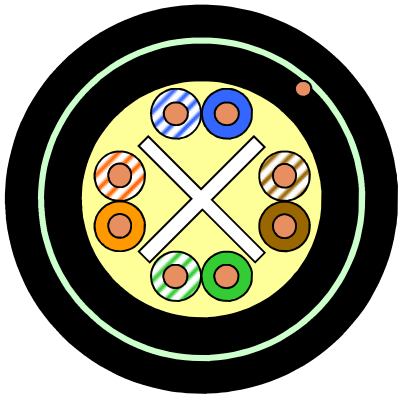
ICS IE SuperCat 6 23 Cat.6 + ALPE

F-U/UTP + ALPE Installation Cable for Outdoor use



Application

Outdoor installations. Filled with compound to prevent water penetration. Extra rugged due to a dual outer sheath construction.
Primary (Campus), Secondary (Riser), Tertiary (Horizontal)
IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T;
IEEE 802.5 16 MB; ISDN; TPDDI; ATM

Standards

EIA/TIA-568-B.2-1 6/2002.
ISO/IEC 11801 2nd ed.; IEC 61156-5
EN 50173-1, EN 50288-6-1

Water penetration rating

Cable core: IEC 60794-1-2F5, methode B

Construction

Conductor	Solid bare copper wire Ø 0.58 mm (AWG23)
Insulation	Polyethylene, Ø 1.1 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core non metallic cross separator (spline)
Cable core filling	Waterproof compound to prevent moisture migration. To prevent water penetration and to ensure electrical properties even in continous wet conditions.
Sheath 1	PE, Black UV stabilized
Drain wire	Tinned drain wire under the AL tape, for easy termination of the AL Screen
Sheath 2	PE with laminated AL tape on the inside, Black UV stabilized. The AL tape also serve as an moisture barrier.

Mechanical properties

Minimum bending radius	Installation	15 x D
	Installed	15 x D
Temperature range	During operation	-55°C to + 60°C
	During installation	-15°C to + 50°C
Max tensile load	During operation	-
	During installation	100N

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Electrical properties

at 20°C

DC loop resistance	≤ 176 Ω /km
Resistance unbalance	≤ 2%
Insulation resistance (500 V)	≥ 5000 MΩ *km
Capacitance at 800 Hz	Nom. 48 nF/km
Capacitance unbalance (pair to ground)	≤ 1500 pF/km
Mean characteristic impedance 100 MHz	100 ± 5 Ω
Nominal velocity of propagation	Approx. 67 %
Propagation delay	Nominal 535 ns/100m
Delay skew	Nominal 20 ns/100m
Test voltage (DC, 1 min) Core/Core	1000 V
Coupling attenuation	≥ 55 dB

Nominal transmission characteristics

at 20°C

F	**Attenuation**		**NEXT**		**PS-NEXT *)**		**ACR**		**PS-ACR**		**ELFEXT**		**PS-ELFEXT**		**Return loss**
(MHz)	(dB/100m)		(dB)		(dB)		(dB/100m)		(dB/100m)		(dB/100m)		(dB/100m)		(dB)
	max.	Nom.	min.	nom.	min.	Nom.	Min.	Nom.	Min.	Nom.	min.	Nom.	min.	Nom.	min.
1	2.1	1.9	74	78	72	75	72.0	76.1	70.0	73.1	68	82	65	80	20
4	3.8	3.8	65	69	63	66	61.2	65.2	59.2	62.2	56	70	53	68	23
10	6.0	6.0	59	63	57	60	53.0	57.0	51.0	54.0	48	62	45	60	25
16	7.6	7.6	56	60	54	57	48.4	52.3	46.4	49.3	44	58	41	56	25
20	8.5	8.5	55	59	53	56	46.5	50.0	44.5	47.0	42	56	39	54	25
31.2	10.7	10.7	52	56	50	53	41.3	45.0	39.3	42.0	38	52	35	50	23.6
62.5	15.5	15.1	47	51	45	48	31.5	36.0	29.5	33.0	32	46	29	44	21.5
100	19.9	19.1	44	48	42	45	24.1	28.9	22.1	25.9	28	42	25	40	20.1
125	22.5	21.3	43	47	41	44	20.5	25.2	18.5	22.2	26	40	23	38	19.5
155.5	25.4	23.8	42	45	40	42	16.6	21.3	14.6	18.3	24	38	21	36	18.8
175	27.1	25.3	41	44	39	41	13.9	19.1	11.9	16.1	23	37	20	35	18.4
200	29.2	27.0	40	44	38	41	10.8	16.5	8.8	13.5	22	36	19	34	18.0
250	33.0	32.0	38	42	36	39	5.0	10.0	2.0	7.0	20	34	17	32	17.3
300		36.1		41		38		4.8		1.8		32		30	-
400		41.7		39		36		-2.7		-5.7		30		28	-

Product order data

Description	Colour	Outer diameter (D) mm	Weight kg/km	Material code
SuperCat 23 C6 F-U/UTP 4P + ALPE	Black	10,5	110	1014166

Product Code Table

Product Description	Product Code	PG Reference Code	PG Part Number
SuperCat 23 C6 F-U/UTP 4P + ALPE 500DP	1014166-00500DP	60016065	**60016068**
SuperCat 23 C6 F-U/UTP 4P + ALPE	1014166	60016065	**60016065**

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