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# COPPER CONDUCTER CABLES

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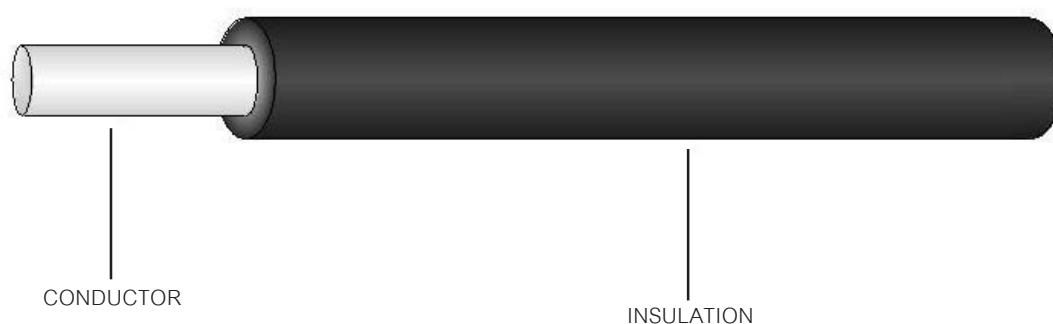
## Building Wires and Cables

|                  |                                                                                   |    |
|------------------|-----------------------------------------------------------------------------------|----|
| IV               | 300 V 70°C PVC INSULATED, SINGLE CORE. (TIS 11 TABLE 1)                           | B2 |
| THW , MEA TYPE A | 750 V 70°C PVC INSULATED, SINGLE CORE. (TIS 11 TABLE 4)                           | B4 |
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**B**  
**1**



300 V 70°C PVC INSULATED, SINGLE CORE



## CABLE STRUCTURE

|                 |   |                                                                                           |
|-----------------|---|-------------------------------------------------------------------------------------------|
| CONDUCTOR       | : | Solid and stranded annealed copper,<br>Size 0.5 mm <sup>2</sup> up to 150 mm <sup>2</sup> |
| INSULATION      | : | PVC, Any color                                                                            |
| CLASSIFICATION  | : | Maximum conductor temperature 70°C<br>Circuit voltage not exceeding 300 volts             |
| TESTING VOLTAGE | : | 2,000 volts                                                                               |
| REFERENCE       | : | TIS 11-2531, Table 1                                                                      |

# IV

TIS 11-2531

TABLE 1

| Nominal cross sectional area (mm <sup>2</sup> ) | Number and diameter of wire (No./mm) | Insulation thickness (mm) | Max. overall diameter (mm) | Minimum insulation resistance at 70 °C (MΩ- km) | Maximum continuous current rating in free air (Ampere) | Cable weight (approx.) (kg/km) | Standard length (m) |
|-------------------------------------------------|--------------------------------------|---------------------------|----------------------------|-------------------------------------------------|--------------------------------------------------------|--------------------------------|---------------------|
| 0.5                                             | 1/0.80                               | 0.6                       | 2.6                        | 0.0146                                          | 8                                                      | 9                              | 100/C               |
| 1                                               | 1/1.13                               | 0.6                       | 2.9                        | 0.0115                                          | 12                                                     | 14                             | 100/C               |
| 1                                               | 7/0.43                               | 0.6                       | 3.1                        | 0.0110                                          | 12                                                     | 15                             | 100/C               |
| 1.5                                             | 1/1.38                               | 0.6                       | 3.2                        | 0.0100                                          | 16                                                     | 19                             | 100/C               |
| 1.5                                             | 7/0.53                               | 0.6                       | 3.4                        | 0.0094                                          | 16                                                     | 21                             | 100/C               |
| 2.5                                             | 1/1.78                               | 0.7                       | 3.8                        | 0.0092                                          | 23                                                     | 31                             | 100/C               |
| 2.5                                             | 7/0.67                               | 0.7                       | 4.1                        | 0.0084                                          | 23                                                     | 32                             | 100/C               |
| 4                                               | 1/2.25                               | 0.8                       | 4.5                        | 0.0086                                          | 31                                                     | 47                             | 100/C               |
| 4                                               | 7/0.85                               | 0.8                       | 4.9                        | 0.0078                                          | 31                                                     | 50                             | 100/C               |
| 6                                               | 7/1.04                               | 0.8                       | 5.6                        | 0.0066                                          | 42                                                     | 70                             | 100/C               |
| 10                                              | 7/1.35                               | 1.0                       | 7.0                        | 0.0064                                          | 61                                                     | 120                            | 100/C               |
| 16                                              | 7/1.70                               | 1.0                       | 8.2                        | 0.0053                                          | 83                                                     | 180                            | 100/C               |
| 25                                              | 7/2.14                               | 1.2                       | 10.0                       | 0.0051                                          | 113                                                    | 280                            | 100/C               |
| 35                                              | 19/1.53                              | 1.2                       | 11.5                       | 0.0043                                          | 141                                                    | 370                            | 100/C               |
| 50                                              | 19/1.78                              | 1.4                       | 13.0                       | 0.0044                                          | 175                                                    | 500                            | 500/D               |
| 70                                              | 19/2.14                              | 1.4                       | 15.0                       | 0.0037                                          | 221                                                    | 700                            | 500/D               |
| 95                                              | 19/2.52                              | 1.6                       | 17.5                       | 0.0036                                          | 275                                                    | 1,000                          | 500/D               |
| 120                                             | 37/2.03                              | 1.6                       | 19.0                       | 0.0032                                          | 321                                                    | 1,200                          | 500/D               |
| 150                                             | 37/2.25                              | 1.8                       | 21.5                       | 0.0033                                          | 368                                                    | 1,500                          | 500/D               |

C : Packing in coil.

D : Packing in drum.





750 V 70°C PVC INSULATED, SINGLE CORE



# CABLE STRUCTURE

|                 |   |                                                                                           |
|-----------------|---|-------------------------------------------------------------------------------------------|
| CONDUCTOR       | : | Solid and stranded annealed copper,<br>Size 0.5 mm <sup>2</sup> up to 500 mm <sup>2</sup> |
| INSULATION      | : | PVC, Any color                                                                            |
| CLASSIFICATION  | : | Maximum conductor temperature 70°C<br>Circuit voltage not exceeding 750 volts             |
| TESTING VOLTAGE | : | 2,500 volts                                                                               |
| REFERENCE       | : | TIS 11-2531, Table 4                                                                      |



# THW, MEA TYPE A

TIS 11-2531

TABLE 4

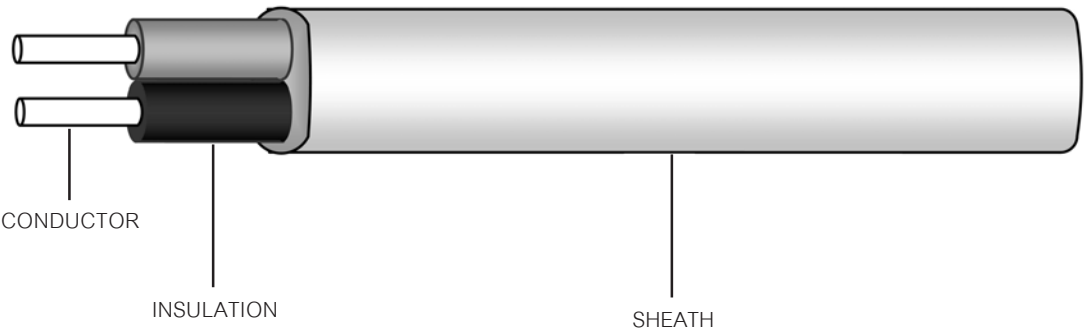
| Nominal cross sectional area (mm <sup>2</sup> ) | Number and diameter of wire (No./mm) | Insulation thickness (mm) | Max. overall diameter (mm) | Minimum insulation resistance at 70 °C (MΩ- km) | Maximum continuous current rating in free air (Ampere) | Cable weight (approx.) (kg/km) | Standard length (m) |
|-------------------------------------------------|--------------------------------------|---------------------------|----------------------------|-------------------------------------------------|--------------------------------------------------------|--------------------------------|---------------------|
| 0.5                                             | 1/0.80                               | 0.8                       | 3.0                        | 0.0175                                          | 9                                                      | 11                             | 100/C               |
| 1                                               | 1/1.13                               | 0.8                       | 3.3                        | 0.0141                                          | 13                                                     | 17                             | 100/C               |
| 1                                               | 7/0.43                               | 0.8                       | 3.5                        | 0.0135                                          | 13                                                     | 18                             | 100/C               |
| 1.5                                             | 1/1.38                               | 0.8                       | 3.6                        | 0.0123                                          | 17                                                     | 22                             | 100/C               |
| 1.5                                             | 7/0.53                               | 0.8                       | 3.8                        | 0.0116                                          | 17                                                     | 24                             | 100/C               |
| 2.5                                             | 1/1.78                               | 0.8                       | 4.0                        | 0.0102                                          | 23                                                     | 32                             | 100/C               |
| 2.5                                             | 7/0.67                               | 0.8                       | 4.3                        | 0.0093                                          | 23                                                     | 35                             | 100/C               |
| 4                                               | 1/2.25                               | 0.9                       | 4.8                        | 0.0094                                          | 32                                                     | 49                             | 100/C               |
| 4                                               | 7/0.85                               | 0.9                       | 5.2                        | 0.0085                                          | 32                                                     | 50                             | 100/C               |
| 6                                               | 7/1.04                               | 0.9                       | 5.8                        | 0.0073                                          | 43                                                     | 75                             | 100/C               |
| 10                                              | 7/1.35                               | 1.1                       | 7.2                        | 0.0069                                          | 60                                                     | 120                            | 100/C               |
| 16                                              | 7/1.70                               | 1.1                       | 8.4                        | 0.0057                                          | 83                                                     | 180                            | 100/C               |
| 25                                              | 7/2.14                               | 1.3                       | 10.5                       | 0.0054                                          | 114                                                    | 280                            | 100/C               |
| 35                                              | 19/1.53                              | 1.3                       | 11.5                       | 0.0047                                          | 141                                                    | 380                            | 100/C               |
| 50                                              | 19/1.78                              | 1.5                       | 13.5                       | 0.0046                                          | 175                                                    | 500                            | 500/D               |
| 70                                              | 19/2.14                              | 1.5                       | 15.5                       | 0.0039                                          | 221                                                    | 700                            | 500/D               |
| 95                                              | 19/2.52                              | 1.7                       | 18.0                       | 0.0038                                          | 275                                                    | 1,000                          | 500/D               |
| 120                                             | 37/2.03                              | 1.7                       | 19.5                       | 0.0034                                          | 321                                                    | 1,200                          | 500/D               |
| 150                                             | 37/2.25                              | 1.9                       | 21.5                       | 0.0034                                          | 367                                                    | 1,500                          | 500/D               |
| 185                                             | 37/2.52                              | 2.1                       | 24.0                       | 0.0034                                          | 424                                                    | 1,900                          | 500/D               |
| 240                                             | 61/2.25                              | 2.3                       | 27.0                       | 0.0033                                          | 505                                                    | 2,500                          | 500/D               |
| 300                                             | 61/2.52                              | 2.5                       | 30.0                       | 0.0032                                          | 581                                                    | 3,100                          | 500/D               |
| 400                                             | 61/2.85                              | 2.7                       | 33.5                       | 0.0030                                          | 675                                                    | 3,900                          | 500/D               |
| 500                                             | 61/3.20                              | 3.1                       | 38.5                       | 0.0031                                          | 781                                                    | 5,000                          | 500/D               |

C : Packing in coil.

D : Packing in drum.



300 V 70°C PVC INSULATED AND SHEATHED FLAT TYPE



CABLE STRUCTURE

|                 |   |                                                                                                                                                 |
|-----------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE  | : | 2-3 cores                                                                                                                                       |
| CONDUCTOR       | : | Solid and stranded annealed copper,<br>Size 0.5 mm <sup>2</sup> up to 35 mm <sup>2</sup> for 2-core<br>and up to 16 mm <sup>2</sup> for 3-cores |
| INSULATION      | : | PVC,<br>Color :     2 cores-Light gray, Black<br>3 cores-Light gray, Black and Red                                                              |
| SHEATH          | : | PVC<br>Color :     White                                                                                                                        |
| CLASSIFICATION  | : | Maximum conductor temperature 70°C<br>Circuit voltage not exceeding 300 volts                                                                   |
| TESTING VOLTAGE | : | 2,000 volts                                                                                                                                     |
| REFERENCE       | : | TIS 11-2531, Table 2                                                                                                                            |



# VAF

TIS 11-2531

TABLE 2

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Insulation thickness<br>(mm) | Sheath thickness<br>(mm) | Approx. overall diameter(mm) |             | Minimum insulation resistance at 70°C<br>(MΩ-km) | Maximum continuous current rating in free air<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|------------------------------|--------------------------|------------------------------|-------------|--------------------------------------------------|-----------------------------------------------------------|-----------------------------------|------------------------|
|                |                                                    |                                         |                              |                          | Lower limit                  | Upper limit |                                                  |                                                           |                                   |                        |
| 2              | 0.5                                                | 1/0.80                                  | 0.6                          | 0.9                      | 3.6x5.6                      | 4.4x6.8     | 0.0146                                           | 7                                                         | 38                                | 100/C                  |
|                | 1                                                  | 1/1.13                                  | 0.6                          | 0.9                      | 4.0x6.2                      | 4.8x7.4     | 0.0115                                           | 11                                                        | 50                                | 100/C                  |
|                | 1                                                  | 7/0.43                                  | 0.6                          | 0.9                      | 4.0x6.4                      | 5.0x7.8     | 0.0110                                           | 11                                                        | 55                                | 100/C                  |
|                | 1.5                                                | 1/1.38                                  | 0.6                          | 1.2                      | 4.8x7.2                      | 5.8x8.6     | 0.0100                                           | 15                                                        | 75                                | 100/C                  |
|                | 1.5                                                | 7/0.53                                  | 0.6                          | 1.2                      | 4.9x7.4                      | 6.0x9.2     | 0.0094                                           | 15                                                        | 80                                | 100/C                  |
|                | 2.5                                                | 1/1.78                                  | 0.7                          | 1.2                      | 5.4x8.4                      | 6.4x10.0    | 0.0092                                           | 20                                                        | 100                               | 100/C                  |
|                | 2.5                                                | 7/0.67                                  | 0.7                          | 1.2                      | 5.6x8.8                      | 6.8x10.5    | 0.0084                                           | 20                                                        | 110                               | 100/C                  |
|                | 4                                                  | 1/2.25                                  | 0.8                          | 1.2                      | 6.0x9.8                      | 7.2x11.5    | 0.0086                                           | 27                                                        | 150                               | 100/C                  |
|                | 4                                                  | 7/0.85                                  | 0.8                          | 1.2                      | 6.2x10.0                     | 7.6x12.0    | 0.0078                                           | 27                                                        | 150                               | 100/C                  |
|                | 6                                                  | 7/1.04                                  | 0.8                          | 1.2                      | 6.8x11.0                     | 8.2x13.5    | 0.0066                                           | 35                                                        | 200                               | 100/C                  |
|                | 10                                                 | 7/1.35                                  | 0.9                          | 1.2                      | 8.0x13.0                     | 9.4x16.0    | 0.0059                                           | 49                                                        | 310                               | 100/C                  |
|                | 16                                                 | 7/1.70                                  | 1.0                          | 1.2                      | 9.2x16.0                     | 11.0x18.5   | 0.0053                                           | 65                                                        | 450                               | 100/C                  |
|                | 25                                                 | 7/2.14                                  | 1.2                          | 1.4                      | 11.0x19.5                    | 13.0x22.5   | 0.0051                                           | 88                                                        | 700                               | 500/D                  |
|                | 35                                                 | 19/1.53                                 | 1.2                          | 1.4                      | 12.0x22.0                    | 14.5x25.0   | 0.0043                                           | 109                                                       | 900                               | 500/D                  |
| 3              | 0.5                                                | 1/0.80                                  | 0.6                          | 0.9                      | 3.6x7.4                      | 4.4x9.0     | 0.0146                                           | 6                                                         | 55                                | 100/C                  |
|                | 1                                                  | 1/1.13                                  | 0.6                          | 0.9                      | 4.0x8.4                      | 4.8x10.0    | 0.0115                                           | 9                                                         | 75                                | 100/C                  |
|                | 1                                                  | 7/0.43                                  | 0.6                          | 0.9                      | 4.0x8.6                      | 5.0x10.5    | 0.0110                                           | 9                                                         | 80                                | 100/C                  |
|                | 1.5                                                | 1/1.38                                  | 0.6                          | 1.2                      | 4.8x9.8                      | 5.8x11.5    | 0.0100                                           | 12                                                        | 100                               | 100/C                  |
|                | 1.5                                                | 7/0.53                                  | 0.6                          | 1.2                      | 4.9x10.0                     | 6.0x12.5    | 0.0094                                           | 12                                                        | 110                               | 100/C                  |
|                | 2.5                                                | 1/1.78                                  | 0.7                          | 1.2                      | 5.4x11.5                     | 6.4x13.5    | 0.0092                                           | 16                                                        | 150                               | 100/C                  |
|                | 2.5                                                | 7/0.67                                  | 0.7                          | 1.2                      | 5.6x12.0                     | 6.8x14.5    | 0.0084                                           | 16                                                        | 160                               | 100/C                  |
|                | 4                                                  | 1/2.25                                  | 0.8                          | 1.2                      | 6.0x13.0                     | 7.2x16.0    | 0.0086                                           | 22                                                        | 210                               | 100/C                  |
|                | 4                                                  | 7/0.85                                  | 0.8                          | 1.2                      | 6.2x14.0                     | 7.6x16.5    | 0.0078                                           | 22                                                        | 230                               | 100/C                  |
|                | 6                                                  | 7/1.04                                  | 0.8                          | 1.2                      | 6.8x16.0                     | 8.2x18.5    | 0.0066                                           | 29                                                        | 300                               | 100/C                  |
|                | 10                                                 | 7/1.35                                  | 0.9                          | 1.2                      | 8.0x19.0                     | 9.4x22.0    | 0.0059                                           | 40                                                        | 450                               | 500/D                  |
|                | 16                                                 | 7/1.70                                  | 1.0                          | 1.4                      | 9.6x23.0                     | 11.5x26.5   | 0.0053                                           | 53                                                        | 700                               | 500/D                  |

TISI permitted to increase the maximum overall diameter by 5%

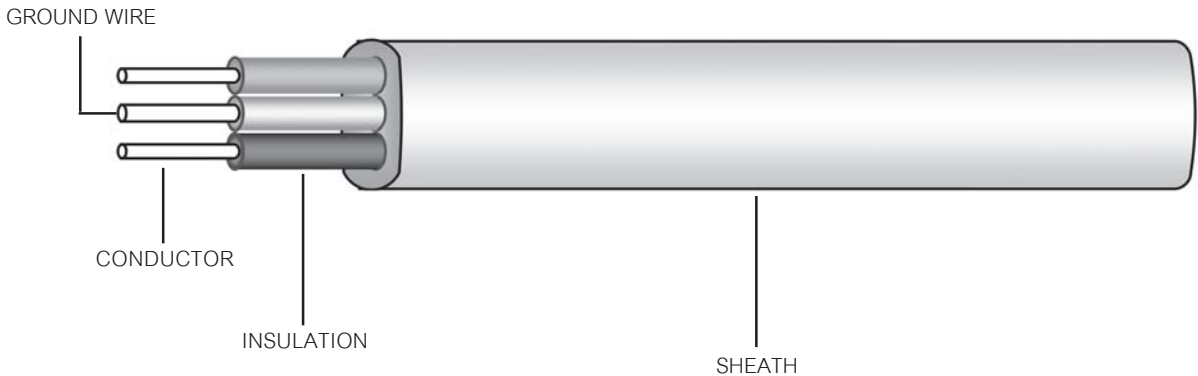
C : Packing in coil.

D : Packing in drum.





300 V 70°C PVC INSULATED AND SHEATHED FLAT TYPE, WITH GROUND



CABLE STRUCTURE

|                 |   |                                                                                                                           |
|-----------------|---|---------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE  | : | 2-3 cores with safety-ground                                                                                              |
| CONDUCTOR       | : | Solid and stranded annealed copper,<br>Sizes 1 mm <sup>2</sup> up to 35 mm <sup>2</sup>                                   |
| GROUND WIRE     | : | Ground conductor size 1mm <sup>2</sup> up 10 mm <sup>2</sup>                                                              |
| INSULATION      | : | PVC<br><br>Color :    2 cores - Light gray and Black<br>3 cores - Light gray, Black and Red<br>Ground core - Green/Yellow |
| SHEATH          | : | PVC<br><br>Color :    White                                                                                               |
| CLASSIFICATION  | : | Maximum conductor temperature 70°C<br>Circuit voltage not exceeding 300 volts                                             |
| TESTING VOLTAGE | : | 2,000 volts                                                                                                               |
| REFERENCE       | : | TIS 11-2531, Table 11                                                                                                     |



# VAF-GRD

TIS 11-2531

TABLE 11

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | Number and diameter of wire (No./mm) | Insulation thickness (mm) | Nominal cross sectional area of ground conductor (mm <sup>2</sup> ) | Ground insulation thickness (mm) | Sheath thickness (mm) | Approx overall diameter (mm) |             | Minimum insulation resistance at 70°C (MΩ-km) | Maximum Continuous current rating in free air (Ampere) | Cable weight (approx.) (kg/km) | Standard length (m) |
|----------------|-------------------------------------------------|--------------------------------------|---------------------------|---------------------------------------------------------------------|----------------------------------|-----------------------|------------------------------|-------------|-----------------------------------------------|--------------------------------------------------------|--------------------------------|---------------------|
|                |                                                 |                                      |                           |                                                                     |                                  |                       | Lower limit                  | Upper limit |                                               |                                                        |                                |                     |
| 2              | 1                                               | 1/1.13                               | 0.6                       | 1                                                                   | 0.6                              | 0.9                   | 4.0x8.4                      | 4.8x10.0    | 0.0115                                        | 11                                                     | 75                             | 100/C               |
|                | 1                                               | 7/0.43                               | 0.6                       | 1                                                                   | 0.6                              | 0.9                   | 4.0x8.6                      | 5.0x10.5    | 0.0110                                        | 11                                                     | 80                             | 100/C               |
|                | 1.5                                             | 1/1.38                               | 0.6                       | 1                                                                   | 0.6                              | 1.2                   | 4.8x9.4                      | 5.8x11.5    | 0.0100                                        | 15                                                     | 100                            | 100/C               |
|                | 1.5                                             | 7/0.53                               | 0.6                       | 1                                                                   | 0.6                              | 1.2                   | 4.9x9.8                      | 6.0x12.0    | 0.0094                                        | 15                                                     | 110                            | 100/C               |
|                | 2.5                                             | 1/1.78                               | 0.7                       | 1.5                                                                 | 0.6                              | 1.2                   | 5.4x10.5                     | 6.4x13.0    | 0.0092                                        | 20                                                     | 140                            | 100/C               |
|                | 2.5                                             | 7/0.67                               | 0.7                       | 1.5                                                                 | 0.6                              | 1.2                   | 5.6x11.5                     | 6.8x14.0    | 0.0084                                        | 20                                                     | 140                            | 100/C               |
|                | 4                                               | 1/2.25                               | 0.8                       | 2.5                                                                 | 0.6                              | 1.2                   | 6.0x12.5                     | 7.2x15.0    | 0.0086                                        | 27                                                     | 190                            | 100/C               |
|                | 4                                               | 7/0.85                               | 0.8                       | 2.5                                                                 | 0.6                              | 1.2                   | 6.2x13.0                     | 7.6x16.0    | 0.0078                                        | 27                                                     | 210                            | 100/C               |
|                | 6                                               | 7/1.04                               | 0.8                       | 4                                                                   | 0.6                              | 1.2                   | 6.8x15.0                     | 8.2x17.5    | 0.0066                                        | 35                                                     | 270                            | 100/C               |
|                | 10                                              | 7/1.35                               | 0.9                       | 4                                                                   | 0.6                              | 1.2                   | 8.0x17.0                     | 9.4x20.0    | 0.0059                                        | 49                                                     | 380                            | 100/C               |
|                | 16                                              | 7/1.70                               | 1.0                       | 6                                                                   | 0.6                              | 1.2                   | 9.2x20.0                     | 11.0x23.0   | 0.0053                                        | 65                                                     | 550                            | 100/C               |
|                | 25                                              | 7/2.14                               | 1.2                       | 6                                                                   | 0.6                              | 1.4                   | 11.0x24.0                    | 13.0x27.0   | 0.0051                                        | 88                                                     | 800                            | 500/D               |
|                | 35                                              | 19/1.53                              | 1.2                       | 10                                                                  | 0.6                              | 1.4                   | 12.0x27.0                    | 14.5x31.0   | 0.0043                                        | 109                                                    | 1,100                          | 500/D               |

TISI Permitted to increase the maximum overall diameter by 5%

C : Packing in coil.

D : Packing in drum.

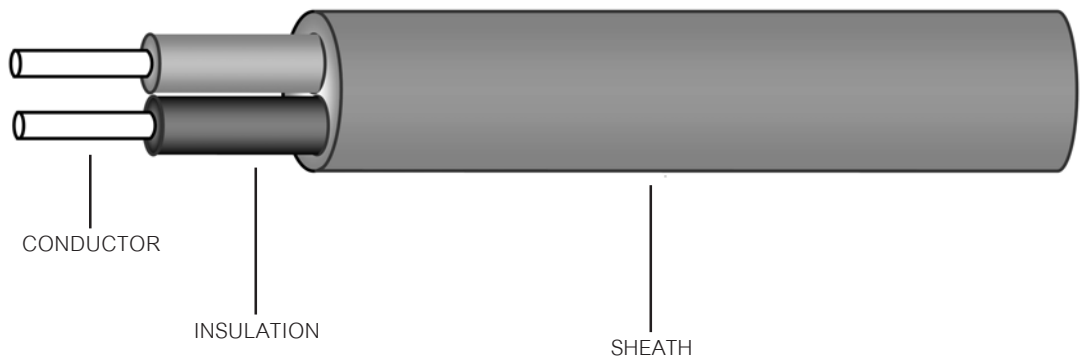


# Low Voltage Power Cables

|                               |                                                                                                                                 |      |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------|
| WR                            | 300 V 70°C PVC INSULATED AND SHEATHED ROUND TYPE<br>(TIS 11 TABLE 2 AND 3)                                                      | B 11 |
| WR - GRD                      | 300 V 70°C PVC INSULATED AND SHEATHED ROUND TYPE<br>WITH GROUND (TIS 11 TABLE 12)                                               | B 14 |
| WV, MEA TYPE B (1 CORE)       | 750 V 70°C PVC INSULATED AND SHEATHED, SINGLE CORE<br>(TIS 11 TABLE 5)                                                          | B 16 |
| WV, MEA TYPE B (2 CORE)       | 750 V 70°C PVC INSULATED AND SHEATHED, FLAT TYPE<br>(TIS 11 TABLE 5)                                                            | B 18 |
| WV - GRD,<br>MEA TYPE B - GRD | 750 V 70°C PVC INSULATED AND SHEATHED, FLAT TYPE<br>WITH GROUND (TIS 11 TABLE 13)                                               | B 20 |
| NY, MEA TYPE C                | 750 V 70°C PVC INSULATED AND DOUBLE SHEATHED<br>ROUND TYPE (TIS 11 TABLE 6 AND 7)                                               | B 22 |
| NY - N, MEA TYPE C - N        | 750 V 70°C PVC INSULATED AND DOUBLE SHEATHED<br>ROUND TYPE WITH NEUTRAL (TIS 11 TABLE 8)                                        | B 26 |
| NY - GRD,<br>MEA TYPE C - GRD | 750 V 70°C PVC INSULATED AND DOUBLE SHEATHED<br>ROUND TYPE WITH GROUND (TIS 11 TABLE 14)                                        | B 28 |
| NY - SWA                      | 750 V 70°C PVC INSULATED AND DOUBLE SHEATHED POWER<br>CABLE, WITH STEEL WIRES ARMOUR (THAI YAZAKI STANDARD)                     | B 31 |
| NYCY                          | 750 V 70°C PVC INSULATED AND DOUBLE SHEATHED POWER<br>CABLE, WITH CONCENTRIC CONDUCTORS (THAI YAZAKI STANDARD)                  | B 35 |
| 0.6 / 1 KV - CV               | 0.6 / 1 KV 90°C CROSS - LINKED POLYETHYLENE INSULATED AND<br>PVC SHEATHED POWER CABLE (IEC 60502-1 STANDARD)                    | B 37 |
| 0.6 / 1KV - CV - SWA          | 0.6 / 1 KV 90°C CROSS - LINKED POLYETHYLENE INSULATED AND<br>PVC SHEATHED STEEL WIRE ARMORED POWER CABLE (IEC 60502-1 STANDARD) | B 40 |



300 V 70°C PVC INSULATED AND SHEATHED ROUND TYPE



CABLE STRUCTURE

|                 |   |                                                                                                                                                                     |
|-----------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE  | : | Up to 4 cores                                                                                                                                                       |
| CONDUCTOR       | : | Solid and stranded annealed copper,<br>Sizes 0.5 mm <sup>2</sup> up to 35 mm <sup>2</sup>                                                                           |
| INSULATION      | : | PVC<br><br>Color :   Single core - Light gray<br>2 cores - Light gray and Black<br>3 cores - Light gray, Black and Red<br>4 cores - Light gray, Black, Red and Blue |
| SHEATH          | : | PVC<br><br>Color :    White                                                                                                                                         |
| CLASSIFICATION  | : | Maximum conductor temperature 70°C<br>Circuit voltage not exceeding 300 V                                                                                           |
| TESTING VOLTAGE | : | 2,000 volts                                                                                                                                                         |
| REFERENCE       | : | TIS 11-2531, Table 2 (Single core)<br>TIS 11-2531, Table 3 (Multi core)                                                                                             |

# VVR (SINGLE CORE)

TIS 11-2531

TABLE 2

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | Number and diameter of wire (No./mm) | Insulation thickness (mm) | Sheath thickness (mm) | Max. overall diameter (mm) | Minimum insulation resistance at 70°C (MΩ-km) | Maximum continuous current rating in free air (Ampere) | Cable weight (approx.) (kg/km) | Standard length (m) |
|----------------|-------------------------------------------------|--------------------------------------|---------------------------|-----------------------|----------------------------|-----------------------------------------------|--------------------------------------------------------|--------------------------------|---------------------|
| 1              | 0.5                                             | 1/0.80                               | 0.6                       | 0.9                   | 4.4                        | 0.0146                                        | 10                                                     | 21                             | 500/D               |
|                | 1                                               | 1/1.13                               | 0.6                       | 0.9                   | 4.8                        | 0.0115                                        | 15                                                     | 28                             | 500/D               |
|                | 1                                               | 7/0.43                               | 0.6                       | 0.9                   | 5.0                        | 0.0110                                        | 15                                                     | 30                             | 500/D               |
|                | 1.5                                             | 1/1.38                               | 0.6                       | 0.9                   | 5.2                        | 0.0100                                        | 19                                                     | 34                             | 500/D               |
|                | 1.5                                             | 7/0.53                               | 0.6                       | 0.9                   | 5.4                        | 0.0094                                        | 19                                                     | 37                             | 500/D               |
|                | 2.5                                             | 1/1.78                               | 0.7                       | 0.9                   | 5.8                        | 0.0092                                        | 26                                                     | 48                             | 500/D               |
|                | 2.5                                             | 7/0.67                               | 0.7                       | 0.9                   | 6.2                        | 0.0084                                        | 26                                                     | 50                             | 500/D               |
|                | 4                                               | 1/2.25                               | 0.8                       | 0.9                   | 6.6                        | 0.0086                                        | 35                                                     | 65                             | 500/D               |
|                | 4                                               | 7/0.85                               | 0.8                       | 0.9                   | 7.0                        | 0.0078                                        | 35                                                     | 70                             | 500/D               |
|                | 6                                               | 7/1.04                               | 0.8                       | 0.9                   | 7.6                        | 0.0066                                        | 46                                                     | 95                             | 500/D               |
|                | 10                                              | 7/1.35                               | 0.9                       | 0.9                   | 8.6                        | 0.0059                                        | 64                                                     | 140                            | 500/D               |
|                | 16                                              | 7/1.70                               | 1.0                       | 1.2                   | 11.0                       | 0.0053                                        | 87                                                     | 220                            | 500/D               |
|                | 25                                              | 7/2.14                               | 1.2                       | 1.2                   | 12.5                       | 0.0051                                        | 117                                                    | 330                            | 500/D               |
|                | 35                                              | 19/1.53                              | 1.2                       | 1.2                   | 14.0                       | 0.0043                                        | 144                                                    | 430                            | 500/D               |

D : Packing in drum.



# VVR (MULTI CORE)

TIS 11-2531

TABLE 3

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | Number and diameter of wire (No./mm) | Insulation thickness (mm) | Sheath thickness (mm) | Max. overall diameter (mm) | Minimum insulation resistance at 70°C (MΩ-km) | Maximum continuous current rating in free air (Ampere) | Cable weight (approx.) (kg/km) | Standard length (m) |
|----------------|-------------------------------------------------|--------------------------------------|---------------------------|-----------------------|----------------------------|-----------------------------------------------|--------------------------------------------------------|--------------------------------|---------------------|
| 2              | 0.5                                             | 1/0.80                               | 0.6                       | 0.9                   | 6.8                        | 0.0146                                        | 9                                                      | 50                             | 500/D               |
|                | 1                                               | 1/1.13                               | 0.6                       | 0.9                   | 7.6                        | 0.0115                                        | 14                                                     | 65                             | 500/D               |
|                | 1                                               | 7/0.43                               | 0.6                       | 0.9                   | 8.0                        | 0.0110                                        | 14                                                     | 70                             | 500/D               |
|                | 1.5                                             | 1/1.38                               | 0.6                       | 1.2                   | 8.8                        | 0.0100                                        | 18                                                     | 90                             | 500/D               |
|                | 1.5                                             | 7/0.53                               | 0.6                       | 1.2                   | 9.2                        | 0.0094                                        | 18                                                     | 100                            | 500/D               |
|                | 2.5                                             | 1/1.78                               | 0.7                       | 1.2                   | 10.0                       | 0.0092                                        | 24                                                     | 130                            | 500/D               |
|                | 2.5                                             | 7/0.67                               | 0.7                       | 1.2                   | 11.0                       | 0.0084                                        | 24                                                     | 140                            | 500/D               |
|                | 4                                               | 1/2.25                               | 0.8                       | 1.2                   | 11.5                       | 0.0086                                        | 32                                                     | 180                            | 500/D               |
|                | 4                                               | 7/0.85                               | 0.8                       | 1.2                   | 12.5                       | 0.0078                                        | 32                                                     | 200                            | 500/D               |
|                | 6                                               | 7/1.04                               | 0.8                       | 1.2                   | 13.5                       | 0.0066                                        | 43                                                     | 260                            | 500/D               |
|                | 10                                              | 7/1.35                               | 0.9                       | 1.2                   | 16.0                       | 0.0059                                        | 60                                                     | 380                            | 500/D               |
|                | 16                                              | 7/1.70                               | 1.0                       | 1.4                   | 19.0                       | 0.0053                                        | 80                                                     | 550                            | 500/D               |
|                | 25                                              | 7/2.14                               | 1.2                       | 1.4                   | 22.5                       | 0.0051                                        | 107                                                    | 850                            | 500/D               |
|                | 35                                              | 19/1.53                              | 1.2                       | 1.4                   | 25.5                       | 0.0043                                        | 132                                                    | 1,100                          | 500/D               |
| 3              | 0.5                                             | 1/0.80                               | 0.6                       | 0.9                   | 7.2                        | 0.0146                                        | 7                                                      | 55                             | 500/D               |
|                | 1                                               | 1/1.13                               | 0.6                       | 0.9                   | 8.0                        | 0.0115                                        | 11                                                     | 75                             | 500/D               |
|                | 1                                               | 7/0.43                               | 0.6                       | 0.9                   | 8.4                        | 0.0110                                        | 11                                                     | 85                             | 500/D               |
|                | 1.5                                             | 1/1.38                               | 0.6                       | 1.2                   | 9.2                        | 0.0100                                        | 15                                                     | 110                            | 500/D               |
|                | 1.5                                             | 7/0.53                               | 0.6                       | 1.2                   | 9.6                        | 0.0094                                        | 15                                                     | 120                            | 500/D               |
|                | 2.5                                             | 1/1.78                               | 0.7                       | 1.2                   | 10.5                       | 0.0092                                        | 20                                                     | 160                            | 500/D               |
|                | 2.5                                             | 7/0.67                               | 0.7                       | 1.2                   | 11.5                       | 0.0084                                        | 20                                                     | 170                            | 500/D               |
|                | 4                                               | 1/2.25                               | 0.8                       | 1.2                   | 12.5                       | 0.0086                                        | 27                                                     | 230                            | 500/D               |
|                | 4                                               | 7/0.85                               | 0.8                       | 1.2                   | 13.0                       | 0.0078                                        | 27                                                     | 240                            | 500/D               |
|                | 6                                               | 7/1.04                               | 0.8                       | 1.2                   | 14.5                       | 0.0066                                        | 36                                                     | 320                            | 500/D               |
|                | 10                                              | 7/1.35                               | 0.9                       | 1.2                   | 17.0                       | 0.0059                                        | 50                                                     | 490                            | 500/D               |
|                | 16                                              | 7/1.70                               | 1.0                       | 1.4                   | 20.0                       | 0.0053                                        | 67                                                     | 750                            | 500/D               |
|                | 25                                              | 7/2.14                               | 1.2                       | 1.8                   | 25.0                       | 0.0051                                        | 90                                                     | 1,200                          | 500/D               |
|                | 35                                              | 19/1.53                              | 1.2                       | 1.8                   | 28.0                       | 0.0043                                        | 110                                                    | 1,500                          | 500/D               |
| 4              | 0.5                                             | 1/0.80                               | 0.6                       | 0.9                   | 7.8                        | 0.0146                                        | 7                                                      | 65                             | 500/D               |
|                | 1                                               | 1/1.13                               | 0.6                       | 0.9                   | 8.6                        | 0.0115                                        | 10                                                     | 90                             | 500/D               |
|                | 1                                               | 7/0.43                               | 0.6                       | 0.9                   | 9.0                        | 0.0110                                        | 10                                                     | 100                            | 500/D               |
|                | 1.5                                             | 1/1.38                               | 0.6                       | 1.2                   | 10.0                       | 0.0100                                        | 13                                                     | 130                            | 500/D               |
|                | 1.5                                             | 7/0.53                               | 0.6                       | 1.2                   | 10.5                       | 0.0094                                        | 13                                                     | 140                            | 500/D               |
|                | 2.5                                             | 1/1.78                               | 0.7                       | 1.2                   | 11.5                       | 0.0092                                        | 18                                                     | 190                            | 500/D               |
|                | 2.5                                             | 7/0.67                               | 0.7                       | 1.2                   | 12.5                       | 0.0084                                        | 18                                                     | 200                            | 500/D               |
|                | 4                                               | 1/2.25                               | 0.8                       | 1.2                   | 13.5                       | 0.0086                                        | 25                                                     | 280                            | 500/D               |
|                | 4                                               | 7/0.85                               | 0.8                       | 1.2                   | 14.0                       | 0.0078                                        | 25                                                     | 300                            | 500/D               |
|                | 6                                               | 7/1.04                               | 0.8                       | 1.2                   | 15.5                       | 0.0066                                        | 33                                                     | 400                            | 500/D               |
|                | 10                                              | 7/1.35                               | 0.9                       | 1.4                   | 19.0                       | 0.0059                                        | 45                                                     | 650                            | 500/D               |
|                | 16                                              | 7/1.70                               | 1.0v                      | 1.4                   | 22.0                       | 0.0053                                        | 60                                                     | 950                            | 500/D               |
|                | 25                                              | 7/2.14                               | 1.2                       | 1.8                   | 27.5                       | 0.0051                                        | 81                                                     | 1,500                          | 500/D               |
|                | 35                                              | 19/1.53                              | 1.2                       | 1.8                   | 30.5                       | 0.0043                                        | 99                                                     | 1,900                          | 500/D               |

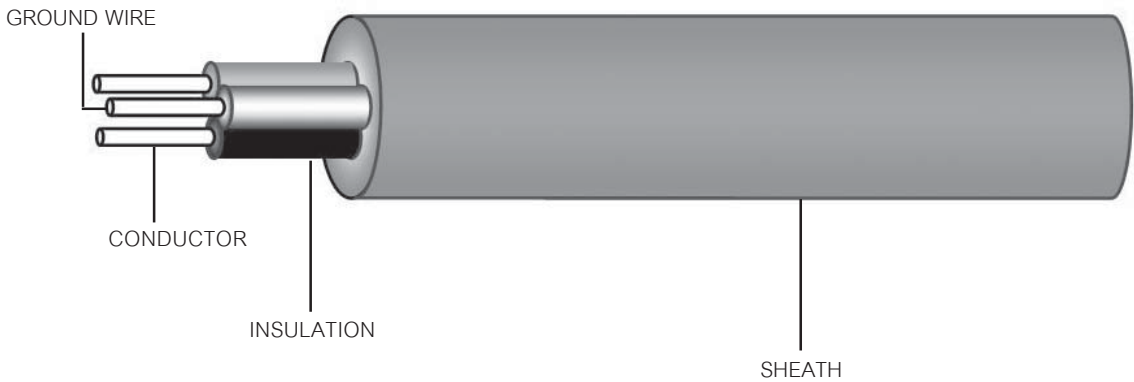
TISI permitted to increase the maximum overall diameter by 5%

D : Packing in drum.



