TOPFLEX® -EMV-2YSLCY-J

for power supply connections to frequency converters, double screened, 0,6/1 kV, meter marking





Technical data

- Special motor power supply cable for frequency converters adapted to DIN VDE 0250
- Temperature range flexing +5°C to +70°C fixed installation -40°C to +70°C
- Nominal voltage U₀/U 600/1000 V
- Max. operating voltage
 A.C. and 3-phase 700/1200 V
 DC operation 900/1800 V
- Test voltage 4000 V
- Coupling resistance acc. to different cross sections max. 250 Ohm/km
- Minimum bending radius flexing for cable Ø: up to 12 mm: 10x cable Ø
 12 mm: 15x cable Ø fixed installation 4x cable Ø
- Radiation-resistance up to 80x10⁶ cJ/kg (up to 80 Mrad)



Cable structure

- Bare copper conductor, to DIN VDE 0295 cl.5, fine wire, BS 6360 cl.5, IEC 60228 cl.5
- Core insulation of polyethylene (PE)
- Core identification BN, BK, GY
- GN-YE conductor
- Cores stranded in concentric layers
- 1. Screen with special aluminium film
- 2. Tinned copper braided screen, approx. 85% coverage
- · Outer sheath of special PVC
- Sheath colour: transparent
- · With meter marking

Note

- G = with GN-YE conductor
- **) The current carrying capacity for permanent operation at ambient temperature of 30°C. For deviating ambient temperatures the conversion factors should be used and for further see the indication in DIN VDE 0298 part 4.
- AWG sizes are approximate equivalent values. The actual cross section is in mm².

Properties

- Low mutual capacitance
- Low coupling resistance for high electromagnetic compatibility
- This screened motor supply cable with low mutual capacitance of the single cores because of the special PE core insulation and low screen capacitance enable a low-loss transmission of the power compared to PVC-sheathed connecting cables
- Due to the optimal screening an interference-free operation of frequency converters is obtained
- The materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

Tests

- PVC self-extinguishing and flame retardant acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1-2 (equivalent DIN VDE 0472 part 804 test method B)
- Meets EMC requirements acc. to EN 55011 and DIN VDE 0875 part 11

Application

As a supply and connecting cable for medium mechanical stresses in fixed installations and forced movements in dry, moist and wet environments, not however for outdoor applications. Used in the automotive and food industries, environmental technology, packaging industry, chemical industry. **EMC** = Electromagnetic compatibility

To optimize the EMC features we recommend a large round contact of the copper braiding on both ends.

C ∈ Product conforms with Low-Voltage Directive 2014/35/EU.

Part no.	No.cores x cross-sec. mm²	Outer Ø app. mm		Core / Screen app. nF / km	at 1 MHz Ohm/km	at 30 MHz Ohm/km	Power ratings **) with 3 loaded cores in Amperes	Cop. weight kg/km	Weight app. kg / km	AWG-No.
22084	4 G 1.5	10,1	70	110	Olilli/Kill	Olilli/Kill	18	95,0	230,0	16
22085	4 G 2,5		80	130	18	210	26	150,0	300,0	14
		11,9			18					
22086	4 G 4	13,6	90	150	11	210	34	235,0	485,0	12
22087	4 G 6	15,3	90	150	6	150	44	320,0	633,0	10
22088	4 G 10	19,4	120	200	7	180	61	533,0	863,0	8
22089	4 G 16	22,4	120	210	9	190	82	789,0	1291,0	6
22090	4 G 25	26,7	140	230	4	95	108	1236,0	1862,0	4
22091	4 G 35	29,3	150	260	3	85	135	1662,0	2611,0	2
22092	4 G 50	34,1	190	320	2	40	168	2345,0	2955,0	1
22093	4 G 70	39,0	190	320	2	45	207	3196,0	3953,0	2/0
22094	4 G 95	44,0	250	410	1	50	250	4316,0	5304,0	3/0
22095	4 G 120	48,7					292	5435,0	6604,0	4/0
22096	4 G 150	54,2					335	6394,0	7043,0	300 kcmil
22097	4 G 185	60,6					382	7639,0	8384,0	350 kcmil

Dimensions and specifications may be changed without prior notice. (RD01)