

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



Applicable Standards

Design specification:	EN 50288-4-2, IEC 61156-6
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Fire behaviour

Euroclass:	-
Smoke production:	-
Acidity:	-
Flaming droplets:	-
Flame retardant:	-
Halogen free:	IEC 60754-2
Smoke density:	

Construction

Construction:	S/FTP
Conductor:	stranded bare copper wire Ø 0.48 mm (AWG26/7)
Insulation:	Foam skin Polyethylene, Ø 1.04 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; coverage ≥40%
Outer jacket:	PE, black RAL 9005
Cable marking white:	Telegärtner S/FTP 4x2xAWG26/7 Cat.7 PE PATCH CABLE "production batch no." "sequential length in meters"  

Mechanical properties

Outer diameter:	6.2 ± 0.2 mm	
Bending radius:	during operation:	≥ 25 mm
	during installation:	≥ 50 mm
Tensile force:	max. 60 N	
Weight:	33.8 kg/km	

Environment and Security

Temperature range:	during operation:	-20 °C to +60 °C
	during installation:	0 °C to +50 °C
Fire load:	488 MJ/km	
UV resistance:	UV-resistant acc. to IEC 60068-2-5 (2 cycles of procedure B)	

Electrical properties (typical at 20°C)

Characteristic impedance Z_c (1-100 MHz):	100 ± 15 Ω	
Nominal velocity of propagation NVP:	ca. 78%	
Propagation delay:	≤ 427 ns/100m	
Delay skew:	≤ 25 ns/100m	
Loop resistance:	26.76 Ω/100m max. 29 Ω/100m	
Resistance unbalance:	pair:	≤ 2%
	between the pairs:	≤ 4%
Insulation resistance (500V):	≥ 15 MΩx100m	
Mutual capacitance (at 1000 Hz):	4.6 nF/100m	
Capacitance unbalance (pair/ground):	≤ 160 pF/100m	
Test voltage (DC, 60 sec.) (core/core und core/screen):	750 V	
Transfer impedance (mΩ/m):	Grade 2	
Coupling attenuation:	Type 2	
Segregation classification:	c	

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
L02002A0226 / 100013148	Li-02YSC2Y 4x2x0.48 PiMF PE	305 m (1000 ft) easy reel box	-

The editions of the afore mentioned standards by the time of 15.04.2021 are valid.