HELUCHAIN® TOPSERV® 221-TPE UL/CSA





TECHNICAL DATA

TPE Motor and servo cable acc. to UL Std. 758 (AWM) Style 21387

Temperature range	flexible -40°C to +90°C fixed -50°C to +90°C
Nominal voltage	VDE AC U0/U 600/1000 V UL (AWM) AC 1000 V
AC Test voltage	3000 V
Minimum bending radius	flexible 6.8 x outer Ø fixed 4 x outer Ø

CABLE STRUCTURE

- Copper wire bare, extra finely stranded acc. to DIN VDE 0295 Class 6 / IEC 60228 Class 6
- Core insulation: 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 cores
  Pair 1: black-BR1, white-BR2
- G = with protective conductor GN-YE,
  x = without protective conductor
- Screened cores: control cores in pairs, helically screen with tinned copper wires, approx. Coverage 95%
- Power supply cores laid up with optimal lay length and stabilising filler
- Ripcord
- Inner sheath: TPE, extruded filler
- Screen: braided screen of tinned copper wires, approx. Coverage 85%
- Polyester fleece wrapped
- Outer sheath: TPE
- Sheath colour: see table
- Length marking: in metres

PROPERTIES

- resistant to: oil, grease, coolants, hydraulic fluids, microbes, numerous alkalis and solvents, as well as cleaning agents and disinfectants
- low adhesion
- low capacity
- suitable for drag chain application
- Drag chain parameters
- Acceleration (max.): 50 m/s²
- Velocity (max.), gliding: 5 m/s
- Traverse path (max.): 100 m
- The materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2, UL VW-1, CSA FT1
- certifications and approvals:
- ECOLAB®

APPLICATION

This TPE-drag chain cable is particularly suitable for use in machinery, plant engineering, robotics, as well as automation, drive, control, and production technology. A key advantage lies in the TPE inner sheath, which is specially designed for long travel distances and high accelerations. In addition, a ripcord is integrated into the inner sheath, enabling faster and easier processing. Furthermore, the cable stands out due to highest abrasion resistance and oil resistance, ensuring reliable performance even under intensive mechanical stress. Thanks to the very robust and elastic TPE sheath, it offers a long service life, reduces downtime, and helps increase system availability.

NOTES

- Brackets ( ) mean screen
- for use in energy supply systems:
- 1) the assembly instructions must be observed
- 2) for special applications, we recommend contacting us and using our data entry form for energy supply systems

Part no.	No. cores x cross-sec. mm²	for system	Sheath colour	Outer-Ø approx. mm	Cu factor per km	Weight kg/km, approx
11029602	(4G1,5 + (2x1,5)D)C	Divers	black	13.3	146.7	252.0
11028112	(4G2,5 + (2x1,5)D)C	Divers	black	14.2	191.5	308.0
11028125	(4G4 + (2x1,5)D)C	Divers	black	15.8	254.7	396.0
11028128	(4G6 + (2x1,5)D)C	Divers	black	17.4	337.2	495.0

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