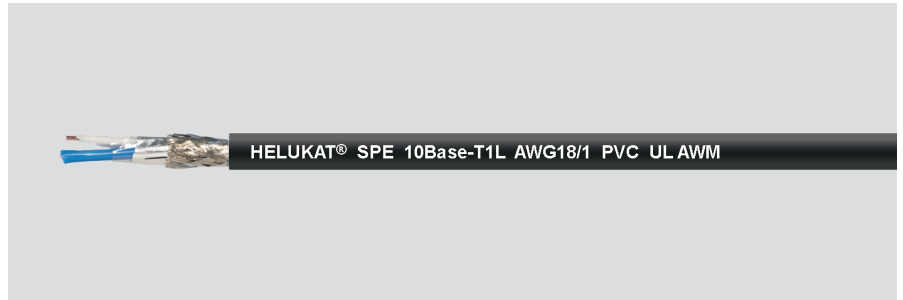
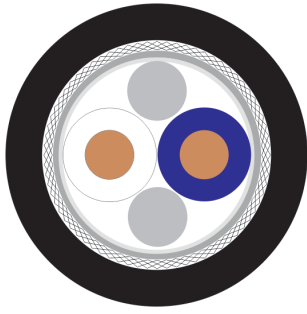


Industrial Ethernet

HELUKAT® SPE Type A 10 BASE T1L 1x2xAWG18/1 PVC



Type Cable structure

Inner conductor diameter:
Core insulation:
Core colours:
Stranding element:
Separator:
Total shielding:
Outer sheath material:
Cable external diameter:
Outer sheath colour:

Fixed installation, indoor 1x2xAWG18/1

Copper, bare (AWG 18/1)
Foam-skin-PE
wh, bu
2 cores + 2 fillers stranded together
Polyester foil over stranded bundle
Cu braid, tinned
PVC
app. 7,0 mm ± 0,2 mm
Black

Electrical data

Characteristic impedance: 100 Ohm ± 15 Ohm at 20 MHz
Conductor resistance, max.: 22 Ohm/km
Insulation resistance, min.: 1 GOhm x km
Loop resistance: 44 Ohm/km max.
Mutual capacitance: 50 nF/km nom.
Test voltage: 3 kV

Typical values

Frequency (MHz)	1	4	10	16	20
Attenuation (db/100m)	1.19	2.32	3.41	4.21	4.67
Next (db)					

Technical data

Weight: app. 76 kg/km
bending radius, repeated: 140 mm
Operating temperature range min.: -30°C
Operating temperature range max.: +80°C
Caloric load, approx. value: 0,34 MJ/m
Copper weight: 35,00 kg/km

Norms

Flame-retardant acc. to IEC 60332-1-2, UL AWM Style 21179 80°C 600V
Oil resistant acc. to DIN EN 60811-404

Application

Single Pair Ethernet covers the requirements of diverse industries, at the same time it can also supply devices with voltage via data cores with up to 50 Watt through PoDL (Power over Data Line). According to application area it is possible for the Customer to use the 1-pair cable for permanent installation, flexible use or for high dynamic application as a drag chain or at the robot. Different sheathing materials are used to meet the respective customer requirements.

The applications could be diverse and provide relief in mechanical and plant engineering or process technology. For example, camera broadcasts, the insert in Cobots (collaborative robots that work together with humans) or the MessSensoric. SPE is the solution for miniaturization and holds out the prospect of small, space- and weight-saving wiring in the future. The Type HELUKAT® SPE 1x2xAWG18/1 Typ A 10BASE-T1L is suitable for fixed installation up to 1000m transmission distance and forms in the process industry the switching option from Profibus PA / Foundation Fieldbus with 31,25 kBit to a data rate 10 Mbit with SPE 10BASE-T1L. This opens up completely new areas of application in the future.

Part no.

11017748, SPE Type A 10BASE-T1L

Dimensions and specifications may be changed without prior notice.