

## ARG7H1(O)R Cable - 25mm<sup>2</sup> to 400mm<sup>2</sup>



### Description

ARG7H1(O)R cables are Medium Voltage Italian reference power distribution cables built with Class 2 compact stranded aluminium conductors, G7 quality Hard Grade Ethylene Propylene Rubber (HEPR) insulation, and an extruded semiconductor layer. For structural completion, this unarmoured configuration features a plain copper tape metallic screen for electrical shielding, a specialized filler, and 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, a minimum installation temperature of 0°C, and a maximum short-circuit threshold of +250°C. The range complies with strict industrial standard specifications including HD 620, IEC 60502-2, CEI 20-13, CEI 20-16, and BS EN/IEC 60228, as well as BS EN/IEC 60332-1-2 for vertical flame retardancy, requiring a minimum bending radius of 12 x overall diameter.

These medium-voltage aluminium cables are designed for power transmission networks requiring high-capacity electrical distribution where a lightweight alternative to copper conductor configurations is specified. They are widely used for routing bulk electricity between substations, transformer rooms, and heavy industrial complexes or utility-scale power networks. Their integrated plain copper tape screen provides the essential electrostatic shielding necessary for medium-voltage performance, making them ideally suited for large-scale energy infrastructure layouts requiring reliable distribution under strict project budgets.

In terms of specific installation environments, ARG7H1(O)R cables are suitable for fixed indoor and outdoor installations, overhead on heavy-duty cable ladders, or run through protective underground ducts and conduits. Due to their robust core properties, they are also approved for direct underground burial without requiring additional protective trunking, provided the placement complies with standardized electrical installation codes such as CEI 11-17. However, because this specific variant is an unarmoured cable lacking steel wire or steel tape armour, it must only be deployed in situations and environments where it remains entirely free from continuous external mechanical shocks, severe crushing forces, or high tensile strains.

### Key Features



**Voltage Rating**  
3.6/6kV



**Minimum Bending Radius**  
12 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

- IEC 60885-3
- CEI 0-21
- BS EN/IEC 60754-1
- CEI 20-13
- BS EN/IEC 60332-1-2
- IEC 60502-2

### Construction

- **Conductor:** Class 2 Stranded Aluminium Conductor
- **Conductor Screen:** 6/10 kV and above: semi-conductive material
- **Insulation:** Hard Ethylene Propylene Rubber (HEPR)
- **Insulation Screen:** 6/10 kV and above: semi-conductive material
- **Screen:** Copper Tape Screen (CTS)
- **Filler:** Flame Retardant Compound
- **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

#### ecovadis

## ARG7H1(O)R Cable - 25mm<sup>2</sup> to 400mm<sup>2</sup> - Dimensions

Reference	Conductor Size (mm <sup>2</sup> )	No Of Cores	Insulation Thickness (mm)	Overall Diameter(mm)	Weight(Kg/Km)
ARG7H1OR6KV3X25	25	3	3.00	31.70	1425
ARG7H1OR6KV3X35	35	3	3.00	34.50	1635
ARG7H1OR6KV3X50	50	3	3.00	36.80	1930
ARG7H1OR6KV3X70	70	3	3.00	40.40	2360
ARG7H1OR6KV3X95	95	3	3.00	44.60	2895
ARG7H1OR6KV3X120	120	3	3.00	48.00	3400
ARG7H1OR6KV3X150	150	3	3.00	51.00	3890
ARG7H1OR6KV3X185	185	3	3.00	55.05	4540
ARG7H1OR6KV3X240	240	3	3.00	61.10	5555
ARG7H1OR6KV3X300	300	3	3.00	66.05	6530
ARG7H1OR6KV3X400	400	3	3.00	73.30	8520

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