AXELON INDUSTRIES

Head Office & Plant
Plot No. 3050, 51, 52, 54 G.I.D.C. - Phase 3, Dared, Jamnagar, Gujarat - 361004, India.
Tel + 91 288677 2050 to 2099, | Fax +91 288 677 2060,
Email : sales@axelongroup.com

Sales Office
307, kalpataru Plaza, Chincholi Bunder Road, Malad West Mumbai,
Maharastra - 400064 | India. Tel +91 22 28806214 / 17,
Fax +91 22 2889 6218

Bureau en France:
de la rue 147 Chemin du puits 30730 FONS France
Mob: +33 6 13 84 28 11
patrick.devaux@free.fr

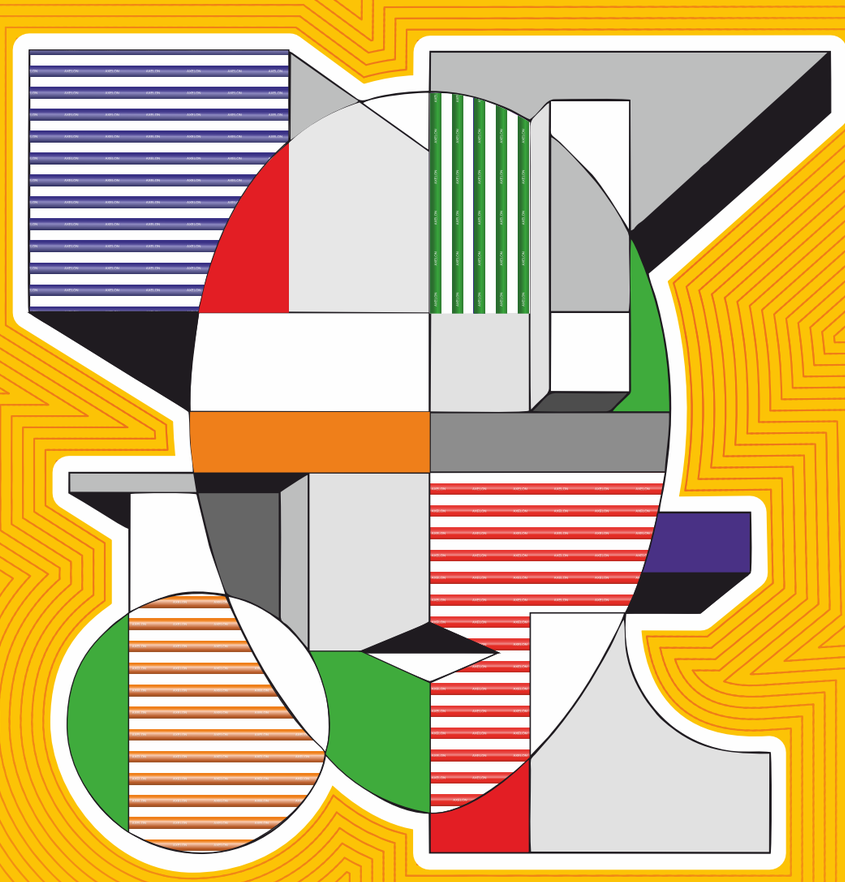
customer care : +91 288 677 2070 | Email : sales@axelongroup.com

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
RoHS COMPLIANT
CE
IS : 694 CM/L - 7600107912
IS : 7098 CM/L - 7600133012
IS : 1554 CM/L - 7600132911
IS : 1293 CM/L - 7900112110
CPRI

www.axelongroup.com | www.axeloncables.com



Axelon
Wire & Cables

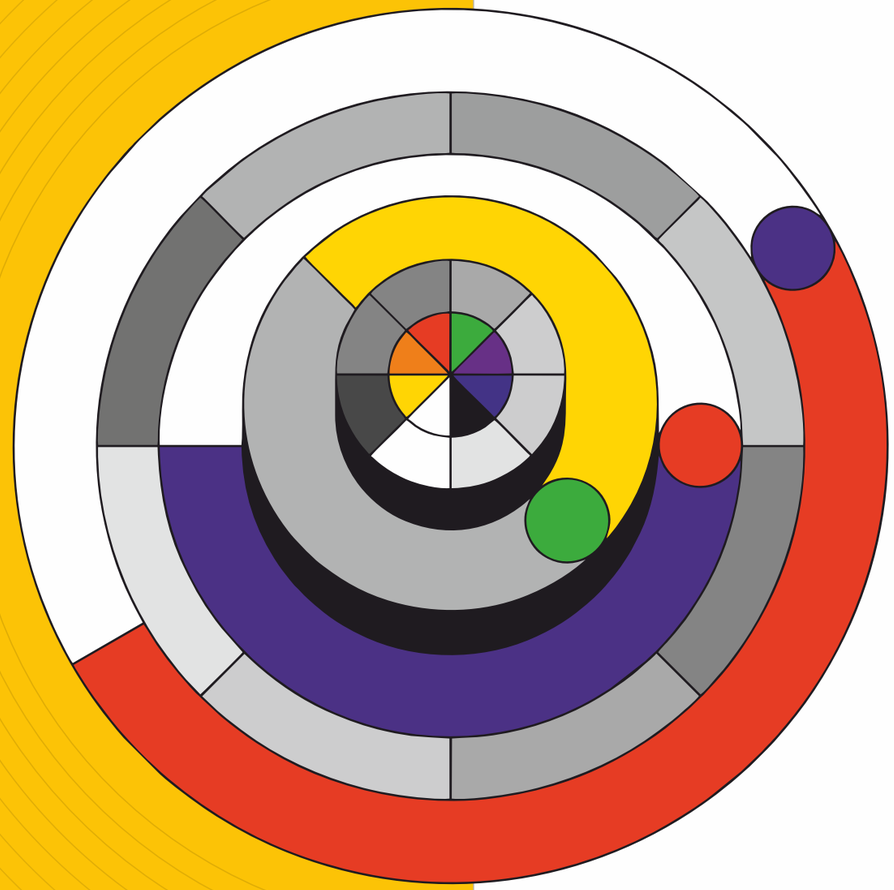


TODAY
TOMORROW
FOREVER

CATALOGUE
2023 - 24

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Axelon
Wire & Cables

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Axelon
Wire & Cables

ELECTRIFYING
THE FUTURE

AXELON is a core, four-decade-old business established in Jamnagar, Gujarat, committed to quality, sustainability and transparency. Axelon is a family-owned, professionally managed company. Over the decades, it has served leading companies in India as an OEM supplier. With multiple verticals, Axelon Group operates in the "Brass [OEM], Exports, Wires & Cables, Real Estate, and Angel Investment" segments.

A leading manufacturer of wires and cables in Gujarat, the plant is fully imported from Germany "NIEHOFF" and produces the entire range of wires and cables specified by IS 694, IS 7098 and IS 1554, among other global standards.

Axelon Group has grown tremendously in the past few years. It is successfully debt-free, has an annual turnover of over 71 million USD and has a global footprint spanning more than 29 countries.

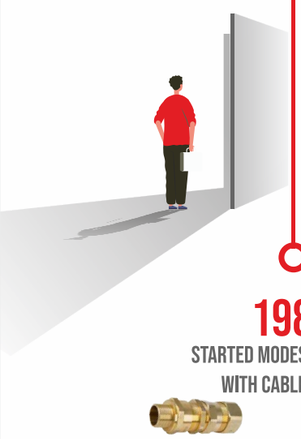
Axelon derives its strength from its customers, who are in sectors like utilities, power generation, transmission and distribution, petroleum and oil refineries, OEMs, EPC contractors, steel and metals, cement, chemicals, atomic energy and nuclear plants. Through innovative strategies and diligent staff, Axelon believes in taking on the challenges of today's discoveries to make them tomorrow's trends, strives to provide affordable prices and adheres to a code of ethics and values. A combination of performance-driven, result-oriented and empowering cultures makes Axelon Group stand out of the box.

www.axeloncables.com

INCEPTION | GROWTH | DIVERSIFICATION

Axelon
Wire & Cables

1985
STARTED MODEST BEGINNING
WITH CABLE GLANDS

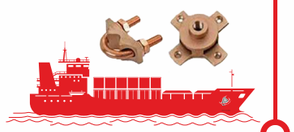


1990
7 PERSON &
350 SQ. FEET
AREA

OEM TO
INDIA'S BEST BRANDS

Established own casting foundry to move from trading to manufacturing of cable glands and other electric accessories becoming OEM to India's best brands like comet



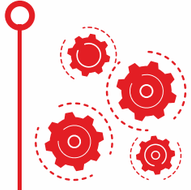


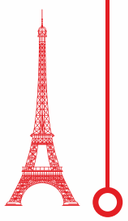
1997
STARTED WITH EXPORTS OF
BRASS ELECTRICAL &
EARTHING ACCESSORIES TO

Middle East and European Countries with all necessary approvals.



2002
Diversified into manufacturing of
PLUMBING AND SANITARY
Components for Indian and Export market





2005
Started with a branch office in Paris, exporting to over
29 COUNTRIES WORLDWIDE
AND HAD A REVENUE OF 10 CRORES.



Moved to a larger manufacturing plant with superior infrastructure and equipment.

REACHING 100 CRORES IN REVENUE.

2010

2016
Added another feather to Group by jointly Promoting one of its kind industrial park called
VISION INDUSTRIAL PARK
Spread over 4.4 million square feet with all major amenities

GROUP TURNOVER
₹ 300+ CRORES

Publishing our supremacy in OEM segment, axelon commissioned state of art manufacturing plant for wires and cables at Jamnagar, Gujarat. This manufacturing unit is one of the most technologically advanced manufacturing facility with most of THE machines imported from Germany and spread over 200,000 ft.²

YEAR 2015 WITNESSING
THE TOTAL REVENUE OF GROUP HITTING
₹ 350+ CRORES TURNOVER

2017
DIVERSIFICATION IN
WIRES & CABLES



2020
DIVERSIFY INTO
ANGEL INVESTING

1.DRIVEZY INC
2.PURPLE STYLE LAB
3. BOOK MY DIAMOND.COM

6000+
TONS PER YEAR
BRASS & COPPER
PROCESSING

650+ PEOPLE TEAM
₹ 550+ CRORES

2022

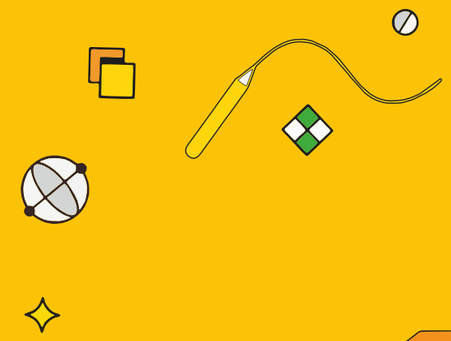
2023
ASPIRE TO EVOLVE
INTO FUTURE
MILESTONES





100%
Fire Safety
Compliant

Fully Automated
"NIEHOFF GERMAN PLANT"



VISION

Keeping the legacy of excellence in hindsight, the group aims to explore uncharted territories with the courage to conquer them and wishes to embark on a path of continuous evolution through innovation and upgradation in products, services and processes.

MISSION

The strength of the group lies in the prudence and vision of its founders. Steered by their astute wisdom, the group aims to build the identity of a company driven by technology and fortified by the values of reliability, quality, integrity and customer satisfaction that is equally conscious of and accountable for the physical and mental well-being of it's people and stakeholder groups. The group's goal is to foster a liberating work culture in which knowledge and ideas are shared. Hence, mutual growth occurs.

CORE VALUES

After spending three decades in the industry and earning respect, trust and loyalty from esteemed customers, the group wishes to reinforce them in a bigger and better way by going the extra mile in building strong and longstanding relationships with both it's people and clients for long-term satisfaction.



INFRASTRUCTURE

In a bid to establish Axelon as a product at par in the field of electric wires and cables, the group has not left any stone unturned in establishing an infrastructure at par. To guarantee that products bearing the Axelon brand identification uphold the standards of outstanding quality and dependability, it has employed the best-in-class types of machinery and technology from Germany. As an emerging brand, ready to keep pace with changing technology and product specifications, the machinery and processes are designed and implemented in a way that they can be altered to adapt to the new technology and customization requirements. With such a flexible infrastructure, Axelon does not have to suffer huge production expenses, resulting in competitive and best-in-industry rates for its products.

