



Application

IEC 11801-1:	Class I
EN 50173-1:	Class F _A
IEEE 802.3:	10Base-T; 100Base-T; 1000Base-T; 10GBase-T; 40GBase-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

Euroclas:	Eca
Smoke production:	-
Acidity:	-
Flaming droplets:	-
Flame retardant:	IEC 60332-3-24
Halogen free:	IEC 60754-2
Smoke density:	IEC 61034

Construction

Construction:	S/FTP
Conductor:	Bare copper wire Ø 0,64 mm (AWG22/1)
Insulation:	Foam skin Polyethylene, Ø 1,6 mm
Verseilung:	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 1600 S/FTP 4x2xAWG22/1 Cat.7A LSZH Eca NVP 75% „production batch no“ „sequential length in meters“

Mechanical properties

Outer diameter:	8,7 ± 0,3 mm
Bending radius:	during operation: ≥ 35 mm during installation: ≥ 70 mm
Tencile force:	max. 105 N
Weight:	83 kg/km

Environment and Security

Temperature range:	during operation: -30 °C to +60 °C during installation: 0 °C to +50 °C
Fire load:	max. 900 MJ/km

Installation Cable

AMJ 1600 S/FTP AWG22/1 Cat.7_A LSZH Eca



Electrical properties (typisch bei 20°C)

Characteristic impedance \underline{Z} (1-100 MHz):	100 ± 15 Ω	
Nominal velocity of propagation NVP:	ca. 75%	
Propagation delay:	≤ 444 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*	1600*	MHz
Attenuation	1,9	3,5	5,4	6,8	9,5	13	17	28	40	45	60	65	77	dB/100m
NEXT	110	110	110	110	110	110	110	105	100	98	95	93	88	dB/100m
PS NEXT	108	108	108	108	108	108	108	103	98	96	93	91	86	dB/100m
ACR	108	106	104	103	100	97	93	77	60	53	35	28	11	dB/100m
PS ACR	106	104	102	101	98	95	91	75	58	51	33	26	9	dB/100m
ACR-F	95	94	93	91	90	89	88	80	65	60	44	40	35	dB/100m
PS ACR-F	93	92	91	89	88	87	86	78	63	58	42	38	33	dB/100m
Return Loss	30	30	32	32	32	33	32	29	25	24	21	19	17	dB/100m

* Values are for information only.

Order No.	Standard designation	Scope of delivery	Copper content kg/km
L02002A0213	J-02YSCH 4x2x0,64 PiMF LSZH	1000 m Einwegtrommel, Holz	36
L02002A0214	J-02YSCH 4x2x0,64 PiMF LSZH	500 m Einwegtrommel, Holz	36

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