

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
6 kV surge voltage insulation test:	IEC 60664-1

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 0.46 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:	543 MJ/km

Electrical properties (typical at 20 °C)

Characteristic impedance \underline{Z} (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:	33.56 Ω/100m max. 36.6 Ω/100m
Resistance unbalance:	pair: ≤ 2 % between the pairs: ≤ 4 %
Insulation resistance (500 V):	≥ 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.

TG part number old / new.	Standard designation	Scope of delivery
L02002A0061 / 100013077 grey RAL 7035	Li-02YSCH 4x2x0.46 PiMF LSZH	1000 ft (305 m) easy reel box
L02002B0061 / 100013200 green RAL 6024		
L02002C0061 / 100013202 red RAL 3018		
L02002D0061 / 100013211 blue RAL 5015		
L02002E0061 / 100013212 yellow RAL 1018		
L02002F0061 / 100013213 black RAL 9011		
L02002G0061 / 100013214 white RAL 9003		
L02002H0061 / 100013215 violet RAL 4005		
L02002A0061B / 100027762 grey RAL 7035	Li-02YSCH 4x2x0.46 PiMF LSZH	420 m roll
L02002B0061B / 100027799 green RAL 6024		
L02002C0061B / 100027800 red RAL 3018		
L02002D0061B / 100027806 blue RAL 5015		
L02002E0061B / 100027807 yellow RAL 1018		
L02002F0061B / 100027808 black RAL 9011		
L02002G0061B / 100027809 white RAL 9003		
L02002H0061B / 100027810 violet RAL 4005		

Patch Cable S/FTP AWG27/7 Cat.7 LSZH



TG part number old / new.	Standard designation	Scope of delivery
L02002A0283 / 100013197 grey RAL 7035	Li-02YSCH 4x2x0.46 PiMF LSZH	1000 m disposable wooden drum

Drum dimensions for:	L02002A0283 / 100013197
Drum type:	wooden drum (disposable)
Flange diameter d1:	400 mm
Core diameter d2:	150 mm
Central hole:	55 mm
Overall width:	430 mm
Winding width:	410 mm
Drum/EPAL:	18

The editions of the afore mentioned standards by the time of 21.07.2022 are valid.