

Application

IEC 11801-1:	Class F
EN 50173-1:	Class F
IEEE 802.3:	10Base-T; 100Base-T; 1000Base-T; 10GBase-T
IEEE 802.3:	Power over Ethernet PoE; PoE+; 4PPoE
Installation Cable for tougher environments	




Applicable Standards

Design specification:	EN 50288-4-1, IEC 61156-5; EN 50575+A1
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Fire behaviour

Euroclass:	Eca
Smoke production:	-
Flaming droplets:	-
Acidity:	-
Flame retardant:	IEC 60332-3-24 (inner und outer jacket)
Halogen free:	IEC 60754-2 (inner und outer jacket)
Smoke density:	IEC 61034 (inner und outer jacket)

Construction

Construction:	S/FTP
Conductor:	Bare copper wire Ø 0.56 mm (AWG23/1)
Insulation:	Foam skin Polyethylene, Ø 1.4 mm
Twisting:	2 cores to the pair
Pair screen:	Aluminium-laminated plastic foil, conducting side outward
Cable lay up:	4 pairs (PiMF)
Overall screen:	Copper braid, tinned
Inner jacket:	FRNC-C, light grey RAL 7035
Cable marking black:	Telegärtner TOC 900 S/FTP 4x2xAWG23/1 Cat.7 FRNC-C Eca NVP 79%
Rip cord:	between the two jackets
Outer jacket:	FRNC-C, MUD protecting, graphite grey RAL 7024
Cable marking white:	Telegärtner TOC 900 S/FTP 4x2xAWG23/1 Cat.7 FRNC-C Eca NVP 79% „production batch no“ „sequential length in meters“   

Mechanical properties

Outer diameter:	9.6 ± 0.3 mm
Bending radius:	during operation: ≥ 40 mm during installation: ≥ 80 mm
Tensile force:	max. 200 N
Weight:	112 kg/km

Environment and Security

Temperature range:	during operation:	-40 °C to +85 °C
	during installation:	15 °C to +50 °C
Fire load:	670 MJ/km	
Chemical resistance:	Mineral oils IRM 902	≤ 7 days / 100 °C acc. to IEC 60811-2-1
	Diesel IRM 903	≤ 7 days / 100 °C acc. to IEC 60811-2-1

Electrical properties (typical at 20°C)

Characteristic impedance Z_c (1-100 MHz):	100 ± 5 Ω
Nominal velocity of propagation NVP:	ca. 79%
Propagation delay:	≤ 570 ns/100m
Delay skew:	≤ 9 ns/100m
Loop resistance:	14.1 Ω/100m max. 15 Ω/100m
Resistance unbalance:	pair: ≤ 2% between the pairs: ≤ 4%
Insulation resistance (500V):	≥ 500 MΩx100m
Mutual capacitance (at 800 Hz):	< 4.3 nF/100m
Capacitance unbalance (pair/ground):	≤ 150 pF/100m
Test voltage (DC, 60 sec.) (core/core und core/screen):	1000 V
Transfer impedance (mΩ/m):	Grade 1
Coupling attenuation:	Type 1
Segregation classification:	d

Transmission properties (at 20°C)

Has been verified as being compliant with the standards.

Order No. old / new	Standard designation	Scope of delivery	Copper content kg/km
L02002A0175B / 100027773	J-02YSCHH 4x2x0,56 PiMF FRNC-C	500 m plastic drum	38

Drum dimensions for:	L02002A0175B / 100027773
Drum Type:	plastic drum
Flange diameter d1:	600 mm
Core diameter d2:	250 mm
Central hole:	75 mm
Overall width:	440 mm
Winding width:	400 mm
Drum/EPAL:	4

The editions of the afore mentioned standards by the time of 08.04.2021 are valid.