THAI-YAZAKI TECHNICAL DATA

300 V 70°C PVC INSULATED AND SHEATHED ROUND TYPE, WITH GROUND



**B**  
**2**

**CABLE STRUCTURE**

|                 |   |                                                                                                                                |
|-----------------|---|--------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE  | : | 2-4 cores with safety-ground                                                                                                   |
| CONDUCTOR       | : | Solid and stranded annealed copper,<br>Size 1 mm <sup>2</sup> up to 35 mm <sup>2</sup>                                         |
| GROUND WIRE     | : | Ground conductor size 1 mm <sup>2</sup> up 10 mm <sup>2</sup>                                                                  |
| INSULATION      | : | PVC<br>Color :    2 cores-Light gray and Black<br>3 cores-Light gray, Black and Red<br>4 cores-Light gray, Black, Red and Blue |
| SHEATH          | : | PVC<br>Color :    White                                                                                                        |
| CLASSIFICATION  | : | Maximum conductor temperature 70°C<br>Circuit voltage not exceeding 300 volts                                                  |
| TESTING VOLTAGE | : | 2,000 volts                                                                                                                    |
| REFERENCE       | : | TIS 11-2531, Table 12                                                                                                          |

# VVR - GRD

TIS 11-2531

TABLE 12

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Insulation thickness<br>(mm) | Nominal cross sectional area of ground conductor<br>(mm <sup>2</sup> ) | Ground insulation thickness<br>(mm) | Sheath thickness<br>(mm) | Max. overall diameter<br>(mm) | Minimum insulation resistance at 70°C<br>(MΩ-km) | Maximum continuous current rating in free air<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|------------------------------|------------------------------------------------------------------------|-------------------------------------|--------------------------|-------------------------------|--------------------------------------------------|-----------------------------------------------------------|-----------------------------------|------------------------|
| 2              | 1                                                  | 1/1.13                                  | 0.6                          | 1                                                                      | 0.6                                 | 0.9                      | 8.0                           | 0.0115                                           | 14                                                        | 75                                | 500/D                  |
|                | 1                                                  | 7/0.43                                  | 0.6                          | 1                                                                      | 0.6                                 | 0.9                      | 8.4                           | 0.0110                                           | 14                                                        | 85                                | 500/D                  |
|                | 1.5                                                | 1/1.38                                  | 0.6                          | 1                                                                      | 0.6                                 | 1.2                      | 9.2                           | 0.0100                                           | 18                                                        | 100                               | 500/D                  |
|                | 1.5                                                | 7/0.53                                  | 0.6                          | 1                                                                      | 0.6                                 | 1.2                      | 9.6                           | 0.0094                                           | 18                                                        | 110                               | 500/D                  |
|                | 2.5                                                | 1/1.78                                  | 0.7                          | 1.5                                                                    | 0.6                                 | 1.2                      | 10.5                          | 0.0092                                           | 24                                                        | 140                               | 500/D                  |
|                | 2.5                                                | 7/0.67                                  | 0.7                          | 1.5                                                                    | 0.6                                 | 1.2                      | 11.5                          | 0.0084                                           | 24                                                        | 150                               | 500/D                  |
|                | 4                                                  | 1/2.25                                  | 0.8                          | 2.5                                                                    | 0.6                                 | 1.2                      | 12.5                          | 0.0086                                           | 32                                                        | 200                               | 500/D                  |
|                | 4                                                  | 7/0.85                                  | 0.8                          | 2.5                                                                    | 0.6                                 | 1.2                      | 13.0                          | 0.0078                                           | 32                                                        | 210                               | 500/D                  |
|                | 6                                                  | 7/1.04                                  | 0.8                          | 4                                                                      | 0.6                                 | 1.2                      | 14.5                          | 0.0066                                           | 43                                                        | 290                               | 500/D                  |
|                | 10                                                 | 7/1.35                                  | 0.9                          | 4                                                                      | 0.6                                 | 1.2                      | 16.0                          | 0.0059                                           | 60                                                        | 410                               | 500/D                  |
|                | 16                                                 | 7/1.70                                  | 1.0                          | 6                                                                      | 0.6                                 | 1.4                      | 19.0                          | 0.0053                                           | 80                                                        | 600                               | 500/D                  |
|                | 25                                                 | 7/2.14                                  | 1.2                          | 6                                                                      | 0.6                                 | 1.4                      | 22.5                          | 0.0051                                           | 107                                                       | 850                               | 500/D                  |
|                | 35                                                 | 19/1.53                                 | 1.2                          | 10                                                                     | 0.6                                 | 1.4                      | 25.5                          | 0.0043                                           | 132                                                       | 1,200                             | 500/D                  |
| 3              | 1                                                  | 1/1.13                                  | 0.6                          | 1                                                                      | 0.6                                 | 0.9                      | 8.6                           | 0.0115                                           | 11                                                        | 95                                | 500/D                  |
|                | 1                                                  | 7/0.43                                  | 0.6                          | 1                                                                      | 0.6                                 | 0.9                      | 9.0                           | 0.0110                                           | 11                                                        | 100                               | 500/D                  |
|                | 1.5                                                | 1/1.38                                  | 0.6                          | 1                                                                      | 0.6                                 | 1.2                      | 10.0                          | 0.0100                                           | 15                                                        | 120                               | 500/D                  |
|                | 1.5                                                | 7/0.53                                  | 0.6                          | 1                                                                      | 0.6                                 | 1.2                      | 10.5                          | 0.0094                                           | 15                                                        | 140                               | 500/D                  |
|                | 2.5                                                | 1/1.78                                  | 0.7                          | 1.5                                                                    | 0.6                                 | 1.2                      | 11.5                          | 0.0092                                           | 20                                                        | 180                               | 500/D                  |
|                | 2.5                                                | 7/0.67                                  | 0.7                          | 1.5                                                                    | 0.6                                 | 1.2                      | 12.5                          | 0.0084                                           | 20                                                        | 190                               | 500/D                  |
|                | 4                                                  | 1/2.25                                  | 0.8                          | 2.5                                                                    | 0.6                                 | 1.2                      | 13.5                          | 0.0086                                           | 27                                                        | 260                               | 500/D                  |
|                | 4                                                  | 7/0.85                                  | 0.8                          | 2.5                                                                    | 0.6                                 | 1.2                      | 14.0                          | 0.0078                                           | 27                                                        | 280                               | 500/D                  |
|                | 6                                                  | 7/1.04                                  | 0.8                          | 4                                                                      | 0.6                                 | 1.2                      | 15.5                          | 0.0066                                           | 36                                                        | 370                               | 500/D                  |
|                | 10                                                 | 7/1.35                                  | 0.9                          | 4                                                                      | 0.6                                 | 1.2                      | 18.5                          | 0.0059                                           | 50                                                        | 550                               | 500/D                  |
|                | 16                                                 | 7/1.70                                  | 1.0                          | 6                                                                      | 0.6                                 | 1.4                      | 22.0                          | 0.0053                                           | 67                                                        | 800                               | 500/D                  |
|                | 25                                                 | 7/2.14                                  | 1.2                          | 6                                                                      | 0.6                                 | 1.8                      | 27.5                          | 0.0051                                           | 90                                                        | 1,200                             | 500/D                  |
|                | 35                                                 | 19/1.53                                 | 1.2                          | 10                                                                     | 0.6                                 | 1.8                      | 30.5                          | 0.0043                                           | 110                                                       | 1,600                             | 500/D                  |
| 4              | 1                                                  | 1/1.13                                  | 0.6                          | 1                                                                      | 0.6                                 | 0.9                      | 9.2                           | 0.0115                                           | 10                                                        | 120                               | 500/D                  |
|                | 1                                                  | 7/0.43                                  | 0.6                          | 1                                                                      | 0.6                                 | 0.9                      | 9.8                           | 0.0110                                           | 10                                                        | 130                               | 500/D                  |
|                | 1.5                                                | 1/1.38                                  | 0.6                          | 1                                                                      | 0.6                                 | 1.2                      | 11.0                          | 0.0100                                           | 13                                                        | 160                               | 500/D                  |
|                | 1.5                                                | 7/0.53                                  | 0.6                          | 1                                                                      | 0.6                                 | 1.2                      | 11.5                          | 0.0094                                           | 13                                                        | 170                               | 500/D                  |
|                | 2.5                                                | 1/1.78                                  | 0.7                          | 1.5                                                                    | 0.6                                 | 1.2                      | 12.5                          | 0.0092                                           | 18                                                        | 220                               | 500/D                  |
|                | 2.5                                                | 7/0.67                                  | 0.7                          | 1.5                                                                    | 0.6                                 | 1.2                      | 13.5                          | 0.0084                                           | 18                                                        | 240                               | 500/D                  |
|                | 4                                                  | 1/2.25                                  | 0.8                          | 2.5                                                                    | 0.6                                 | 1.2                      | 14.5                          | 0.0086                                           | 25                                                        | 320                               | 500/D                  |
|                | 4                                                  | 7/0.85                                  | 0.8                          | 2.5                                                                    | 0.6                                 | 1.2                      | 15.5                          | 0.0078                                           | 25                                                        | 350                               | 500/D                  |
|                | 6                                                  | 7/1.04                                  | 0.8                          | 4                                                                      | 0.6                                 | 1.2                      | 17.0                          | 0.0066                                           | 33                                                        | 470                               | 500/D                  |
|                | 10                                                 | 7/1.35                                  | 0.9                          | 4                                                                      | 0.6                                 | 1.4                      | 20.5                          | 0.0059                                           | 45                                                        | 700                               | 500/D                  |
|                | 16                                                 | 7/1.70                                  | 1.0                          | 6                                                                      | 0.6                                 | 1.4                      | 24.5                          | 0.0053                                           | 60                                                        | 1,000                             | 500/D                  |
|                | 25                                                 | 7/2.14                                  | 1.2                          | 6                                                                      | 0.6                                 | 1.8                      | 30.0                          | 0.0051                                           | 81                                                        | 1,600                             | 500/D                  |
|                | 35                                                 | 19/1.53                                 | 1.2                          | 10                                                                     | 0.6                                 | 1.8                      | 33.5                          | 0.0043                                           | 99                                                        | 2,000                             | 500/D                  |

TISI permitted to increase the maximum overall diameter by 5%

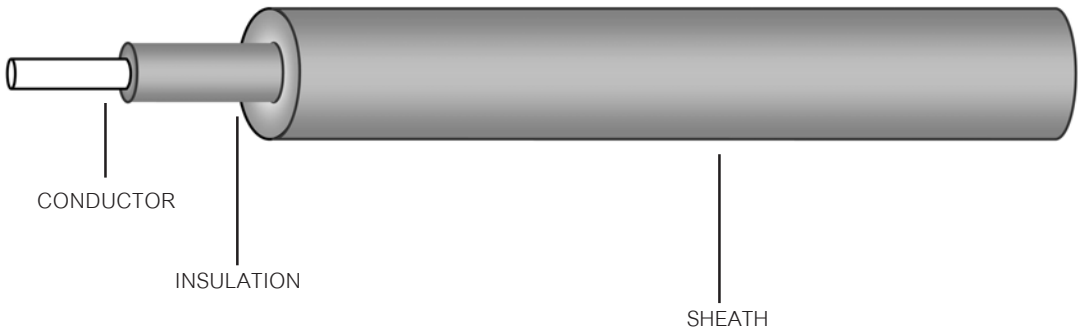
D : Packing in drum.



THAI-YAZAKI TECHNICAL DATA



750 V 70°C PVC INSULATED AND SHEATHED, SINGLE CORE



CABLE STRUCTURE

|                 |   |                                                                                        |
|-----------------|---|----------------------------------------------------------------------------------------|
| CONDUCTOR       | : | Solid and stranded annealed copper,<br>Size 1 mm <sup>2</sup> up to 35 mm <sup>2</sup> |
| INSULATION      | : | PVC<br>Color : Light gray                                                              |
| SHEATH          | : | PVC<br>Color : White                                                                   |
| CLASSIFICATION  | : | Maximum conductor temperature 70°C<br>Circuit voltage not exceeding 750 volts          |
| TESTING VOLTAGE | : | 2,500 volts                                                                            |
| REFERENCE       | : | TIS 11-2531, Table 5                                                                   |



# VV, MEA TYPE B SINGLE CORE

TIS 11-2531

TABLE 5

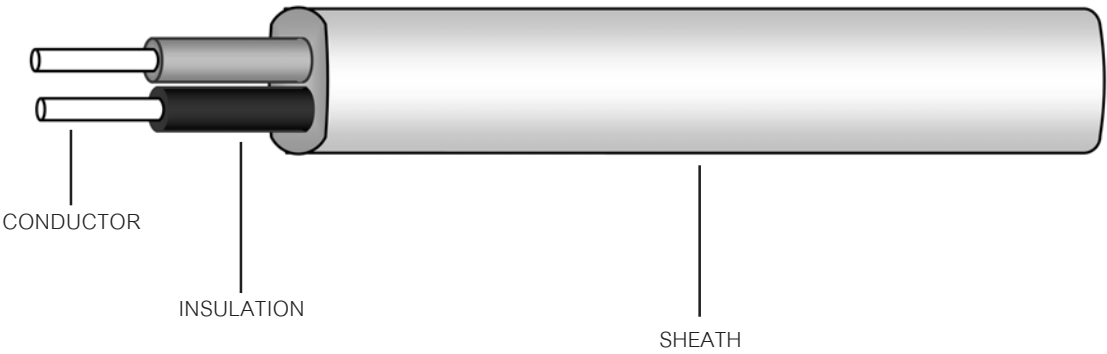
| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Insulation thickness<br>(mm) | Sheath thickness<br>(mm) | Max. overall diameter<br>(mm) | Minimum insulation resistance at 70 °C<br>(MΩ- km) | Maximum continuous current rating in free air<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|------------------------------|--------------------------|-------------------------------|----------------------------------------------------|-----------------------------------------------------------|-----------------------------------|------------------------|
| 1              | 1                                                  | 1/1.13                                  | 0.8                          | 1.0                      | 5.4                           | 0.0141                                             | 15                                                        | 35                                | 500/D                  |
|                | 1                                                  | 7/0.43                                  | 0.8                          | 1.0                      | 5.6                           | 0.0135                                             | 15                                                        | 36                                | 500/D                  |
|                | 1.5                                                | 1/1.38                                  | 0.8                          | 1.0                      | 5.8                           | 0.0123                                             | 20                                                        | 41                                | 500/D                  |
|                | 1.5                                                | 7/0.53                                  | 0.8                          | 1.0                      | 6.0                           | 0.0116                                             | 20                                                        | 43                                | 500/D                  |
|                | 2.5                                                | 1/1.78                                  | 0.8                          | 1.2                      | 6.6                           | 0.0102                                             | 27                                                        | 55                                | 500/D                  |
|                | 2.5                                                | 7/0.67                                  | 0.8                          | 1.2                      | 7.0                           | 0.0093                                             | 27                                                        | 60                                | 500/D                  |
|                | 4                                                  | 1/2.25                                  | 0.9                          | 1.2                      | 7.4                           | 0.0094                                             | 36                                                        | 80                                | 500/D                  |
|                | 4                                                  | 7/0.85                                  | 0.9                          | 1.2                      | 7.8                           | 0.0085                                             | 36                                                        | 80                                | 500/D                  |
|                | 6                                                  | 7/1.04                                  | 0.9                          | 1.4                      | 8.8                           | 0.0073                                             | 47                                                        | 110                               | 500/D                  |
|                | 10                                                 | 7/1.35                                  | 1.1                          | 1.4                      | 10.5                          | 0.0069                                             | 66                                                        | 170                               | 500/D                  |
|                | 16                                                 | 7/1.70                                  | 1.1                          | 1.5                      | 11.5                          | 0.0057                                             | 88                                                        | 240                               | 500/D                  |
|                | 25                                                 | 7/2.14                                  | 1.3                          | 1.5                      | 13.5                          | 0.0054                                             | 118                                                       | 360                               | 500/D                  |
|                | 35                                                 | 19/1.53                                 | 1.3                          | 1.6                      | 15.0                          | 0.0047                                             | 145                                                       | 470                               | 500/D                  |

D : Packing in drum.





750 V 70°C PVC INSULATED AND SHEATHED FLAT TYPE



CABLE STRUCTURE

|                 |   |                                                                                         |
|-----------------|---|-----------------------------------------------------------------------------------------|
| NUMBER OF CORE  | : | 2 cores                                                                                 |
| CONDUCTOR       | : | Solid and stranded annealed copper,<br>Sizes 1 mm <sup>2</sup> up to 35 mm <sup>2</sup> |
| INSULATION      | : | PVC<br>Color : Light gray, Black                                                        |
| SHEATH          | : | PVC<br>Color : White                                                                    |
| CLASSIFICATION  | : | Maximum conductor temperature 70°C<br>Circuit voltage not exceeding 750 volts           |
| TESTING VOLTAGE | : | 2,500 volts                                                                             |
| REFERENCE       | : | TIS 11-2531, Table 5                                                                    |



# VVF, MEA TYPE B

TIS 11-2531

TABLE 5

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Insulation thickness<br>(mm) | Sheath thickness<br>(mm) | Approx. overall diameter(mm) |             | Minimum insulation resistance at 70°C<br>(MΩ-km) | Maximum continuous current rating in free air<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|------------------------------|--------------------------|------------------------------|-------------|--------------------------------------------------|-----------------------------------------------------------|-----------------------------------|------------------------|
|                |                                                    |                                         |                              |                          | Lower limit                  | Upper limit |                                                  |                                                           |                                   |                        |
| 2              | 1                                                  | 1/1.13                                  | 0.8                          | 1.4                      | 5.2x8.0                      | 6.4x9.4     | 0.0141                                           | 12                                                        | 75                                | 100/C                  |
|                | 1                                                  | 7/0.43                                  | 0.8                          | 1.4                      | 5.4x8.0                      | 6.6x9.8     | 0.0135                                           | 12                                                        | 75                                | 100/C                  |
|                | 1.5                                                | 1/1.38                                  | 0.8                          | 1.4                      | 5.6x8.4                      | 6.6x10.0    | 0.0123                                           | 15                                                        | 85                                | 100/C                  |
|                | 1.5                                                | 7/0.53                                  | 0.8                          | 1.4                      | 5.6x8.6                      | 7.0x10.5    | 0.0116                                           | 15                                                        | 95                                | 100/C                  |
|                | 2.5                                                | 1/1.78                                  | 0.8                          | 1.4                      | 5.8x9.2                      | 7.2x11.0    | 0.0102                                           | 20                                                        | 110                               | 100/C                  |
|                | 2.5                                                | 7/0.67                                  | 0.8                          | 1.4                      | 6.2x9.6                      | 7.4x11.5    | 0.0093                                           | 20                                                        | 120                               | 100/C                  |
|                | 4                                                  | 1/2.25                                  | 0.9                          | 1.4                      | 6.6x10.5                     | 7.8x12.5    | 0.0094                                           | 27                                                        | 160                               | 100/C                  |
|                | 4                                                  | 7/0.85                                  | 0.9                          | 1.4                      | 6.8x11.0                     | 8.2x13.0    | 0.0085                                           | 27                                                        | 170                               | 100/C                  |
|                | 6                                                  | 7/1.04                                  | 0.9                          | 1.4                      | 7.4x12.0                     | 8.8x14.5    | 0.0073                                           | 36                                                        | 220                               | 100/C                  |
|                | 10                                                 | 7/1.35                                  | 1.1                          | 1.5                      | 8.8x15.0                     | 10.5x17.0   | 0.0069                                           | 50                                                        | 340                               | 100/C                  |
|                | 16                                                 | 7/1.70                                  | 1.1                          | 1.5                      | 9.8x17.0                     | 11.5x19.5   | 0.0057                                           | 66                                                        | 470                               | 500/D                  |
|                | 25                                                 | 7/2.14                                  | 1.3                          | 1.6                      | 11.5x20.5                    | 13.5x23.5   | 0.0054                                           | 89                                                        | 700                               | 500/D                  |
|                | 35                                                 | 19/1.53                                 | 1.3                          | 1.7                      | 13.0x23.0                    | 15.0x26.5   | 0.0047                                           | 109                                                       | 950                               | 500/D                  |

TISI permitted to increase the maximum overall diameter by 5%

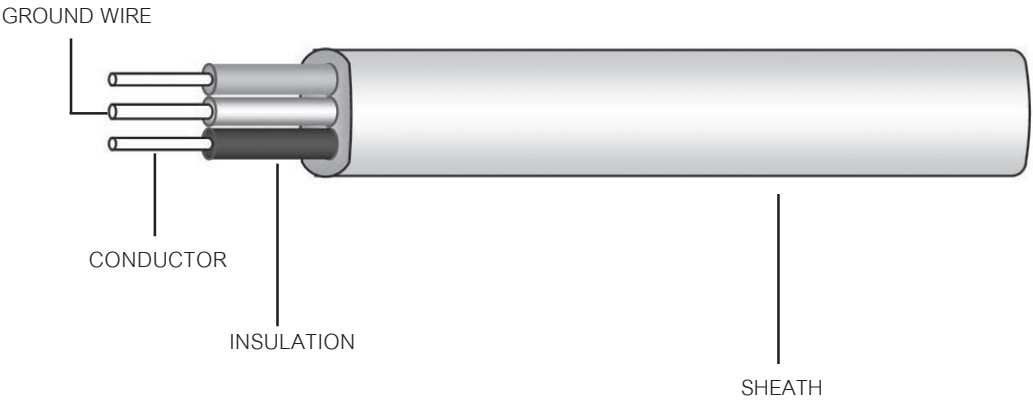
C : Packing in coil.

D : Packing in drum.





750 V 70°C PVC INSULATED AND SHEATHED FLAT TYPE, WITH GROUND



## CABLE STRUCTURE

|                 |   |                                                                                        |
|-----------------|---|----------------------------------------------------------------------------------------|
| NUMBER OF CORE  | : | 2 cores with safety-ground                                                             |
| CONDUCTOR       | : | Solid and stranded annealed copper,<br>Size 1 mm <sup>2</sup> up to 35 mm <sup>2</sup> |
| GROUND WIRE     | : | Ground conductor size 1 mm <sup>2</sup> up to 10 mm <sup>2</sup>                       |
| INSULATION      | : | PVC<br><br>Color : Light gray and Black<br>Ground core - Green/Yellow                  |
| SHEATH          | : | PVC<br><br>Color : White                                                               |
| CLASSIFICATION  | : | Maximum conductor temperature 70°C<br>Circuit voltage not exceeding 750 volts          |
| TESTING VOLTAGE | : | 2,500 volts                                                                            |
| REFERENCE       | : | TIS 11-2531, Table 13                                                                  |



# VVF-GRD, MEA TYPE B-GRD

TIS 11-2531

TABLE 13

| Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Insulation thickness<br>(mm) | Nominal cross sectional area of ground conductor<br>(mm <sup>2</sup> ) | Ground insulation thickness<br>(mm) | Sheath thickness<br>(mm) | Approx. overall diameter(mm) |             | Minimum insulation resistance at 70°C<br>(MΩ-km) | Maximum continuous current rating in free air<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------------------------------------------|-----------------------------------------|------------------------------|------------------------------------------------------------------------|-------------------------------------|--------------------------|------------------------------|-------------|--------------------------------------------------|-----------------------------------------------------------|-----------------------------------|------------------------|
|                                                    |                                         |                              |                                                                        |                                     |                          | Lower limit                  | Upper limit |                                                  |                                                           |                                   |                        |
| 1                                                  | 1/1.13                                  | 0.8                          | 1                                                                      | 0.6                                 | 1.4                      | 5.2x10.0                     | 6.4x12.0    | 0.0141                                           | 12                                                        | 100                               | 100/C                  |
| 1                                                  | 7/0.43                                  | 0.8                          | 1                                                                      | 0.6                                 | 1.4                      | 5.4x10.0                     | 6.6x12.5    | 0.0135                                           | 12                                                        | 110                               | 100/C                  |
| 1.5                                                | 1/1.38                                  | 0.8                          | 1                                                                      | 0.6                                 | 1.4                      | 5.6x10.5                     | 6.6x12.5    | 0.0123                                           | 15                                                        | 110                               | 100/C                  |
| 1.5                                                | 7/0.53                                  | 0.8                          | 1                                                                      | 0.6                                 | 1.4                      | 5.6x11.0                     | 7.0x13.0    | 0.0116                                           | 15                                                        | 120                               | 100/C                  |
| 2.5                                                | 1/1.78                                  | 0.8                          | 1.5                                                                    | 0.6                                 | 1.4                      | 5.8x11.5                     | 7.2x14.0    | 0.0102                                           | 20                                                        | 150                               | 100/C                  |
| 2.5                                                | 7/0.67                                  | 0.8                          | 1.5                                                                    | 0.6                                 | 1.4                      | 6.2x12.0                     | 7.4x14.5    | 0.0093                                           | 20                                                        | 160                               | 100/C                  |
| 4                                                  | 1/2.25                                  | 0.9                          | 2.5                                                                    | 0.6                                 | 1.4                      | 6.6x13.0                     | 7.8x15.5    | 0.0094                                           | 27                                                        | 200                               | 100/C                  |
| 4                                                  | 7/0.85                                  | 0.9                          | 2.5                                                                    | 0.6                                 | 1.4                      | 6.8x14.0                     | 8.2x16.5    | 0.0085                                           | 27                                                        | 220                               | 100/C                  |
| 6                                                  | 7/1.04                                  | 0.9                          | 4                                                                      | 0.6                                 | 1.4                      | 7.4x15.5                     | 8.8x18.5    | 0.0073                                           | 36                                                        | 290                               | 100/C                  |
| 10                                                 | 7/1.35                                  | 1.1                          | 4                                                                      | 0.6                                 | 1.5                      | 8.8x18.5                     | 10.5x21.5   | 0.0069                                           | 50                                                        | 420                               | 100/C                  |
| 16                                                 | 7/1.70                                  | 1.1                          | 6                                                                      | 0.6                                 | 1.5                      | 9.8x21.0                     | 11.5x24.5   | 0.0057                                           | 66                                                        | 600                               | 500/D                  |
| 25                                                 | 7/2.14                                  | 1.3                          | 6                                                                      | 0.6                                 | 1.6                      | 11.5x24.5                    | 13.5x28.0   | 0.0054                                           | 89                                                        | 850                               | 500/D                  |
| 35                                                 | 19/1.53                                 | 1.3                          | 10                                                                     | 0.6                                 | 1.7                      | 13.0x28.0                    | 15.0x32.0   | 0.0047                                           | 109                                                       | 1,100                             | 500/D                  |

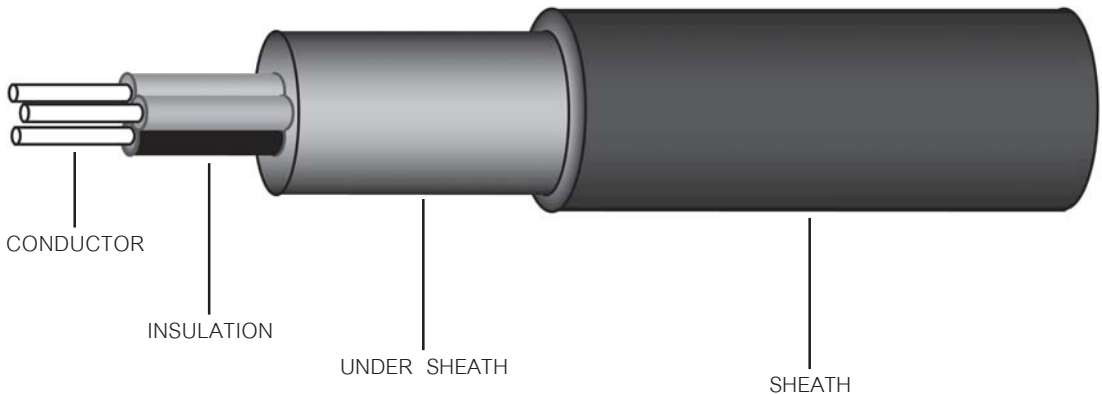
TISI permitted to increase the maximum overall diameter by 5%

C : Packing in coil.

D : Packing in drum.



750 V 70°C PVC INSULATED AND DOUBLE SHEATHED ROUND TYPE



## CABLE STRUCTURE

|                         |   |                                                                                                                                                          |
|-------------------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE          | : | Up to 4 cores                                                                                                                                            |
| CONDUCTOR               | : | Solid and stranded annealed copper,<br>Sizes 1 mm <sup>2</sup> up to 500 mm <sup>2</sup><br>Multi core 1 mm <sup>2</sup> up to 300 mm <sup>2</sup>       |
| INSULATION              | : | PVC<br>Color : Single core - Black<br>2 cores - Light gray and Black<br>3 cores - Light gray, Black and Red<br>4 cores - Light gray, Black, Red and Blue |
| SHEATH AND UNDER SHEATH | : | PVC<br>Color : Black                                                                                                                                     |
| CLASSIFICATION          | : | Maximum conductor temperature 70°C<br>Circuit Voltage not exceeding 750 volts                                                                            |
| TESTING VOLTAGE         | : | 2,500 volts                                                                                                                                              |
| REFERENCE               | : | TIS 11-2531, Table 6 (Single core)<br>TIS 11-2531, Table 7 (Multi core)                                                                                  |



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TIS 11-2531

TABLE 6

| Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Insulation thickness<br>(mm) | Sheath thickness<br>(mm) | Max. overall diameter<br>(mm) | Minimum insulation resistance at 70°C<br>(MΩ-km) | Maximum continuous current rating<br>(Ampere) |              | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------------------------------------------|-----------------------------------------|------------------------------|--------------------------|-------------------------------|--------------------------------------------------|-----------------------------------------------|--------------|-----------------------------------|------------------------|
|                                                    |                                         |                              |                          |                               |                                                  | Free air                                      | Under ground |                                   |                        |
| 1                                                  | 1/1.13                                  | 1.5                          | 1.8                      | 8.6                           | 0.0207                                           | 17                                            | 22           | 80                                | 100/C                  |
| 1                                                  | 7/0.43                                  | 1.5                          | 1.8                      | 8.8                           | 0.0200                                           | 17                                            | 22           | 80                                | 100/C                  |
| 1.5                                                | 1/1.38                                  | 1.5                          | 1.8                      | 9.0                           | 0.0184                                           | 21                                            | 27           | 85                                | 100/C                  |
| 1.5                                                | 7/0.53                                  | 1.5                          | 1.8                      | 9.2                           | 0.0175                                           | 21                                            | 27           | 90                                | 100/C                  |
| 2.5                                                | 1/1.78                                  | 1.5                          | 1.8                      | 9.4                           | 0.0157                                           | 28                                            | 36           | 100                               | 100/C                  |
| 2.5                                                | 7/0.67                                  | 1.5                          | 1.8                      | 9.8                           | 0.0146                                           | 28                                            | 36           | 110                               | 100/C                  |
| 4                                                  | 1/2.25                                  | 1.5                          | 1.8                      | 10.0                          | 0.0135                                           | 38                                            | 47           | 120                               | 100/C                  |
| 4                                                  | 7/0.85                                  | 1.5                          | 1.8                      | 10.5                          | 0.0124                                           | 38                                            | 47           | 130                               | 100/C                  |
| 6                                                  | 7/1.04                                  | 1.5                          | 1.8                      | 11.0                          | 0.0107                                           | 49                                            | 60           | 160                               | 100/C                  |
| 10                                                 | 7/1.35                                  | 1.5                          | 1.8                      | 12.0                          | 0.0088                                           | 67                                            | 81           | 210                               | 500/D                  |
| 16                                                 | 7/1.70                                  | 1.5                          | 1.8                      | 13.0                          | 0.0074                                           | 89                                            | 105          | 280                               | 500/D                  |
| 25                                                 | 7/2.14                                  | 1.5                          | 1.8                      | 14.5                          | 0.0061                                           | 118                                           | 136          | 390                               | 500/D                  |
| 35                                                 | 19/1.53                                 | 1.5                          | 1.8                      | 16.0                          | 0.0053                                           | 146                                           | 165          | 490                               | 500/D                  |
| 50                                                 | 19/1.78                                 | 1.5                          | 1.8                      | 17.0                          | 0.0046                                           | 177                                           | 196          | 600                               | 500/D                  |
| 70                                                 | 19/2.14                                 | 1.5                          | 1.8                      | 19.0                          | 0.0039                                           | 222                                           | 241          | 850                               | 500/D                  |
| 95                                                 | 19/2.52                                 | 1.7                          | 1.8                      | 21.5                          | 0.0038                                           | 274                                           | 289          | 1,100                             | 500/D                  |
| 120                                                | 37/2.03                                 | 1.7                          | 1.8                      | 23.0                          | 0.0034                                           | 318                                           | 330          | 1,400                             | 500/D                  |
| 150                                                | 37/2.25                                 | 1.9                          | 2.0                      | 26.0                          | 0.0034                                           | 362                                           | 370          | 1,700                             | 500/D                  |
| 185                                                | 37/2.52                                 | 2.1                          | 2.0                      | 28.0                          | 0.0034                                           | 416                                           | 419          | 2,100                             | 500/D                  |
| 240                                                | 61/2.25                                 | 2.3                          | 2.2                      | 31.5                          | 0.0033                                           | 492                                           | 486          | 2,700                             | 500/D                  |
| 300                                                | 61/2.52                                 | 2.5                          | 2.2                      | 35.0                          | 0.0032                                           | 565                                           | 551          | 3,400                             | 500/D                  |
| 400                                                | 61/2.85                                 | 2.7                          | 2.2                      | 38.5                          | 0.0030                                           | 655                                           | 629          | 4,300                             | 500/D                  |
| 500                                                | 61/3.20                                 | 3.1                          | 2.4                      | 43.0                          | 0.0031                                           | 757                                           | 717          | 5,400                             | 500/D                  |

TISI permitted to increase the maximum overall diameter by 5%

C : Packing in coil.

D : Packing in drum.



