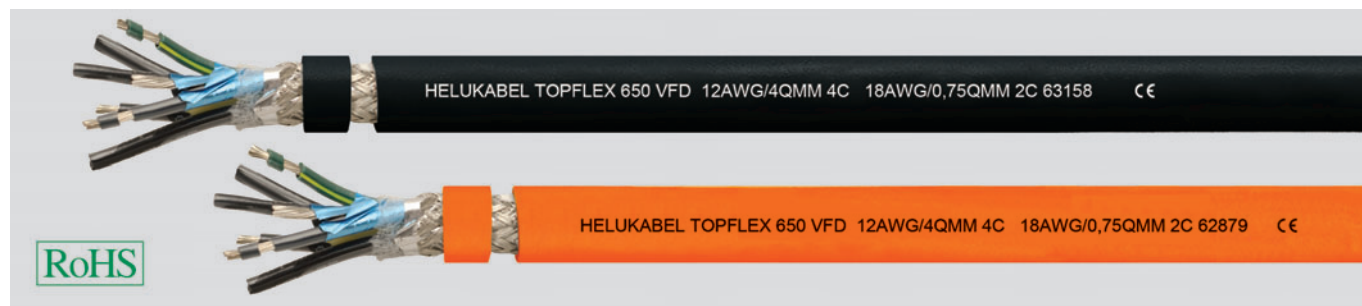


# TOPFLEX® 650 VFD

EMC-preferred type, flexible motor power supply cable with control cores, oil-resistant, NFPA 79 Edition 2007



new



## Technical data

- TPE motor supply cable according to UL 1277
- **Temperature range**  
Flexing -25°C to +105°C
- **Nominal voltage**  
TC 600 V  
WTTC 1000 V
- **Test voltage**  
Power supply cores 4000 V  
Control cores 2000 V
- **Minimum bending radius**  
Flexing 6x cable Ø
- **Coupling resistance**  
Max. 250 Ohm/km

## Cable structure

- Tinned copper conductor, fine wire stranded, with AWG measures
- Special PVC core insulation with transparent nylon skin
- Black supply cores with continuous white numbering
- Green-yellow earth core in the outer layer
- 2 black control cores with marking 5 and 6
- Control cores screened in pairs with plastic-coated aluminium foil, tinned drain wire
- Control cores stranded in pairs and laid up in layers with optimal lay-length with the power supply cores
- 1. Screening with plastic-coated aluminium foil
- 2. Screening from tinned Cu-braid, optimal coverage approx. 85%
- Separator
- Special TPE outer jacket
- Sheath colour - black (RAL 9005) or orange (RAL 2003)
- 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, MTW, NFPA 79 2007, UL 1277, PLTC-ER (AWG 18 - AWG 12), ITC-ER (AWG 18 - AWG 12) OIL RES I & II, 90° C dry / 75° C wet  
Class 1 Div. 2 per NEC Art. 336, 392, 501  
Cold Bend Test -40°C
- **CSA:**  
c (UL) CIC-TC FT4  
AWM I/II A/B FT4

## Note

- VFD = Variable Frequency Drive

## Application

Flexible, extremely oil-resistant motor supply cable for modern servomotors; the double-screening with special aluminium foil (100% coverage) and tinned copper braid (approx. 85% coverage) provides effective protection against electrical disturbance and the resultant failures. Approved to NFPA 79 2007 for open, unprotected installation on cable trays and from cable trays to the machine. The special PVC sheath is extremely resistant to oil, coolants and solvents and hence the perfect solution for industrial applications with open installation, installation in pipes and in the earth.

## EMC = Electromagnetic compatibility

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

CE = The product is conformed with the EC Low-Voltage Directive 2006/95/EG.

### Sheath colour black

Part No.	Number of cores	Outer Ø approx. mm	Cop.Weight kg / km	Weight approx. kg / km
16 AWG / 1,50 mm² (26/30)				
63156	4c/16 + 2c/18	13,0	88,0	259,0
14 AWG / 2,50 mm² (41/30)				
63157	4c/14 + 2c/18	14,0	133,0	370,0
63138	4c/14 + 2c/14	14,6	159,0	399,0
12 AWG / 4 mm² (65/30)				
63158	4c/12 + 2c/18	15,3	197,0	435,0
63159	4c/12 + 2c/14	15,7	224,0	466,0
10 AWG / 6 mm² (105/30)				
63160	4c/10 + 2c/14	18,2	301,0	703,0
8 AWG / 10 mm² (168/30)				
63161	4c/8 + 2c/14	24,1	457,0	901,0
6 AWG / 16 mm² (266/30)				
63162	4c/6 + 2c/14	27,4	615,0	1275,0
4 AWG / 25 mm² (413/30)				
63163	4c/4 + 2c/14	33,4	1450,0	1861,0

### Sheath colour orange, Desina

Part No.	Number of cores	Outer Ø approx. mm	Cop.Weight kg / km	Weight approx. kg / km
16 AWG / 1,50 mm² (26/30)				
62876	4c/16 + 2c/18	13,0	88,0	259,0
14 AWG / 2,50 mm² (41/30)				
62877	4c/14 + 2c/18	14,0	133,0	370,0
62878	4c/14 + 2c/14	14,6	159,0	399,0
12 AWG / 4 mm² (65/30)				
62879	4c/12 + 2c/18	15,3	197,0	435,0
62880	4c/12 + 2c/14	15,7	224,0	466,0
10 AWG / 6 mm² (105/30)				
62881	4c/10 + 2c/14	18,2	301,0	703,0
8 AWG / 10 mm² (168/30)				
62882	4c/8 + 2c/14	24,1	457,0	901,0
6 AWG / 16 mm² (266/30)				
62883	4c/6 + 2c/14	27,4	615,0	1275,0
4 AWG / 25 mm² (413/30)				
62884	4c/4 + 2c/14	33,4	1450,0	1861,0

Dimensions and specifications may be changed without prior notice. (RN01)