Our infrastructure is capable of manufacturing up to 1.1 KV Aluminium/Copper conductor, Stranded/Solid type, PVC or XLPE insulated, Steel strip/Wire armoured or unarmoured or double Armoured PVC or FRLSH or ZHFR or HRFR type industrial power and control cables and domestic house wire along with a complete range of Flexible multi-core copper cables, Instrumentation cables, Fire survival cables Solar cables and various other speciality cables. These products cater to the BUREAU OF INDIAN STANDARDS-IS 694, IS 7098 (part 1), IS 1554 (part-1) Along with IEC and British Codes.



FULLY AUTOMATIC GERMAN NIEHOFF PLANT

- FIRE COMPLIANT PLANT
- Spread Over 2,00,000 Sq Ft

PLANT INFRASTRUCTURE



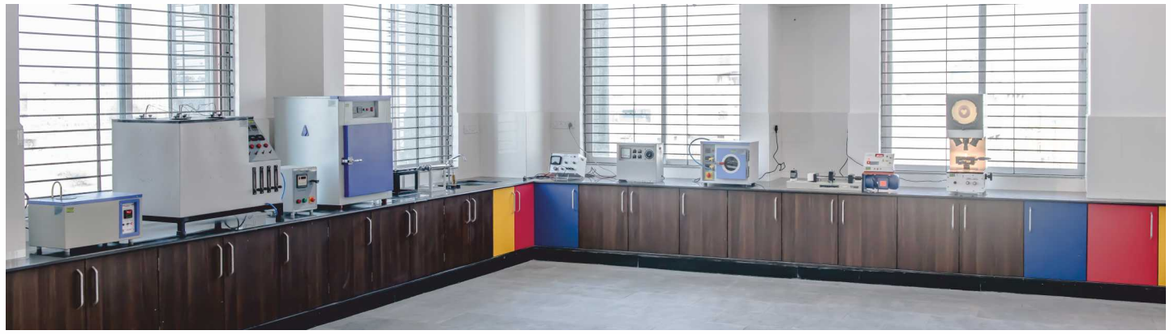






Scan Qr :
For Factory Video

QUALITY CONTROL LAB







To assure the best quality products that not only meet but exceed customer expectations is Axelon's prime forte. At Axelon, we believe in focusing on the consistent delivery of the best results, and to achieve this we ensure to have all necessary equipment in possession with our quality control laboratory. These equipments are of the best international standards that caters to all quality requirements for the electrical industry.

Axelon wires and cables are tested as per the guideline of various Indian and global codes and standards. We strictly ensure a hundred percent inspection on all the drums and all our equipment is calibrated up to date.

LABORATORY TESTING EQUIPMENTS

Digital Tensile Tester | Halogen Acid Gas Emission Test Apparatus | Kelvin Double Bridge | Ageing Oven | Cold Chamber | Hot Set Test Apparatus | Computerized Smoke Density Apparatus | Water Bath | Digital & Analog Million Mega Ohm Meter | Flammability Chamber | 10 Kv Ac High Voltage Testing Setup | Digital Torsion Tensile Tester | Digital Oxygen And Temperature | Index Test Apparatus | Swedish Chimney | Motorized Elongation Machine | Conditioning Chamber | Hot Air Oven | Thermal Stability Test Apparatus | Dc High Voltage | Profile Projector | Digital Micro Ohm Meter | Digital Weighing Scale | Vacuum Oven | Two Roll Mill | Hydraulic Press | Oil Bath | Cord Flexing Test Apparatus | Tumbling Barrel | Resistive And Inductive Load Bank | Glow Wire Test Apparatus | Temp Rise Test Apparatus

TRANSMITTING JOY THROUGH

CUTTING EDGE TECHNOLOGY

THAT AMAZED THE MANKIND ABOUT THE POTENTIAL IT HELD TO THE ACTUAL DISCOVERY OF THE ELECTRICITY

Electricity changed the course of human evolution & civilization. Electricity or power plays an irreplaceable role in our lives today. Imagine a life without a phone or imagine work spaces without computers. Unarguably we can say that today power empowers the progress of society and nation.

THE FIRST SPARK

Almost invisible yet significant,
WE OUGHT TO THANK THE

WIRES OR CABLES WHO KEEP US CONNECTED WITH PEACE & HAPPINESS



Power is delivered to the lives by cables & wires

Connecting lives in cities & around the world

Ignored due to lack of awareness of its attributes.

Unawareness of the purpose of wires

No questions asked result in our homes remaining unsafe.

Right wire Saves Money & ensures Safety

Axelon
Wire & Cables

A SAFE CHOICE...
THAT SMART INDIA MAKES!

And that's Axelon Wires & Cables. For us, wires & cables are not just a means to provide you a supply of electricity, expediting your work or need. We connect you personally with your dream the moment you switch on your lamp or fan or AC or WiFi. Based on the philosophy of seeking perfection, Axelon Wires & Cables features a very contemporary design and engineering.

Confirming its performance characteristics and defined criteria, Axelon Wires & Cables also score high in terms of its aesthetic elegance. To make sure that Axelon is not merely meant to connect you with the convenience of electricity, Axelon Wires & Cables brings with it a team of designers, engineers, fabricators, and other skilled professionals who beautifully combines beauty with practicality that not just switch on the appliances but illuminates your homes or offices with elegance and promise of absolute safety. Our comprehensive range of Axelon Wires & Cables is suitable for homes, recreational centers, schools and shops, all of which come with the reassurance that they are authentic and valid.

“Wires are not just wires; they are a link to prosperity, peace & progress that transcends local, national & global boundaries, connecting us all to ultimate happiness.”



BUILDING WIRES

Axelon Wire & Cables

ACE

FLAME RETARDANT LEAD FREE (FR LF)

Conductor : The conductors, drawn from bright 100% electrolytic grade copper are annealed and bunched together on the latest GERMAN MACHINES

Insulation : The conductors are insulated with a specially formulated **FR PVC** compound with a high insulation resistance value. The insulation process is carried out on modern high-speed extrusion lines, which ensures high accuracy and consistency in performance. Flame retardant properties enable the cable to withstand overloads. The insulation is resistant to boiling water, steam and vapours. This prevents weakening and cracking in kitchens, bathrooms, damp walls and chemical industries.

Marking : The cables are printed with generic marking **"AXELON ACE FR LF"**

Colours : Red, Yellow, Blue, Green, Black, Yellow / Green, Grey, White. Other Colours available On Request.

Packaging : 90 meters / 180 meters / 270 meters / 100 yards.

UNIQUE FEATURE :

- *TEMP INDEX 250° c at 21% O_2*
- *101% Cu CONDUCTIVITY*
- *≥ 30% OXYGEN INDEX*
- *100% BUNCHED COPPER*
- *HIGH HEAT RESISTANCE*
- *100% ELECTROLYTIC COPPER*

100% Spark Tested | 99.97% Cu Purity | 101 % Conductivity

size dimensions and Ratings

SINGLE CORE UNSHEATHED CABLES IN VOLTAGE GRADE 1.1 KV AS PER IS : 694

3 LAYERS triple layered

Nominal Cross Sectional Area of Conductor	Number/Nom. Dia of Wires (Nom.)	Thickness of Insulation (Nom.)	Overall Diameter Max.	Current Capacity #2 Cables Single Phase Ac or Dc		D.C. Resistance (Max.) at 20°c
				In Conduit / Trunking	Unenclosed-clipped directly to surface or on cable tray	
Sq. mm	Number / mm	mm	mm	Amps	Amps	Ohm / km
0.75	24/0.20**	0.60	2.35	8.00	8.000	26.00
1.00	14/0.30*	0.70	2.75	11.00	12.00	18.10
1.50	22/0.30*	0.70	3.00	14.00	17.00	12.10
2.50	36/0.30*	0.80	3.70	19.00	22.00	7.41
4.00	56/0.30**	0.80	4.10	26.00	30.00	4.95
6.00	84/0.30**	0.80	4.60	32.00	37.00	3.30



As per IS 3961 (PART V) - 1968. The Number & diameter of conductor strands are for reference only and governed by conductor resistance.
The above data is indicative only and may be revised without prior information. Axelon will not be responsible for any damages arising out of incorrect application of its product.
* As per conductor class 2 of IS:8130/1984 I ** As per conductor class 5 of IS:8130/1984

BESTO

FLAME RETARDANT LOW SMOKE HALOGEN (FR-LSH)

Conductor : The conductors, drawn from bright 100% electrolytic grade copper are annealed and bunched together on latest GERMAN MACHINES

Insulation : The bunched conductor are insulated with specially formulated flame retardant low smoke compound. During a fire situation, the **FR- LSH** compound restrict the spread of flame. The smoke emission is also minimal.

Marking : The cables are printed with generic marking **"AXELON BESTO FR LSH"**

Colours : Red, Yellow, Blue, Green, Black, Yellow / Green, Grey, White. Other Colours available On Request.

Packaging : 90 meters / 180 meters / 270 meters / 100 yards.

UNIQUE FEATURE :

- *HALOGEN ACID ≤ 15%*
- *TEMP INDEX 250°C AT 21% O_2*
- *101% Cu CONDUCTIVITY*
- *≥ 30% OXYGEN INDEX*
- *100% BUNCHED COPPER*
- *SMOKE DENSITY RATING ≤ 40%*
- *HIGH HEAT RESISTANCE*
- *100% ELECTROLYTIC COPPER*

100% Spark Tested | 99.97% Cu Purity | 101 % Conductivity

Size Dimensions and Ratings

SINGLE CORE UNSHEATHED CABLES IN VOLTAGE GRADE 1.1 KV AS PER IS : 694

3 LAYERS triple layered

Nominal Cross Sectional Area of Conductor	Number/Nom. Dia of Wires (Nom.)	Thickness of Insulation (Nom.)	Overall Diameter Max.	Current Capacity #2 Cables Single Phase Ac or Dc		D.C. Resistance (Max.) at 20°c
				In Conduit / Trunking	Unenclosed-clipped directly to surface or on cable tray	
Sq. mm	Number / mm	mm	mm	Amps	Amps	Ohm / km
0.75	24/0.20**	0.60	2.35	8.00	8.000	26.00
1.00	14/0.30*	0.70	2.75	11.00	12.00	18.10
1.50	22/0.30*	0.70	3.00	14.00	17.00	12.10
2.50	36/0.30*	0.80	3.70	19.00	22.00	7.41
4.00	56/0.30**	0.80	4.10	26.00	30.00	4.95
6.00	84/0.30**	0.80	4.60	32.00	37.00	3.30



As per IS 3961 (PART V) - 1968. The Number & diameter of conductor strands are for reference only and governed by conductor resistance.
The above data is indicative only and may be revised without prior information. Axelon will not be responsible for any damages arising out of incorrect application of its product.
* As per conductor class 2 of IS:8130/1984 I ** As per conductor class 5 of IS:8130/1984

SUPRIMO

HALOGEN FREE FLAME RETARDANT (HFFR | ZHFR)

Conductor : The conductors, drawn from bright 100% electrolytic grade copper are annealed and bunched together on latest GERMAN MACHINES

Insulation : The bunched conductors are insulated with specially formulated grade of Halogen Free Flame Retardant **(HF - FR)** compound. The insulation does not melt in case of fire. The smoke emitted is transparent, non-toxic and minimal. The victims trapped in the fire do not suffocate and evacuation is convenient.

Marking : The cables are printed with generic marking **"AXELON SUPRIMO HFFR"**

Colours : Red, Yellow, Blue, Green, Black, Yellow / Green, Grey, White. Other Colours available On Request.

Packaging : 90 meters / 180 meters / 270 meters / 100 yards.