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TIS 11-2531

TABLE 7

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Insulation thickness<br>(mm) | Under Sheath thickness<br>(mm) | Sheath thickness<br>(mm) | Max. overall diameter<br>(mm) | Minimum insulation resistance at 70°C<br>(MΩ-km) | Maximum continuous current rating<br>(Ampere) |              | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|------------------------------|--------------------------------|--------------------------|-------------------------------|--------------------------------------------------|-----------------------------------------------|--------------|-----------------------------------|------------------------|
|                |                                                    |                                         |                              |                                |                          |                               |                                                  | Free air                                      | Under ground |                                   |                        |
| 2              | 1                                                  | 1/1.13                                  | 0.8                          | 0.8                            | 1.8                      | 12.0                          | 0.0141                                           | 15                                            | 21           | 160                               | 100/C                  |
|                | 1                                                  | 7/0.43                                  | 0.8                          | 0.8                            | 1.8                      | 12.5                          | 0.0135                                           | 15                                            | 21           | 160                               | 100/C                  |
|                | 1.5                                                | 1/1.38                                  | 0.8                          | 0.8                            | 1.8                      | 12.5                          | 0.0123                                           | 19                                            | 27           | 170                               | 100/C                  |
|                | 1.5                                                | 7/0.53                                  | 0.8                          | 0.8                            | 1.8                      | 13.0                          | 0.0116                                           | 19                                            | 27           | 190                               | 100/C                  |
|                | 2.5                                                | 1/1.78                                  | 0.8                          | 0.8                            | 1.8                      | 13.5                          | 0.0102                                           | 25                                            | 35           | 210                               | 100/C                  |
|                | 2.5                                                | 7/0.67                                  | 0.8                          | 0.8                            | 1.8                      | 14.0                          | 0.0093                                           | 25                                            | 35           | 230                               | 100/C                  |
|                | 4                                                  | 1/2.25                                  | 0.9                          | 0.8                            | 1.8                      | 15.0                          | 0.0094                                           | 33                                            | 47           | 270                               | 100/C                  |
|                | 4                                                  | 7/0.85                                  | 0.9                          | 0.8                            | 1.8                      | 15.5                          | 0.0085                                           | 33                                            | 47           | 290                               | 100/C                  |
|                | 6                                                  | 7/1.04                                  | 0.9                          | 0.8                            | 1.8                      | 17.0                          | 0.0073                                           | 43                                            | 60           | 360                               | 100/C                  |
|                | 10                                                 | 7/1.35                                  | 1.1                          | 0.8                            | 1.8                      | 19.5                          | 0.0069                                           | 60                                            | 81           | 550                               | 500/D                  |
|                | 16                                                 | 7/1.70                                  | 1.1                          | 0.8                            | 2.0                      | 22.5                          | 0.0057                                           | 80                                            | 105          | 700                               | 500/D                  |
|                | 25                                                 | 7/2.14                                  | 1.3                          | 1.2                            | 2.0                      | 27.0                          | 0.0054                                           | 106                                           | 136          | 1,100                             | 500/D                  |
|                | 35                                                 | 19/1.53                                 | 1.3                          | 1.2                            | 2.0                      | 29.5                          | 0.0047                                           | 130                                           | 165          | 1,400                             | 500/D                  |
|                | 50                                                 | 19/1.78                                 | 1.5                          | 1.2                            | 2.2                      | 33.5                          | 0.0046                                           | 157                                           | 196          | 1,800                             | 500/D                  |
|                | 70                                                 | 19/2.14                                 | 1.5                          | 1.5                            | 2.2                      | 38.0                          | 0.0039                                           | 195                                           | 240          | 2,400                             | 500/D                  |
|                | 95                                                 | 19/2.52                                 | 1.7                          | 1.5                            | 2.2                      | 42.5                          | 0.0038                                           | 239                                           | 290          | 3,200                             | 500/D                  |
|                | 120                                                | 37/2.03                                 | 1.7                          | 1.5                            | 2.4                      | 46.5                          | 0.0034                                           | 280                                           | 332          | 3,900                             | 500/D                  |
|                | 150                                                | 37/2.25                                 | 1.9                          | 1.8                            | 2.6                      | 52.0                          | 0.0034                                           | 320                                           | 370          | 4,800                             | 500/D                  |
|                | 185                                                | 37/2.52                                 | 2.1                          | 1.8                            | 2.8                      | 57.0                          | 0.0034                                           | 370                                           | 419          | 6,000                             | 500/D                  |
|                | 240                                                | 61/2.25                                 | 2.3                          | 2.0                            | 64.0                     | 64.0                          | 0.0033                                           | 440                                           | 484          | 7,500                             | 500/D                  |
|                | 300                                                | 61/2.25                                 | 2.5                          | 2.0                            | 3.2                      | 70.5                          | 0.0032                                           | 507                                           | 547          | 9,500                             | 500/D                  |
| 3              | 1                                                  | 1/1.13                                  | 0.8                          | 0.8                            | 1.8                      | 12.5                          | 0.0414                                           | 12                                            | 18           | 180                               | 100/C                  |
|                | 1                                                  | 7/0.43                                  | 0.8                          | 0.8                            | 1.8                      | 13.0                          | 0.0135                                           | 12                                            | 18           | 180                               | 100/C                  |
|                | 1.5                                                | 1/1.38                                  | 0.8                          | 0.8                            | 1.8                      | 13.0                          | 0.0123                                           | 16                                            | 22           | 200                               | 100/C                  |
|                | 1.5                                                | 7/0.53                                  | 0.8                          | 0.8                            | 1.8                      | 13.5                          | 0.0116                                           | 16                                            | 22           | 210                               | 100/C                  |
|                | 2.5                                                | 1/1.78                                  | 0.8                          | 0.8                            | 1.8                      | 14.0                          | 0.0102                                           | 21                                            | 30           | 240                               | 100/C                  |
|                | 2.5                                                | 7/0.67                                  | 0.8                          | 0.8                            | 1.8                      | 15.0                          | 0.0093                                           | 21                                            | 30           | 260                               | 100/C                  |
|                | 4                                                  | 1/2.25                                  | 0.9                          | 0.8                            | 1.8                      | 15.5                          | 0.0094                                           | 28                                            | 39           | 320                               | 100/C                  |
|                | 4                                                  | 7/0.85                                  | 0.9                          | 0.8                            | 1.8                      | 16.5                          | 0.0085                                           | 28                                            | 39           | 350                               | 100/C                  |
|                | 6                                                  | 7/1.04                                  | 0.9                          | 0.8                            | 1.8                      | 18.0                          | 0.0073                                           | 37                                            | 50           | 440                               | 100/C                  |
|                | 10                                                 | 7/1.35                                  | 1.1                          | 0.8                            | 1.8                      | 20.5                          | 0.0069                                           | 50                                            | 68           | 650                               | 500/D                  |
|                | 16                                                 | 7/1.70                                  | 1.1                          | 1.2                            | 2.0                      | 24.5                          | 0.0057                                           | 67                                            | 87           | 950                               | 500/D                  |
|                | 25                                                 | 7/2.14                                  | 1.3                          | 1.2                            | 2.0                      | 28.5                          | 0.0054                                           | 89                                            | 113          | 1,400                             | 500/D                  |
|                | 35                                                 | 19/1.53                                 | 1.3                          | 1.2                            | 2.0                      | 31.5                          | 0.0047                                           | 109                                           | 137          | 1,700                             | 500/D                  |
|                | 50                                                 | 19/1.78                                 | 1.5                          | 1.5                            | 2.2                      | 36.0                          | 0.0046                                           | 131                                           | 162          | 2,300                             | 500/D                  |
|                | 70                                                 | 19/2.14                                 | 1.5                          | 1.5                            | 2.2                      | 40.5                          | 0.0039                                           | 163                                           | 200          | 3,100                             | 500/D                  |
|                | 95                                                 | 19/2.52                                 | 1.7                          | 1.5                            | 2.4                      | 46.0                          | 0.0038                                           | 202                                           | 240          | 4,200                             | 500/D                  |
|                | 120                                                | 37/2.03                                 | 1.7                          | 1.8                            | 2.6                      | 50.5                          | 0.0034                                           | 235                                           | 273          | 5,000                             | 500/D                  |
|                | 150                                                | 37/2.25                                 | 1.9                          | 1.8                            | 2.8                      | 56.0                          | 0.0034                                           | 269                                           | 306          | 6,500                             | 500/D                  |
|                | 185                                                | 37/2.52                                 | 2.1                          | 2.0                            | 3.0                      | 61.5                          | 0.0034                                           | 311                                           | 346          | 8,000                             | 500/D                  |
|                | 240                                                | 61/2.25                                 | 2.3                          | 2.0                            | 3.2                      | 69.0                          | 0.0033                                           | 371                                           | 402          | 10,000                            | 500/D                  |
|                | 300                                                | 61/2.52                                 | 2.5                          | 2.2                            | 3.4                      | 76.0                          | 0.0032                                           | 427                                           | 453          | 12,500                            | 500/D                  |



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TIS 11-2531

TABLE 7

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Insulation thickness<br>(mm) | Under sheath thickness<br>(mm) | Sheath thickness<br>(mm) | Max. overall diameter<br>(mm) | Minimum insulation resistance at 70°C<br>(MΩ-km) | Maximum continuous current rating<br>(Ampere) |              | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|------------------------------|--------------------------------|--------------------------|-------------------------------|--------------------------------------------------|-----------------------------------------------|--------------|-----------------------------------|------------------------|
|                |                                                    |                                         |                              |                                |                          |                               |                                                  | Free air                                      | Under ground |                                   |                        |
| 4              | 1                                                  | 1/1.13                                  | 0.8                          | 0.8                            | 1.8                      | 13.5                          | 0.0141                                           | 11                                            | 16           | 200                               | 100/C                  |
|                | 1                                                  | 7/0.43                                  | 0.8                          | 0.8                            | 1.8                      | 14.0                          | 0.0135                                           | 11                                            | 16           | 210                               | 100/C                  |
|                | 1.5                                                | 1/1.38                                  | 0.8                          | 0.8                            | 1.8                      | 14.0                          | 0.0123                                           | 14                                            | 20           | 230                               | 100/C                  |
|                | 1.5                                                | 7/0.53                                  | 0.8                          | 0.8                            | 1.8                      | 14.5                          | 0.0116                                           | 14                                            | 20           | 240                               | 100/C                  |
|                | 2.5                                                | 1/1.78                                  | 0.8                          | 0.8                            | 1.8                      | 15.0                          | 0.0102                                           | 19                                            | 27           | 290                               | 100/C                  |
|                | 2.5                                                | 7/0.67                                  | 0.8                          | 0.8                            | 1.8                      | 16.0                          | 0.0093                                           | 19                                            | 27           | 310                               | 100/C                  |
|                | 4                                                  | 1/2.25                                  | 0.9                          | 0.8                            | 1.8                      | 17.0                          | 0.0094                                           | 25                                            | 35           | 390                               | 100/C                  |
|                | 4                                                  | 7/0.85                                  | 0.9                          | 0.8                            | 1.8                      | 17.5                          | 0.0085                                           | 25                                            | 35           | 410                               | 100/C                  |
|                | 6                                                  | 7/1.04                                  | 0.9                          | 0.8                            | 1.8                      | 19.0                          | 0.0073                                           | 33                                            | 45           | 550                               | 500/D                  |
|                | 10                                                 | 7/1.35                                  | 1.1                          | 0.8                            | 2.0                      | 23.0                          | 0.0069                                           | 45                                            | 60           | 800                               | 500/D                  |
|                | 16                                                 | 7/1.70                                  | 1.1                          | 1.2                            | 2.0                      | 26.5                          | 0.0057                                           | 60                                            | 77           | 1,100                             | 500/D                  |
|                | 25                                                 | 7/2.14                                  | 1.3                          | 1.2                            | 2.0                      | 31.0                          | 0.0054                                           | 79                                            | 100          | 1,700                             | 500/D                  |
|                | 35                                                 | 19/1.53                                 | 1.3                          | 1.5                            | 2.2                      | 35.0                          | 0.0047                                           | 97                                            | 120          | 2,200                             | 500/D                  |
|                | 50                                                 | 19/1.78                                 | 1.5                          | 1.5                            | 2.2                      | 39.5                          | 0.0046                                           | 117                                           | 144          | 2,900                             | 500/D                  |
|                | 70                                                 | 19/2.14                                 | 1.5                          | 1.5                            | 2.4                      | 44.5                          | 0.0039                                           | 147                                           | 176          | 4,000                             | 500/D                  |
|                | 95                                                 | 19/2.52                                 | 1.7                          | 1.8                            | 2.6                      | 57.5                          | 0.0038                                           | 182                                           | 211          | 5,500                             | 500/D                  |
|                | 120                                                | 37/2.03                                 | 1.7                          | 1.8                            | 2.8                      | 56.0                          | 0.0034                                           | 213                                           | 241          | 6,500                             | 500/D                  |
|                | 150                                                | 37/2.25                                 | 1.9                          | 2.0                            | 3.0                      | 62.0                          | 0.0034                                           | 243                                           | 270          | 8,000                             | 500/D                  |
|                | 185                                                | 37/2.52                                 | 2.1                          | 2.0                            | 3.2                      | 68.0                          | 0.0034                                           | 282                                           | 306          | 10,000                            | 500/D                  |
|                | 240                                                | 61/2.25                                 | 2.3                          | 2.2                            | 3.4                      | 76.5                          | 0.0033                                           | 335                                           | 354          | 13,000                            | 500/D                  |
|                | 300                                                | 61/2.52                                 | 2.5                          | 2.2                            | 3.8                      | 85.0                          | 0.0032                                           | 385                                           | 399          | 16,000                            | 500/D                  |

TISI permitted to increase the maximum overall diameter by 5%

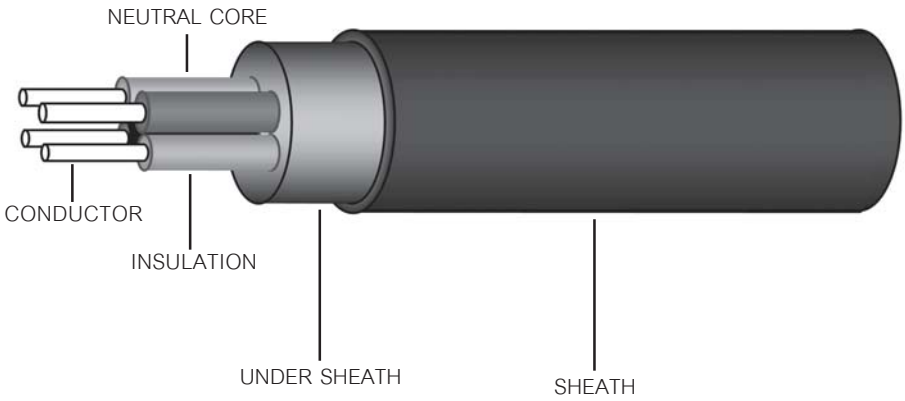
\*REMARK : Special protection can be produced.

C : Packing in coil.

D : Packing in drum.



750 V 70°C PVC INSULATED AND DOUBLE SHEATHED ROUND TYPE WITH NEUTRAL



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## CABLE STRUCTURE

|                         |                                                                                                                                                                                            |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE          | : 3 phase core with 1 neutral core                                                                                                                                                         |
| CONDUCTOR               | : Stranded annealed copper,<br><div> Sizes : Phase conductor size. 6 mm<sup>2</sup> up to 300 mm<sup>2</sup><br/> Neutral conductor size. 4 mm<sup>2</sup> up to 150 mm<sup>2</sup> </div> |
| INSULATION              | : PVC<br><div> Color :3 cores - Black, Red and Blue<br/> 1 Neutral core - Light gray </div>                                                                                                |
| SHEATH AND UNDER SHEATH | : PVC<br><div> Color :Black </div>                                                                                                                                                         |
| CLASSIFICATION          | : Maximum conductor temperature 70°C<br><div> Circuit voltage not exceeding 750 volts </div>                                                                                               |
| TESTING VOLTAGE         | : 2,500 volts                                                                                                                                                                              |
| REFERENCE               | : TIS 11-2531, Table 8                                                                                                                                                                     |

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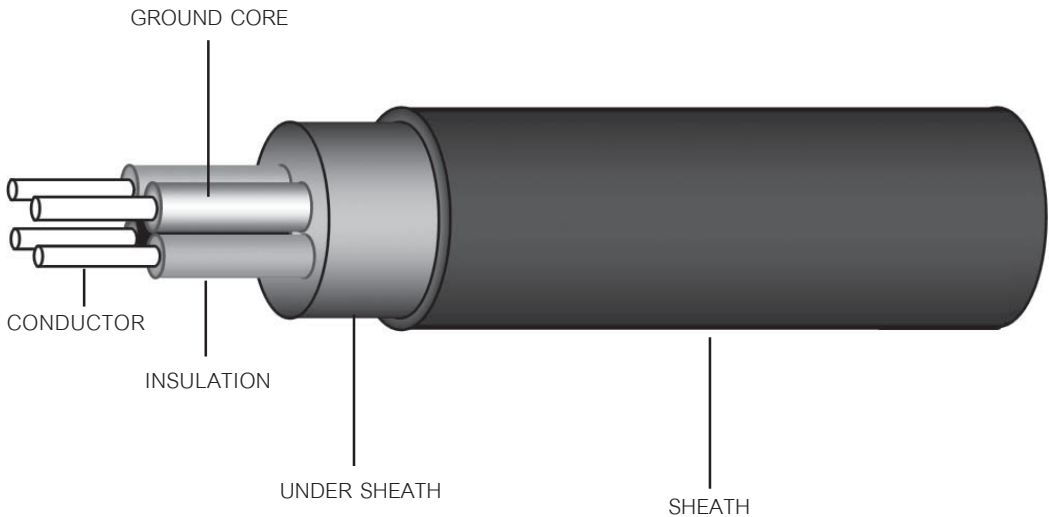
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750 V 70°C PVC INSULATED AND DOUBLE SHEATHED ROUND TYPE, WITH GROUND



CABLE STRUCTURE

|                         |   |                                                                                                                                                                 |
|-------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE          | : | 2 up to 4 cores with safety ground                                                                                                                              |
| CONDUCTOR               | : | Solid and stranded annealed copper,<br>Sizes 1 mm <sup>2</sup> up to 300 mm <sup>2</sup><br>Ground conductor size 1 mm <sup>2</sup> up to 35 mm <sup>2</sup>    |
| INSULATION              | : | PVC<br>Color : 2 cores - Light gray and Black<br>3 cores - Light gray, Black and Red<br>4 cores - Light gray, Black, Red and Blue<br>Ground core - Green/Yellow |
| SHEATH AND UNDER SHEATH | : | PVC<br>Color : Black                                                                                                                                            |
| CLASSIFICATION          | : | Maximum conductor temperature 70°C<br>Circuit voltage not exceeding 750 volts                                                                                   |
| TESTING VOLTAGE         | : | 2,500 volts                                                                                                                                                     |
| REFERENCE               | : | TIS 11-2531, Table 14                                                                                                                                           |



# NYY-GRD, MEA TYPE C-GRD

TIS 11-2531

TABLE 14

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Insulation thickness<br>(mm) | Nominal cross sectional area of ground conductor<br>(mm <sup>2</sup> ) | Ground insulation thickness<br>(mm) | Under sheath thickness<br>(mm) | Sheath thickness<br>(mm) | Max. overall diameter<br>(mm) | Minimum insulation resistance at 70°C<br>(MΩ-km) | Maximum continuous current rating<br>(Ampere) |              | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|------------------------------|------------------------------------------------------------------------|-------------------------------------|--------------------------------|--------------------------|-------------------------------|--------------------------------------------------|-----------------------------------------------|--------------|-----------------------------------|------------------------|
|                |                                                    |                                         |                              |                                                                        |                                     |                                |                          |                               |                                                  | Free air                                      | Under ground |                                   |                        |
| 2              | 1                                                  | 1/1.13                                  | 0.8                          | 1                                                                      | 0.6                                 | 0.8                            | 1.8                      | 12.5                          | 0.0141                                           | 15                                            | 21           | 170                               | 500/D                  |
|                | 1                                                  | 7/0.43                                  | 0.8                          | 1                                                                      | 0.6                                 | 0.8                            | 1.8                      | 13.0                          | 0.0135                                           | 15                                            | 21           | 170                               | 500/D                  |
|                | 1.5                                                | 1/1.38                                  | 0.8                          | 1                                                                      | 0.6                                 | 0.8                            | 1.8                      | 13.0                          | 0.0123                                           | 19                                            | 27           | 180                               | 500/D                  |
|                | 1.5                                                | 7/0.53                                  | 0.8                          | 1                                                                      | 0.6                                 | 0.8                            | 1.8                      | 13.5                          | 0.0116                                           | 19                                            | 27           | 190                               | 500/D                  |
|                | 2.5                                                | 1/1.78                                  | 0.8                          | 1.5                                                                    | 0.6                                 | 0.8                            | 1.8                      | 14.0                          | 0.0102                                           | 25                                            | 35           | 220                               | 500/D                  |
|                | 2.5                                                | 7/0.67                                  | 0.8                          | 1.5                                                                    | 0.6                                 | 0.8                            | 1.8                      | 15.0                          | 0.0093                                           | 25                                            | 35           | 240                               | 500/D                  |
|                | 4                                                  | 1/2.25                                  | 0.9                          | 2.5                                                                    | 0.6                                 | 0.8                            | 1.8                      | 15.5                          | 0.0094                                           | 33                                            | 47           | 290                               | 500/D                  |
|                | 4                                                  | 7/0.85                                  | 0.9                          | 2.5                                                                    | 0.6                                 | 0.8                            | 1.8                      | 16.5                          | 0.0085                                           | 33                                            | 47           | 310                               | 500/D                  |
|                | 6                                                  | 7/1.04                                  | 0.9                          | 4                                                                      | 0.6                                 | 0.8                            | 1.8                      | 18.0                          | 0.0073                                           | 43                                            | 60           | 390                               | 500/D                  |
|                | 10                                                 | 7/1.35                                  | 1.1                          | 4                                                                      | 0.6                                 | 0.8                            | 1.8                      | 19.5                          | 0.0069                                           | 60                                            | 81           | 550                               | 500/D                  |
|                | 16                                                 | 7/1.70                                  | 1.1                          | 6                                                                      | 0.6                                 | 0.8                            | 2.0                      | 22.5                          | 0.0057                                           | 80                                            | 105          | 800                               | 500/D                  |
|                | 25                                                 | 7/2.14                                  | 1.3                          | 6                                                                      | 0.6                                 | 1.2                            | 2.0                      | 27.0                          | 0.0054                                           | 106                                           | 136          | 1,200                             | 500/D                  |
|                | 35                                                 | 19/1.53                                 | 1.3                          | 10                                                                     | 0.6                                 | 1.2                            | 2.0                      | 29.0                          | 0.0047                                           | 130                                           | 165          | 1,500                             | 500/D                  |
|                | 50                                                 | 19/1.78                                 | 1.5                          | 10                                                                     | 0.6                                 | 1.2                            | 2.2                      | 33.5                          | 0.0046                                           | 157                                           | 196          | 1,900                             | 500/D                  |
|                | 70                                                 | 19/2.14                                 | 1.5                          | 10                                                                     | 0.6                                 | 1.5                            | 2.2                      | 38.0                          | 0.0039                                           | 195                                           | 240          | 2,500                             | 500/D                  |
|                | 95                                                 | 19/2.52                                 | 1.7                          | 16                                                                     | 0.6                                 | 1.5                            | 2.2                      | 42.5                          | 0.0038                                           | 239                                           | 290          | 3,400                             | 500/D                  |
|                | 120                                                | 37/2.03                                 | 1.7                          | 16                                                                     | 0.6                                 | 1.5                            | 2.4                      | 46.5                          | 0.0034                                           | 280                                           | 332          | 4,100                             | 500/D                  |
|                | 150                                                | 37/2.25                                 | 1.9                          | 25                                                                     | 0.6                                 | 1.8                            | 2.6                      | 52.0                          | 0.0034                                           | 320                                           | 370          | 5,000                             | 500/D                  |
|                | 185                                                | 37/2.52                                 | 2.1                          | 25                                                                     | 0.6                                 | 1.8                            | 2.8                      | 57.0                          | 0.0034                                           | 370                                           | 419          | 6,000                             | 500/D                  |
|                | 240                                                | 61/2.25                                 | 2.3                          | 35                                                                     | 0.6                                 | 2.0                            | 3.0                      | 64.0                          | 0.0033                                           | 440                                           | 484          | 8,000                             | 300/D                  |
|                | 300                                                | 61/2.52                                 | 2.5                          | 35                                                                     | 0.6                                 | 2.0                            | 3.2                      | 70.5                          | 0.0032                                           | 507                                           | 547          | 10,000                            | 300/D                  |
| 3              | 1                                                  | 1/1.13                                  | 0.8                          | 1                                                                      | 0.6                                 | 0.8                            | 1.8                      | 13.5                          | 0.0141                                           | 12                                            | 18           | 190                               | 500/D                  |
|                | 1                                                  | 7/0.43                                  | 0.8                          | 1                                                                      | 0.6                                 | 0.8                            | 1.8                      | 14.0                          | 0.0135                                           | 12                                            | 18           | 200                               | 500/D                  |
|                | 1.5                                                | 1/1.38                                  | 0.8                          | 1                                                                      | 0.6                                 | 0.8                            | 1.8                      | 14.0                          | 0.0123                                           | 16                                            | 22           | 210                               | 500/D                  |
|                | 1.5                                                | 7/0.53                                  | 0.8                          | 1                                                                      | 0.6                                 | 0.8                            | 1.8                      | 14.5                          | 0.0116                                           | 16                                            | 22           | 230                               | 500/D                  |
|                | 2.5                                                | 1/1.78                                  | 0.8                          | 1.5                                                                    | 0.6                                 | 0.8                            | 1.8                      | 15.0                          | 0.0102                                           | 21                                            | 30           | 270                               | 500/D                  |
|                | 2.5                                                | 7/0.67                                  | 0.8                          | 1.5                                                                    | 0.6                                 | 0.8                            | 1.8                      | 16.0                          | 0.0093                                           | 21                                            | 30           | 290                               | 500/D                  |
|                | 4                                                  | 1/2.25                                  | 0.9                          | 2.5                                                                    | 0.6                                 | 0.8                            | 1.8                      | 17.0                          | 0.0094                                           | 28                                            | 39           | 360                               | 500/D                  |
|                | 4                                                  | 7/0.85                                  | 0.9                          | 2.5                                                                    | 0.6                                 | 0.8                            | 1.8                      | 17.5                          | 0.0085                                           | 28                                            | 39           | 380                               | 500/D                  |
|                | 6                                                  | 7/1.04                                  | 0.9                          | 4                                                                      | 0.6                                 | 0.8                            | 1.8                      | 19.0                          | 0.0073                                           | 37                                            | 50           | 490                               | 500/D                  |
|                | 10                                                 | 7/1.35                                  | 1.1                          | 4                                                                      | 0.6                                 | 0.8                            | 1.8                      | 22.5                          | 0.0069                                           | 50                                            | 68           | 700                               | 500/D                  |
|                | 16                                                 | 7/1.70                                  | 1.1                          | 6                                                                      | 0.6                                 | 1.2                            | 2.0                      | 26.5                          | 0.0057                                           | 67                                            | 87           | 1,000                             | 500/D                  |
|                | 25                                                 | 7/2.14                                  | 1.3                          | 6                                                                      | 0.6                                 | 1.2                            | 2.0                      | 31.0                          | 0.0054                                           | 89                                            | 113          | 1,400                             | 500/D                  |
|                | 35                                                 | 19/1.53                                 | 1.3                          | 10                                                                     | 0.6                                 | 1.2                            | 2.0                      | 34.0                          | 0.0047                                           | 109                                           | 137          | 1,800                             | 500/D                  |
|                | 50                                                 | 19/1.78                                 | 1.5                          | 10                                                                     | 0.6                                 | 1.5                            | 2.2                      | 36.0                          | 0.0046                                           | 131                                           | 162          | 2,400                             | 500/D                  |
|                | 70                                                 | 19/2.14                                 | 1.5                          | 10                                                                     | 0.6                                 | 1.5                            | 2.2                      | 40.5                          | 0.0039                                           | 163                                           | 200          | 3,200                             | 500/D                  |
|                | 95                                                 | 19/2.52                                 | 1.7                          | 16                                                                     | 0.6                                 | 1.5                            | 2.4                      | 46.0                          | 0.0038                                           | 202                                           | 240          | 4,300                             | 500/D                  |
|                | 120                                                | 37/2.03                                 | 1.7                          | 16                                                                     | 0.6                                 | 1.8                            | 2.6                      | 50.5                          | 0.0034                                           | 235                                           | 273          | 5,500                             | 500/D                  |
|                | 150                                                | 37/2.25                                 | 1.9                          | 25                                                                     | 0.6                                 | 1.8                            | 2.8                      | 56.5                          | 0.0034                                           | 269                                           | 306          | 6,500                             | 500/D                  |
|                | 185                                                | 37/2.52                                 | 2.1                          | 25                                                                     | 0.6                                 | 2.0                            | 3.0                      | 61.5                          | 0.0034                                           | 311                                           | 346          | 8,000                             | 300/D                  |
|                | 240                                                | 61/2.25                                 | 2.3                          | 35                                                                     | 0.6                                 | 2.0                            | 3.2                      | 69.0                          | 0.0033                                           | 371                                           | 402          | 10,500                            | 300/D                  |
|                | 300                                                | 61/2.52                                 | 2.5                          | 35                                                                     | 0.6                                 | 2.2                            | 3.4                      | 76.0                          | 0.0032                                           | 427                                           | 453          | 13,000                            | 200/D                  |



THAI-YAZAKI TECHNICAL DATA

# NYY-GRD, MEA TYPE C-GRD

TIS 11-2531

TABLE 14

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Insulation thickness<br>(mm) | Nominal cross sectional area of ground conductor<br>(mm <sup>2</sup> ) | Ground insulation thickness<br>(mm) | Under sheath thickness<br>(mm) | Sheath thickness<br>(mm) | Max. overall diameter<br>(mm) | Minimum insulation resistance at 70°C<br>(MΩ-km) | Maximum continuous current rating<br>(Ampere) |              | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|------------------------------|------------------------------------------------------------------------|-------------------------------------|--------------------------------|--------------------------|-------------------------------|--------------------------------------------------|-----------------------------------------------|--------------|-----------------------------------|------------------------|
|                |                                                    |                                         |                              |                                                                        |                                     |                                |                          |                               |                                                  | Free air                                      | Under ground |                                   |                        |
| 4              | 1                                                  | 1/1.13                                  | 0.8                          | 1                                                                      | 0.6                                 | 0.8                            | 1.8                      | 14.0                          | 0.0141                                           | 11                                            | 16           | 230                               | 500/D                  |
|                | 1                                                  | 7/0.43                                  | 0.8                          | 1                                                                      | 0.6                                 | 0.8                            | 1.8                      | 14.5                          | 0.0135                                           | 11                                            | 16           | 240                               | 500/D                  |
|                | 1.5                                                | 1/1.38                                  | 0.8                          | 1                                                                      | 0.6                                 | 0.8                            | 1.8                      | 15.0                          | 0.0123                                           | 14                                            | 20           | 260                               | 500/D                  |
|                | 1.5                                                | 7/0.53                                  | 0.8                          | 1                                                                      | 0.6                                 | 0.8                            | 1.8                      | 15.5                          | 0.0116                                           | 14                                            | 20           | 280                               | 500/D                  |
|                | 2.5                                                | 1/1.78                                  | 0.8                          | 1.5                                                                    | 0.6                                 | 0.8                            | 1.8                      | 16.0                          | 0.0102                                           | 19                                            | 27           | 320                               | 500/D                  |
|                | 2.5                                                | 7/0.67                                  | 0.8                          | 1.5                                                                    | 0.6                                 | 0.8                            | 1.8                      | 17.0                          | 0.0093                                           | 19                                            | 27           | 350                               | 500/D                  |
|                | 4                                                  | 1/2.25                                  | 0.9                          | 2.5                                                                    | 0.6                                 | 0.8                            | 1.8                      | 18.0                          | 0.0094                                           | 25                                            | 35           | 440                               | 500/D                  |
|                | 4                                                  | 7/0.85                                  | 0.9                          | 2.5                                                                    | 0.6                                 | 0.8                            | 1.8                      | 19.0                          | 0.0085                                           | 25                                            | 35           | 470                               | 500/D                  |
|                | 6                                                  | 7/1.04                                  | 0.9                          | 4                                                                      | 0.6                                 | 0.8                            | 1.8                      | 20.5                          | 0.0073                                           | 33                                            | 45           | 600                               | 500/D                  |
|                | 10                                                 | 7/1.35                                  | 1.1                          | 4                                                                      | 0.6                                 | 0.8                            | 2.0                      | 25.0                          | 0.0069                                           | 45                                            | 60           | 850                               | 500/D                  |
|                | 16                                                 | 7/1.70                                  | 1.1                          | 6                                                                      | 0.6                                 | 1.2                            | 2.0                      | 28.5                          | 0.0057                                           | 60                                            | 77           | 1,200                             | 500/D                  |
|                | 25                                                 | 7/2.14                                  | 1.3                          | 6                                                                      | 0.6                                 | 1.2                            | 2.0                      | 33.5                          | 0.0054                                           | 79                                            | 100          | 1,800                             | 500/D                  |
|                | 35                                                 | 19/1.53                                 | 1.3                          | 10                                                                     | 0.6                                 | 1.5                            | 2.2                      | 38.5                          | 0.0047                                           | 97                                            | 120          | 2,400                             | 500/D                  |
|                | 50                                                 | 19/1.78                                 | 1.5                          | 10                                                                     | 0.6                                 | 1.5                            | 2.2                      | 43.0                          | 0.0046                                           | 117                                           | 144          | 3,000                             | 500/D                  |
|                | 70                                                 | 19/2.14                                 | 1.5                          | 10                                                                     | 0.6                                 | 1.5                            | 2.4                      | 44.5                          | 0.0039                                           | 147                                           | 176          | 4,100                             | 500/D                  |
|                | 95                                                 | 19/2.52                                 | 1.7                          | 16                                                                     | 0.6                                 | 1.8                            | 2.6                      | 51.5                          | 0.0038                                           | 182                                           | 211          | 5,500                             | 500/D                  |
|                | 120                                                | 37/2.03                                 | 1.7                          | 16                                                                     | 0.6                                 | 1.8                            | 2.8                      | 56.0                          | 0.0034                                           | 213                                           | 241          | 7,000                             | 500/D                  |
|                | 150                                                | 37/2.25                                 | 1.9                          | 25                                                                     | 0.6                                 | 2.0                            | 3.0                      | 62.0                          | 0.0034                                           | 243                                           | 270          | 8,500                             | 300/D                  |
|                | 185                                                | 37/2.52                                 | 2.1                          | 25                                                                     | 0.6                                 | 2.0                            | 3.2                      | 68.0                          | 0.0034                                           | 282                                           | 306          | 10,500                            | 300/D                  |
|                | 240                                                | 61/2.25                                 | 2.3                          | 35                                                                     | 0.6                                 | 2.2                            | 3.4                      | 76.5                          | 0.0033                                           | 335                                           | 354          | 13,500                            | 200/D                  |
|                | 300                                                | 61/2.52                                 | 2.5                          | 35                                                                     | 0.6                                 | 2.2                            | 3.8                      | 84.5                          | 0.0032                                           | 385                                           | 399          | 16,500                            | 200/D                  |

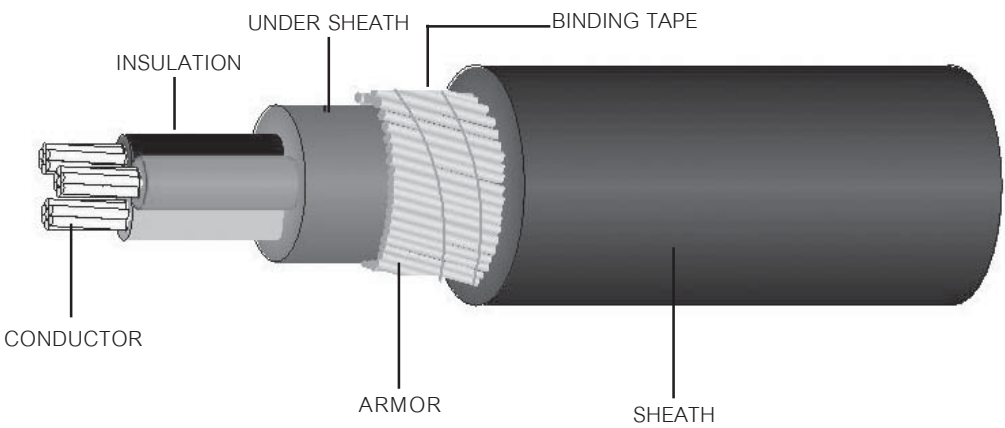
TISI permitted to increase the maximum overall diameter by 5%

\*REMARK : Special protection can be produced.

D : Packing in drum.



750 V 70°C PVC INSULATED AND DOUBLE SHEATHED POWER CABLE, WITH GALVANIZED STEEL WIRES ARMOR



CABLE STRUCTURE

|                 |   |                                                                                                                                       |
|-----------------|---|---------------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE  | : | 2 up to 4 cores                                                                                                                       |
| CONDUCTOR       | : | Solid and stranded annealed copper,<br>Sizes 1 mm <sup>2</sup> up to 300 mm <sup>2</sup>                                              |
| INSULATION      | : | PVC<br><br>Color : 2 cores - Light gray and Black<br>3 cores - Light gray, Black and Red<br>4 cores - Light gray, Black, Red and Blue |
| UNDER SHEATH    | : | PVC, Color : Black                                                                                                                    |
| SHEATH          | : | PVC, Color : Black                                                                                                                    |
| ARMOUR          | : | Galvanized Steel Wires                                                                                                                |
| CLASSIFICATION  | : | Maximum conductor temperature 70°C<br>Circuit voltage not exceeding 750 volts                                                         |
| TESTING VOLTAGE | : | 2,500 volts                                                                                                                           |
| REFERENCE       | : | TIS 11-2531                                                                                                                           |

# 

### THAI-YAZAKI STANDARD

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Insulation thickness<br>(mm) | Under sheath thickness<br>(mm) | Diameter of steel wire armor<br>(mm) | Sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20°C<br>(Ω-km) | Minimum insulation resistance at 70°C<br>(MΩ-km) | Maximum continuous current rating in underground<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|------------------------------|--------------------------------|--------------------------------------|--------------------------|----------------------------------|------------------------------------------------|--------------------------------------------------|--------------------------------------------------------------|-----------------------------------|------------------------|
| 2              | 1                                                  | 1/1.13                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 13.5                             | 18.1                                           | 0.0141                                           | 22                                                           | 300                               | 500/D                  |
|                | 1                                                  | 7/0.43                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 14.0                             | 18.1                                           | 0.0135                                           | 22                                                           | 310                               | 500/D                  |
|                | 1.5                                                | 7/1.38                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 14.0                             | 12.1                                           | 0.0123                                           | 27                                                           | 320                               | 500/D                  |
|                | 1.5                                                | 7/0.53                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 14.5                             | 12.1                                           | 0.0116                                           | 27                                                           | 340                               | 500/D                  |
|                | 2.5                                                | 1/1.78                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 15.0                             | 7.41                                           | 0.0102                                           | 36                                                           | 370                               | 500/D                  |
|                | 2.5                                                | 7/0.67                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 15.5                             | 7.41                                           | 0.0093                                           | 36                                                           | 400                               | 500/D                  |
|                | 4                                                  | 1/2.25                                  | 0.9                          | 0.8                            | 0.8                                  | 1.8                      | 16.5                             | 4.61                                           | 0.0094                                           | 47                                                           | 460                               | 500/D                  |
|                | 4                                                  | 7/0.85                                  | 0.9                          | 0.8                            | 1.25                                 | 1.8                      | 18.0                             | 4.61                                           | 0.0085                                           | 47                                                           | 600                               | 500/D                  |
|                | 6                                                  | 7/1.04                                  | 0.9                          | 0.8                            | 1.25                                 | 1.8                      | 19.0                             | 3.08                                           | 0.0073                                           | 61                                                           | 700                               | 500/D                  |
|                | 10                                                 | 7/1.35                                  | 1.1                          | 0.8                            | 1.25                                 | 1.8                      | 22.0                             | 1.83                                           | 0.0069                                           | 82                                                           | 950                               | 500/D                  |
|                | 16                                                 | 7/1.70                                  | 1.1                          | 0.8                            | 1.6                                  | 1.8                      | 24.0                             | 1.15                                           | 0.0057                                           | 107                                                          | 1,300                             | 500/D                  |
|                | 25                                                 | 7/2.14                                  | 1.3                          | 1.2                            | 2.0                                  | 1.9                      | 30.0                             | 0.727                                          | 0.0054                                           | 138                                                          | 2,000                             | 500/D                  |
|                | 35                                                 | 19/1.53                                 | 1.3                          | 1.2                            | 2.0                                  | 2.0                      | 33.0                             | 0.524                                          | 0.0047                                           | 168                                                          | 2,400                             | 500/D                  |
|                | 50                                                 | 19/1.78                                 | 1.5                          | 1.2                            | 2.0                                  | 2.1                      | 36.0                             | 0.387                                          | 0.0046                                           | 199                                                          | 3,000                             | 500/D                  |
|                | 70                                                 | 19/2.14                                 | 1.5                          | 1.5                            | 2.0                                  | 2.2                      | 41.0                             | 0.268                                          | 0.0039                                           | 243                                                          | 4,000                             | 500/D                  |
|                | 95                                                 | 19/2.52                                 | 1.7                          | 1.5                            | 2.5                                  | 2.4                      | 47.0                             | 0.193                                          | 0.0038                                           | 294                                                          | 5,000                             | 500/D                  |
|                | 120                                                | 37/2.03                                 | 1.7                          | 1.5                            | 2.5                                  | 2.6                      | 51.0                             | 0.153                                          | 0.0034                                           | 336                                                          | 6,000                             | 500/D                  |
|                | 150                                                | 37/2.25                                 | 1.9                          | 1.8                            | 2.5                                  | 2.7                      | 56.0                             | 0.124                                          | 0.0034                                           | 375                                                          | 7,000                             | 500/D                  |
|                | 185                                                | 37/2.52                                 | 2.1                          | 1.8                            | 2.5                                  | 2.9                      | 61.0                             | 0.0991                                         | 0.0034                                           | 424                                                          | 8,500                             | 300/D                  |
|                | 240                                                | 61/2.25                                 | 2.3                          | 2.0                            | 2.5                                  | 3.1                      | 68.0                             | 0.0754                                         | 0.0033                                           | 489                                                          | 10,500                            | 300/D                  |
|                | 300                                                | 61/2.52                                 | 2.5                          | 2.0                            | 3.15                                 | 3.4                      | 76.0                             | 0.0601                                         | 0.0032                                           | 553                                                          | 13,500                            | 200/D                  |



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| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Insulation thickness<br>(mm) | Under sheath thickness<br>(mm) | Diameter of steel wire armor<br>(mm) | Sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20°C<br>(Ω-km) | Minimum insulation resistance at 70°C<br>(MΩ-km) | Maximum continuous current rating in underground<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|------------------------------|--------------------------------|--------------------------------------|--------------------------|----------------------------------|------------------------------------------------|--------------------------------------------------|--------------------------------------------------------------|-----------------------------------|------------------------|
| 3              | 1                                                  | 1/1.13                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 14.0                             | 18.1                                           | 0.0141                                           | 18                                                           | 330                               | 500/D                  |
|                | 1                                                  | 7/0.43                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 14.5                             | 18.1                                           | 0.0135                                           | 18                                                           | 340                               | 500/D                  |
|                | 1.5                                                | 1/1.38                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 14.5                             | 12.1                                           | 0.0123                                           | 23                                                           | 350                               | 500/D                  |
|                | 1.5                                                | 7/0.53                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 15.0                             | 12.1                                           | 0.0116                                           | 23                                                           | 380                               | 500/D                  |
|                | 2.5                                                | 1/1.78                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 15.5                             | 7.41                                           | 0.0102                                           | 30                                                           | 420                               | 500/D                  |
|                | 2.5                                                | 7/0.67                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 16.5                             | 7.41                                           | 0.0093                                           | 30                                                           | 450                               | 500/D                  |
|                | 4                                                  | 1/2.25                                  | 0.9                          | 0.8                            | 1.25                                 | 1.8                      | 18.0                             | 4.61                                           | 0.0094                                           | 40                                                           | 650                               | 500/D                  |
|                | 4                                                  | 7/0.85                                  | 0.9                          | 0.8                            | 1.25                                 | 1.8                      | 18.5                             | 4.61                                           | 0.0085                                           | 40                                                           | 700                               | 500/D                  |
|                | 6                                                  | 7/1.04                                  | 0.9                          | 0.8                            | 1.25                                 | 1.8                      | 20.0                             | 3.08                                           | 0.0073                                           | 51                                                           | 800                               | 500/D                  |
|                | 10                                                 | 7/1.35                                  | 1.1                          | 0.8                            | 1.6                                  | 1.8                      | 23.0                             | 1.83                                           | 0.0069                                           | 69                                                           | 1,200                             | 500/D                  |
|                | 16                                                 | 7/1.70                                  | 1.1                          | 1.2                            | 1.6                                  | 1.8                      | 26.0                             | 1.15                                           | 0.0057                                           | 88                                                           | 1,600                             | 500/D                  |
|                | 25                                                 | 7/2.14                                  | 1.3                          | 1.2                            | 2.0                                  | 1.9                      | 31.0                             | 0.727                                          | 0.0054                                           | 115                                                          | 2,300                             | 500/D                  |
|                | 35                                                 | 19/1.53                                 | 1.3                          | 1.2                            | 2.0                                  | 2.0                      | 34.0                             | 0.524                                          | 0.0047                                           | 140                                                          | 2,800                             | 500/D                  |
|                | 50                                                 | 19/1.78                                 | 1.5                          | 1.5                            | 2.0                                  | 2.2                      | 39.0                             | 0.387                                          | 0.0046                                           | 164                                                          | 3,600                             | 500/D                  |
|                | 70                                                 | 19/2.14                                 | 1.5                          | 1.5                            | 2.0                                  | 2.3                      | 43.0                             | 0.268                                          | 0.0039                                           | 202                                                          | 4,600                             | 500/D                  |
|                | 95                                                 | 19/2.52                                 | 1.7                          | 1.5                            | 2.5                                  | 2.5                      | 50.0                             | 0.193                                          | 0.0038                                           | 244                                                          | 6,500                             | 500/D                  |
|                | 120                                                | 37/2.03                                 | 1.7                          | 1.8                            | 2.5                                  | 2.7                      | 55.0                             | 0.153                                          | 0.0034                                           | 277                                                          | 7,500                             | 300/D                  |
|                | 150                                                | 37/2.25                                 | 1.9                          | 1.8                            | 2.5                                  | 2.8                      | 59.0                             | 0.124                                          | 0.0034                                           | 310                                                          | 9,000                             | 300/D                  |
|                | 185                                                | 37/2.52                                 | 2.1                          | 2.0                            | 2.5                                  | 3.0                      | 65.0                             | 0.0991                                         | 0.0034                                           | 350                                                          | 10,500                            | 300/D                  |
|                | 240                                                | 61/2.25                                 | 2.3                          | 2.0                            | 2.5                                  | 3.3                      | 73.0                             | 0.0754                                         | 0.0033                                           | 406                                                          | 13,000                            | 200/D                  |
|                | 300                                                | 61/2.52                                 | 2.5                          | 2.2                            | 3.15                                 | 3.5                      | 81.0                             | 0.0601                                         | 0.0032                                           | 457                                                          | 17,000                            | 200/D                  |



