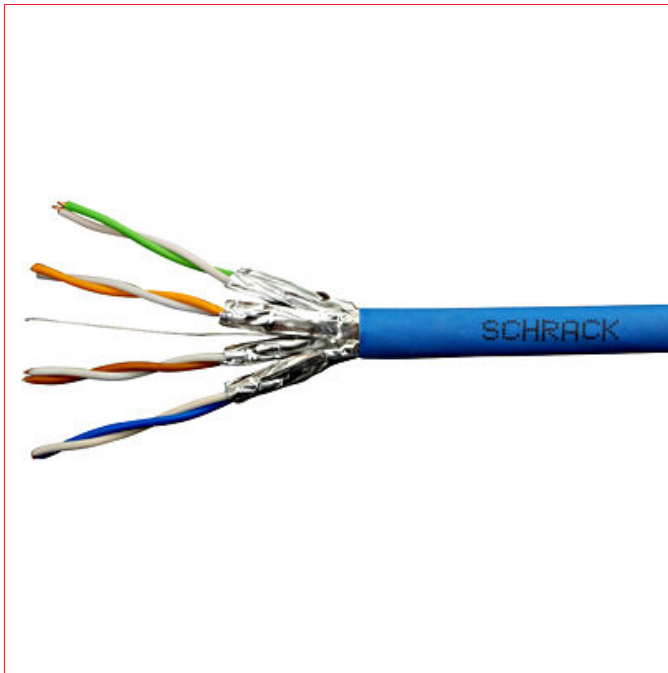


Data Sheet for Article: HSKF423HB5

# U/FTP Cable Cat.6a, 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<sub>A</sub> 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 <sub>A</sub>
Cable construction	U/FTP

## Technical Data - continued

Cable shielding	U/FTP
Conductor	4 individual shielded pairs
Conductor material	Solid bare copper AWG23/1
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
Wire insulation	Halogen-free foam/skin material
Drain wire	0,16mm, AWG26/7
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	LSOH
Jacket	LSOH
Euroclass acc. to EN50575	Dca
Smoke production	s2
Droplets	d1
Acidity	a1
Burning load (kJ/m)	515
Smoke density - transmittance (%)	> 60
Amount of halogen acid gas - pH	> 4.3
Amount of halogen acid gas - Conductivity ( $\mu\text{S}/\text{m}$ )	< 10
Outside diameter (mm)	6.9 $\pm$ 0.3
Weight nominal (kg/km)	48
Sheath colour	Blue
Colour	Blue
Length/Put-ups	500m - drum
Min. ambient temperature ( $^{\circ}\text{C}$ )	-30
Max. ambient temperature ( $^{\circ}\text{C}$ )	60
Temperature range - Operation ( $^{\circ}\text{C}$ )	-30 to +60
Temperature range - Installation ( $^{\circ}\text{C}$ )	+0 to +50
Bending radii cable - Operation (longterm) ( $\emptyset$ )	29mm
Bending radii cable - Installation (shortterm) ( $\emptyset$ )	57mm
Max. pulling tension (N)	79
Rated voltage	72 VDC
Max. continuous current per conductor (25 $^{\circ}\text{C}$ ) (A)	1.5
DC resistance at 20 $^{\circ}\text{C}$ (Ohm/100m)	< 9.5
Resistance unbalance: within a pair / between pairs (%)	<2 / <4
D.C. insulation resistance: conductor – conductor and conductor – screen ( $\text{M}\Omega \cdot \text{km}$ )	$\geq 5000$

## Technical Data - continued

Dielectric strength conductor – screen (2 sec) (kV DC)	2.5
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
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
Net length (mm)	1.000,00
Net weight (kg)	0,05
Net diameter (mm)	7,00

## 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 for information only

## Article Table

DESCRIPTION	NVP (%)	Order No.
U/FTP Cable Cat.6a, 4x2xAWG23/1, 500Mhz, LS0H, Dca, blue Drum 500m	77	HSKF423HB5
<b>Optional Accessories</b>		
S-JACK Module RJ45 shielded, Cat.6a 10GB, 4PPoE 100W, SFB 24 pieces box		HSEMRJ6GS2
S-JACK Module RJ45 shielded, Cat.6a 10GB, 4PPoE 100W, SFB		HSEMRJ6GS1
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