UNIQUE FEATURE :

- *HALOGEN ACID ≤ 0%*
- *100% ELECTROLYTIC COPPER*
- *101% Cu CONDUCTIVITY*
- *≥ 32% OXYGEN INDEX*
- *100% BUNCHED COPPER*
- *SMOKE DENSITY RATING ≤ 6%*
- *HIGH HEAT RESISTANCE*

100% Spark Tested | 99.97% Cu Purity | 101 % Conductivity

Size Dimensions and Ratings

SINGLE CORE UNSHEATHED CABLES IN VOLTAGE GRADE 1.1 KV AS PER IS : 694

3 LAYERS triple layered

Nominal Cross Sectional Area of Conductor	Number/Nom. Dia of Wires (Nom.)	Thickness of Insulation (Nom.)	Overall Diameter Max.	Current Capacity #2 Cables Single Phase Ac or Dc		D.C. Resistance (Max.) at 20°c
				In Conduit / Trunking	Unenclosed-clipped directly to surface or on cable tray	
Sq. mm	Number / mm	mm	mm	Amps	Amps	Ohm / km
0.75	24/0.20**	0.60	2.35	8.00	8.00	26.00
1.00	14/0.30*	0.70	2.75	11.00	12.00	18.10
1.50	22/0.30*	0.70	3.00	14.00	17.00	12.10
2.50	36/0.30*	0.80	3.70	19.00	22.00	7.41
4.00	56/0.30**	0.80	4.10	26.00	30.00	4.95
6.00	84/0.30**	0.80	4.60	32.00	37.00	3.30



As per IS 3961 (PART V) - 1968. The Number & diameter of conductor strands are for reference only and governed by conductor resistance.
The above data is indicative only and may be revised without prior information. Axelon will not be responsible for any damages arising out of incorrect application of its product.
* As per conductor class 2 of IS:8130/1984 I ** As per conductor class 5 of IS:8130/1984

MAGNUM

HEAT RESISTANCE (105°C EQUILAY CONDUCTOR
100% Spark Tested | 99.97% Cu Purity | 101 % Conductivity

EQUILAY BUNCHED CONDUCTOR

Conductor : Thin strands of electrolytic copper are multi-drawn for uniformity of resistance, dimension and flexibility. The drawn strands are equilaid with high precision and compacted. Thus forming a perfectly circular conductor which enables reduction in overall diameter for space saving in high density wiring.

Insulation : Specially formulated 105°C heat resistant & flame retardant PVC insulation is used. The ***(HR FR)*** property retards the propagation of flame without compromising safety

Marking : The cables are printed with generic marking ***"AXELON MAGNUM EQUILAY"***

Colours : Red, Yellow, Blue, Green, Black, Yellow/Green, Grey, White. Other Colours Available On Request.

Packaging : 90 meters / 180 meters / 270 meters / 100 yards.

UNIQUE FEATURE

- *NO LUGS WIRE*
- *ENERGY SAVING*
- *EQUILAY CONDUCTOR*
- *100% ELECTROLYTIC COPPER*
- *HEAT RESISTANCE PVC 105° C*
- *NON TOXIC & NON CORROSIVE*

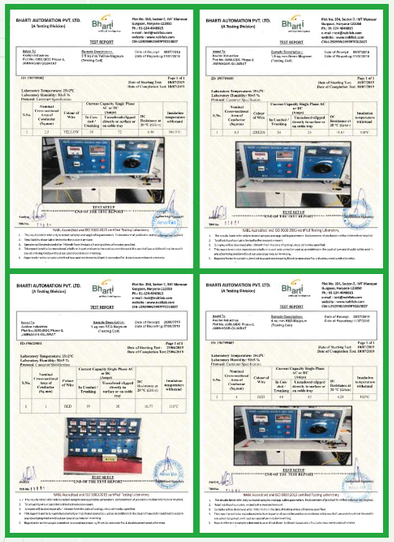
Size Dimensions and Ratings
SINGLE CORE UNSHEATHED CABLES IN VOLTAGE GRADE 1.1 KV AS PER IS : 694

Nominal Cross Sectional Area of Conductor	Number/Nom. Dia of Wires (Nom.)	Thickness of Insulation (Nom.)	Overall Diameter Max.	Current Capacity #2 Cables Single Phase Ac or DC		D.C. Resistance (Max.) at 20°c Ohm / km
				In Conduit / Trunking	Unenclosed-clipped directly to surface or on cable	
Sq. mm	Number / mm	mm	mm	Amps	Amps	Ohm / km
0.75	19/0.230*	0.70	2.40	**11.00**	**12.00**	26.00
1.00	19/0.300*	0.70	2.70	**14.00**	**15.00**	19.50
1.50	19/0.330*	0.80	3.10	**17.00**	**19.00**	13.30
2.50	37/0.300*	0.80	3.70	**22.00**	**26.00**	07.980
4.00	37/0.370*	0.90	4.30	**30.00**	**34.00**	04.600
6.00	37/0.445	0.90	4.55	**42.00**	**44.00**	03.300

BUILDING WIRES



3rd PARTY TEST CERTIFICATE



DIAMOND EDGE TECHOLOGY

HOW AXELON MAGNUM IS BETTER THAN ANY LEADING CABLE BRAND PRODUCT ?





AXELON



OTHER COMPETITORS

MAGNUM FEATURES	ONE OF THE ONLY COMPANY GIVING TRIPLE LAYER FOR BETTER INSULATION	MOST OF OTHER COMPANIES HAVE TWO LAYERS MAXIMUM
HEAT RESISTANCE PVC 105° C	ONLY COMPANY TO GIVE ALL 3 LAYERS WITH 105° C HEAT RESISTANT PVC	SOME COMPANIES ARE GIVING ONLY TOP LAYER AS 105° C PVC
HIGH CURRENT CARRYING CAPACITY	AXELON MAGNUM HAS ALMOST 1.5 TIMES THE CURRENT CARRYING CAPACITY	NO COMPETITION
INDIA'S FIRST WIRE WITH EQUILAY BUNCH TECHNOLOGY	INHOUSE & DEVELOPED EQUILAY BUNCH FOR BETTER PROPERTIES	NO COMPETITION
ENERGY SAVING	SAVES LOTS OF ENERGY AS WIRE FUNCTIONING AT LOWER CAPACITY	NO COMPETITION
NO LUGS WIRE	BECAUSE OF EQUILAY BUNCH, LUGS CAN BE AVOIDED	NO COMPETITION
INDO GERMAN TECHNOLOGY FOR SHOCK RESISTANCE	ENTIRE PLANT IS NIEHOFF GERMANY WITH ONLINE SPARK TESTING	SOME COMPANIES ARE DOING THIS

SINGLE CORE FLEXIBLE CABLES-PANEL WIRE

Applications : These wires/cables are used for wiring in control panels, machines and various electrical installations in dry and damp interiors especially under typical industrial environmental conditions

Insulation : The conductors are insulated with specially formulated FR pvc compound with a high insulation resistance value. The insulation process is carried out on modern high speed extrusion lines, which ensures high accuracy and consistency in performance. Flame Retardant properties enable the cable to withstand overloads. The insulation is resistant to boiling water, steam and vapour. This prevents ageing and cracking in kitchens, bathrooms, damp walls and chemical industries.

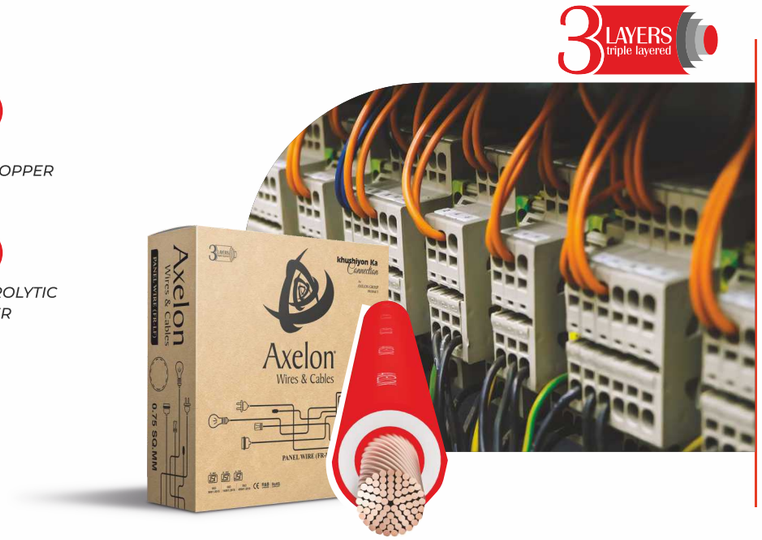
Marking : The cables are printed with generic marking **ACE-FR-LF**

Colours : Red, Yellow, Blue, Green, Black, Yellow/Green, Grey, White Other Colours available On Request.

Packaging : 100 mtr coils packed in Plastic Wrapper or Box and packed in protective cartons, 500 mtrs in wooden drums.

UNIQUE FEATURES:

- *101% Cu CONDUCTIVITY*
- *> 30% OXYGEN INDEX*
- *100% BUNCHED COPPER*
- *MAXIMUM STRETCHABILITY*
- *HIGH HEAT RESISTANCE*
- *100% ELECTROLYTIC COPPER*
- *NO INVISIBLE HAIRLINE FRACTURE*
- *LOW BENDING RADIUS*



Cable Structure : Single Core Flexibles

Features	FR	FRLS	HFFR
Type of insulation	70°C / 105°C Heat Resistant PVC	Flame Retardant Low Smoke (FRLS)	Halogen Free (HFFR)
Type of Applications	Wiring of panels for use in high ambient temperature	Wiring in High density critical installations in public places and fire prone areas	Wiring in high density critical installations in public places and vicinity of electronic systems
Applications Standards	IS-694, BS 6004, IEC 60227, DIN VDE-0281-3	IEC 60332-1, BS 4066-1, IEC-60754-1, ASTMD-2843, ASTMD-2863	IEC 60332-1&3, BS 4066-1&3, IEC 60754-1&2, ASTMD-2563, BS 7211, DIN VDE-0282-9

FLEXIBLES - SINGLECORE - PANEL WIRE
100% Spark Tested I 99.97% Cu Purity 101% Conductivity

Axelon Wire & Cables

SINGLE CORE FLEXIBLE CABLES-PANEL WIRE Size Dimensions And Ratings

Nominal Cross Sectional Area Of Conductor	Number / Nom. Dia of Wires* (Nom.)	Thickness of Insulation (Nom.)	Overall Diameter Max.	Current Carrying Capacity 2 Cables Single Phase — Unenclosed Clipped directly to a surface or on Cable trays	D.C. Resistance (Max.) at 20°C
Sq. mm	Number / mm	mm	mm	Amps	Ohm / km
0.50	16/0.20	0.60	2.60	5.00	39.00
0.75	24/0.20	0.60	2.80	10.00	26.00
1.00	32/0.25	0.60	3.00	15.00	19.50
1.50	30/0.25	0.60	3.80	18.00	13.30
2.50	50/0.25	0.70	4.00	25.00	7.980
4.00	56/0.30	0.80	4.80	35.00	4.950
6.00	84/0.30	0.80	6.40	46.00	3.300
10.00	80/0.40	1.00	6.30	59.00	1.9100
16.00	126/0.40	1.00	7.40	79.00	1.2100
25.00	196/0.40	1.20	9.10	93.00	0.7800
35.00	276/0.40	1.20	10.30	113.00	0.5540
50.00	396/0.40	1.40	12.20	153.00	0.3860
70.00	354/0.50	1.40	14.10	238.00	0.2720
95.00	484/0.50	1.60	16.40	289.00	0.2060
120.00	608/0.50	1.60	18.00	339.00	0.1610
150.00	750/0.50	1.80	20.10	394.00	0.1290
185.00	925/0.50	2.00	22.30	461.00	0.1060
240.00	1210/0.50	2.20	25.20	555.00	0.0801
300.00	1520/0.50	2.40	28.50	649.00	0.0641
400.00	2030/0.50	2.60	31.00	771.00	0.0480
500.00	1776/0.60	2.80	35.50	818.00	0.0380
630.00	2183/0.60	3.00	39.00	916.00	0.0280

The conductor strand count and diameter are provided for reference purposes only and are based solely on conductor resistance indication. They are subject to change without notice. Incorrect application of the mentioned product will not make Axelon liable for any damage.

