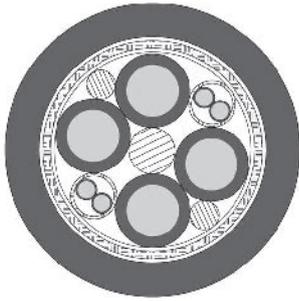


TOPSERV® 155 / 156 PUR, high flexible drag chain servo cable, 0,6/1kV, low capacitance, halogen-free



Technical data

- Special PUR drag chain cable acc. to UL AWM Style 20235 and CSA AWM
- Based on DIN VDE 0293, 0295, 0250, 0281
- **Temperature range**
flexing -20°C to +80°C
fixed installation -40°C to +80°C
- **Nominal voltage**
acc. to UL 1000 V
acc. to VDE
power supply cores U_0/U 600/1000 V
control cores U_0/U 300/500 V
- **A.c. test voltage**, 50 Hz
power supply cores 4000 V
control cores 1000 V
- **Insulation resistance**
min. 20 MΩm x km
- **Coupling resistance**
max. 250 Ωm/km
- **Minimum bending radius**
approx. 7,5x cable diameters

Cable construction

- TOPSERV® 155** (with 1 control pair)
- Bare copper, fine wire conductors in acc. with DIN VDE 0295 cl. 6 and IEC 60228 cl. 6
 - Polypropylen core insulation, halogen-free
 - Black power supply cores with imprint U1, V2, W3
 - Green-yellow earth core
 - Black control cores with imprint BR1, BR2
 - Screening of the control cores in pairs wrapped with plastic aluminium foil, copper drain-wire tinned and tinned copper braided screening, approx. coverage 85%
 - Control cores stranded in pairs and laid up in layers together with the power supply cores with optimal lay length and stabilising filler
 - Fleece wrapping facilitates sliding
 - Overall screening of tinned copper wire braid, coverage approx. 85%
 - PUR outer sheath
 - Sheath colour orange (RAL 2003) according to DESINA®
- TOPSERV® 156** (with 2 or 4 control pairs)
- Construction as per TOPSERV® 155
 - Except 2 or 4 screened control pairs
 - Black control cores with white imprint 5-6 and 7-8

Properties

- PUR outer sheath: low adhesion, flame retardant, extremely abrasion resistant, halogen-free, resistant to UV, oil, hydrolysis and microbial attack
- PUR sheath self-extinguishing and flame retardant, test method B acc. to VDE 0472 part 804 and IEC 60332-1
- The use of polypropylene for core insulation means that thanks to the reduction in cable-related losses these low capacitance motor cables can have longer cable lengths between the converter and the motor than with comparable cables with PVC insulation
- Optimum compliance with requirements for electromagnetic compatibility (EMC) by approx. 85% coverage from the braided screen
- These cables are produced to high quality specifications and conform to the DESINA®-standard

Note

- **Part No. 700402** with colour code
2,5 mm² = br, bu, bl, gnge
0,34 mm² = DIN 47100
- Brackets () indicate screen.
- Desina®: Explanation: see introduction.

Application

The combination of supply cores with the control cores for the braking function and the thermal protection in these cables is ideal. Precision servomotors, as used today in many areas of highly-automated manufacturing processes, call for high-quality, reliable and long-lasting cables. These requirements are met to a high degree by these cables. The cables have an additional overall screen to ensure EMC compatibility, i.e. for protection against electromagnetic interference. They are manufactured based on specifications from leading manufacturers of servo drives and control systems, as well as in compliance with various VDE standards.

EMC = Electromagnetic compatibility

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

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

TOPSERV® 155 (1 control pair) EMC

Part No.	No. cores x cross-sec. mm ²	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
79562	(4 x 1,5 + (2 x 1,0))	11,7	138,0	245,0	16
700501	(4 x 1,5 + (2 x 1,5))	12,5	148,0	255,0	16
79563	(4 x 2,5 + (2 x 1,0))	13,1	177,0	329,0	14
700502	(4 x 2,5 + (2 x 1,5))	13,8	187,0	339,0	14
79564	(4 x 4,0 + (2 x 1,0))	14,4	258,0	462,0	12
700503	(4 x 4,0 + (2 x 1,5))	14,9	168,0	472,0	12
79565	(4 x 6,0 + (2 x 1,0))	15,6	349,0	596,0	10
700504	(4 x 6,0 + (2 x 1,5))	15,9	359,0	606,0	10

TOPSERV® 156 (2 and 4 respectively control pairs) EMC

Part No.	No. cores x cross-sec. mm ²	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
79571	(4 x 1,5 + 2 x (2 x 1,0))	12,8	182,0	262,0	16
700510	(4 x 1,5 + 2 x (2 x 1,5))	13,6	192,0	272,0	16
700402	(4 x 2,5 + 4 x (2 x 0,34))	15,3	177,0	340,0	14
79572	(4 x 2,5 + 2 x (2 x 1,0))	14,1	229,0	336,0	14
700511	(4 x 2,5 + 2 x (2 x 1,5))	14,8	239,0	346,0	14
79573	(4 x 4,0 + 2 x (2 x 1,0))	16,0	312,0	475,0	12
700512	(4 x 4,0 + 2 x (2 x 1,5))	16,5	322,0	485,0	12
79574	(4 x 6,0 + 2 x (2 x 1,0))	18,1	437,0	606,0	10
700513	(4 x 6,0 + 2 x (2 x 1,5))	18,1	447,0	616,0	10
79575	(4 x 10,0 + 2 x (2 x 1,0))	18,8	609,0	905,0	8

Dimensions and specifications may be changed without prior notice.

Continuation ▶