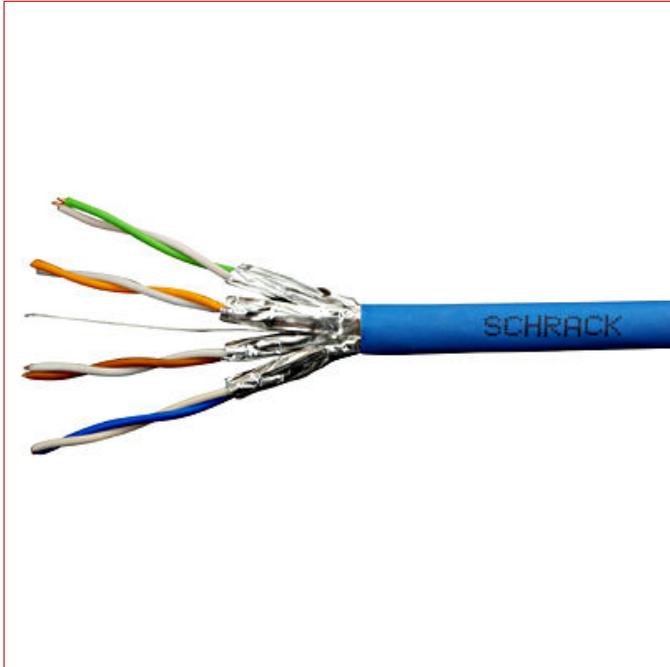


Data Sheet for Article: HSKF423HB9

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

Box 100m



SCHRACK-Info

Installation cable for generic cabling systems

APPLICATION

- Horizontal and building backbone cable
- Support current and future Category 6_A 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-B.2-10 (2008)



Technical Data

Category	Cat.6 _A
Cable shielding	U/FTP

Technical Data - continued

Conductor material	Solid bare copper AWG23/1
Conductor	4 individual shielded pairs
Color code pairs	Pair 1 White / Blue Pair 2 White / Orange Pair 3 White / Green Pair 4 White / Brown
Number of pairs	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)	500
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)	7,0 ± 0,3
Weight nominal (kg/km)	48
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)	90
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

Technical Data - continued

Coupling attenuation according IEC 61156-5	Type 2
Elongation at break of the conductors (%)	10
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	100m
IEEE Compliance	PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4

REFERENCE STANDARD: IEC 61156-5

TYPE	1 *	4	10	16	31,2	62,5	100	155	200	250	300	500	MHz
Attenuation	2.1	3.7	5.8	7.3	10.3	14.7	18.8	23.6	27.0	30.4	33.6	44.6	dB/100m
NEXT	100	100	100	100	100	100	100	95	94	93	92	90	dB/100m
PS NEXT	100	100	100	100	100	100	98	93	92	91	90	88	dB/100m
ACR	98	96	94	93	90	85	81	71	67	63	58	45	dB/100m
PS ACR	98	96	94	93	90	85	79	69	65	61	56	43	dB/100m
ACR-F	90	90	90	90	88	85	80	75	68	62	58	53	dB/100m
PS ACR-F	90	90	90	88	86	83	78	73	66	60	56	51	dB/100m
Return Loss	33	35	35	33	33	33	33	30	28	27	26	24	dB/100m

Typical values are informative.

TYPICAL VALUES

Frequency	1	4	10	16	31.2	62.5	100	125	200	300	500	MHz
Attenuation	2.1	3.8	5.9	7.5	10.5	15	19.1	21.5	27.6	34.3	45.3	dB/100m
NEXT	75.3	66.3	60.3	57.2	52.9	48.4	45.3	43.8	40.8	38.1	34.8	dB/100m
PS NEXT	72.3	63.3	57.3	54.2	49.9	45.4	42.3	40.8	37.8	35.1	31.8	dB/100m
ACR	73.2	62.5	54.4	49.8	42.4	33.4	26.2	22.3	13.2	3.9	-10.4	dB/100m
PS ACR	70.2	59.5	51.4	46.8	39.4	30.4	23.2	19.3	10.2	0.9	-13.4	dB/100m
ACR-F	68	56	48	43.9	38.1	32.1	28	26.1	22	18.5	14	dB/100m
PS ACR-F	65	53	45	40.9	35.1	29.1	25	23.1	19	15.5	11	dB/100m
Return Loss	20	23	25	25	23.6	21.5	20.1	19.4	18	17.3	17.3	dB/100m
TCL level 1	40	34	30	28	25.1	22	20	19	17	-	-	dB/100m
EL TCTL	35	23	15	10.9	5.1	-	-	-	-	-	-	dB/100m
PS ANEXT	67	67	67	67	67	65.6	62.5	61	58	55.3	52	dB/100m
PS AACR-F	67	66.2	58.2	54.1	48.3	42.3	38.2	36.3	32.2	28.7	24.2	dB/100m
Propagation delay	570	552	545	543	540	539	538	537	536	536	536	dB/100m

* Limits below 4MHz are informative.

Article Table

DESCRIPTION	NVP (%)	COPPER WEIGHT (kg/km)	Order No.
U/FTP Cable Cat.6a, 4x2xAWG23/1, 500MHz, LS0H, Dca, blue Box 100m	77	20	HSKF423HB9
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