

FURUKAWA ELECTRIC
INDUSTRIAL CABLE CO., LTD.

Spec. No.: CGS-140004

SPECIFICATION

FOR

Coaxial with braid armoured,
halogen-free thermoplastic compound sheath cable

1. Citation standard

- IEC 60092-350 Electrical installations in ships – Part 350: General construction and test methods of power, control and instrumentation cable for shipboard and offshore applications
- IEC 60092-359 Electrical installation in ships- Part 359: sheathing materials for ship board power and telecommunication cable
- FURUKAW Standard

2. Construction

Construction shall be in according with attached table.

2.1 Construction of symbols and materials

Table 1 Construction of symbols and materials

| Items | Symbols | Materials |
|---------------|------------------------------|--|
| Coaxial cable | RG-6/U | |
| | RG-10/U (Not covered armour) | |
| | RG-11/U | |
| | RG-12/U (Not covered armour) | |
| Armour | O | Plain annealed copper wire braid |
| | C | Galvanized steel wire braid |
| Sheath | I | Halogen-free thermoplastic compound in according to IEC 60092-359 for SHF1 |

3. Length marking

- (1) Symbols
- (2) ○○○M (Winding start number 0)

4. Tests

Tests are carried out the follows. Coaxial cable is not applicable.

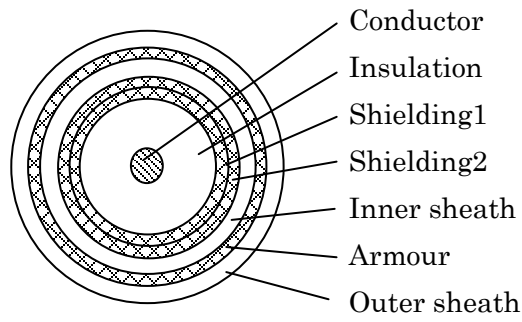
- (1) Appearance test (On sample)
- (2) Construction test (On sample)
- (3) Insulation resistance (Manufacture length)
- (4) A.C. Dielectric strength (Manufacture length)
- (5) Characteristic impedance (Manufacture length)
- (6) Attenuation (Manufacture length)

5. Packing

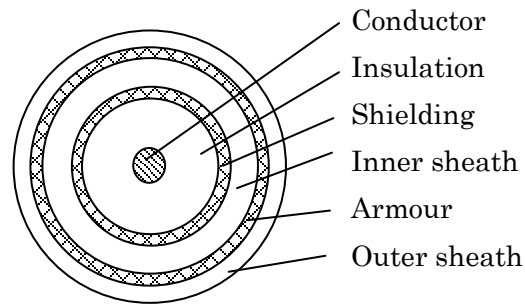
The completed cable shall be wound on a strong reel and lagged securely in order to protect from any possible damage during transportation.