'As per IS:3961 (Part V)-1968'

Multicore Flexibles

Type of Insulation	Type of Sheathing	Applicable Standards	Typical Applicable
Standard PVC	Standard PVC, HRPVC	IS 694, BS 6500, IEC 60227, DIN VDE-0281	Power Cords for appliance, temporary power supplies. 3 core flat cables are suitable for submersible pump applications
Heat Resistant PVC up to 105°C	Standard PVC, HRPVC	IS 694, BS 6500, IEC 60227, DIN VDE-0281	Hi-power appliances, ovens, temporary power supply in higher temperature areas.
Standard PVC of FRLS	FRLS (Flame Retardant Low Smoke)	IS 694, BS 6500, IEC 60227, DIN VDE-0281, IEC 60754-1, IEC 60332-1, BS-4066-1. ASTMD 2843. ASTMD-2863	Power cords for application used in fire prone areas, flame proof equipments, machine tools used in critical locations and heat zones.

MULTICORE FLEXIBLE CABLES

Conductor : EC Grade Annealed Copper With High Flexibility Class 5 And Uniform Resistance Properties.

Insulation : All Insulation Grades in PVC exceeds the requirements as stated in **IS 5831**. All Grades Of Insulation are "RoHS" Compliant With 70° C And 85° C Rating.

Marking : The cables are printed with generic marking **AXELON**.

Insulation Colours : Red, Yellow, Blue, Green, Black, Yellow / Green, Grey, White. Other Colours available On Request.

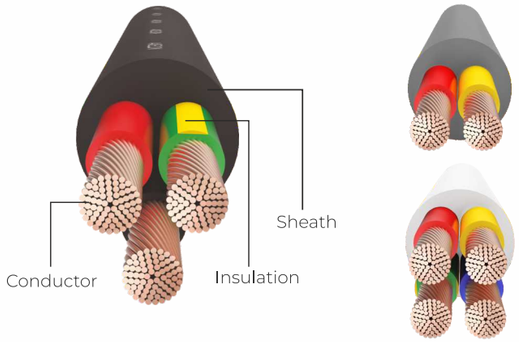
Sheath Colours : Black, Blue, White, Grey. Others colours available on Request.

Packaging : Standard packing of 100 mtr. in coils. Longer length available on request.

Size Dimensions and Ratings

Size	No/Nominal Dia of Conductor Stands*	Nominal Insulation Thickness (mm)	Nominal THICKNESS OF SHEATH				Approx. Overall Diameter				Current Rating	Voltage /Amp per mtr		Max. D.C. Conductor Resistance at 20°C
			2 CORE	3 CORE	4 CORE	5 CORE	2 CORE	3 CORE	4 CORE	5 CORE		DC Or single phase AC	3 phase AC	
Sq. mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Amps	mv	mv	ohms
00.50	16/0.20	0.60	0.900	0.90	0.90	0.90	6.90	7.30	8.00	8.70	4.0	83.0	72.00	39.00
00.75	24/0.20	0.60	0.900	0.90	0.90	0.90	7.30	7.70	8.40	9.20	7.0	56.00	48.00	26.00
01.00	32/0.20	0.60	0.900	0.90	0.90	1.00	7.60	8.10	8.80	9.60	11.0	43.00	37.00	19.50
01.50	30/0.25	0.60	0.900	0.90	1.00	1.00	8.90	9.40	10.40	11.40	14.0	31.00	26.00	13.30
02.50	50/0.25	0.70	1.000	1.00	1.00	1.00	10.30	10.90	12.0	13.20	19.0	18.00	16.00	7.980
04.00	56/0.30	0.80	1.000	1.00	1.00	1.10	11.60	12.40	13.60	15.30	26.0	11.00	9.60	4.950
06.00	84/0.30	0.80	01.10	1.20	1.20	-	13.00	13.80	15.50	-	33.0	7.30	6.0	3.300
10.00	141/0.30	1.00	01.30	1.40	1.40	-	16.50	17.70	19.50	-	45.0	4.40	3.50	1.910
16.00	226/0.30	1.00	01.40	1.40	1.40	-	19.40	20.60	23.00	-	60.0	2.80	2.20	1.210
25.00	196/0.40	1.20	01.40	1.50	1.60	-	23.80	25.60	28.50	-	75.0	0.20	1.40	0.780
35.00	276/0.40	1.20	01.60	1.60	1.70	-	27.20	29.30	32.70	-	95.0	0.20	1.00	0.554
50.00	396/0.40	1.40	02.00	2.00	2.00	-	32.00	34.60	38.60	-	125.0	0.20	0.80	0.386
70.00	360/0.50	1.40	02.20	2.20	2.20	-	36.80	39.60	44.30	-	170.0	0.20	0.60	0.272

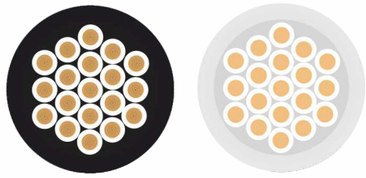
Note : * The number and diameter of conductor strands are for reference only. Conductor resistance as per IS:8130 is the governing criteria
The above data is indicative and may be revised without prior intimation. As per IS:3961 (Part V)-1968

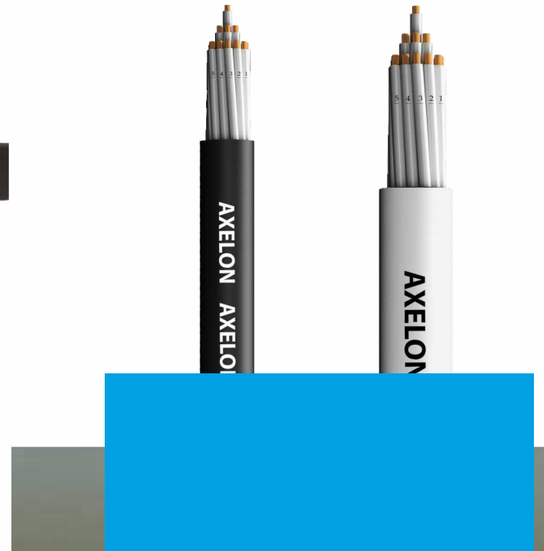




Core wise colour coded packing

size	0.5 SQMM			0.75 SQMM			1.0 SQMM			1.50 SQMM			2.50 SQMM		
No of Cores	Nominal Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Max. Overall Dia of Cable (mm)	Nominal Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Max. Overall Dia of Cable (mm)	Nominal Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Max. Overall Dia of Cable (mm)	Nominal Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Max. Overall Dia of Cable (mm)	Nominal Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Max. Overall Dia of Cable (mm)
6	0.6	0.90	9.50	0.6	1.00	10.00	0.6	1.00	10.50	0.6	1.00	12.40	0.7	1.10	14.50
7	0.6	0.90	9.50	0.6	1.00	10.00	0.6	1.00	10.50	0.6	1.00	12.40	0.7	1.10	14.50
8	0.6	1.00	11.10	0.6	1.00	11.80	0.6	1.00	12.40	0.6	1.10	14.70	0.7	1.20	17.30
9	0.6	1.00	11.80	0.6	1.10	12.40	0.6	1.10	13.10	0.6	1.10	15.60	0.7	1.30	18.30
10	0.6	1.00	12.00	0.6	1.10	12.70	0.6	1.10	13.40	0.6	1.10	16.00	0.7	1.30	18.70
11	0.6	1.00	12.00	0.6	1.10	12.70	0.6	1.10	13.40	0.6	1.10	16.00	0.7	1.30	18.70
12	0.6	1.00	12.40	0.6	1.10	13.10	0.6	1.10	13.90	0.6	1.10	16.50	0.7	1.30	19.40
13	0.6	1.00	13.10	0.6	1.10	13.80	0.6	1.10	14.60	0.6	1.20	17.40	0.7	1.30	20.50
14	0.6	1.10	13.10	0.6	1.10	13.80	0.6	1.10	14.60	0.6	1.20	17.40	0.7	1.30	20.50
15	0.6	1.10	13.50	0.6	1.20	14.30	0.6	1.20	15.10	0.6	1.20	18.10	0.7	1.40	21.30
16	0.6	1.10	13.80	0.6	1.20	14.60	0.6	1.20	15.40	0.6	1.20	18.40	0.7	1.40	21.70
17	0.6	1.10	14.60	0.6	1.20	15.40	0.6	1.20	16.30	0.6	1.30	19.50	0.7	1.40	23.00
18	0.6	1.10	14.60	0.6	1.20	15.40	0.6	1.30	16.30	0.6	1.30	19.50	0.7	1.40	23.30
19	0.6	1.10	14.60	0.6	1.20	15.40	0.6	1.30	16.30	0.6	1.30	19.50	0.7	1.40	23.80
20	0.6	1.20	15.40	0.6	1.30	16.30	0.6	1.40	17.30	0.6	1.40	20.70	0.7	1.50	24.40
21	0.6	1.20	15.40	0.6	1.30	16.30	0.6	1.40	17.30	0.6	1.40	20.70	0.7	1.50	25.00
22	0.6	1.20	16.30	0.6	1.30	17.30	0.6	1.40	18.20	0.6	1.40	21.90	0.7	1.50	25.80
23	0.6	1.20	16.30	0.6	1.30	17.30	0.6	1.40	18.20	0.6	1.40	21.90	0.7	1.50	26.30
24	0.6	1.20	17.10	0.6	1.30	18.20	0.6	1.40	19.20	0.6	1.40	23.00	0.7	1.50	27.20
25	0.6	1.20	17.10	0.6	1.30	19.00	0.6	1.40	19.20	0.6	1.40	23.00	0.7	1.50	27.90







PVC 3 & 4 CORE FLAT CABLE

100% Spark Tested I 99.97% Cu Purity I
101% Conductivity

KISAANMITRA

Applications : The PVC / XLPE insulated and sheathed 3 Core Flat Cables are mainly used in pump connections. They are also used in many industrial applications. The sheath is specially made out to resist tough and difficult condition of usage, excellent resistant to water, conditionally resistant to oil and grease.

Conductor : Electrolytic grade annealed copper.

Marking : The cables are printed with generic marking **AXELON KISAANMITRA .**

Core Colour : Red, Yellow (center core), Blue.

Packaging : Standard packing of 300 mtrs in coils, 500 mtrs wooden drums. Longer length available on request.

Sheathing Colours : Black, Grey, Orange, Blue

Insulation : PVC, XLPE, EPR, TPR

Sheathing : PVC, EPR, TPR

Standard : CENELEC HD 21, IEC 60227, BS 6500, DIN VDE 0281, IS 694

UNIQUE FEATURES:

HIGH ABRASION RESISTANT SPECIAL GRADE PVC

BEST QUALITY EC GRADE COPPER FOR POWER SAVING

TOUGH & FLEXIBLE CABLE PROVIDES SAFETY

75° C WET CONDITION 90° C IN DRY AREA

EXCELLENT WEATHER, MOISTURE, OIL & GREASE RESISTANT

Size Dimensions and Ratings

PVC 3 CORE FLAT CABLE FOR SUBMERSIBLE PUMP (1100 VOLTS)

Conductor		PVC Insulation/Rubber		PVC Sheath/Rubber			Conductor Resistance At 20°C (max) Ohms/km	Current Rating At 40°C Amps.
Nominal Size in	Nos. & Dia. of Wire	Nominal Thickness	Nominal Core Dia.	Nominal Thickness	Approx. Overall Dimensions			
Sq. mm	Nos. / mm	mm	mm	mm	Height mm	Width mm		
1.50	22/0.30	0.80	3.25	1.15	6.20	12.80	12.10	14
2.50	36/0.30	0.90	3.80	1.15	6.40	14.60	7.41	18
4.00	56/0.30	1.00	4.50	1.15	7.40	16.80	4.95	26
6.00	84/0.30	1.00	5.25	1.15	8.00	18.70	3.30	31
10.00	140/0.30	1.00	6.50	1.40	9.90	23.70	1.91	42
16.00	224/0.30	1.00	8.00	1.40	11.80	28.00	1.21	57
25.00	350/0.30	1.20	10.10	2.00	14.70	35.50	0.780	72
35.00	490/0.30	1.20	11.30	2.00	16.80	39.50	0.554	90
50.00	703/0.30	1.40	13.30	2.20	18.30	45.50	0.386	115
70.00	988/0.30	1.40	15.30	2.20	21.00	51.00	0.272	143
95.00	1349/0.30	1.60	18.00	2.40	23.50	60.00	0.206	165
120.00	608/0.50	1.80	19.80	2.80	25.00	65.00	0.161	188
150.00	760/0.50	2.20	22.70	4.00	30.70	76.10	0.129	216

