

Twisted Pair Patch Cable - Category 6<sub>A</sub> Class E<sub>A</sub> - S/FTP



LSZH (Low Smoke Zero Halogen)
Yellow colored plug for CAT 6<sub>A</sub>
Kink prot., strain relief, latch prot.
various lengths and colors available

#### Abstract

CAT 6<sub>A</sub> Class E<sub>A</sub>, S/FTP, Twisted Pair Patch Cable, Cu, LSZH, AWG 26/7, various lengths and colors available

#### Features

- 2x RJ45 (8P8C) connectors
- Boots with kink protection, strain relief and latch protection
- Length marking on boot
- Conductor: Cu (Copper)
- Shielding: S/FTP (complete braid shielding, pairs foil shielded)
- Structure: 4x 2 AWG 26/7, twisted pair
- Sheath: LSZH (Low Smoke Zero Halogen)
- PoE+ ready

### **Product Overview**

The DIGITUS<sup>®</sup> Category  $6_A$  Class  $E_A$  patch cables are manufactured and tested to the ISO/IEC 11801 and DIN EN 50173 Category  $6_A$  specifications. They will guarantee the installed cabling system is compliant with the ISO & EN channel specification requirements and will provide optimum performance levels of DIGITUS<sup>®</sup> Category  $6_A$  cabling. The performance is tested up to 500 MHz inclusive performance characteristics such as near end cross talk ("NEXT").

DIGITUS<sup>®</sup> patch cables are designed and produced to fulfill the highest requirements of various application areas in full volume.

Each cable is fitted with a molded boot which comes with kink protection and strain relief. Furthermore the boot is equipped with a latch protection that prevents the latching lever against breaking. You can easily identify the Category  $6_A$ , because of the transparent yellow colored connector.

### Patch Cable Matrix and Configuration

Patch cables can be wide-ranging. Therefore we prepared a complete overview of our range, which guides you to the cable you require.

One E-Mail or one call will be enough and we will send you the latest version as a PDF file.

You can also check our Patch Cable Configuration tool on our website <u>www.digitus-professional.com</u>



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## **Performance- and Specification Overview**

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Conductor	Stranded AWG 26/7 bare copper, $0.148 \pm 0.005$ mm
Insulations	FO-PE (Foamed Polyethylene)
Outer sheath	LSZH (Low Smoke Zero Halogen)
Overall diameter	5.8 mm ± 0.30 mm
Bending radius	15x OD
RJ45 connector	3 $\mu$ nominal gold flash over 60 $\mu$ nickel undercoat contact pins
Color code	Orange x White, Green x White, Blue x White, Brown x White
Wiring standard	EIA/TIA 568B
Pin assignment	1:1
Durability	750 insertion cycles
Contact resistance	30 mΩ maximum
Resistance unbalance	3% maximum
Dielectric strength	2500 VDC for 3 seconds
Uninsulated resistance	150 MΩ/km minimum
Operating temperature	-20 °C up to +60 °
NVP	76%
Flame retardancy	IEC 60332-1
Smoke emission	IEC 61034
Typical applications	IEEE 802.3: 10BASE-T; 100BASE-T; 1000BASE-T; 10GBASE-T
Norms	ISO/IEC 11801-1; EN-50173; ANSI/TIA 568-C; EN 60603-7-51
Colors	Various colors available on request
Marking	Brand name, cable length and cable information

## **Transmission Properties**

Freq.	Insertion Loss	NEXT	RL	ACR-F	PS NEXT	PS ACRF
MHz	dB	dB	dB	dB	dB	dB
1.00	4.00	65.00	19.00	63.30	62.00	60.30
10.00	6.50	56.60	19.00	43.30	54.00	40.30
20.00	9.20	51.60	17.50	37.20	49.00	34.20
25.00	10.20	50.00	17.00	35.30	47.30	32.30
62.50	16.40	43.40	14.00	27.30	40.60	24.30
100.00	20.90	39.90	12.00	23.30	37.10	20.30
200.00	30.10	34.80	9.00	17.20	31.90	14.20
350.00	40.60	30.30.	6.60	12.40	27.60	9.40
500.00	49.30	27.90	6.00	9.30	24.80	6.30

The results of the chart above are typical for Category 6<sub>A</sub>, Class E<sub>A</sub> patch cables 2 m, 5 m up to 10 m length



# **Length Tolerances**

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Length (m)	Tolerance (mm)	Length (m)	Tolerance (mm)	
0.15	+20/-6	8	+/-155	
0.25	+20/-6	10	+/-200	
0.5	+20/-10	12	+/-250	
0.75	+20/-13	13	+/-270	
1	+/-20	15	+/-310	
1.5	+/-30	20	+/-400	
2	+/-40	25	+/-500	
2.5	+/-50	30	+/-630	
3	+/-60	40	+/-840	
4	+/-90	50	+/-1000	
5	+/-110	70	+/-1300	
6	+/-120	75	+/-1500	
7	+/-140	100	+/-1800	
7.5	+/-150	*The cable length is measured from plug A to plug B		

# **Technical Drawing**



MA	TERIAL LIST:	
NO.	PARTS NAME	SPECIFICATION DESCRIPTION
1	CABLE	S/FTP [26AWG(BC 7/0.148±0.005)*1PR+A]*4+B(AL-MG)+LSOH OD:5.8±0.3mm COLOR:Assorted upon request
0	RJ45 CONNECTOR	RJ45,8P8C,TWO FORK GOLD PLATED CONTACTS YELLOW TRANSPARENT WITH METAL HOUSING
3	MOLDING PVC	MOLDING PVC 45P COLOR:Assorted upon request



Heat Seal

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