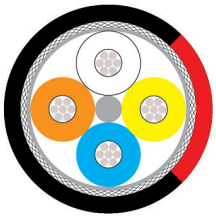
HELUKABEL® EtherCAT-P100S-M CAT.5e SF/UTP PUR CHAIN

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 21198

Temperature range	flexible -30°C to +70°C fixed -40°C to +80°C UL (AWM) to +80°C
Peak operating voltage	125 V (not for high power current installation purposes)
Test voltage core/core	1000 V
Conductor resistance at 20°C	max. 87.6 Ohm/km
Loop resistance at 20°C	max. 175.2 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. 79%
Characteristic impedance	at 1 to 100 MHz, 100 Ohm ± 15 Ohm
Caloric load	approx. 0.57 MJ/m
Minimum bending radius	flexible 15x Outer-Ø fixed 8x Outer-Ø

CABLE STRUCTURE

- Copper wire tinned, AWG sizes
- Core insulation: Foam PE
- Core identification: white, yellow, blue, orange
- 4 cores twisted into a star quad with optimal lay lengths
- Foil wrapping
- 1. Screen: plastic-coated aluminium foil (St)
  2. Screen: braided screen of tinned copper wires
- Fleece wrapping
- Outer sheath: PUR
- Length marking: in metres

PROPERTIES

- resistant to: oil, UV radiation
- 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

APPLICATION

HELUKABEL® EtherCAT-P100S-M CAT.5e SF/UTP PUR CHAIN for use on moving parts and in cable carriers. The cable listed here correspond to the EtherCAT classifications for moving cables and is designed to withstand permanent mechanical loads. This PUR version has UL AWM Style and offers higher values in chain and chemical resistance.

NOTES

- Conductor sizes are based on the AWG measurement system, metric conductor sizes (mm²) are approximated and are for reference only
- UL Voltage Rating: 300 V

TYPICAL VALUES

Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
Attenuation (dB/100m)	3.0	6.0	9.5	12.1	13.5	17.1	24.8	32.0
NEXT (dB)	65.0	56.3	50.0	47.2	45.8	42.9	38.4	35.3
ACR (dB/100m)	62.0	50.3	40.5	35.1	32.3	25.8	13.6	3.3

Part no.	No. cores x AWG-No.	Cross-sec. mm², approx.	Conductor Ø mm, approx.	Core Ø mm, approx.	Outer-Ø min - max mm	Cu factor per km	Weight kg/km, approx.
11007523	4 x 1 x AWG 24 /7	0.22	0.61	1.15	5.0 - 5.4	19.0	44.9