

Applications

A continental style flexible power cable with 3 layer protection suitable for robotic and automated equipment. The braiding provides partial electrical screening.

Family

Flexible power control cable

Standards

VDE2050
VDE0295

Design

- 1. Conductor**
Plain copper wire
- 2. Insulation**
FR-PVC
- 3. Filler**
Chalk or PVC strip (where required)
- 4. Inner Sheath**
FR-PVC
- 5. Braiding**
Galvanised Steel
- 6. Outer Sheath**
Transparent FR-PVC



Electrical Characteristics at 20°C

Conductor size (mm ²)	Max. Conductor DC resistance (Ω/km)	Rated Temperature (°C)	Voltage Rating (KV) DC	Min. Insulation Resistance (MΩ*km)
0.75	26.0	-30~+80	0.3	500
1.0	19.5			
1.5	13.3			
2.5	7.98			
4.0	4.95			
6.0	3.3			

Constructional Information (Table 1)

No. of Cores	Conductor size (mm ²)	Conductor Diameter (mm)	Insulated Diameter (mm)	Insulation Thickness (mm)	Filler Type /Size (mm)	Inner Sheath Thickness (mm)	Diameter of inner sheath (mm)	Overall Diameter (mm)	Sheath Thickness (mm)
2 Core	1.0	0.193 ± 0.008x32	2.2 ± 0.1	0.5	Chalk	0.55	5.7 ± 0.20	0.75	8.2 ± 0.25
	1.5	0.24 ± 0.008x30	2.4 ± 0.1	0.4		0.65	6.4 ± 0.20	0.80	9.4 ± 0.30
	2.5	0.24 ± 0.008x50	3.0 ± 0.15	0.5		0.65	7.6 ± 0.25	0.80	10.6 ± 0.30
	4.0	0.29 ± 0.008x56	4.2 ± 0.15	0.8		0.65	10.4 ± 0.25	0.80	13.4 ± 0.30
3 Core	0.75	0.193 ± 0.008x24	2.0 ± 0.1	0.5	Chalk	0.55	5.4 ± 0.20	0.75	7.80 ± 0.20
	1.0	0.193 ± 0.008x32	2.2 ± 0.1	0.5		0.55	5.7 ± 0.20	0.75	8.20 ± 0.20
	1.5	0.24 ± 0.008x30	2.4 ± 0.1	0.4		0.60	6.4 ± 0.20	0.75	9.40 ± 0.20
	2.5	0.24 ± 0.008x50	3.0 ± 0.15	0.5		0.70	7.6 ± 0.25	0.80	10.6 ± 0.20
	4.0	0.29 ± 0.008x56	4.2 ± 0.15	0.8		0.75	10.4 ± 0.30	0.80	13.4 ± 0.30

Constructional Information (Table 2)

No. of Cores	Conductor size (mm ²)	Conductor Diameter (mm)	Insulated Diameter (mm)	Insulation Thickness (mm)	Filler Type /Size (mm)	Inner Sheath Thickness (mm)	Diameter of inner sheath (mm)	Overall Diameter (mm)	Sheath Thickness (mm)
4 Core	1.0	0.193 ± 0.008x32	2.2 ± 0.1	0.5	Chalk	0.55	5.7 ± 0.20	0.75	8.2 ± 0.25
	1.5	0.24 ± 0.008x30	2.4 ± 0.1	0.4		0.65	6.4 ± 0.20	0.80	9.4 ± 0.30
	2.5	0.24 ± 0.008x50	3.0 ± 0.15	0.5		0.65	7.6 ± 0.25	0.80	10.6 ± 0.30
	4.0	0.29 ± 0.008x56	4.2 ± 0.15	0.8		0.65	10.4 ± 0.25	0.80	13.4 ± 0.30
	6.0	0.29 ± 0.008x84	4.5 ± 0.15	0.7		0.75	12.8 ± 0.30	0.80	16.0 ± 0.40
5 Core	1.0	0.193 ± 0.008x32	2.2 ± 0.1	0.5	Chalk	0.60	7.6 ± 0.20	0.75	10.6 ± 0.30
	1.5	0.24 ± 0.008x30	2.4 ± 0.1	0.4	PVC/Chalk	0.60	8.2 ± 0.20	0.80	11.2 ± 0.30
	2.5	0.24 ± 0.008x50	3.0 ± 0.15	0.5	PVC/Chalk	0.70	9.8 ± 0.30	0.80	12.8 ± 0.30
6 Core	1.5	0.24 ± 0.008x30	2.4 ± 0.1	0.4	PVC/Chalk	0.70	9.3 ± 0.25	0.80	12.3 ± 0.30
7 Core	1.0	0.193 ± 0.008x32	2.2 ± 0.1	0.5	Chalk	0.70	8.7 ± 0.25	0.80	11.7 ± 0.30
	1.5	0.24 ± 0.008x30	2.4 ± 0.1	0.4		0.70	9.3 ± 0.25	0.80	12.4 ± 0.30
12 Core	1.0	0.193 ± 0.008x32	2.2 ± 0.1	0.5	Chalk	0.70	10.8 ± 0.3	0.80	13.8 ± 0.30
	1.5	0.24 ± 0.008x30	2.4 ± 0.1	0.4		0.70	11.6 ± 0.3	0.80	14.3 ± 0.35
18 Core	1.0	0.193 ± 0.008x32	2.2 ± 0.1	0.5	Chalk	0.75	12.8 ± 0.3	0.80	15.8 ± 0.40
	1.5	0.24 ± 0.008x30	2.4 ± 0.1	0.4		0.75	13.8 ± 0.3	0.80	16.8 ± 0.30
25 Core	1.0	0.193 ± 0.008x32	2.2 ± 0.1	0.5	Chalk	0.70	15.7 ± 0.4	0.80	19.7 ± 0.30