

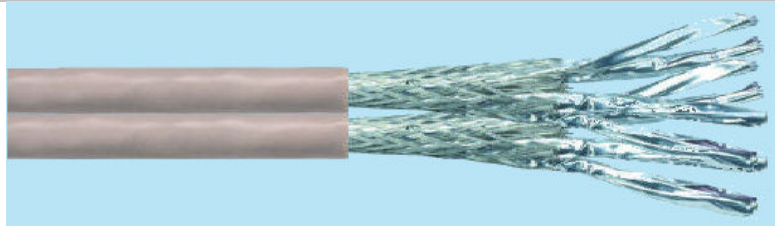


Technical Specification

Cable Type: 2x(4x2x23#) S/FTP FIG-8 (Siamese) Category 7A 100 Ohm LS0H-3 Horizontal Data Cable

HCS P/N: H7A-B080K-xxx-DA55W0

Revision: 02/24 Date: 20 August 2024



Category 7A S/FTP indoor cable, conforming to ISO/IEC-11801 and IEC 61156-5 Category 7A limits, tested up to 1500MHz. The cable contains 8 individually foil-shielded twisted pairs cabled in two 4-pair cores, each overall shielded with a tinned-copper braid and overall jacketed in a FIG-8 (Siamese) formation with LS0H compound for indoor use, conforming to IEC 60332-3-22. The cable fully supports all IEEE 802.3 PoE applications including Type 1, 2, 3 & 4, CISCO UPoE & UPoE+ and HDBase-T PoH. The cable fully supports all ISO/IEC 11801 and TIA-568 supported applications up to IEEE 10GBASE-T. The cable conforms to EU Regulation 305/2011 (CPR) Class Dca-s1a,d1,a1.

Physical Description

Basic Conductor	Solid 23AWG, bare annealed copper.
Insulation	SFS-PO.
Total number of insulated conductors	16, twisted in two cores of 4 pairs each.
Color code in each core	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 of each core	Tin-coated copper wire braid, providing 55% coverage.
Drain wire in each core	Solid tin-coated copper wire, 0.40±0.01 mm, laid in close contact with the individual shields.
Outer jacket	Low-smoke, Zero-halogen, Flame-retardant compound for indoor use, FIG-8 (Siamese) formation.
Core identification	Surface printing shall be always on the same core.
Outer jacket thickness	0.70±0.1mm
Color options	
P/N H7A-B080K-xx0-DA55W0	Grey RAL 7001
P/N H7A-B080K-xx1-DA55W0	Blue RAL 5015
P/N H7A-B080K-xx2-DA55W0	Orange RAL 2003.
P/N H7A-B080K-xx3-DA55W0	Green RAL 6025.
P/N H7A-B080K-xx5-DA55W0	White RAL 9003.
P/N H7A-B080K-xx6-DA55W0	Red RAL 3000.
P/N H7A-B080K-xx7-DA55W0	Black RAL 9005.
Overall Diameter	7.7x15.4 mm nom.
Surface Marking	HCS H7A-B080K 2x(4x2x23#) S/FTP (55%) CATEGORY 7A DataLink 1000 SHIELDED LS0H CABLE Tested to 1500MHz VERIFIED to CAT 7A ISO/IEC-11801 & IEC 61156-5 FR IEC 60332-3-22 CE CPR Class Dca-s1a,d1,a1 CE 2011/65/EU (RoHS-2) [Meter Mark] METER wwSnnxxx
Note	Batch number wwSnnxxx ww=week number Snn=cabling machine number xxx=master reel number.

Mechanical Properties

Bend Radius	Dynamic: 8xD min. Static: 4xD min.
Storage Temperature	-20 to +75C
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 60332-3-22 (flame propagation), IEC 60754 (acid gas release) & IEC 61034 (smoke density).
Pulling force	200 N max.
Total Weight	132 kg/km nom.

Electrical Properties @ 20C

Characteristic Impedance	100±5 Ohm @ 100 MHz
Vp	74% nom.
Capacitance unbalance to ground	1.6 pF/m max. @ 1 KHz
Insulation Resistance	0.5 GOhm•km min.
DC Resistance	62 Ohm/km max. (2% max. resistance unbalance).
DC Loop Resistance	124 Ohm/km max. (2% max. resistance unbalance).
Voltage rating	72Vdc max.
Coupling attenuation	IEC 61156-5 Type I.
Transfer Impedance	IEC 61156-5 Grade 1.
Phase delay	534+36/f ^{1/2} nS/100m max. @ f=1-1000 MHz.
Delay Skew	25 nS/100m max. @ 4-1000MHz

Transmission Properties @ 20C CAT 7A IEC 61156-5

Freq.	IL	NEXT	PS-NEXT	ACR-F	PS ACR-F	RL	TCL	EL-TCTL	PS-ANEXT	PS-AACR-F
MHz	dB/100m	dB	dB	dB/100m	dB/100m	dB	dB	dB	dB	dB
	Max	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Min.
1	2.1	78.0	75.0	78.0	75.0	20.0	40.0	35.0	67.0	67.0
10	5.8	78.0	75.0	75.3	72.3	25.0	40.0	15.0	67.0	67.0
25	9.2	78.0	75.0	67.3	64.3	24.3	36.0	7.0	67.0	65.2
30	10.1	78.0	75.0	65.8	62.8	23.8	35.2	5.5	67.0	63.7
62.5	14.6	78.0	75.0	59.4	56.4	21.5	32.0	NS	67.0	57.3
100	18.5	75.4	72.4	55.3	52.3	20.1	30.0	NS	67.0	53.2
250	29.7	69.4	66.4	47.3	44.3	17.3	26.0	NS	67.0	45.2
500	42.8	64.9	61.9	41.3	38.3	17.3	NS	NS	67.0	39.2
600	47.1	63.7	60.7	39.7	36.7	17.3	NS	NS	65.8	37.6
1000	61.9	60.4	57.4	35.3	32.3	15.1	NS	NS	62.5	33.2
1200	68.4	59.2	56.2	33.7	30.7	14.3	NS	NS	61.3	31.6
1400	74.4	58.2	55.2	32.2	29.2	13.6	NS	NS	60.3	30.3
1500	77.2	57.8	54.8	31.6	28.6	13.3	NS	NS	59.9	29.7

Transmission parameters indicated above 1000MHz are non-binding nominal values provided for reference only.

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