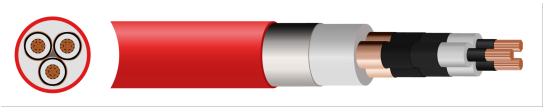
# RG7H1ONR Cable - 16mm² to 300mm²



## Description

RG7H1ONR cables are Medium Voltage Italian reference power distribution cables built with Class 2 compact stranded copper conductors, G7 quality Hard Grade Ethylene Propylene Rubber (HEPR) insulation, and a plain copper tape metallic screen. For mechanical protection, the configuration features galvanised steel tape armour over an extruded PVC inner layer, all enclosed within a red PVC outer sheath. These cables operate across multiple medium voltage ratings including 3.6/6kV, 6/10kV, 12/20kV, and 18/30kV, with a fixed operating temperature rating of -15°C to +90°C and a short-circuit threshold of +250°C. The range complies with industrial standard specifications including HD 620, IEC 60502-2, CEI 20-13, CEI 20-16, and BS EN/IEC 60332-1-2 for flame retardancy, requiring a minimum bending radius of 16 x overall diameter.

These medium-voltage armoured cables are designed for power transmission networks requiring high-capacity electrical supply and robust screening. They are commonly used to establish connections between transformer rooms and primary distribution switchboards, as well as supplying power to heavy-duty machinery and equipment within high-consumption industrial complexes. Their integrated copper tape shielding makes them well suited for settings demanding high levels of protection against electromagnetic interference, while the specialised outer compound provides reliable resistance against oil and hydrocarbon exposures in heavy industrial environments.

In terms of specific installation environments, RG7H1ONR cables are suitable for fixed indoor and outdoor installations, overhead on heavy-duty cable ladders, or run through concrete ducts and conduits. Due to the high mechanical protection provided by the galvanised steel tape armour, they are also approved for direct underground burial without requiring additional protective trunking. The cable can be safely deployed in damp environments and open-air industrial zones, provided that the physical layout accommodates its maximum tensile stress and minimum installation temperatures.

## Key Features

**Voltage Rating**
6.35/11 (12)kV
12/20 (24)kV

**Minimum Bending Radius**
16 x overall diameter

**Flame Retardancy**
BS EN/IEC 60332-1-2

**Temperature Limits**
Operating Temperature: -15°C to +90°C
Maximum Short Circuit Temperature: +250°C

## Standards

- CEI 0-21
- BS EN/IEC 60332-1-2
- CEI 20-13
- IEC 60502-2

## Construction

- **Conductor**: Class 2 Copper Conductor
- **Conductor Screen**: Semi-Conductive material
- **Insulation**: Hard Ethylene Propylene Rubber (HEPR)
- **Insulation Screen**: Semi-Conductive material
- **Screen**: Copper Tape Screen (CTS)
- **Bedding**: Polyvinyl Chloride (PVC)
- **Armour**: Galvanised steel tapes
- **Outer Sheath**: Polyvinyl Chloride (PVC)
- **Sheath Colour**: Red

## QA Lab

**Cleveland Cable Test & Training Lab**
Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.

**CPR**
Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.

## Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.

**ecovadis**
Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

## RG7H1ONR Cable - 16mm² to 300mm² - Dimensions

| Reference | Conductor Size (mm2) | No Of Cores | Insulation Thickness (mm) | Overall Diameter(mm) | Weight(Kg/Km) |
|---|---|---|---|---|---|
| RG7H1ONR6KV3X16 | 16 | 3 | 3.00 | 39.50 | 2815 |
| RG7H1ONR6KV3X25 | 25 | 3 | 3.00 | 41.20 | 3065 |
| RG7H1ONR6KV3X35 | 35 | 3 | 3.00 | 44.90 | 3810 |
| RG7H1ONR6KV3X50 | 50 | 3 | 3.00 | 47.30 | 4425 |
| RG7H1ONR6KV3X70 | 70 | 3 | 3.00 | 51.50 | 5400 |
| RG7H1ONR6KV3X95 | 95 | 3 | 3.00 | 55.70 | 6545 |
| RG7H1ONR6KV3X120 | 120 | 3 | 3.00 | 59.90 | 7850 |
| RG7H1ONR6KV3X150 | 150 | 3 | 3.00 | 63.50 | 8995 |
| RG7H1ONR6KV3X185 | 185 | 3 | 3.00 | 68.00 | 10505 |
| RG7H1ONR6KV3X240 | 240 | 3 | 3.00 | 75.20 | 13000 |
| RG7H1ONR6KV3X300 | 300 | 3 | 3.00 | 80.30 | 15480 |