7. Cross section area

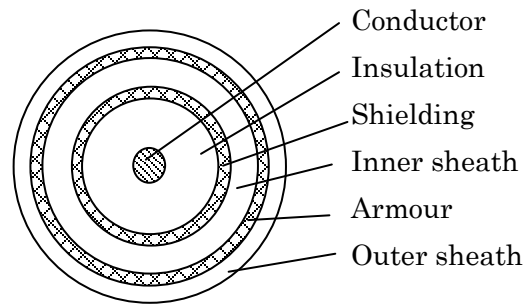
7.1 RG-6/UOI, RG-6/UCI



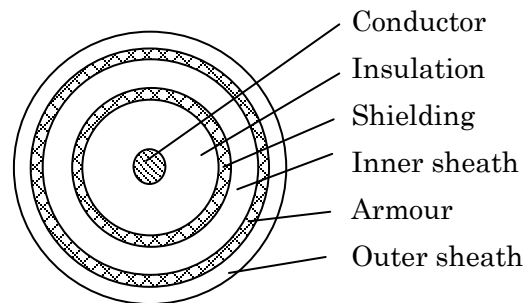
7.2 RG-10/UOI, RG-10/UCI



7.3 RG-11/UOI, RG-11/UCI



7.4 RG-12/UOI, RG-12/UCI



Attached table 1

RG-6/UOI, RG-6/UCI

| Item | | Specification |
|------------------------------------|-------------------|---|
| Conductor | Material | Copper-covered steel |
| | Construction | No./mm |
| | Diameter | mm |
| Insulation | Material / Color | PE / Natural |
| | Diameter | mm |
| Shielding1 | | Silver plating annealed copper wire braid |
| Shielding2 | | Annealed copper wire braid |
| Inner sheath | Material / Color | PVC / Gray |
| | Nominal thickness | mm |
| | Diameter | mm |
| Diameter of wire braid | | mm |
| Outer sheath | Material / Color | SHF1 / Black |
| | Nominal thickness | mm |
| Approx. overall diameter | | mm |
| Approx. net weight | | kg/km |
| Min, Insulation resistance | | MΩ·km |
| Dielectric strength | | V·min. |
| Characteristic impedance (at 4MHz) | | Ω |
| Max. attenuation (at 4MHz) | | dB/km |

Attached table 2

RG-10/UOI, RG-10/UCI

| Item | | Specification |
|------------------------------------|-------------------|----------------------------|
| Conductor | Material | Annealed copper wire |
| | Construction | No./mm 7/0.724 |
| | Diameter | mm 2.17 |
| Insulation | Material / Color | PE / Natural |
| | Diameter | mm 7.3 |
| Shielding | | Annealed copper wire braid |
| Inner sheath | Material / Color | PCV / Grey |
| | Nominal thickness | mm 1.075 |
| | Diameter | mm 10.3 |
| Diameter of wire braid | | mm 0.3 |
| Outer sheath | Material / Color | SHF1 / Black |
| | Nominal thickness | mm 1.3 |
| Approx. overall diameter | | mm 14.5 |
| Approx. net weight | | kg/km 355 |
| Min, Insulation resistance | | M Ω ·km 10000 |
| Dielectric strength | | V·min. 10000 |
| Characteristic impedance (at 4MHz) | | Ω 52±2 |
| Max. attenuation (at 4MHz) | | dB/km 16.25 |

Attached table 3

RG-11/UOI, RG-11/UCI

| Item | | Specification |
|------------------------------------|-------------------|-----------------------------|
| Conductor | Material | Tinned annealed copper wire |
| | Construction | No./mm 7/0.404 |
| | Diameter | mm 1.21 |
| Insulation | Material / Color | PE / Natural |
| | Diameter | mm 7.2 |
| Shielding | | Annealed copper wire braid |
| Inner sheath | Material / Color | PVC / Black |
| | Nominal thickness | mm 1.1 |
| | Diameter | mm 10.3 |
| Diameter of wire braid | | mm 0.3 |
| Outer sheath | Material / Color | SHF1 / Black |
| | Nominal thickness | mm 1.3 |
| Approx. overall diameter | | mm 14.5 |
| Approx. net weight | | kg/km 340 |
| Min, Insulation resistance | | M Ω ·km 10000 |
| Dielectric strength | | V·min. 10000 |
| Characteristic impedance (at 4MHz) | | Ω 75 \pm 3 |
| Max. attenuation (at 4MHz) | | dB/km 16.2 |

Attached table 4

RG-12/UOI, RG-12/UCI

| Item | | Specification |
|------------------------------------|-------------------|-----------------------------|
| Conductor | Material | Tinned annealed copper wire |
| | Construction | No./mm 7/0.404 |
| | Diameter | mm 1.21 |
| Insulation | Material / Color | PE / Natural |
| | Diameter | mm 7.2 |
| Shielding | | Plain anneal copper wire |
| Inner sheath | Material / Color | PVC / Grey |
| | Nominal thickness | mm 1.1 |
| | Diameter | mm 10.3 |
| Diameter of wire braid | | mm 0.3 |
| Outer sheath | Material / Color | SHF1 / Black |
| | Nominal thickness | mm 1.3 |
| Approx. overall diameter | | mm 14.5 |
| Approx. net weight | | kg/km 340 |
| Min, Insulation resistance | | M Ω ·km 10000 |
| Dielectric strength | | V·min. 10000 |
| Characteristic impedance (at 4MHz) | | Ω 75 \pm 3 |
| Max. attenuation (at 4MHz) | | dB/km 16.25 |