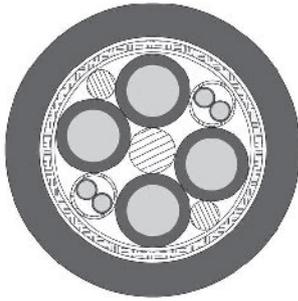


TOPSERV® 222 H / 223 H

halogenfree, flexible servo cable, 0,6/1kV, EMC-preferred type



Technical data

- Halogen-free servo cable adapted to DIN VDE 0295, 0207, 0472, IEC 60754 1/-2, IEC 60332-1
- **Temperature range**
flexing -5°C to +70°C
fixed installation -40°C to +70°C
- **Mutual capacitance**
TOPSERV®; 222 H: approx. 130 nF/km
TOPSERV®; 223 H: approx. 70 nF/km
- **Nominal voltage**
U₀/U 600/1000 V
Part Nos. 75362, 73976
U₀/U 300/500 V
- **A.c. test voltage**, 50 Hz
power supply cores 4000 V
control cores 1000 V
- **Coupling resistance**
max. 250 Ohm/km
- **Minimum bending radius**
for flexible installation
approx. 15x cable Ø

Cable construction

TOPSERV® 222 H

- Bare copper, fine wire in acc. with DIN VDE 0295 cl. 5 or IEC 60228 cl. 5
- Core insulation of halogen-free polymer HI2
- Black power supply cores with imprint U1, V2, W3
- Green-yellow earth core
- Black control cores with white imprint 5-6 and 7-8
- Screening of the control cores in pairs wrapped with plastic aluminium-covered polyester foil, copper drain-wire tinned and tinned copper braided screening, approx. coverage 85% polyester foil wrapping over screen
- Control cores stranded in pairs together with the power supply cores in layers with optimal lay-length
- Taping of polyester foil
- Overall screening of tinned copper braid, coverage approx. 85%
- Halogen-free HM2 polymer sheath to DIN VDE 0207 part 24
- Sheath colour grey (RAL 7001)

TOPSERV® 223 H

- Construction as above, except
 - Core insulation of polyethylene (PE), compound type 2Y to DIN VDE 0207 part 2
 - Sheath colour grey (RAL 7001)
- Part Nos. 73976, 75362 (300/500V)**
- Construction as TOPSERV® 223 H, except
 - Control cores white, brown, black, red
 - Sheath colour petrol (RAL 5018)

Properties

- Halogen-free: to DIN VDE 0472 part 815 and IEC 60754-1
- Flame-test: flame retardant and self-extinguishing acc. to IEC 60332-1 and DIN VDE 0472 part 804 test method B (T 223 H), test method C (T 222 H)
- Corrosiveness of combustion gases: Complies with IEC 60754-2 and DIN VDE part 813 and HD 602 - no generation of corrosive gases in the event of fire
- Smoke density: low (low smoke emission)
- Oxygen index: 30%
- Optimum compliance with requirements for electromagnetic compatibility (EMC) by approx. 85% coverage from the braided screen

TOPSERV® 223 H

This type is an economical alternative to TOPSERV® 222-H. Compared with HI2, PVC and TPE cores, its PE-insulated cores have significantly better capacitance values, and thus provide greater reliability with regard to signal transmission.

Note

- Brackets () indicate screen.

Application

These halogen-free, flame retardant cables provide an ideal combination of supply cores with the control cores for the braking function and thermal protection. Precision servomotors, as used today in many areas of highly-automated manufacturing processes, call for high-quality, reliable and long-lasting cables. 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® 222H (1 control pair)

Part No.	No. cores x cross-sec. mm ²	Outer Ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
76333	(4 x 1,5 + 2 x (2 x 1,0))	12,8	180,0	250,0	16
76334	(4 x 2,5 + 2 x (2 x 1,0))	14,1	230,0	340,0	14
76335	(4 x 4,0 + 2 x (2 x 1,0))	16,0	329,0	450,0	12
76336	(4 x 6,0 + 2 x (2 x 1,0))	18,1	409,0	550,0	10
76337	(4 x 10,0 + 2 x (2 x 1,0))	18,8	600,0	860,0	8
76338	(4 x 16,0 + 2 x (2 x 1,0))	21,8	865,0	1170,0	6
76339	(4 x 25,0 + 2 x (2 x 1,0))	26,7	1258,0	1670,0	4
76340	(4 x 35,0 + 2 x (2 x 1,0))	30,8	1677,0	2310,0	2
76341	(4 x 50,0 + 2 x (2 x 1,0))	34,7	2160,0	2850,0	1

TOPSERV® 223H (2 control pairs)

Part No.	No. cores x cross-sec. mm ²	Outer Ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
75362	(4 x 1,5 + 2 x (2 x 0,5))	12,3	160,0	239,0	16
73976	(4 x 1,5 + 2 x (2 x 0,75))	12,7	169,0	242,0	16
76533	(4 x 1,5 + 2 x (2 x 1,0))	12,8	180,0	250,0	16
76534	(4 x 2,5 + (4 x 1,0))	14,1	230,0	340,0	14
76535	(4 x 4,0 + 2 x (2 x 1,0))	16,0	329,0	450,0	12
76536	(4 x 6,0 + 2 x (2 x 1,0))	18,1	409,0	550,0	10
76537	(4 x 10,0 + 2 x (2 x 1,0))	18,8	600,0	860,0	8
76538	(4 x 16,0 + 2 x (2 x 1,0))	21,8	865,0	1170,0	6
76539	(4 x 25,0 + 2 x (2 x 1,0))	26,7	1258,0	1670,0	4
76540	(4 x 35,0 + 2 x (2 x 1,0))	30,8	1677,0	2310,0	2
76541	(4 x 50,0 + 2 x (2 x 1,0))	34,7	2160,0	2850,0	1

Dimensions and specifications may be changed without prior notice.