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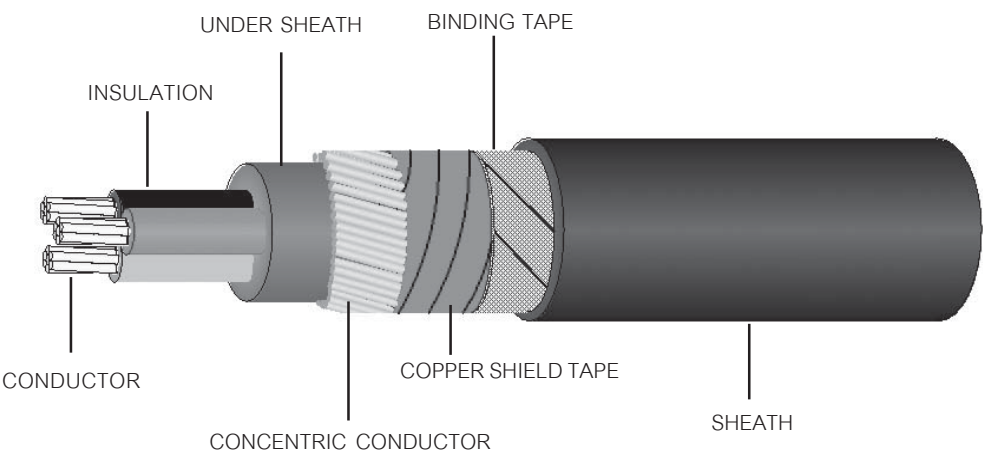
| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Insulation thickness<br>(mm) | Under sheath thickness<br>(mm) | Diameter of steel wire armor<br>(mm) | Sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20°C<br>(Ω-km) | Minimum insulation resistance at 70°C<br>(MΩ-km) | Maximum continuous current rating in underground<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|------------------------------|--------------------------------|--------------------------------------|--------------------------|----------------------------------|------------------------------------------------|--------------------------------------------------|--------------------------------------------------------------|-----------------------------------|------------------------|
| 4              | 1                                                  | 1/1.13                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 15.0                             | 18.1                                           | 0.0141                                           | 16                                                           | 360                               | 500/D                  |
|                | 1                                                  | 7/0.43                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 15.0                             | 18.1                                           | 0.0135                                           | 16                                                           | 380                               | 500/D                  |
|                | 1.5                                                | 1/1.38                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 15.5                             | 12.1                                           | 0.0123                                           | 20                                                           | 400                               | 500/D                  |
|                | 1.5                                                | 7/0.53                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 16.0                             | 12.1                                           | 0.0116                                           | 20                                                           | 420                               | 500/D                  |
|                | 2.5                                                | 1/1.78                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 16.5                             | 7.41                                           | 0.0102                                           | 27                                                           | 480                               | 500/D                  |
|                | 2.5                                                | 7/0.67                                  | 0.8                          | 0.8                            | 0.8                                  | 1.8                      | 18.0                             | 7.41                                           | 0.0093                                           | 27                                                           | 650                               | 500/D                  |
|                | 4                                                  | 1/2.25                                  | 0.9                          | 0.8                            | 1.25                                 | 1.8                      | 19.0                             | 4.61                                           | 0.0094                                           | 36                                                           | 750                               | 500/D                  |
|                | 4                                                  | 7/0.85                                  | 0.9                          | 0.8                            | 1.25                                 | 1.8                      | 20.0                             | 4.61                                           | 0.0085                                           | 36                                                           | 800                               | 500/D                  |
|                | 6                                                  | 7/1.04                                  | 0.9                          | 0.8                            | 1.25                                 | 1.8                      | 21.0                             | 3.08                                           | 0.0073                                           | 45                                                           | 950                               | 500/D                  |
|                | 10                                                 | 7/1.35                                  | 1.1                          | 0.8                            | 1.25                                 | 1.8                      | 25.0                             | 1.83                                           | 0.0069                                           | 61                                                           | 1,400                             | 500/D                  |
|                | 16                                                 | 7/1.70                                  | 1.1                          | 1.2                            | 1.6                                  | 1.8                      | 28.0                             | 0.15                                           | 0.0057                                           | 78                                                           | 1,800                             | 500/D                  |
|                | 25                                                 | 7/2.14                                  | 1.3                          | 1.2                            | 1.6                                  | 2.0                      | 34.0                             | 0.727                                          | 0.0054                                           | 102                                                          | 2,800                             | 500/D                  |
|                | 35                                                 | 19/1.53                                 | 1.3                          | 1.5                            | 2.0                                  | 2.1                      | 38.0                             | 0.524                                          | 0.0047                                           | 122                                                          | 3,500                             | 500/D                  |
|                | 50                                                 | 19/1.78                                 | 1.5                          | 1.5                            | 2.0                                  | 2.3                      | 43.0                             | 0.387                                          | 0.0046                                           | 145                                                          | 4,300                             | 500/D                  |
|                | 70                                                 | 19/2.14                                 | 1.5                          | 1.5                            | 2.0                                  | 2.5                      | 49.0                             | 0.268                                          | 0.0039                                           | 179                                                          | 6,000                             | 500/D                  |
|                | 95                                                 | 19/2.52                                 | 1.7                          | 1.8                            | 2.5                                  | 2.7                      | 55.0                             | 0.193                                          | 0.0038                                           | 214                                                          | 8,000                             | 300/D                  |
|                | 120                                                | 37/2.03                                 | 1.7                          | 1.8                            | 2.5                                  | 2.9                      | 60.0                             | 0.153                                          | 0.0034                                           | 244                                                          | 9,000                             | 300/D                  |
|                | 150                                                | 37/2.25                                 | 1.9                          | 2.0                            | 2.5                                  | 3.0                      | 65.0                             | 0.124                                          | 0.0034                                           | 273                                                          | 11,000                            | 300/D                  |
|                | 185                                                | 37/2.52                                 | 2.1                          | 2.0                            | 2.5                                  | 3.2                      | 72.0                             | 0.0991                                         | 0.0034                                           | 309                                                          | 13,000                            | 200/D                  |
| 4              | 240                                                | 61/2.25                                 | 2.3                          | 2.2                            | 3.15                                 | 3.5                      | 81.0                             | 0.0754                                         | 0.0033                                           | 358                                                          | 17,500                            | 150/D                  |
|                | 300                                                | 61/2.52                                 | 2.5                          | 2.2                            | 3.15                                 | 3.8                      | 89.0                             | 0.0601                                         | 0.0032                                           | 403                                                          | 21,000                            | 150/D                  |

TISI permitted to increase the maximum overall diameter by 5%

D : Packing in drum.



750 V 70°C PVC INSULATED AND DOUBLE SHEATHED POWER CABLE, WITH CONCENTRIC CONDUCTORS



CABLE STRUCTURE

|                         |   |                                                                                                  |
|-------------------------|---|--------------------------------------------------------------------------------------------------|
| NUMBER OF CORE          | : | 3 cores                                                                                          |
| PHASE CONDUCTOR         | : | Concentric stranded annealed copper wires,<br>Sizes 16 mm <sup>2</sup> up to 300 mm <sup>2</sup> |
| CONCENTRIC CONDUCTORS   | : | Annealed copper wires Size. 16 mm <sup>2</sup> up to 150 mm <sup>2</sup>                         |
| INSULATION              | : | PVC<br>Color : Light gray, Black and Red                                                         |
| SHEATH AND UNDER SHEATH | : | PVC<br>Color : Black                                                                             |
| CLASSIFICATION          | : | Maximum conductor temperature 70°C<br>Circuit voltage not exceeding 750 volts                    |
| TESTING VOLTAGE         | : | 2,500 volts                                                                                      |
| REFERENCE               | : | TIS 11-2531                                                                                      |

# NYCY

THAI-YAZAKI STANDARD

| Nominal cross sectional area (mm <sup>2</sup> ) |            | Number and diameter of wire (No./mm) |            | Insulation thickness (mm) | Under sheath thickness (mm) | Sheath thickness (mm) | Approx. overall diameter (mm) | Maximum conductor resistance at 20°C (Ω-km) | Minimum insulation resistance at 70°C (MΩ-km) | Maximum continuous current rating in free air (Ampere) | Cable weight (approx.) (kg/km) | Standard length (m) |
|-------------------------------------------------|------------|--------------------------------------|------------|---------------------------|-----------------------------|-----------------------|-------------------------------|---------------------------------------------|-----------------------------------------------|--------------------------------------------------------|--------------------------------|---------------------|
| Phase                                           | Concentric | Phase                                | Concentric |                           |                             |                       |                               |                                             |                                               |                                                        |                                |                     |
| 3x25                                            | 16         | 7/2.14                               | 19/1.04    | 1.3                       | 1.2                         | 2.0                   | 30                            | 0.727                                       | 0.0054                                        | 88                                                     | 1,600                          | 500/D               |
| 3x35                                            | 16         | 19/1.53                              | 19/1.04    | 1.3                       | 1.2                         | 2.0                   | 33                            | 0.524                                       | 0.0047                                        | 107                                                    | 1,900                          | 500/D               |
| 3x50                                            | 25         | 19/1.78                              | 25/1.13    | 1.5                       | 1.5                         | 2.2                   | 38                            | 0.387                                       | 0.0046                                        | 130                                                    | 2,600                          | 500/D               |
| 3x70                                            | 35         | 19/2.14                              | 23/1.38    | 1.5                       | 1.5                         | 2.2                   | 43                            | 0.268                                       | 0.0039                                        | 162                                                    | 3,500                          | 500/D               |
| 3x95                                            | 50         | 19/2.52                              | 27/1.53    | 1.7                       | 1.5                         | 2.4                   | 48                            | 0.193                                       | 0.0038                                        | 201                                                    | 4,700                          | 500/D               |
| 3x120                                           | 70         | 37/2.03                              | 31/1.70    | 1.7                       | 1.8                         | 2.6                   | 53                            | 0.153                                       | 0.0034                                        | 233                                                    | 6,000                          | 500/D               |
| 3x150                                           | 70         | 37/2.25                              | 31/1.70    | 1.9                       | 1.8                         | 2.8                   | 58                            | 0.124                                       | 0.0034                                        | 266                                                    | 7,000                          | 300/D               |
| 3x185                                           | 95         | 37/2.52                              | 36/1.83    | 2.1                       | 2.0                         | 3.0                   | 64                            | 0.0991                                      | 0.0034                                        | 306                                                    | 9,000                          | 300/D               |
| 3x240                                           | 120        | 61/2.25                              | 37/2.03    | 2.3                       | 2.0                         | 3.2                   | 72                            | 0.0601                                      | 0.0033                                        | 364                                                    | 11,500                         | 200/D               |
| 3x300                                           | 150        | 61/2.52                              | 41/2.14    | 2.5                       | 2.2                         | 3.4                   | 79                            | 0.0601                                      | 0.0032                                        | 417                                                    | 14,000                         | 200/D               |

D : Packing in drum.

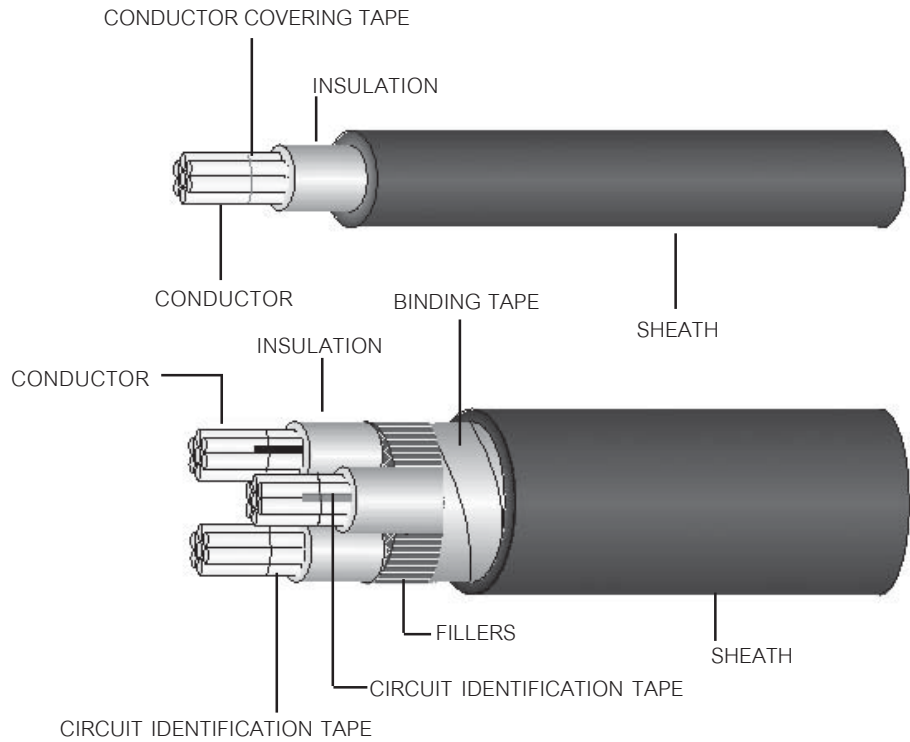
| Nominal cross sectional area (mm <sup>2</sup> ) |            | Number and diameter of wire (No./mm) |            | Insulation thickness (mm) | Under sheath thickness (mm) | Sheath thickness (mm) | Approx. overall diameter (mm) | Maximum conductor resistance at 20°C (Ω-km) | Minimum insulation resistance at 70°C (MΩ-km) | Maximum continuous current rating in free air (Ampere) | Cable weight (approx.) (kg/km) | Standard length (m) |
|-------------------------------------------------|------------|--------------------------------------|------------|---------------------------|-----------------------------|-----------------------|-------------------------------|---------------------------------------------|-----------------------------------------------|--------------------------------------------------------|--------------------------------|---------------------|
| Phase                                           | Concentric | Phase                                | Concentric |                           |                             |                       |                               |                                             |                                               |                                                        |                                |                     |
| 3x16                                            | 16         | 7/1.70                               | 19/1.04    | 1.1                       | 1.2                         | 2.0                   | 26                            | 1.15                                        | 0.0057                                        | 66                                                     | 1,100                          | 500/D               |
| 3x25                                            | 25         | 7/2.14                               | 25/1.13    | 1.3                       | 1.2                         | 2.0                   | 30                            | 0.727                                       | 0.0054                                        | 88                                                     | 1,600                          | 500/D               |
| 3x35                                            | 25         | 19/1.53                              | 25/1.13    | 1.3                       | 1.2                         | 2.0                   | 33                            | 0.524                                       | 0.0047                                        | 107                                                    | 2,000                          | 500/D               |
| 3x50                                            | 35         | 19/1.78                              | 23/1.38    | 1.5                       | 1.5                         | 2.2                   | 39                            | 0.387                                       | 0.0046                                        | 129                                                    | 2,700                          | 500/D               |
| 3x70                                            | 50         | 19/2.14                              | 27/1.53    | 1.5                       | 1.5                         | 2.2                   | 43                            | 0.268                                       | 0.0039                                        | 162                                                    | 3,600                          | 500/D               |
| 3x95                                            | 70         | 19/2.52                              | 31/1.70    | 1.7                       | 1.5                         | 2.4                   | 49                            | 0.193                                       | 0.0038                                        | 200                                                    | 5,000                          | 500/D               |
| 3x120                                           | 95         | 37/2.03                              | 36/1.83    | 1.7                       | 1.8                         | 2.6                   | 54                            | 0.153                                       | 0.0034                                        | 233                                                    | 6,000                          | 500/D               |
| 3x150                                           | 95         | 37/2.25                              | 36/1.83    | 1.9                       | 1.8                         | 2.8                   | 58                            | 0.124                                       | 0.0034                                        | 266                                                    | 7,500                          | 300/D               |
| 3x150                                           | 120        | 37/2.25                              | 37/2.03    | 1.9                       | 1.8                         | 2.8                   | 59                            | 0.124                                       | 0.0034                                        | 266                                                    | 7,500                          | 300/D               |
| 3x185                                           | 120        | 37/2.52                              | 37/2.03    | 2.1                       | 2.0                         | 3.0                   | 65                            | 0.0991                                      | 0.0034                                        | 306                                                    | 9,000                          | 300/D               |

D : Packing in drum.



THAI-YAZAKI TECHNICAL DATA

0.6/1KV 90 °C CROSS-LINKED POLYETHYLENE INSULATED PVC SHEATED POWER CABLE



CABLE STRUCTURE

|                 |   |                                                                                                                                              |
|-----------------|---|----------------------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE  | : | Up to 4 cores                                                                                                                                |
| CONDUCTOR       | : | Concentric stranded and compacted round stranded annealed copper,<br>Sizes 1.5 mm <sup>2</sup> up to 1,000 mm <sup>2</sup>                   |
| INSULATION      | : | Cross-linked polyethylene<br>Color : Natural (Translucent)<br>Core identification : Compound color or color tape<br>Black, White, Red, Green |
| SHEATH          | : | PVC<br>Color : Black                                                                                                                         |
| CLASSIFICATION  | : | Maximum conductor temperature 90 °C<br>Circuit voltage not exceeding 1,200 volts                                                             |
| TESTING VOLTAGE | : | 3,500 volts                                                                                                                                  |
| REFERENCE       | : | IEC 60502-1                                                                                                                                  |

# 0.6/1KV-CV

IEC 60502-1

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Minimum number of stranded<br>(No./mm) | Insulation thickness<br>(mm) | Sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20°C<br>(Ω-km) | Minimum insulation resistance at 20°C<br>(MΩ-km) | Maximum continuous current rating in free air<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|----------------------------------------|------------------------------|--------------------------|----------------------------------|------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------|-----------------------------------|------------------------|
| 1              | 1.5                                                | 7/0.53                                 | 0.7                          | 1.4                      | 6.3                              | 12.1                                           | 2,500                                            | 27                                                        | 50                                | 500/D                  |
|                | 2.5                                                | 7/0.67                                 | 0.7                          | 1.4                      | 6.8                              | 7.41                                           | 2,100                                            | 36                                                        | 60                                | 500/D                  |
|                | 4                                                  | 7/0.85                                 | 0.7                          | 1.4                      | 7.3                              | 4.61                                           | 1,700                                            | 48                                                        | 80                                | 500/D                  |
|                | 6                                                  | 7/1.04                                 | 0.7                          | 1.4                      | 7.9                              | 3.08                                           | 1,450                                            | 61                                                        | 100                               | 500/D                  |
|                | 10                                                 | 6                                      | 0.7                          | 1.4                      | 8.4                              | 1.83                                           | 1,250                                            | 82                                                        | 140                               | 500/D                  |
|                | 16                                                 | 6                                      | 0.7                          | 1.4                      | 9.4                              | 1.15                                           | 1,000                                            | 110                                                       | 200                               | 500/D                  |
|                | 25                                                 | 6                                      | 0.9                          | 1.4                      | 11.0                             | 0.727                                          | 1,050                                            | 145                                                       | 300                               | 500/D                  |
|                | 35                                                 | 6                                      | 0.9                          | 1.4                      | 12.0                             | 0.524                                          | 900                                              | 180                                                       | 400                               | 500/D                  |
|                | 50                                                 | 6                                      | 1.0                          | 1.4                      | 13.5                             | 0.387                                          | 850                                              | 220                                                       | 500                               | 500/D                  |
|                | 70                                                 | 12                                     | 1.1                          | 1.4                      | 15.0                             | 0.268                                          | 800                                              | 280                                                       | 750                               | 500/D                  |
|                | 95                                                 | 15                                     | 1.1                          | 1.5                      | 17.5                             | 0.193                                          | 650                                              | 345                                                       | 1,000                             | 500/D                  |
|                | 120                                                | 18                                     | 1.2                          | 1.5                      | 19.0                             | 0.153                                          | 650                                              | 400                                                       | 1,200                             | 500/D                  |
|                | 150                                                | 18                                     | 1.4                          | 1.6                      | 21                               | 0.124                                          | 700                                              | 460                                                       | 1,500                             | 500/D                  |
|                | 185                                                | 30                                     | 1.6                          | 1.6                      | 23                               | 0.0991                                         | 700                                              | 530                                                       | 1,900                             | 500/D                  |
|                | 240                                                | 34                                     | 1.7                          | 1.7                      | 26                               | 0.0754                                         | 650                                              | 630                                                       | 2,500                             | 500/D                  |
|                | 300                                                | 34                                     | 1.8                          | 1.8                      | 29                               | 0.0601                                         | 600                                              | 725                                                       | 3,100                             | 500/D                  |
|                | 400                                                | 53                                     | 2.0                          | 1.9                      | 32                               | 0.0470                                         | 600                                              | 840                                                       | 3,900                             | 500/D                  |
|                | 500                                                | 53                                     | 2.2                          | 2.0                      | 36                               | 0.0366                                         | 600                                              | 975                                                       | 5,000                             | 500/D                  |
|                | 630                                                | 53                                     | 2.4                          | 2.2                      | 40                               | 0.0283                                         | 550                                              | 1,125                                                     | 6,500                             | 500/D                  |
|                | 800                                                | 53                                     | 2.6                          | 2.3                      | 45                               | 0.0221                                         | 550                                              | 1,320                                                     | 8,500                             | 300/D                  |
|                | 1,000                                              | 53                                     | 2.8                          | 2.4                      | 51                               | 0.0176                                         | 500                                              | 1,510                                                     | 10,500                            | 300/D                  |
| 2              | 1.5                                                | 7/0.53                                 | 0.7                          | 1.8                      | 11.0                             | 12.1                                           | 2,500                                            | 25                                                        | 130                               | 500/D                  |
|                | 2.5                                                | 7/0.67                                 | 0.7                          | 1.8                      | 12.0                             | 7.41                                           | 2,100                                            | 34                                                        | 160                               | 500/D                  |
|                | 4                                                  | 7/0.85                                 | 0.7                          | 1.8                      | 13.0                             | 4.61                                           | 1,700                                            | 44                                                        | 200                               | 500/D                  |
|                | 6                                                  | 7/1.04                                 | 0.7                          | 1.8                      | 14.0                             | 3.08                                           | 1,450                                            | 57                                                        | 260                               | 500/D                  |
|                | 10                                                 | 6                                      | 0.7                          | 1.8                      | 15.0                             | 1.83                                           | 1,250                                            | 77                                                        | 340                               | 500/D                  |
|                | 16                                                 | 6                                      | 0.7                          | 1.8                      | 17.0                             | 1.15                                           | 1,000                                            | 100                                                       | 480                               | 500/D                  |
|                | 25                                                 | 6                                      | 0.9                          | 1.8                      | 20                               | 0.727                                          | 1,050                                            | 135                                                       | 700                               | 500/D                  |
|                | 35                                                 | 6                                      | 0.9                          | 1.8                      | 23                               | 0.524                                          | 900                                              | 165                                                       | 900                               | 500/D                  |
|                | 50                                                 | 6                                      | 1.0                          | 1.8                      | 25                               | 0.387                                          | 850                                              | 205                                                       | 1,200                             | 500/D                  |
|                | 70                                                 | 12                                     | 1.1                          | 1.8                      | 29                               | 0.268                                          | 800                                              | 255                                                       | 1,700                             | 500/D                  |
|                | 95                                                 | 15                                     | 1.1                          | 2.0                      | 33                               | 0.193                                          | 650                                              | 315                                                       | 2,300                             | 500/D                  |
|                | 120                                                | 18                                     | 1.2                          | 2.1                      | 37                               | 0.153                                          | 650                                              | 365                                                       | 2,800                             | 500/D                  |
|                | 150                                                | 18                                     | 1.4                          | 2.2                      | 41                               | 0.124                                          | 700                                              | 415                                                       | 3,500                             | 500/D                  |
|                | 185                                                | 30                                     | 1.6                          | 2.3                      | 45                               | 0.0991                                         | 700                                              | 485                                                       | 4,300                             | 500/D                  |
|                | 240                                                | 34                                     | 1.7                          | 2.5                      | 51                               | 0.0754                                         | 650                                              | 580                                                       | 5,500                             | 500/D                  |
|                | 300                                                | 34                                     | 1.8                          | 2.7                      | 56                               | 0.0601                                         | 600                                              | 675                                                       | 7,000                             | 300/D                  |
|                | 400                                                | 53                                     | 2.0                          | 2.9                      | 63                               | 0.0470                                         | 600                                              | 790                                                       | 9,000                             | 300/D                  |

D : Packing in drum



THAI-YAZAKI TECHNICAL DATA

# 0.6/1KV-CV

IEC 60502-1

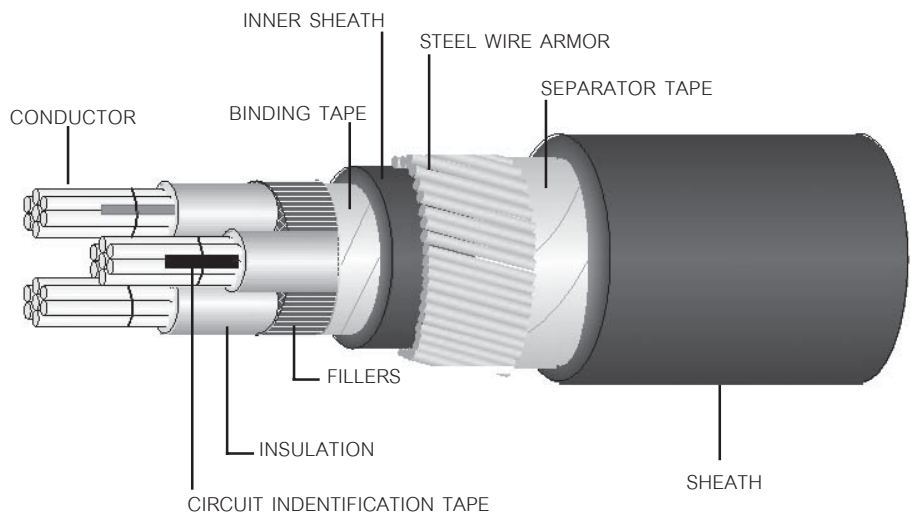
| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Minimum number of stranded<br>(No./mm) | Insulation thickness<br>(mm) | Sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20°C<br>(Ω-km) | Minimum insulation resistance at 20°C<br>(MΩ-km) | Maximum continuous current rating in free air<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|----------------------------------------|------------------------------|--------------------------|----------------------------------|------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------|-----------------------------------|------------------------|
| 3              | 1.5                                                | 7/0.53                                 | 0.7                          | 1.8                      | 11.5                             | 12.1                                           | 2,500                                            | 21                                                        | 150                               | 500/D                  |
|                | 2.5                                                | 7/0.67                                 | 0.7                          | 1.8                      | 12.5                             | 7.41                                           | 2,100                                            | 28                                                        | 190                               | 500/D                  |
|                | 4                                                  | 7/0.85                                 | 0.7                          | 1.8                      | 13.5                             | 4.61                                           | 1,700                                            | 37                                                        | 240                               | 500/D                  |
|                | 6                                                  | 7/1.04                                 | 0.7                          | 1.8                      | 15.0                             | 3.08                                           | 1,450                                            | 48                                                        | 320                               | 500/D                  |
|                | 10                                                 | 6                                      | 0.7                          | 1.8                      | 16.0                             | 1.83                                           | 1,250                                            | 64                                                        | 440                               | 500/D                  |
|                | 16                                                 | 6                                      | 0.7                          | 1.8                      | 18.0                             | 1.15                                           | 1,000                                            | 86                                                        | 650                               | 500/D                  |
|                | 25                                                 | 6                                      | 0.9                          | 1.8                      | 22                               | 0.727                                          | 1,050                                            | 115                                                       | 950                               | 500/D                  |
|                | 35                                                 | 6                                      | 0.9                          | 1.8                      | 24                               | 0.524                                          | 900                                              | 140                                                       | 1,300                             | 500/D                  |
|                | 50                                                 | 6                                      | 1.0                          | 1.8                      | 27                               | 0.387                                          | 850                                              | 170                                                       | 1,600                             | 500/D                  |
|                | 70                                                 | 12                                     | 1.1                          | 1.9                      | 31                               | 0.268                                          | 800                                              | 215                                                       | 2,300                             | 500/D                  |
|                | 95                                                 | 15                                     | 1.1                          | 2.0                      | 36                               | 0.193                                          | 650                                              | 260                                                       | 3,100                             | 500/D                  |
|                | 120                                                | 18                                     | 1.2                          | 2.1                      | 39                               | 0.153                                          | 650                                              | 305                                                       | 4,000                             | 500/D                  |
|                | 150                                                | 18                                     | 1.4                          | 2.3                      | 44                               | 0.124                                          | 700                                              | 350                                                       | 4,900                             | 500/D                  |
|                | 185                                                | 30                                     | 1.6                          | 2.4                      | 49                               | 0.0991                                         | 700                                              | 405                                                       | 6,000                             | 500/D                  |
|                | 240                                                | 34                                     | 1.7                          | 2.6                      | 55                               | 0.0754                                         | 650                                              | 490                                                       | 8,000                             | 300/D                  |
|                | 300                                                | 34                                     | 1.8                          | 2.8                      | 61                               | 0.0601                                         | 600                                              | 565                                                       | 10,000                            | 300/D                  |
|                | 400                                                | 53                                     | 2.0                          | 3.1                      | 68                               | 0.0470                                         | 600                                              | 655                                                       | 12,500                            | 200/D                  |
| 4              | 1.5                                                | 7/0.53                                 | 0.7                          | 1.8                      | 12.0                             | 12.1                                           | 2,500                                            | 21                                                        | 180                               | 500/D                  |
|                | 2.5                                                | 7/0.67                                 | 0.7                          | 1.8                      | 13.5                             | 7.41                                           | 2,100                                            | 28                                                        | 230                               | 500/D                  |
|                | 4                                                  | 7/0.85                                 | 0.7                          | 1.8                      | 14.5                             | 4.61                                           | 1,700                                            | 37                                                        | 300                               | 500/D                  |
|                | 6                                                  | 7/1.04                                 | 0.7                          | 1.8                      | 16.0                             | 3.08                                           | 1,450                                            | 48                                                        | 400                               | 500/D                  |
|                | 10                                                 | 6                                      | 0.7                          | 1.8                      | 17.5                             | 1.83                                           | 1,250                                            | 64                                                        | 550                               | 500/D                  |
|                | 16                                                 | 6                                      | 0.7                          | 1.8                      | 20                               | 1.15                                           | 1,000                                            | 86                                                        | 800                               | 500/D                  |
|                | 25                                                 | 6                                      | 0.9                          | 1.8                      | 24                               | 0.727                                          | 1,050                                            | 115                                                       | 1,200                             | 500/D                  |
|                | 35                                                 | 6                                      | 0.9                          | 1.8                      | 27                               | 0.524                                          | 900                                              | 140                                                       | 1,600                             | 500/D                  |
|                | 50                                                 | 6                                      | 1.0                          | 1.9                      | 30                               | 0.387                                          | 850                                              | 170                                                       | 2,200                             | 500/D                  |
|                | 70                                                 | 12                                     | 1.1                          | 2.0                      | 35                               | 0.268                                          | 800                                              | 215                                                       | 3,000                             | 500/D                  |
|                | 95                                                 | 15                                     | 1.1                          | 2.1                      | 39                               | 0.193                                          | 650                                              | 260                                                       | 4,100                             | 500/D                  |
|                | 120                                                | 18                                     | 1.2                          | 2.3                      | 44                               | 0.153                                          | 650                                              | 305                                                       | 5,000                             | 500/D                  |
|                | 150                                                | 18                                     | 1.4                          | 2.4                      | 49                               | 0.124                                          | 700                                              | 350                                                       | 6,500                             | 500/D                  |
|                | 185                                                | 30                                     | 1.6                          | 2.6                      | 54                               | 0.0991                                         | 700                                              | 405                                                       | 8,000                             | 300/D                  |
|                | 240                                                | 34                                     | 1.7                          | 2.8                      | 61                               | 0.0754                                         | 650                                              | 490                                                       | 10,500                            | 300/D                  |
|                | 300                                                | 34                                     | 1.8                          | 3.0                      | 68                               | 0.0601                                         | 600                                              | 565                                                       | 13,000                            | 200/D                  |
|                | 400                                                | 53                                     | 2.0                          | 3.3                      | 76                               | 0.0470                                         | 600                                              | 655                                                       | 16,500                            | 200/D                  |

D : Packing in drum



THAI-YAZAKI TECHNICAL DATA

0.6/1kV Cross linked Polyethylene Insulated PVC Sheath Steel Wire Armored Power Cable



CABLE STRUCTURE

|                         |   |                                                                                                                    |
|-------------------------|---|--------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE          | : | 2 up to 4 cores                                                                                                    |
| CONDUCTOR               | : | Concentric stranded and compact<br>stranded annealed copper<br>Sizes 1.5 mm <sup>2</sup> up to 400 mm <sup>2</sup> |
| INSULATION              | : | Cross-linked polyethylene<br>Color :Natural (Translucent)                                                          |
| CORE IDENTIFICATION     | : | Compound color or color tape<br>Color :Black, White, Red and Green                                                 |
| ARMORED                 | : | Steel wire armored                                                                                                 |
| INNER AND OUTTER SHEATH | : | PVC<br>Color :Black                                                                                                |
| CLASSIFICATION          | : | Maximum conductor temperature 90 <sup>o</sup> C<br>Circuit voltage not exceeding 1,200 volts                       |
| TESTING VOLTAGE         | : | 3,500 volts                                                                                                        |
| REFERENCE               | : | IEC 60502-1                                                                                                        |

# 0.6/1KV-CV-SWA

IEC 60502-1

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number of stranded<br>(No./mm) | Conductor diameter approx.<br>(mm) | Insulation thickness nominal<br>(mm) | Jacket thickness nominal<br>(mm) | Diameter of jacket approx.<br>(mm) | Armor wire diameter nominal<br>(mm) | Overall jacket thickness nominal<br>(mm) | Overall diameter approx.<br>(mm) | Maximum conductor resistance at 20°C<br>(Ω-km) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|--------------------------------|------------------------------------|--------------------------------------|----------------------------------|------------------------------------|-------------------------------------|------------------------------------------|----------------------------------|------------------------------------------------|-----------------------------------|------------------------|
| 2              | 1.5                                                | 7/0.53                         | 1.59                               | 0.7                                  | 1.2                              | 9.7                                | 0.80                                | 1.8                                      | 15.0                             | 12.1                                           | 360                               | 500/D                  |
|                | 2.5                                                | 7/0.67                         | 2.01                               | 0.7                                  | 1.2                              | 10.5                               | 0.80                                | 1.8                                      | 16.5                             | 7.41                                           | 400                               | 500/D                  |
|                | 4                                                  | 7/0.85                         | 2.55                               | 0.7                                  | 1.2                              | 11.5                               | 1.25                                | 1.8                                      | 18.0                             | 4.61                                           | 600                               | 500/D                  |
|                | 6                                                  | 7/1.04                         | 3.12                               | 0.7                                  | 1.2                              | 12.5                               | 1.25                                | 1.8                                      | 19.5                             | 3.08                                           | 700                               | 500/D                  |
|                | 10                                                 | 6                              | 3.8                                | 0.7                                  | 1.2                              | 14.0                               | 1.25                                | 1.8                                      | 20                               | 1.83                                           | 800                               | 500/D                  |
|                | 16                                                 | 6                              | 4.8                                | 0.7                                  | 1.2                              | 16.0                               | 1.25                                | 1.8                                      | 23                               | 1.15                                           | 1,000                             | 500/D                  |
|                | 25                                                 | 6                              | 6.0                                | 0.9                                  | 1.2                              | 19.0                               | 1.60                                | 1.8                                      | 26                               | 0.727                                          | 1,500                             | 500/D                  |
|                | 35                                                 | 6                              | 7.1                                | 0.9                                  | 1.2                              | 22                                 | 2.0                                 | 1.8                                      | 30                               | 0.524                                          | 2,000                             | 500/D                  |
|                | 50                                                 | 6                              | 8.3                                | 1.0                                  | 1.2                              | 24                                 | 2.0                                 | 1.9                                      | 33                               | 0.387                                          | 2,400                             | 500/D                  |
|                | 70                                                 | 12                             | 9.9                                | 1.1                                  | 1.2                              | 28                                 | 2.0                                 | 2.0                                      | 36                               | 0.268                                          | 3,100                             | 500/D                  |
|                | 95                                                 | 15                             | 11.7                               | 1.1                                  | 1.2                              | 32                                 | 2.0                                 | 2.1                                      | 40                               | 0.193                                          | 3,800                             | 500/D                  |
|                | 120                                                | 18                             | 13.2                               | 1.2                                  | 1.2                              | 35                                 | 2.0                                 | 2.3                                      | 44                               | 0.153                                          | 4,600                             | 500/D                  |
|                | 150                                                | 18                             | 14.6                               | 1.4                                  | 1.3                              | 39                                 | 2.0                                 | 2.4                                      | 48                               | 0.124                                          | 5,500                             | 500/D                  |
|                | 185                                                | 30                             | 16.3                               | 1.6                                  | 1.3                              | 43                                 | 2.5                                 | 2.6                                      | 54                               | 0.0991                                         | 7,000                             | 500/D                  |
|                | 240                                                | 34                             | 18.7                               | 1.7                                  | 1.4                              | 49                                 | 2.5                                 | 2.7                                      | 60                               | 0.0754                                         | 8,500                             | 500/D                  |
|                | 300                                                | 34                             | 20.9                               | 1.8                                  | 1.5                              | 54                                 | 2.5                                 | 2.9                                      | 66                               | 0.0601                                         | 10,000                            | 300/D                  |
|                | 400                                                | 53                             | 23.5                               | 2.0                                  | 1.7                              | 61                                 | 2.5                                 | 3.2                                      | 73                               | 0.0470                                         | 12,500                            | 300/D                  |
| 3              | 1.5                                                | 7/0.53                         | 1.59                               | 0.7                                  | 1.2                              | 10.0                               | 0.80                                | 1.8                                      | 16.0                             | 12.1                                           | 400                               | 500/D                  |
|                | 2.5                                                | 7/0.67                         | 2.01                               | 0.7                                  | 1.2                              | 11.0                               | 1.25                                | 1.8                                      | 18.0                             | 7.41                                           | 550                               | 500/D                  |
|                | 4                                                  | 7/0.85                         | 2.55                               | 0.7                                  | 1.2                              | 12.0                               | 1.25                                | 1.8                                      | 19.0                             | 4.61                                           | 650                               | 500/D                  |
|                | 6                                                  | 7/1.04                         | 3.12                               | 0.7                                  | 1.2                              | 13.5                               | 1.25                                | 1.8                                      | 20                               | 3.08                                           | 800                               | 500/D                  |
|                | 10                                                 | 6                              | 3.8                                | 0.7                                  | 1.2                              | 14.5                               | 1.25                                | 1.8                                      | 21                               | 1.83                                           | 950                               | 500/D                  |
|                | 16                                                 | 6                              | 4.8                                | 0.7                                  | 1.2                              | 17.0                               | 1.60                                | 1.8                                      | 24                               | 1.15                                           | 1,300                             | 500/D                  |
|                | 25                                                 | 6                              | 6.0                                | 0.9                                  | 1.2                              | 21                                 | 1.60                                | 1.8                                      | 28                               | 0.727                                          | 1,800                             | 500/D                  |
|                | 35                                                 | 6                              | 7.1                                | 0.9                                  | 1.2                              | 23                                 | 2.0                                 | 1.8                                      | 31                               | 0.524                                          | 2,400                             | 500/D                  |
|                | 50                                                 | 6                              | 8.3                                | 1.0                                  | 1.2                              | 26                                 | 2.0                                 | 2.0                                      | 34                               | 0.387                                          | 3,000                             | 500/D                  |
|                | 70                                                 | 12                             | 9.9                                | 1.1                                  | 1.2                              | 30                                 | 2.0                                 | 2.1                                      | 39                               | 0.268                                          | 3,800                             | 500/D                  |
|                | 95                                                 | 15                             | 11.7                               | 1.1                                  | 1.2                              | 34                                 | 2.0                                 | 2.2                                      | 43                               | 0.193                                          | 4,800                             | 500/D                  |
|                | 120                                                | 18                             | 13.2                               | 1.2                                  | 1.2                              | 38                                 | 2.0                                 | 2.3                                      | 47                               | 0.153                                          | 6,000                             | 500/D                  |
|                | 150                                                | 18                             | 14.6                               | 1.4                                  | 1.3                              | 42                                 | 2.5                                 | 2.5                                      | 52                               | 0.124                                          | 7,500                             | 500/D                  |
|                | 185                                                | 30                             | 16.3                               | 1.6                                  | 1.4                              | 47                                 | 2.5                                 | 2.7                                      | 58                               | 0.0991                                         | 9,000                             | 500/D                  |
|                | 240                                                | 34                             | 18.7                               | 1.7                                  | 1.5                              | 53                                 | 2.5                                 | 2.9                                      | 64                               | 0.0754                                         | 11,000                            | 300/D                  |
|                | 300                                                | 34                             | 20.9                               | 1.8                                  | 1.6                              | 58                                 | 2.5                                 | 3.0                                      | 70                               | 0.0601                                         | 13,500                            | 300/D                  |
|                | 400                                                | 53                             | 23.5                               | 2.0                                  | 1.8                              | 65                                 | 3.15                                | 3.4                                      | 80                               | 0.0470                                         | 17,500                            | 300/D                  |



