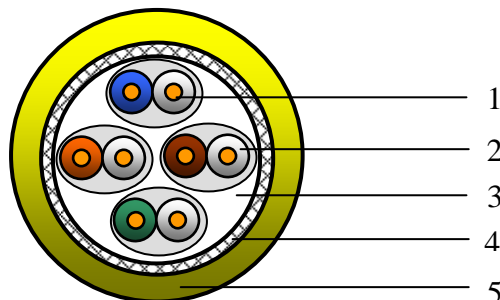


1885ENH CAT 7 S/FTP FRNC/LSOH

Networking Cables

Datatwist® cable

2018-05-30 V4



Applications

- Horizontal and building backbone cable
- Support current and future Category 6a and 7 applications, such as:
10GBase-T (10 Gigabit Ethernet), 1000Base-T (Gigabit Ethernet), 100 Base-T, 10 Base-T, FDDI, ATM

General standards

- International standard: ISO/IEC 11801 2nd edition (2002) and ISO/IEC 11801 Amendment 2 (2010)
- European standard: EN 50173-1 (2002) and EN 50173-1 Amendment 1 (2009)

Construction & Dimensions

- Conductor**
 - Material: Solid bare copper ETP
 - Diameter: AWG 23
- Insulation**
 - Material: Foamed polyethylene
 - Nominal diameter over insulation: 1.45 mm
- Cable core**
 - Pair: 2 twisted insulated conductors with overall foil
 - Foil: Laminated aluminium-polyester
 - Aluminium facing outside
 - Number of shielded pairs: 4, all twisted together
- Braid**
 - Material: Solid tinned copper
- Jacket**
 - Material: LSNH
 - Diameter: 7.0 ± 0.3 mm
 - Ripcord: Nylon ripcord under jacket
 - Colour: Yellow (RAL 1021) or blue (RAL5015)

Electrical characteristics

Low frequency and D.C. (at 20°C)	Specification	Unit
D.C. resistance conductor	< 9,5	Ω/100m
Resistance unbalance: within a pair / between pairs	< 2 / < 4	%
Insulation resistance	≥ 5000	MΩ.km
Dielectric strength conductor-conductor and conductor-screen (2 sec.)	2.5	kV DC
Mutual capacitance	< 56	nF/km
Capacitance unbalance pair to ground	< 1600	pF/km
Nominal velocity of propagation (for information only)	0.78	c
Delay skew (differential delay)	≤ 25	ns/100m
Transfer impedance according IEC 61156-5	Grade 2	
Coupling attenuation according IEC 61156-5	Type II	

Nominal	1*	4	10	16	31.2	62.5	100	125	200	300	600	1000*	MHz
Attenuation	1.8	3.3	5.3	6.7	9.4	13.4	17.1	19.3	26.7	30.8	45.5	60.3	dB/100m
NEXT	103	100	98	97	95	94	93	92	91	90	89	88	dB/100m
PS NEXT	100	97	95	94	92	91	90	89	88	87	86	85	dB/100m
ACR	101	97	93	91	85	81	76	73	64	59	43	28	dB/100m
PS ACR	98	94	90	88	82	78	73	70	61	56	40	25	dB/100m
ACR-F	95	94	93	91	90	87	85	83	77	74	60	50	dB/100m
PS ACR-F	92	91	90	88	87	84	82	80	74	71	57	47	dB/100m
Return Loss	27	30	32	32	35	33	32	31	30	25	23	21	dB/100m

NOTE: Limits below 4MHz and at 1000 MHz are for information only

Environmental and overall characteristics

	Specification	Unit
Maximum operating voltage (for all temperatures cable is intended to be used)	72	V D.C.
Maximum continuous current per conductor (@25°C)	1.5	A
Temperature rating installation	0 / 50	°C
Temperature rating operation	- 30 / 60	°C
Total cable weight	52	kg/km
Minimum bending radius (during operation and installation)	29 / 58	mm
Maximum pulling strength	85	N
Burning load	500	kJ/m
Smoke density acc. to IEC 61034-1/2 & EN50268-1/2; transmittance	> 60	%
Amount of halogen acid gas acc. to IEC 60754-1/2 & EN50267-1/2; pH	> 4.3	
Amount of halogen acid gas acc. to IEC 60754-1/2 & EN50267-1/2; Conductivity	< 10	µS/mm
Reaction to fire according IEC 60332-1-2	Pass	
Reaction to fire according EN 50575	Dca-s2,d1,a1	



Belden declares this product to be in compliance with the environmental regulations EU RoHS (Directive 2002/95/EC, 27 January 2003); this is valid for all material produced after the RoHS compliant date for this product.