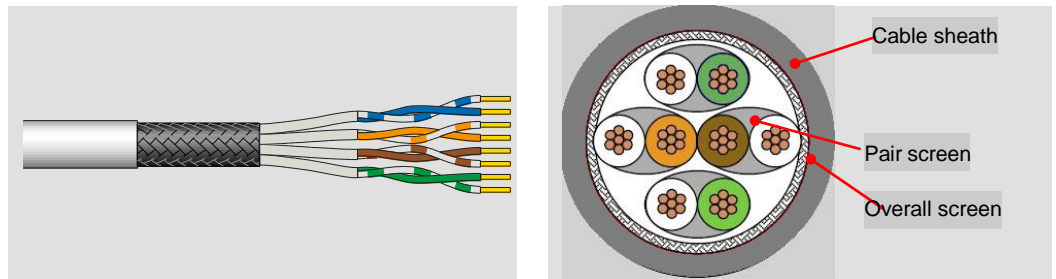


Cable reference	Part number	R318386
	Source code	B
	R&M positioning	Cat.6A

Cable construction	Conductor	stranded copper wire AWG26/7 (≥ Ø 0.14 mm)
	Insulation	Polyethylene with additive ≤ Ø 1.00 mm
	Twisting	2 wires to the pair
	Cable lay up	4 paires to the core
	Pair screen	Alu / polyester tape
	Overall screen	Tin plated copper braid (≥ 60 % coverage)
	Sheath	LSFRZH, grey, RAL7035



Application	Primary (Campus), Secondary (Riser), Tertiary (Horizontal)
	IEEE 802.3an: 10Base-T; 100Base-TX; 1000Base-T; 10GBase-T
	IEEE 802.5 16 MB; ISDN; TPDDI; ATM
	Confirming to European regulation "CPR" EN 50575

Fire rating	LSFRZH-D
	IEC 60332-3-24; IEC 60754-2; IEC 61034
	EN50575; Eca; DOP D2502

Technical Data	Cable designation	PA Cat.6A S/FTP 4P-AWG26/7 650MHz gy
	Packaging	Drum 2000 m
	Outer diameter	Nominal 6.0 mm
	Weight	80 kg / km
	Thermal load	345 MJ / km
	Segregation class	D
	Tensile force	100 N

Mechanical Properties	Bending radius	≥ 35 mm during operation (without load)
		≥ 60 mm during installation (with load)
	Temperature range	During operation -20°C...+ 60°C

During installation 0°C...+ 50°C

### Electrical Properties

(at 20°C ± 5°C)





DC loop resistance		≤ 25.0 Ω / 100 m
Resistance unbalance		≤ 2 %
Test voltage	DC, 1 min, core/core	1000 V
Insulation resistance	500 V	≥ 5000 MΩ * km
Capacitance		43 pF / m max.
Capacitance unbalance		≤ 700 pF / km
Mean characteristic impedance		100 ± 5 Ω
Nominal velocity of propagation		Approx. 75 %
Propagation delay	At 1 MHz	≤ 427 ns / 100 m
Delay skew		≤ 10 ns / 100 m
Coupling attenuation		≥ 85 dB
Transfer impedance	At 1 MHz	≤ 10 mΩ / m
	At 10 MHz	≤ 10 mΩ / m
	At 30 MHz	≤ 25 mΩ / m

### Typical transmission characteristics (at 20°C)

f (MHz)	Attenuation (dB/100 m)		NEXT (dB)		PS-NEXT (dB)		ACR-F <sup>1)</sup> (dB/100 m)		PS-ACR-F <sup>1)</sup> (dB/100 m)		Return loss (dB)	
	Max	Typ	Min	Typ	Min	Typ	Min	Typ	Min	Typ	Min	Typ
4	5.7	5.5	78.0	90.0	75.0	97	78	92	75	87	23	27
10	8.9	8	78.0	90.0	75.0	97	74	89	71	81	25	28
20	12.6	11	78.0	90.0	75.0	94	68	83	65	77	25	28
62.5	22.5	20	75.5	87.5	72.5	92	58	72	55	70	20.1	28
100	28.7	26	72.4	84.4	69.4	92	54	66	51	63	18	28
250	46.6	41	66.4	78.4	63.4	90	46	49	43	50	17.3	25
500	67.9	60	61.9	73.9	58.9	87	40	27	37	37	17.3	20
600	-	66.0	-	72.7	-	70	-	20	-	36	-	19
650	-	70	-	72.2	-	69	-	15	-	35	-	18

<sup>1)</sup> ACR-F was formerly known as ELFEXT.

Recommended connection technique

Module		Perm. Link Class D	Perm. Link Class E	Channel Class E <sub>A</sub>	Perm. Link Class E <sub>A</sub>	Short Link Class E <sub>A</sub>
	Cat.5e/s	✓	-	-	-	-
	Cat.6 Real10/s	✓	✓	✓	-	-
	Cat.6A EL/s	✓	✓	✓	✓	✓
	Cat.6A/s	✓	✓	✓ Best in Class	✓ Best in Class	✓ Best in Class