



Construction, tests, and technical data:

4 color-coded, individually foil shielded twisted pairs cabled together, overall shielded with a tin-coated copper braid and overall jacketed. Siamese (Figure-8) cables are made of two identical 4-pair cables connected in a zip-cord formation, one cable identified with a longitudinal rib.

Basic Conductor	: solid, 23AWG bare annealed copper.
Insulation	: polyolefin.
No. of insulated conductors	: 8, twisted in 4 pairs. (8 pairs in FIG-8 cables).
Color Code of Pairs	: Blue x White, Orange x White, Green x White, Brown x White.
Individual pair shield	: polyester-aluminum foil (foil face out), providing 100% coverage.
Overall shield	: tin coated copper braid laid in close contact over the inner foils.
Outer Jacket	: LSZH Halogen free flame retardant or PVC compound.
Standard Jacket Color	: light Gray RAL 7035. Other colors available upon request.
Standard Surface Marking	: cable description, Meter mark and Batch Number.
Pulling force	: 50 N/mm ² max.
Short Term Bend Radius	: 8xOD mm.
Long Term Bend Radius	: 4xOD mm.
Storage temperature	: -20 to +60° C.
Operating temperature	: -20 to +60° C.
Installation temperature	: 0 to +50° C.
Flame Test	: IEC 60332-1, IEC 60332-3-24 or IEC 60332-3-25.
Conductor Size Test :	: UL 444.
LSZH cables tests	: IEC 60754 (gas) & IEC 61034 (smoke).
Characteristic Impedance	: 100±5 Ohm @ 1-600 MHz, @ 1-1000 Mhz, @ 1-1200 Mhz.
DC Resistance	: 93.0 Ohm/Km max.
Resistance unbalance	: 2% max.
Capacitance	: 45 pF/m nom. @ 1 KHz.
Cap. Unbalanced (wire to ground)	: 1500 pF/Km max. @ 1 KHz.
Voltage rating	: 72 Vdc max.
Dielectric strength	: 700 Volts/1 minute min rms.
Velocity of Propagation (NVP)	: 77-80%.
Propagation delay	: 500+36/f ^{1/2} , @ 1-1000 Mhz, @ 1-1200 Mhz.
Delay Skew	: 25 nS/100m max @ 1-600 MHz, @ 1-1000 Mhz, @ 1-1200 Mhz.
Insulation Resistance	: 5000 MegaOhm*Km min. @ 500 Vdc.
Coupling attenuation	: 85 dB min @ 30-100 MHz 85-20Log(f/100) @100-600 MHz.
Screening Attenuation	: 60 dB min @ 30-600 MHz.
Transfer Impedance	: 10 mOhm/m max @ 1-30 MHz 30 MOhm/m max @ 30-100 MHz.

CAT 7+ S/FTP 100 Ohm Horizontal LAN cables are tested and verified for full compliance with the following standards:

Category 7 according to IEC 61156-5 (for ISO/IEC-11801)

600 MHz according to CENELEC EN 50288-4



Applications:

CAT 7 cable series consists of 100 Ohm impedance, 4-pair and 8-pair S/FTP cables for horizontal installations in local area networks (LANs). All cables fully conform to and provide a substantial margin above all Category 7 requirements of IEC 61156-5 (Specified in ISO/IEC 11801) and are tested up to 600, 1000 and 1200 MHz.

CAT 7+ S/FTP 100 Ohm Horizontal LAN cables support all presently available and future LAN applications, including the following protocols:

- Broadband Digital and Analog CATV signals up to 1200 MHz;
- SOHO and multiple simultaneous applications on all 4 pairs;
- 10GBASE-T 10 Gigabit Ethernet;
- 1000BASE-T 1 Gigabit Ethernet;
- ATM 155;
- TP-PMD;
- 100BASE-T "Fast Ethernet";
- 100BASE-T2;
- 100BASE-T4;
- ITU V.21 and X.11;
- 100BASE-TX;
- Token Ring 100 Mbps;
- ATM 52;
- ATM 25;
- 10BASE-T Ethernet;
- Token Ring 4 Mbps and 16 Mbps;
- Broadband and Baseband Video;
- ISDN Basic and Primary Access;
- 1BASE-5 Starlan;
- ISALAN.