THAI-YAZAKI TECHNICAL DATA

# 0.6/1KV-CV-SWA

IEC 60502-1

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number of stranded<br>(No./mm) | Conductor diameter approx.<br>(mm) | Insulation thickness nominal<br>(mm) | Jacket thickness nominal<br>(mm) | Diameter of jacket approx.<br>(mm) | Aarmor wire diameter nominal<br>(mm) | Overall jacket thickness nominal<br>(mm) | Overall diameter approx.<br>(mm) | Maximum conductor resistance at 20°C<br>(Ω-km) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|--------------------------------|------------------------------------|--------------------------------------|----------------------------------|------------------------------------|--------------------------------------|------------------------------------------|----------------------------------|------------------------------------------------|-----------------------------------|------------------------|
| 4              | 1.5                                                | 7/0.53                         | 1.59                               | 0.7                                  | 1.2                              | 11.0                               | 1.25                                 | 1.8                                      | 17.5                             | 12.1                                           | 550                               | 500/D                  |
|                | 2.5                                                | 7/0.67                         | 2.01                               | 0.7                                  | 1.2                              | 12.0                               | 1.25                                 | 1.8                                      | 19.0                             | 7.41                                           | 650                               | 500/D                  |
|                | 4                                                  | 7/0.85                         | 2.55                               | 0.7                                  | 1.2                              | 13.5                               | 1.25                                 | 1.8                                      | 20                               | 4.61                                           | 750                               | 500/D                  |
|                | 6                                                  | 7/1.04                         | 3.12                               | 0.7                                  | 1.2                              | 15.0                               | 1.25                                 | 1.8                                      | 21                               | 3.08                                           | 900                               | 500/D                  |
|                | 10                                                 | 6                              | 3.8                                | 0.7                                  | 1.2                              | 16.0                               | 1.25                                 | 1.8                                      | 23                               | 1.83                                           | 1,100                             | 500/D                  |
|                | 16                                                 | 6                              | 4.8                                | 0.7                                  | 1.2                              | 18.5                               | 1.60                                 | 1.8                                      | 26                               | 1.15                                           | 1,600                             | 500/D                  |
|                | 25                                                 | 6                              | 6.0                                | 0.9                                  | 1.2                              | 23                                 | 2.0                                  | 1.8                                      | 31                               | 0.727                                          | 2,300                             | 500/D                  |
|                | 35                                                 | 6                              | 7.1                                | 0.9                                  | 1.2                              | 25                                 | 2.0                                  | 1.9                                      | 34                               | 0.524                                          | 2,900                             | 500/D                  |
|                | 50                                                 | 6                              | 8.3                                | 1.0                                  | 1.2                              | 29                                 | 2.0                                  | 2.1                                      | 37                               | 0.387                                          | 3,600                             | 500/D                  |
|                | 70                                                 | 12                             | 9.9                                | 1.1                                  | 1.2                              | 33                                 | 2.0                                  | 2.2                                      | 42                               | 0.268                                          | 4,700                             | 500/D                  |
|                | 95                                                 | 15                             | 11.7                               | 1.1                                  | 1.2                              | 38                                 | 2.0                                  | 2.3                                      | 47                               | 0.193                                          | 6,000                             | 500/D                  |
|                | 120                                                | 18                             | 13.2                               | 1.2                                  | 1.3                              | 42                                 | 2.5                                  | 2.5                                      | 53                               | 0.153                                          | 7,500                             | 500/D                  |
|                | 150                                                | 18                             | 14.6                               | 1.4                                  | 1.4                              | 46                                 | 2.5                                  | 2.7                                      | 58                               | 0.124                                          | 9,000                             | 500/D                  |
|                | 185                                                | 30                             | 16.3                               | 1.6                                  | 1.5                              | 52                                 | 2.5                                  | 2.8                                      | 64                               | 0.0991                                         | 11,000                            | 300/D                  |
|                | 240                                                | 34                             | 18.7                               | 1.7                                  | 1.6                              | 59                                 | 2.5                                  | 3.1                                      | 71                               | 0.0754                                         | 14,000                            | 300/D                  |
|                | 300                                                | 34                             | 20.9                               | 1.8                                  | 1.7                              | 65                                 | 2.5                                  | 3.3                                      | 78                               | 0.0601                                         | 17,000                            | 200/D                  |
|                | 400                                                | 53                             | 23.5                               | 2.0                                  | 1.9                              | 73                                 | 3.15                                 | 3.6                                      | 87                               | 0.0470                                         | 22,000                            | 200/D                  |

D : Packing in drum



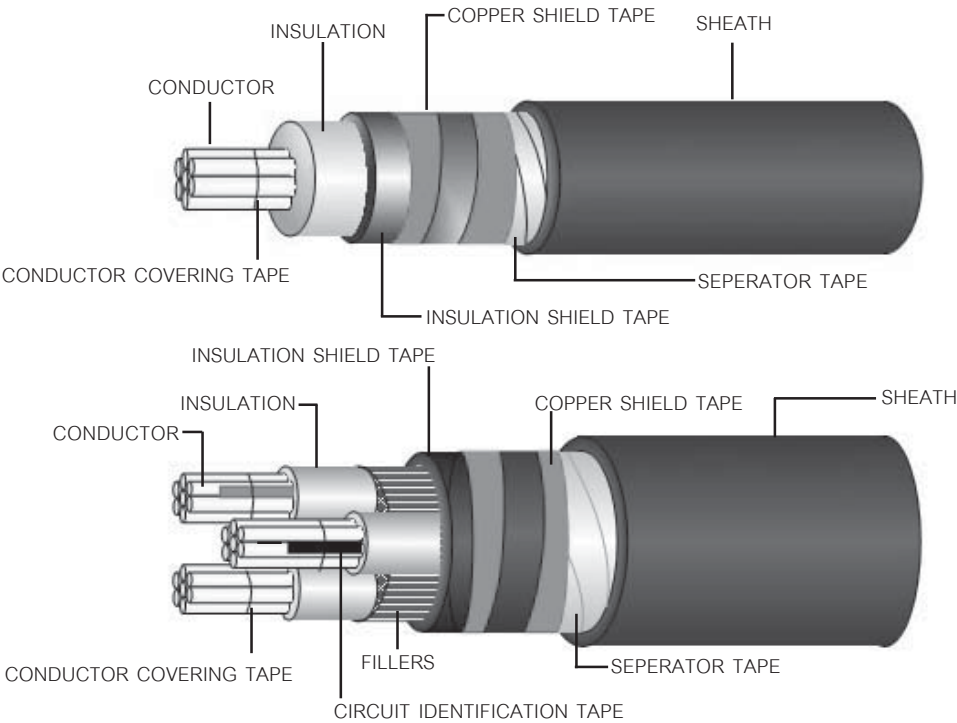
THAI-YAZAKI TECHNICAL DATA

## Medium Voltage Power Cables

|           |                                                                                                  |      |
|-----------|--------------------------------------------------------------------------------------------------|------|
| 1.8/3 kV  | 90° C CROSS - LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE. (IEC 60502-1 STANDARD) | B 44 |
| 3.6/6 kV  | 90° C CROSS - LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE. (IEC 60502-2 STANDARD) | B 46 |
| 6/10 kV   | 90° C CROSS - LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE. (IEC 60502-2 STANDARD) | B 48 |
| 8.7/15 kV | 90° C CROSS - LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE. (IEC 60502-2 STANDARD) | B 50 |
| 12/20 kV  | 90° C CROSS - LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE. (IEC 60502-2 STANDARD) | B 52 |
| 18/30 kV  | 90° C CROSS - LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE. (IEC 60502-2 STANDARD) | B 54 |



1.8/3 kV 90° C CROSS - LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



CABLE STRUCTURE

|                 |   |                                                                                                                       |
|-----------------|---|-----------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE  | : | Single and 3 cores                                                                                                    |
| CONDUCTOR       | : | Compact round stranded annealed copper,<br>Sizes. 10 mm <sup>2</sup> up to 1,000 mm <sup>2</sup>                      |
| INSULATION      | : | Cross-linked polyethylene<br>Color : Natural (Translucent)<br>Core identification : Color tape<br>White, Red and Blue |
| SHEATH          | : | PVC Color : Black                                                                                                     |
| SHIELD          | : | Copper tape, thickness 0.1 mm                                                                                         |
| CLASSIFICATION  | : | Maximum conductor temperature 90° C<br>Circuit voltage not exceeding 3,600 volts                                      |
| TESTING VOLTAGE | : | 6,500 volts                                                                                                           |
| REFERENCE       | : | IEC 60502-1                                                                                                           |

# 1.8/3(3.6)KV-CV

IEC 60502-1

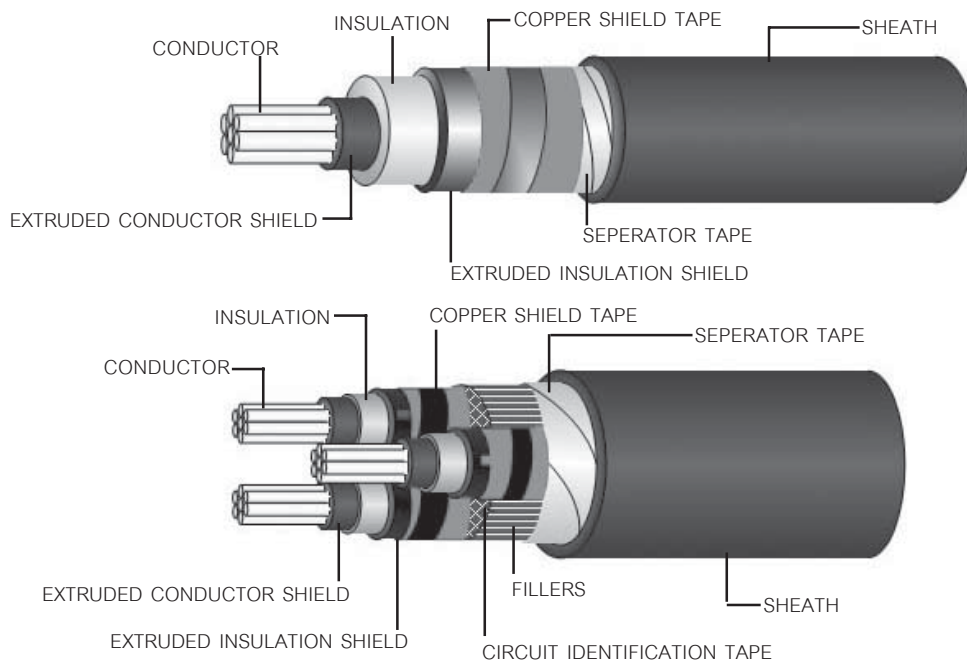
| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Minimum number of stranded<br>(No.) | Mean value of insulation thickness<br>(mm) | Mean value of sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20 °C<br>(Ω/km) | Minimum insulation resistance at 20 °C<br>(MΩ-km) | Maximum continuous current rating in free air<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-------------------------------------|--------------------------------------------|----------------------------------------|----------------------------------|-------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------|-----------------------------------|------------------------|
| 1              | 10                                                 | 6                                   | 2.0                                        | 1.4                                    | 12.0                             | 1.83                                            | 2,900                                             | 90                                                        | 220                               | 500/D                  |
|                | 16                                                 | 6                                   | 2.0                                        | 1.4                                    | 13.0                             | 1.15                                            | 2,450                                             | 115                                                       | 290                               | 500/D                  |
|                | 25                                                 | 6                                   | 2.0                                        | 1.4                                    | 14.5                             | 0.727                                           | 2,050                                             | 155                                                       | 390                               | 500/D                  |
|                | 35                                                 | 6                                   | 2.0                                        | 1.4                                    | 15.5                             | 0.524                                           | 1,800                                             | 190                                                       | 490                               | 500/D                  |
|                | 50                                                 | 6                                   | 2.0                                        | 1.4                                    | 16.5                             | 0.387                                           | 1,550                                             | 230                                                       | 600                               | 500/D                  |
|                | 70                                                 | 12                                  | 2.0                                        | 1.5                                    | 18.5                             | 0.268                                           | 1,350                                             | 285                                                       | 850                               | 500/D                  |
|                | 95                                                 | 15                                  | 2.0                                        | 1.5                                    | 21                               | 0.193                                           | 1,150                                             | 350                                                       | 1,100                             | 500/D                  |
|                | 120                                                | 18                                  | 2.0                                        | 1.6                                    | 22                               | 0.153                                           | 1,050                                             | 410                                                       | 1,400                             | 500/D                  |
|                | 150                                                | 18                                  | 2.0                                        | 1.6                                    | 24                               | 0.124                                           | 950                                               | 465                                                       | 1,600                             | 500/D                  |
|                | 185                                                | 30                                  | 2.0                                        | 1.7                                    | 26                               | 0.0991                                          | 850                                               | 535                                                       | 2,000                             | 500/D                  |
|                | 240                                                | 34                                  | 2.0                                        | 1.8                                    | 28                               | 0.0754                                          | 750                                               | 630                                                       | 2,600                             | 500/D                  |
|                | 300                                                | 34                                  | 2.0                                        | 1.8                                    | 30                               | 0.0601                                          | 700                                               | 725                                                       | 3,200                             | 500/D                  |
|                | 400                                                | 53                                  | 2.0                                        | 2.0                                    | 33                               | 0.0470                                          | 600                                               | 840                                                       | 4,000                             | 500/D                  |
| 3              | 10                                                 | 6                                   | 2.0                                        | 1.8                                    | 23                               | 1.83                                            | 2,900                                             | 69                                                        | 650                               | 500/D                  |
|                | 16                                                 | 6                                   | 2.0                                        | 1.8                                    | 25                               | 1.15                                            | 2,450                                             | 91                                                        | 850                               | 500/D                  |
|                | 25                                                 | 6                                   | 2.0                                        | 1.8                                    | 28                               | 0.727                                           | 2,050                                             | 115                                                       | 1,200                             | 500/D                  |
|                | 35                                                 | 6                                   | 2.0                                        | 1.9                                    | 30                               | 0.524                                           | 1,800                                             | 145                                                       | 1,500                             | 500/D                  |
|                | 50                                                 | 6                                   | 2.0                                        | 2.0                                    | 33                               | 0.387                                           | 1,550                                             | 170                                                       | 1,900                             | 500/D                  |
|                | 70                                                 | 12                                  | 2.0                                        | 2.1                                    | 37                               | 0.268                                           | 1,350                                             | 215                                                       | 2,600                             | 500/D                  |
|                | 95                                                 | 15                                  | 2.0                                        | 2.2                                    | 41                               | 0.193                                           | 1,150                                             | 265                                                       | 3,500                             | 500/D                  |
|                | 120                                                | 18                                  | 2.0                                        | 2.3                                    | 44                               | 0.153                                           | 1,050                                             | 305                                                       | 4,300                             | 500/D                  |
|                | 150                                                | 18                                  | 2.0                                        | 2.4                                    | 48                               | 0.124                                           | 950                                               | 350                                                       | 5,000                             | 500/D                  |
|                | 185                                                | 30                                  | 2.0                                        | 2.5                                    | 52                               | 0.0991                                          | 850                                               | 410                                                       | 6,500                             | 500/D                  |
|                | 240                                                | 34                                  | 2.0                                        | 2.7                                    | 57                               | 0.0754                                          | 750                                               | 490                                                       | 8,000                             | 500/D                  |
|                | 300                                                | 34                                  | 2.0                                        | 2.9                                    | 62                               | 0.0601                                          | 700                                               | 565                                                       | 10,000                            | 300/D                  |
|                | 400                                                | 53                                  | 2.0                                        | 3.1                                    | 69                               | 0.0470                                          | 600                                               | 655                                                       | 12,500                            | 300/D                  |

\*Remark : Special protection can be produced

D : Packing in drum.



### 3.6/6 kV 90° C CROSS - LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



## CABLE STRUCTURE

|                         |   |                                                                                                                                |
|-------------------------|---|--------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE          | : | Single and 3 cores                                                                                                             |
| CONDUCTOR               | : | Compact round stranded annealed copper,<br>Sizes. 10 mm <sup>2</sup> up to 1,000 mm <sup>2</sup>                               |
| INSULATION              | : | Cross-linked polyethylene<br>Color : Natural (Translucent)<br>Core identification : Color tape<br>White, Red and Blue          |
| SHEATH                  | : | PVC Color : Black                                                                                                              |
| SHIELD                  | : | Copper tape, thickness 0.1 mm                                                                                                  |
| CLASSIFICATION          | : | Maximum conductor temperature 90° C<br>Circuit voltage not exceeding 7,200 volts                                               |
| TESTING VOLTAGE         | : | 12,500 volts                                                                                                                   |
| REFERENCE               | : | IEC 60502-2                                                                                                                    |
| *REMARK                 |   |                                                                                                                                |
| INSULATION SHIELD LAYER | : | SEMI-CONDUCTING COVERING REMOVE AT SPLICES<br>OR TERMINALS<br>(ทำการลอกชั้นสกรีนของฉนวนออกก่อนทำการต่อเข้ากับ<br>ชุดทำปลายสาย) |



# 3.6/6(7.2)KV-CV

IEC 60502-2

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Minimum number of stranded<br>(No.) | Mean value of insulation thickness<br>(mm) | Mean value of sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20 °C<br>(Ω/km) | Minimum insulation resistance at 20 °C<br>(MΩ-km) | Maximum continuous current rating in free air<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-------------------------------------|--------------------------------------------|----------------------------------------|----------------------------------|-------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------|-----------------------------------|------------------------|
| 1              | **10                                               | 6                                   | 2.5                                        | 1.4                                    | 14.0                             | 1.83                                            | 2,850                                             | 93                                                        | 260                               | 500/D                  |
|                | **16                                               | 6                                   | 2.5                                        | 1.5                                    | 15.5                             | 1.15                                            | 2,500                                             | 120                                                       | 350                               | 500/D                  |
|                | 25                                                 | 6                                   | 2.5                                        | 1.5                                    | 17.5                             | 0.727                                           | 2,150                                             | 160                                                       | 480                               | 500/D                  |
|                | 35                                                 | 6                                   | 2.5                                        | 1.5                                    | 18.5                             | 0.524                                           | 1,900                                             | 195                                                       | 600                               | 500/D                  |
|                | 50                                                 | 6                                   | 2.5                                        | 1.6                                    | 20                               | 0.387                                           | 1,700                                             | 230                                                       | 750                               | 500/D                  |
|                | 70                                                 | 12                                  | 2.5                                        | 1.6                                    | 21                               | 0.268                                           | 1,500                                             | 290                                                       | 950                               | 500/D                  |
|                | 95                                                 | 15                                  | 2.5                                        | 1.7                                    | 24                               | 0.193                                           | 1,300                                             | 355                                                       | 1,200                             | 500/D                  |
|                | 120                                                | 18                                  | 2.5                                        | 1.7                                    | 25                               | 0.153                                           | 1,200                                             | 410                                                       | 1,500                             | 500/D                  |
|                | 150                                                | 18                                  | 2.5                                        | 1.8                                    | 27                               | 0.124                                           | 1,100                                             | 465                                                       | 1,800                             | 500/D                  |
|                | 185                                                | 30                                  | 2.5                                        | 1.8                                    | 28                               | 0.0991                                          | 1,000                                             | 535                                                       | 2,200                             | 500/D                  |
|                | 240                                                | 34                                  | 2.6                                        | 1.9                                    | 31                               | 0.0754                                          | 900                                               | 635                                                       | 2,800                             | 500/D                  |
|                | 300                                                | 34                                  | 2.8                                        | 2.0                                    | 34                               | 0.0601                                          | 900                                               | 725                                                       | 3,400                             | 500/D                  |
|                | 400                                                | 53                                  | 3.0                                        | 2.1                                    | 37                               | 0.0470                                          | 850                                               | 840                                                       | 4,300                             | 500/D                  |
|                | 500                                                | 53                                  | 3.2                                        | 2.2                                    | 42                               | 0.0366                                          | 800                                               | 970                                                       | 5,500                             | 500/D                  |
|                | 630                                                | 53                                  | 3.2                                        | 2.4                                    | 46                               | 0.0283                                          | 700                                               | 1,140                                                     | 7,000                             | 500/D                  |
|                | 800                                                | 53                                  | 3.2                                        | 2.5                                    | 50                               | 0.0221                                          | 600                                               | 1,330                                                     | 8,500                             | 300/D                  |
|                | 1000                                               | 53                                  | 3.2                                        | 2.6                                    | 55                               | 0.0176                                          | 550                                               | 1,520                                                     | 11,000                            | 300/D                  |
| 3              | **10                                               | 6                                   | 2.5                                        | 2.0                                    | 28                               | 1.83                                            | 2,850                                             | 72                                                        | 850                               | 500/D                  |
|                | **16                                               | 6                                   | 2.5                                        | 2.0                                    | 30                               | 1.15                                            | 2,500                                             | 94                                                        | 1,100                             | 500/D                  |
|                | 25                                                 | 6                                   | 2.5                                        | 2.1                                    | 35                               | 0.727                                           | 2,150                                             | 120                                                       | 1,600                             | 500/D                  |
|                | 35                                                 | 6                                   | 2.5                                        | 2.2                                    | 38                               | 0.524                                           | 1,900                                             | 145                                                       | 1,900                             | 500/D                  |
|                | 50                                                 | 6                                   | 2.5                                        | 2.3                                    | 40                               | 0.387                                           | 1,700                                             | 175                                                       | 2,400                             | 500/D                  |
|                | 70                                                 | 12                                  | 2.5                                        | 2.4                                    | 44                               | 0.268                                           | 1,500                                             | 220                                                       | 3,100                             | 500/D                  |
|                | 95                                                 | 15                                  | 2.5                                        | 2.5                                    | 48                               | 0.193                                           | 1,300                                             | 270                                                       | 4,000                             | 500/D                  |
|                | 120                                                | 18                                  | 2.5                                        | 2.6                                    | 52                               | 0.153                                           | 1,200                                             | 315                                                       | 4,900                             | 500/D                  |
|                | 150                                                | 18                                  | 2.5                                        | 2.8                                    | 55                               | 0.124                                           | 1,100                                             | 360                                                       | 6,000                             | 500/D                  |
|                | 185                                                | 30                                  | 2.5                                        | 2.9                                    | 59                               | 0.0991                                          | 1,000                                             | 415                                                       | 7,000                             | 500/D                  |
|                | 240                                                | 34                                  | 2.6                                        | 3.1                                    | 65                               | 0.0754                                          | 900                                               | 495                                                       | 9,000                             | 500/D                  |
|                | 300                                                | 34                                  | 2.8                                        | 3.3                                    | 71                               | 0.0601                                          | 900                                               | 570                                                       | 11,000                            | 300/D                  |
|                | 400                                                | 53                                  | 3.0                                        | 3.5                                    | 79                               | 0.0470                                          | 850                                               | 665                                                       | 13,500                            | 300/D                  |

\*REMARK : Special protection can be produced.

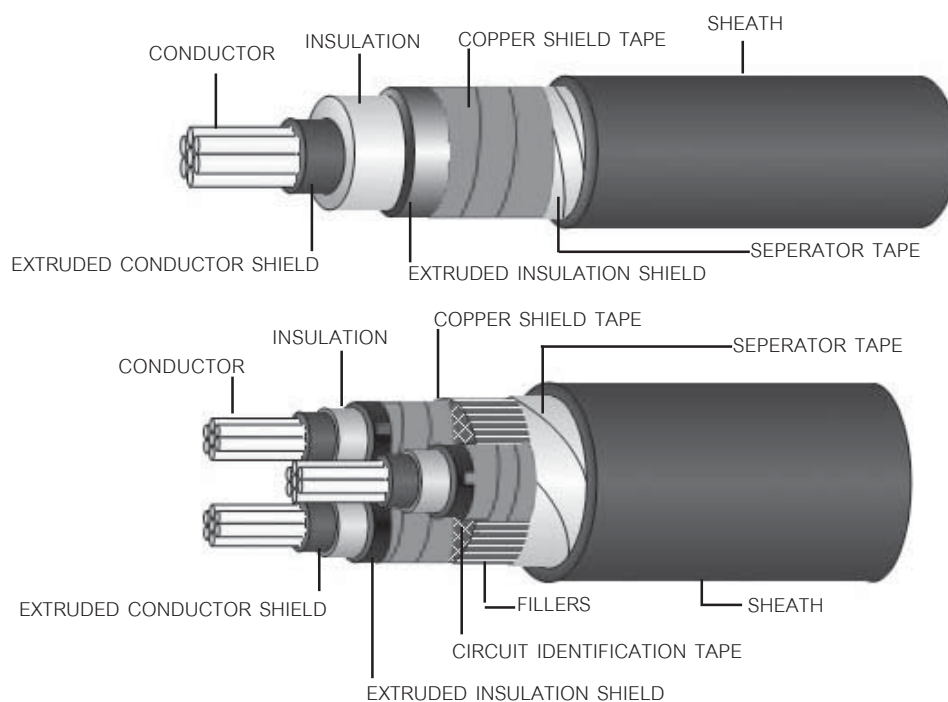
\*\*REMARK : Insulation shield shall be applied semi-conduction tape.

D: Packing in drum.



THAI-YAZAKI TECHNICAL DATA

6/10 kV 90° C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



## CABLE STRUCTURE

|                         |   |                                                                                                                                |
|-------------------------|---|--------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE          | : | Single and 3 cores                                                                                                             |
| CONDUCTOR               | : | Compact round stranded annealed copper,<br>Sizes. 16 mm <sup>2</sup> up to 1,000 mm <sup>2</sup>                               |
| INSULATION              | : | Cross-linked polyethylene<br>Color: Natural (Translucent)<br>Core identification : Color tape<br>White, Red and Blue           |
| SHEATH                  | : | PVC Color : Black                                                                                                              |
| SHIELD                  | : | Copper tape, thickness 0.1 mm                                                                                                  |
| CLASSIFICATION          | : | Maximum conductor temperature 90° C<br>Circuit voltage not exceeding 12,000 volts                                              |
| TESTING VOLTAGE         | : | 21,000 volts                                                                                                                   |
| REFERENCE               | : | IEC 60502-2                                                                                                                    |
| *REMARK                 |   |                                                                                                                                |
| INSULATION SHIELD LAYER | : | SEMI-CONDUCTING COVERING REMOVE AT SPLICES<br>OR TERMINALS<br>(ทำการลอกชั้นสกรีนของฉนวนออกก่อนทำการต่อเข้ากับ<br>ชุดทำปลายสาย) |



# 6/10(12)KV-CV

IEC 60502-2

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Minimum number of stranded<br>(No.) | Mean value of insulation thickness<br>(mm) | Mean value of sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20 °C<br>(Ω/km) | Minimum insulation resistance at 20 °C<br>(MΩ-km) | Maximum continuous current rating in free air<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-------------------------------------|--------------------------------------------|----------------------------------------|----------------------------------|-------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------|-----------------------------------|------------------------|
| 1              | 16                                                 | 6                                   | 3.4                                        | 1.5                                    | 18.5                             | 1.15                                            | 3,100                                             | 120                                                       | 440                               | 500/D                  |
|                | 25                                                 | 6                                   | 3.4                                        | 1.6                                    | 20                               | 0.727                                           | 2,700                                             | 160                                                       | 550                               | 500/D                  |
|                | 35                                                 | 6                                   | 3.4                                        | 1.6                                    | 21                               | 0.524                                           | 2,450                                             | 195                                                       | 700                               | 500/D                  |
|                | 50                                                 | 6                                   | 3.4                                        | 1.7                                    | 22                               | 0.387                                           | 2,200                                             | 235                                                       | 850                               | 500/D                  |
|                | 70                                                 | 12                                  | 3.4                                        | 1.7                                    | 24                               | 0.268                                           | 1,900                                             | 290                                                       | 1,100                             | 500/D                  |
|                | 95                                                 | 15                                  | 3.4                                        | 1.8                                    | 26                               | 0.193                                           | 1,700                                             | 355                                                       | 1,300                             | 500/D                  |
|                | 120                                                | 18                                  | 3.4                                        | 1.8                                    | 27                               | 0.153                                           | 1,550                                             | 410                                                       | 1,600                             | 500/D                  |
|                | 150                                                | 18                                  | 3.4                                        | 1.9                                    | 29                               | 0.124                                           | 1,450                                             | 465                                                       | 1,900                             | 500/D                  |
|                | 185                                                | 30                                  | 3.4                                        | 1.9                                    | 31                               | 0.0991                                          | 1,300                                             | 535                                                       | 2,300                             | 500/D                  |
|                | 240                                                | 34                                  | 3.4                                        | 2.0                                    | 33                               | 0.0754                                          | 1,150                                             | 630                                                       | 2,900                             | 500/D                  |
|                | 300                                                | 34                                  | 3.4                                        | 2.1                                    | 36                               | 0.0601                                          | 1,050                                             | 725                                                       | 3,500                             | 500/D                  |
|                | 400                                                | 53                                  | 3.4                                        | 2.2                                    | 39                               | 0.0470                                          | 950                                               | 835                                                       | 4,400                             | 500/D                  |
|                | 500                                                | 53                                  | 3.4                                        | 2.3                                    | 42                               | 0.0366                                          | 850                                               | 975                                                       | 5,500                             | 500/D                  |
|                | 630                                                | 53                                  | 3.4                                        | 2.4                                    | 46                               | 0.0283                                          | 750                                               | 1,140                                                     | 7,000                             | 500/D                  |
|                | 800                                                | 53                                  | 3.4                                        | 2.5                                    | 50                               | 0.0221                                          | 650                                               | 1,330                                                     | 8,500                             | 500/D                  |
|                | 1000                                               | 53                                  | 3.4                                        | 2.6                                    | 56                               | 0.0176                                          | 600                                               | 1,520                                                     | 11,000                            | 300/D                  |
| 3              | 16                                                 | 6                                   | 3.4                                        | 2.2                                    | 37                               | 1.15                                            | 3,100                                             | 96                                                        | 1,500                             | 500/D                  |
|                | 25                                                 | 6                                   | 3.4                                        | 2.2                                    | 40                               | 0.727                                           | 2,700                                             | 120                                                       | 1,900                             | 500/D                  |
|                | 35                                                 | 6                                   | 3.4                                        | 2.3                                    | 42                               | 0.524                                           | 2,450                                             | 150                                                       | 2,200                             | 500/D                  |
|                | 50                                                 | 6                                   | 3.4                                        | 2.4                                    | 45                               | 0.387                                           | 2,200                                             | 180                                                       | 2,700                             | 500/D                  |
|                | 70                                                 | 12                                  | 3.4                                        | 2.6                                    | 49                               | 0.268                                           | 1,900                                             | 225                                                       | 3,500                             | 500/D                  |
|                | 95                                                 | 15                                  | 3.4                                        | 2.7                                    | 53                               | 0.193                                           | 1,700                                             | 275                                                       | 4,400                             | 500/D                  |
|                | 120                                                | 18                                  | 3.4                                        | 2.8                                    | 57                               | 0.153                                           | 1,550                                             | 320                                                       | 5,500                             | 500/D                  |
|                | 150                                                | 18                                  | 3.4                                        | 2.9                                    | 60                               | 0.124                                           | 1,450                                             | 365                                                       | 6,000                             | 500/D                  |
|                | 185                                                | 30                                  | 3.4                                        | 3.0                                    | 64                               | 0.0991                                          | 1,300                                             | 420                                                       | 7,500                             | 500/D                  |
|                | 240                                                | 34                                  | 3.4                                        | 3.2                                    | 70                               | 0.0754                                          | 1,150                                             | 500                                                       | 9,500                             | 300/D                  |
|                | 300                                                | 34                                  | 3.4                                        | 3.3                                    | 75                               | 0.0601                                          | 1,050                                             | 575                                                       | 11,500                            | 300/D                  |
|                | 400                                                | 53                                  | 3.4                                        | 3.6                                    | 81                               | 0.0470                                          | 950                                               | 665                                                       | 14,000                            | 300/D                  |

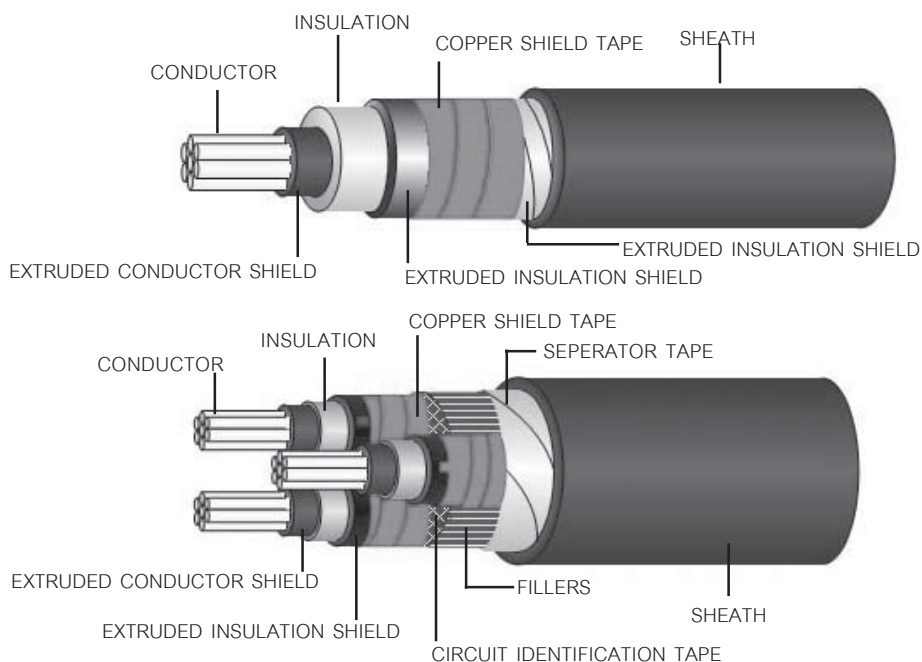
\*REMARK : Special protection can be produced.

D: Packing in drum.



