



## VSD CABLES

|                    |    |
|--------------------|----|
| KSXCX Series ..... | 74 |
| MDXCX Series ..... | 75 |
| HDXCY Series ..... | 76 |
| FDXCX Series ..... | 78 |



## KSXCY SERIES

High Performance Fixed Copper Tape  
VSD Power Cable  
Flexible Conductors for Fixed Applications



### APPLICATIONS:

**VSD Connection** Fixed wiring cable designed for the connection of AC Variable Speed Drives or where a fixed EMC screened cable is required.

**RFI & EMI Protection** With single screening (Copper tape) and split interstitial earth cores (6mm<sup>2</sup> and above) this cable has optimum screening performance of low frequency and electromagnetic output.

**Glanding** Use Firstflex GM-EMC-FT Series glands for best contact.

### PRODUCT FEATURES:

- ▶ Flexible Class 5 conductors for easy installation
- ▶ Helps avoid reactance with other devices outside the plant
- ▶ UV stabilised
- ▶ Flame retardant
- ▶ To be earthed using an EMC compatible gland
- ▶ Heat, oil and chemical resistant (See *Technical Section*)

### CONSTRUCTION:

**Conductor** Annealed plain copper stranded HIGH flexibility (Class 5).

**Insulation** XLPE X-90.

**Bedding** PVC 5V-90.

**Screening** Copper Tape 30% overlap.

**Sheath** PVC 5V-90.

### CHARACTERISTICS:

**Operating Temperature Range** Fixed -30°C to 90°C

**Maximum Conductor Temperature** 90°C

**Rated Voltage** U<sub>o</sub>/U 0.6/1kV.


**Max AC Operating Voltage** U<sub>o</sub> 0.7kV.

**Sheath Colour** Black.

**Standard Core Colours** Red, White, Blue and Green/Yellow.

**Relevant Standards** IEC 60332-1, AS/NZS 3808,

AS/NZS 5000.1, AS/NZS 1125, AS/NZS 3008, **RoHS** Compliant.

| Code              | No. of Cores x Size         |                             | Approx. Stranding<br>No. of wires x mm | Approx. Overall Diameter<br>(mm) | Approx. Weight<br>(Kg/Km) | Nominal Amps<br>un-enclosed protected<br>from sun @ 30°C<br>fixed application<br>Touching  | 3 Phase Volt Drop<br>@ 50Hz / MAX.<br>Conductor Temp:<br>90°C<br>(Mv/Am) |
|-------------------|-----------------------------|-----------------------------|--|----------------------------------|---------------------------|---|--|
|                   | Power<br>(mm <sup>2</sup> ) | Earth<br>(mm <sup>2</sup> ) |  |                                  |                           |   |  |
| <b>KSXCY4/1.5</b> | 3 x 1.5 + 1 x 1.5           |                             | 30/0.25                                | 13.3                             | 250                       | 21  | 30.000   |
| <b>KSXCY4/2.5</b> | 3 x 2.5 + 1 x 2.5           |                             | 50/0.25                                | 15.0                             | 300                       | 29  | 16.400   |
| <b>KSXCY4/4.0</b> | 3 x 4.0 + 1 x 2.5           |                             | 56/0.30                                | 15.3                             | 378                       | 37  | 10.200   |
| <b>KSXCY4/6.0</b> | 3 x 6.0 + 3 x 1.5           |                             | 84/0.30                                | 16.9                             | 474                       | 47  | 6.800  |
| <b>KSXCY4/10</b>  | 3 x 10 + 3 x 1.5            |                             | 80/0.40                                | 17.8                             | 612                       | 67  | 4.050  |
| <b>KSXCY4/16</b>  | 3 x 16 + 3 x 2.5            |                             | 128/0.40                               | 21.0                             | 855                       | 89  | 2.550  |
| <b>KSXCY4/25</b>  | 3 x 25 + 3 x 4.0            |                             | 200/0.40                               | 24.4                             | 1200                      | 119   | 1.610  |
| <b>KSXCY4/35</b>  | 3 x 35 + 3 x 6.0            |                             | 280/0.40                               | 27.2                             | 1600                      | 149   | 1.170  |
| <b>KSXCY4/50</b>  | 3 x 50 + 3 x 10             |                             | 400/0.40                               | 32.7                             | 2250                      | 187   | 0.868  |
| <b>KSXCY4/70</b>  | 3 x 70 + 3 x 10             |                             | 356/0.50                               | 35.7                             | 2890                      | 235   | 0.609  |
| <b>KSXCY4/95</b>  | 3 x 95 + 3 x 16             |                             | 485/0.50                               | 42                               | 3980                      | 282   | 0.450  |
| <b>KSXCY4/120</b> | 3 x 120 + 3 x 16            |                             | 614/0.50                               | 46.3                             | 4600                      | 333   | 0.366  |
| <b>KSXCY4/150</b> | 3 x 150 + 3 x 25            |                             | 765/0.50                               | 48.4                             | 5900                      | 383   | 0.307  |
| <b>KSXCY4/185</b> | 3 x 185 + 3 x 25            |                             | 944/0.50                               | 57                               | 7500                      | 436   | 0.259  |
| <b>KSXCY4/240</b> | 3 x 240 + 3 x 35            |                             | 1225/0.50                              | 64                               | 9600                      | 519   | 0.216  |

