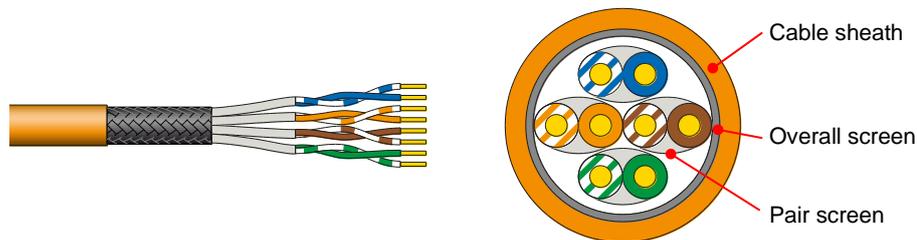


Cable reference	Part number	R896701
	Source code	Z
	R&M positioning	Cat.7 _A

Cable construction	Conductor	Bare solid copper wire AWG22
	Insulation	Polyethylene ≤ Ø 1.6 mm
	Twisting	2 wires to the pair
	Cable lay up	4 pairs to the core
	Pair screen	Alu / polyester tape
	Overall screen	Copper braid (nom. 55 % coverage)
	Sheath	LSFRZH, Orange RAL 2003



Application	Primary (Campus), Secondary (Riser), Tertiary (Horizontal) IEEE 802.3an: 10Base-T; 100Base-TX; 1000Base-T; 10GBase-T 25GBase-T IEEE 802.5 16 MB; ISDN; TPDDI; ATM, CATV IEEE 802.3af / IEEE 802.3at / IEEE 802.3bt Confirming to European regulation "CPR" EN 50575
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Standards	ISO/IEC 11801 2nd ed.; EN 50173-1 IEC 61156-5; IEC 61156-7, EN50288-9-1; Power over Ethernet (PoE) / Type 1-4 Universal PoE (UPoE / UPoE+) / Power Over HDBASE-T (POH)
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Fire rating	LSFRZH IEC 60332-3-24; IEC 60754-2; IEC 61034 EN50575; Cca s1a-d1-a1; DOP C7587
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Technical Data	Cable designation	S/FTP Cat.7 _A 1500MHz 4PxAWG22
	Packaging	Drum 1000 m
	Outer diameter	Nominal 7.9 mm
	Weight	71 kg / km
	Thermal load	674 MJ / km
	Segregation class	D
	Tensile force	160 N

Mechanical Properties	Bending radius	≥ 35 mm during operation (without load)
		≥ 70 mm during installation (with load)
	Temperature range	During operation -20°C...+ 75°C During installation 0°C...+ 50°C

Electrical Properties (at 20°C ± 5°C)

DC loop resistance		≤ 12 Ω / 100 m
Resistance unbalance		≤ 2 %
Test voltage	DC, 1 min, core/core	1000 V
Insulation resistance	500 V	≥ 5000 MΩ * km
Capacitance		40 pF / m nom.
Capacitance unbalance		≤ 1.2 pF / m
Mean characteristic impedance @ 100 MHz		100 ± 5 Ω
Nominal velocity of propagation		Approx. 76 %
Propagation delay	At 1 MHz	≤ 450 ns / 100 m
Delay skew		≤ 15 ns / 100 m
Coupling attenuation		≥ 85 dB
Transfer impedance	At 1 MHz	≤ 8 mΩ / m
	At 10 MHz	≤ 5 mΩ / m
	At 100 MHz	≤ 30 mΩ / m
Balance TCL	At 1 MHz	≥ 40 dB
	At 10 MHz	≥ 40 dB
	At 100 MHz	≥ 20 dB
PS-Alien NEXT	At 100 MHz	≥ 75 dB
		Typ. 80 dB

Typical transmission characteristics (at 20°C)

f (MHz)	Attenuation (dB/100m)		NEXT (dB)		PS-NEXT (dB)		ACR-F ¹⁾ (dB/100m)		PS-ACR-F ¹⁾ (dB/100m)		Return loss (dB)	
	Max	Typ	Min	Typ	Min	Typ	Min	Typ	Min	Typ	Min	Typ
4	3.6	3.3	96.4	100	93.4	100	83.3	97	80.3	94	23	26
10	5.7	5.1	90.4	100	87.4	100	75.3	95	72.3	92	25	28
20	8.1	7.3	85.9	100	82.9	100	69.3	90	66.3	87	25	28
62.5	14.5	12.8	78.5	100	75.5	100	59.4	85	56.4	82	21.5	25
100	18.5	16.3	75.4	100	72.4	100	55.3	80	52.3	77	20.1	23
250	29.7	25.8	69.4	100	66.4	100	47.3	69	44.3	66	17.3	20
600	47.1	40.2	63.7	100	60.7	100	39.7	45	36.7	42	17.3	20
1000	61.9	60.4	60.4	90	57.4	90	35.3	40	32.3	37	15.1	20
1200	-	68.4	-	90	-	90	-	35	-	32	-	18
1500	-	75	-	90	-	90	-	28	-	25	-	17

¹⁾ ACR-F was formerly known as ELFEXT.

Recommended connection technique

Module		Perm. Link Class D	Perm. Link Class E	Channel Class E _A	Perm. Link Class E _A	Short Link Class E _A
	Cat.5e	✓	-	-	-	-
	Cat.6	✓	✓	✓	-	-
	Cat.6 _A EL	✓	✓	✓	✓	✓
	Cat.6 _A	✓	✓	✓ Best in Class	✓ Best in Class	✓ Best in Class