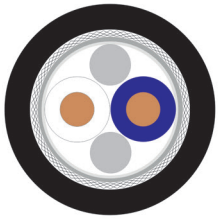
HELUKAT® SPE Type A 10BASE-T1L PVC STATIC

Single Pair Ethernet Type A



TECHNICAL DATA

Industrial Ethernet cable acc. to UL-Std. 758 (AWM) Style 21179

Temperature range	fixed installation -40°C to +80°C during installation -30°C to +80°C
Peak operating voltage	125 V (not for high power current installation purposes)
Test voltage core/core	3000 V
Conductor resistance at 20°C	max. 22.0 Ohm/km
Loop resistance at 20°C	max. 44.0 Ohm/km
Insulation resistance	min. 1.0 GOhm x km
Mutual capacitance core/core	at 800 Hz, approx. 50 pF/m
Rel. Velocity of Propagation	approx. 80%
Characteristic impedance	at 20 MHz, 100 Ohm ± 15 Ohm
Caloric load	approx. 1.01 MJ/m
Minimum bending radius	flexible 15x Outer-Ø fixed installation 4x Outer-Ø

CABLE STRUCTURE

- Copper conductor bare, AWG sizes
- Core insulation: Foam PE
- Core identification: white, blue
- Cores stranded to form a pair
- Foil wrapping
- 1. Screen: plastic-coated aluminium foil (St)
  2. Screen: braided screen of tinned copper wires
- Outer sheath: PVC
- Sheath colour: black
- Length marking: in metres

PROPERTIES

- resistant to: oil, UV radiation
- flame-retardant

TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2
- oil-resistant acc. to DIN VDE 0473-811-404 / DIN EN 60811-404 / IEC 60811-404

APPLICATION

For fixed installations with transmission paths up to 1,000m; offers those in the process industry the opportunity to upgrade from the 31.25 kBit Profibus PA / Foundation Fieldbus to a data rate of 10 Mbit with the SPE 10BASE-T1L. With Single Pair Ethernet, the requirements of diverse industries are covered, and devices can simultaneously be supplied with voltage via Power over Data Line (PoDL).

NOTES

- Conductor sizes are based on the AWG measurement system, metric conductor sizes (mm²) are approximated and are for reference only
- UL Voltage Rating: 600 V

TYPICAL VALUES

Frequency (MHz)	1	4	10	16	20
Attenuation (dB/100m)	0.73	2.32	3.41	4.21	4.67

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.
11017748	1 x 2 x AWG 18 /1	0.82	1.02	2.35	6.7 - 7.3	35.0	70.0