

# TOPSERV® 600 VFD EMC-preferred type, flexible motor power supply cable, oil-resistant, NFPA 79 Edition 2007



## Technical data

- PVC motor supply cable according to UL 1277
- **Temperature range**  
-25°C to +90°C
- **Nominal voltage**  
TC 600 V  
WTTC 1000 V
- **Test voltage** 4000 V
- **Minimum bending radius**  
Flexing 5x cable ø  
Permanently flexing 7,5 cable ø
- **Coupling resistance**  
Max. 250 Ohm/km

## Cable structure

- Tinned copper conductor, extra fine wire stranded with AWG measures
- Special PVC core insulation with transparent nylon skin
- Black cores with continuous white numbering
- Green-yellow earth core in the outer layer
- Cores 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%
- Separator
- Special PVC 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, 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 TPE 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 conforms to the EG 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
18 AWG / 1 mm² (41/34)				
62607	4	9,9	38,0	163,0
5116 AWG / 1,50 mm² (65/34)				
62608	4	11,4	51,0	184,0
14 AWG / 2,50 mm² (105/34)				
62609	4	12,5	80,0	197,0
12 AWG / 4 mm² (168/34)				
62610	4	14,0	127,0	266,0
10 AWG / 6 mm² (259/34)				
62611	4	17,1	230,0	401,0
8 AWG / 10 mm² (413/34)				
62612	4	22,3	384,0	669,0
6 AWG / 16 mm² (665/34)				
62613	4	25,4	614,0	917,0
4 AWG / 25 mm² (1064/34)				
62614	4	30,1	960,0	1364,0
2 AWG / 35 mm² (1666/34)				
62615	4	35,3	1344,0	1990,0

### Sheath colour orange, Desina

Part No.	Number of cores	Outer Ø approx. mm	Cop.Weight kg / km	Weight approx. kg / km
18 AWG / 1 mm² (41/34)				
62616	4	9,9	38,0	163,0
5116 AWG / 1,50 mm² (65/34)				
62617	4	11,4	51,0	184,0
14 AWG / 2,50 mm² (105/34)				
62618	4	12,5	80,0	197,0
12 AWG / 4 mm² (168/34)				
62619	4	14,0	127,0	266,0
10 AWG / 6 mm² (259/34)				
62620	4	17,1	230,0	401,0
8 AWG / 10 mm² (413/34)				
62621	4	22,3	384,0	669,0
6 AWG / 16 mm² (665/34)				
62622	4	25,4	614,0	917,0
4 AWG / 25 mm² (1064/34)				
62623	4	30,1	960,0	1364,0
2 AWG / 35 mm² (1666/34)				
62624	4	35,3	1344,0	1990,0

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