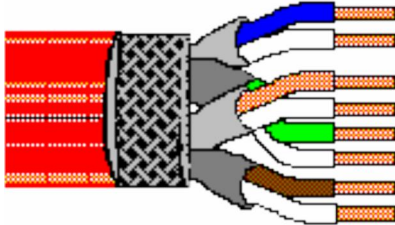


Data cable S/STP 900 MHz Horizontal Cable 22 AWG



General Construction

This is a 100 Ω double-shielded data cable, designed for high data-rates and tested up to 900 MHz.

This cable contains 4 individually shielded twisted pairs, cabled, overall braided shielded and jacketed with dark-blue HFFR jacket for indoor use.

This cable conforms to IEC 61156-5 Cat5e, Cat6, Cat7, Cat7+ and it is optimized for broadband CATV transmission up to 900 MHz.

Detailed Construction

Basic Wires

- Conductor: Bare copper, 0,64 mm nom OD (22#)
- Insulation: SFS PO, 1,56 mm nom.
- Number of basic wires: 8

Pairs Construction

- Total number of pairs: 4
- Color code (IEC 708-1): White x Blue, White x Orange, White x Green, White x Brown
- Individual shield: Each pair is wrapped with a polyester-aluminum foil (foil face out) providing 100 % coverage.

Pair Arrangement:

- The four pairs cabled together around a solid 22-24# TC drain-wire.

Overall Shield:

- Tinned copper braid, providing 65 % coverage min.

Overall jacket:

- Material: Halogen-Free Flame-Retardant (HFFR) compound.
- Color: Dark-blue, RAL 5002.
- Marking: per request
- Overall diameter: 8,4 mm. nom.

Physical Properties:

- Total weight: 76 kg/km, nom.
- Storage Temp. Range: -30 to +70°C
- Installation Temp. Range: -5 to +50°C
- Flame Test: UL VW-1, and IEC 332-1, Low-smoke Zero Halogen (LSOH).
- Caloric Value: 760 kJ/m nom.
- Min. Bend radius: 100 x D mm. During installation.
8 x D mm. Permanent
- Pulling force: 130 N max. during installation.
- Halogen content: NULL.

Electrical Properties

- Major Transmission Properties:

Freq. MHz	Attenuation dB/100m Max	NEXT dB Min	PS NEXT dB Min	EL FEXT dB/100m Min	PS EL FEXT dB/100m Min	RL dB Min	Zo Ohm	SKEW ns/100m Max	LCL dB Min
1.0	1.9	90	87.0	NS	NS	23.0	100+/-15	20	42.0
4.0	3.4	90	87.0			23.0	100+/-15	20	34.8
10.0	5.4	90	87.0			23.0	100+/-15	20	30.0
16.0	6.8	90	87.0			23.0	100+/-15	20	27.6
30.0	9.3	90	87.0			23.0	100+/-15	20	24.3
54.1	12.7	90	87.0			23.0	100+/-15	20	ffs
62.5	13.7	89.1	86.1			23.0	100+/-15	20	ffs
100	17.5	86.0	83.0			23.0	100+/-15	20	ffs
200	25.3	81.5	78.5			23.0	100+/-15	20	ffs
300	31.5	78.8	75.8			23.0	100+/-15	20	ffs
600	46.3	74.3	71.3			20.0	100+/-20	20	ffs
900	58.4	71.7	68.7			18.2	100+/-20	20	ffs

- DC Resistance: 59,0 Ω / Km max @ 20 C
- Resistance unbalance : 2% max
- Capacitance: 43 pF/m nom @ 1KHz
- Voltage rating: 30 V rms
- Dielectric strength: 700 Volts ac/1 minute min
- Velocity of Propagation: 79-80 % nominal
- Transfer Impedance: 15 m Ω / m max @ 1 MHz
10 m Ω / m max @ 10 MHz
30 m Ω / m max @ 30 MHz
- Coupling attenuation 90 dB min @ 30-100 MHz
90-20Log(f/100) dB min @ 100-1200 MHz
- Screening attenuation 65 dB min @ 30-1200 MHz
- Capacitance Unbalance 1.6 pF/m max @ 1 KHz wire to ground
- LCL 45 dB min @ 64 KHz
45 dB min @ 100 KHz
42-12Log(f)dB min @ 1-30 MHz
- Propagation Delay 500+18/Sqrt(f) nS/m max @ 1-1200 MHz
- Propagation Delay Skew 8 nom 15 max nS/100m @ 10-900 MHz
- Insulation Resistance 152 M Ω . Km min @ 500 Vdc, 20C