



# RG 213 U Marine ARM MUD

50Ω

Flexible, SHF2

DNV / ABS

## Application

Armoured coaxial cable for ship- and offshore applications. VHF/UHF equipment. Electrical specifications in compliance with MIL C-17/F.

The steel braid meets EU EMC requirements. Also meets the requirements of Anatel.



## Construction

|                |                                                                      |
|----------------|----------------------------------------------------------------------|
| Conductor      | Stranded Plain Cu                                                    |
| Dielectricum   | Low density PE 7.25 ± 0.18 [mm]                                      |
| Screen         | Al + polyester + Al tape 100 [% optical coverage]                    |
| Screen 2       | Cu- braid 96 [% optical coverage]                                    |
| Inner jacket   | SHF1                                                                 |
| Armour alt.1   | Galvanised steel wire braid 144 x 0.24 mm                            |
| Armour alt.2   | Tinned Cu-braid 144 x 0.24 mm                                        |
| Armour alt.3   | Bronze wire braid 144 x 0.24 mm                                      |
| Jacket         | Black SHF2                                                           |
| O.D.           | 17.0 ± 0.2 [mm]                                                      |
| Weight         | 360 [kg/km]                                                          |
| Jacket marking | NEK Kabel – RG213U Marine – SHF2 – ARMOURED –<br>DNV – IEC60332-3-24 |



## Specifications

|                              |                   |
|------------------------------|-------------------|
| Operating temperature normal | -40 – +70         |
| Characteristic impedance     | 50 ± 2 Ω          |
| Braid Resistance             | 4.4 [Ω/km]        |
| Conductor resistance         | 8 [Ω/km]          |
| Test voltage                 | 5.5 [kV]          |
| Capacitance                  | 100 [pF/m]        |
| Velocity factor              | 0.66              |
| Min. bending radius          | 5 [x outer diam]  |
| Min. bending radius flexible | 10 [x outer diam] |



## Norms

|                                                    |                                 |
|----------------------------------------------------|---------------------------------|
| Halogenfree, max content corrosive and toxic gases | IEC 60754-1 & IEC 60754-2       |
| Material properties, insulation and sheath         | IEC 60092-359                   |
| Design and testing standards                       | IEC 60096-0-1 Ed 3              |
| Flame resistance                                   | IEC 60332-3-22 & IEC 60332-3-24 |
| Flame retardant                                    | IEC 60332-1-2                   |
| Smoke emission                                     | IEC 61034-1 & IEC 61034-2       |
| Oil and fuel resistant                             | IEC 60811-3-1                   |
| MUD resistant                                      | NEK TS 606                      |
| UV-resistant                                       | UL 1581                         |
| Certification                                      | DNV                             |

|          |                |
|----------|----------------|
| Part No. | 1092443 (GSWB) |
|----------|----------------|



## Attenuation nominal, max 105%

| Frequency MHz | Attenuation dB/100m |
|---------------|---------------------|
| 5             | 1.1                 |
| 10            | 1.5                 |
| 50            | 3.8                 |
| 100           | 5.5                 |
| 200           | 8                   |
| 300           | 10.1                |
| 500           | 13.2                |
| 800           | 17.5                |
| 1000          | 20                  |
| 1500          | 25.3                |
| 2150          | 31.5                |
| 2500          | 34.7                |
| 2750          | 36.7                |
| 3000          | 38.3                |



## Structural return loss

| MHz         | dB  |
|-------------|-----|
| 30 – 300    | >31 |
| 300 – 600   | >28 |
| 600 – 1000  | >20 |
| 1000 – 2000 | >24 |
| 2000 – 3000 | >22 |

## Screen effectiveness IEC 61196-1

| MHz         | dB  |
|-------------|-----|
| 100 – 900   | >90 |
| 900 – 2000  | >80 |
| 2000 – 3000 | >70 |