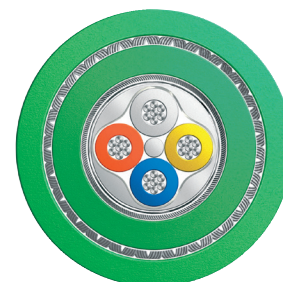


Armada[®] PROFINET Type B Industrial ethernet Cat 5e ES LSZH FireFighter[®] DataGuard[®] (GSWB)

Cable Design *Profinet Type B*

Conductor	Stranded tinned copper wire (7x0,25 mm)
Diameter	Ø 0,75 mm
Insulation	Polyethylene (PE)
Diameter	Ø 1,50 mm
Cable Core	Filler as central element
Assembly	4 cores twisted to a quad, WH-YW-BU-OE
Tape	Plastic tape, overlapped
EasyStrip Jacket	Thermoplastic copolymer, Ø 3,90 mm
Screen	Alulamine foil overlapped, applied longitudinally
Shield	Tinned copper wire braid 0.13 mm wires coverage 85 %, Ø 4,70 mm
Inner Jacket	Green Low Smoke Zero Halogen FireFighter [®]
Diameter	Ø 6,5 ± 0,20 mm
Armour	DataGuard [®] Galvanised Steel Wire Braid (GSWB)
Outer Jacket	Green Low Smoke Zero Halogen FireFighter [®]
Diameter	Ø 9,50 ± 0,40 mm
Weight	205 kg/km



Application

Fixed installation on and below deck of commercial ships and offshore units. The cables meet the technical requirements of IEC 60092.

Standards

Flamability Rating	IEC 60332-1-2, IEC 60332-3-22 A/F, IEC 60754-1/2, IEC 61034 1/2
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Specification

Part Number	Type
24L45467-J16-B146	PROFINET Type B Armoured for Offshore and Maritime environments. LSZH FireFighter [®] 2x2x22AWG 7.

Electrical Data @ 20° C

Loop resistance			≤	124	Ohm/km
Resistance Difference				5	%
Signal run time			≤	5,55	ns/m
Insulation resistance			≥	500	MOhm*km
Characteristic Impedance	1-100	MHz		100±15	Ohm
Ground unbalance attenuation	64	kHz	>	43	dB
Capacity unbalanced to ground	1	MHz	≤	3300	pF/m
Return Loss (dB)	1 ≤ f ≤ 10 MHz			20+5	log (f)
	10 ≤ f ≤ 20 MHz			25	
	20 ≤ f ≤ 100 MHz			25-8,6	log (f/20)
Surface Transfer Impedance	10	MHz	≤	10	mOhm/m
Capacitance	1	kHz	≈	53	nF/km
Inductance	0,06	MHz	≈	670	μH/km
	1	MHz	≈	520	μH/km
	≥ 10	MHz	≈	500	μH/km
UL-Rating				300	V
Test Voltage (wire/wire/screen rms 50Hz min.)				700	V

Near-end crosstalk attenuation

Frequency (MHz)	0,772	1	4	10	16	20	31,25	62,5	100
Cat5e requirements (dB/100m) ≤	67	65,3	56,3	50,3	47,3	45,8	42,9	38,4	35
typ. Value (dB/100m)	≥ 80	≥ 80	75	70	65	63	60	55	50

Far-end crosstalk attenuation

Frequency (MHz)	0,772	1	4	10	16	20	31,25	62,5	100
Cat5e requirements (dB/100m) ≤	66	63,8	51,7	43,8	39,7	37,7	33,9	27,8	23,8
typ. Value (dB/100m)	≥ 80	≥ 80	75	65	59	55	50	47	45

Attenuation

Frequency (MHz)	0,256	0,512	0,772	1	4	10	16	20	31,25	62,5	100
Cat5e requirements (dB/100m) ≤	1,3	1,8	2,2	2,4	4,9	7,8	9,8	11,1	14	20,4	26,4
typ. Value (dB/100m)	0,9	1,1	1,4	1,8	3,6	6,0	7,6	8,7	11,2	17	22