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## CHEMTUFF VSD MDXCY-BK SERIES

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



#### APPLICATIONS:

VSD CABLES

**Chemtuff** Used in applications that require a greater resistance to chemicals, solvents, oils and fats.

**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 SER105.

#### 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 Uo/U 0.6/1kV.

Max AC Operating Voltage Uo 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.

**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 un-enclosed protected from sun @ 30°C fixed application	3 Phase Volt Drop @ 50Hz / MAX. Conductor Temp:
	Power (mm²)	Earth (mm²)	No. of wires x mm	(mm)	(mm)	(Kg/Km)	Fixed Installation Touching	90°C (Mv/Am)
Note - Up to 6.0mm 85% tinned copper braid screen c/w 100% foil screen coverage.								
MDXCY3/1.5BK	2 x 1.5	+ 1 x 1.5	30/0.25	12.5	8.6	155	25	30.000
MDXCY3/2.5BK	2 x 2.5	+1x 2.5	50/0.25	13.5	9.6	195	33	16.400
MDXCY4/1.5BK	3 x 1.5 ·	+ 1 x 1.5	30/0.25	13.5	9.5	195	21	30.000
MDXCY4/2.5BK	3 x 2.5	+1x2.5	50/0.25	14.5	10.6	245	29	16.400
MDXCY4/4.0BK	3 x 4.0 ·	+1x4.0	56/0.30	16.5	12.7	350	37	10.200
MDXCY4/6.0BK	3 x 6.0	+ 3 x 1.5	190/0.20	19.5	16.0	445	47	6.800
Note – 10mm and above 85% tinned copper braid screen, plus split earths.								
MDXCY4/10BK	3 x 10.0	+ 3 x 1.5	312/0.20	21.5	17.9	675	67	4.050
MDXCY4/16BK	3 x 16.0	+ 3 x 2.5	484/0.20	23.5	19.5	955	89	2.550

# MDXCY-CL 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. Sheath Transparent PVC.

#### 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 Uo/U 0.6/1kV.

Max AC Operating Voltage Uo 0.7kV.

Minimum Bending Radius Fixed 7.5 x cable diameter /

Flexing 15 x cable diameter.

Sheath Colour Clear.

**Standard Core Colours** 

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 un-enclosed protected from sun @ 30°C fixed application	3 Phase Volt Drop @ 50Hz / MAX. Conductor Temp:
	Power (mm²)	Earth (mm²)	No. of wires x mm	(mm)	(mm)	(Kg/Km)	Fixed Installation Touching	90°C (Mv/Am)
MDXCY4/1.5CL	3 x 1.5 +	+ 1 x 1.5	30/0.25	13.5	9.5	195	21	30.000
MDXCY4/2.5CL	3 x 2.5 -	+1x2.5	50/0.25	14.5	10.6	245	29	16.400
MDXCY4/4.0CL	3 x 4.0 -	+1x4.0	56/0.30	16.5	12.7	350	37	10.200
MDXCY4/6.0CL	3 x 6.0 -	+ 3 x 1.5	190/0.20	19.5	16.0	445	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 -20°C to 90°C / Flexing -5°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 Uo/U 0.6/1kV.

Max AC Operating Voltage Uo 0.7kV.

**Minimum Bending Radius**  $1.5 \text{mm}^2 - 25 \text{mm}^2$ : Fixed 4 x cable diameter / Flexing 6 x cable diameter.

35mm<sup>2</sup> – 240mm<sup>2</sup>: Fixed 6 x cable diameter / Flexing 9 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	Approx. Overall Diameter	Approx. Weight	Nominal Amps un-enclosed protected from sun @ 30°C fixed application	3 Phase Volt Drop @ 50Hz / MAX. Conductor Temp:
	Power (mm²)	Earth (mm²)	No. of wires x mm	(mm)	(Kg/Km)	Fixed Installation Touching	90°C (Mv/Am)
FDXCY4/1.5	3x1.5 + 1	1 x 1.5	30/0.25	11.8	194	21	30.000
FDXCY4/2.5	3x2.5 + 1	1 x 2.5	50/0.25	12.7	250	29	16.400
FDXCY4/4.0	3x4.0 + 1	1 x 4.0	56/0.30	14.4	322	37	10.200
FDXCY4/6.0	3x6.0+2	3 x 1.5	84/0.30	15.7	406	47	6.800
FDXCY4/10	3x10 + 3 x 1.5		140/0.30	18.0	545	67	4.050
FDXCY4/16	3x16 + 3 x 2.5		126/0.40	20.1	789	89	2.550
FDXCY4/25	3 x 25 + 3 x 4.0		200/0.40	24.4	1154	119	1.62
FDXCY4/35	3 x 35 + 3 x 6.0		280/0.40	26.6	1503	149	1.18
FDXCY4/50	3 x 50 + 3 x 10		400/0.40	31.0	2167	187	0.878
FDXCY4/70	3 x 70 + 3 x 10		356/0.50	34.9	2817	235	0.623
FDXCY4/95	3 x 95 + 3 x 16		485/0.50	39.2	3816	282	0.467
FDXCY4/120	3 x 120 + 3 x 16		614/0.50	43.3	4498	333	0.385
FDXCY4/185	3 x 185 + 3 x 35		944/0.50	53.6	6859	436	0.285
FDXCY4/150	3 x 150 + 3 x 25		765/0.50	48.3	5684	383	0.330
FDXCY4/240	3 x 240 +	· 3 x 35	1225/0.50	59.9	8785	519	0.245

