



tde - TP cable assemblies

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.



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Technical Data

Whip length	Side A (Patchfield-End): Increments according to customer specification
	Side B (Switch-End): Increments according to customer specification

Connectors

Туре	RJ45 (TM31), with integreted dwell lever protection				
Shielding	hielded				
Dimensions Boot	34 mm length				
	13.4 mm width				
Manufacturer	Hirose (connector)				
	tde (boot)				
QS-Management Systems Certification	ISO 9001				
	ISO 14001				
	TL 9000				

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TP Cable

Application

IEEE 802.3: 10Base-T; 100Base-T; 100Base-T; 10GBase-T IEEE 802.5 16 MB; ISDN; TPDDI; ATM

Standards EN 50173-1; EN 50288-4-2



ISO/IEC 11801; IEC 61156-6

Flame resistance

LSHF (FRNC): IEC 60332-1; IEC 60754-2; IEC 61034

Construction

Conductor	CU-wire, Ø 0.42 mm (AWG27/7)
Insulation	Foam skin PP, diameter 0.98 mm
Twisting	2 cores to the pair
Pair screening	Al-laminated plastic foil
Cable lay up	4x pimf to the core
Cable Screen	Tinned copper braid
Sheath	LSHF orange RAL 2003
Stranding (6x)	0+6 stranded to the cable core, filler in the centre

Mechanical properties

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

Electrical properties at 20°C ± 5°C

Loop resistance		\leq 340 Ω/km
Resistance unbalance		≤ 3%
Insulation resistance	(500 V)	$\geq 5000 \text{ M}\Omega\text{km}$
Capacitance	at 800 Hz	Nom. 43 nF/km
Capacitance unbalance		\leq 1600 pF/km
Impedance	100 MHz	(100 ± 15) Ω
Nominal velocity of propagation		ca. 79%
Signal transit time		\leq 427 ns/100m
Delay skew		\leq 12 ns/100m
Test voltage	(DC, 1 min.) core/core & core/screen	1000 V
Coupling resistance	at 1 MHz	25 mΩ/m
	at 10 MHz	15 mΩ/m
	at 30 MHz	30 mΩ/m
Coupling attenuation		75 dB

Electrical Data (nominal) acc. to Cat.7 (at 20°C)

F	Atten- uation	NEXT	PS- NEXT	ACR	ELFEXT	PS- ELFEXT	Return Ioss
MHZ	dB/10m	dB	dB	dB/100m	dB/100m	dB/100m	dB



ISO 9001 TL 9000 ISO 14001

S/FTP Trunk-Patch cord both side 6xRJ45 TM31, UC Future FRNC Cat.6_A grey, Length: xxxx

1.0	0.3	90	87	87	80	77	23
4.0	0.6	90	87	84	80	77	24
10.0	1.0	90	87	80	80	77	25
16.0	1.3	90	87	77	76	73	25
20.0	1.4	90	87	76	74	71	25
31.2	1.8	90	87	72	70	67	25
62.5	2.6	90	87	64	64	61	23
100.0	3.2	87	84	55	60	57	21
125.0	3.6	85	82	49	58	55	20
155.5	4.0	84	81	44	56	53	19
175.0	4.3	83	80	40	55	52	19
200.0	4.6	82	79	36	54	51	18
250.0	5.1	81	78	30	52	49	18
300.0	5.6	80	77	24	50	47	17
450.0	6.9	77	74	8	47	44	17
600.0	7.9	75	72	-4	44	41	17
750.0	8.7	73	70		42	39	
900.0	9.7	72	69		41	38	
1000.0	10.2	71	68		40	37	

Technical Data

Designation	Li-02YSCH
Туре	4x2x0.42L PiMF FRNC
Outer diameter	17.8 mm
Fire load	2094 MJ/km
Fire load	0.582 kWh/m
Weight	272 kg/km
Copper number	144
Tensile force	600 N

Product variants & accessories

ArtNo.	Description
T-H6AZyyN27Mxxxx	S/FTP Trunk-Patch cord both side 6xRJ45 TM31, UC Future FRNC Cat.6 _A grey, Length: xxxx