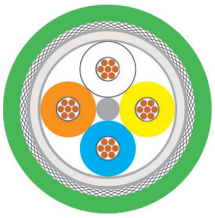
HELUCHAIN® HELUKAT® PROFInet C CAT.5e SF/UTP TPE

high abrasion resistance, with inner sheath for long travel distances



TECHNICAL DATA

TPE drag chain cable acc. to UL-Std. 758 (AWM) Style 22541

Temperature range	flexible -35°C to +90°C fixed -50°C to +90°C
Nominal voltage	UL (AWM) AC 1000 V
Peak operating voltage	125 V (not for high power current installation purposes)
Test voltage	3000 V
Conductor resistance at 20°C	max. 55.2 Ohm/km
Insulation resistance	min. 5.0 GOhm x km
Mutual capacitance core/core	at 800 Hz, approx. 50 pF/m
Rel. Velocity of Propagation	approx. 67%
Characteristic impedance	at 100 MHz, 100 Ohm ± 5 Ohm
Minimum bending radius	flexible 7.5x Outer-Ø fixed installation 4x Outer-Ø

CABLE STRUCTURE

- Copper wire bare
- Core insulation: PP
- Core identification: white, yellow, blue, orange
- Cores twisted into a star quad with optimal lay lengths
- Foil wrapping
- Inner sheath: TPE, undyed
- Screen: plastic-coated aluminium foil (St), braided screen of tinned copper wires, approx. coverage 85%
- Outer sheath: TPE
- Sheath colour: green (RAL 6018)
- Length marking: in metres

PROPERTIES

- resistant to: hydrolysis, microbes
- suitable for use in drag chains
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

TESTS

- oil-resistant acc. to DIN VDE 0473-811-404 / DIN EN 60811-404 / IEC 60811-404
- Cable Flame Test acc. to UL Std. 1581 Sec. 1061

APPLICATION

The HELUCHAIN® HELUKAT® PROFInet C CAT.5e SF/UTP TPE features an additional inner sheath for applications with long travel distances and the highest requirements for acceleration, abrasion resistance, and minimum bending radii. Has an extended functional temperature range while moving of -35°C to +90°C.

NOTES

- Conductor sizes are based on the AWG measurement system, metric conductor sizes (mm²) are approximated and are for reference only

TYPICAL VALUES

Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
Attenuation (dB/100m)	1.5	4.0	6.5	8.5	9.6	12.4	18.5	24.5
NEXT (dB)	85.0	71.5	66.7	63.3	61.4	60.8	53.3	49.2

Part no.	No. cores x AWG-No.	Cross-sec. mm², approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
11027791	2 x 2 x AWG 22 /19	0.38	7.2	37.0	75.0