



Technical Specification

Cable Type: 4 Pair Category 7 100 Ohm Rodent & Termite Protected Horizontal Cable

HCS P/N: H07-00495

Revision: 06/08 Date: 29 November 2008



Category 7 Horizontal cable, conforming to ISO/IEC-11801 and IEC 61156-5.

The cable contains 4 individually shielded twisted pairs, cabled together, overall shielded with copper braid and inner jacketed with a PVC compound.

A corrugated steel tape (150 micron) and a heavy-duty, black PE outer jacket render the cable suitable for outdoor installations in rodent and termite infested locations.

Physical Description

Basic Conductor	Solid 23AWG, bare annealed copper.
Insulation	SFS-PO.
Total number of insulated conductors	8, twisted in 4 pairs.
Color code	Blue x White, Orange x White, Green x White, Brown x White.
Individual pair shield	Aluminum foil, providing 100% coverage, foil face out.
Overall shield	Tin-coated copper wire braid, providing 35% nominal coverage.
Drain wire	None.
Inner jacket	PVC compound for indoor use.
Inner jacket thickness	1.2 mm nom.
Color	NS
Inner diameter	8.7 mm nom.
Armor	Corrugated steel tape, 150μ, copolymer coated both sides, bonded to itself and to the outer PE jacket.
Outer Jacket	Heavy duty UV resistant PE compound.
Color	Black RAL 9005.
Overall Diameter	14.5 mm nom.
Surface Marking	HCS H07-00495 4x2x23# S/FTP CAT 7 DataLink 600 CSA Rodent and Termite Protected Cable CE
White hot stamping	2002/95/EC (ROHS) [Batch Number] [Sequential Meter Mark] METER

Physical Properties

Min. Bend radius during installation	500mm
Min. Bend radius in fixed position	300mm
Storage Temperature	-20 to +75C
Temperature installation range	0 to +50C
Temperature operating range	-20 to +60C
Pulling force	100 N max.
Total Weight	200 Kg/Km nom.

Electrical Properties

Input Impedance	100±10 Ohm @ 1-100 MHz
DC Resistance	93 Ohm/Km max.
Resistance unbalance	2% max.
Vp	75-77% nom.
Capacitance	40 pF/m nom @ 1 KHz
DC Resistance	72 Ohm /Km max. @ 20C
Voltage rating	72Vdc max.
Delay Skew	25 nS/100m max.
Cap. Unbalance (wire to ground)	1500 pF/Km max. @ 1 KHz.
Dielectric strength	1500 Volts/1 minute min rms
Insulation Resistance	5000 MegaOhm•Km min. @ 500 Vdc

Transmission Properties @ 20C - Conforming to IEC 61156-5 Category 7

FREQ. MHz	Insertion Loss dB/100m	NEXT dB	PS NEXT dB	EL FEXT dB/100m	PS EL FEXT dB/100m	RL dB	TCL dB	EL-TCTL dB
	Max	Min	Min	Min	Min	Min	Min	Min
1.00	2.0	80.0	75.0	75.0	72.0	20.0	40	35
10.00	5.9	80.0	75.0	74.0	71.0	25.0	40	15
16.00	7.4	80.0	75.0	69.9	66.9	25.0	40	11
25.00	9.3	80.0	75.0	66.0	63.0	24.3	36	7.0
31.25	10.7	80.0	75.0	64.1	61.1	23.6	35	5.5
62.50	14.9	75.5	72.5	58.1	55.1	21.5	32	NS
100.00	19.0	72.4	69.4	54.0	51.0	20.1	30	NS
200.00	27.5	67.9	64.9	48.0	45.0	18.0	27	NS
300.00	34.1	65.2	62.2	44.5	41.5	16.8	NS	NS
400.00	40.0	63.4	60.4	42.0	39.0	15.9	NS	NS
500.00	45.3	61.9	58.9	40.0	37.0	15.2	NS	NS
600.00	50.1	60.7	57.7	38.4	35.4	14.7	NS	NS

This cable fully conforms to EU Directive 2002/95/EC (RoHS)