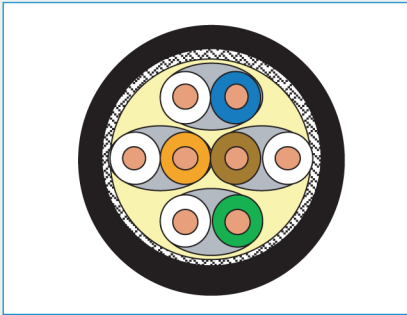


IE SuperCat 7 HS23 Cat.7 LSHF

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

- IEC 60332-1, IEC 60332-3-24, IEC 61034-2, IEC 60754-1/2

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	LSZH, UV stabilized, diameter 8.7 mm
Colour	Black, RAL 9011
Outer Diameter	Nom. 8.7 mm
Weight	Nom. 1000 kg/km
Tensile force N	100

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
	During operation	-
Maximum tensile load	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
Delay skew	-	≥ 75 dB

Nominal Transmission Characteristics 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	1.8	100	97	98	95	105	105	-
4	3.4	100	97	97	94	105	102	27
10	5.4	100	97	95	92	97	94	30
16	6.8	100	97	93	90	93	90	30
20	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	17.4	100	97	83	80	77	74	30
125	19.5	95	92	75	72	75	72	26
155.5	21.9	94	91	72	69	73	70	26
175	23.3	93	90	70	67	72	69	25
200	25.0	92	89	67	64	71	68	25
250	28.1	90	87	62	59	69	66	24
300	30.9	89	86	58	55	67	64	24
450	38.3	87	84	48	45	64	61	23
600	44.8	85	82	40	37	61	58	22
750	52.0	83	80	31	28	59	56	21
900	59.4	82	79	23	20	58	55	20

Ordering Information

P/N	Product Description	P.U
60014892	Water resistant S/FTP Installation Cable 4x2xAWG23/1 for Indoor/Outdoor use, IE SuperCat 7 HS23 Cat.7 LSHF	500m/drum
60014810	Water resistant S/FTP Installation Cable 4x2xAWG23/1 for Indoor/Outdoor use, IE SuperCat 7 HS23 Cat.7 LSHF	1000m/drum