



Application

IEC 11801-1:	Class F _A
EN 50173-1:	Class F _A
IEEE 802.3:	10Base-T; 100Base-T; 1000Base-T; 10GBase-T
IEEE 802.3:	Power over Ethernet PoE; PoE+

Applicable Standards

Design specification:	EN 50288-9-1, EN 50174-2, IEC 14763-2, IEC 61156-5; EN 50575+A1
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Fire behaviour

Euroclass:	Dca
Smoke production:	s2
Flaming droplets:	d1
Acidity:	a1
Flame retardant:	IEC 60332-1
Halogen free:	IEC 60754-2
Smoke density:	IEC 61034

Construction

Construction:	S/FTP
Conductor:	Bare copper wire Ø 0,57 mm (AWG23/1)
Insulation:	Foam skin Polyethylene, Ø 1,45 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, blue RAL 5015
Ripcord:	Nylon ripcord under jacket
Cable marking black:	Telegärtner AMJ 1000 S/FTP 4x2xAWG23/1 Cat.7 LSZH Dca-s2,d1,a1 NVP 78% „production batch no“ „sequential length in meters“

Mechanical properties

Outer diameter:	7,0 ± 0,3 mm
Bending radius:	during operation: ≥ 29 mm during installation: ≥ 58 mm
Tencile force:	max. 85 N
Weight:	52 kg/km

Environment and Security

Temperature range:	during operation: -30 °C to +60 °C during installation: 0 °C to +50 °C
Fire load:	max. 500 MJ/km

Installation Cable

AMJ 1000 S/FTP AWG23/1 Cat.7 LSZH Dca-s2,d1,a1



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:	≤ 19 Ω/100m	
Resistance unbalance:	pair:	≤ 2%
	between the pairs:	≤ 4%
Insulation resistance (500V):	≥ 500 MΩx100m	
Nominal capacity (at 800 Hz):	< 5,6 nF/100m	
Capacitance unbalance (pair/ground):	≤ 160 pF/100m	
Test voltage (DC, 2 sec.) (core/core und core/screen):	2500 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.

Transmission properties

Typical values

Frequency	1*	4	10	16	31,2	62,5	100	125	200	250	300	600	1000*	MHz
Attenuation	1,8	3,4	5,5	6,9	9,7	13,9	17,7	19,9	25,6	28,8	31,8	46,6	62,2	dB/100m
NEXT	103	100	98	97	95	94	93	92	91	90	90	89	88	dB/100m
PS NEXT	100	97	95	94	92	91	90	89	88	87	87	86	85	dB/100m
ACR	101	97	92	90	85	80	75	72	65	61	58	42	26	dB/100m
PS ACR	98	94	89	87	82	77	72	69	64	58	55	39	23	dB/100m
ACR-F	95	94	93	91	90	87	85	83	77	74	74	60	50	dB/100m
PS ACR-F	92	91	92	88	87	84	82	80	74	71	71	57	47	dB/100m
Return Loss	27	30	32	32	32	32	32	31	30	25	25	23	21	dB/100m

* Values are for information only.

Order No.	Standard designation	Scope of delivery	Copper content kg/km
L02002A0180	J-02YSCH 4x2x0,57 PiMF LSZH	1000 m disposable wooden drum	26,6
L02002A0181	J-02YSCH 4x2x0,57 PiMF LSZH	500 m disposable wooden drum	26,6

The editions of the afore mentioned standards by the time of 4.05.2017 are valid.