Cable Features:

- Exceptional transmission properties - suitable for 10GBE applications on 100m channels.
- Testing every reel of cable prior to shipment - providing the highest degree of quality assurance.
- Exceptional material properties and cable design.
- High ACR values - providing low BER (Bit-Error-Rate) in all applications.
- Extremely high pair-balance and double shield - providing excellent EMC (Electro Magnetic Compatibility), minimizing radiation, maximizing noise immunity and preventing any alien-crosstalk (AXT).
- Revolutionary pair lay scheme - providing an extremely low delay skew.
- Descending sequential meter mark - providing easy stock and left-over handling.
- Smooth and rigid jacket - proving fast and easy cable pulling and installation.
- Batch number printed every meter - providing fast retrieval of test results from data-base.
- A comprehensive product range - providing all state-of-the-art cable constructions.
- Large variety of packaging options - providing minimum scrap and left-over cable sections.
- Unique DoubleSafe™ Quality Assurance Program providing lowest rejection rate available.
- Full compliance with EU Directive 2002/95/CE (RoHS).



HALLEY CABLES

Category 7+ S/FTP 100 Ohm

Data and computer cables

LAN cable for horizontal installation, tested at 600, 1000 and 1200 MHz

www.halleycables.com

Transmission Properties and Electrical Specifications 600, 1000, 1200 MHz

Frequency MHz	Insertion Loss dB/100m Max.	NEXT dB Min.	PS NEXT dB Min.	EL FEXT db/100m Min.	PS EL FEXT dB/100m Min.	RL dB Min.	TCL dB Min.	EL-TCTL dB Min.	PS ANEXT dB Min.	PS AFEXT dB Min.
1	NS	78	75	78	75	20	40	35	67	67
4	3.74	78	75	83.3	80.3	23	40	23	67	67
8	5.24	78	75	77.2	74.2	24.5	40	16.9	67	67
10	5.86	78	75	75.3	72.3	25	40	15	67	67
16	7.41	78	75	71.2	68.2	26	38	10.9	67	67
20	8.29	78	75	69.3	66.3	25	37	9	67	67
25	9.29	78	75	67.3	64.3	24.3	36	7	67	65.2
31.25	10.41	78	75	65.4	62.4	23.6	35.1	5.1	67	63.3
62.5	14.88	75.5	72.5	59.4	56.4	21.5	32	NS	67	57.3
100	19.02	72.4	69.4	55.3	52.3	20.1	30	NS	67	53.2
150	23.56	69.8	66.8	51.8	48.8	18.9	28.2	NS	67	49.7
200	27.47	67.9	64.9	49.3	46.3	18	27	NS	67	47.2
250	30.97	66.4	63.4	47.3	44.3	17.3	26	NS	67	45.2
300	34.19	65.2	62.2	45.8	42.8	17.3	NS	NS	67	43.7
400	40.01	63.4	60.4	43.3	40.3	17.3	NS	NS	67	41.2
500	45.26	61.9	58.9	41.3	38.3	17.3	NS	NS	67	39.2
600	50.1	60.7	57.7	39.7	36.7	17.3	NS	NS	65.8	37.6
700	54.63	59.7	56.7	38.4	35.4	16.6	NS	NS	64.8	36.3
800	58.92	58.9	55.9	37.2	34.2	16.1	NS	NS	64	35.1
1000	66.93	57.4	54.4	35.3	32.3	15.1	NS	NS	62.5	33.2
1200	74.36	56.2	53.2	33.7	30.7	14.3	NS	NS	61.3	31.6

Note: Values above 600 MHz are nominal, for reference only.

Ordering info:

4x2x23# S/FTP CAT 7+ PVC Grey Tested to 1200MHz / OD (mm) 7.0 / Kg/km 48 / Kj/m 660 / 500/1000 m drum.

4x2x23# S/FTP CAT 7+ LSZH Grey Tested to 1200MHz / OD (mm) 7.0 / Kg/km 48 / Kj/m 660 / 500/1000 m drum.

2x(4x2x23#) CAT 7+ S/FTP PVC Grey Tested to 1200MHz / OD (mm) 7.0x14.2 / Kg/km 100 / Kj/m 1320 / 500/1000 m drum / Notes: FIG-8.

2x(4x2x23#) CAT 7+ S/FTP LSZH Grey Tested to 1200MHz / OD (mm) 7.0x14.2 / Kg/km 100 / Kj/m 1320 / 500/1000 m drum / Notes: FIG-8.

Category 7+ S/FTP 100 Ohm Horizontal LAN Cables

