



MOG 500hm coaxial cable RG58CU SHF MUD unarmoured and armoured



Store at: -40 to +70 °C

Install at: -10 to +50 °C **Bend minimum** 5/10 times O.D.

Operate at: -40 to +90 °C, **Bend minimum** 10/15 times O.D.

Design

Conductor : stranded tinned copper 19×0.18mm

Dielectric : low density polyethylene Ø2.95 ± 0.10 mm

Screen 1 : aluminium/polesther/aluminium tape (width 15mm)

Screen 2 : tinned copper braid (coverage 93%)

Outer jacket (inner jacket for armoured version): black Fire Retardant and UV Resistant cross-linked SHF MUD material, LSZH

Marking : APS Finland - ww/yy - RG58 MARINE SHF MUD NEK606 - 50 OHM - IEC60332-3-24 Cat C - DNV GL - lot + meter

Armoured version:

Inner jacket : black Fire Retardant and UV Resistant material, LSZH

Armour : galvanized steel, tinned copper or bronze wire braid

Outer jacket : black Fire Retardant and UV Resistant cross-linked SHF MUD material, LSZH

Marking : APS Finland - ww/yy - ARMOURED RG58 MARINE SHF MUD NEK606 - 50 OHM - IEC60332-3-24 Cat C - DNV GL - 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 $\leq 10\mu\text{S/mm}$)

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 : EN50305 9.2

Flame retardant : IEC 60332-1-2

Fire retardant : IEC 60332-3-24 Cat.C

Ozone resistant : IEC60811-2-1, DIN VDE 0472 part 805 B

Weather resistant : ASTM G 154, EN 11507

LSZH SHF2 : IEC 60092-360

Oil resistant : IEC60811, IRM 903

MUD resistant : NEK606:2009, IEC60092-350

Water absorption : IEC60811-1-3

UV resistant : ASTM G 154 IEC 60068-2-5

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

Impedance : $50 \pm 3 \Omega$

Capacitance : $100 \pm 9 \text{ pF/m}$

Velocity ratio : 66%

Inner conductor resistance @ 500V : $6 \pm 1.5 \Omega/\text{km}$ Braid resistance @ 500V : $4.4 \pm 1.5 \Omega/\text{km}$

Spark tension of the sheath : 5.5 kV

Attenuation

MHz	5	10	50	100	200	300	500	600	800	1000	1350	1500	1750	2150	2250	2500	2750	3000
dB	3.3	4.3	9.9	13.5	19.2	24.0	31.9	35.5	41.6	47.5	57.1	60.8	67.1	77.0	78.8	85.7	88.9	90.7

Return Loss (IEC61196-1-113)

MHz	30 ÷ 300	300 ÷ 600	600 ÷ 1000	1000 ÷ 2000	2000 ÷ 3000
dB	>28	>23	>20	>15	>15

Ordering and delivery information

Type	P/N	O.D [mm]	Weight [kg/km]	Packaging
RG58 MUD Non-armoured	OC50R58UU	6.0	60	500m or 1000m (+/-5%)
RG58 MUD GSWB armoured	OC50R58AU	11.0	150	500m (+/-5%)
RG58 MUD TCWB armoured	OC50R58TU	11.0	140	500m (+/-5%)
RG58 MUD BWB armoured	OC50R58BU	11.0	140	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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