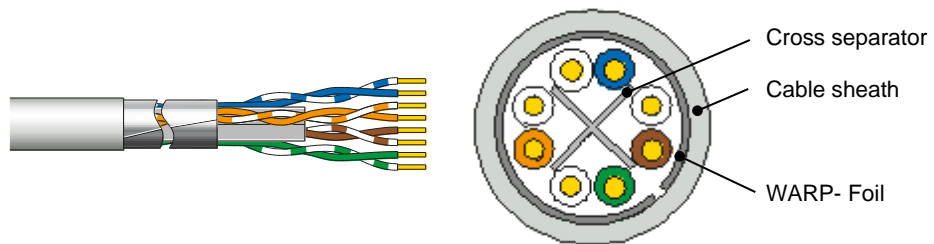


<b>Cable reference</b>	<b>Part number</b>	R 892615
	<b>Source code</b>	J
	<b>R&amp;M positioning</b>	Cat.6 <sub>A</sub>

<b>Cable construction</b>	<b>Conductor</b>	Bare solid copper wire AWG23 (≥ Ø 0.55 mm)
	<b>Insulation</b>	Polyethylene ≤ Ø 1.22 mm
	<b>Twisting</b>	2 wires to the pair
	<b>Cable lay up</b>	4 pairs to the core with cross separator
	<b>Pair screen</b>	Non
	<b>Overall screen</b>	Non continuous foil
	<b>Sheath</b>	LSZH, gray RAL 7035



<b>Application</b>	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
	IEEE 802.3af / IEEE 802.3at / IEEE 802.3bt
Confirming to European regulation "CPR" EN 50575	

<b>Standards</b>	ISO/IEC 11801 2nd ed.; EN 50173-1; ANSI/TIA-568.2 IEC 61156-5 2nd ed.; Power over Ethernet (PoE) / Type 1-4
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<b>Fire rating</b>	LSZH IEC 60332-1; IEC 60754-1&2; IEC 61034-1&2 EN50575; Dca s1-d2-a1; DOP-No. D6624
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<b>Technical Data</b>	<b>Cable designation</b>	U/UTP Cat.6 <sub>A</sub> 650MHz 4PxAWG23
	<b>Packaging</b>	Drum 500 m
	<b>Outer diameter</b>	Nominal 7.0 mm
	<b>Weight</b>	47 kg / km
	<b>Thermal load</b>	650 MJ / km
	<b>Tensile force</b>	100 N

<b>Mechanical Properties</b>	<b>Bending radius</b>	≥ 28 mm during operation (without load)
		≥ 42 mm during installation (with load)
	<b>Temperature range</b>	During operation -20°C...+ 60°C
	During installation 0°C...+ 50°C	

## Electrical Properties (at 20°C ± 5°C)





<b>DC loop resistance</b>		≤ 18.8 Ω / 100 m
<b>Resistance unbalance</b>		≤ 5 %
<b>Test voltage</b>	DC, 1 min, core/core	1000 V
<b>Insulation resistance</b>	500V	≥ 50 MΩ * km
<b>Capacitance</b>		56 pF / m max.
<b>Capacitance unbalance</b>		≤ 3.3 pF / m
<b>Mean characteristic impedance</b>		100 ± 15 Ω
<b>Nominal velocity of propagation</b>		Approx. 66 %
<b>Propagation delay</b>	At 1 MHz	≤ 570 ns / 100 m
<b>Delay skew</b>		≤ 45 ns / 100 m
<b>Coupling attenuation</b>		N/A
<b>Balance TCL (level 1)</b>	At 1 MHz	≥ 40 dB
	At 10 MHz	≥ 30 dB
	At 100 MHz	≥ 20 dB
<b>PS-Alien NEXT</b>	At 100MHz	Min. 63 dB
		Typ. 73 dB

## Typical transmission characteristics (at 20°C)

f (MHz)	Attenuation (B/100m)		NEXT (dB)		PS-NEXT (dB)		ACR-F <sup>1)</sup> (dB/100m)		PS-ACR-F <sup>1)</sup> (dB/100m)		Return loss (dB)	
	Max	Typ	Min	Typ	Min	Typ	Min	Typ	Min	Typ	Min	Typ
4	3.8	3.4	66.3	70	63.3	73	56	60	53	63	23	26
10	5.9	5.5	60.3	64	57.3	67	48	52	45	55	25	28
20	8.4	7.7	55.8	60	52.8	63	42	46	39	49	25	28
62.5	15	14	48.4	52	45.4	55	32.1	36	29.1	39	21.5	24.5
100	19.1	18	45.3	49	42.3	52	28	32	25	35	20.1	23
250	31.1	29	39.3	43	36.3	47	20	24	17	27	17.3	20
500	45.3	42	34.8	39	31.8	42	14	18	11	21	17.3	20
600	-	48	-	36	-	39	-	17	-	20	-	18
650	-	50	-	35	-	38	-	16	-	19	-	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/u	✓	-	-	-	-
	Cat.6/u	✓	✓	-	-	-
	Cat.6/u	✓	✓	✓	-	-
	Cat.6 <sub>A</sub> /u	✓	✓	✓	✓	✓