

# SF/UTP Patch cord RJ45/RJ45 Hirose w. tde boot Cat.5e UC300 LSHF Crossover Length: xxxx

## Description

The tde patch and trunk cables are manufactured completely at the German facility in Ohrte. Production processes at tde meet the latest standards. The patch cables and trunk cables are manufactured in many different configurations using highly automated processes. The range of products on offer encompasses the entire spectrum of connector types available on the market. To guarantee consistently top quality, only the best components from renowned vendors are used. All tde production staff have the necessary qualifications and education, and have been well trained in using specialist technical equipment. Each cable application is subjected to a full test procedure and a final visual inspection to ensure that only 100% error-free products are shipped to the customer.



Products made by tde perform at least internationally accepted quality standards and norms. The quality management system is ISO 9001, ISO 14001 and TL9000 certified.

RJ45 Patch cord for the employment in the distribution frame or for the connection of terminals.

## Technical Data

|               |   |
|---------------|---|
| Cabletype     | Draka UC300 HS26 Cat.5e   |
| Configuration | Crossover   |
| Tests         | 100% electrical test on short-circuit and visual final inspection |
|               | optional: Link Performance Tests                                  |
|               | QS-Managementsystem ISO 9001, ISO 14001 and TL 9000               |

xxxx = Length in cm

## Connectors

### TP Cable

|              |  |
|--------------|--|
| Conductor    | stranded bare copper wire Ø 0.48 mm (AWG 26/1)   |
| Insulation   | Polyethylene, Ø 0.95 mm                          |
| Twisting     | 2 cores to the pair                              |
| Cable lay up | 4 pairs to the core                              |
| Screen       | Al-laminated plastic foil + Copper braid, tinned |
| Sheath       | PVC or LSHF (FRNC)                               |

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## Mechanical properties

|                        |                     |                   |
|------------------------|---------------------|-------------------|
| Minimum bending radius | Without load        | ≥ 25 mm           |
|                        | With load           | ≥ 50 mm           |
| Temperature range      | During operation    | -20°C up to +60°C |
|                        | During installation | 0°C up to +50°C   |

## Electrical properties at 20°C ± 5°C

|                                 |                                       |               |
|---------------------------------|---------------------------------------|---------------|
| Loop resistance                 |                                       | ≤ 340 Ω/km    |
| Resistance unbalance            |                                       | ≤ 2%          |
| Insulation resistance           | 500 V                                 | ≥ 5000 MΩkm   |
| Mutual capacitance              | at 800 Hz                             | Nom. 48 nF/km |
| Capacitance unbalance           | (pair/ground)                         | ≤ 1200 pF/km  |
| Characteristic impedance        | 100 MHz                               | (100 ± 5) Ω   |
| Nominal velocity of propagation |                                       | ca. 67%       |
| Propagation delay               |                                       | ≤ 535 ns/100m |
| Delay skew                      |                                       | 20 ns/100m    |
| Test voltage                    | (DC, 1 min) core/core and core/screen | 1000 V        |
| Transfer impedance              | at 1 MHz                              | ≤ 30 mΩ/m     |
|                                 | at 10 MHz                             | ≤ 30 mΩ/m     |
|                                 | at 30 MHz                             | ≤ 50 mΩ/m     |
| Coupling attenuation            |                                       | ≥ 75 dB       |

## Electrical Data (nominal) acc. to Cat.5e (at 20°C)

| F     | Attenuation | NEXT | PS-NEXT | ELFEXT  | PS-ELFEXT | Return loss |
|-------|-------------|------|---------|---------|-----------|-------------|
| MHZ   | dB/10m      | dB   | dB      | dB/100m | dB/100m   | dB          |
| 1.0   | 0.3         | 71   | 68      | 68      | 65        | 23          |
| 4.0   | 0.6         | 62   | 59      | 56      | 53        | 23          |
| 10.0  | 0.9         | 56   | 53      | 48      | 45        | 23          |
| 16.0  | 1.1         | 53   | 50      | 44      | 41        | 23          |
| 20.0  | 1.3         | 51   | 48      | 42      | 39        | 23          |
| 31.2  | 1.6         | 49   | 46      | 38      | 35        | 23          |
| 62.5  | 2.4         | 44   | 41      | 32      | 29        | 23          |
| 100.0 | 3.0         | 41   | 38      | 28      | 25        | 23          |

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|       |     |    |    |    |    |    |
|-------|-----|----|----|----|----|----|
| 125.0 | 3.3 | 40 | 37 | 26 | 23 | 23 |
| 155.5 | 3.6 | 38 | 35 | 24 | 21 | 23 |
| 175.0 | 3.9 | 37 | 34 | 23 | 20 |    |
| 200.0 | 4.1 | 36 | 33 | 22 | 19 |    |
| 250.0 | 4.4 | 35 | 32 | 20 | 17 |    |
| 300.0 | 4.8 | 34 | 31 | 16 | 13 |    |

|                |             |
|----------------|-------------|
| Outer diameter | 5.7 mm      |
| Fire load      | 369 MJ/km   |
|                | 0.103 kWh/m |
| Weight         | 37 kg/km    |
| Copper content | 22.5        |
| Tensile force  | 100 N       |

Colour = zz: GR (grey), GN (green), BL (blue), GE (yellow), RT (red), OR (orange), SW (black)

| Art.-No.          | Description   |
|-------------------|---|
| SF-H5ZyyE-Nzzxxxx | SF/UTP Patch cord RJ45/RJ45 Hirose w. tde boot Cat.5e UC300 LSHF Crossover Length: xxxx |