



# Armada®

Cat.5e 4x2x24/1 AWG U/FTP Fire Resistant Armoured Horizontal Cable SHF1



## Application

DNV-GL Approved DataGuard® armoured (GSWB) Cat5e for offshore installations, Maritime Environment, High data rates, Indoor use, fixed installations, High bandwidth digital applications with low BER. 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 (24awg)
Insulation	PO
Fire Barrier	FFCi™ Fire resistant tape wrapped Ø 1.10 mm nom.
Screened Pair	2 cores twisted to a pair + Aluminium/polyester foil, 100% coverage
Formation	4 screened pairs (4x2x24/1awg)
Pair Identification	Per TIA/EIA 568-B
Drain Wire	0,41mm solid tinned copper wire
Inner Jacket	Low Smoke Zero Halogen FireFighter® SHF-1, Red
Diameter	Ø 8.70 mm nom.
Armour	DataGuard® Galvanised Steel Wire Braid (GSWB)
Outer Jacket	Low Smoke Zero Halogen FireFighter® SHF-1, Red
Diameter	Ø 12,50 mm nom.
Weight	228 kg/km





# Armada®

Cat.5e 4x2x24/1 AWG U/FTP Fire Resistant  
Armoured Horizontal Cable SHF 1

## Specification

Part Number	Type
AMS5EUF24DG	Cat5e 4x2xAWG24/1 U/FTP Fire Resistant Armoured Horizontal Cable SHF-1

## Standards

Applicable Standards	IEC 60092-359, IEC 60092-350, TIA/EIA-568, ASTM G154, RoHS-2 2011/65/EU
Flamability 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	1-100	MHz
Impedance	100	Ohm
Max. DC Resistance	90	Ohm/km @ 20°C
Max. Resistance Unbalance:	3	%
Capacitance	47	pF/m
Capacitance Unbalance	1,6	pF/m max.
Velocity of Propagation	68	% nom.
Dielectric Strength	700	V/minute
Dielectric Strength to Shield	500	V/minute
Min. Insulation Resistance	4	GOhm • km
Max. Operating Temperature	+65	°C
Min. Operating Temperature	-30	°C
UV resistance	Yes	
Rodent resistant	Yes	



# Armada®

Cat.5e 4x2x24/1 AWG U/FTP Fire Resistant  
Armoured Horizontal Cable SHF1

## Transmission Properties

Frequency (MHz)	Attenuation (dB/100m) 20 °C		PS NEXT Loss (dB)		NEXT Loss (dB)		RL (dB)		PS ELFEXT (dB)		PS ELFEXT (dB)	
	Typ.	Cat.5e	Typ.	Cat.5e	Typ.	Cat.5e	Typ.	Cat.5e	Typ.	Cat.5e	Typ.	Cat.5e
1	2,0	2,1	68.3	62.3	71,3	65,3	22	20	64	51	67	64
4	3,9	4,1	59.3	53.3	62,3	56,3	25	23	52	49	55	52
10	6,2	6,5	53.3	47.3	56,3	50,3	28	25	44	41	47	44
20	8,8	9,3	48.8	42.8	51,8	45,8	28	25	38	35	41	38
30	10,9	11,5	46.1	40.1	49,1	43,1	27	23,8	35	31,5	38	34,5
60	15,8	16,6	41.6	35.6	44,6	38,6	24	21,1	28	25,4	31	28,4
100	21,0	22,0	38.3	32.3	41,3	35,3	22	18,8	24	21	27	24

Supplied cables meet minimum Cat. 5e transmission requirements of IEC 61156-5 Ed. 2 and ANSI/EIA/TIA 568-B.2

*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.*