PVC 4 CORE FLAT CABLE FOR SUBMERSIBLE PUMP (1100 VOLTS)

Conductor		PVC Insulation/Rubber		PVC Sheath/Rubber			Conductor Resistance At 20°C (max) Ohms/km	Current Rating At 40°C Amps.
Nominal Size in	Nos. & Dia. of Wire	Nominal Thickness	Nominal Core Dia.	Nominal Thickness	Approx. Overall Dimensions			
Sq. mm	Nos. / mm	mm	mm	mm	Height mm	Width mm		
1.50	22/0.30	0.80	3.25	1.30	6.20	15.80	12.10	14
2.50	36/0.30	0.90	3.80	1.30	6.40	18.00	7.41	18
4.00	56/0.30	1.00	4.50	1.45	7.40	21.00	4.95	26
6.00	84/0.30	1.00	5.25	1.50	8.00	24.50	3.30	31
10.00	140/0.30	1.00	6.50	1.80	9.90	29.70	1.91	42
16.00	224/0.30	1.00	8.00	1.95	11.80	36.00	1.21	57
25.00	350/0.30	1.20	10.10	2.00	14.70	45.10	0.780	72
35.00	490/0.30	1.20	11.30	2.00	16.80	50.10	0.554	90
50.00	703/0.30	1.40	13.30	2.20	18.30	58.10	0.386	115
70.00	988/0.30	1.40	15.30	2.20	20.00	66.50	0.272	143
95.00	1349/0.30	1.60	18.00	2.40	23.50	77.30	0.206	165
120.00	608/0.50	1.80	19.80	2.30	27.40	87.00	0.161	188

PVC 3 & 4 CORE FLAT CABLE

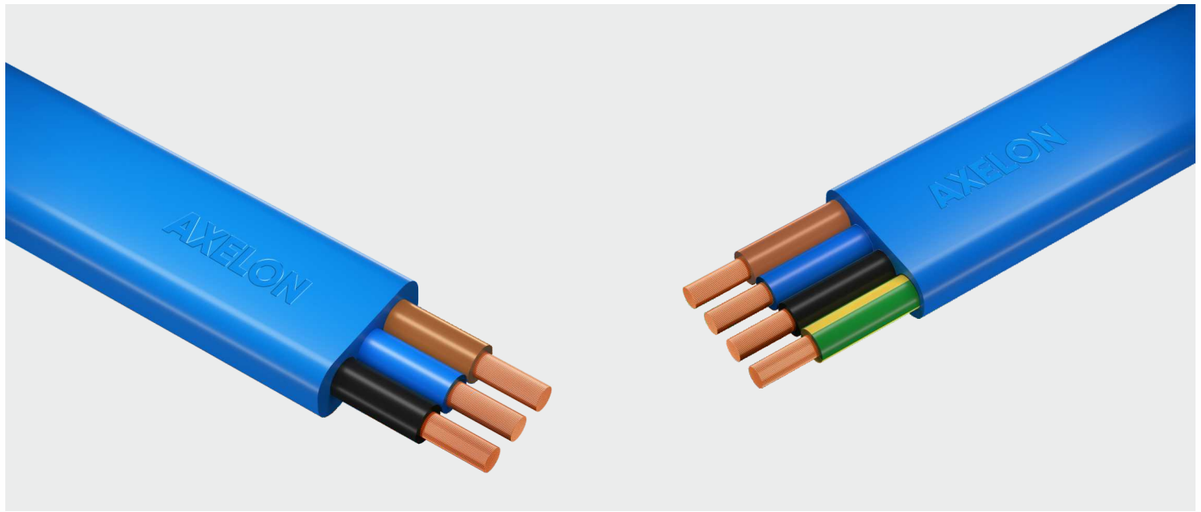
100% Spark Tested I 99.97% Cu Purity I
101% Conductivity

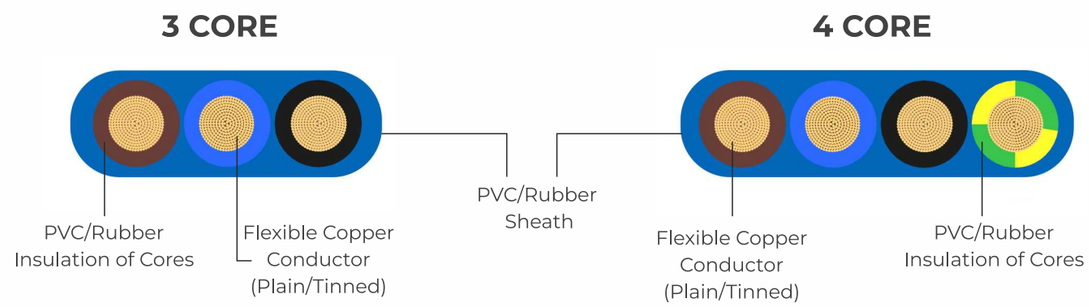
Axelon Wire & Cables

CABLE SELECTION CHART

SUBMERSIBLE PUMPSET CABLE SELECTION CHART FOR 415 V, 3 PHASE - 50Hz.

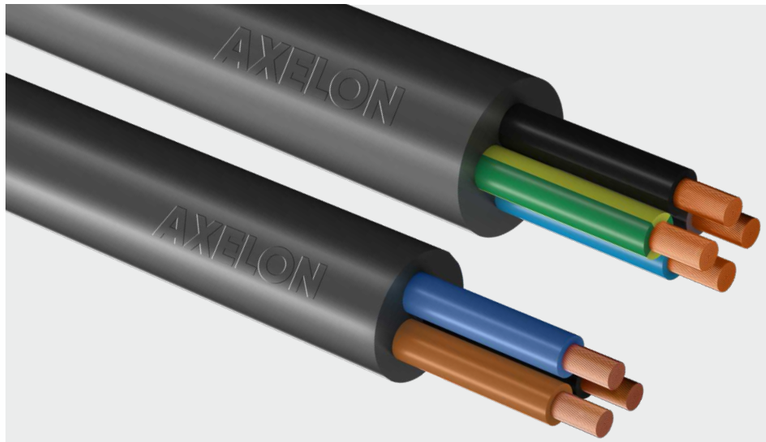
HP	LENGTH IN METERS																		
	10	20	30	40	50	60	70	80	90	100	120	140	160	180	200	250	300	350	400
1.0/1.5	1.0	1.0	1.0	1.0															
3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	2.5	2.5	2.5	4.0	4.0	4.0	6.0
4.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	2.5	4.0	4.0	4.0	6.0	6.0	6.0
5.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	2.5	4.0	4.0	6.0	6.0	6.0	10.0
6.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	4.0	4.0	4.0	2.0	2.0	10.0	10.0	10.0
7.5S	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	4.0	4.0	6.0	6.0	10.0	10.0	10.0	16.0
7.5D	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	2.5	4.0	4.0	4.0	6.0	6.0	10.0
10.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	4.0	4.0	4.0	6.0	6.0	10.0	10.0	10.0
12.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	4.0	4.0	6.0	6.0	10.0	10.0	10.0	16.0
15.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	6.0	6.0	6.0	10.0	10.0	10.0	10.0	16.0
17.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	6.0	6.0	10.0	10.0	10.0	16.0	16.0	16.0
20.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10.0	10.0	10.0	10.0	16.0	16.0	16.0	125.0
25.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10.0	10.0	10.0	16.0	16.0	16.0	16.0	25.0
30.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	10.0	10.0	10.0	16.0	16.0	16.0	16.0	25.0
40.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	16.0	16.0	16.0	25.0	25.0	25.0	25.0	35.0
50.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	25.0	25.0	35.0	35.0	35.0	50.0



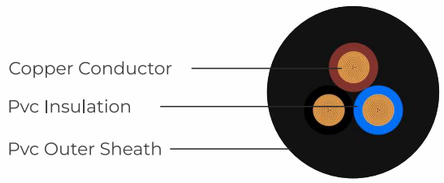


PVC 3 & 4 CORE ROUND CABLE

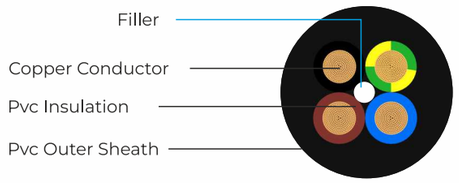
100% Spark Tested I 99.97% Cu Purity I
101% Conductivity



3 CORE



4 CORE



Construction

Conductor : Finely stranded bare flexible copper conductor
Insulation : PVC
Sheath : PVC
Core Colours :
- 3core : Red, Yellow, Blue or Brown, Blue, Black
- 4core: Red, Yellow, Blue, Green or Brown, Blue, Black, Yellow with Green line or Green with Yellow line

Applications

For continuous use in deep well to supply power to submersible motors for the depth upto 500 mtrs.

Special Features

- Excellent resistant to moisture, abrasion, greace and oil
- Excellent mechanical & electrical properties
- Generally Conforming to : CENELEC HD 21, IEC 60227, BS 6500, DIN VDE 0281, IS 694
- Temperature range -15°C to +70°C

PVC 3 & 4 CORE ROUND CABLE

100% Spark Tested I 99.97% Cu Purity I
101% Conductivity

Axelon Wire & Cables

PVC 3 CORE ROUND CABLE FOR SUBMERSIBLE PUMPS (1100 VOLTS)

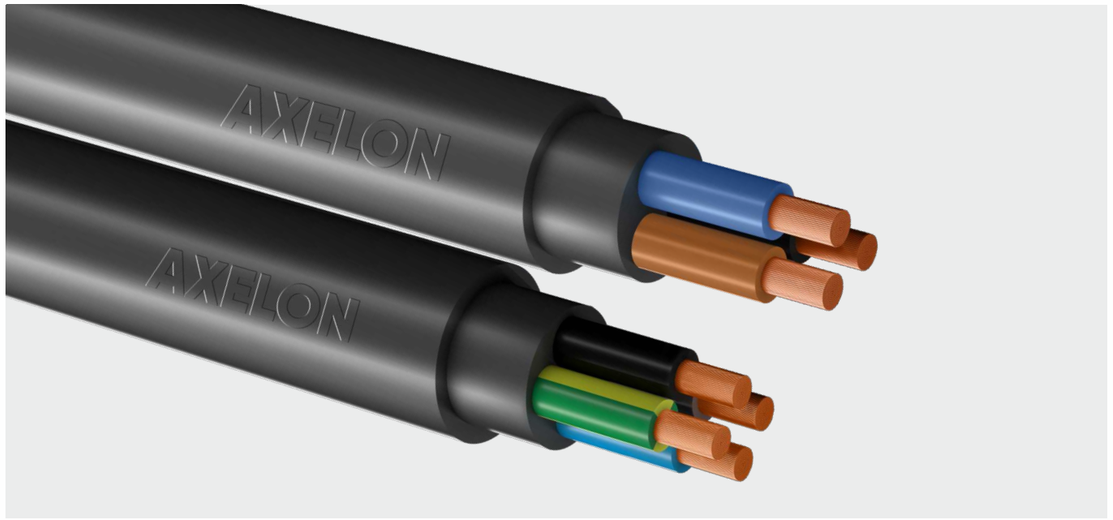
Conductor		PVC Insulation		PVC Sheath		Conductor Resistance At 20°C (max) Ohms/km	Current Rating At 40°C Amps.
Nominal Size in	Nos. & Dia. of Wire	Nominal Thickness	Nominal Core Dia.	Nominal Thickness	Approx. Overall Dimensions		
Sq. mm	Nos. / mm	mm	mm	mm	mm		
1.50	22/0 30	0.80	3.25	1.50	10.00	12.10	14
2.50	36/0.30	0.90	3.80	1.50	11.00	7.41	18
4.00	56/0.30	1.00	4.50	1.60	13.00	4.95	26
6.00	84/0.30	1.00	5.25	1.60	14.80	3.30	31
10.00	140/0.30	1.00	6.50	2.00	18.00	1.91	42
16.00	224/0.30	1.00	8.00	2.00	21.20	1.21	57
25.00	350/0.30	1.20	10.10	2.40	26.50	0.780	72
35.00	490/0.30	1.20	11.30	2.60	29.50	0.554	90
50.00	703/0.30	1 40	13.30	3.10	34.80	0.386	115
70.00	988/0.30	1.40	15.30	3.20	39.30	0.272	143
95.00	1349/0.30	1 60	18.00	3.50	45.70	0.206	165
120.00	608/0.50	1.90	19.80	3.80	50.20	0.161	188
150.00	760/0.50	2.00	22.00	4.00	55.30	0.129	216

