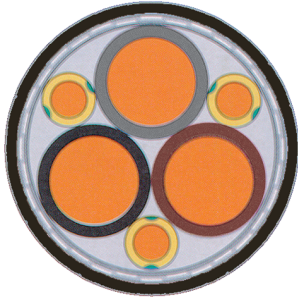


TOPFLEX®-EMV-UV-3 PLUS 2XSLCYK-J

for power supply connections to frequency converters, double screened, higher current carrying capacity, 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 +90°C
fixed installation -40°C to +90°C
- Permissible **operating temperature** at conductor +90°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 cross-linked polyethylene (XLPE)
- Core identification BK, BN, GY
- GN-YE conductor (divided into 3)
- 3±3 core design
- 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: black (RAL 9005)
- With meter marking

Note

- **)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
- Due to the optimal screening an interference-free operation of frequency converters is obtained
- The 3 PLUS-construction of motor power supply cables features a symmetrical 3-core design, improved in terms of EMC characteristics comparing favorably with a 4-core version. The protective conductor PE, divided into 3 is uniformly stranded in the interstices. This enables an extremely concentric structure.
- The minimum cross section of 0,75 mm² meets the requirements of DIN EN 60204 part 1
- UV-resistant
- Outdoor application
- This screened motor supply cable with low mutual capacitance of the single cores because of the special XLPE core insulation and low screen capacitance enable a low-loss transmission of the power compared to PVC-sheathed connecting cables
- The materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

Tests

- 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 and for outdoor applications, possible for installation in underground at 3x16+3G2,5 mm². Respecting the permissible operating temperature at the conductor of +90 °C permits a higher current carrying capacity than PE insulated power distribution cables. 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.

CE = Product conforms with Low-Voltage Directive 2014/35/EU.

Continuation ►

TOPFLEX®-EMV-UV-3 PLUS 2XSLCYK-J

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

Part no.	No. cores x cross-sec. mm ²	Outer Ø app. mm	Coupling resistance		Power ratings **) with 3 loaded cores in Amperes	Cop. weight kg / km	Weight app. kg / km	AWG-No.
			at 1 MHz Ohm/km	at 30 MHz Ohm/km				
24508	3 x 1,5 + 3 G 0,25	9,2			23	86,0	140,0	16
24509	3 x 2,5 + 3 G 0,5	10,8	18	210	32	144,0	220,0	14
24510	3 x 4 + 3 G 0,75	12,3	11	210	42	224,0	323,0	12
24511	3 x 6 + 3 G 1,0	14,0	6	150	54	298,0	420,0	10
24512	3 x 10 + 3 G 1,5	17,6	7	180	75	491,0	615,0	8
24513	3 x 16 + 3 G 2,5	20,4	9	190	100	723,0	819,0	6
24514	3 x 25 + 3 G 4,0	23,2	4	95	127	1138,0	1325,0	4
24515	3 x 35 + 3 G 6,0	26,1	3	85	158	1535,0	1718,0	2
24516	3 x 50 + 3 G 10,0	30,8	2	40	192	2208,0	2399,0	2
24517	3 x 70 + 3 G 10,0	34,2	2	45	246	2871,0	3056,0	2/0
24518	3 x 95 + 3 G 16,0	37,8	1	50	298	3953,0	4162,0	3/0
24519	3 x 120 + 3 G 16,0	42,6			346	4836,0	5075,0	4/0
24520	3 x 150 + 3 G 25,0	47,5			399	5412,0	6128,0	300 kcmil
24521	3 x 185 + 3 G 35,0	53,4			456	6969,0	7189,0	350 kcmil
24587	3 x 240 + 3 G 42,5	58,7			538	8540,0	9540,0	500 kcmil

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