HELUKAT® PROFInet A CAT.5e SF/UTP PE STATIC ARMOURED

PROFInet Type A, armoured, for outdoor use













TECHNICAL DATA

Industrial Ethernet cable / Cat. 5e acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-5, PROFInet Guidline

Temperature range fixed installation -40°C to

+70°C

during installation -20°C to

+60°C

Peak operating voltage 125 V (not for high power

current installation purposes)

Test voltage core/core 2000 V

Conductor resistance at 20°C max. 57.5 Ohm/km
Loop resistance at 20°C max. 115.0 Ohm/km
Insulation resistance min. 0.5 GOhm x km
Mutual capacitance core/core at 800 Hz, approx. 50 pF/m

Rel. Velocity of Propagation approx. 62%

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

15 Ohm

Caloric load approx. 2.14 MJ/m

Minimum bending radius during installation 10x Outer-Ø fixed installation 5x Outer-Ø

CABLE STRUCTURE

- Copper conductor bare, conductor diameter: 0.64 mm, AWG sizes
- Core insulation: PE
- Core identification: white, yellow, blue, orange
- Cores twisted into a star quad with optimal lay lengths
- Foil wrapping
- Inner sheath: PVC

- 1. Screen: plastic-coated aluminium foil (St)
- 2. Screen: braided screen of tinned copper wires
- · Inner sheath: PVC
- · Steel tape, galvanised
- Outer sheath: PE
- Sheath colour: black
- Length marking: in metres

PROPERTIES

- resistant to: UV radiation, weathering effects, microbes, coolants, acids, alkalis
- · for outdoor use

TESTS

 certifications and approvals: EAC

APPLICATION

HELUKAT® PROFInet A CAT.5e SF/UTP PE STATIC ARMOURED for fixed installation in industrial networks. It guarantees excellent transmission characteristics and may be used even under the harshest conditions. The cables listed here correspond to PROFInet Type A and thanks to their special construction with PVC inner sheath/PE outer sheath ideal for areas with rodent problems.

NOTES

Conductor sizes are based on the AWG measurement system, metric conductor sizes (mm²) are approximated and are for reference only

TYPICAL VALUES

Frequency (MHz)	10	16	62.5	100
Attenuation (dB/100m)	5.2	6.9	15.0	19.5
NEXT (dB)	70.0	65.0	55.0	50.0
ACR (dB/100m)	64.8	58.1	40.0	30.5

Part no.	No. cores x AWG-No.	Cross-sec. mm², approx.	Core Ø mm, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
801650	2 x 2 x AWG 22 /1	0.32	1.5	9.3	31.0	124.0

