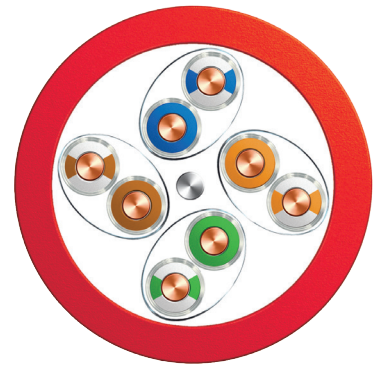


Armada®

Cat. 7 4x2x23/1 AWG S/FTP LSZH-SHF1 Fire Resistant



Application

Offshore installations, Maritime Environment, Optimized for IEEE 802.3at PoE+, High bandwidth digital applications with low BER, Ships, High speed & Light craft. The cable design and structure comply with the circuit integrity performance during a fire of the relevant requirements of IEC 60331-23 and allows data transmission during the fire.

Cable Design

Conductor	Solid annealed bare copper wire (23awg)
Insulation	PO
Fire Barrier	FFCi™ Fire resistant tape wrapped
Diameter	Ø 1.20 mm nom.
Screened Pair	2 cores twisted to a pair + Aluminium/polyester foil, 100% coverage
Formation	4 screened pairs (4x2x23/1awg)
Pair Identification	Per TIA/EIA 598-C
Braid	Tinned copper wire braid
Coverage	55% nom.
Drain Wire	0,41mm solid tinned copper wire
Outer Jacket	Low Smoke Zero Halogen FireFighter® SHF-1, Red
Diameter	Ø 8.50 mm nom.
Weight	85 kg/km



Specification

Part Number	Type
AMS7-SF23UA-ZF1	Cat.7 4x2xAWG23/1 SU/FTP Fire Resistant SHF-1

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Standards

Applicable Standards	DNV-GL certified, IEC 60092-359, IEC 60092-350, IEC 60811-2-1, IEC 61156-5, ISO/IEC 11801, TIA/EIA-568, ASTM G154, RoHS-2 2011/65/EU
Flammability Rating	IEC 60331-23, IEC 60332-1, IEC 60332-3, IEC 60754-1/2, IEC 61034-1/2, UL 1581 VW-1

Electrical & Mechanical Performance

Frequency Range	1-600	MHz
Impedance	100	Ohm
Transfer Impedance	Grade 1	
Coupling Attenuation	Type I	
DC Resistance	73	Ohm/km @ 20°C
Max. Resistance Unbalance	2	%
Max. Screen Resistance	5	Ohm/km @ 20°C (cable level) typical value
Capacitance	42	pF/m
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	

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.

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Transmission Properties

Frequency (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

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