THAI-YAZAKI TECHNICAL DATA

## 8.7/15 kV 90° C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



## CABLE STRUCTURE

|                         |   |                                                                                                                                |
|-------------------------|---|--------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE          | : | Single and 3 cores                                                                                                             |
| CONDUCTOR               | : | Compact round stranded annealed copper,<br>Sizes. 25 mm <sup>2</sup> up to 1,000 mm <sup>2</sup>                               |
| INSULATION              | : | Cross-linked polyethylene<br>Color: Natural (Translucent)<br>Core identification : Color tape<br>White, Red and Blue           |
| SHEATH                  | : | PVC Color : Black                                                                                                              |
| SHIELD                  | : | Copper tape, thickness 0.1 mm                                                                                                  |
| CLASSIFICATION          | : | Maximum conductor temperature 90° C<br>Circuit voltage not exceeding 17,500 volts                                              |
| TESTING VOLTAGE         | : | 30,500 volts                                                                                                                   |
| REFERENCE               | : | IEC 60502-2                                                                                                                    |
| *REMARK                 |   |                                                                                                                                |
| INSULATION SHIELD LAYER | : | SEMI-CONDUCTING COVERING REMOVE AT SPLICES<br>OR TERMINALS<br>(ทำการลอกชั้นสกรีนของฉนวนออกก่อนทำการต่อเข้ากับ<br>ชุดทำปลายสาย) |



# 8.7/15(17.5)KV-CV

IEC 60502-2

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Minimum number of stranded<br>(No.) | Mean value of insulation thickness<br>(mm) | Mean value of sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20° C<br>(Ω/km) | Minimum insulation resistance at 20° C<br>(MΩ-km) | Maximum continuous current rating in free air<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-------------------------------------|--------------------------------------------|----------------------------------------|----------------------------------|-------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------|-----------------------------------|------------------------|
| 1              | 25                                                 | 6                                   | 4.5                                        | 1.6                                    | 22                               | 0.727                                           | 3,300                                             | 160                                                       | 650                               | 500/D                  |
|                | 35                                                 | 6                                   | 4.5                                        | 1.7                                    | 23                               | 0.524                                           | 3,000                                             | 195                                                       | 750                               | 500/D                  |
|                | 50                                                 | 6                                   | 4.5                                        | 1.7                                    | 25                               | 0.387                                           | 2,700                                             | 235                                                       | 900                               | 500/D                  |
|                | 70                                                 | 12                                  | 4.5                                        | 1.8                                    | 26                               | 0.268                                           | 2,400                                             | 295                                                       | 1,200                             | 500/D                  |
|                | 95                                                 | 15                                  | 4.5                                        | 1.8                                    | 28                               | 0.193                                           | 2,100                                             | 355                                                       | 1,400                             | 500/D                  |
|                | 120                                                | 18                                  | 4.5                                        | 1.9                                    | 30                               | 0.153                                           | 1,950                                             | 410                                                       | 1,700                             | 500/D                  |
|                | 150                                                | 18                                  | 4.5                                        | 1.9                                    | 31                               | 0.124                                           | 1,800                                             | 465                                                       | 2,000                             | 500/D                  |
|                | 185                                                | 30                                  | 4.5                                        | 2.0                                    | 33                               | 0.0991                                          | 1,650                                             | 535                                                       | 2,400                             | 500/D                  |
|                | 240                                                | 34                                  | 4.5                                        | 2.1                                    | 36                               | 0.0754                                          | 1,500                                             | 630                                                       | 3,000                             | 500/D                  |
|                | 300                                                | 34                                  | 4.5                                        | 2.1                                    | 38                               | 0.0601                                          | 1,350                                             | 720                                                       | 3,700                             | 500/D                  |
|                | 400                                                | 53                                  | 4.5                                        | 2.2                                    | 41                               | 0.0470                                          | 1,200                                             | 835                                                       | 4,500                             | 500/D                  |
|                | 500                                                | 53                                  | 4.5                                        | 2.3                                    | 45                               | 0.0366                                          | 1,100                                             | 980                                                       | 5,500                             | 500/D                  |
|                | 630                                                | 53                                  | 4.5                                        | 2.4                                    | 48                               | 0.0283                                          | 950                                               | 1,145                                                     | 7,000                             | 500/D                  |
|                | 800                                                | 53                                  | 4.5                                        | 2.6                                    | 53                               | 0.0221                                          | 850                                               | 1,330                                                     | 8,500                             | 500/D                  |
|                | 1000                                               | 53                                  | 4.5                                        | 2.7                                    | 58                               | 0.0176                                          | 750                                               | 1,520                                                     | 11,500                            | 300/D                  |
| 3              | 25                                                 | 6                                   | 4.5                                        | 2.4                                    | 45                               | 0.727                                           | 3,300                                             | 125                                                       | 2,200                             | 500/D                  |
|                | 35                                                 | 6                                   | 4.5                                        | 2.5                                    | 48                               | 0.524                                           | 3,000                                             | 150                                                       | 2,600                             | 500/D                  |
|                | 50                                                 | 6                                   | 4.5                                        | 2.6                                    | 51                               | 0.387                                           | 2,700                                             | 185                                                       | 3,100                             | 500/D                  |
|                | 70                                                 | 12                                  | 4.5                                        | 2.7                                    | 54                               | 0.268                                           | 2,400                                             | 230                                                       | 3,900                             | 500/D                  |
|                | 95                                                 | 15                                  | 4.5                                        | 2.8                                    | 58                               | 0.193                                           | 2,100                                             | 280                                                       | 4,800                             | 500/D                  |
|                | 120                                                | 18                                  | 4.5                                        | 2.9                                    | 62                               | 0.153                                           | 1,950                                             | 325                                                       | 5,500                             | 500/D                  |
|                | 150                                                | 18                                  | 4.5                                        | 3.1                                    | 66                               | 0.124                                           | 1,800                                             | 370                                                       | 6,500                             | 500/D                  |
|                | 185                                                | 30                                  | 4.5                                        | 3.2                                    | 69                               | 0.0991                                          | 1,650                                             | 425                                                       | 8,000                             | 500/D                  |
|                | 240                                                | 34                                  | 4.5                                        | 3.4                                    | 75                               | 0.0754                                          | 1,500                                             | 500                                                       | 10,000                            | 300/D                  |
|                | 300                                                | 34                                  | 4.5                                        | 3.5                                    | 80                               | 0.0601                                          | 1,350                                             | 575                                                       | 12,000                            | 300/D                  |
|                | 400                                                | 53                                  | 4.5                                        | 3.7                                    | 86                               | 0.0470                                          | 1,200                                             | 665                                                       | 15,000                            | 300/D                  |

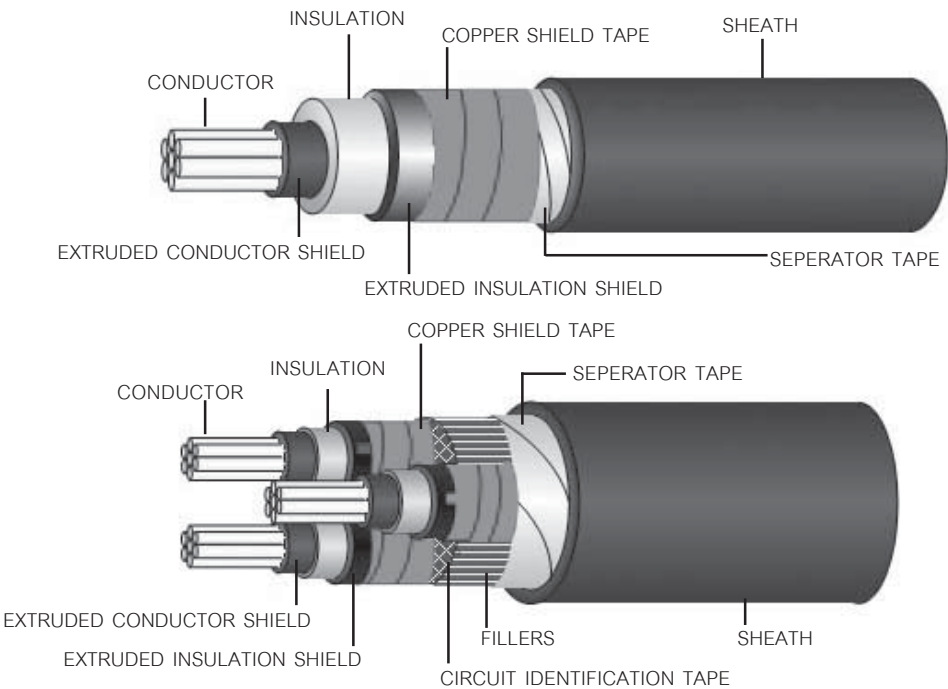
\*REMARK : Special protection can be produced.

D: Packing in drum.



THAI-YAZAKI TECHNICAL DATA

12/20 kV 90° C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



CABLE STRUCTURE

|                         |   |                                                                                                                                |
|-------------------------|---|--------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE          | : | Single and 3 cores                                                                                                             |
| CONDUCTOR               | : | Compact round stranded annealed copper,<br>Sizes. 35 mm <sup>2</sup> up to 1,000 mm <sup>2</sup>                               |
| INSULATION              | : | Cross-linked polyethylene<br>Color : Natural (Translucent)<br>Core identification : Color tape<br>White, Red and Blue          |
| SHEATH                  | : | PVC Color : Black                                                                                                              |
| SHIELD                  | : | Copper tape, thickness 0.1 mm                                                                                                  |
| CLASSIFICATION          | : | Maximum conductor temperature 90° C<br>Circuit voltage not exceeding 24,000 volts                                              |
| TESTING VOLTAGE         | : | 42,000 volts                                                                                                                   |
| REFERENCE               | : | IEC 60502-2                                                                                                                    |
| *REMARK                 |   |                                                                                                                                |
| INSULATION SHIELD LAYER | : | SEMI-CONDUCTING COVERING REMOVE AT SPLICES<br>OR TERMINALS<br>(ทำการลอกชั้นสกรีนของฉนวนออกก่อนทำการต่อเข้ากับ<br>ชุดทำปลายสาย) |

# 12/20(24)KV-CV

IEC 60502-2

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Minimum number of stranded<br>(No.) | Mean value of insulation thickness<br>(mm) | Mean value of sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20 °C<br>(Ω/km) | Minimum insulation resistance at 20 °C<br>(MΩ-km) | Maximum continuous current rating in free air<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-------------------------------------|--------------------------------------------|----------------------------------------|----------------------------------|-------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------|-----------------------------------|------------------------|
| 1              | 35                                                 | 6                                   | 5.5                                        | 1.8                                    | 26                               | 0.524                                           | 3,460                                             | 195                                                       | 850                               | 500/D                  |
|                | 50                                                 | 6                                   | 5.5                                        | 1.8                                    | 27                               | 0.387                                           | 3,130                                             | 235                                                       | 1,000                             | 500/D                  |
|                | 70                                                 | 12                                  | 5.5                                        | 1.8                                    | 28                               | 0.268                                           | 2,790                                             | 295                                                       | 1,300                             | 500/D                  |
|                | 95                                                 | 15                                  | 5.5                                        | 1.9                                    | 30                               | 0.193                                           | 2,500                                             | 360                                                       | 1,600                             | 500/D                  |
|                | 120                                                | 18                                  | 5.5                                        | 2.0                                    | 32                               | 0.153                                           | 2,290                                             | 410                                                       | 1,900                             | 500/D                  |
|                | 150                                                | 18                                  | 5.5                                        | 2.0                                    | 34                               | 0.124                                           | 2,130                                             | 465                                                       | 2,200                             | 500/D                  |
|                | 185                                                | 30                                  | 5.5                                        | 2.1                                    | 35                               | 0.0991                                          | 1,970                                             | 535                                                       | 2,600                             | 500/D                  |
|                | 240                                                | 34                                  | 5.5                                        | 2.1                                    | 38                               | 0.0754                                          | 1,770                                             | 630                                                       | 3,200                             | 500/D                  |
|                | 300                                                | 34                                  | 5.5                                        | 2.2                                    | 40                               | 0.0601                                          | 1,620                                             | 720                                                       | 3,800                             | 500/D                  |
|                | 400                                                | 53                                  | 5.5                                        | 2.3                                    | 43                               | 0.0470                                          | 1,480                                             | 840                                                       | 4,700                             | 500/D                  |
|                | 500                                                | 53                                  | 5.5                                        | 2.4                                    | 47                               | 0.0366                                          | 1,320                                             | 980                                                       | 6,000                             | 500/D                  |
|                | 630                                                | 53                                  | 5.5                                        | 2.5                                    | 51                               | 0.0283                                          | 1,190                                             | 1,145                                                     | 7,500                             | 500/D                  |
|                | 800                                                | 53                                  | 5.5                                        | 2.6                                    | 55                               | 0.0221                                          | 1,070                                             | 1,330                                                     | 9,000                             | 500/D                  |
|                | 1000                                               | 53                                  | 5.5                                        | 2.8                                    | 60                               | 0.0176                                          | 940                                               | 1,520                                                     | 11,500                            | 300/D                  |
| 3              | 35                                                 | 6                                   | 5.5                                        | 2.7                                    | 53                               | 0.524                                           | 3,460                                             | 155                                                       | 3,000                             | 500/D                  |
|                | 50                                                 | 6                                   | 5.5                                        | 2.8                                    | 55                               | 0.387                                           | 3,130                                             | 185                                                       | 3,500                             | 500/D                  |
|                | 70                                                 | 12                                  | 5.5                                        | 2.9                                    | 59                               | 0.268                                           | 2,790                                             | 230                                                       | 4,300                             | 500/D                  |
|                | 95                                                 | 15                                  | 5.5                                        | 3.0                                    | 63                               | 0.193                                           | 2,500                                             | 285                                                       | 5,000                             | 500/D                  |
|                | 120                                                | 18                                  | 5.5                                        | 3.1                                    | 67                               | 0.153                                           | 2,290                                             | 325                                                       | 6,000                             | 500/D                  |
|                | 150                                                | 18                                  | 5.5                                        | 3.2                                    | 70                               | 0.124                                           | 2,130                                             | 370                                                       | 7,000                             | 300/D                  |
|                | 185                                                | 30                                  | 5.5                                        | 3.3                                    | 74                               | 0.0991                                          | 1,970                                             | 425                                                       | 8,500                             | 300/D                  |
|                | 240                                                | 34                                  | 5.5                                        | 3.5                                    | 80                               | 0.0754                                          | 1,770                                             | 505                                                       | 10,500                            | 300/D                  |
|                | 300                                                | 34                                  | 5.5                                        | 3.7                                    | 85                               | 0.0601                                          | 1,620                                             | 580                                                       | 12,500                            | 300/D                  |
|                | 400                                                | 53                                  | 5.5                                        | 3.9                                    | 91                               | 0.0470                                          | 1,480                                             | 670                                                       | 15,500                            | 200/D                  |

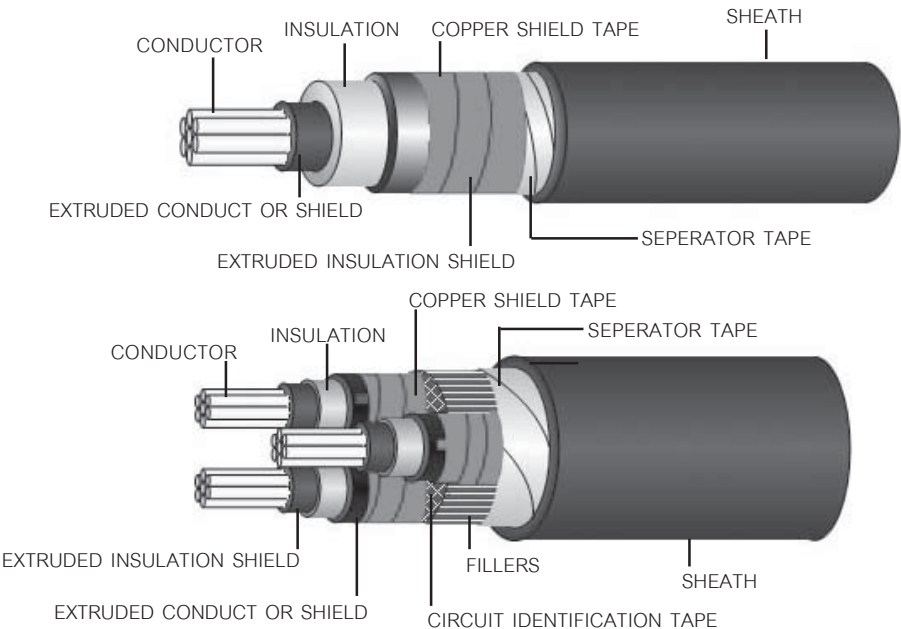
\*REMARK : Special protection can be produced.

D: Packing in drum.



THAI-YAZAKI TECHNICAL DATA

18/30 kV 90° C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



CABLE STRUCTURE

|                         |   |                                                                                                                                |
|-------------------------|---|--------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE          | : | Single and 3 cores                                                                                                             |
| CONDUCTOR               | : | Compact round stranded annealed copper,<br>Sizes. 35 mm <sup>2</sup> up to 1,000 mm <sup>2</sup>                               |
| INSULATION              | : | Cross-linked polyethylene<br>Color: Natural (Translucent)<br>Core identification : Color tape<br>White, Red and Blue           |
| SHEATH                  | : | PVC Color : Black                                                                                                              |
| SHIELD                  | : | Copper tape, thickness 0.1 mm                                                                                                  |
| CLASSIFICATION          | : | Maximum conductor temperature 90° C<br>Circuit voltage not exceeding 36,000 volts                                              |
| TESTING VOLTAGE         | : | 63,000 volts                                                                                                                   |
| REFERENCE               | : | IEC 60502-2                                                                                                                    |
| *REMARK                 |   |                                                                                                                                |
| INSULATION SHIELD LAYER | : | SEMI-CONDUCTING COVERING REMOVE AT SPLICES<br>OR TERMINALS<br>(ทำการลอกชั้นสกรีนของฉนวนออกก่อนทำการต่อเข้ากับ<br>ชุดทำปลายสาย) |

# 18/30(36)KV-CV

IEC 60502-2

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Minimum number of stranded<br>(No.) | Mean value of insulation thickness<br>(mm) | Mean value of sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20 °C<br>(Ω/km) | Minimum insulation resistance at 20 °C<br>(MΩ-km) | Maximum continuous current rating in free air<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-------------------------------------|--------------------------------------------|----------------------------------------|----------------------------------|-------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------|-----------------------------------|------------------------|
| 1              | 35                                                 | 6                                   | 8.9                                        | 2.0                                    | 33                               | 0.524                                           | 4,680                                             | 195                                                       | 1,200                             | 500/D                  |
|                | 50                                                 | 6                                   | 8.0                                        | 2.0                                    | 32                               | 0.387                                           | 4,010                                             | 235                                                       | 1,300                             | 500/D                  |
|                | 70                                                 | 12                                  | 8.0                                        | 2.0                                    | 34                               | 0.268                                           | 3,620                                             | 295                                                       | 1,500                             | 500/D                  |
|                | 95                                                 | 15                                  | 8.0                                        | 2.1                                    | 36                               | 0.193                                           | 3,260                                             | 355                                                       | 1,900                             | 500/D                  |
|                | 120                                                | 18                                  | 8.0                                        | 2.1                                    | 37                               | 0.153                                           | 3,020                                             | 410                                                       | 2,200                             | 500/D                  |
|                | 150                                                | 18                                  | 8.0                                        | 2.2                                    | 39                               | 0.124                                           | 2,820                                             | 465                                                       | 2,500                             | 500/D                  |
|                | 185                                                | 30                                  | 8.0                                        | 2.2                                    | 41                               | 0.0991                                          | 2,620                                             | 530                                                       | 2,900                             | 500/D                  |
|                | 240                                                | 34                                  | 8.0                                        | 2.3                                    | 43                               | 0.0754                                          | 2,370                                             | 630                                                       | 3,500                             | 500/D                  |
|                | 300                                                | 34                                  | 8.0                                        | 2.4                                    | 46                               | 0.0601                                          | 2,190                                             | 725                                                       | 4,200                             | 500/D                  |
|                | 400                                                | 53                                  | 8.0                                        | 2.5                                    | 48                               | 0.0470                                          | 2,000                                             | 845                                                       | 5,000                             | 500/D                  |
|                | 500                                                | 53                                  | 8.0                                        | 2.6                                    | 52                               | 0.0366                                          | 1,800                                             | 985                                                       | 6,500                             | 500/D                  |
|                | 630                                                | 53                                  | 8.0                                        | 2.7                                    | 56                               | 0.0283                                          | 1,630                                             | 1,145                                                     | 7,500                             | 500/D                  |
|                | 800                                                | 53                                  | 8.0                                        | 2.8                                    | 60                               | 0.0221                                          | 1,480                                             | 1,330                                                     | 9,500                             | 300/D                  |
|                | 1000                                               | 53                                  | 8.0                                        | 3.0                                    | 66                               | 0.0176                                          | 1,300                                             | 1,515                                                     | 12,000                            | 300/D                  |
| 3              | 35                                                 | 6                                   | 8.9                                        | 3.1                                    | 68                               | 0.524                                           | 4,680                                             | 160                                                       | 4,300                             | 500/D                  |
|                | 50                                                 | 6                                   | 8.0                                        | 3.2                                    | 67                               | 0.387                                           | 4,010                                             | 190                                                       | 4,500                             | 500/D                  |
|                | 70                                                 | 12                                  | 8.0                                        | 3.3                                    | 71                               | 0.268                                           | 3,620                                             | 235                                                       | 5,500                             | 300/D                  |
|                | 95                                                 | 15                                  | 8.0                                        | 3.4                                    | 75                               | 0.193                                           | 3,260                                             | 290                                                       | 6,500                             | 300/D                  |
|                | 120                                                | 18                                  | 8.0                                        | 3.5                                    | 79                               | 0.153                                           | 3,020                                             | 330                                                       | 7,500                             | 300/D                  |
|                | 150                                                | 18                                  | 8.0                                        | 3.6                                    | 82                               | 0.124                                           | 2,820                                             | 375                                                       | 8,500                             | 300/D                  |
|                | 185                                                | 30                                  | 8.0                                        | 3.7                                    | 86                               | 0.0991                                          | 2,620                                             | 430                                                       | 10,000                            | 300/D                  |
|                | 240                                                | 34                                  | 8.0                                        | 3.9                                    | 91                               | 0.0754                                          | 2,370                                             | 510                                                       | 12,000                            | 300/D                  |
|                | 300                                                | 34                                  | 8.0                                        | 4.0                                    | 97                               | 0.0601                                          | 2,190                                             | 580                                                       | 14,000                            | 300/D                  |
|                | 400                                                | 53                                  | 8.0                                        | 4.3                                    | 103                              | 0.0470                                          | 2,000                                             | 670                                                       | 17,000                            | 200/D                  |

\*REMARK : Special protection can be produced.

D: Packing in drum.



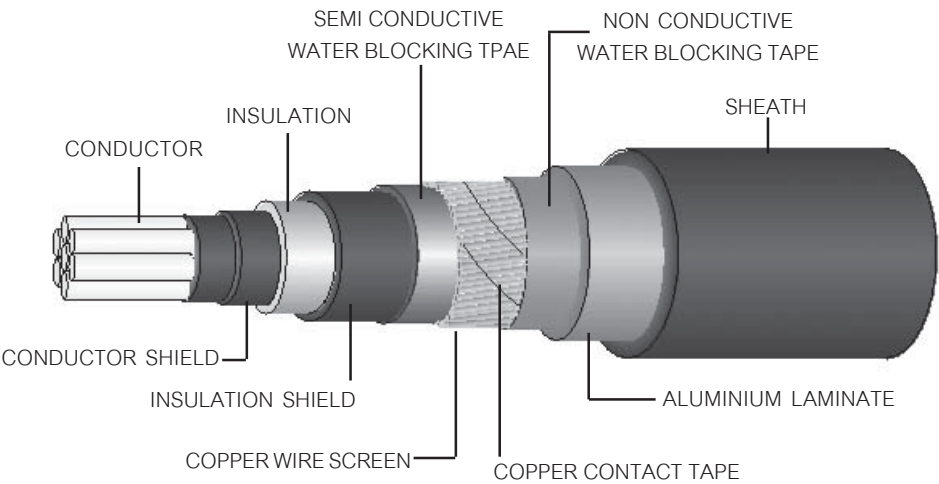
THAI-YAZAKI TECHNICAL DATA

# High Voltage Power Cables

|                              |                                                                                             |      |
|------------------------------|---------------------------------------------------------------------------------------------|------|
| 69 KV - CE (CU.WIRE SCREEN)  | 69 kV 90° C CROSS - LINKED POLYETHYLENE INSULATED AND PE JACKETED POWER CABLE. (IEC 60840)  | B 57 |
| 115 KV - CE (CU.WIRE SCREEN) | 115 kV 90° C CROSS - LINKED POLYETHYLENE INSULATED AND PE JACKETED POWER CABLE. (IEC 60840) | B 59 |

B  
4

69 kV 90° C CROSS - LINKED POLYETHYLENE INSULATED WITH COPPER WIRE SCREEN  
POLYETHYLENE JACKETED POWER CABLE



CABLE STRUCTURE

|                 |   |                                                                   |
|-----------------|---|-------------------------------------------------------------------|
| NUMBER OF CORE  | : | Single core                                                       |
| CONDUCTOR       | : | Compact concentric stranded uncoated<br>annealed Copper conductor |
| INSULATION      | : | Cross-linked polyethylene<br>Color: Natural                       |
| SHEATH          | : | Ployethylene                                                      |
| TESTING VOLTAGE | : | 90,000 volts                                                      |
| CLASSIFICATION  | : | Maximum conductor temperature 90° C                               |
| REFERENCE       | : | IEC 60840 : 1999                                                  |

## 69 KV-CE (CU.WIRE SCREEN)

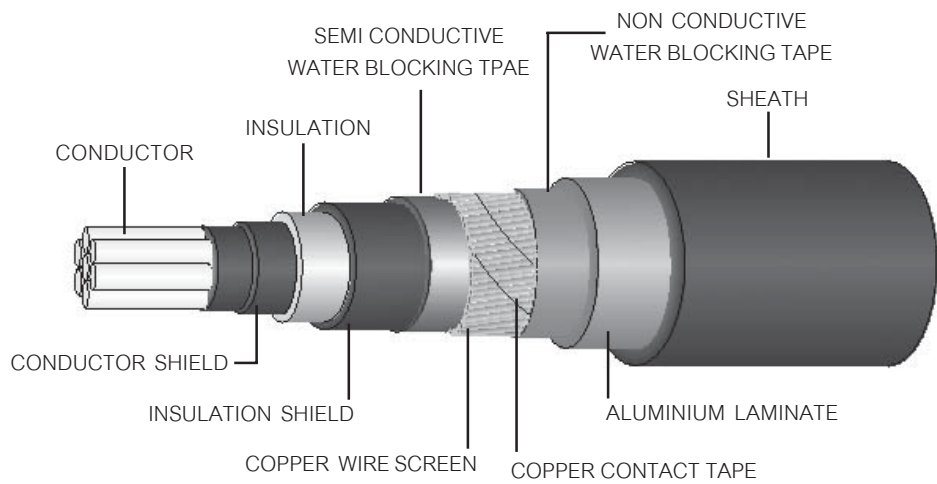
IEC 60840

| Number of cores | Nominal cross sectional area (mm <sup>2</sup> ) | Minimum number of stranded (No.) | Conductor diameter approx. (mm) | Conductor shield thickness nominal (mm) | Insulation thickness nominal (mm) | Insulation shield thickness nominal (mm) | Copper wire area (mm <sup>2</sup> ) | Jacket thickness nominal (mm) | Overall diameter approx. (mm) | Maximum conductor resistance at 20 °C (Ω/km) | Maximum Current Rating in ground (ampere) | Weight of cable (approx.) (kg/km) | Standard length (m) |
|-----------------|-------------------------------------------------|----------------------------------|---------------------------------|-----------------------------------------|-----------------------------------|------------------------------------------|-------------------------------------|-------------------------------|-------------------------------|----------------------------------------------|-------------------------------------------|-----------------------------------|---------------------|
| 1               | 400/95                                          | 53                               | 23.5                            | 1.5                                     | 11.0                              | 1.5                                      | 95                                  | 3.1                           | 66                            | 0.0470                                       | 690                                       | 7,000                             | 500/D               |
|                 | 500/95                                          | 53                               | 26.7                            | 1.5                                     | 11.0                              | 1.5                                      | 95                                  | 3.2                           | 69                            | 0.0366                                       | 785                                       | 8,000                             | 300/D               |
|                 | 630/120                                         | 53                               | 30.3                            | 1.5                                     | 11.0                              | 1.5                                      | 120                                 | 3.4                           | 74                            | 0.0283                                       | 895                                       | 10,000                            | 300/D               |
|                 | 800/120                                         | 53                               | 34.1                            | 1.5                                     | 11.0                              | 1.5                                      | 120                                 | 3.5                           | 78                            | 0.0221                                       | 1,010                                     | 11,500                            | 300/D               |

D: Packing in drum.



115 KV 90° C CROSS - LINKED POLYETHYLENE INSULATED WITH COPPER WIRE SCREEN AND POLYETHYLENE JACKETED POWER CABLE



### CABLE STRUCTURE

|                 |   |                                                                |
|-----------------|---|----------------------------------------------------------------|
| NUMBER OF CORE  | : | Single core                                                    |
| CONDUCTOR       | : | Compact concentric stranded uncoated annealed copper conductor |
| INSULATION      | : | Cross-linked polyethylene<br>Color : Natural                   |
| SHEATH          | : | Ployethylene                                                   |
| TESTING VOLTAGE | : | 160,000 volts                                                  |
| CLASSIFICATION  | : | Maximum conductor temperature 90° C                            |
| REFERENCE       | : | IEC 60840 : 1999                                               |

# 115 KV-CE (CU.WIRE SCREEN)

IEC 60840

| Number of cores | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Minimum number of strands<br>(No.) | Conductor diameter approx.<br>(mm) | Conductor shield thickness nominal<br>(mm) | Insulation thickness nominal<br>(mm) | Insulation shield thickness nominal<br>(mm) | Copper wire area<br>(mm <sup>2</sup> ) | Jacket thickness nominal<br>(mm) | Overall diameter approx.<br>(mm) | Maximum conductor resistance at 20 °C<br>(Ω/km) | Maximum current rating in ground<br>(ampere) | Weight of cable (approx.)<br>(kg/km) | Standard length<br>(m) |
|-----------------|----------------------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|--------------------------------------|---------------------------------------------|----------------------------------------|----------------------------------|----------------------------------|-------------------------------------------------|----------------------------------------------|--------------------------------------|------------------------|
| 1               | 400/95                                             | 53                                 | 23.5                               | 1.5                                        | 16.0                                 | 1.5                                         | 95                                     | 3.5                              | 76                               | 0.0470                                          | 690                                          | 8,000                                | 300/D                  |
|                 | 500/95                                             | 53                                 | 26.7                               | 1.5                                        | 16.0                                 | 1.5                                         | 95                                     | 3.6                              | 80                               | 0.0366                                          | 785                                          | 9,000                                | 300/D                  |
|                 | 630/120                                            | 53                                 | 30.3                               | 1.5                                        | 16.0                                 | 1.5                                         | 120                                    | 3.7                              | 84                               | 0.0283                                          | 895                                          | 11,000                               | 300/D                  |
|                 | 800/120                                            | 53                                 | 34.1                               | 1.5                                        | 16.0                                 | 1.5                                         | 120                                    | 3.9                              | 88                               | 0.0221                                          | 1,010                                        | 13,000                               | 300/D                  |

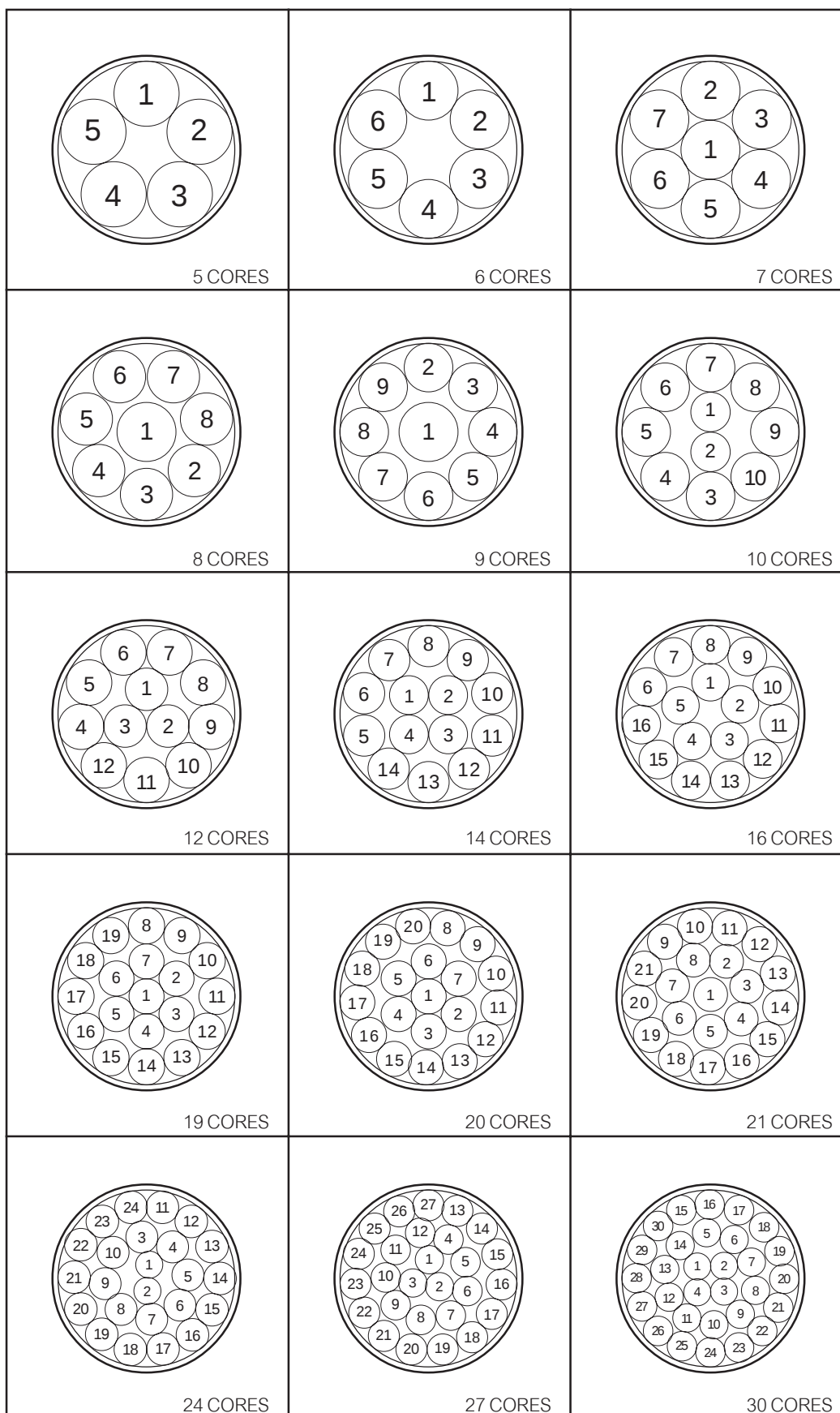
D: Packing in drum

B  
4

# Control Cables

|      |                                                                                            |      |
|------|--------------------------------------------------------------------------------------------|------|
| CW   | 600 V.70° C PVC INSULATED AND SHEATHED CONTROL CABLE<br>(THAI YAZAKI STANDARD)             | B 63 |
| CW-S | 600 V.70° C PVC INSULATED AND SHEATHED CONTROL CABLE<br>WITH SHIELD (THAI YAZAKI STANDARD) | B 63 |

# ARRANGEMENT OF CORES FOR CVV



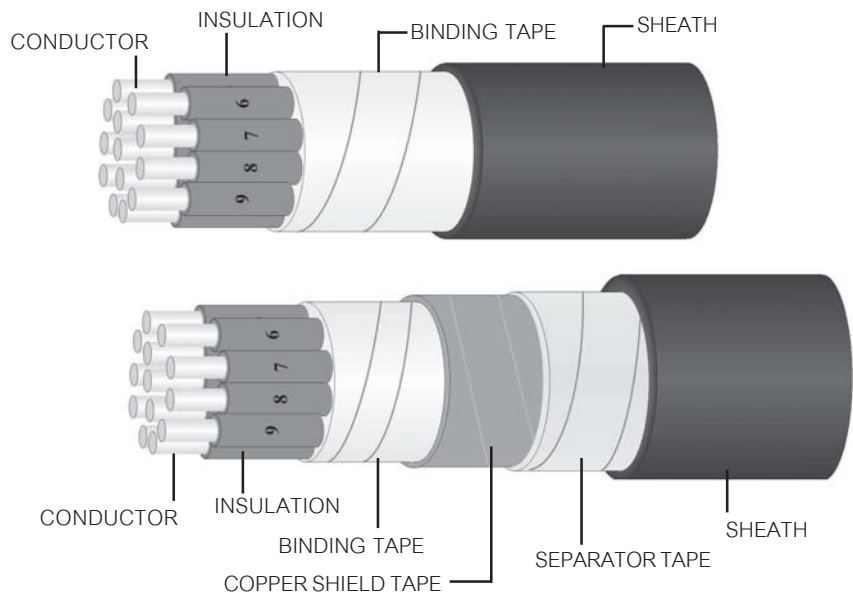
NOTE : Jute fillers are necessary to fill the cable a substantially circular cross section.

(If the stranded cores be circle enough, jute fillers shall not be necessary)



THAI-YAZAKI TECHNICAL DATA

600 V 70° C PVC INSULATED AND SHEATHED CONTROL CABLE  
600 V 70° C PVC INSULATED AND SHEATHED CONTROL CABLE WITH SHIELD



CABLE STRUCTURE

|                 |   |                                                                                                                                                                                                                                   |
|-----------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE  | : | 2 up to 48 cores                                                                                                                                                                                                                  |
| CONDUCTOR       | : | Flexible stranded annealed copper wires<br>Sizes. : 0.5 mm <sup>2</sup> up to 6 mm <sup>2</sup>                                                                                                                                   |
| INSULATION      | : | PVC<br>Color : 2-4 cores-Black, White, Red and Green<br>More than 4 cores : Black with marking numbers, colored white, printed continuously throughout the whole length of insulated wires for the purpose of core identification |
| SHEATH          | : | PVC Color: Black                                                                                                                                                                                                                  |
| SHIELD          | : | Copper tape                                                                                                                                                                                                                       |
| CLASSIFICATION  | : | Maximum conductor temperature 70° C<br>Circuit voltage not exceeding 600 volts                                                                                                                                                    |
| TESTING VOLTAGE | : | 2,000 volts                                                                                                                                                                                                                       |
| REFERENCE       | : | THAI YAZAKI STANDARD                                                                                                                                                                                                              |

# CVV

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Approx. diameter of conductor<br>(mm) | Insulation thickness<br>(mm) | Sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20 °C<br>(Ω/km) | Minimum insulation resistance at 70 °C<br>(MΩ-km) | Cable weight (approx.)<br>(kg/km) | Standard Length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|---------------------------------------|------------------------------|--------------------------|----------------------------------|-------------------------------------------------|---------------------------------------------------|-----------------------------------|------------------------|
| 2              | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 0.9                      | 7.5                              | 39.0                                            | 0.0130                                            | 49                                | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.2                      | 8.5                              | 26.0                                            | 0.0114                                            | 65                                | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.2                      | 8.7                              | 19.5                                            | 0.0104                                            | 75                                | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.2                      | 9.3                              | 13.3                                            | 0.0089                                            | 90                                | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.2                      | 10.5                             | 7.98                                            | 0.0081                                            | 130                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.2                      | 12.0                             | 4.95                                            | 0.0076                                            | 170                               | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.4                      | 14.0                             | 3.30                                            | 0.0061                                            | 250                               | 500/D                  |
| 3              | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.2                      | 8.5                              | 39.0                                            | 0.0130                                            | 65                                | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.2                      | 8.9                              | 26.0                                            | 0.0114                                            | 80                                | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.2                      | 9.1                              | 19.5                                            | 0.0104                                            | 90                                | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.2                      | 9.8                              | 13.3                                            | 0.0089                                            | 110                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.2                      | 11.0                             | 7.98                                            | 0.0081                                            | 160                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.2                      | 13.0                             | 4.95                                            | 0.0076                                            | 230                               | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.4                      | 15.0                             | 3.30                                            | 0.0061                                            | 330                               | 500/D                  |
| 4              | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.2                      | 9.1                              | 39.0                                            | 0.0130                                            | 80                                | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.2                      | 9.6                              | 26.0                                            | 0.0114                                            | 95                                | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.2                      | 9.8                              | 19.5                                            | 0.0104                                            | 110                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.2                      | 10.5                             | 13.3                                            | 0.0089                                            | 140                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.2                      | 12.0                             | 7.98                                            | 0.0081                                            | 200                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.4                      | 14.5                             | 4.95                                            | 0.0076                                            | 300                               | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.4                      | 16.5                             | 3.30                                            | 0.0061                                            | 410                               | 500/D                  |
| 5              | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.2                      | 9.8                              | 39.0                                            | 0.0130                                            | 90                                | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.2                      | 10.0                             | 26.0                                            | 0.0114                                            | 110                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.2                      | 10.5                             | 19.5                                            | 0.0104                                            | 130                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.2                      | 11.5                             | 13.3                                            | 0.0089                                            | 160                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 13.5                             | 7.98                                            | 0.0081                                            | 250                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.4                      | 15.5                             | 4.95                                            | 0.0076                                            | 350                               | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.4                      | 18.0                             | 3.30                                            | 0.0061                                            | 500                               | 500/D                  |
| 6              | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.2                      | 10.5                             | 39.0                                            | 0.0130                                            | 110                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.2                      | 11.0                             | 26.0                                            | 0.0114                                            | 130                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.2                      | 11.5                             | 19.5                                            | 0.0104                                            | 150                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.2                      | 12.0                             | 13.3                                            | 0.0089                                            | 190                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 14.5                             | 7.98                                            | 0.0081                                            | 290                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.4                      | 17.0                             | 4.95                                            | 0.0076                                            | 420                               | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.4                      | 19.5                             | 3.30                                            | 0.0061                                            | 600                               | 500/D                  |
| 7              | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.2                      | 10.5                             | 39.0                                            | 0.0130                                            | 110                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.2                      | 11.0                             | 26.0                                            | 0.0114                                            | 140                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.2                      | 11.5                             | 19.5                                            | 0.0104                                            | 160                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.2                      | 12.0                             | 13.3                                            | 0.0089                                            | 210                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 14.5                             | 7.98                                            | 0.0081                                            | 320                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.4                      | 17.0                             | 4.95                                            | 0.0076                                            | 460                               | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.4                      | 19.5                             | 3.30                                            | 0.0061                                            | 650                               | 500/D                  |
| 8              | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.2                      | 11.0                             | 39.0                                            | 0.0130                                            | 130                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.2                      | 11.5                             | 26.0                                            | 0.0114                                            | 160                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.2                      | 12.0                             | 19.5                                            | 0.0104                                            | 180                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 13.5                             | 13.3                                            | 0.0089                                            | 240                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 16.0                             | 7.98                                            | 0.0081                                            | 360                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.4                      | 18.5                             | 4.95                                            | 0.0076                                            | 550                               | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.4                      | 21.0                             | 3.30                                            | 0.0061                                            | 750                               | 500/D                  |
| 9              | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.2                      | 12.0                             | 39.0                                            | 0.0130                                            | 150                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.2                      | 12.5                             | 26.0                                            | 0.0114                                            | 180                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 13.5                             | 19.5                                            | 0.0104                                            | 220                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 14.5                             | 13.3                                            | 0.0089                                            | 270                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 17.0                             | 7.98                                            | 0.0081                                            | 410                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.4                      | 20.0                             | 4.95                                            | 0.0076                                            | 600                               | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.4                      | 23.0                             | 3.30                                            | 0.0061                                            | 850                               | 500/D                  |