PVC 4 CORE ROUND CABLE FOR SUBMERSIBLE PUMPS (1100 VOLTS)

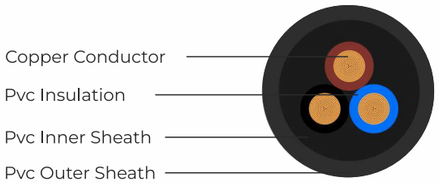
Conductor		PVC Insulation		PVC Sheath		Conductor Resistance At 20°C (max) Ohms/km	Current Rating At 40°C Amps.
Nominal Size in	Nos. & Dia. of Wire	Nominal Thickness	Nominal Core Dia.	Nominal Thickness	Approx. Overall Dimensions		
Sq. mm	Nos. / mm	mm	mm	mm	mm		
1.50	22/0 30	0.80	3.25	1.50	10.80	12.10	14
2.50	36/0.30	0.90	3.80	1.65	12.50	7.41	18
4.00	56/0.30	1.00	4.50	1.65	14.10	4.95	26
6.00	84/0.30	1.00	5.25	1.65	16.00	3.30	31
10.00	140/0.30	1.00	6.50	2.00	20.35	1.91	42
16.00	224/0.30	1.00	8.00	2.00	23.40	1.21	57
25.00	350/0.30	1.20	10.10	2.40	29.20	0.780	72
35.00	490/0.30	1.20	11.30	2.60	32.40	0.554	90
50.00	703/0.30	1.40	13.30	3.10	38.25	0.386	115
70.00	988/0.30	1.40	15.30	3.20	43.30	0.272	143
95.00	1349/0.30	1.60	18.00	3.50	50.40	0.206	165
120.00	608/0.50	1.90	19.80	3.80	55.30	0.161	188
150.00	760/0.50	2.00	22.00	4.00	61.00	0.129	216

Note:
The number of wires and diameter mentioned in the table are approximate and nominal, but they shall meet the requirements of conductor resistance per standards.
In view of continuous improvements in our design and process, the information, dimensions and specifications given herein are subject to change without notice.

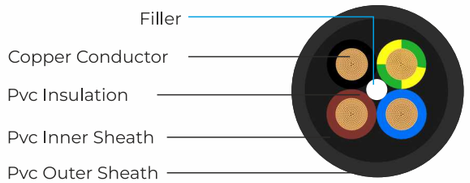
PVC 3 & 4 CORE DOUBLE SHEATHED ROUND CABLE



3 CORE



4 CORE



Construction

Conductor : Finely stranded bare flexible copper conductor
Insulation : PVC
Sheath : PVC (Sheath 1 & 2)
Core Colours :
- 3core : Red, Yellow, Blue or Brown, Blue, Black
- 4core: Red, Yellow, Blue, Green or Brown, Blue, Black, Yellow with Green line or Green with Yellow line

Applications

For Equipment used in the following applications

- Irrigation
- Offshore Drilling Rigs
- Drinking water-supply
- Industries
- Sewage Treatment Plant
- Mine De-watering
- Sea Water Handling
- Fire Fighting

Special Features

- Excellent resistant to moisture, abrasion, greace and oil
- Excellent mechanical & electrical properties
- Generally Conforming to : CENELEC HD 21, IEC 60227, BS 6500, DIN VDE 0281, IS 694
- Temperature range -15°C to +70°C

PVC 3 & 4 CORE DOUBLE SHEATHED ROUND CABLE

Axelon Wire & Cables

Technical Data

Operating Temp : -20°C to max. + 70°C
Nominal voltage : 1100 V
Test voltage : 3000 V
Min. bending radius : 6 x cable diameter
Flame propagation : Flame retardant test per IEC 60332-1

PVC 3 CORE ROUND CABLE FOR SUBMERSIBLE PUMPS (1100 VOLTS)

Conductor		PVC Insulation		Total Thickness Of Double PVC Sheath		Conductor Resistance At 20°C (max) Ohms/km	Current Rating At 40°C Amps.
Nominal Size in	Nos. & Dia. of Wire	Nominal Thickness	Nominal Core Dia.	Sheath Thickness	Approx. Overall Dimensions		
Sq. mm	Nos. / mm	mm	mm	mm	mm		
1.50	22/0.30	0.60	3.00	1.65	10.00	12.10	14
2.50	36/0.30	0.70	3.60	1.65	11.00	7.41	18
4.00	56/0.30	0.80	4.30	1.85	13.00	4.95	26
6.00	84/0.30	0.80	5.10	1.80	14.60	3.30	31
10.00	140/0.30	1.00	6.50	2.00	18.00	1.91	42
16.00	226/0.30	1.00	8.00	2.00	21.20	1.21	57
25.00	354/0.30	1.20	10.10	2.15	26.00	0.780	72
35.00	495/0.30	1.20	11.30	2.15	28.30	0.554	90
50.00	703/0.30	1.40	13.60	2.25	33.50	0.386	115
70.00	988/0.30	1.40	15.30	2.45	37.80	0.272	143
95.00	1349/0.30	1.60	18.00	2.40	43.50	0.206	165

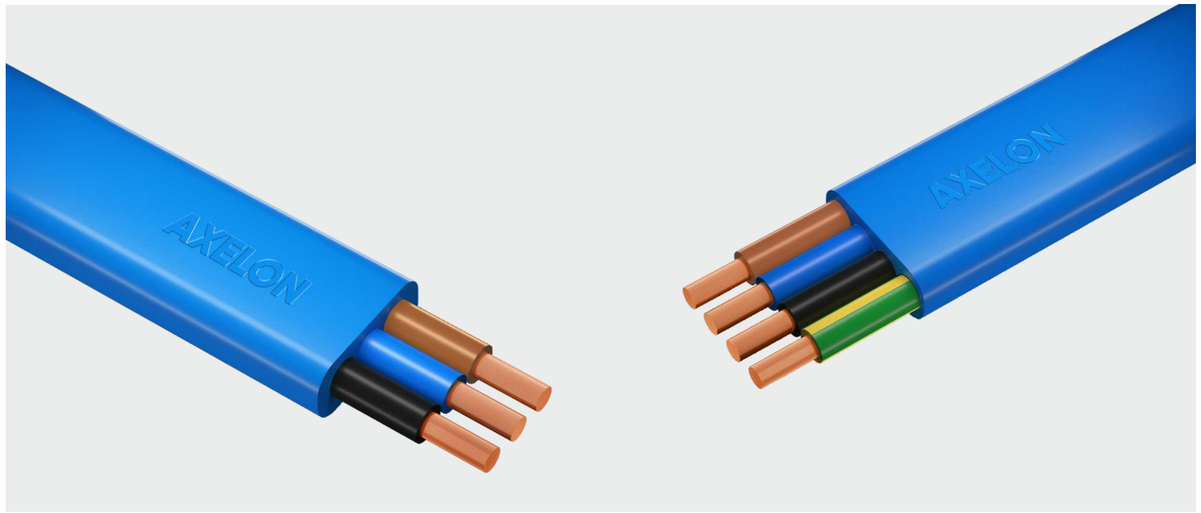
PVC 4 CORE ROUND CABLE FOR SUBMERSIBLE PUMPS (1100 VOLTS)

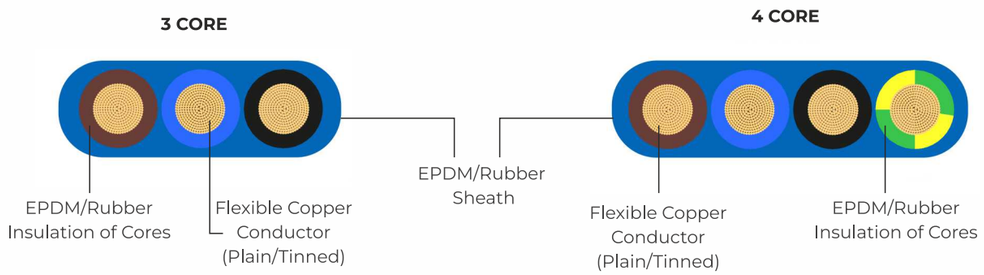
Conductor		PVC Insulation		Total Thickness Of Double PVC Sheath		Conductor Resistance At 20°C (max) Ohms/km	Current Rating At 40°C Amps.
Nominal Size in	Nos. & Dia. of Wire	Nominal Thickness	Nominal Core Dia.	Sheath Thickness	Approx. Overall Dimensions		
Sq. mm	Nos. / mm	mm	mm	mm	mm		
1.50	22/0 30	0.60	3.00	1.80	10.80	12.10	14
2.50	36/0.30	0.70	3.60	1.85	12.50	7.41	18
4.00	56/0.30	0.80	4.30	1.85	14.10	4.95	26
6.00	84/0.30	0.80	5.10	1.85	16.00	3.30	31
10.00	140/0.30	1.00	6.50	2.00	20.35	1.91	42
16.00	226/0.30	1.00	8.00	2.00	23.40	1.21	57
25.00	354/0.30	1.20	10.10	2.20	28.80	0.780	72
35.00	495/0.30	1.20	11.30	2.30	31.50	0.554	90
50.00	703/0.30	1.40	13.60	2.30	37.30	0.386	115
70.00	988/0.30	1.40	15.30	2.60	42.20	0.272	143
95.00	1349/0.30	1.60	18.00	2.65	48.80	0.206	165

Note:
The number of wires and diameter mentioned in the table are approximate and nominal, but they shall meet the requirements of conductor resistance per standards.
In view of continuous improvements in our design and process, the information, dimensions and specifications given herein are subject to change without notice.

RUBBER 3 & 4 CORE FLAT CABLE EPDM

100% Spark Tested I 99.97% Cu Purity I
101% Conductivity





Construction

Conductor : Finely stranded bare flexible copper conductor
Insulation : EPR Rubber
Sheath : Black/Blue heavy duty EPR
Core Colours :
- 3core : Red, Yellow, Blue or Brown, Blue, Black
- 4core: Red, Yellow, Blue, Green or Brown, Blue, Black, Yellow with Green line or Green with Yellow line

Applications

For continuous use in deep well to supply power to submersible motors for the depth upto 500 mtrs.

