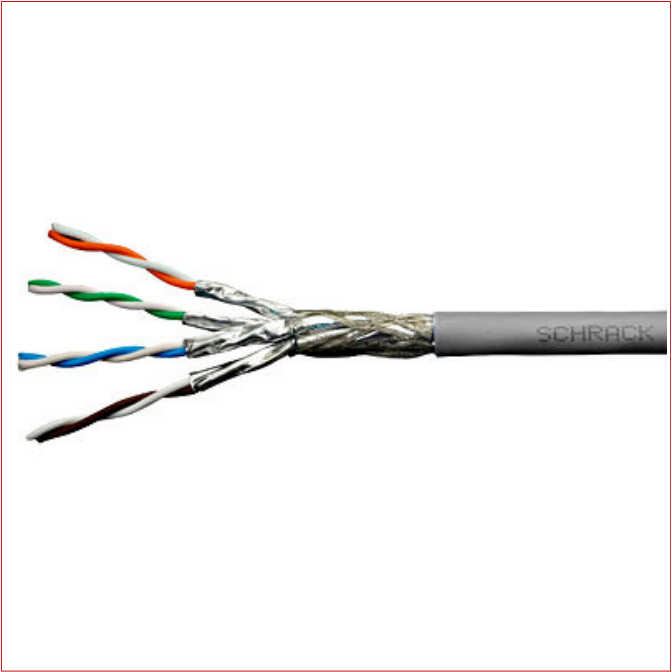


Data Sheet for Article: HSKP422HG9

S/FTP Cable Cat.7a, 4x2xAWG22/1, 1.250MHz, LSOH-3, B2ca, 50%

grey RAL7032, Drum 100m



SCHRACK-Info

Installationcables for generic, structured network cabling systems. Support all applications requiring Class D to Class F_A (e.g. 10GBase-T, 1000Base-T, 100Base-TX, ATM) as well as VoIP, 4PPoE.

Supports 25Gbase-T (ISO/IEC TR 11801-9905).

Due to the cable construction and the high braid coverage of 50%, the cable reaches the coupling attenuation (Type I) of ≥ 85 dB.

25GB

Technical Data

Category	Cat.7 _A
Cable shielding	S/FTP
Conductor material	Solid bare copper AWG22/1 (0.64mm)
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

Technical Data - continued

Insulation material	Foamed polyethylene
Nominal diameter over insulation (mm)	1,54
Shielding	shielded
Pair-Foil	Laminated aluminium polyester, Aluminium facing outside (PiMF)
Overall Shield	Solid tinned copper
Braid coverage (%)	50
Ripcord	Nylon
Cable jacket	LS0H-3
Jacket	LS0H-3, FRNC according to: IEC 61034-1/2, EN 50268-1/2 IEC 60754-1/2, EN 50267-1/2 IEC 60332-3-24, EN 60332-3-24
Euroclass acc. to EN50575	B2ca
Smoke production	s1a
Droplets	d1
Acidity	a1
Sheath colour	grey
Burning load (kJ/m)	700
Outside diameter (mm)	8,1
Weight nominal (kg/km)	65
Colour	Grey
Temperature range - Operation (°C)	-30 to +60
Temperature range - Transport/storage (°C)	-30 to +60
Temperature range - Installation (°C)	+0 to +50
Bending radii cable - Operation (longterm) (Ø)	4
Bending radii cable - Installation (shortterm) (Ø)	8
Max. pulling tension (N)	110
Rated voltage	≤72V DC and ≤50V AC
Max. continuous current per conductor (25°C) (A)	1,5
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 – conductor (2 sec) (kV DC)	2,5
Dielectric strength conductor – screen (2 sec) (kV DC)	2,5
Mutual capacitance (nF/km)	≤56
Capacitance unbalance pair to ground (pF/km)	≤1600
SKEW (ns/100m)	≤ 25
NVP (%)	73
Length/Put-ups	100m - Drum
IEEE Compliance	PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Net diameter (mm)	8,10
Min. ambient temperature (°C)	-30

