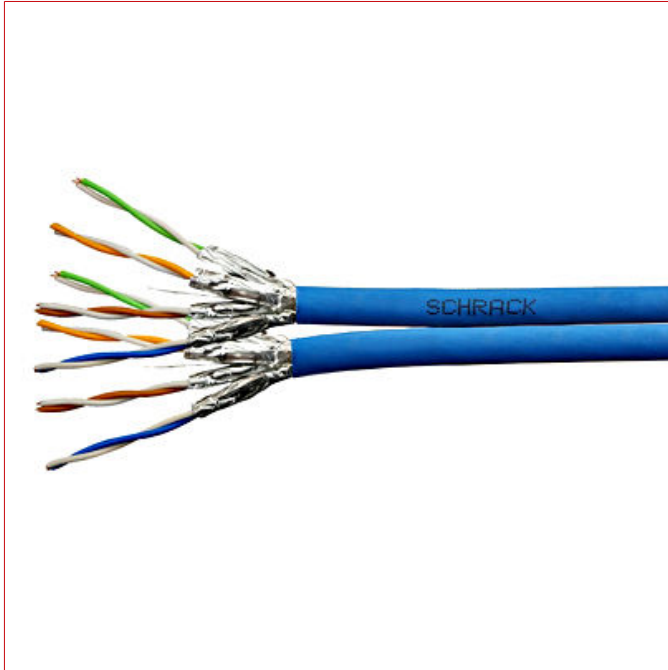


Data Sheet for Article: HSKF823HB5

U/FTP Cable Cat.6a, 2x(4x2xAWG23/1), 500MHz, LSOH, Dca, blue

Drum 500m



SCHRACK-Info

Installation cable for generic cabling systems

APPLICATION

- Horizontal and building backbone cable
- Support current and future Category 6_A and 6 applications, such as: 1000Base-T (Gigabit Ethernet), 100 Base-T, 10 Base-T, FDDI, ATM

GENERAL STANDARDS

- International standard: ISO/IEC 11801 2nd edition (2002) and ISO/IEC 11801 Amendment 2 (2010)
- European standard: EN 50173-1 (2002) and EN 50173-1 Amendment 1 (2009)
- U.S. Standard: ANSI/TIA/EIA 568.2-D

Technical Data

Category	Cat.6 _A
Cable shielding	U/FTP
Conductor material	Solid bare copper AWG23/1
Conductor	2 x 4 individual shielded pairs

Technical Data - continued

Color code pairs	Pair 1 White / Blue Pair 2 White / Orange Pair 3 White / Green Pair 4 White / Brown
Number of pairs	2 x 4, all twisted together
Insulation material	Foamed polyethylene
Nominal diameter over insulation (mm)	1,32
Shielding	shielded
Pair-Foil	Laminated aluminium polyester, Aluminium facing outside (PiMF)
Ripcord	Nylon
Cable jacket	LS0H
Jacket	LS0H
Euroclass acc. to EN50575	Dca
Smoke production	s2
Droplets	d1
Acidity	a1
Sheath colour	blue, RAL 5015
Burning load (kJ/m)	1000
Wire insulation	Halogen-free foam/skin material
Drain wire	0,16mm, AWG26/7
Smoke density - transmittance (%)	≥80
Amount of halogen acid gas - pH	≥4.3
Amount of halogen acid gas - Conductivity (μS/m)	≤10
Outside diameter (mm)	15,6 ± 0,5
Weight nominal (kg/km)	94
Colour	Blue
Temperature range - Operation (°C)	-30 to +60
Temperature range - Installation (°C)	+0 to +50
Bending radii cable - Operation (longterm) (Ø)	29mm
Bending radii cable - Installation (shortterm) (Ø)	57mm
Max. pulling tension (N)	180
Rated voltage	72 VDC
Max. continuous current per conductor (25°C) (A)	1,50
DC resistance at 20° C (Ohm/100m)	≤9,5
Resistance unbalance: within a pair / between pairs (%)	≤2 / ≤4
D.C. insulation resistance: conductor – conductor and conductor – screen (MΩ*km)	≥ 5000
Dielectric strength conductor – screen (2 sec) (kV DC)	2,50
Mutual capacitance (nF/km)	≤56
Capacitance unbalance pair to ground (pF/km)	≤1600
Resistance difference (%)	≤2 / ≤4
Coupling attenuation according IEC 61156-5	Type 2
Elongation at break of the conductors (%)	10