Special Features

- Meets the requirement of CENELEC HD 22.1.52, DIN VDE 0282 PART 810, IEC 245, CEI 20-19 & BS 6007, BS 6899.
- Designed for heavy duty use.
- Excellent resistant to oils, acids, chemicals, ozone & solvents.
- Excellent Weather Resistant.
- Excellent Electrical Properties.
- Temperature range -40°C to + 90°C

RUBBER 3 & 4 CORE FLAT CABLE EPDM

Axelon Wire & Cables

EPDM RUBBER 3 CORE FLAT CABLE FOR SUBMERSIBLE PUMPS (1100 VOLTS)

Conductor		Rubber Insulation		Rubber Sheath			Conductor Resistance At 20°C (max) Ohms/km	Current Rating At 40°C Amps.
Nominal Size in	Nos. & Dia. of Wire	Nominal Thickness	Nominal Core Dia.	Nominal Thickness	Approx. Overall Dimensions			
Sq. mm	Nos. / mm	mm	mm	mm	Height mm	Width mm		
1.50	22/0.30	0.60	3.20	1.15	6.20	12.80	12.10	23
2.50	36/0.30	0.70	3.80	1.15	6.40	14.60	7.41	30
4.00	56/0.30	0.80	4.50	1.15	7.40	16.80	4.95	34
6.00	84/0.30	0.80	5.25	1.15	8.00	18.70	3.30	43
10.00	140/0.30	1.00	6.50	1.40	9.90	23.70	1.91	61
16.00	224/0.30	1.00	8.00	1.40	11.80	28.00	1.21	81
25.00	350/0.30	1.20	10.10	2.00	14.70	35.50	0.780	108
35.00	490/0.30	1.20	11.30	2.00	16.80	39.50	0.554	135
50.00	703/0.30	1.40	13.30	2.20	18.30	45.50	0.386	170
70.00	988/0.30	1.40	15.30	2.20	20.00	51.00	0.272	220
95.00	1349/0.30	1.60	18.00	2.40	23.50	60.00	0.206	265
120.00	608/0.50	1.80	19.80	2.80	25.00	65.00	0.161	306
150.00	760/0.50	2.20	22.70	4.00	30.70	76.10	0.129	365

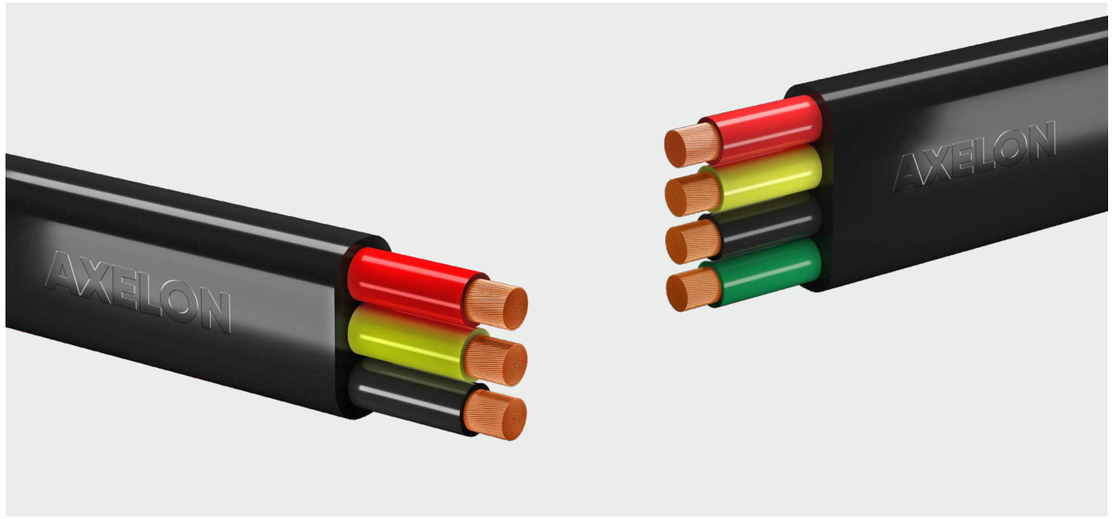
EPDM RUBBER 4 CORE FLAT CABLE FOR SUBMERSIBLE PUMPS (1100 VOLTS)

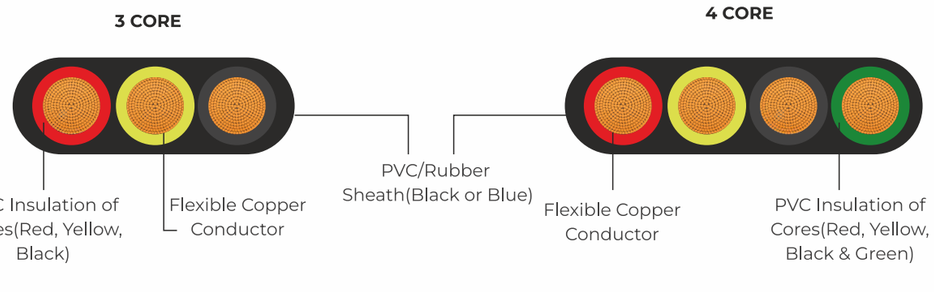
Conductor		Rubber Insulation		Rubber Sheath			Conductor Resistance At 20°C (max) Ohms/km	Current Rating At 40°C Amps.
Nominal Size in	Nos. & Dia. of Wire	Nominal Thickness	Nominal Core Dia.	Nominal Thickness	Approx. Overall Dimensions			
Sq. mm	Nos. / mm	mm	mm	mm	Height mm	Width mm		
1.50	22/0.30	0.80	3.25	1.30	6.20	15.80	12.10	23
2.50	36/0.30	0.90	3.80	1.30	6.40	18.00	7.41	30
4.00	56/0.30	1.00	4.50	1.45	7.40	21.00	4.95	34
6.00	84/0.30	1.00	5.25	1.50	8.00	24.50	3.30	43
10.00	140/0.30	1.00	6.50	1.80	9.90	29.70	1.91	61
16.00	224/0.30	1.00	8.00	1.95	11.80	36.00	1.21	81
25.00	350/0.30	1.20	10.10	2.00	14.70	45.10	0.780	108
35.00	490/0.30	1.20	11.30	2.00	16.80	50.10	0.554	135
50.00	703/0.30	1.40	13.30	2.20	18.30	58.10	0.386	170
70.00	988/0.30	1.40	15.30	2.20	20.00	66.50	0.272	220
95.00	1349/0.30	1.60	18.00	2.40	23.50	77.30	0.206	265
120.00	608/0.50	1.80	19.80	3.50	27.40	87.00	0.161	306

Note:
The number of wires and diameter mentioned in the table are approximate and nominal, but they shall meet the requirements of conductor resistance per standards.
In view of continuous improvements in our design and process, the information, dimensions and specifications given herein are subject to change without notice.

PVC/RUBBER 3 & 4 CORE FLAT CABLE AWG

100% Spark Tested I 99.97% Cu Purity I
101% Conductivity





Construction

Conductor :	Finely stranded bare flexible copper conductor
Insulation :	PVC / EPR Rubber
Sheath :	PVC / EPR
Core Colours :	• 3core : Red, Yellow, Black • 4core: Red, Yellow, Black, Green

Applications

For continuous use in deep well to supply power to submersible motors for the depth upto 500 mtrs.

Special Features

- Cable is in accordance with UL specification for 75 degree C type TW cable
- Generally conforming to : UL 83, IEC 60227, BS 6500, ISI 694
- Excellent resistant to moisture, abrasion, grease and oil
- Excellent resistant to oil, acids, chemicals and ozone

PVC/RUBBER 3 & 4 CORE FLAT CABLE AWG

Axelon Wire & Cables

PVC/RUBBER 3 CORE FLAT SUBMERSIBLE PUMP CABLE (WITHOUT GROUND)

Conductor Size (AWG)	Nos and Dia. of wire (Nos x mm)	Core Dia. (mm)	Nominal Sheath Thickness (mm)
14	41 x 0.254	3.60	1.15
12	65 x 0.254	4.30	1.15
10	105 x 0.254	5.10	1.15
8	168 x 0.254	6.30	1.40
6	226 x 0.254	7.60	1.40
4	420 x 0.254	9.90	2.00
2	665 x 0.254	11.10	2.00
1	817 x 0.254	13.60	2.20
1/0	1045 x 0.254	13.60	2.20
2/0	1330 x 0.254	15.60	2.20
3/0	1672 x 0.254	18.00	2.40
4/0	2116 x 0.254	19.80	2.65
250 MCM	2503 x 0.254	20.60	2.80

PVC/RUBBER 4 CORE FLAT SUBMERSIBLE PUMP CABLE (WITH GROUND)

Conductor Size (AWG)	Nos and Dia. of wire (Nos x mm)	Ground Conductor size (AWG)	Core Dia. (mm)	Nominal Sheath Thickness (mm)
14	41 x 0.254	14	3.65	1.15
12	65 x 0.254	12	4.50	1.15
10	105 x 0.254	10	5.30	1.15
8	168 x 0.254	10	6.50	1.40
6	226 x 0.254	8	8.00	2.00
4	420 x 0.254	8	10.10	2.00
2	665 x 0.254	6	11.30	2.20
1	817 x 0.254	6	13.60	2.20
1/0	1045 x 0.254	6	13.60	2.20
2/0	1330 x 0.254	4	15.60	2.20
3/0	1672 x 0.254	2	18.00	2.65
4/0	2116 x 0.254	2	19.80	3.85

Note:
The number of wires and diameter mentioned in the table are approximate and nominal, but they shall meet the requirements of conductor resistance per standards.
In view of continuous improvements in our design and process, the information, dimensions and specifications given herein are subject to change without notice.

SUBMERSIBLE WINDING WIRE

100% Spark Tested | 99.97% Cu Purity |
101 % Conductivity

SUBMERSIBLE WINDING WIRE
AXELON WINDING WIRES

Axelon Proudly presents Poly wrapped winding wire commonly known as **"SUBMERSIBLE COPPER"** Winding Wire. "The copper conductor is wrapped with thin polyester film & Biaxial Oriented Poly Propylene **(BOPP)**" The modern plant with sophisticated wrapping heads & inline continuous heat shrinkage furnace is installed to get uniform covering. A complete quality assurance testing by instruments covering all governing standards is available. The test standards followed are IS 8783:1995

Conductor : 100% EC Grade Copper

Application : Used in submersible pump motors of all for domestic and industrial application.

Size : 0.40mm to 3.00mm conductor

Packaging : Available in coil form with sustainable length as per size, in polythene bag and packed in inner & outer corrugated boxes.

WINDING WIRE SPECIFICATIONS AS PER IS 8783 (PART4/SECTION3): 1995 SOLID COPPER CONDUCTOR.

Conductor Diameter (Nominal)	Outer Diameter (Nominal) mm	Max. Resistance of Conductor at 20°C ohm/km
0.4	0.75	137.200
0.5	0.85	87.800
0.6	0.95	60.980
0.7	1.05	43.550
0.8	1.15	34.300
0.9	1.25	27.100
1.0	1.40	21.950
1.1	1.50	17.500
1.2	1.60	15.260
1.3	1.70	12.580
1.4	1.80	11.200
1.5	1.90	9.757
1.6	2.10	8.575
1.7	2.20	7.596
1.8	2.30	6.775
1.9	2.40	6.081
2.0	2.50	5.488
2.1	2.60	4.884
2.2	2.70	4.630
2.3	2.80	4.230
2.4	2.90	3.890
2.5	3.00	3.580
2.6	3.10	3.310
2.7	3.30	3.070
2.8	3.50	2.860
2.9	3.70	2.660
3.0	3.90	2.490

*Tolerance of outer Diameter (+1) 0.05 mm

*Over all dimension be increased or decreased as per client requirement.

BENEFITS OF AXELON'S WIRE

- VERY HIGH DIELECTRIC STRENGTH.
- LONG LIFE GUARANTEED.
- GREATER TENSILE STRENGTH
- COST-OPTIMISED FOR HIGHER SAVINGS.
- EASILY BENDABLE FOR EASY WINDING.
- SAVES ENERGY - ETP GRADE HIGH CONDUCTIVITY ANNEALED COPPER USED
- FIRM INSULATION FOR HIGH MECHANICAL STRENGTH
- LESS CURRENT LEAKAGE - NO AIR GAP BETWEEN THE FILMS.
- VERY HIGH RESISTANCE TO TEARS.
- MANUFACTURED BY ULTRA MODERN AUTOMATIC PLANT AS PER IS 8783 (PART 4 / SEC 3)
- EXTREME TEMPERATURE RESISTANCE.

TESTING FACILITIES FOR SUBMERSIBLE WINDING WIRES

S.No.	Name of the Tests	Units	Testing Instruments used
1	Size (Diameters)	mm	Digital Micrometers
2	Elongation	Percentage	Tensile tester
3	Conductor Resistance	Ohm/KM	Resistance Meter
4	Volume Resistivity	Ohm-cm	Million mega meter
5	High Voltage Test	Kv	High Voltage tester
6	Thermal Ageing	Change in Elongation & tensile	Ageing Oven & tensile tester
7	Shrinkage Test	Percent	Circulating Hot air oven
8	Water Absorption	mg/cm²	Vacuum Oven & Pump Desecrator
9	Hot Deformation	Percent	Circulating Hot air oven
10	Heat Shock Test	No sign of Cracks/scales separation of layers	Circulating Hot air oven &Mandrels



TELEPHONE CABLES

100% Spark Tested | 99.97% Cu Purity |
101 % Conductivity

Copper type : Drawn from 8mm wire rod- electrolytic cathode grade of 99.97% purity..

