XHIORV Medium Voltage Power Cable 3.6/6kV (7.2kV) 25mm² - 630mm²



Description

The XHIORV cable range, supplied by Cleveland Cable Company, comprises armoured copper medium-voltage power cables primarily designed to meet Portuguese utility distribution grid designs. Manufactured in compliance with international standards IEC 60502-2 and IEC 60228, alongside European reference framework HD 620, these cables cover operational voltage ranges from 3.6/6kV up to 18/30kV.

The construction features a Class 2 stranded plain copper conductor layered with semi-conductive screens, cross-linked polyethylene (XLPE) insulation, and a high-performance concentric copper wire metallic screen. An inner PVC bedding layer holds a heavy-duty mechanical shield—consisting of Aluminium Wire Armour (AWA) for single-core variants or Galvanised Steel Wire Armour (SWA) for multicore configurations—all enclosed by a robust, flame-retardant black PVC outer sheath.

Engineered for dependable use in heavy-duty utility and industrial sectors, this cable is designed for environments subject to elevated risks of mechanical damage, impact, or external crushing. The integrated armouring delivers superior mechanical protection, with the single-core AWA option preventing inductive heating in AC installations. The durable, UV-resistant, and flame-retardant PVC jacket performs reliably under continuous maximum conductor operating temperatures of +90°C and peak short-circuit levels up to +250°C, making it suitable for both internal power networks and tough external utility lines.

For general installation, these cables are suitable for direct burial in trenches within free-draining soils, as well as pulling through underground plastic ducts and conduits. They are also widely deployed above ground for fixed routing on open-air utility structures, external building walls, and industrial indoor or outdoor cable trays

Key Features

Voltage Rating
3.6/6 (7.2)kV
6.35/11 (12)kV
8.7/15 (17.5)kV
12/20 (24)kV
18/30 (36)kV

Minimum Bending Radius
Fixed: 10 x Overall Diameter
Flexing: 15 x Overall Diameter

Flame Retardancy
BS EN/IEC 60332-1-2
BS EN/IEC 60332-3-24

Temperature Limits
Conductor Maximum Operating Temperature: +90°C
Maximum Short Circuit Temperature: +250°C

Standards

- BS EN/IEC 60332-3-24
- BS EN/IEC 60228
- BS EN/IEC 60332-1-2
- IEC 60502-2

Construction

- **Conductor**: Class 2 stranded copper conductor
- **Conductor Screen**: Semi conductive XLPE
- **Insulation**: Cross Linked polyethylene (XLPE)
- **Insulation Screen**: Semi conductive XLPE
- **Metallic Screen**: Copper Wire Screen
- **Tape**: Plastic tape
- **Filler**: Extruded Polymeric Material
- **Bedding**: Polyvinyl Chloride (PVC)
- **Armour**: Galvanised Steel Wire Armour (SWA)
- **Outer Sheath**: Polyvinyl Chloride (PVC) Type TM 2
- **Sheath Colour**: Black

Training & Testing Lab

AN ISO/IEC 17025 ACCREDITED FACILITY

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.

ISO/IEC 17025 Accredited Testing Laboratory
UKAS TESTING 31196

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.

CLEVELAND CABLE COMPANY

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

XHIORV Medium Voltage Power Cable 3.6/6kV (7.2kV) 25mm² - 630mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Overall Diameter(mm)	Weight(Kg/Km)
XHIORV6KV3X25	25	3	44.50	3225
XHIORV12KV3X25	25	3	48.50	3780
XHIORV17/5KV3X25	25	3	54.00	4330
XHIORV6KV3X35	35	3	47.00	3785
XHIORV12KV3X35	35	3	51.00	4235
XHIORV17/5KV3X35	35	3	57.00	4840
XHIORV24KV3X35	35	3	61.00	5320
XHIORV6KV3X50	50	3	49.00	4335
XHIORV12KV3X50	50	3	54.50	4850
XHIORV17/5KV3X50	50	3	59.00	5460
XHIORV24KV3X50	50	3	64.50	6000
XHIORV36KV3X50	50	3	76.00	7600
XHIORV6KV3X70	70	3	53.50	5290
XHIORV12KV3X70	70	3	58.50	5815
XHIORV17/5KV3X70	70	3	63.50	6430
XHIORV24KV3X70	70	3	68.50	7045
XHIORV36KV3X70	70	3	80.50	8730
XHIORV6KV3X95	95	3	58.00	6330
XHIORV12KV3X95	95	3	62.00	6830
XHIORV17/5KV3X95	95	3	67.00	7510
XHIORV24KV3X95	95	3	73.00	8200
XHIORV36KV3X95	95	3	86.00	10840
XHIORV6KV3X120	120	3	61.00	7300
XHIORV12KV3X120	120	3	66.50	7885
XHIORV17/5KV3X120	120	3	71.50	8600
XHIORV24KV3X120	120	3	76.50	9285
XHIORV36KV3X120	120	3	90.00	12095
XHIORV6KV3X150	150	3	64.00	8300
XHIORV12KV3X150	150	3	69.00	8950
XHIORV17/5KV3X150	150	3	74.50	9730
XHIORV24KV3X150	150	3	79.00	10340
XHIORV6KV3X185	185	3	67.00	9650
XHIORV12KV3X185	185	3	72.50	10290
XHIORV17/5KV3X185	185	3	77.50	10985
XHIORV24KV3X185	185	3	81.50	11795
XHIORV6KV3X240	240	3	75.00	11980
XHIORV12KV3X240	240	3	78.00	12450
XHIORV17/5KV3X240	240	3	83.00	13300

Reference	Conductor Size (mm2)	No Of Cores	Overall Diameter(mm)	Weight(Kg/Km)
XHIORV6KV3X300	300	3	83.00	14490
XHIORV12KV3X300	300	3	85.00	14950

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