



MOG 500hm coaxial cable RG214U SHF1 unarmoured and armoured



Store at: -20 to +60 °C

Install at: 0 to +50 °C

Bend minimum: 10 times O.D.

Operate at: -30 to +70 °C

Bend minimum: 5 times O.D

Design

Conductor : stranded silvered copper 7×0.75mm

Dielectric : low density polyethylene Ø 7.25 ± 0.18 mm

Screen 1 : aluminium/poleysther/aluminium tape (width 29mm)

Screen 2 : silvered copper braid (coverage 94%)

Screen 3 : silvered copper braid (coverage 98%)

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

Marking : APS Finland - ww/yy - RG214 MARINE SHF1 - 50 OHM - IEC60332-3-24 Cat.C - lot + meter

Armoured version is supplied with additional:

Armour : galvanized steel, tinned copper or bronze wire braid

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

Marking : APS Finland - ww/yy - RG214 MARINE SHF1 ARMoured - 50 OHM - IEC60332-3-24 Cat.C - 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 : EN 50305 9.2

Flame retardant : IEC 60332-1-2

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

UV resistant : ASTM-D-2565-92A

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 : $4.4 \pm 4 \Omega/\text{km}$

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	1.4	1.9	3.9	5.6	8.3	10.3	13.7	15.3	17.9	20.3	24.7	26.1	29.8	33.6	34.7	37.1	39.5	41.7

Return Loss (IEC61196-1-113)

MHz	30 ÷ 300	300 ÷ 600	600 ÷ 1000	1000 ÷ 2000	2000 ÷ 3000
dB	>22	>22	>22	>19	>18

Ordering and delivery information

Type	P/N	O.D [mm]	Weight [kg/km]	Packaging
RG214U Non-armoured	OC50R213U1	10.8	2102.2	500m or 1000m (+/-5%)
RG214U GSWB armoured	OC50R213A1	14.8	370.3	500m (+/-5%)
RG214U TCWB-armoured	OC50R213T1	14.8	350.3	500m (+/-5%)
RG214U BWB armoured	OC50R213B1	14.8	365.0	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

Every effort has been put so that this document is most reliable and free from errors. However, APS Cables & Connectors OY cannot be considered responsible for any mistakes in this documents and users should consult APS Cables & Connectors OY for any information needed. APS Cables & Connectors OY reserves the right to make changes to the document at any time without prior notice.