# CVV

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Approx. diameter of conductor<br>(mm) | Insulation thickness<br>(mm) | Sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20 °C<br>(Ω/km) | Minimum insulation resistance at 70 °C<br>(MΩ-km) | Cable weight (approx.)<br>(kg/km) | Standard Length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|---------------------------------------|------------------------------|--------------------------|----------------------------------|-------------------------------------------------|---------------------------------------------------|-----------------------------------|------------------------|
| 10             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.2                      | 12.5                             | 39.0                                            | 0.0130                                            | 150                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 14.0                             | 26.0                                            | 0.0114                                            | 210                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 14.5                             | 19.5                                            | 0.0104                                            | 240                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 15.5                             | 13.3                                            | 0.0089                                            | 310                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 18.0                             | 7.98                                            | 0.0081                                            | 460                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.4                      | 21.0                             | 4.95                                            | 0.0076                                            | 650                               | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.8                      | 25.0                             | 3.30                                            | 0.0061                                            | 1,000                             | 500/D                  |
| 11             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.2                      | 12.5                             | 39.0                                            | 0.0130                                            | 170                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 14.0                             | 26.0                                            | 0.0114                                            | 210                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 14.5                             | 19.5                                            | 0.0104                                            | 250                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 15.5                             | 13.3                                            | 0.0089                                            | 320                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 18.0                             | 7.98                                            | 0.0081                                            | 480                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.4                      | 21.0                             | 4.95                                            | 0.0076                                            | 700                               | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.8                      | 25.0                             | 3.30                                            | 0.0061                                            | 1,100                             | 500/D                  |
| 12             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.2                      | 13.0                             | 39.0                                            | 0.0130                                            | 180                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 14.5                             | 26.0                                            | 0.0114                                            | 220                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 15.0                             | 19.5                                            | 0.0104                                            | 280                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 16.0                             | 13.3                                            | 0.0089                                            | 350                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 19.0                             | 7.98                                            | 0.0081                                            | 550                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.4                      | 22.0                             | 4.95                                            | 0.0076                                            | 750                               | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.8                      | 26.0                             | 3.30                                            | 0.0061                                            | 1,200                             | 500/D                  |
| 13             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 14.0                             | 39.0                                            | 0.0130                                            | 200                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 15.0                             | 26.0                                            | 0.0114                                            | 250                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 15.5                             | 19.5                                            | 0.0104                                            | 290                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 17.0                             | 13.3                                            | 0.0089                                            | 370                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 20.0                             | 7.98                                            | 0.0081                                            | 550                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.4                      | 23.0                             | 4.95                                            | 0.0076                                            | 850                               | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.8                      | 28.0                             | 3.30                                            | 0.0061                                            | 1,200                             | 500/D                  |
| 14             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 14.0                             | 39.0                                            | 0.0130                                            | 210                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 15.0                             | 26.0                                            | 0.0114                                            | 250                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 15.5                             | 19.5                                            | 0.0104                                            | 300                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 17.0                             | 13.3                                            | 0.0089                                            | 390                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 20.0                             | 7.98                                            | 0.0081                                            | 600                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.4                      | 23.0                             | 4.95                                            | 0.0076                                            | 850                               | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.8                      | 28.0                             | 3.30                                            | 0.0061                                            | 1,300                             | 500/D                  |
| 15             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 14.5                             | 39.0                                            | 0.0130                                            | 220                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 15.5                             | 26.0                                            | 0.0114                                            | 270                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 16.0                             | 19.5                                            | 0.0104                                            | 320                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 17.5                             | 13.3                                            | 0.0089                                            | 420                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 21.0                             | 7.98                                            | 0.0081                                            | 650                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 25.0                             | 4.95                                            | 0.0076                                            | 950                               | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.8                      | 29.0                             | 3.30                                            | 0.0061                                            | 1,400                             | 500/D                  |
| 16             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 15.0                             | 39.0                                            | 0.0130                                            | 230                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 15.5                             | 26.0                                            | 0.0114                                            | 280                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 16.0                             | 19.5                                            | 0.0104                                            | 340                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 17.5                             | 13.3                                            | 0.0089                                            | 430                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 21.0                             | 7.98                                            | 0.0081                                            | 650                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 25.0                             | 4.95                                            | 0.0076                                            | 1,000                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.8                      | 29.0                             | 3.30                                            | 0.0061                                            | 1,400                             | 500/D                  |
| 17             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 15.5                             | 39.0                                            | 0.0130                                            | 240                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 16.5                             | 26.0                                            | 0.0114                                            | 310                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 17.0                             | 19.5                                            | 0.0104                                            | 370                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 18.5                             | 13.3                                            | 0.0089                                            | 470                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 22.0                             | 7.98                                            | 0.0081                                            | 700                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 27.0                             | 4.95                                            | 0.0076                                            | 1,100                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.8                      | 31.0                             | 3.30                                            | 0.0061                                            | 1,600                             | 500/D                  |



# CVV

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Approx. diameter of conductor<br>(mm) | Insulation thickness<br>(mm) | Sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20 °C<br>(Ω/km) | Minimum insulation resistance at 70 °C<br>(MΩ-km) | Cable weight (approx.)<br>(kg/km) | Standard Length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|---------------------------------------|------------------------------|--------------------------|----------------------------------|-------------------------------------------------|---------------------------------------------------|-----------------------------------|------------------------|
| 18             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 15.5                             | 39.0                                            | 0.0130                                            | 250                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 16.5                             | 26.0                                            | 0.0114                                            | 310                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 17.0                             | 19.5                                            | 0.0104                                            | 370                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 18.5                             | 13.3                                            | 0.0089                                            | 470                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 22.0                             | 7.98                                            | 0.0081                                            | 700                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 27.0                             | 4.95                                            | 0.0076                                            | 1,100                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.8                      | 31.0                             | 3.30                                            | 0.0061                                            | 1,600                             | 500/D                  |
| 19             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 15.5                             | 39.0                                            | 0.0130                                            | 260                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 16.5                             | 26.0                                            | 0.0114                                            | 320                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 17.0                             | 19.5                                            | 0.0104                                            | 380                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 18.5                             | 13.3                                            | 0.0089                                            | 490                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 22.0                             | 7.98                                            | 0.0081                                            | 750                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 27.0                             | 4.95                                            | 0.0076                                            | 1,100                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.8                      | 31.0                             | 3.30                                            | 0.0061                                            | 1,600                             | 500/D                  |
| 20             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 16.0                             | 39.0                                            | 0.0130                                            | 270                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 17.0                             | 26.0                                            | 0.0114                                            | 330                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 17.5                             | 19.5                                            | 0.0104                                            | 400                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 19.0                             | 13.3                                            | 0.0089                                            | 500                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 23.0                             | 7.98                                            | 0.0081                                            | 800                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 28.0                             | 4.95                                            | 0.0076                                            | 1,200                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.8                      | 32.0                             | 3.30                                            | 0.0061                                            | 1,700                             | 500/D                  |
| 21             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 16.5                             | 39.0                                            | 0.0130                                            | 280                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 17.5                             | 26.0                                            | 0.0114                                            | 350                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 18.0                             | 19.5                                            | 0.0104                                            | 420                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 19.5                             | 13.3                                            | 0.0089                                            | 550                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.4                      | 23.0                             | 7.98                                            | 0.0081                                            | 800                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 28.0                             | 4.95                                            | 0.0076                                            | 1,300                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.8                      | 32.0                             | 3.30                                            | 0.0061                                            | 1,800                             | 500/D                  |
| 22             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 17.0                             | 39.0                                            | 0.0130                                            | 300                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 18.0                             | 26.0                                            | 0.0114                                            | 370                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 18.5                             | 19.5                                            | 0.0104                                            | 450                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 20.0                             | 13.3                                            | 0.0089                                            | 550                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 25.0                             | 7.98                                            | 0.0081                                            | 900                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 30.0                             | 4.95                                            | 0.0076                                            | 1,300                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.8                      | 34.0                             | 3.30                                            | 0.0061                                            | 1,900                             | 500/D                  |
| 23             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 17.0                             | 39.0                                            | 0.0130                                            | 310                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 18.0                             | 26.0                                            | 0.0114                                            | 380                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 18.5                             | 19.5                                            | 0.0104                                            | 460                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 20.0                             | 13.3                                            | 0.0089                                            | 600                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 25.0                             | 7.98                                            | 0.0081                                            | 950                               | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 30.0                             | 4.95                                            | 0.0076                                            | 1,400                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 1.8                      | 34.0                             | 3.30                                            | 0.0061                                            | 2,000                             | 500/D                  |
| 24             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 18.0                             | 39.0                                            | 0.0130                                            | 320                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 19.0                             | 26.0                                            | 0.0114                                            | 400                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 19.5                             | 19.5                                            | 0.0104                                            | 500                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 21.0                             | 13.3                                            | 0.0089                                            | 600                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 26.0                             | 7.98                                            | 0.0081                                            | 1,000                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 31.0                             | 4.95                                            | 0.0076                                            | 1,400                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 37.0                             | 3.30                                            | 0.0061                                            | 2,100                             | 500/D                  |
| 25             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 18.0                             | 39.0                                            | 0.0130                                            | 330                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 19.0                             | 26.0                                            | 0.0114                                            | 410                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 19.5                             | 19.5                                            | 0.0104                                            | 490                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 21.0                             | 13.3                                            | 0.0089                                            | 650                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 26.0                             | 7.98                                            | 0.0081                                            | 1,000                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 31.0                             | 4.95                                            | 0.0076                                            | 1,500                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 37.0                             | 3.30                                            | 0.0061                                            | 2,200                             | 500/D                  |



# CVV

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Approx. diameter of conductor<br>(mm) | Insulation thickness<br>(mm) | Sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20 °C<br>(Ω/km) | Minimum insulation resistance at 70 °C<br>(MΩ-km) | Cable weight (approx.)<br>(kg/km) | Standard Length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|---------------------------------------|------------------------------|--------------------------|----------------------------------|-------------------------------------------------|---------------------------------------------------|-----------------------------------|------------------------|
| 26             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 18.0                             | 39.0                                            | 0.0130                                            | 340                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 19.0                             | 26.0                                            | 0.0114                                            | 420                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 19.5                             | 19.5                                            | 0.0104                                            | 500                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 21.0                             | 13.3                                            | 0.0089                                            | 650                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 26.0                             | 7.98                                            | 0.0081                                            | 1,000                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 31.0                             | 4.95                                            | 0.0076                                            | 1,500                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 37.0                             | 3.30                                            | 0.0061                                            | 2,300                             | 500/D                  |
| 27             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 18.5                             | 39.0                                            | 0.0130                                            | 340                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 19.5                             | 26.0                                            | 0.0114                                            | 430                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 20.0                             | 19.5                                            | 0.0104                                            | 500                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 22.0                             | 13.3                                            | 0.0089                                            | 650                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 27.0                             | 7.98                                            | 0.0081                                            | 1,100                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 32.0                             | 4.95                                            | 0.0076                                            | 1,600                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 38.0                             | 3.30                                            | 0.0061                                            | 2,400                             | 500/D                  |
| 28             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 19.0                             | 39.0                                            | 0.0130                                            | 370                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 20.0                             | 26.0                                            | 0.0114                                            | 460                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 21.0                             | 19.5                                            | 0.0104                                            | 550                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 23.0                             | 13.3                                            | 0.0089                                            | 700                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 28.0                             | 7.98                                            | 0.0081                                            | 1,100                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 33.0                             | 4.95                                            | 0.0076                                            | 1,700                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 39.0                             | 3.30                                            | 0.0061                                            | 2,500                             | 500/D                  |
| 29             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 19.0                             | 39.0                                            | 0.0130                                            | 370                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 20.0                             | 26.0                                            | 0.0114                                            | 460                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 21.0                             | 19.5                                            | 0.0104                                            | 550                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 23.0                             | 13.3                                            | 0.0089                                            | 700                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 28.0                             | 7.98                                            | 0.0081                                            | 1,100                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 33.0                             | 4.95                                            | 0.0076                                            | 1,700                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 39.0                             | 3.30                                            | 0.0061                                            | 2,500                             | 500/D                  |
| 30             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 19.0                             | 39.0                                            | 0.0130                                            | 370                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 20.0                             | 26.0                                            | 0.0114                                            | 470                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 21.0                             | 19.5                                            | 0.0104                                            | 550                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.4                      | 23.0                             | 13.3                                            | 0.0089                                            | 750                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 28.0                             | 7.98                                            | 0.0081                                            | 1,200                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 33.0                             | 4.95                                            | 0.0076                                            | 1,700                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 39.0                             | 3.30                                            | 0.0061                                            | 2,600                             | 500/D                  |
| 31             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 19.5                             | 39.0                                            | 0.0130                                            | 400                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 21.0                             | 26.0                                            | 0.0114                                            | 500                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 22.0                             | 19.5                                            | 0.0104                                            | 600                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.6                                   | 0.6                          | 1.8                      | 24.0                             | 13.3                                            | 0.0089                                            | 850                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 29.0                             | 7.98                                            | 0.0081                                            | 1,300                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 34.0                             | 4.95                                            | 0.0076                                            | 1,800                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 41.0                             | 3.30                                            | 0.0061                                            | 2,700                             | 500/D                  |
| 32             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 19.5                             | 39.0                                            | 0.0130                                            | 400                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 21.0                             | 26.0                                            | 0.0114                                            | 500                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 22.0                             | 19.5                                            | 0.0104                                            | 600                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 24.0                             | 13.3                                            | 0.0089                                            | 850                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 29.0                             | 7.98                                            | 0.0081                                            | 1,300                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 34.0                             | 4.95                                            | 0.0076                                            | 1,900                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 41.0                             | 3.30                                            | 0.0061                                            | 2,800                             | 500/D                  |
| 33             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 19.5                             | 39.0                                            | 0.0130                                            | 400                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 21.0                             | 26.0                                            | 0.0114                                            | 500                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 22.0                             | 19.5                                            | 0.0104                                            | 600                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 24.0                             | 13.3                                            | 0.0089                                            | 850                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 29.0                             | 7.98                                            | 0.0081                                            | 1,300                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 1.8                      | 34.0                             | 4.95                                            | 0.0076                                            | 1,900                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 41.0                             | 3.30                                            | 0.0061                                            | 2,800                             | 500/D                  |



# CVV

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Approx. diameter of conductor<br>(mm) | Insulation thickness<br>(mm) | Sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20 °C<br>(Ω/km) | Minimum insulation resistance at 70 °C<br>(MΩ-km) | Cable weight (approx.)<br>(kg/km) | Standard Length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|---------------------------------------|------------------------------|--------------------------|----------------------------------|-------------------------------------------------|---------------------------------------------------|-----------------------------------|------------------------|
| 34             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 20.0                             | 39.0                                            | 0.0130                                            | 430                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 21.0                             | 26.0                                            | 0.0114                                            | 550                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 22.0                             | 19.5                                            | 0.0104                                            | 650                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 25.0                             | 13.3                                            | 0.0089                                            | 900                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 30.0                             | 7.98                                            | 0.0081                                            | 1,400                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 2.2                      | 37.0                             | 4.95                                            | 0.0076                                            | 2,100                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 42.0                             | 3.30                                            | 0.0061                                            | 3,000                             | 500/D                  |
| 35             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 20.0                             | 39.0                                            | 0.0130                                            | 430                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 21.0                             | 26.0                                            | 0.0114                                            | 550                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 22.0                             | 19.5                                            | 0.0104                                            | 650                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 25.0                             | 13.3                                            | 0.0089                                            | 900                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 30.3                             | 7.98                                            | 0.0081                                            | 1,400                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 2.2                      | 37.0                             | 4.95                                            | 0.0076                                            | 2,100                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 42.0                             | 3.30                                            | 0.0061                                            | 3,000                             | 500/D                  |
| 36             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 20.0                             | 39.0                                            | 0.0130                                            | 440                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 21.0                             | 26.0                                            | 0.0114                                            | 550                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 22.0                             | 19.5                                            | 0.0104                                            | 650                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 25.0                             | 13.3                                            | 0.0089                                            | 900                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 30.0                             | 7.98                                            | 0.0081                                            | 1,400                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 2.2                      | 37.0                             | 4.95                                            | 0.0076                                            | 2,100                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 42.0                             | 3.30                                            | 0.0061                                            | 3,100                             | 500/D                  |
| 37             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 20.0                             | 39.0                                            | 0.0130                                            | 450                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 21.0                             | 26.0                                            | 0.0114                                            | 550                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 22.0                             | 19.5                                            | 0.0104                                            | 700                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 25.0                             | 13.3                                            | 0.0089                                            | 950                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 30.0                             | 7.98                                            | 0.0081                                            | 1,400                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 2.2                      | 37.0                             | 4.95                                            | 0.0076                                            | 2,200                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 42.0                             | 3.30                                            | 0.0061                                            | 3,100                             | 500/D                  |
| 38             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 21.0                             | 39.0                                            | 0.0130                                            | 460                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 22.0                             | 26.0                                            | 0.0114                                            | 600                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 23.0                             | 19.5                                            | 0.0104                                            | 700                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 26.0                             | 13.3                                            | 0.0089                                            | 950                               | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 31.0                             | 7.98                                            | 0.0081                                            | 1,500                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 2.2                      | 38.0                             | 4.95                                            | 0.0076                                            | 2,200                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 44.0                             | 3.30                                            | 0.0061                                            | 3,300                             | 500/D                  |
| 39             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 21.0                             | 39.0                                            | 0.0130                                            | 470                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 22.0                             | 26.0                                            | 0.0114                                            | 600                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 23.0                             | 19.5                                            | 0.0104                                            | 700                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 26.0                             | 13.3                                            | 0.0089                                            | 1,000                             | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 31.0                             | 7.98                                            | 0.0081                                            | 1,500                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 2.2                      | 38.0                             | 4.95                                            | 0.0076                                            | 2,300                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 44.0                             | 3.30                                            | 0.0061                                            | 3,300                             | 500/D                  |
| 40             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 21.0                             | 39.0                                            | 0.0130                                            | 480                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 22.0                             | 26.0                                            | 0.0114                                            | 600                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.4                      | 23.0                             | 19.5                                            | 0.0104                                            | 750                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 26.0                             | 13.3                                            | 0.0089                                            | 1,000                             | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 31.0                             | 7.98                                            | 0.0081                                            | 1,500                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 2.2                      | 38.0                             | 4.95                                            | 0.0076                                            | 2,300                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 44.0                             | 3.30                                            | 0.0061                                            | 3,400                             | 500/D                  |
| 41             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 22.0                             | 39.0                                            | 0.0130                                            | 500                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 23.0                             | 26.0                                            | 0.0114                                            | 650                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.8                      | 25.0                             | 19.5                                            | 0.0104                                            | 800                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 27.0                             | 13.3                                            | 0.0089                                            | 1,000                             | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 33.0                             | 7.98                                            | 0.0081                                            | 1,600                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 2.2                      | 40.0                             | 4.95                                            | 0.0076                                            | 2,400                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 46.0                             | 3.30                                            | 0.0061                                            | 3,500                             | 500/D                  |



# CVV

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Approx. diameter of conductor<br>(mm) | Insulation thickness<br>(mm) | Sheath thickness<br>(mm) | Approx. overall diameter<br>(mm) | Maximum conductor resistance at 20 °C<br>(Ω/km) | Minimum insulation resistance at 70 °C<br>(MΩ-km) | Cable weight (approx.)<br>(kg/km) | Standard Length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|---------------------------------------|------------------------------|--------------------------|----------------------------------|-------------------------------------------------|---------------------------------------------------|-----------------------------------|------------------------|
| 42             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 22.0                             | 39.0                                            | 0.0130                                            | 500                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 23.0                             | 26.0                                            | 0.0114                                            | 650                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.8                      | 25.0                             | 19.5                                            | 0.0104                                            | 800                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 27.0                             | 13.3                                            | 0.0089                                            | 1,100                             | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 33.0                             | 7.98                                            | 0.0081                                            | 1,600                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 2.2                      | 40.0                             | 4.95                                            | 0.0076                                            | 2,500                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 46.0                             | 3.30                                            | 0.0061                                            | 3,600                             | 500/D                  |
| 43             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 22.0                             | 39.0                                            | 0.0130                                            | 500                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 23.0                             | 26.0                                            | 0.0114                                            | 650                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.8                      | 25.0                             | 19.5                                            | 0.0104                                            | 850                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 27.0                             | 13.3                                            | 0.0089                                            | 1,100                             | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 33.0                             | 7.98                                            | 0.0081                                            | 1,600                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 2.2                      | 40.0                             | 4.95                                            | 0.0076                                            | 2,500                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.2                      | 46.0                             | 3.30                                            | 0.0061                                            | 3,600                             | 500/D                  |
| 44             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 22.0                             | 39.0                                            | 0.0130                                            | 550                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 24.0                             | 26.0                                            | 0.0114                                            | 650                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.8                      | 26.0                             | 19.5                                            | 0.0104                                            | 850                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 28.0                             | 13.3                                            | 0.0089                                            | 1,100                             | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 34.0                             | 7.98                                            | 0.0081                                            | 1,700                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 2.2                      | 41.0                             | 4.95                                            | 0.0076                                            | 2,600                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.6                      | 48.0                             | 3.30                                            | 0.0061                                            | 3,800                             | 500/D                  |
| 45             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 22.0                             | 39.0                                            | 0.0130                                            | 550                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 24.0                             | 26.0                                            | 0.0114                                            | 700                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.8                      | 26.0                             | 19.5                                            | 0.0104                                            | 850                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 28.0                             | 13.3                                            | 0.0089                                            | 1,100                             | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 34.0                             | 7.98                                            | 0.0081                                            | 1,700                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 2.2                      | 41.0                             | 4.95                                            | 0.0076                                            | 2,600                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.6                      | 48.0                             | 3.30                                            | 0.0061                                            | 3,900                             | 500/D                  |
| 46             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 22.0                             | 39.0                                            | 0.0130                                            | 550                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 24.0                             | 26.0                                            | 0.0114                                            | 700                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.8                      | 26.0                             | 19.5                                            | 0.0104                                            | 900                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 28.0                             | 13.3                                            | 0.0089                                            | 1,100                             | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 34.0                             | 7.98                                            | 0.0081                                            | 1,800                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 2.2                      | 41.0                             | 4.95                                            | 0.0076                                            | 2,700                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.6                      | 48.0                             | 3.30                                            | 0.0061                                            | 4,000                             | 500/D                  |
| 47             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 22.0                             | 39.0                                            | 0.0130                                            | 550                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.4                      | 24.0                             | 26.0                                            | 0.0114                                            | 700                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.8                      | 26.0                             | 19.5                                            | 0.0104                                            | 900                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 28.0                             | 13.3                                            | 0.0089                                            | 1,200                             | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 34.0                             | 7.98                                            | 0.0081                                            | 1,800                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 2.2                      | 41.0                             | 4.95                                            | 0.0076                                            | 2,700                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.6                      | 48.0                             | 3.30                                            | 0.0061                                            | 4,000                             | 500/D                  |
| 48             | 0.50                                               | 16/0.20                                 | 0.95                                  | 0.6                          | 1.4                      | 23.0                             | 39.0                                            | 0.0130                                            | 550                               | 500/D                  |
|                | 0.75                                               | 24/0.20                                 | 1.15                                  | 0.6                          | 1.8                      | 25.0                             | 26.0                                            | 0.0114                                            | 750                               | 500/D                  |
|                | 1.0                                                | 32/0.20                                 | 1.30                                  | 0.6                          | 1.8                      | 26.0                             | 19.5                                            | 0.0104                                            | 900                               | 500/D                  |
|                | 1.5                                                | 30/0.25                                 | 1.60                                  | 0.6                          | 1.8                      | 29.0                             | 13.3                                            | 0.0089                                            | 1,200                             | 500/D                  |
|                | 2.5                                                | 50/0.25                                 | 2.10                                  | 0.7                          | 1.8                      | 34.0                             | 7.98                                            | 0.0081                                            | 1,800                             | 500/D                  |
|                | 4.0                                                | 56/0.30                                 | 2.60                                  | 0.8                          | 2.2                      | 42.0                             | 4.95                                            | 0.0076                                            | 2,800                             | 500/D                  |
|                | 6.0                                                | 84/0.30                                 | 3.40                                  | 0.8                          | 2.6                      | 49.0                             | 3.30                                            | 0.0061                                            | 4,100                             | 500/D                  |

This table show only flexible stranded condutor. If you want to have solid or concentric conductor type, please contact with our sales department for CVV-S : The overall diameter of cable and cable weight shall be change a little bit more.  
D : Packing in drum.

\*Remark : Special protection can be produce.



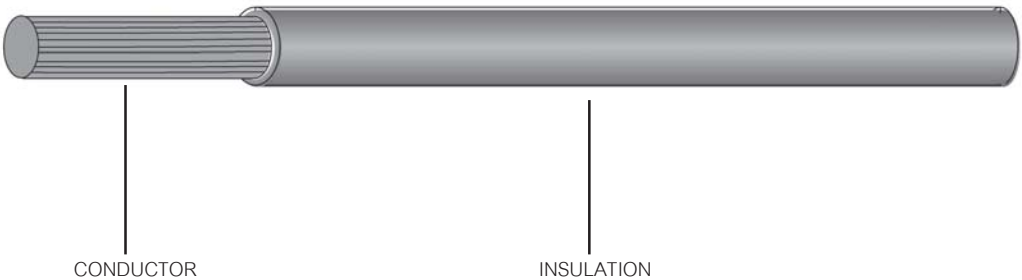
# Flexible Wires And Calbes

|           |                                                                                           |      |
|-----------|-------------------------------------------------------------------------------------------|------|
| VSF       | 300 V. 70° C PVC INSULATED FLEXIBLE CONDUCTOR, SINGLE CORE (TIS 11 TABLE 10)              | B 71 |
| VTF       | 300 V. 70° C PVC INSULATED TWISTED FLEXIBLE CONDUCTOR (TIS 11 TABLE 10)                   | B 73 |
| VFF       | 300 V. 70° C PVC INSULATED FLAT - TYPE, FLEXIBLE CONDUCTOR (TIS 11 TABLE 10)              | B 75 |
| VFF-GRD   | 300 V. 70° C PVC INSULATED FLAT - TYPE, FLEXIBLE CONDUCTOR WITH GROUND (TIS 11 TABLE 16)  | B 77 |
| VKF       | 300 V. 70° C PVC INSULATED AND SHEATHED FLAT - TYPE, FLEXIBLE CONDUCTOR (TIS 11 TABLE 17) | B 79 |
| VCT       | 750 V. 70° C PVC INSULATED AND SHEATHED FLEXIBLE CONDUCTOR (TIS 11 TABLE 9)               | B 81 |
| VCT - GRD | 750 V. 70° C PVC INSULATED AND SHEATHED FLEXIBLE CONDUCTOR WITH GROUND (TIS 11 TABLE 15)  | B 83 |





300V 70° C PVC INSULATED FLEXIBLE CONDUCTOR, SINGLE CORE



CABLE STRUCTURE

|                 |   |                                                                                                 |
|-----------------|---|-------------------------------------------------------------------------------------------------|
| CONDUCTOR       | : | Flexible stranded annealed copper wire,<br>Sizes. 0.5 mm <sup>2</sup> up to 2.5 mm <sup>2</sup> |
| INSULATION      | : | PVC - Any color                                                                                 |
| CLASSIFICATION  | : | Maximum conductor temperature 70° C<br>Circuit voltage not exceeding 300 volts                  |
| TESTING VOLTAGE | : | 2,000 volts                                                                                     |
| REFERENCE       | : | TIS 11-2531, Table 10                                                                           |

# VSF

TIS 11-2531  
TABLE 10

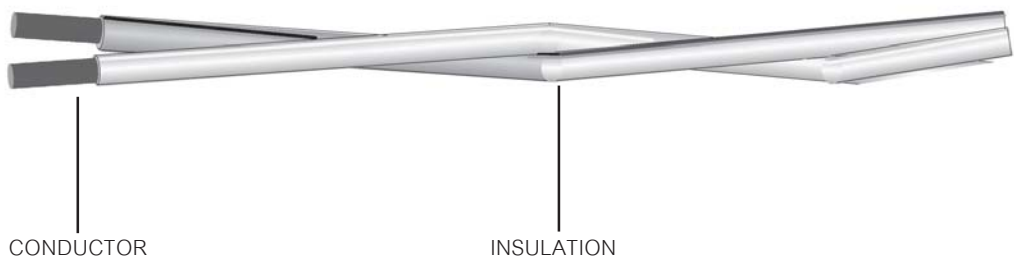
| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | Number and diameter of wire (No./mm) | Insulation thickness (mm) | Max. overall diameter (mm) | Minimum insulation resistance at 70 °C (MΩ-km) | Maximum continuous current rating in free air (Ampere) | Cable weight (approx.) (kg/km) | Standard length (m) |
|----------------|-------------------------------------------------|--------------------------------------|---------------------------|----------------------------|------------------------------------------------|--------------------------------------------------------|--------------------------------|---------------------|
| 1              | 0.5                                             | 16/0.20                              | 0.8                       | 3.2                        | 0.0160                                         | 9                                                      | 12                             | 100/C               |
|                | 0.5                                             | 28/0.15                              | 0.8                       | 3.2                        | 0.0160                                         | 9                                                      | 11                             | 100/C               |
|                | 0.75                                            | 24/0.20                              | 0.8                       | 3.4                        | 0.0140                                         | 11                                                     | 15                             | 100/C               |
|                | 0.75                                            | 42/0.15                              | 0.8                       | 3.4                        | 0.0140                                         | 11                                                     | 14                             | 100/C               |
|                | 1                                               | 32/0.20                              | 0.8                       | 3.6                        | 0.0127                                         | 14                                                     | 17                             | 100/C               |
|                | 1.5                                             | 30/0.25                              | 0.8                       | 3.9                        | 0.0111                                         | 18                                                     | 22                             | 100/C               |
|                | 2.5                                             | 50/0.25                              | 0.8                       | 4.8                        | 0.0092                                         | 24                                                     | 33                             | 100/C               |

C : Packing in coil.





300V 70° C PVC INSULATED TWISTED, FLEXIBLE CONDUCTOR



CABLE STRUCTURE

|                 |   |                                                                                                                                                                                                                                                                |
|-----------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE  | : | 2 up to 5 cores, twisted together                                                                                                                                                                                                                              |
| CONDUCTOR       | : | Flexible annealed copper wire,<br>Sizes. 0.5 mm <sup>2</sup> up to 2.5 mm <sup>2</sup>                                                                                                                                                                         |
| INSULATION      | : | PVC<br>Color : Single core shall be light gray,<br>others shall be light gray as<br>base color with color tracer or<br>color threads laid with conductor<br>Black, Red, Blue<br>: For 5 cores shall be plus one<br>core Green/Yellow or Yellow/<br>Green color |
| CLASSIFICATION  | : | Maximum conductor temperature 70° C<br>Circuit voltage not exceeding 300 volts                                                                                                                                                                                 |
| TESTING VOLTAGE | : | 2,000 volts                                                                                                                                                                                                                                                    |
| REFERENCE       | : | TIS 11-2531, Table 10                                                                                                                                                                                                                                          |

# VTF

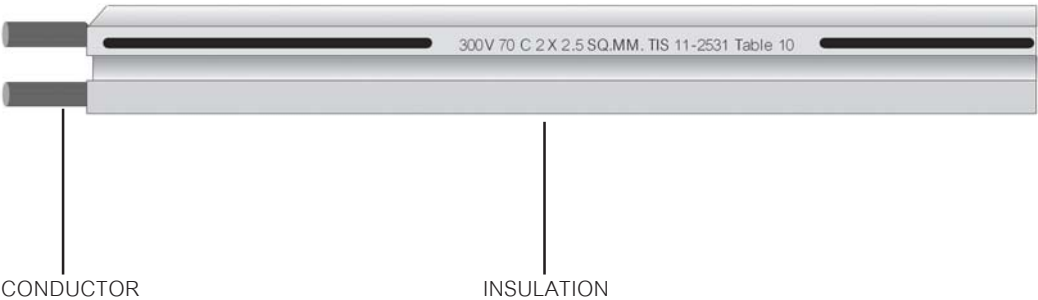
TIS 11-2531  
TABLE 10

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | Number and diameter of wire (No./mm) | Insulation thickness (mm) | Max. overall diameter (mm) | Minimum insulation resistance at 70 °C (MΩ-km) | Maximum continuous current rating in free air (Ampere) | Cable weight (approx.) (kg/km) | Standard length (m) |
|----------------|-------------------------------------------------|--------------------------------------|---------------------------|----------------------------|------------------------------------------------|--------------------------------------------------------|--------------------------------|---------------------|
| 2              | 0.5                                             | 16/0.20                              | 0.8                       | 3.2                        | 0.0160                                         | 7                                                      | 23                             | 100/C               |
|                | 0.5                                             | 28/0.15                              | 0.8                       | 3.2                        | 0.0160                                         | 7                                                      | 23                             | 100/C               |
|                | 0.75                                            | 24/0.20                              | 0.8                       | 3.4                        | 0.0140                                         | 10                                                     | 29                             | 100/C               |
|                | 0.75                                            | 42/0.15                              | 0.8                       | 3.4                        | 0.0140                                         | 10                                                     | 29                             | 100/C               |
|                | 1                                               | 32/0.20                              | 0.8                       | 3.6                        | 0.0127                                         | 11                                                     | 34                             | 100/C               |
|                | 1.5                                             | 30/0.25                              | 0.8                       | 3.9                        | 0.0111                                         | 15                                                     | 45                             | 100/C               |
|                | 2.5                                             | 50/0.25                              | 0.8                       | 4.8                        | 0.0092                                         | 20                                                     | 65                             | 100/C               |

C : Packing in coil.



300V 70° C PVC INSULATED FLAT TYPE, FLEXIBLE CONDUCTOR



CABLE STRUCTURE

|                 |   |                                                                                                                                        |
|-----------------|---|----------------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE  | : | 2 conductors                                                                                                                           |
| CONDUCTOR       | : | Flexible annealed copper wire,<br>Sizes. 0.5 mm <sup>2</sup> up to 2.5 mm <sup>2</sup>                                                 |
| INSULATION      | : | PVC<br><br>Color : Any color with one<br>different color tracer on<br>lateral side of wire, or<br>color thread at one of<br>conductors |
| CLASSIFICATION  | : | Maximum conductor temperature 70° C<br>Circuit voltage not exceeding 300 volts                                                         |
| TESTING VOLTAGE | : | 2,000 volts                                                                                                                            |
| REFERENCE       | : | TIS 11-2531, Table 10                                                                                                                  |

# VFF

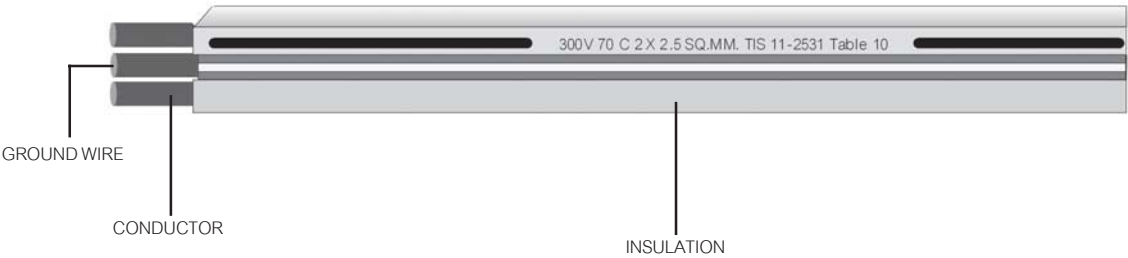
TIS 11-2531  
TABLE 10

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | Number and diameter of wire (No./mm) | Insulation thickness (mm) | Overall diameter (mm) |             | Minimum insulation resistance at 70 °C (MΩ-km) | Maximum continuous current rating in free air (Ampere) | Cable weight (approx.) (kg/km) | Standard length (m) |
|----------------|-------------------------------------------------|--------------------------------------|---------------------------|-----------------------|-------------|------------------------------------------------|--------------------------------------------------------|--------------------------------|---------------------|
|                |                                                 |                                      |                           | Lower limit           | Upper limit |                                                |                                                        |                                |                     |
| 2              | 0.5                                             | 16/0.20                              | 0.8                       | 2.4x4.9               | 3.2x6.2     | 0.0160                                         | 8                                                      | 23                             | 100/C               |
|                | 0.5                                             | 28/0.15                              | 0.8                       | 2.4x4.8               | 3.2x6.2     | 0.0160                                         | 8                                                      | 23                             | 100/C               |
|                | 0.75                                            | 24/0.20                              | 0.8                       | 2.6x5.2               | 3.4x6.6     | 0.0140                                         | 10                                                     | 29                             | 100/C               |
|                | 0.75                                            | 42/0.15                              | 0.8                       | 2.6x5.2               | 3.4x6.6     | 0.0140                                         | 10                                                     | 29                             | 100/C               |
|                | 1                                               | 32/0.20                              | 0.8                       | 2.8x5.6               | 3.6x7.0     | 0.0127                                         | 12                                                     | 35                             | 100/C               |
|                | 1.5                                             | 30/0.25                              | 0.8                       | 3.0x6.0               | 3.9x7.6     | 0.0111                                         | 15                                                     | 46                             | 100/C               |
|                | 2.5                                             | 50/0.25                              | 0.8                       | 3.5x7.0               | 4.8x9.4     | 0.0092                                         | 21                                                     | 68                             | 100/C               |

C : Packing in coil.



300V 70° C PVC INSULATED FLAT TYPE CONDUCTOR WITH GROUND



CABLE STRUCTURE

|                 |   |                                                                                                                                                       |
|-----------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE  | : | 2 conductors with safety ground                                                                                                                       |
| CONDUCTOR       | : | Flexible annealed copper wires,<br>Sizes. 1 mm <sup>2</sup> up to 2.5 mm <sup>2</sup><br>Ground conductor 1 mm <sup>2</sup> up to 1.5 mm <sup>2</sup> |
| INSULATION      | : | PVC<br>Color : Any color with one different color<br>tracer on lateral side of wire, or color<br>thread at one of conductors                          |
| CLASSIFICATION  | : | Maximum conductor temperature 70° C<br>Circuit voltage not exceeding 300 volts                                                                        |
| TESTING VOLTAGE | : | 2,000 volts                                                                                                                                           |
| REFERENCE       | : | TIS 11-2531, Table 16                                                                                                                                 |

# VFF-GRD

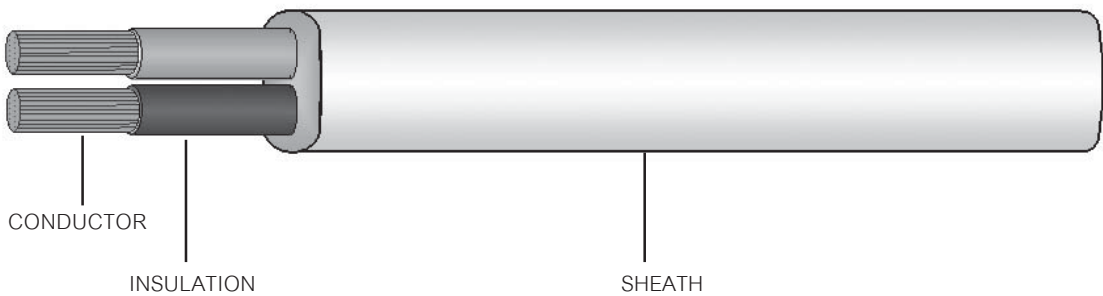
TIS 11-2531  
TABLE 16

| Nominal cross sectional area (mm <sup>2</sup> ) | Number and diameter of wire (No./mm) | Insulation thickness (mm) | Nominal cross sectional area of ground conductor (mm <sup>2</sup> ) | Thickness of ground insulator (mm) | Overall diameter (mm) |             | Minimum insulation resistance at 70 °C (MΩ-km) | Maximum continuous current rating in free air (Ampere.) | Cable weight (approx.) (kg/km) | Standard length (m) |
|-------------------------------------------------|--------------------------------------|---------------------------|---------------------------------------------------------------------|------------------------------------|-----------------------|-------------|------------------------------------------------|---------------------------------------------------------|--------------------------------|---------------------|
|                                                 |                                      |                           |                                                                     |                                    | Lower limit           | Upper limit |                                                |                                                         |                                |                     |
| 1                                               | 30/0.20                              | 0.8                       | 1                                                                   | 0.6                                | 2.8x8.0               | 3.6x9.8     | 0.0127                                         | 12                                                      | 50                             | 500/C               |
| 1.5                                             | 30/0.25                              | 0.8                       | 1                                                                   | 0.6                                | 3.0x8.6               | 3.9x10.5    | 0.0111                                         | 15                                                      | 60                             | 500/C               |
| 2.5                                             | 50/0.25                              | 0.8                       | 1.5                                                                 | 0.6                                | 3.5x9.6               | 4.8x12.5    | 0.0092                                         | 21                                                      | 90                             | 500/C               |

C : Packing in coil.