Technical Data - continued

Minimum elongation at break of the insulation (%)	≥ 100
Minimum elongation at break of the sheath (%)	≥ 100
Tensile strength of sheath (MPa)	≥ 9
Frequencies tested to (MHz)	500
SKEW (ns/100m)	≤ 45
NVP (%)	77
Length/Put-ups	500m - drum
IEEE Compliance	PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Net length (mm)	1.000,00
Net diameter (mm)	15,60
Net weight (kg)	0,04
Min. ambient temperature (°C)	-30
Max. ambient temperature (°C)	60

TYPICAL VALUES

Frequency	Max.	Min.	Min.	Min.	Min.	Min. ACRF	Min. PSACRF	Min. RL	Min.	Min.	Min.	Min.
[MHz]	Insertion Loss	NEXT	PSNEXT	ACR	PSACR	(ELFEXT)	(PSELFEXT)	(Return Loss)	PSANEXT	PSAACRF	TCL	ELTCTL
	(Attenuation)	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]
1	2,1 dB/100m	75,3	72,3	73,2	70,2	68	65	20	67	67	40	35
4	3,8 dB/100m	66,3	63,3	62,5	59,5	56	53	23	67	66,2	34	23
10	5,9 dB/100m	60,3	57,3	54,4	51,4	48	45	25	67	58,2	30	15
16	7,5 dB/100m	57,2	54,2	49,8	46,8	43,9	40,9	25	67	54,1	28	10,9
31,2	10,5 dB/100m	52,9	49,9	42,4	39,4	38,1	35,1	23,6	67	48,3	25,1	5,1
62,5	15 dB/100m	48,4	45,4	33,4	30,4	32,1	29,1	21,5	65,6	42,3	22	
100	19,1 dB/100m	45,3	42,3	26,2	23,2	28	25	20,1	62,5	38,2	20	
125	21,5 dB/100m	43,8	40,8	22,3	19,3	26,1	23,1	19,4	61	36,3	19	
200	27,6 dB/100m	40,8	37,8	13,2	10,2	22	19	18	58	32,2	17	
250	31,1 dB/100m	39,3	36,3	8,3	5,3	20	17	17,3	56,5	30,2	16	
300	34,3 dB/100m	38,1	35,1	3,9	0,9	18,5	15,5	17,3	55,3	28,7		
500	45,3 dB/100m	34,8	31,8	-10,4	-13,4	14	11	17,3	52	24,2		

Limits below 4 MHz are for information only. Reference standard: IEC 61156-5

DESCRIPTION	NVP (%)	Order No.
U/FTP Cable Cat.6a, 2x(4x2xAWG23/1), 500MHz, LS0H, Dca, blue	77	HSKF823HB5
Drum 500m		

Optional Accessories

Article Table

DESCRIPTION	NVP (%)	Order No.
Optional Accessories		
S-JACK Module RJ45 shielded, Cat.6a 10GB, 24 pieces box 4PPoE 100W, SFB		HSEMRJ6GS2
S-JACK Module RJ45 shielded, Cat.6a 10GB, Single Pack 4PPoE 100W, SFB		HSEMRJ6GS1
TOOLLESS LINE Jack RJ45 shielded, Cat.6a 10GB, 24 pieces box 4PPoE 100W, (SFB), Type: HSEMRJ6GBA		HSEMRJ6GB2
TOOLLESS LINE Jack RJ45 shielded, Cat.6a 10GB 4PPoE 100W (SFB)		HSEMRJ6GBA
TOOLLESS LINE Jack RJ45 shielded, Cat.6a 10GB 4PPoE 100W (SFA)		HSEMRJ6GWA
Cable dispenser for 250kg Load for drums up to 52cm width		HTOOL00006
Back to back cable tie blue 16mm x 4m		Q7KB0416-B
Back to back cable tie red 16mm x 4m		Q7KB0416-R
Back to back cable tie black 16mm x 4m		Q7KB0416-S
Back to back cable tie yellow 16mm x 4m		Q7KB0416-Y
Back to back cable tie green 16mm x 4m		Q7KB0416-U