



MOG 750hm coaxial cable RG59BU SHF1 unarmoured and armoured



Store at: -20 to +60 °C

Install at: 0 to +50 °C, **Bend minimum:** 10/20 times O.D.

Operate at: -30 to +70 °C, **Bend minimum:** 5/15 times O.D.

Design

Conductor : copperweld Ø 0.58 ± 0.025 mm

Dielectric : low density polyethylene Ø 3.70 ± 0.15 mm

Screen 1 : aluminium/poleysther/aluminium tape (width 18mm)

Screen 2 : bare copper braid (coverage 93%)

Screen 3 : N/A

Outer jacket (inner jacket for armoured version): black Fire Retardant and UV Resistant SHF1 material, LSZH

Marking : APS Finland – ww/yy – RG59 MARINE SHF1 – 75 OHM – IEC60332-3-24 Cat.C – DNV – lot + meter

Armoured version is supplied with additional:

Armour : galvanized steel wire braid

Outer jacket : black Fire Retardant and UV Resistant SHF1 thermoplastic material, LSZH

Marking : APS Finland – ww/yy – RG59 MARINE SHF1 ARMoured – 75 OHM – IEC60332-3-24 Cat.C – DNV – lot + meter

Environmental properties and Fire Performances

Degree of acidity of gases : IEC 60754-1, IEC 60754-2 (pH value $\geq 4,3$ and Conductivity $\leq 10\mu\text{S}/\text{mm}$)

Halogen acid gas : IEC 60754-1, IEC 60754-2 (Halogen acid gas emission $\leq 0.5\%$)

Smoke Emission : IEC 61034-2, EN 50268-2 (Transmittance) $\geq 60\%$

Toxicity of evolved gas : EN 50305 9.2

Flame retardant : YES – IEC 60332-1-2

Fire retardant : YES – IEC 60332-3-22 Cat.A

Fire resistant : NO

Ozone resistant : NO

Weather resistant : NO

LSZH SHF2 : NO

Oil resistant : NO

MUD resistant : NO

Water resistant : NO

Water penetration : NO

UV resistant : YES – ASTM-D-2565-92A

Electrical characteristics (IEC60092-350, EN 50290-2-23, IEC61196-1-108)

Impedance : $75 \pm 3 \Omega$

Capacitance : $67 \pm 3 \text{ pF}/\text{m}$

Velocity ratio : 66%

Inner conductor resistance @ 500V : $154 \pm 5 \Omega/\text{km}$

Braid resistance @ 500V : $9 \pm 3 \Omega/\text{km}$

Spark tension of the sheath : 4.5 kV

Attenuation

MHz	5	10	50	100	200	300	500	600	800	1000	1350	1500	1750	2150	2250	2500	2750	3000
dB	2.7	3.4	7.3	10.7	15.0	18.6	24.8	27.0	31.5	35.6	41.7	44.8	49.2	55.6	59.7	63.0	67.7	50.1

Return Loss (IEC61196-1-113)

MHz	30 ÷ 300	300 ÷ 600	600 ÷ 1000	1000 ÷ 2000	2000 ÷ 3000
dB	>28	>23	>18	>14	>14

Ordering and delivery information

Type	P/N	O.D [mm]	Weight [kg/km]	Packaging	
RG59BU Non-armoured	OC75R59U1	6.2	57.2	500m or 1000m (+/-5%)	
RG59BU GSWB armoured	OC75R59A1	9.4	144.2	500m (+/-5%)	
RG59BU TCWB armoured	OC75R59T1	9.4	130.0	500m (+/-5%)	
RG59BU BWB armoured	OC75R59B1	9.4	140.5	500m (+/-5%)	

Other standards of reference

IEC 60092-370	Electrical installations in ships: Guidance on the selection of cables for telecommunication and data.
DNV TAP 827.10/20	Type Approval Program - coaxial cables
ABS SVR	Rules for building and classing. Steel Vessels.
ABS SMR	Rules for building and classing. Steel vessels under 90 meters.
MIL-C-17	General specification for radio frequency coaxial cables
IEC61196-1	Coaxial communication cables
EN 50290-2-23	Insulation materials for telecommunication cables

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