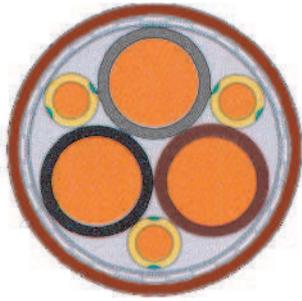


TOPFLEX®-EMV-3 PLUS 2YSLCY-J for power supply connections to frequency converters, double screened, 0,6/1kV



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** U_0/U 600/1000 V
- **Max. operating voltage**
A.C. and 3-phase 700/1200 V
DC operation 900/1800 V
- **Peak value** \hat{U} 1700 V
- **Test voltage** 2500 V
- Insulation resistance
min. 200 MOhm x km
- **Coupling resistance**
according to different cross-sections
max. 250 Ohm/km
- **Minimum bending radius**
fixed installation for outer \emptyset :
up to 12 mm: approx. 5x cable \emptyset
>12 to 20 mm: approx. 7,5x cable \emptyset
>20 mm: approx. 10x cable \emptyset
free-movement for outer \emptyset :
up to 12 mm: approx. 10x cable \emptyset
>12 to 20 mm: approx. 15x cable \emptyset
>20 mm: approx. 20x cable \emptyset
- **Radiation-resistance**
up to 80×10^6 cJ/kg (up to 80 Mrad)

Cable construction

- Plain copper, fine wire conductor according to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and/or IEC 60228 cl. 5
- Polyethylene (PE) core insulation
- Core colours: black, brown, grey, green-yellow (earth core divided into 3)
- 3+3-core structure
- Cores stranded in concentric layers
- 1. screening with special aluminium film
- 2. screening with copper braiding, tinned copper, coverage approx. 80%
- Transparent orange special PVC outer sheath
- Pos.no. 22380 = capacitance
core/core 270 nF/km
core/screen 520 nF/km

Properties

- Behavior in fire: Test to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1 (equivalent to DIN VDE 0472 part 804, test type B) low mutual capacitance, to DIN VDE 0472 part 504, test method B
- PE-insulation secures a lower dielectric loss, double potential strength, high longevity and low screen-interference currents
- Low mutual capacitance
- Meets EMC requirements according to EN 55011 and DIN VDE 0875 part 11
- Low coupling resistance for high electromagnetic compatibility
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers
- The screen must be connected at both ends and ensure large-area contact over the entire cable circumference for compliance with the functional interference requirements of EN 55011
- The minimum cross-section of 0,75² meets the requirements of DIN EN 60204 part 1

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. Used in the automotive and food industries, environmental technology, packaging industry, machine tools. Handling equipment, for SIMOVERT drives, they are particularly suitable for use with industrial pumps, ventilators, conveyor belts and air-conditioning installations and similar applications. Installation in hazardous areas
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.

EMC = Electromagnetic compatibility

The screen must be connected at both ends and ensure large-area contact over the entire cable circumference for compliance with the functional interference requirements of EN 55011.

CE = The product is conformed with the EC Low-Voltage Directive 73/23/EEC and 93/68/EEC.

| Part No. | No. cores x cross-sec. mm ² | Outer \emptyset ca. mm | Coupling resistance | | Power ratings **) | Cop. weight kg / km | Weight ca. kg / km | AWG-No. |
|----------|--|--------------------------|---------------------|--------------------|-------------------------------|---------------------|--------------------|---------|
| | | | with 1 MHz Ohm/km | with 30 MHz Ohm/km | with 3 loaded cores in Ampere | | | |
| 22368 | (3 x 1,5 + 3 x 0,25) | 10,2 | | | 18,0 | 86 | 140,0 | 16 |
| 22369 | (3 x 2,5 + 3 x 0,5) | 11,4 | 18,0 | 210,0 | 26,0 | 144 | 220,0 | 14 |
| 22370 | (3 x 4,0 + 3 x 0,75) | 13,0 | 11,0 | 210,0 | 34,0 | 224 | 323,0 | 12 |
| 22371 | (3 x 6,0 + 3 x 1,0) | 15,0 | 6,0 | 150,0 | 44,0 | 298 | 420,0 | 10 |
| 22372 | (3 x 10,0 + 3 x 1,5) | 18,4 | 7,0 | 180,0 | 61,0 | 491 | 615,0 | 8 |
| 22373 | (3 x 16,0 + 3 x 2,5) | 21,6 | 9,0 | 190,0 | 82,0 | 723 | 819,0 | 6 |
| 22374 | (3 x 25,0 + 3 x 4,0) | 25,3 | 4,0 | 95,0 | 108,0 | 1138 | 1325,0 | 4 |

Dimensions and specifications may be changed without prior notice.

Continuation ▶

**) 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.