

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:	-
Flaming droplets:	-
Acidity:	-
Flame retardant:	IEC 60332-1-2; UL 444 CM
Halogen free:	IEC 60754-2
Smoke density:	-

Construction

Construction:	S/FTP
Conductor:	stranded bare copper wire, Ø 0.43 mm (AWG27/7)
Insulation:	Foam skin Polyethylene, Ø 1.02 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:	LSZH
Cable marking blue:	Telegärtner S/FTP 4x2xAWG27/7 Cat.7 LSZH PATCH CABLE E344985 AA c(UL)us CM IEC 60332-1 "production batch no." "sequential length in meters" 
Cable marking white:	on black cable jacket

Mechanical properties

Outer diameter:	5.8 ± 0.3 mm
Bending radius:	during operation: ≥ 24 mm during installation: ≥ 48 mm
Tensile force:	max. 60 N
Weight:	36.22 kg/km

Environment and Security

Temperature range:	during operation: -40 °C to +75 °C during installation: 0 °C to +50 °C
Fire load:	max. 543 MJ/km

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:	≤ 36,6 Ω/km	
Resistance unbalance:	pair:	≤ 2%
	between the pairs:	≤ 4%
Insulation resistance (500V):	≥ 15 MΩx100m	
Nominal capacity (at 1000 Hz):	4,6 nF/100m	
Capacitance unbalance (pair/ground):	≤ 160 pF/100m	
Test voltage (DC, 60 sec.) (core/core and 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.	Standard designation	Scope of delivery	Copper content Kg/km
L02002A0061, grey RAL 7035	Li-02YSCH 4x2x0.43 PiMF LSZH	1000 ft (305m) easy reel box	-
L02002B0061, green RAL 6024			
L02002C0061, red RAL 3018			
L02002D0061, blue RAL 5015			
L02002E0061, yellow RAL 1018			
L02002F0061, black RAL 9011			
L02002G0061, white RAL 9003			
L02002H0061, purple RAL 4005			
L02002A0075, yellow RAL 1018	Li-02YSCH 4x2x0.43 PiMF LSZH	100m roll	-
L02002A0061B, grey RAL 7035	Li-02YSCH 4x2x0.43 PiMF LSZH	420m roll	-
L02002B0061B, green RAL 6024			
L02002C0061B, red RAL 3018			
L02002D0061B, blue RAL 5015			
L02002E0061B, yellow RAL 1018			
L02002F0061B, black RAL 9011			
L02002G0061B, white RAL 9003			
L02002H0061B, purple RAL 4005			
L02002A0283, grey RAL 7035	Li-02YSCH 4x2x0.43 PiMF LSZH	1000 m disposable wooden drum	-

The editions of the afore mentioned standards by the time of 12.02.2020 are valid.