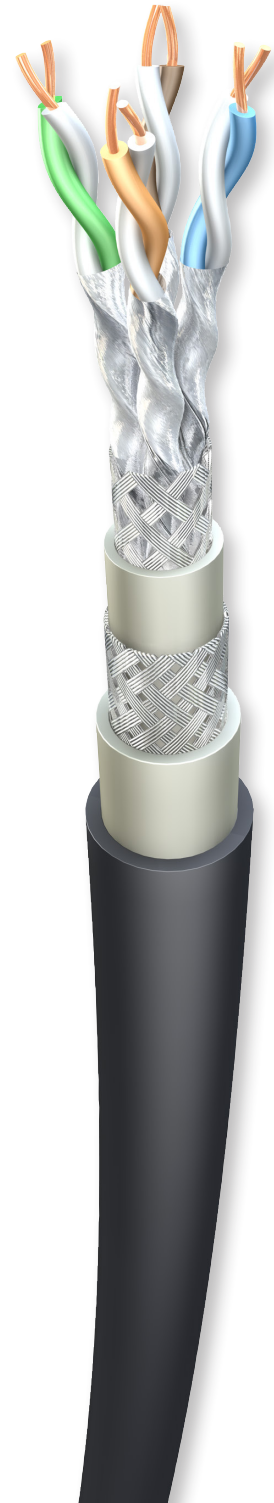


Armoured (GSWB) Cat.7 23/1awg S/FTP
Horizontal Cable MUD-Resistant



Application

DNV-GL Approved Cat.7 for Offshore installations, Maritime Environment, High data rates, outdoor use, fixed installations, Ships, High speed & Light craft. Where mechanical protection and MUD Resistance is required. Certificate No: TAE0000456.

Cable Design

Conductor AWG	Solid Annealed Bare Copper wire 23/1 AWG
Insulation Diameter	Cellular PO Ø 1,38 mm nom.
Formation Pair Identification	2 cores twisted to a pair, 4 pairs total (4x2x23/1awg) Per TIA/EIA 568-B
Individual shield	Aluminium/polyester foil, 100% coverage
Drain Wire	Solid Annealed Tinned Copper 0,41 mm
Overall Shield	Annealed Tinned Copper Wire Braid, 55% nom. coverage

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Inner Jacket	FR-LSZH SHF-1
Colour	Grey
Diameter	Ø 8.00 mm nom.
Armour	Galvanised Steel Wire Braid (GSWB)
Outer Jacket	Dual Layer FR-LSZH SHF-1 + SHF MUD compound
Colour	Black
Diameter	Ø 13,60 ± 0,20 mm nom.

Performance

Frequency Range	1 - 600	MHz
Impedance	100	Ohm
Transfer Impedance	Grade 1	
Coupling Attenuation	Type I	
DC Resistance	73	Ohm/km nom.
Max. Resistance Unbalance	2	%
Capacitance Unbalance	1,2	pF/m max.
Velocity of Propagation	78	% nom.
Propagation Delay Skew	25	ns/100m max.
Dielectric Strength	700	V/minute
Dielectric Strength to Shield	700	V/minute
Min. Insulation Resistance	5	GOhm • km
Tensile Strength - Short Term	130	N max.
Min. Bend Radius	80	mm
Max. Operating Temperature	+85	°C
Min. Operating Temperature	-40	°C
UV resistance	YES	
MUD resistance	YES	

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Electrical Properties Cat. 7 Horizontal Cables *

Fre- quency (MHz)	Attenuation (dB/100m) 20°C		PS NEXT Loss (dB)		NEXT Loss (dB)		RL (dB)		PS ANEXT (dB)		PS ELFEXT (dB)		ELFEXT (dB)	
	Typ.	Cat.7	Typ.	Cat.7	Typ.	Cat.7	Typ.	Cat.7	Typ.	Cat.7	Typ.	Cat.7	Typ.	Cat.7
1	2,0	2,0	105,0	75,0	108,0	78,0	22,0	20,0	68,0	N/A	95,0	75,0	98,0	78,0
4	3,6	3,7	98,0	75,0	101,0	78,0	25,0	23,0	68,0	N/A	90,0	75,0	93,0	78,0
10	5,6	5,8	95,0	75,0	98,0	78,0	28,0	25,0	68,0	N/A	86,0	71,0	89,0	74,0
20	7,9	8,3	90,0	75,0	93,0	78,0	28,0	25,0	68,0	N/A	80,0	65,0	83,0	68,0
30	9,7	10,2	85,0	75,0	88,0	78,0	27,0	23,8	68,0	N/A	76,0	61,5	79,0	64,5
100	18,0	19,0	80,0	69,4	83,0	72,4	24,0	21,1	68,0	N/A	66,0	51,0	69,0	54,0
150	22,4	23,6	78,0	66,7	81,0	69,7	22,0	18,8	65,0	N/A	63,0	47,5	66,0	50,5
200	26,0	27,5	78,0	65,0	81,0	68,0	21,0	18,0	65,0	N/A	60,0	45,0	63,0	48,0
250	29,4	31,0	75,0	63,4	78,0	66,4	20,0	17,3	62,0	N/A	58,0	43,0	61,0	46,0
300	32,5	34,2	75,0	62,2	78,0	65,2	19,0	17,3	62,0	N/A	52,0	41,5	55,0	44,5
400	38,0	40,0	70,0	60,4	73,0	63,4	19,0	17,3	62,0	N/A	49,0	38,9	52,0	41,9
500	43,0	45,2	70,0	58,9	73,0	61,9	19,0	17,3	62,0	N/A	47,0	37,0	50,0	40,0
600	47,6	50,1	70,0	57,7	73,0	60,7	19,0	17,3	62,0	N/A	45,0	35,4	48,0	38,4

*Supplied cables meet the minimum Cat. 7 transmission requirements as per IEC 61156-5 Ed. 2

Standards

Applicable Standards

DNV-GL certified (TAE0000456), IEC 60092-359, IEC 60092-350, IEC 61156-5, IEEE 802.3at (PoE+), ISO/IEC 11801, RoHS-2 2011/65/EU. MUD resistant acc. to NEK TS 606

Flammability Rating

IEC 60332-1, IEC 60332-3-22, IEC 60332-3-24 , IEC 60754-2, IEC 61034-1/2,
UL 1581 VW-1



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Specification

Part Number	Construction	Shield Type	Armour	Outer Jacket
AML7-SFBS23-WBZFM	4x2x23/1 awg	S/FTP	GSWB	SHF MUD