HELUKAT® 100S CAT.5e 30 V 4C SF/UTP PUR CHAIN























TECHNICAL DATA

Industrial Ethernet cable / Cat. 5e acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-6, DIN EN 50288-2-2, UL-Std. 758 (AWM) Style 20963

Temperature range flexible -30°C to +60°C

fixed installation -40°C to +80°C

at 800 Hz, approx. 50 pF/m

UL (AWM) to +80°C

Peak operating voltage 125 V (not for high power current installation purposes)

Test voltage core/core

Conductor resistance at 20°C max. 140.0 Ohm/km Loop resistance at 20°C max. 280.0 Ohm/km Insulation resistance min. 5.0 GOhm x km

Mutual capacitance core/core Rel. Velocity of Propagation

Characteristic impedance at 1 to 100 MHz, 100 Ohm \pm

15 Ohm

approx. 67%

Caloric load approx. 0.37 MJ/m Minimum bending radius flexible 15x Outer-Ø fixed installation 7x Outer-Ø

CABLE STRUCTURE

· Copper wire bare, AWG sizes

• Core insulation: Polyolefin

- · Core identification: blue, orange, white-blue, white-orange
- Cores twisted into a star quad with optimal lay lengths

Fleece wrapping

- 1. Screen: plastic-coated aluminium foil (St)
 - 2. Screen: braided screen of tinned copper wires

· Outer sheath: PUR

· Sheath colour: green

· Length marking: in metres

PROPERTIES

- resistant to: oil, UV radiation, hydrolysis, microbes, coolants, grea-
- · abrasion-resistant, notch-resistant, tear-resistant, cut-resistant, wear-resistant, low adhesion
- suitable for use in drag chains
- 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
- certifications and approvals: **EAC**

APPLICATION

HELUKAT 100S CAT.5e 30 V 4C SF/UTP PUR CHAIN is designed in use in cable carriers and the recurring loads cause by moving machine components. Thanks to the PU sheath, it also offers excellent resistance to common mineral oils, greases and cooling lubricants.

NOTES

- · Conductor sizes are based on the AWG measurement system, metric conductor sizes (mm²) are approximated and are for reference only
- UL Voltage Rating: 30 V

TYPICAL VALUES

Frequency (MHz)	10	16	62.5	100	155
Attenuation (dB/100m)	9.1	11.3	22.8	29.5	41.0
NEXT (dB)	67.5	69.0	56.1	55.7	30.0
ACR (dB/100m)	58.4	57.7	33.3	26.2	11.0

Part no.	No. cores x AWG-No.	Cross-sec. mm², approx.	Conductor Ø mm, approx.	Core Ø mm, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
82838	2 x 2 x AWG 26 /19	0.15	0.5	1.0	4.8	17.0	30.0

