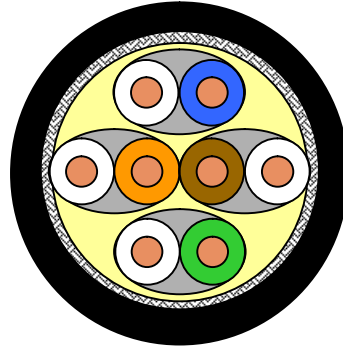




ICS IE SuperCat 7SW LSHF

Water resistant S/FTP Installation Cable 4x2xAWG23/1 for Indoor/Outdoor use



Application

Indoor- and outdoor installations, filled with compound to prevent water penetration
Primary (Campus), Secondary (Riser), Tertiary (Horizontal)
IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T; 10GBase-T
IEEE 802.5 16 MB; ISDN; TPDDI; ATM

Standards

EN 50173-1; EN 50288-4-1
ISO/IEC 11801; IEC 61156-5

Water penetration rating

IEC 60794-1-2F5, method B

Fire rating

Flame retardant and Halogen free: IEC 60332-1; IEC 60754-2
Smoke classification : No

Construction

Conductor	Solid bare copper wire, Ø 0.55 mm (AWG 23)
Insulation	Foam-skin PE, Ø 1.45 mm
Twisting	2 cores to the pair, WBC filled
Pair screen	Al-laminated plastic foil
Cable lay up	4 pairs (PiMF) to the core, swelling yarn and tape
Cable core filling	Special Waterproofing/compound to prevent moisture migration*). To prevent water penetration and to ensure electrical properties even in continuous wet conditions.
Screen	Copper braid, tinned
Sheath	LSHF, UV stabilized, diameter 8.7 mm
Colour	Black, RAL 9011
Marking	DRAKA OUTDOOR 23 CATEGORY 7 S/FTP 4P <factory code/batch no./date-time> <meter> m



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Mechanical properties

Bending radius	During operation	4 x Outer diameter
	During installation	8 x Outer diameter
Temperature range	During operation	-40°C to + 60°C
	During installation	-10°C to + 50°C
Fire load		838 MJ/km
Maximum tensile load	During operation	-
	During installation	100 N

Electrical properties

at 20°C± 5°C

Loop resistance		≤ 165 Ω/km
Resistance unbalance		≤ 2%
Insulation resistance	(500 V)	≥ 2000 MΩ*km
Mutual capacitance	at 800 Hz	Nom. 43 nF/km
Capacitance unbalance	(pair/ground)	≤ 1500 pF/km
Characteristic impedance	(1-100 MHz)	(100 ± 15) Ω
	(100 - 250) MHz	(100 ± 18) Ω
	(250 - 600) MHz	(100 ± 25) Ω
Nominal velocity of propagation		ca. 79 %
Propagation delay		≤ 550 ns/100m
Delay skew		≤ 10 ns/100m
Test voltage	(DC, 1 min) core/core and core/screen	1000 V
Transfer impedance	at 1 MHz	≤ 20 mΩ/m
	at 10 MHz	≤ 30 mΩ/m
	at 30 MHz	≤ 40 mΩ/m
	at 100MHz	≤ 200 mΩ/m
Coupling attenuation		≥ 75 dB



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Electrical data (nominal)

at 20°C

F (MHZ)	Attenuation (dB/100m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	PS-ACR (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)	Return loss (dB)
1.0	1.8	100	97	98	95	105	105	-
4.0	3.4	100	97	97	94	105	102	27
10.0	5.4	100	97	95	92	97	94	30
16.0	6.8	100	97	93	90	93	90	30
20.0	7.7	100	97	92	89	91	88	30
31.2	9.6	100	97	90	87	87	84	30
62.5	13.7	100	97	86	83	81	78	30
100.0	17.4	100	97	83	80	77	74	30
125.0	19.5	95	92	75	72	75	72	26
155.5	21.9	94	91	72	69	73	70	26
175.0	23.3	93	90	70	67	72	69	25
200.0	25.0	92	89	67	64	71	68	25
250.0	28.1	90	87	62	59	69	66	24
300.0	30.9	89	86	58	55	67	64	24
450.0	38.3	87	84	48	45	64	61	23
600.0	44.8	85	82	40	37	61	58	22
750.0	52.0	83	80	31	28	59	56	21
900.0	59.4	82	79	23	20	58	55	20

Technical data

Part number	Cable type DIN/VDE	Product name	Outer diameter nominal mm	Weight kg/km	Delivery length m	Copper content	Tensile force N
1006237	02YSC(F)H 4x2AWG23/1 PiMF-100 Cat. 7	ICS IE SuperCat 7SW LSHF	8.7	65	1000	26.9	100