Technical Data - continued

Max. ambient temperature (°C)	60
Net weight (kg)	0,07

ELECTRICAL CHARACTERISTICS AT 20°C ACCORDING TO IEC 61156-5

	Freq. (MHz)	Specification	Unit
NVP (Nominal velocity of propagation)	4 – 1000	0.73	c
Skew	4 – 1000	≤ 25	ns/100m
Propagation delay	4 – 1000	≤ 534 + 36/Vf	ns/100m
Attenuation	5 – 1000	≤ 1.8 * Vf + 0.005 * f + 0.25/Vf	dB
TCL, level 1 (Transverse conversion loss)	1 – 250	> 40 – 10 * log (f)	dB
ELTCL (Equal level transverse conversion loss)	1 – 30	> 35 – 20 * log (f)	dB
NEXT (Near end cross talk)	4 – 1000	≥ 106-15 * log (f) (78 max.)	dB
PS NEXT (Power sum near end cross talk)	4 – 1000	≥ 103-15 * log (f) (75 max.)	dB
ACR-N (Attenuation cross talk ratio)	4 – 1000	NEXT – Dämpfung	dB
PS ACR-N (Power sum attenuation cross talk ratio)	4 – 1000	PSNEXT – Dämpfung	dB
ACR-F (Equal level far end cross talk)	4 – 1000	≥ 95.3-20 * log (f) (78 max.)	dB
PS ACR-F (Power sum equal level far end cross talk)	4 – 1000	≥ 92.3-20 * log (f) (75 max.)	dB
PS ANEXT (Power sum alien near end cross talk)	4 – 1000	≥ 107.5-15 * log (f) (67 min.)	dB
PS AACR-F (Power sum alien far end cross talk)	4 – 1000	≥ 92.3-20 * log (f) (67 min.)	dB
Input impedance open / short (Zo/s)	4 – 1000	100	Ω
RL (Return loss)	4 ≤ f ≤ 10	≥ 20 + 5 * log (f)	dB
	10 ≤ f ≤ 20	≥ 25	dB
	20 ≤ f ≤ 600	≥ 25-7 * log (f/20) (17.3 min.)	dB
	600 ≤ f ≤ 1000	≥ 17.3-10 * log (f/600)	dB
Coupling attenuation (type I)	30 – 100	≥ 85	dB
	100 – 1000	≥ 85-20 * log (f/100)	dB
Transfer impedance (ZT, grade 1)	1	< 10	mΩ/m
	10	< 10	mΩ/m
	30	< 30	mΩ/m
	100	< 100	mΩ/m

REFERENCE STANDARD AT 20°C: IEC 61156-5

Frequency	1 *	4	10	16	30	62,5	100	155	250	500	600	1000	1250 *	MHz
Attenuation	2,1	3,7	5,8	7,3	10,3	14,6	18,5	23,2	29,7	42,8	47,1	61,9	69,9	dB/100m
NEXT	78	78	78	78	78	78	76	73,1	70	65,5	64,3	61	59,5	dB/100m
PS NEXT	75	75	75	75	75	75	73	70,1	67	62,5	61,3	58	56,5	dB/100m
ACR-N	75,9	74,3	72,2	70,7	67,7	63,4	57,5	49,9	40,3	22,7	17,2	-0,9	-10,4	dB/100m
PS ACR-N	72,9	71,3	69,2	67,7	64,7	60,4	54,5	46,9	37,3	19,7	14,2	-3,9	-13,4	dB/100m
ACR-F	78	78	75,3	71,2	65,4	59,4	55,3	51,5	47,3	41,3	39,7	35,3	33,4	dB/100m
PS ACR-F	75	75	72,3	68,2	62,4	56,4	52,3	48,5	44,3	38,3	36,7	32,3	30,4	dB/100m
RL	20	23	25	25	23,6	21,5	20,1	18,8	17,3	17,3	17,3	15,1	14,1	dB/100m

* Limits below 4 MHz and values at 1250 MHz are for information only.

TYPICAL VALUES AT 20°C

Frequency	1*	4	10	16	30	62,5	100	155	250	500	600	1000	1250*	MHz
Attenuation	1,8	3,3	5,3	6,7	9,3	13,4	17,1	20,9	27	39,4	43,3	57,7	65,4	dB/100m
NEXT	103	100	98	97	95	94	93	92	91	90	89	88	87	dB/100m
PS NEXT	100	97	95	94	92	91	90	89	88	87	86	85	84	dB/100m
ACR-N	101	97	93	91	85	81	76	71	64	51	46	30	21	dB/100m
PS ACR-N	98	94	90	88	82	78	73	68	61	48	43	27	18	dB/100m
ACR-F	95	94	93	91	90	87	85	82	71	65	60	50	45	dB/100m
PS ACR-F	92	91	90	88	87	84	82	79	68	62	57	47	42	dB/100m
RL	27	30	32	32	35	33	32	31	27	23	23	19	18	dB/100m

* Limits below 4 MHz and values at 1250 MHz are for information only.

Article Table

DESCRIPTION	NVP (%)	COPPER WEIGHT (kg/km)	Order No.
S/FTP Cable Cat.7a, 4x2xAWG22/1, 1.250MHz, LS0H-3, B2ca, 50% grey RAL7032, Drum 100m	73	35	HSKP422HG9
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 4PPoE 100W (SFA)			HSEMRJ6GWA
TOOLLESS LINE Jack RJ45 shielded, Cat.6a 10GB 4PPoE 100W (SFB)			HSEMRJ6GBA
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