Firstflex has taken every precaution to ensure accurate information in this catalogue, but accept no liability for any errors or omissions. Firstflex reserves the right to modify specifications at any time.

# MDXCY SERIES

High Performance Flexible VSD Marine / Power Cable 0.6/1kV 90°C



### APPLICATIONS:

**VSD Connection** Designed for the connection of AC Variable Speed Drives (VSD) or where a flexible EMC screened cable is required. These cables are flexible for fixed installation as well as occasional flexing without tensile load.

**RFI & EMI Protection** With double screening (CBS & foil tape) and split interstitial earth cores (6mm<sup>2</sup> and above) this cable has optimum screening performance of low frequency and electromagnetic output.

**Marine** Flexible tinned copper VSD cable for installation in super yachts and other marine applications.

**Pumping** Suitable for permanent submersion up to 200 metres.

### PRODUCT FEATURES:

- ▶ Helps avoid reactance with other devices outside the plant
- ▶ UV stabilised
- ▶ Flame retardant
- ▶ Moisture resistant
- ▶ Suitable for permanent submersion to 200 metres
- ▶ Resistant to environmental factors such as oxidation, ozone and sunlight
- ▶ To be earthed using an EMC compatible gland
- ▶ Heat, oil and chemical resistant (*See Technical Section*)

### CONSTRUCTION:

**Conductor** Annealed tinned copper stranded high flexibility (Class 5).

**Insulation** X-90.

**Bedding** SPVC V-90HT.

**Screening** Up to 6.0mm 85% tinned copper braid screen c/w 100% foil screen coverage, 10mm and above 85% tinned copper braid screen, plus split earths.

**Sheath** SPVC V-90HT.

### CHARACTERISTICS:

**Operating Temperature Range** Fixed -40°C to 90°C / Flexing -20°C to 90°C.

**Maximum Conductor Temperature** 90°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

**Rated Voltage** U<sub>o</sub>/U 0.6/1kV.

**Max AC Operating Voltage** U<sub>o</sub> 0.7kV.

**Minimum Bending Radius** Fixed 7.5 x cable diameter / Flexing 15 x cable diameter.


#### Sheath Colour

- 3 Core - Black.
- 4 Core - (1.5mm to 6.0mm) Black & Clear.
- 4 Core - (10mm above) Black.

#### Standard Core Colours

- 3 Core – Red, Black, Green/Yellow.
- 4 Core – Red, White, Blue, Green/Yellow.

