



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+
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
Tencile 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:	max. 670 MJ/km

Installation Cable

TOC 900 S/FTP AWG23/1 Cat.7 FRNC-C Eca



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 \underline{Z} (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: ≤ 15 Ω/100m
 Resistance unbalance: pair: ≤ 2%
 between the pairs: ≤ 4%
 Insulation resistance (500V): ≥ 500 MΩx100m
 Nominal capacity (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.	Standard designation	Scope of delivery	Copper content kg/km
L02002A0175	J-02YSCHH 4x2x0,56 PiMF FRNC-C	500 m plastic drum	38

Drum dimensions for: L02002A0175
 Drum Type: plastic drum
 Flange outer diameter d1: 600 mm
 Flange inner diameter d2: 250 mm
 Central hole / core hole: 75 mm
 Overall width: 440 mm
 Winding width: 400 mm

Printing errors and technical changes reserved

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The editions of the afore mentioned standards by the time of 24.01.2018 are valid.