## Twisted Pair Patch Cable - Category 6 Class E - S/FTP



- ✔ LSZH (Low Smoke Zero Halogen)
- ✔ Red colored plug for CAT 6
- ✔ Kink prot., strain relief, latch prot.
- ✔ various lengths and colors available


### Abstract

CAT 6 Class E, S/FTP, Twisted Pair Patch Cable, Cu, LSZH, AWG 27/7, various lengths and colors available


### Features

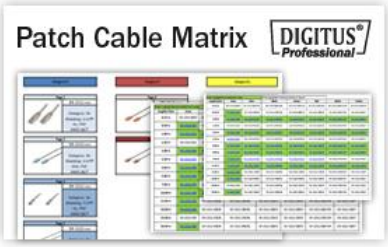
- 2x RJ45 (8P8C) connectors
- Boots with kink protection, strain relief and latch protection
- Length marking on boot
- Conductor: Cu (Copper)
- Shielding: S/FTP (complete braid shielding, pairs foil shielded)
- Structure: 4x 2 AWG 27/7, twisted pair
- Sheath: LSZH (Low Smoke Zero Halogen)
- PoE+ ready

### Product Overview

The DIGITUS® Category 6 Class E patch cables are manufactured and tested to the ISO/IEC 11801 and DIN EN 50173 Category 6 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® Category 6 cabling. The performance is tested up to 250 MHz inclusive performance characteristics such as near end cross talk (“NEXT”).
DIGITUS® 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, because of the transparent red 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 *www.digitus-professional.com*



## Performance- and Specification Overview

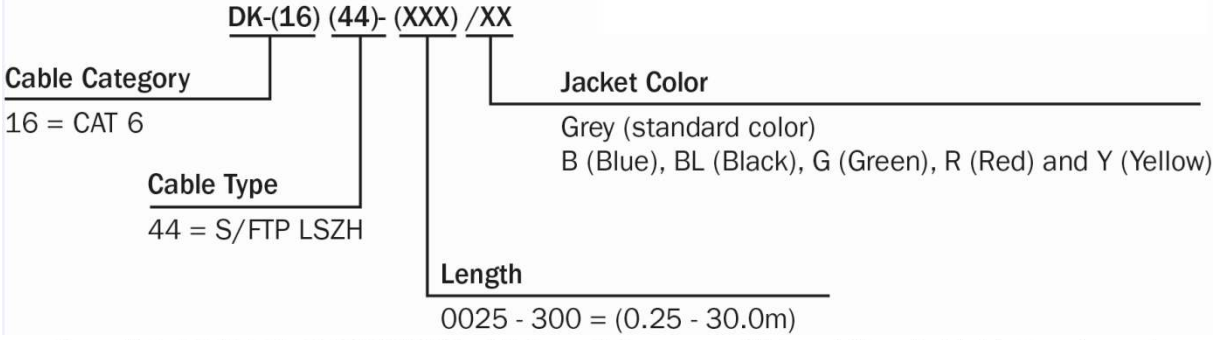
| | |
|---|---|
| Conductor | Stranded AWG 27/7 bare copper, 0.127 ± 0.005 mm |
| Insulations | FO-PE (Foamed Polyethylene) |
| Outer sheath | LSZH (Low Smoke Zero Halogen) |
| Overall diameter | 5.7 mm ± 0.30 mm |
| Bending radius | 15x OD |
| RJ45 connector | 3 µ nominal gold flash over 60 µ nickel undercoat contact pins |
| Color code | Orange x White, Green x White, Blue x White, Brown x White |
| Wiring standard | EIA/TIA 586B |
| 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 |
| Norms | ISO/IEC 11801-1; EN-50173; ANSI/TIA 568-C; EN 60603-7-5 |
| Colors | Various colors available on request |
| Marking | Brand name, cable length and cable information |

## Transmission Properties

| Freq. | Insertion Loss | NEXT | RL | ACR-N | ACR-F | PS NEXT | PS ACR-N | PS ACRF |
|---|---|---|---|---|---|---|---|---|
| **MHz** | **dB** | **dB** | **dB** | **dB** | **dB** | **dB** | **dB** | **dB** |
| **1.00** | 4.00 | 65.00 | 19.00 | 61.00 | 63.30 | 62.00 | 58.00 | 60.30 |
| **10.00** | 6.60 | 56.60 | 19.00 | 50.00 | 43.30 | 54.00 | 47.40 | 40.30 |
| **20.00** | 9.30 | 51.60 | 17.50 | 42.30 | 37.20 | 49.00 | 39.70 | 34.20 |
| **25.00** | 10.50 | 50.00 | 17.00 | 39.60 | 35.30 | 47.30 | 36.90 | 32.30 |
| **62.50** | 16.90 | 43.40 | 14.00 | 26.50 | 27.30 | 40.60 | 23.70 | 24.30 |
| **100.00** | 21.70 | 39.90 | 12.00 | 18.20 | 23.30 | 37.10 | 15.40 | 20.30 |
| **200.00** | 31.70 | 34.80 | 9.00 | 3.10 | 17.20 | 31.90 | 0.10 | 14.20 |
| **250.00** | 35.90 | 33.10 | 8.00 | -2.80 | 15.30 | 30.20 | -5.80 | 12.30 |

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

## Product Number Information



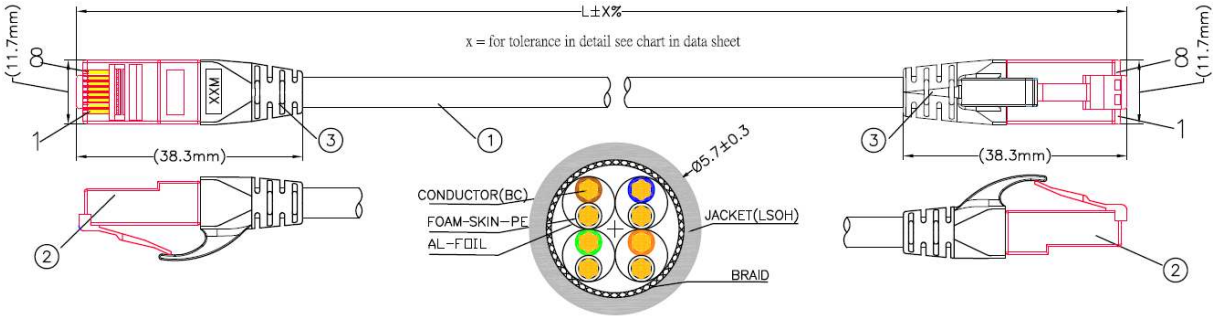

Assmann Electronic GmbH, Auf dem Schüffel 3, 58513 Lüdenscheid, Germany, info@assmann.com, printing errors, falsities and technical changes remain reserved

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## Length Tolerances

| 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




MATERIAL LIST:

| NO. | PARTS NAME | SPECIFICATION DESCRIPTION |
|---|---|---|
| ① | CABLE | S/FTP [27AWG(BC 7/0.127±0.005)*1PR+A]*4+B(AL-MG)+LSOH<br>OD:5.7±0.3mm COLOR:Assorted upon request |
| ② | RJ45 CONNECTOR | RJ45,8P8C,TWO FORK GOLD PLATED CONTACTS<br>RED TRANSPARENT WITH METAL HOUSING (IRON SHELL ) |
| ③ | MOLDING PVC | MOLDING PVC 45P COLOR:Assorted upon request |