300V 70° C PVC INSULATED AND SHEATHED FLAT TYPE, FLEXIBLE CONDUCTOR



CABLE STRUCTURE

|                 |   |                                                                                       |
|-----------------|---|---------------------------------------------------------------------------------------|
| NUMBER OF CORE  | : | 2 cores                                                                               |
| CONDUCTOR       | : | Flexible annealed copper wires<br>Sizes. 0.5 mm <sup>2</sup> up to 35 mm <sup>2</sup> |
| INSULATION      | : | PVC<br>Color : Light gray, Black                                                      |
| SHEATH          | : | PVC<br>Color : Black or White                                                         |
| CLASSIFICATION  | : | Maximum conductor temperature 70° C<br>Circuit voltage not exceeding 300 volts        |
| TESTING VOLTAGE | : | 2,000 volts                                                                           |
| REFERENCE       | : | TIS 11-2531, Table 17                                                                 |



# VKF

TIS 11-2531  
TABLE 17

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | Number and diameter of wire (No./mm) | Insulation thickness (mm) | Sheath thickness (mm) | Overall diameter (mm) |             | Minimum insulation resistance at 70 °C (MΩ-km) | Maximum continuous current rating in free air (Ampere) | Cable weight (approx.) (kg/km) | Standard length (m) |
|----------------|-------------------------------------------------|--------------------------------------|---------------------------|-----------------------|-----------------------|-------------|------------------------------------------------|--------------------------------------------------------|--------------------------------|---------------------|
|                |                                                 |                                      |                           |                       | Lower limit           | Upper limit |                                                |                                                        |                                |                     |
| 2              | 0.5                                             | 16/0.20                              | 0.6                       | 0.9                   | 3.8x5.8               | 4.7x7.2     | 0.0132                                         | 8                                                      | 38                             | 100/C               |
|                | 0.5                                             | 28/0.15                              | 0.6                       | 0.9                   | 3.8x5.8               | 4.7x7.2     | 0.0133                                         | 8                                                      | 38                             | 100/C               |
|                | 1                                               | 32/0.20                              | 0.6                       | 0.9                   | 4.1x6.6               | 5.2x8.0     | 0.0104                                         | 11                                                     | 50                             | 100/C               |
|                | 1.5                                             | 30/0.25                              | 0.6                       | 1.2                   | 5.0x7.6               | 6.2x9.4     | 0.0090                                         | 15                                                     | 75                             | 100/C               |
|                | 2.5                                             | 50/0.25                              | 0.7                       | 1.2                   | 5.6x9.0               | 7.2x11.5    | 0.0083                                         | 20                                                     | 110                            | 100/C               |
|                | 4                                               | 56/0.30                              | 0.8                       | 1.2                   | 6.4x10.0              | 8.0x13.0    | 0.0073                                         | 27                                                     | 150                            | 100/C               |
|                | 6                                               | 84/0.30                              | 0.8                       | 1.2                   | 6.8x11.5              | 8.8x14.5    | 0.0065                                         | 36                                                     | 210                            | 100/C               |
|                | 10                                              | 84/0.40                              | 0.9                       | 1.2                   | 8.0x13.5              | 10.5x17.5   | 0.0057                                         | 50                                                     | 330                            | 100/C               |
|                | 16                                              | 126/0.40                             | 1.0                       | 1.2                   | 9.8x17.5              | 12.0x20.5   | 0.0047                                         | 67                                                     | 460                            | 100/C               |
|                | 25                                              | 196/0.40                             | 1.2                       | 1.4                   | 12.0x21.5             | 14.5x25.0   | 0.0045                                         | 80                                                     | 700                            | 500/D               |
|                | 35                                              | 280/0.40                             | 1.2                       | 1.4                   | 13.5x24.0             | 16.0x28.0   | 0.0038                                         | 111                                                    | 950                            | 500/D               |

TISI permitted to increase the maximum overall diameter by 5%

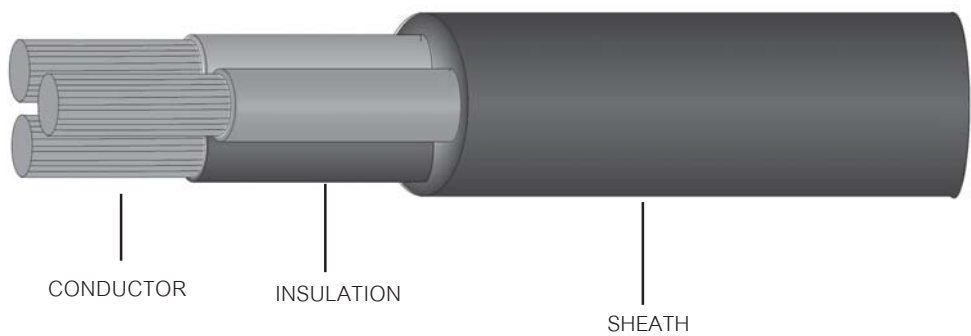
C : Packing in coil.

D : Packing in drum.





750V 70° C PVC INSULATED AND SHEATHED FLEXIBLE CABLE



CABLE STRUCTURE

|                 |   |                                                                     |
|-----------------|---|---------------------------------------------------------------------|
| NUMBER OF CORE  | : | Up to 4 cores                                                       |
| CONDUCTOR       | : | Flexible annealed copper wire                                       |
|                 |   | Sizes. 0.5 mm <sup>2</sup> up to 95 mm <sup>2</sup> for single core |
|                 |   | 0.5 mm <sup>2</sup> up to 35 mm <sup>2</sup> for multi core         |
| INSULATION      | : | PVC                                                                 |
|                 |   | Color : Single core -Black                                          |
|                 |   | 2 cores- Light gray, Black                                          |
|                 |   | 3 cores- Light gray, Black and Red                                  |
|                 |   | 4 cores- Light gray, Black, Red and Blue                            |
| SHEATH          | : | PVC                                                                 |
|                 |   | Color : Black                                                       |
| CLASSIFICATION  | : | Maximum conductor temperature 70° C                                 |
|                 |   | Circuit voltage not exceeding 750 volts                             |
| TESTING VOLTAGE | : | 2,500 volts                                                         |
| REFERENCE       | : | TIS 11-2531, Table 9                                                |

# VCT

TIS 11-2531  
TABLE 9

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | Number and diameter of wire (No./mm) | Insulation thickness (mm) | Sheath thickness (mm) | Max. Overall diameter (mm) | Minimum insulation resistance at 70 °C (MΩ-km) | Maximum continuous current rating in free air (Ampere) | Cable weight (approx.) (kg/km) | Standard length (m) |
|----------------|-------------------------------------------------|--------------------------------------|---------------------------|-----------------------|----------------------------|------------------------------------------------|--------------------------------------------------------|--------------------------------|---------------------|
| 1              | 0.5                                             | 16/0.20                              | 0.8                       | 1.0                   | 5.4                        | 0.0160                                         | 10                                                     | 28                             | 100/C               |
|                | 0.75                                            | 24/0.20                              | 0.8                       | 1.0                   | 5.6                        | 0.0140                                         | 13                                                     | 32                             | 100/C               |
|                | 1                                               | 32/0.20                              | 0.8                       | 1.2                   | 6.2                        | 0.0127                                         | 15                                                     | 40                             | 100/C               |
|                | 1.5                                             | 30/0.25                              | 0.8                       | 1.2                   | 6.6                        | 0.0111                                         | 19                                                     | 47                             | 100/C               |
|                | 2.5                                             | 50/0.25                              | 0.8                       | 1.2                   | 7.4                        | 0.0092                                         | 27                                                     | 60                             | 100/C               |
|                | 4                                               | 56/0.30                              | 0.9                       | 1.4                   | 8.6                        | 0.0084                                         | 36                                                     | 85                             | 100/C               |
|                | 6                                               | 84/0.30                              | 0.9                       | 1.4                   | 9.4                        | 0.0071                                         | 46                                                     | 120                            | 100/C               |
|                | 10                                              | 80/0.40                              | 1.1                       | 1.8                   | 12.0                       | 0.0068                                         | 67                                                     | 200                            | 100/C               |
|                | 16                                              | 126/0.40                             | 1.1                       | 1.8                   | 13.5                       | 0.0050                                         | 88                                                     | 270                            | 100/C               |
|                | 25                                              | 196/0.40                             | 1.3                       | 2.2                   | 16.0                       | 0.0048                                         | 116                                                    | 400                            | 100/C               |
|                | 35                                              | 280/0.40                             | 1.3                       | 2.2                   | 17.5                       | 0.0041                                         | 145                                                    | 550                            | 500/D               |
|                | 50                                              | 399/0.40                             | 1.5                       | 2.6                   | 21.0                       | 0.0040                                         | 181                                                    | 750                            | 500/D               |
|                | 70                                              | 361/0.50                             | 1.5                       | 2.6                   | 23.0                       | 0.0034                                         | 226                                                    | 950                            | 500/D               |
|                | 95                                              | 475/0.50                             | 1.7                       | 3.0                   | 26.5                       | 0.0034                                         | 268                                                    | 1,300                          | 500/D               |
| 2              | 0.5                                             | 16/0.20                              | 0.8                       | 1.2                   | 8.8                        | 0.0160                                         | 9                                                      | 75                             | 100/C               |
|                | 0.75                                            | 24/0.20                              | 0.8                       | 1.2                   | 9.2                        | 0.0140                                         | 12                                                     | 85                             | 100/C               |
|                | 1                                               | 32/0.20                              | 0.8                       | 1.2                   | 9.6                        | 0.0127                                         | 14                                                     | 95                             | 100/C               |
|                | 1.5                                             | 30/0.25                              | 0.8                       | 1.4                   | 11.0                       | 0.0111                                         | 18                                                     | 120                            | 100/C               |
|                | 2.5                                             | 50/0.25                              | 0.8                       | 1.4                   | 12.5                       | 0.0092                                         | 24                                                     | 160                            | 100/C               |
|                | 4                                               | 56/0.30                              | 0.9                       | 1.6                   | 14.5                       | 0.0084                                         | 33                                                     | 230                            | 100/C               |
|                | 6                                               | 84/0.30                              | 0.9                       | 1.6                   | 16.0                       | 0.0071                                         | 42                                                     | 300                            | 100/C               |
|                | 10                                              | 80/0.40                              | 1.1                       | 1.8                   | 20.0                       | 0.0068                                         | 60                                                     | 500                            | 500/D               |
|                | 16                                              | 126/0.40                             | 1.1                       | 2.2                   | 23.0                       | 0.0050                                         | 80                                                     | 700                            | 500/D               |
|                | 25                                              | 196/0.40                             | 1.3                       | 2.4                   | 27.5                       | 0.0048                                         | 104                                                    | 1,000                          | 500/D               |
| 3              | 0.5                                             | 16/0.20                              | 0.8                       | 1.2                   | 9.2                        | 0.0160                                         | 8                                                      | 85                             | 100/C               |
|                | 0.75                                            | 24/0.20                              | 0.8                       | 1.2                   | 9.6                        | 0.0140                                         | 10                                                     | 100                            | 100/C               |
|                | 1                                               | 32/0.20                              | 0.8                       | 1.4                   | 10.5                       | 0.0127                                         | 12                                                     | 120                            | 100/C               |
|                | 1.5                                             | 30/0.25                              | 0.8                       | 1.4                   | 11.5                       | 0.0111                                         | 15                                                     | 140                            | 100/C               |
|                | 2.5                                             | 50/0.25                              | 0.8                       | 1.4                   | 13.0                       | 0.0092                                         | 20                                                     | 190                            | 100/C               |
|                | 4                                               | 56/0.30                              | 0.9                       | 1.6                   | 15.5                       | 0.0084                                         | 27                                                     | 270                            | 100/C               |
|                | 6                                               | 84/0.30                              | 0.9                       | 1.8                   | 17.5                       | 0.0071                                         | 35                                                     | 390                            | 100/C               |
|                | 10                                              | 80/0.40                              | 1.1                       | 2.0                   | 21.5                       | 0.0068                                         | 51                                                     | 650                            | 500/D               |
|                | 16                                              | 126/0.40                             | 1.1                       | 2.4                   | 25.0                       | 0.0050                                         | 67                                                     | 900                            | 500/D               |
|                | 25                                              | 196/0.40                             | 1.3                       | 2.6                   | 30.0                       | 0.0048                                         | 87                                                     | 1,300                          | 500/D               |
| 4              | 0.5                                             | 16/0.20                              | 0.8                       | 1.4                   | 10.5                       | 0.0160                                         | 7                                                      | 110                            | 100/C               |
|                | 0.75                                            | 24/0.20                              | 0.8                       | 1.4                   | 11.0                       | 0.0140                                         | 9                                                      | 130                            | 100/C               |
|                | 1                                               | 32/0.20                              | 0.8                       | 1.6                   | 12.0                       | 0.0127                                         | 11                                                     | 150                            | 100/C               |
|                | 1.5                                             | 30/0.25                              | 0.8                       | 1.6                   | 12.5                       | 0.0111                                         | 13                                                     | 180                            | 100/C               |
|                | 2.5                                             | 50/0.25                              | 0.8                       | 1.6                   | 15.0                       | 0.0092                                         | 18                                                     | 240                            | 100/C               |
|                | 4                                               | 56/0.30                              | 0.9                       | 1.8                   | 17.0                       | 0.0084                                         | 25                                                     | 340                            | 100/C               |
|                | 6                                               | 84/0.30                              | 0.9                       | 2.0                   | 19.5                       | 0.0071                                         | 32                                                     | 500                            | 100/C               |
|                | 10                                              | 80/0.40                              | 1.1                       | 2.2                   | 24.0                       | 0.0068                                         | 46                                                     | 800                            | 500/D               |
|                | 16                                              | 126/0.40                             | 1.1                       | 2.6                   | 28.0                       | 0.0050                                         | 60                                                     | 1,100                          | 500/D               |
|                | 25                                              | 196/0.40                             | 1.3                       | 2.8                   | 33.0                       | 0.0048                                         | 78                                                     | 1,700                          | 500/D               |
| 5              | 0.5                                             | 16/0.20                              | 0.8                       | 1.4                   | 10.5                       | 0.0160                                         | 7                                                      | 110                            | 100/C               |
|                | 0.75                                            | 24/0.20                              | 0.8                       | 1.4                   | 11.0                       | 0.0140                                         | 9                                                      | 130                            | 100/C               |
|                | 1                                               | 32/0.20                              | 0.8                       | 1.6                   | 12.0                       | 0.0127                                         | 11                                                     | 150                            | 100/C               |
|                | 1.5                                             | 30/0.25                              | 0.8                       | 1.6                   | 12.5                       | 0.0111                                         | 13                                                     | 180                            | 100/C               |
|                | 2.5                                             | 50/0.25                              | 0.8                       | 1.6                   | 15.0                       | 0.0092                                         | 18                                                     | 240                            | 100/C               |
|                | 4                                               | 56/0.30                              | 0.9                       | 1.8                   | 17.0                       | 0.0084                                         | 25                                                     | 340                            | 100/C               |
|                | 6                                               | 84/0.30                              | 0.9                       | 2.0                   | 19.5                       | 0.0071                                         | 32                                                     | 500                            | 100/C               |
|                | 10                                              | 80/0.40                              | 1.1                       | 2.2                   | 24.0                       | 0.0068                                         | 46                                                     | 800                            | 500/D               |
|                | 16                                              | 126/0.40                             | 1.1                       | 2.6                   | 28.0                       | 0.0050                                         | 60                                                     | 1,100                          | 500/D               |
|                | 25                                              | 196/0.40                             | 1.3                       | 2.8                   | 33.0                       | 0.0048                                         | 78                                                     | 1,700                          | 500/D               |

TISI permitted to increase the maximum overall diameter by 5%

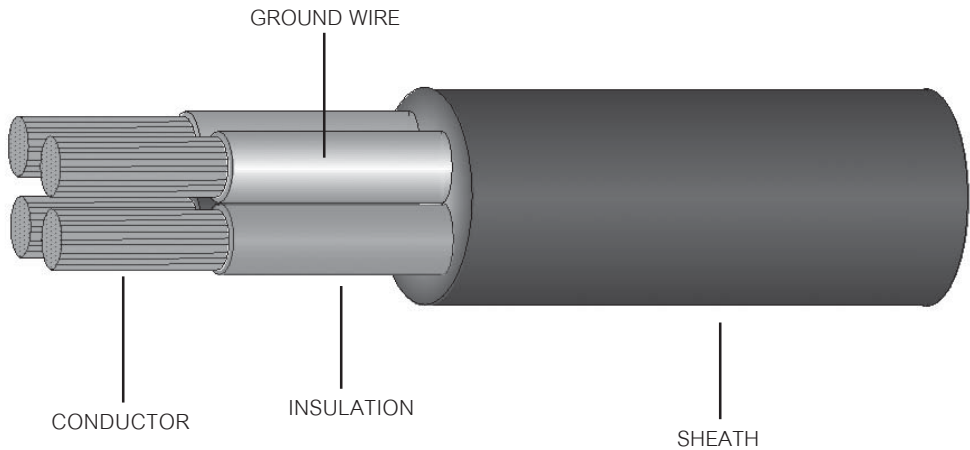
C : Packing in coil.

D : Packing in drum.



THAI-YAZAKI TECHNICAL DATA

750V 70° C PVC INSULATED AND SHEATHED FLEXIBLE CONDUCTOR WITH GROUND



### CABLE STRUCTURE

|                 |   |                                                                                                                                                                                             |
|-----------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NUMBER OF CORE  | : | 2 up to 4 phase cores with 1 grounding core                                                                                                                                                 |
| CONDUCTOR       | : | Flexible annealed copper wires<br><div>Sizes. 1 mm<sup>2</sup> up to 35 mm<sup>2</sup></div> <div>Ground conductor 1 mm<sup>2</sup> up to 10 mm<sup>2</sup></div>                           |
| INSULATION      | : | PVC<br><div>Color : 2 cores- Light gray, Black</div> <div>3 cores- Light gray, Black and Red</div> <div>4 cores- Light gray, Black, Red and Blue</div> <div>Ground core- Green/Yellow</div> |
| SHEATH          | : | PVC<br><div>Color : Black</div>                                                                                                                                                             |
| CLASSIFICATION  | : | Maximum conductor temperature 70° C<br><div>Circuit voltage not exceeding 750 volts</div>                                                                                                   |
| TESTING VOLTAGE | : | 2,500 volts                                                                                                                                                                                 |
| REFERENCE       | : | TIS 11-2531, Table 15                                                                                                                                                                       |

# VCT-GRD

TIS 11-2531  
TABLE 15

| Number of core | Nominal cross sectional area<br>(mm <sup>2</sup> ) | Number and diameter of wire<br>(No./mm) | Insulation thickness<br>(mm) | Nominal cross sectional area of ground conductor<br>(mm <sup>2</sup> ) | Thickness of ground insulation<br>(mm) | Sheath thickness<br>(mm) | Max. overall diameter<br>(mm) | Minimum insulation resistance at 70 °C<br>(MΩ-km) | Maximum continuous current rating in free air<br>(Ampere) | Cable weight (approx.)<br>(kg/km) | Standard length<br>(m) |
|----------------|----------------------------------------------------|-----------------------------------------|------------------------------|------------------------------------------------------------------------|----------------------------------------|--------------------------|-------------------------------|---------------------------------------------------|-----------------------------------------------------------|-----------------------------------|------------------------|
| 2              | 1                                                  | 32/0.20                                 | 0.8                          | 1                                                                      | 0.6                                    | 1.2                      | 10.5                          | 0.0127                                            | 14                                                        | 100                               | 100/C                  |
|                | 1.5                                                | 30/0.25                                 | 0.8                          | 1                                                                      | 0.6                                    | 1.4                      | 11.5                          | 0.0111                                            | 18                                                        | 130                               | 100/C                  |
|                | 2.5                                                | 50/0.25                                 | 0.8                          | 1.5                                                                    | 0.6                                    | 1.4                      | 13.0                          | 0.0092                                            | 24                                                        | 170                               | 100/C                  |
|                | 4                                                  | 56/0.30                                 | 0.9                          | 2.5                                                                    | 0.6                                    | 1.6                      | 15.5                          | 0.0084                                            | 33                                                        | 240                               | 100/C                  |
|                | 6                                                  | 84/0.30                                 | 0.9                          | 4                                                                      | 0.6                                    | 1.6                      | 17.0                          | 0.0071                                            | 42                                                        | 330                               | 100/C                  |
|                | 10                                                 | 84/0.40                                 | 1.1                          | 4                                                                      | 0.6                                    | 1.8                      | 20.0                          | 0.0068                                            | 60                                                        | 550                               | 500/D                  |
|                | 16                                                 | 126/0.40                                | 1.1                          | 6                                                                      | 0.6                                    | 2.2                      | 23.0                          | 0.0050                                            | 80                                                        | 750                               | 500/D                  |
|                | 25                                                 | 196/0.40                                | 1.3                          | 6                                                                      | 0.6                                    | 2.4                      | 27.5                          | 0.0048                                            | 104                                                       | 1,100                             | 500/D                  |
|                | 35                                                 | 280/0.40                                | 1.3                          | 10                                                                     | 0.6                                    | 2.6                      | 31.0                          | 0.0041                                            | 130                                                       | 1,500                             | 500/D                  |
| 3              | 1                                                  | 32/0.20                                 | 0.8                          | 1                                                                      | 0.6                                    | 1.4                      | 11.5                          | 0.0127                                            | 12                                                        | 130                               | 100/C                  |
|                | 1.5                                                | 30/0.25                                 | 0.8                          | 1                                                                      | 0.6                                    | 1.4                      | 12.5                          | 0.0111                                            | 15                                                        | 160                               | 100/C                  |
|                | 2.5                                                | 50/0.25                                 | 0.8                          | 1.5                                                                    | 0.6                                    | 1.4                      | 14.5                          | 0.0092                                            | 20                                                        | 210                               | 100/C                  |
|                | 4                                                  | 56/0.30                                 | 0.9                          | 2.5                                                                    | 0.6                                    | 1.6                      | 17.0                          | 0.0084                                            | 27                                                        | 310                               | 100/C                  |
|                | 6                                                  | 84/0.30                                 | 0.9                          | 4                                                                      | 0.6                                    | 1.8                      | 19.0                          | 0.0071                                            | 35                                                        | 440                               | 100/C                  |
|                | 10                                                 | 84/0.40                                 | 1.1                          | 4                                                                      | 0.6                                    | 2.0                      | 23.5                          | 0.0068                                            | 51                                                        | 650                               | 500/D                  |
|                | 16                                                 | 126/0.40                                | 1.1                          | 6                                                                      | 0.6                                    | 2.4                      | 27.5                          | 0.0050                                            | 67                                                        | 950                               | 500/D                  |
|                | 25                                                 | 196/0.40                                | 1.3                          | 6                                                                      | 0.6                                    | 2.6                      | 32.5                          | 0.0048                                            | 87                                                        | 1,400                             | 500/D                  |
|                | 35                                                 | 280/0.40                                | 1.3                          | 10                                                                     | 0.6                                    | 2.8                      | 36.5                          | 0.0041                                            | 108                                                       | 1,800                             | 500/D                  |
| 4              | 1                                                  | 32/0.20                                 | 0.8                          | 1                                                                      | 0.6                                    | 1.6                      | 13.0                          | 0.0127                                            | 11                                                        | 180                               | 100/C                  |
|                | 1.5                                                | 30/0.25                                 | 0.8                          | 1                                                                      | 0.6                                    | 1.6                      | 13.5                          | 0.0111                                            | 13                                                        | 210                               | 100/C                  |
|                | 2.5                                                | 50/0.25                                 | 0.8                          | 1.5                                                                    | 0.6                                    | 1.6                      | 16.0                          | 0.0092                                            | 18                                                        | 270                               | 100/C                  |
|                | 4                                                  | 56/0.30                                 | 0.9                          | 2.5                                                                    | 0.6                                    | 1.8                      | 18.5                          | 0.0084                                            | 25                                                        | 400                               | 100/C                  |
|                | 6                                                  | 84/0.30                                 | 0.9                          | 4                                                                      | 0.6                                    | 2.0                      | 21.0                          | 0.0071                                            | 32                                                        | 550                               | 500/D                  |
|                | 10                                                 | 84/0.40                                 | 1.1                          | 4                                                                      | 0.6                                    | 2.2                      | 26.0                          | 0.0068                                            | 46                                                        | 900                               | 500/D                  |
|                | 16                                                 | 126/0.40                                | 1.1                          | 6                                                                      | 0.6                                    | 2.6                      | 30.5                          | 0.0050                                            | 60                                                        | 1,200                             | 500/D                  |
|                | 25                                                 | 196/0.40                                | 1.3                          | 6                                                                      | 0.6                                    | 2.8                      | 36.0                          | 0.0048                                            | 78                                                        | 1,700                             | 500/D                  |
|                | 35                                                 | 280/0.40                                | 1.3                          | 10                                                                     | 0.6                                    | 3.1                      | 40.5                          | 0.0041                                            | 97                                                        | 2,400                             | 500/D                  |

TISI permitted to increase the maximum overall diameter by 5%

C : Packing in coil.

D : Packing in drum.

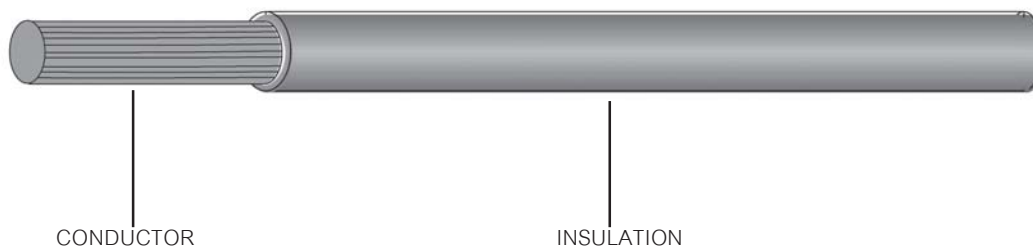


THAI-YAZAKI TECHNICAL DATA

# Automobile Wires And Cables

|    |                                                                                    |      |
|----|------------------------------------------------------------------------------------|------|
| AV | 60° C LOW VOLTAGE WIRES AND CABLES FOR AUTOMOBILE<br>(TIS 118-2522 AND JIS C 3406) | B 86 |
|----|------------------------------------------------------------------------------------|------|

## 60° C LOW VOLTAGE FLEXIBLE CONDUCTOR FOR AUTOMOBILE



## CABLE STRUCTURE

|                 |   |                                                                                       |
|-----------------|---|---------------------------------------------------------------------------------------|
| CONDUCTOR       | : | Flexible annealed copper wires<br>Sizes. 0.5 mm <sup>2</sup> up to 95 mm <sup>2</sup> |
| INSULATION      | : | PVC<br>Color : Any color                                                              |
| CLASSIFICATION  | : | Maximum conductor temperature 60° C<br>Low voltage circuit                            |
| TESTING VOLTAGE | : | 5,000 volts                                                                           |
| REFERENCE       | : | TIS 118-2522 and JIS C 3406                                                           |

**Remark:** Nowadays the wires are produced according to two kinds of Standard. But such the Ministerial Regulations shall come into force upon their publication in Government Gazette, the production must be in the way of THAI INDUSTRIAL STANDARD.

# AV

(THAI INDUSTRIAL STANDARD)

TIS 118-2522

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | Number and diameter of wire (No./mm) | Approx. conductor diameter (mm) | Mean value of insulation thickness (mm) | Approx. overall diameter (mm) | Maximum conductor resistance at 20 °C (Ω-km) | Maximum continuous current rating in free air (Ampere) | Cable weight (approx.) (kg/km) | Standard length (m) |
|----------------|-------------------------------------------------|--------------------------------------|---------------------------------|-----------------------------------------|-------------------------------|----------------------------------------------|--------------------------------------------------------|--------------------------------|---------------------|
| 1              | 0.5                                             | 16/0.20                              | 0.95                            | 0.6                                     | 2.2                           | 37.1                                         | 8                                                      | 9                              | 100/C               |
|                | 0.5                                             | 7/0.30                               | 0.95                            | 0.6                                     | 2.2                           | 37.1                                         | 8                                                      | 9                              | 100/C               |
|                | 0.75                                            | 24/0.20                              | 1.15                            | 0.6                                     | 2.4                           | 24.7                                         | 11                                                     | 11                             | 100/C               |
|                | 0.85                                            | 12/0.30                              | 1.20                            | 0.6                                     | 2.4                           | 22.0                                         | 11                                                     | 12                             | 100/C               |
|                | 1.0                                             | 32/0.20                              | 1.30                            | 0.6                                     | 2.6                           | 18.5                                         | 13                                                     | 14                             | 100/C               |
|                | 1.25                                            | 40/0.20                              | 1.50                            | 0.6                                     | 2.7                           | 14.8                                         | 15                                                     | 17                             | 100/C               |
|                | 1.25                                            | 18/0.30                              | 1.50                            | 0.6                                     | 2.7                           | 14.7                                         | 15                                                     | 17                             | 100/C               |
|                | 1.5                                             | 30/0.25                              | 1.60                            | 0.6                                     | 2.8                           | 12.7                                         | 16                                                     | 19                             | 100/C               |
|                | 2                                               | 28/0.30                              | 1.90                            | 0.6                                     | 3.1                           | 9.42                                         | 20                                                     | 24                             | 100/C               |
|                | 2.5                                             | 50/0.25                              | 2.10                            | 0.7                                     | 3.5                           | 7.60                                         | 23                                                     | 30                             | 100/C               |
|                | 3                                               | 44/0.30                              | 2.30                            | 0.7                                     | 3.7                           | 6.00                                         | 26                                                     | 37                             | 100/C               |
|                | 4                                               | 56/0.30                              | 2.60                            | 0.8                                     | 4.2                           | 4.71                                         | 31                                                     | 47                             | 100/C               |
|                | 5                                               | 70/0.30                              | 3.0                             | 0.8                                     | 4.6                           | 3.77                                         | 36                                                     | 57                             | 100/C               |
|                | 6                                               | 84/0.30                              | 3.20                            | 0.9                                     | 5.0                           | 3.14                                         | 40                                                     | 69                             | 100/C               |
|                | 8                                               | 63/0.40                              | 3.7                             | 0.9                                     | 5.5                           | 2.31                                         | 48                                                     | 88                             | 100/C               |
|                | 10                                              | 84/0.40                              | 4.2                             | 1.1                                     | 6.4                           | 1.82                                         | 58                                                     | 114                            | 100/C               |
|                | 16                                              | 126/0.40                             | 5.8                             | 1.1                                     | 8.0                           | 1.16                                         | 75                                                     | 173                            | 100/C               |
|                | 25                                              | 196/0.60                             | 7.0                             | 1.4                                     | 9.8                           | 0.770                                        | 98                                                     | 261                            | 100/C               |
|                | 35                                              | 280/0.40                             | 8.5                             | 1.4                                     | 11.3                          | 0.524                                        | 124                                                    | 366                            | 100/C               |
|                | 50                                              | 399/0.40                             | 10.9                            | 1.6                                     | 14.1                          | 0.357                                        | 163                                                    | 537                            | 500/D               |
|                | 70                                              | 361/0.50                             | 12.60                           | 2.0                                     | 16.6                          | 0.268                                        | 200                                                    | 727                            | 500/D               |
|                | 95                                              | 475/0.50                             | 14.1                            | 2.0                                     | 18.1                          | 0.193                                        | 248                                                    | 971                            | 500/D               |

C : Packing in coil.

D : Packing in drum.



THAI-YAZAKI TECHNICAL DATA

# AV

(JAPANESE INDUSTRIAL STANDARD)

JIS C 3406

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | Number and diameter of wire (No./mm) | Average standed of conductor diameter (mm) | Approx. conductor diameter (mm) | Mean value of insulation thickness (mm) | Approx. overall diameter (mm) | Maximum conductor resistance at 20 °C (Ω-km) | Maximum continuous current rating in free air (Ampere) | Cable weight (approx.) (kg/km) | Standard length (m) |
|----------------|-------------------------------------------------|--------------------------------------|--------------------------------------------|---------------------------------|-----------------------------------------|-------------------------------|----------------------------------------------|--------------------------------------------------------|--------------------------------|---------------------|
| 1              | 0.5                                             | 20/0.18                              | 0.95                                       | 1.0                             | 0.6                                     | 2.1                           | 36.7                                         | 8                                                      | 8.5                            | 100/C               |
|                | 0.5                                             | 7/0.32                               | 1.00                                       | 1.0                             | 0.6                                     | 2.1                           | 32.7                                         | 9                                                      | 9                              | 100/C               |
|                | 0.75                                            | 30/0.18                              | 1.15                                       | 1.20                            | 0.6                                     | 2.3                           | 24.4                                         | 11                                                     | 12                             | 100/C               |
|                | 0.85                                            | 11/0.32                              | 1.25                                       | 1.20                            | 0.6                                     | 2.4                           | 20.8                                         | 12                                                     | 13                             | 100/C               |
|                | 1.25                                            | 50/0.18                              | 1.50                                       | 1.50                            | 0.6                                     | 2.7                           | 14.7                                         | 15                                                     | 17                             | 100/C               |
|                | 1.25                                            | 16/0.32                              | 1.50                                       | 1.50                            | 0.6                                     | 2.7                           | 14.3                                         | 15                                                     | 17                             | 100/C               |
|                | 2                                               | 26/0.32                              | 1.90                                       | 1.90                            | 0.6                                     | 3.1                           | 8.81                                         | 20                                                     | 26                             | 100/C               |
|                | 3                                               | 41/0.32                              | 2.40                                       | 2.30                            | 0.7                                     | 3.8                           | 5.59                                         | 27                                                     | 40                             | 100/C               |
|                | 5                                               | 65/0.32                              | 3.00                                       | 3.0                             | 0.8                                     | 4.5                           | 3.52                                         | 37                                                     | 60                             | 100/C               |
|                | 8                                               | 50/0.45                              | 3.70                                       | 3.7                             | 0.9                                     | 5.4                           | 2.32                                         | 48                                                     | 90                             | 100/C               |
|                | 15                                              | 84/0.45                              | 5.10                                       | 5.8                             | 1.1                                     | 7.2                           | 1.38                                         | 67                                                     | 160                            | 100/C               |
|                | 20                                              | 247/0.32                             | 6.30                                       | 7.0                             | 1.1                                     | 8.2                           | 0.887                                        | 88                                                     | 230                            | 100/C               |
|                | 30                                              | 361/0.32                             | 7.60                                       | 8.5                             | 1.4                                     | 10.5                          | 0.520                                        | 122                                                    | 380                            | 500/D               |
|                | 40                                              | 494/0.32                             | 8.90                                       | 10.9                            | 1.4                                     | 11.5                          | 0.428                                        | 139                                                    | 450                            | 500/D               |
|                | 50                                              | 608/0.32                             | 9.8                                        | 12.6                            | 1.6                                     | 13.0                          | 0.337                                        | 177                                                    | 570                            | 500/D               |
|                | 60                                              | 741/0.32                             | 10.0                                       | 14.1                            | 1.6                                     | 13.5                          | 0.287                                        | 199                                                    | 670                            | 500/D               |

F : More flexible.

C : Packing in coil.

D : Packing in drum.

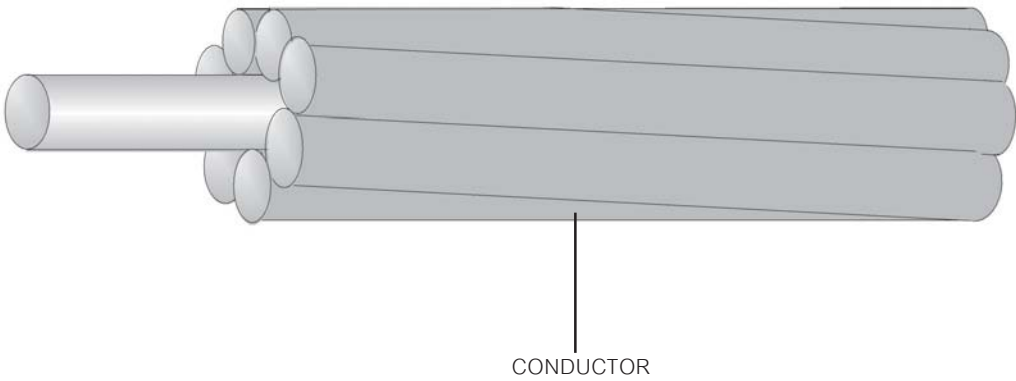


THAI-YAZAKI TECHNICAL DATA

# Bare Conductor

|     |                                                       |      |
|-----|-------------------------------------------------------|------|
| FHC | HARD DRAWN COPPER STRANDED CONDUCTOR<br>(TIS 64-2517) | B 90 |
|-----|-------------------------------------------------------|------|

HARD DRAWN COPPER STANDED CONDUCTOR



B  
8

CABLE STRUCTURE

|           |   |                                                                                                                                                |
|-----------|---|------------------------------------------------------------------------------------------------------------------------------------------------|
| CONDUCTOR | : | Hard drawn copper wires, concentric stranded conductor<br>Sizes 10 mm <sup>2</sup> up to 500 mm <sup>2</sup><br>Direction of outermost layer Z |
| REFERENCE | : | TIS 64-2517                                                                                                                                    |

# FHC

TIS 64-2517

| Nominal<br>Cross<br>Sectional<br>area<br><br>(mm <sup>2</sup> ) | Number<br>and<br>diameter<br>of wire<br><br>(No./mm) | Approx<br>conductor<br>diameter<br><br>(mm) | Maximum<br>conductor<br>resistance<br>at 20 °C<br><br>(Ω/km) | Breaking<br>strength<br><br>(kgf) | Maximum<br>continuous<br>current<br>rating in free<br>air<br>(Ampere) | Cable<br>weight<br>(approx.)<br><br>(kg/km) | Standard<br>length<br><br>(m) |
|-----------------------------------------------------------------|------------------------------------------------------|---------------------------------------------|--------------------------------------------------------------|-----------------------------------|-----------------------------------------------------------------------|---------------------------------------------|-------------------------------|
| 10                                                              | 7/1.35                                               | 4.05                                        | 1.80548                                                      | 438                               | 90                                                                    | 9                                           | 100/D                         |
| 16                                                              | 7/1.70                                               | 5.10                                        | 1.13857                                                      | 694                               | 125                                                                   | 140                                         | 100/D                         |
| 25                                                              | 7/2.14                                               | 6.42                                        | 0.71851                                                      | 1,076                             | 160                                                                   | 230                                         | 100/D                         |
| 35                                                              | 7/2.52                                               | 7.56                                        | 0.51815                                                      | 1,459                             | 200                                                                   | 320                                         | 100/D                         |
| 50                                                              | 7/3.02                                               | 9.06                                        | 0.35896                                                      | 2,095                             | 250                                                                   | 450                                         | 100/D                         |
| 50                                                              | 19/1.78                                              | 8.90                                        | 0.38252                                                      | 2,021                             | 250                                                                   | 430                                         | 100/D                         |
| 70                                                              | 19/2.14                                              | 10.70                                       | 0.26466                                                      | 2,921                             | 310                                                                   | 600                                         | 100/D                         |
| 95                                                              | 19/2.52                                              | 12.60                                       | 0.19183                                                      | 3,961                             | 380                                                                   | 850                                         | 100/D                         |
| 120                                                             | 19/2.85                                              | 14.25                                       | 0.14922                                                      | 5,067                             | 440                                                                   | 1,100                                       | 500/D                         |
| 150                                                             | 37/2.25                                              | 15.75                                       | 0.12384                                                      | 6,289                             | 510                                                                   | 1,300                                       | 500/D                         |
| 185                                                             | 37/2.52                                              | 17.64                                       | 0.09813                                                      | 7,713                             | 585                                                                   | 1,700                                       | 500/D                         |
| 240                                                             | 61/2.25                                              | 20.25                                       | 0.07528                                                      | 10,369                            | 700                                                                   | 2,200                                       | 500/D                         |
| 300                                                             | 61/2.52                                              | 22.68                                       | 0.06002                                                      | 12,717                            | 800                                                                   | 2,800                                       | 500/D                         |
| 400                                                             | 61/2.85                                              | 25.65                                       | 0.04692                                                      | 16,266                            | 900                                                                   | 3,600                                       | 500/D                         |
| 500                                                             | 61/3.20                                              | 28.80                                       | 0.03703                                                      | 20,506                            | 1,110                                                                 | 4,500                                       | 500/D                         |

D : Packing in drum.

