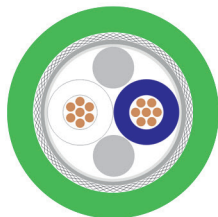


HELUKAT® SPE Type R 1000BASE-T1 SF/UTP PUR ROBOTIC

Single Pair Ethernet Type R



TECHNICAL DATA

Industrial Ethernet cable acc. to UL-Std. 758 (AWM) Style 21223, CSA bzw. cRU AWM I/II A/B

Temperature range	flexible -30°C to +80°C fixed -40°C to +80°C UL (AWM) to +80°C
Peak operating voltage	100 V (not for high power current installation purposes)
Test voltage core/core	3000 V
Test voltage core/screen	3000 V
Conductor resistance at 20°C	max. 125.0 Ohm/km
Loop resistance at 20°C	max. 250.0 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. 69%
Characteristic impedance	at 1 to 100 MHz, 100 Ohm ± 15 Ohm at 101 to 600 MHz, 100 Ohm ± 20 Ohm
Caloric load	approx. 0.65 MJ/m
Minimum bending radius	flexible 12x Outer-Ø fixed 5x Outer-Ø

CABLE STRUCTURE

- Copper wire bare
- Core insulation: Polyolefin
- Core identification: white, blue
- Fleece wrapping

- 1. Screen: plastic-coated aluminium foil (St)
- 2. Screen: braided screen of tinned copper wires, approx. coverage 85%
- Fleece wrapping
- Outer sheath: PUR
- Sheath colour: green
- Length marking: in metres

PROPERTIES

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

TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2, CSA FT1
- oil-resistant acc. to DIN VDE 0473-811-404 / DIN EN 60811-404 / IEC 60811-404

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	31.25	62.5	100	155	200	250	300	400	600
Attenuation (dB/100m)	3.08	5.62	8.73	11.01	12.31	15.39	21.86	27.79	34.81	39.71	44.59	49.04	57.02	70.65

Part no.	No. cores x AWG-No.	Cross-sec. mm ² , approx.	Conductor Ø mm, approx.	Core Ø mm, approx.	Outer-Ø min - max mm	Cu factor per km	Weight kg/km, approx.
11019818	1 x 2 x AWG 26 / 19	0.14	0.51	1.2	5.3 - 5.7	14.0	30.0