**Relevant Standards** IEC 60228, IEC 60332-1, AS/NZS 5000.1, AS/NZS 1125, AS/NZS 3008, **RoHS** Compliant.

| Code  | No. of Cores x Size      |                          | Approx. Stranding Power | Approx. Overall Diameter | Approx. Diameter Under Screen | Approx. Weight | Nominal Amps<br>un-enclosed protected from sun<br>@ 30°C fixed application   | 3 Phase Volt Drop<br>@ 50Hz / MAX.<br>Conductor Temp: |
|---|--------------------------|--------------------------|-------------------------|--------------------------|-------------------------------|----------------|--|---|
|   | Power (mm <sup>2</sup> ) | Earth (mm <sup>2</sup> ) | No. of wires x mm       | (mm)                     | (mm)                          | (Kg/Km)        | Fixed Installation<br>Touching  | 90°C (Mv/Am)  |
| <b>MDXCY3/1.5</b>   | 2 x 1.5 + 1 x 1.5        |                          | 30/0.25                 | 12.5                     | 8.6                           | 155            | 25   | 30.000  |
| <b>MDXCY3/2.5</b>   | 2 x 2.5 + 1 x 2.5        |                          | 50/0.25                 | 13.5                     | 9.6                           | 195            | 33   | 16.400  |
| <b>MDXCY4/1.5</b>   | 3 x 1.5 + 1 x 1.5        |                          | 30/0.25                 | 13.5                     | 9.5                           | 195            | 21   | 30.000  |
| <b>MDXCY4/2.5</b>   | 3 x 2.5 + 1 x 2.5        |                          | 50/0.25                 | 14.5                     | 10.6                          | 245            | 29   | 16.400  |
| <b>MDXCY4/4.0</b>   | 3 x 4.0 + 1 x 4.0        |                          | 56/0.30                 | 16.5                     | 12.7                          | 350            | 37   | 10.200  |
| <i>Note – split earth conductor 4 core 6.0mm<sup>2</sup> to 150.0mm<sup>2</sup> for optimal screening</i> |                          |                          |                         |                          |                               |                |  |   |
| <b>MDXCY4/6.0</b>   | 3 x 6.0 + 3 x 1.5        |                          | 190/0.20                | 19.5                     | 16.0                          | 445            | 47   | 6.800   |
| <b>MDXCY4/10</b>  | 3 x 10.0 + 3 x 1.5       |                          | 312/0.20                | 21.5                     | 17.9                          | 675            | 67   | 4.050   |
| <b>MDXCY4/16</b>  | 3 x 16.0 + 3 x 2.5       |                          | 484/0.20                | 23.5                     | 19.5                          | 955            | 89   | 2.550   |

Firstflex has taken every precaution to ensure accurate information in this catalogue, but accept no liability for any errors or omissions. Firstflex reserves the right to modify specifications at any time.

# HDXCY SERIES

Ultra Performance Flexible Rubber  
VSD Power Cable 0.6/1kV 90°C



### APPLICATIONS:

**VSD Connection** Designed for the connection of AC Variable Speed Drives (VSD) or where a flexible EMC screened cable is required. These cables are flexible for fixed installation as well as occasional flexing without tensile load.

**RFI & EMI Protection** With double screening (CBS & foil tape) and split interstitial earth cores (6mm<sup>2</sup> and above), this cable has optimum screening performance of low frequency and electromagnetic output.

**Pumping** Suitable for permanent submersion up to 500 metres.

### PRODUCT FEATURES:

- ▶ Extra durable rubber sheath
- ▶ Prevents reactance with other devices outside the plant
- ▶ UV stabilised
- ▶ Flame retardant
- ▶ Water and moisture resistant
- ▶ Resistant to environmental factors such as oxidation, ozone and sunlight
- ▶ To be earthed using an EMC compatible gland
- ▶ Suitable for permanent submersion to 500 metres (*See Technical Section*)
- ▶ Heat, oil and chemical resistant (*See Technical Section*)

See over for full product table ▶

### CONSTRUCTION:

**Conductor** Annealed plain copper stranded high flexibility (Class 5).

**Insulation** Black sheathed cables are up to 6.0mm<sup>2</sup> XLPE X-90, 10mm<sup>2</sup> and above and 5 core EPR.

**Screening** 3 and 4 core up to 4.0mm<sup>2</sup> aluminium / mylar tape plus tinned copper braid, 4 core 6mm<sup>2</sup> and above tinned copper braid and split earth cores, 5 core aluminium / mylar tape plus tinned copper braid (all copper braids are minimum 85% coverage plus either aluminium / mylar foil tape or split interstitial earth cores to give even greater EMC protection).

