

# HELUKAT® 100T CAT.5e S/UTP PUR TORSION

flame-retardant



## TECHNICAL DATA

Industrial Ethernet cable / Cat. 5e acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-6, UL-Std. 758 (AWM) Style 20549

<b>Temperature range</b>	flexible -30°C to +70°C fixed installation -40°C to +80°C UL (AWM) to +80°C
<b>Peak operating voltage</b>	125 V (not for high power current installation purposes)
<b>Test voltage core/core</b>	2000 V
<b>Conductor resistance at 20°C</b>	max. 59.4 Ohm/km
<b>Loop resistance at 20°C</b>	max. 118.8 Ohm/km
<b>Insulation resistance</b>	min. 0.5 GOhm x km
<b>Mutual capacitance core/core</b>	at 800 Hz, approx. 52 pF/m
<b>Rel. Velocity of Propagation</b>	approx. 74%
<b>Characteristic impedance</b>	at 1 to 100 MHz, 100 Ohm ± 5 Ohm
<b>Caloric load</b>	approx. 0.45 MJ/m
<b>Minimum bending radius</b>	flexible 8x Outer-Ø fixed installation 4x Outer-Ø

## ■ CABLE STRUCTURE

- Copper wire tinned, AWG sizes
- Core insulation: Foam PE
- Core identification: white, yellow, blue, orange
- Cores twisted into a star quad with optimal lay lengths
- Foil wrapping
- Screen: braided screen of tinned copper wires
- Outer sheath: PUR
- Sheath colour: green

## ■ TYPICAL VALUES

Frequency (MHz)	10	16	62.5	100
Attenuation (dB/100m)	6.8	8.8	18.6	24.1
NEXT (dB)	76.1	66.6	60.8	54.0
ACR (dB/100m)	69.3	57.8	42.2	29.9

- Length marking: in metres

## ■ PROPERTIES

- resistant to: oil, hydrolysis, microbes, coolants, greases, UV radiation (SUN RES)
- abrasion-resistant, notch-resistant, tear-resistant, cut-resistant, wear-resistant, low adhesion
- torsion rated
- halogen-free
- flame-retardant

## ■ TESTS

- halogen-free acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2, CSA FT2
- certifications and approvals: EAC

## ■ APPLICATION

HELUKAT 100T CAT.5e S/UTP PUR TORSION offers excellent transmission characteristics and is designed for applications with torsion loads. The cable listed here corresponds to the classification for continuous movement.

## ■ NOTES

- Conductor sizes are based on the AWG measurement system, metric conductor sizes (mm<sup>2</sup>) are approximated and are for reference only

Part no.	No. cores x AWG-No.	Cross-sec. mm <sup>2</sup> , approx.	Conductor Ø mm, approx.	Core Ø mm, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
802186	2 x 2 x AWG 22 / 19	0.38	0.75	1.5	6.5	32.0	54.0