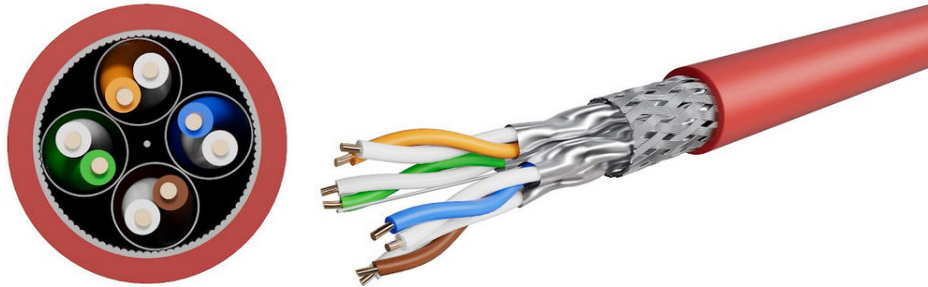


Technical Specification
Cable Type: 4x2x23# S/FTP Category 7 100 Ohm LS0H-1 Data Cable
HCS P/N H07-00422-xxx-DA35Wx
Revision: 08/25 Date: 04 March 2025



Category 7 S/FTP indoor cable, conforming to IEC 61156-5, tested up to 1200MHz. The cable contains 4 individually foil-shielded twisted pairs cabled together, overall shielded with a tinned-copper braid and a drain-wire, overall jacketed with LS0H compound for indoor use, conforming to IEC 60332-1. The cable fully supports all IEEE 802.3 PoE applications including Type 1, 2, 3 & 4, CISCO UPoE & UPoE+ and HDBase-T PoH and Class F permanent links & channels as specified in ISO/IEC 11801 and EN 50173. The cable conforms to EU Regulation 305/2011 (CPR) Class Dca-s1a,d1,a1.

Physical Description

Basic conductor	Solid 23AWG (UL 444) 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, 35±5% coverage.
Drain wire	Tin-coated copper wire, 0.40±0.01 mm, laid in contact with the foils and the braid shields.
Outer jacket	LSOH compound for indoor use.
Outer jacket thickness	0.50±0.05 mm.
Optional Jacket Colors	

P/N H07-00422-xx0-DA35W0	Gray RAL 7001
P/N H07-00422-xx0-DA35W1	Light-Gray RAL 9002
P/N H07-00422-xx1-DA35W0	Blue RAL 5015
P/N H07-00422-xx2-DA35W0	Orange RAL 2003
P/N H07-00422-xx3-DA35W0	Green RAL 6024
P/N H07-00422-xx5-DA35W0	White RAL 9003
P/N H07-00422-xx6-DA35W0	Red RAL 3000
P/N H07-00422-xx8-DA35W0	Yellow RAL 1021
P/N H07-00422-xx9-DA35W0	Purple RAL 4005
Overall diameter	7.2 mm nom.
Surface marking	HCS H07-00422 4x2x23# S/FTP CATEGORY 7 DataLink 600 SHIELDED CABLE Tested to 1200MHz VERIFIED to CAT 7 ISO/IEC-11801 & IEC 61156-5 FR IEC 60332-1 CE CPR Class Dca-s1a,d1,a1 CE 2011/65/EU (RoHS-2) [Meter Mark] METER wwSnnxxx Batch number wwSnnxxx ww=week number Snn=cabling machine number xxx=master reel number.

Note

Mechanical Properties

Bend radius	Dynamic: 8xD min. Static: 4xD min.
Storage temperature	-20 to +60C
Temperature installation range	0 to +50C
Temperature operating range	-20 to +60C
EU Regulation 305/2011 (CPR) conformance	CENELEC EN 13501 Class Dca-s1a,d1,a1. NB 2652
Flame tests	IEC 60332-1 (flame propagation), IEC 60754 (acid gas release) & IEC 61034 (smoke density).
Pulling force	150 N max.
Total weight	51 kg/km nom.

Electrical Properties @ 20C

Mean Impedance	100±5 Ohm @ 100 MHz
Vp	74% nom.
Capacitance	40 pF/m nom @ 1 kHz
Capacitance unbalance to ground	1.6 pF/m max. @ 1 kHz
Insulation resistance	5.0 GOhm·km min.
DC Resistance	77 Ohm/km max. (2% max. resistance unbalance).
DC loop resistance	154 Ohm/km max. (2% max. resistance unbalance).
Voltage rating	72Vdc max.
Transfer impedance	IEC 61156-5 Grade 1.
Coupling attenuation	IEC 61156-5 Type 1b.
Phase delay	534+36/t ^{1/2} nS/100m max. @ f=1-1200 MHz.
Delay skew	25 nS/100m max.

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

FREQ. MHz	Insertion Loss dB/100m		NEXT dB		PS NEXT dB		ACR-F dB/100m		PS ACR-F dB/100m		RL dB		TCL dB	EL-TCTL dB	PS ANEXT dB	PS AACR-F dB
	Max	Nom	Min	Nom	Min	Nom	Min	Nom	Min	Nom	Min	Nom	Min	Min	Min	Min
1	NS	1.8	78.0	100	75.0	97	78.0	105	75.0	103	20.0	23	40.0	35.0	67.0	67.0
4	3.74	3.4	78.0	100	75.0	97	78.0	93	75.0	91	23.0	25	40.0	23.0	67.0	67.0
10	5.86	5.4	78.0	100	75.0	97	74.0	85	71.0	83	25.0	30	40.0	15.0	67.0	67.0
25	9.29	8.7	78.0	100	75.0	97	66.0	77	63.0	75	24.3	30	36.0	7.0	67.0	65.2
31.25	10.41	9.6	78.0	100	75.0	97	64.1	75	61.1	73	23.6	28	35.1	5.1	67.0	63.3
62.5	14.88	13.7	75.5	100	72.5	97	58.0	69	55.1	67	21.5	28	32.0	NS	67.0	57.3
100	19.02	17.4	72.4	100	69.4	97	54.0	65	51.0	63	20.1	25	30.0	NS	67.0	53.2
250	30.97	28.1	66.4	90	63.4	87	46.0	57	43.0	55	17.3	25	26.0	NS	67.0	45.2
500	45.26	40.0	61.9	86	58.9	83	40.0	50	37.0	48	17.3	23	NS	NS	67.0	39.2
600	50.10	44.8	60.7	85	57.7	82	38.4	49	35.4	47	17.3	23	NS	NS	65.8	37.6
700	NS	48.0	NS	84	NS	81	NS	48	NS	46	NS	23	NS	NS	64.8	36.3
800	NS	51.0	NS	83	NS	80	NS	47	NS	45	NS	23	NS	NS	64.0	35.1
1000	NS	58.4	NS	82	NS	79	NS	45	NS	43	NS	20	NS	NS	62.5	33.2
1200	NS	65.2	NS	82	NS	79	NS	43	NS	41	NS	20	NS	NS	61.3	31.6

Values above 600MHz are non-binding nominal values for reference only

This cable fully conforms to EU Directive 2011/65/EU (RoHS-2)