**Sheath** Black up to 6.0mm<sup>2</sup> NBR, Black 10mm<sup>2</sup> and above and 5 core CPE.

### CHARACTERISTICS:

**Operating Temperature Range** Fixed -40°C to 90°C / Flexing -20°C to 90°C.

**Maximum Conductor Temperature** 90°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

**Rated Voltage** U<sub>o</sub>/U 0.6/1kV.

**Max AC Operating Voltage** U<sub>o</sub> 0.7kV.

**Minimum Bending Radius** Fixed 7.5 x cable diameter / Flexing 15 x cable diameter.

**Sheath Colour** Black.

#### Standard Core Colours


3 Core – Red, Black, Green/Yellow.

4 Core – Red, White, Blue, Green/Yellow.

5 Core – Red, White, Blue, Black, Green/Yellow.

**Relevant Standards** IEC 60332-1, AS/NZS 5000.1, AS/NZS 1125, AS/NZS 3008, **RoHS** Compliant.

HDXCY SERIES continued

| Code  | No. of Cores x Size      |                          | Approx. Stranding Power | Approx. Overall Diameter | Approx. Diameter Under Screen | Approx. Weight | Nominal Amps<br>un-enclosed protected from sun @ 30°C fixed application   | 3 Phase Volt Drop @ 50Hz / MAX. Conductor Temp: |
|---|--------------------------|--------------------------|-------------------------|--------------------------|-------------------------------|----------------|---|---|
|   | Power (mm <sup>2</sup> ) | Earth (mm <sup>2</sup> ) | No. of wires x mm       | (mm)                     | (mm)                          | (Kg/Km)        | Fixed Installation Touching  | 90°C (Mv/Am)                                    |
| <b>HDXCY3/1.5</b>   | 2 x 1.5 + 1 x 1.5        |                          | 30/0.25                 | 12.5                     | 8.6                           | 155            | 25  | 30.000  |
| <b>HDXCY3/2.5</b>   | 2 x 2.5 + 1 x 2.5        |                          | 50/0.25                 | 13.5                     | 9.6                           | 195            | 33  | 16.400  |
| <b>HDXCY4/1.5</b>   | 3 x 1.5 + 1 x 1.5        |                          | 30/0.25                 | 13.5                     | 9.5                           | 195            | 21  | 30.000  |
| <b>HDXCY4/2.5</b>   | 3 x 2.5 + 1 x 2.5        |                          | 50/0.25                 | 14.5                     | 10.6                          | 245            | 29  | 16.400  |
| <b>HDXCY4/4.0</b>   | 3 x 4.0 + 1 x 4.0        |                          | 56/0.30                 | 16.5                     | 12.7                          | 350            | 37  | 10.200  |
| <i>Note – split earth conductor 4 core 6.0mm<sup>2</sup> to 150.0mm<sup>2</sup> for optimal screening</i> |                          |                          |                         |                          |                               |                |   |   |
| <b>HDXCY4/6.0</b>   | 3 x 6.0 + 3 x 1.5        |                          | 190/0.20                | 19.5                     | 16.0                          | 445            | 47  | 6.800   |
| <b>HDXCY4/10</b>  | 3 x 10.0 + 3 x 1.5       |                          | 312/0.20                | 21.5                     | 17.9                          | 675            | 67  | 4.050   |
| <b>HDXCY4/16</b>  | 3 x 16.0 + 3 x 2.5       |                          | 484/0.20                | 23.5                     | 19.5                          | 955            | 89  | 2.550   |
| <b>HDXCY4/25</b>  | 3 x 25.0 + 3 x 4.0       |                          | 777/0.20                | 28.5                     | 24.5                          | 1455           | 119   | 1.610   |
| <b>HDXCY4/35</b>  | 3 x 35.0 + 3 x 6.0       |                          | 1094/0.20               | 32.0                     | 25.7                          | 2200           | 149   | 1.170   |
| <b>HDXCY4/50</b>  | 3 x 50.0 + 3 x 10.0      |                          | 1552/0.20               | 40.0                     | 32.7                          | 3211           | 187   | 0.868   |
| <b>HDXCY4/70</b>  | 3 x 70.0 + 3 x 10.0      |                          | 2192/0.20               | 43.3                     | 35.0                          | 3950           | 235   | 0.609   |
| <b>HDXCY4/95</b>  | 3 x 95.0 + 3 x 16.0      |                          | 2928/0.20               | 48.7                     | 40.5                          | 5126           | 282   | 0.450   |
| <b>HDXCY4/120</b>   | 3 x 120.0 + 3 x 16.0     |                          | 888/0.40                | 51.3                     | 43.0                          | 5925           | 333   | 0.366   |
| <b>HDXCY4/150</b>   | 3 x 150.0 + 3 x 25.0     |                          | 1118/0.40               | 58.5                     | 49.3                          | 7146           | 374   | 0.307   |
| <b>HDXCY5/2.5</b>   | 4 x 2.5 + 1 x 2.5        |                          | 50/0.25                 | 18.7                     | 13.6                          | 533            | 29  | 16.400  |
| <b>HDXCY5/4.0</b>   | 4 x 4.0 + 1 x 4.0        |                          | 127/0.21                | 23.0                     | 14.9                          | 610            | 37  | 10.200  |
| <b>HDXCY5/6.0</b>   | 4 x 6.0 + 1 x 6.0        |                          | 84/0.30                 | 24.0                     | 16.5                          | 952            | 47  | 6.800   |



