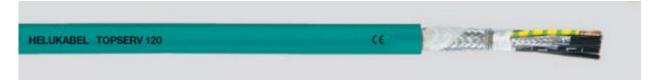


# TOPSERV® 110/120 PUR servo cable with 1 or 2 signal pairs 0,6/1kV, high flexible, cable for drag chain, EMC preferred type





### Technical data

Special-PUR drag chain cable adapted to DIN VDE 0295, 0550, DIN VDE 0285-525-1-1 /DIN EN 50525-1

### Temperature range

flexing -30°C to +80°C

fixed installation -40°C to +80°C

#### Nominal voltage

power supply cores U<sub>0</sub>/U 600/1000 V control cores U<sub>n</sub>/U 300/500 V

### Test voltage

power supply cores 4000 V

# control cores 1000V

Power rating

to DIN VDE 0298 part 4

Insulation resistance

min. 20 MOhm x km

Minimum bending radius

flexing 10x cable Ø

fixed installation 5x cable Ø

Coupling resistance

max. 250 Ohm/km

#### Cable structure

Bare copper-conductor, to DIN VDE 0295 cl. 6, extra fine-wire Core insulation of halogen-free PP Core identification

#### power supply cores

core 1: black with imprint U/L1/C/L+ core 2: black with imprint V/L2

core 3: black with imprint W/L3/D/L-

#### control sores

#### TOPSERV® 110

core 1 black with imprint BR1 core 2 black witt imprint BR2

#### TOPSERV® 120

pair 1: black with number no. BR1 pair 2: black with number no. BR2

**GN-YE** conductor

tinned drain wire and tinned Cu braid Control cores stranded in pairs and laid up in layer together with the power supply cores

Foil wrapping

Overall screening of tinned cu braid, visible coverage min. 85%

Fleece wrapping Outer sheath of PUR

Sheath colour petrol (RAL 5018)

## **Properties**

low capacitance by using PP as core insulation PUR-outer sheath low adhesion, resistan to hydrolysis and microbial attack, halogeen-free These highlt flexible cables are fitted with an additional overall screen to assure EMC compatibility, i.e. the protection against electromagnetic interference The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

For extreme applications extrending beyond standard solutions we recommend that you Screening of the control cores in pairs, request our questionnaire, which has been especially designed for energy supply systems. Please observe applicable intallation regulations for use in energy supply chains. AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>. Servo-cable and Freedback-cable with UL-approval to e.g. Siemens, Bosch Rexroth, Lenze etc. can be found in chapter N ...

#### **Application**

The combination of feeder 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 as is the electromagnetic compatibillity (EMC). These cables can also be used as drag chain cables. Manufacturing is based on specifications from renowned manufacturers of servo-actuators and servo-controls as well as in accordance with diverse VDE standards. Application for system SIMODRIVE.

EMC = Electromagnetic compatibillity

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

**C**€= The product is conformed with the EC Low- Voltage Directive 2006/95/EC.







# TOPSERV® 110 (1 pair screened and overall screening)

Part No.	No. cores x cross-sec.	Outer Ø	Cop. weight	Weight approx.	AWG-No.
	mm²	approx. mm	kg/km	kg/km	
71491	(4 G 1,5 + (2 x 1,0))	11,5	139,0	211,0	16
71493	(4 G 2,5 + (2 x 1,0))	13,6	188,0	273,0	14
71705	(4 G 4 + (2 x 1,0))	14,6	260,0	352,0	12
71706	(4 G 6 + (2 x 1,0))	16,0	360,0	500,0	10
71707	(4 G 10 + (2 x 1,0))	20,2	590,0	753,0	8
71708	(4 G 16 + (2 x 1,0))	23,8	845,0	1061,0	6
71709	(4 G 25 + (2 x 1,0))	27,0	1320,0	1499,0	4
71710	(4 G 35 + (2 x 1,0))	31,9	1840,0	1992,0	2
71711	(4 G 50 + (2 x 1,0))	36,7	2530,0	2880,0	1

# TOPSERV® 120 (2 pairs individually screened and overall screening)

Part No.	No. cores x cross-sec.	Outer Ø	Cop. weight	Weight approx.	AWG-No.
	mm²	approx. mm	kg/km	kg/km	
71990	(4 G 1,5 + 2 x (2 x 1,0))	12,6	186,0	242,0	16
71991	(4 G 2,5 + 2 x (2 x 1,0))	15,0	231,0	316,0	14
71992	(4 G 4 + 2 x (2 x 1,0))	16,0	308,0	415,0	12
71993	(4 G 6 + 2 x (2 x 1,0))	18,2	420,0	574,0	10
71994	(4 G 10 + 2 x (2 x 1,0))	22,8	647,0	805,0	8
71995	(4 G 16 + 2 x (2 x 1,0))	25,0	918,0	1122,0	6
71996	(4 G 25 + 2 x (2 x 1,0))	27,7	1400,0	1584,0	4
72106	(4 G 35 + 2 x (2 x 1,0))	32,0	1882,0	2185,0	2
71997	(4 G 50 + 2 x (2 x 1,0))	37,0	2574,0	2977,0	1

