

2YSLCY-J 0,6/1 kV

Double screened cables for frequency converters, EMC*



Cable structure

- Stranded bare copper conductor according to DIN VDE 0295, IEC 60228 cl. 5
- Core insulation of polyethylene (PE)
- Core colors: black, brown, grey, green-yellow, cores stranded in concentric layers
- First screening with special aluminum foil
- Second screening with tinned copper braiding, coverage approx. 80%
- Special PVC sheath, transparent
- PVC self-extinguishing and flame retardant, according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1
- Low mutual capacitance according to DIN VDE 0472 part 504, test method B

Technical data

- Special flexible cables for frequency converters according to DIN VDE 0250
- **Temperature range:** flexing from -5 °C to +70 °C
fixed from -40 °C to +70 °C
- **Nominal voltage** U_0/U 600/1000 V
- **Test voltage a.c.** 4000 V
- **Insulation resistance** min. 200 M Ω × km
- **Radiation resistance** up to 80 × 10⁶ cJ/kg (up to 80 Mrad)
- **Minimum bending radius**
fixed installation for outer diameter up to 12 mm – 5× cable diameter, > 12 to 20 mm – 7,5× cable diameter, > 20 mm – 10× cable diameter
free-movement for outer diameter up to 12 mm – 10× cable diameter, > 12 to 20 mm – 15× cable diameter > 20 mm – 20× cable diameter

Advantages

- PE core insulation ensures low dielectric loss, double potential strenght, long durability and low level of interference
- Installation in hazardous areas, meets EMC requirements according to EN 55011
- Low coupling resistance due to high EMC compatibility

Application

This motor power supply cable for frequency converters ensures electromagnetic compatibility in industrial buildings, facilities with operating equipment where electromagnetic interference might negatively influence surroundings. The cable is also suitable as supply and connecting cable for medium mechanical stress in fixed installation and forced movements in dry, moist and wet environments but not suitable for open-air use. The cable is used in automotive industry, food industry, packaging, tool making machinery, handling technics, as a connecting cable to industrial pumps, ventilators, conveyor belts and air-conditioning installation. The optimal screening of those cables ensures an interference-free operation of frequency converters.

Note

*EMC = Electromagnetic compatibility – recommended type
CE = the product is conformed with the EC Low-Voltage Directive 73/23/EEC
Conforms to RoHS.

Part No.	Number of cores × core cross-section [mm ²]	Approx. outer \varnothing [mm]	Mutual capacitance		Coupling resistance		Current carrying with 3 loaded cores [A]	Copper weight [kg/km]	Approx. cable weight [kg/km]
			core/core approx. [nF/km]	core/screen approx. [nF/km]	at 1 MHz [Ω /km]	at 30 MHz [Ω /km]			
0222084	4 × 1,5	10,6	70	110	-	-	18	95	230
0222085	4 × 2,5	12,3	80	130	18	210	26	150	300
0222086	4 × 4	14,5	90	150	11	210	34	235	485
0222087	4 × 6	16,4	90	150	6	150	44	320	633
0222088	4 × 10	20,1	120	200	7	180	61	533	863
0222089	4 × 16	23,4	140	230	9	190	82	789	1291
0222090	4 × 25	27,0	120	210	4	95	108	1236	1862
0222091	4 × 35	30,7	150	260	3	85	135	1662	2611
0222092	4 × 50	36,1	190	320	2	40	168	2345	2955
0222093	4 × 70	42,3	190	320	2	45	207	3196	3953
0222094	4 × 95	47,7	250	410	1	50	250	4316	5304
0222095	4 × 120	51,9	-	-	-	-	292	5435	6604
0222096	4 × 150	57,5	-	-	-	-	335	6394	7043
0222097	4 × 185	61,1	-	-	-	-	382	7639	8384