



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
-----------------------	--

Fire behaviour

Euroclass:	Dca
Smoke production:	s1
Acidity:	d2
Flaming droplets:	a1
Flame retardant:	IEC 60332-1
Halogen free:	IEC 60754-2
Smoke density:	IEC 61034

Construction

Construction:	S/FTP
Conductor:	Bare copper wire Ø 0,6 mm (AWG23/1)
Insulation:	Foam skin Polyethylene, Ø 1,5 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 1300 S/FTP 2x(4x2xAWG23/1) Cat.7A LSZH Dca-s1,d2,a1 NVP 76% „production batch no“ „sequential length in meters“

Mechanical properties

Outer diameter:	16,5 ± 0,5 mm
Bending radius:	during operation: ≥ 32 mm during installation: ≥ 64 mm
Tencile force:	max. 170 N
Weight:	110 kg/km

Environment and Security

Temperature range:	during operation: -30 °C to +60 °C during installation: 0 °C to +50 °C
Fire load:	max. 1000 MJ/km

Installation Cable

AMJ 1300 S/FTP AWG23/1 Cat.7_A LSZH Dca-s1,d2,a1



Electrical properties (typical at 20°C)

Characteristic impedance \underline{Z} (1-100 MHz):	100 ± 15 Ω	
Nominal velocity of propagation NVP:	ca. 76%	
Propagation delay:	≤ 439 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	250	500	600	1000*	1200*	1300*	MHz
Dämpfung	1,9	3,5	5,6	7,1	10,0	14,1	18,0	28,9	41,3	46,6	60,2	66,6	69,6	dB/100m
NEXT	110	105	104	103	102	101	100	98	96	94	92	90	88	dB/100m
PS NEXT	108	103	102	101	100	99	98	96	94	92	90	88	86	dB/100m
ACR	108	101	98	96	92	87	82	69	54	48	32	23	18	dB/100m
PS ACR	106	99	96	94	90	85	80	67	52	46	30	21	16	dB/100m
ACR-F	95	94	93	91	90	89	88	80	65	60	40	38	37	dB/100m
PS ACR-F	93	92	91	89	88	87	86	78	63	58	38	36	35	dB/100m
Return Loss	30	30	32	32	32	33	32	29	25	24	21	19	18	dB/100m

* Values are for information only.

Order No.	Standard designation	Scope of delivery	Copper content kg/km
L02002A0185	J-02YSCH 2x(4x2x0,6) PiMF LSZH	500 m disposable wooden drum	60,4

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