TOPFLEX® 620 VFD EMC-preferred type, XLPE-insulated, flexible motor power supply cable, oil-resistant, NFPA 79 Edition 2007

Technical data

- PVC motor supply cable according to UL 1277 & 2277
- **Temperature range**
  UL/CSA TC -25°C to +90°C
  flexing -25°C to +105°C
  fixed installation -40°C to +105°C
- **Nominal voltage**
  TC 600 V
  WTTC 1000 V
  UL Flexible Motor Supply 1000 V
- **Test voltage** 4000 V
- **Minimum bending radius**
  Flexing 6x cable ø

Cable structure

- Tinned copper conductor, fine wire stranded with AWG measures
- XLPE core insulation
- Black cores with continuous white numbering
- Green-yellow ground in the outer layer
- Conductors stranded in layers with optimal lay-lengths
- Fleece
- 1. Screening with special aluminium foil
- 2. Screening with braid of tinned copper wires, optimal coverage, approx. 85%, and drain wire
- Separator
- Special PVC outer sheath
- Sheath colour - black (RAL 9005)
- With length marking in feet

Properties

- Self-extinguishing and flame retardant in accordance with CSA FT4
- The materials used in manufacture are free of silicone, cadmium and substances that impair paint wetting
- UV-resistant
- **Tests**
  UL:
  TC-ER, WTTC 1000 V, NFPA 79 2007, UL 1277 & 2277, OIL RES I & II, SUN RES, DIR BUR 90° C dry/wet, -40°C Cold Bend Test, -25°C Cold Impact Test, Class 1 Div. 2 per NEC Art. 336 & 501
  CSA:
  c (UL) CIC-TC FT4, AWM I/II A/B FT4

Note

- VFD = Variable Frequency Drive

Application

Flexible, extremly oil-resistant motor supply cable for modern servomotors; the double-shielding with special aluminium foil (100% coverage) and tinned copper braid (approx. 85% coverage) provides effective protection against electrical disturbance and the resultant failures. The XLPE insulation is ideal for applications with high voltage spikes and long cable runs due to its low capacitance. Approved by NFPA 79 and UL 2277 Flexible Motor Supply Cable standards for open,unprotected installation on cable trays and from cable trays to the machine. The special PVC jacket is extremly resistant to oil, coolants and solvents and hence the perfect solution for industrial applications with open installation, installation in pipes and in the ground.

EMC = Electromagnetic compatibility

To optimize EMC characteristics, we recommend a large contact area for the copper braiding around the entire circumference on both ends.

CE= The product conforms to the EG Low-Voltage Directive 2006/95/EG

Part no.	Number of cores	Outer Ø approx. mm	Cop. Weight kg / km	Weight approx. kg / km
16 AWG / 1,50 mm² (26/30)				
63392	4	12,6	79,6	202,3
14 AWG / 2,50 mm² (41/30)				
63393	4	13,8	159,0	265,0
12 AWG / 4 mm² (65/30)				
63394	4	15,2	231,1	339,0
10 AWG / 6 mm² (105/30)				
63395	4	17,2	293,6	461,0

Part no.	Number of cores	Outer Ø approx. mm	Cop. Weight kg / km	Weight approx. kg / km
8 AWG / 10 mm² (168/30)				
63396	4	23,8	445,0	712,9
6 AWG / 16 mm² (266/30)				
63397	4	26,2	671,5	946,9
4 AWG / 25 mm² (413/30)				
63398	4	29,5	891,9	1335,8
2 AWG / 35 mm² (665/30)				
63399	4	34,0	1359,0	1920,6