

SureLAN® Cat6.A SU/FTP <550 MHz>

Water Blocking DataGuard® Armoured (SWA)

Application

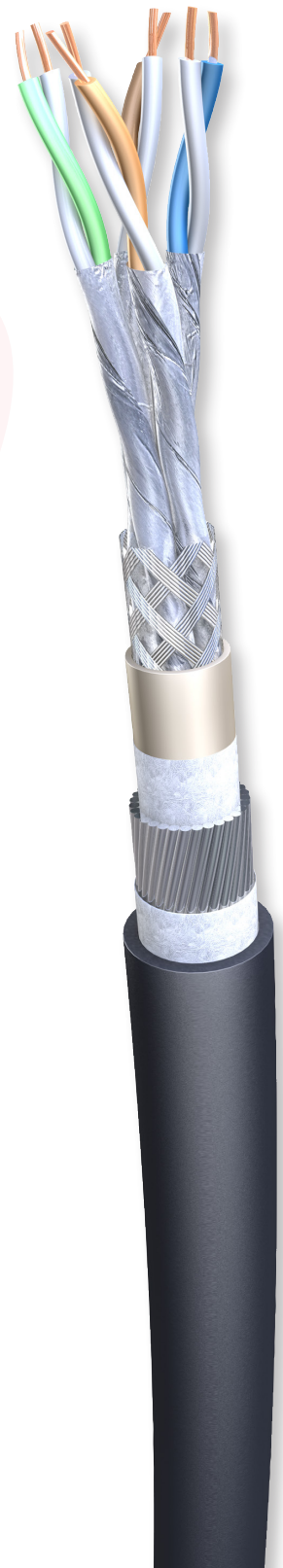
10 Gigabit high speed data transmission cable for horizontal cable distribution local computer networks. This cable operates at the ISO/IEC EA class for the 10 GBASE-T application and will function up to 550 MHz. IEEE 802.3. Using DataGuard® Armouring this cable is also suitable for Indoor/Outdoor applications, Mechanical protection, Rodent Protection, Direct Burial with additional water protection.

Cable Design

Conductor	Bare copper wire (23awg) Ø 0,57 mm
Insulation	PE, Ø 1.30 mm nom
Twisting	2 cores to the pair
Pair Screen	Individual Aluminium/polyester tape
Cable lay up	4 shielded pairs stranded
Overall Screen	Tinned copper wire braid
Inner Sheath	LSZH FireFighter® : Ø 7,70 ± 0,50 mm
Tape	Water swellable tape over inner sheath
Armour	DataGuard® Steel Wire Armour (SWA)
Tape	Water swellable tape over armour
Outer Jacket	LSZH FireFighter® UV-resistant : Ø 13,0 ± 0,50 mm

Standards

Flammability Rating	IEC 60332-1, IEC 60332-3-24, IEC 60754-2, EN 61034, IEC 61034
---------------------	---------------------------------------------------------------



SureLAN® Cat6.A SU/FTP <550 MHz>

Water Blocking DataGuard® Armoured (SWA)

Specification

Part Number	Type
147297WB	Cat6.A SU/FTP 4x2xAWG23/1 <550 MHz> DataGuard® Armoured (SWA) LSZH with water blocking protection

Colour Code Chart

Pair	Colour
1	Blue + White
2	Orange + White
3	Green + White
4	Brown + White

Electrical Data @ 20°C

Complete conductor resistance	≤ 146.4 Ω/km
Resistance unbalance	≤ 2 %
Dielectric strength (continuous current)	1kV during 1min=no breakdown
Insulation resistance (500V)	≥ 5000 MΩ . km
Capacitance unbalance Real-ground	≤ 1600 pF/km
Characteristic impedance at 100 MHz	100 ± 5 Ω
Nom. Velocity	78 %
Transfer Impedance	1 MHz ≤ 10 mΩ/m
	10 MHz ≤ 10 mΩ/m
	30 MHz ≤ 20 mΩ/m
	100 MHz ≤ 30 mΩ/m

SureLAN® Cat6.A SU/FTP <550 MHz>

Water Blocking DataGuard® Armoured (SWA)

Electrical Characteristics

Frequency (MHz)	Attenuation (dB/100m)		NEXT (dB)		ACR dB/100m	EL-FEXT (dB)		Return Loss (dB)	
	Nom.	Max. Cat 7	Nom.	Min. Cat 6	Nom.	Nom.	Min. Cat 6	Nom.	Min. Cat 6
1	1.8	[2.0]	100	66	98.2	92	66	23	-
4	3.3	3.6	100	65	96.7	92	58	27	23.1
10	5.3	5.7	100	59	94.7	92	50	30	25
16	6.7	7.2	100	56	93.3	92	46	30	25
20	7.5	8.1	100	55	92.5	90	44	30	25
100	17.3	18.5	98	44	80.7	75	30	28	20.1
155	21.7	23.4	94	41	72.3	70	26	27	18.8
200	24.9	26.8	91	40	66.1	68	24	25	18
300	30.7	33.3	88	-	57.3	64	-	24	-
500	39.1	44.1	85	-	45.9	59	-	22	-
600	44.6	48.9	82	-	37.4	57	-	21	-

The performance data given are typical measured values

Belcom Cables Ltd. ("Belcom") reserves the right to make changes to the product described in this specification without prior notice. Belcom does not assume any liability which may occur due to the use of the specification described herein. Drawings are not to scale unless otherwise specified and are provided for general and informational purposes only. All values represented in this specification should be used as a guide only and exact product details can be confirmed at point of enquiry.