## FDXCY SERIES

High Performance Flexible VSD Power Cable 0.6/1kV 90°C



### APPLICATIONS:

**VSD Connection** Designed for the connection of AC Variable Speed Drives (VSD) or where a flexible EMC screened cable is required. These cables are flexible for fixed installation as well as occasional flexing without tensile load.

**RFI & EMI Protection** With double screening (CBS & foil tape) and split interstitial earth cores (6mm<sup>2</sup> and above), this cable has optimum screening performance of low frequency and electromagnetic output.

### PRODUCT FEATURES:

- ▶ Helps avoid reactance with other devices outside the plant
- ▶ UV stabilised
- ▶ Flame retardant
- ▶ Moisture resistant
- ▶ Resistant to environmental factors such as oxidation, ozone and sunlight
- ▶ To be earthed using an EMC compatible gland
- ▶ Heat, oil and chemical resistant (*See Technical Section*)

### CONSTRUCTION:

**Conductor** Annealed plain copper stranded high flexibility (Class 5).  
**Insulation** X-90.

**Screening** 85% tinned copper braid screen c/w 100% foil screen coverage.

**Sheath** SPVC V-90.

### CHARACTERISTICS:

**Operating Temperature Range** Fixed -5°C to 90°C / Flexing -20°C to 90°C.

**Maximum Conductor Temperature** 90°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

**Rated Voltage** U<sub>o</sub>/U 0.6/1kV.


**Max AC Operating Voltage** U<sub>o</sub> 0.7kV.

**Minimum Bending Radius** Fixed 15 x cable diameter / Flexing 10 x cable diameter.

**Sheath Colour** Black.

**Standard Core Colours** Red, White, Blue, Green/Yellow.

**Relevant Standards** AS/NZS 5000.1, AS/NZS 1125, AS/NZS 3808, IEC 60332-1, **RoHS** Compliant.

| Code              | No. of Cores x Size      |                          | Approx. Stranding Power<br>No. of wires x mm | Approx. Overall Diameter<br>(mm) | Approx. Weight<br>(Kg/Km) | Nominal Amps<br>un-enclosed protected from sun @ 30°C fixed application   | 3 Phase Volt Drop @ 50Hz / MAX. Conductor Temp: |
|-------------------|--------------------------|--------------------------|--|----------------------------------|---------------------------|---|---|
|                   | Power (mm <sup>2</sup> ) | Earth (mm <sup>2</sup> ) |  |                                  |                           | Fixed Installation Touching  | 90°C (Mv/Am)                                    |
| <b>FDXCY4/25</b>  | 3 x 25 + 3 x 4.0         |                          | 200/0.40                                     | 24.6                             | 1135                      | 119   | 1.610   |
| <b>FDXCY4/35</b>  | 3 x 35 + 3 x 6.0         |                          | 280/0.40                                     | 27.3                             | 1497                      | 149   | 1.170   |
| <b>FDXCY4/50</b>  | 3 x 50 + 3 x 10          |                          | 400/0.40                                     | 32.1                             | 2143                      | 187   | 0.868   |
| <b>FDXCY4/70</b>  | 3 x 70 + 3 x 10          |                          | 356/0.50                                     | 35.9                             | 2779                      | 235   | 0.609   |
| <b>FDXCY4/95</b>  | 3 x 95 + 3 x 16          |                          | 485/0.50                                     | 42                               | 3680                      | 282   | 0.450   |
| <b>FDXCY4/120</b> | 3 x 120 + 3 x 16         |                          | 614/0.50                                     | 43                               | 4498                      | 333   | 0.366   |

Firstflex has taken every precaution to ensure accurate information in this catalogue, but accept no liability for any errors or omissions. Firstflex reserves the right to modify specifications at any time.