# FDCY SERIES

High Performance Flexible VSD Power Cable 0.6/1kV 80°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.

#### **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)



# **VSD CABLES**

#### CONSTRUCTION:

Conductor Annealed plain copper stranded high flexibility (Class 5). Insulation PVC. Screening 85% tinned copper braid screen. Sheath SPVC.

#### CHARACTERISTICS:

**Operating Temperature Range** Fixed -40°C to 80°C / Flexing -15°C to 70°C.

Maximum Conductor Temperature 80°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors). Rated Voltage Uo/U 0.6/1kV.

Max AC Operating Voltage Uo 0.7kV.

Minimum Bending Radius Fixed 6 x cable diameter /

Flexing 15 x cable diameter.

Sheath Colour Black.

Standard Core Colours Black (Numbered) Plus / Green/Yellow Earth. Relevant Standards IEC60228, EN50525-2-51, IEC 60332-1, *ROHS* Compliant, Conform to 2014/35/E4CE

Code	No. of Cores x Size	Approx. Stranding Power	Approx. Overall Diameter	Approx. Weight	Nominal Amps un-enclosed protected from sun @ 30°C fixed application	3 Phase Volt Drop @ 50Hz / MAX. Conductor Temp:
		No. of wires x mm	(mm)	(Kg/Km)	Fixed Installation Touching	80°C (Mv/Am)
FDCY5/2.5	5 x 2.5	50/0.25	15	457	20	16.400
FDCY5/4.0	5 x 4.0	56/0.30	17.3	661	25	10.200

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



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# 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 X-90. Bedding PVC 5V-90. Screening Copper Tape 30% overlap. Sheath SPVC.

#### CHARACTERISTICS:

Operating Temperature Range Fixed -30°C to 90°C Maximum Conductor Temperature 90°C Rated Voltage Uo/U 0.6/1kV. Max AC Operating Voltage Uo 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	Approx. Overall Diameter	Approx. Weight	Nominal Amps un-enclosed protected from sun @ 30°C fixed application	3 Phase Volt Drop @ 50Hz / MAX. Conductor Temp:
	Power (mm²)	Earth (mm²)	No. of wires x mm	(mm)	(Kg/Km)	Touching	90°C (Mv/Am)
KSXCY4/1.5	3 x 1.5 + 1	l x 1.5	30/0.25	13.3	250	21	30.000
KSXCY4/2.5	3 x 2.5 + 1	l x 2.5	50/0.25	15.0	300	29	16.400
KSXCY4/4.0	3 x 4.0 + 1	l x 2.5	56/0.30	15.3	378	37	10.200
KSXCY4/6.0	3 x 6.0 + 3 x 1.5		84/0.30	16.9	474	47	6.800
KSXCY4/10	3 x 10 + 3 x 1.5		80/0.40	17.8	612	67	4.050
KSXCY4/16	3 x 16 + 3 x 2.5		128/0.40	21.0	855	89	2.550
KSXCY4/25	3 x 25 + 3 x 4.0		200/0.40	24.4	1200	119	1.610
KSXCY4/35	3 x 35 + 3 x 6.0		280/0.40	27.2	1600	149	1.170
KSXCY4/50	3 x 50 + 3 x 10		400/0.40	32.7	2250	187	0.868
KSXCY4/70	3 x 70 + 3 x 10		356/0.50	35.7	2890	235	0.609
KSXCY4/95	3 x 95 + 3 x 16		485/0.50	42	3980	282	0.450
KSXCY4/120	3 x 120 + 3 x 16		614/0.50	46.3	4600	333	0.366
KSXCY4/150	3 x 150 + 3 x 25		765/0.50	48.4	5900	383	0.307
KSXCY4/185	3 x 185 + 3 x 25		944/0.50	57	7500	436	0.259
KSXCY4/240	3 x 240 +	3 x 35	1225/0.50	64	9600	519	0.216