

# TOPFLEX® 600 VFD XLPE insulation, EMC-preferred type, flexible motor power supply cable, oil-resistant, NFPA 79 Ch. 4



## Technical data

- XLPE-insulated motor supply cable acc. to UL Std. 1277 and 2277
- **Temperature range**  
UL/CSA TC -40°C to +90°C  
flexing +5°C to +50°C  
static -40°C to +105°C
- **Nominal voltage**  
UL/CSA TC 600 V  
UL WTTC/Flexible Motor Supply/CSA 1000 V
- **Test voltage** 4000 V
- **Minimum bending radius**  
flexing 10x cable Ø
- **Coupling resistance**  
max. 250 Ohm/km

## Cable structure

- Finely stranded (Cl. K), tinned copper acc. to AWG standards
- Special XLPE conductor insulation
- Black conductors with continuous white numbering
- GN-YE conductor in the outer layer
- Conductors stranded in layers with optimal lay length
- Fleece
- 1. Special aluminum foil shield  
2. Braided, tinned copper shield, approx. 85% coverage
- Separator
- Special PVC outer jacket
- Black (RAL 9005) or orange (RAL 2003) jacket
- With length marking in feet

## Properties

- Self-extinguishing and flame retardant acc. to CSA FT4
- The materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers
- UV-resistant
- Direct burial rated
- Resistant to cleaning and disinfecting agents acc. to



## Tests

- **UL:**  
TC-ER (1277), WTTC (2277), ITC-ER & PLTC-ER (18-12 AWG), 44 (14-2 AWG), NFPA 79, Class I Div. 2 per NEC Art. 501, NEC Art. 336 & 392, Oil Res I/II, 90°C Dry/Wet, -40°C Cold Bend
- **CSA:**  
C22.2 No. 230 & 239 - c(UL) CIC-TC FT4  
C22.2 No. 210 - AWM I/II A/B FT4

## Note

- VFD = Variable Frequency Drive

## Application

Flexible, extremely oil-resistant, thermoset-insulated motor supply cable for modern servomotors; the double-shielding with special aluminum foil (100% coverage) and tinned copper braid (approx. 85% coverage) provides effective protection against electrical disturbances and the resultant failures. XLPE insulation makes this compliant with the requirements outlined in the current edition of NFPA 79 Chapter 4. The special PVC jacket is extremely resistant to oil, coolants and solvents making it the perfect solution for industrial applications. Open, unprotected installation in cable trays and from cable trays to the machine, as well as in pipes and direct burial are approved.

**EMC** = Electromagnetic compatibility

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

CE = The product conforms to EC Low-Voltage Directive 2006/95/EC.

## Jacket color black

Part no.	No. conductor x AWG No.	Cross section mm <sup>2</sup>	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
63139	4 x 18	0,824	11,8	60,0	201,0
63140	4 x 16	1,31	12,5	81,5	238,0
63137	4 x 14	2,08	14,7	113,2	327,0
63141	4 x 12	3,31	15,7	163,3	409,0
63142	4 x 10	5,26	17,7	254,7	536,0
63143	4 x 8	8,37	23,0	389,9	856,0
63144	4 x 6	13,3	24,7	600,7	1131,0
63145	4 x 4	21,2	27,7	913,3	1518,0
63146	4 x 2	33,6	31,8	1383,1	2106,0

## Jacket color orange

Part no.	No. conductor x AWG No.	Cross section mm <sup>2</sup>	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
63147	4 x 18	0,824	11,8	60,0	201,0
63148	4 x 16	1,31	12,5	81,5	238,0
63149	4 x 14	2,08	14,7	113,2	327,0
63150	4 x 12	3,31	15,7	163,3	409,0
63151	4 x 10	5,26	17,7	254,7	536,0
63152	4 x 8	8,37	23,0	389,9	856,0
63153	4 x 6	13,3	24,7	600,7	1131,0
63154	4 x 4	21,2	27,7	913,3	1518,0
63155	4 x 2	33,6	31,8	1383,1	2106,0

Dimensions and specifications may be changed without prior notice.



Suitable accessories can be found in Chapter X.

- Cable Gland - HELUTOP® HT-MS-EP4