

# HELUCHAIN® HELUKAT® 500S CAT.6A S/SFTP TPE



high abrasion resistance with a tight bending radius



HELUCHAIN® HELUKAT® INDUSTRIAL ETHERNET TPE CAT 6A 4x2x0,15mm<sup>2</sup> UL22541 CE

## 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. 134.0 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. 70%
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: colour coded, pairs:
  - No. 1: white-blue / blue
  - No. 2: white-orange / orange
  - No. 3: white-green / green
  - No. 4: white-brown / brown
- Cores stranded to form a pair
- Foil wrapping of the pairs
- Screening element: pairs, plastic-coated copper foil (St), braided screen of tinned copper wires, approx. coverage 85%

- 4 pairs stranded into bundle with optimal lay lengths
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- Outer sheath: TPE
- Sheath colour: violet (RAL 4001)
- 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® 500S CAT.6A S/SFTP TP 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 (mm<sup>2</sup>) are approximated and are for reference only

## TYPICAL VALUES

Frequency (MHz)	1	4	10	16	20	31.25	62.5	100	155	200	250	300	400	500
Attenuation (dB/100m)	2.3	4.7	7.1	9.1	10.2	12.7	18.2	23.3	29.2	33.4	37.6	42.6	48.4	54.6
NEXT (dB)	125.3	116.5	112.2	111.5	110.6	109.8	109.4	109.2	108.5	108.3	108.0	107.8	107.6	106.9

Part no.	No. cores x AWG-No.	Cross-sec. mm <sup>2</sup> , approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
11027794	4 x 2 x AWG 26 / 19	0.15	9.8	71.0	137.0