Reference to IS standard for conductors : IS 8130 : 1984 with latest amendments

Conductor construction : Single solid in 0.4 mm and 0.5 mm conductor size. And any other size as per order.

Standard insulation ase : Special grade high density polyethylene.

Standard jacketing base : Jacketing of FR (Flame Retardant) PVC compound made from virgin grade PVC resin

Insulation type for all sizes : HDPE / PVC and LSZH

Jacketing type for all pairs : Generally tubular extrusion

Ripcord : Nylon

CABLE SELECTION CHART

Size	Packing	Colour	Conductor size
1 Pair	100 mtr coil	Light Grey	0.40 & 0.50 mm
2 Pair	100 mtr coil	Light Grey	0.40 & 0.50 mm
3 Pair	100 mtr coil	Light Grey	0.40 & 0.50 mm
4 Pair	100 mtr coil	Light Grey	0.40 & 0.50 mm
5 Pair	100 mtr coil	Light Grey	0.40 & 0.50 mm
10 Pair	100 mtr coil	Light Grey	0.40 & 0.50 mm
20 Pair	100 mtr coil	Light Grey	0.40 & 0.50 mm

**Higher sizes available on request*

NO VOICE BREAK OR LOSS

ZERO NOISE LEVEL

NO CROSS TALK

NO ECHO SOUND

VOICE CLARITY



LAN CABLES

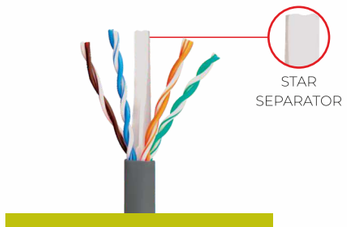
Size	Packing	Colour
CAT SE	305 mtr Tangle Free	Light Grey
CAT 6	305 mtr Tangle Free	Light Grey
CAT 6 OUTDOOR	305 mtr Drum	Black
CAT 6 ARM	305 mtr Drum	Black

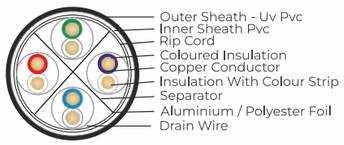
LOW STRUCTURAL RETURN LOSS

MAXIMUM NOISE IMMUNITY

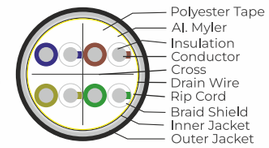
HIGH ACR VALUES (LOW BIT ERROR RATE)

HIGHER DATA TRANSFER SPEEDS (UPTO 1000 MBPS)

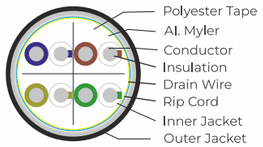




CAT 6 UTP



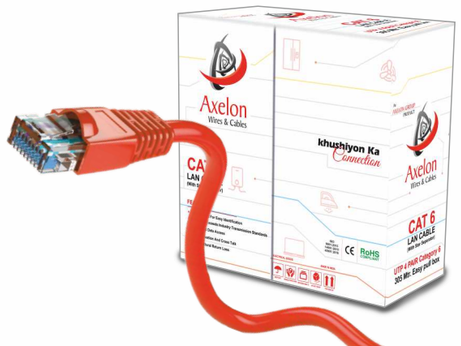
CAT 6 OUTDOOR STP



CAT 5E UTP



CAT 6 ARM



CO-AXIAL CABLES

HIGHER BANDWIDTH (MAXIMUM NUMBERS OF CHANNELS)

MINIMUM STRUCTURAL LOSS

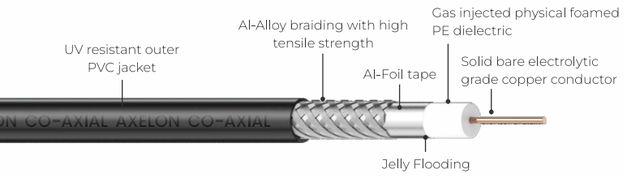
LOW ATTENUATION VALUE

HIGH FIDELITY PICTURE QUALITY

SUPERIOR SOUND QUALITY

MOISTURE PROOF

Size	Packing	Colour
RG 6	305 mtr	BLACK
RG 6 CCS	305 mtr	BLACK
RG 11	305 mtr	BLACK





CCTV CABLES

FLAME RETARDANT CABLE

COPPER BRAIDING

COPPER BRAIDING

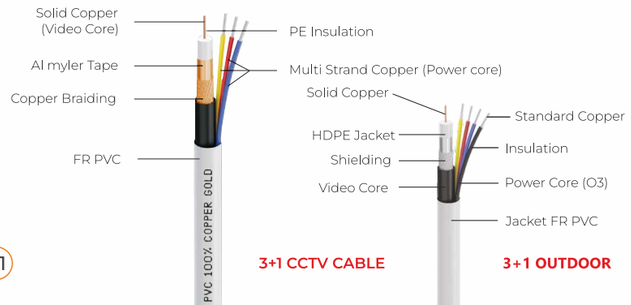
HIGH QUALITY COPPER WIRE

SUPPORTS HYBRID CABLE

SHIELDED COMMUNICATION CABLE

Size	Packing	Colour
CCTV 3+1	100 mtr	WHITE
CCTV 4+1	100 mtr	WHITE
CCTV 3+1 OUTDOOR CABLES	100 mtr	BLACK





3+1 CCTV CABLE

3+1 OUTDOOR

SOLAR CABLES

Solar energy is the most abundant source of energy on our planet.

Solar energy is converted in the electrical energy by means of arrays of photovoltaic modules. Specially designed Photovoltaic cables are used in these modules.

Conductor : EC GRADE ANNEALED UNIFORMLY TIN COATED COPPER
Insulation : XLPO / XLPE / LSZH
Sheathing : XLPO/ ST-2(HR) PVC/ LSZH
Color : BLACK | RED | BLACK WITH RED STRIP
Packaging 100 | 500 AND ANY AS PER CUSTOMER REQUIREMENTS
Sizes : 2.50 / 4.0 / 6.0 AND ANY AS PER CUSTOMER REQUEST

Application : These cables are connected between individual modules and string combiner box (Junction).



ADVANTAGES :

HIGH THERMAL RATING TO STAND EXTREME TEMPERATURES

SPECIALLY DESIGNED TO STAND EXTREME WEATHER CONDITIONS

EXCELLENT RESISTANCE TO HEAT PRESSURE

EXCELLENT ABRASION & NOTCH RESISTANT

RoHS COMPLIANT

TECHNICAL SPECIFICATIONS

Parameter	TÜV 2Pfg 1169 / 08.2007	TÜV 2Pfg 1990 / 05.12 and EN 50618
Rated Voltage - AC (Uo/U)	0.6 / 1.0 kV	
DC (C - to - E)**	0.9 kV	1.5 kV
Maximum Permissible Voltage DC (V) (Circuit under NO LOAD)	1.8 kV (C - to - C)* Un-earthed system	1.8 kV (C - to - E)** Earthed system
Conductor Material	Electrolytic, Multi Strand Annealed Bunched Tinned Copper	
Conductor Flexibility Class	5	
Insulation & Sheath Material	Cross-linked Polyolefin Halogen Free Flame Retardant	
Max. Temp at conductor	120°C (20000Hrs), EN 60216-1	
Operating temp range	- 40°C to 90°C	
Thermal Characteristics Performance		
Damp Heat	1000Hrs at 90°C with 85% humidity, According to EN 60068 - 2 - 78	
Pressure at High Temp.	4Hrs at 140°C, According to EN 60811 - 3 - 1	
Thermal Endurance	20000Hrs, 50% Residual elongation, According to EN 60216 - 2	
Weathering / UV Resistance (According to HD 605/A1)	720Hrs	1500Hrs
Performance under fire conditions		
Flame Propagation	According to EN 60332 - 1 - 2	
Halogen Free	Less than 0.5%, According to EN 50267 - 2 - 1/ -2 IEC 60684 - 2	
Acid / Alkaline Resistance (Oxal Acid, Sodium Hydroxide)	Tensile strength Variation + 30% elongation min 100%, According to EN 60811 - 2 - 1	
Electrical Characteristics : in kV		
AC Test Voltage - 5 Mins	6.5	11
DC Test Voltage - 5 Mins	15	25
AC Spark Test Voltage	10	12
Mechanical Characteristics of Insulation & Sheath		
Tensile strength	Insulation: 6.5 N/mm2, Sheath: 8.0 N/mm2 Min., According to EN 60811-1-1	
Elongation	125 %, Min., According to EN 60811-1-1	
Dynamic Penetration	Minimum force to penetrate sheath and insulation F (N)	
	50 x OD	150 x Conductor Dia.
Notch Propagation	Withstands Voltage test (half of rated voltage) after Notch propagation.	

SPEAKER CABLES

100% Spark Tested | 99.97% Cu Purity | 101 % Conductivity



Application : Speaker cables are highly recommended for use in connecting speakers, public address system for clear and distortion free voice with low DB loss.

Conductor : Oxygen Free flexible Copper conductor.

Colour : White with red tracer for polarity identification. Also available in grey.

Packaging : Standard packing of 100mtr. coils.

Equivalent AWG	Nominal Cross Sectional Area (Sq. mm)	Max. Dc Resistance of Cond. at 20°c	Max. Overall Dimensions (WxH) (MM)
22	0.50	39.00	4.2 X 2.1
19	0.75	26.00	1.7 X 2.4
18	1.00	19.50	5.7 X 2.9
16	1.50	13.30	6.0 X 3.0
14	2.50	7.98	7.0 X 3.6
12	4.00	4.95	8.4 X 4.1
10	6.00	3.30	9.6 X 4.7

ELEVATOR CABLES

100% Spark Tested | 99.97% Cu Purity | 101 % Conductivity



NO SPARKING & NO OVERHEATING

100% BUNCHED COPPER

VERY HIGH FLEXIBILITY

SUITABLE FOR USAGE FROM -15°c TO +70°c APPLICATION

100% ELECTROLYTIC COPPER

Application : Elevator Suspension Cable for Internal and Panoramic Elevators

Applicable Standard : IEC 60227-6, EN 50214

CONSTRUCTION

Conductor : Flexible bright annealed bare copper conductor Class 5, manufactured using 99.97% pure electrolytic grade copper, with more than 100% conductivity, as per IEC 60228

Insulation : Specially formulated PVC with a blend of Elastomer, for continuous flexing operation, meeting the requirement of Type D as per IEC 60227-2

Core Identification : Black insulated cores printed with numerals in white & one Y/G for Ground or Grey insulated core printed with numerals in Black and one Y/G for ground.

Grouping : Structured parallel lay with each group having a rip cord & Steel Rope strength member on request - for high rise application

Outer Sheath : Specially formulated PVC with a blend of Elastomer, for continuous flexing operation, meeting the requirement of Type ST 3 as per IEC 60227-2, in Black and Grey colour..

POWER CORD & WIRES HARNESS

100% Spark Tested I 99.97% Cu Purity | 101% Conductivity

Axelon Wire & Cables

A power cord temporarily connecting an appliance to the main electricity supply via a wall socket or extension cord is an assembly of cables and power plug, used to connect to a single-phase AC. Axelon manufactures high-quality, durable power cords of various types. These can be used for various applications such as Power Supplies, Stabilizers, Water Heaters, Washing Machines, Wet Grinders, Cash Register, Weighing Scale, Power Tool, Bedside Monitor, De-Fabricator, X-Ray Machines and Ultrasound 2-pin and 3-pin miniature locking power plugs. Plugs are molded into a choice of round or flat UL/ISI-approved cable and available in customer specified lengths. These power cords are manufactured in a controlled environment for unparalleled reliability and safety.

Colour : Black (other colours as per customer order)

Length : As per Customer Requirement.

Conductor : Annealed BARE OR TINNED Flexible Copper Conductor

Insulation : PVC Type - A as per IS 5831

Cable Jacket : Type - ST1 PVC as per IS 5831.

Brass Pins : Extruded brass solid pin, hollow pin, hollow sheet metal pin

Moulded Plug : Moulding grade PVC as per IS 5831 Power Cord

Length: Customer Choice.

PLUG TYPE : INDIAN, EUROPE, BS 1363 ANGLED PLUG, AUSTRALIAN PLUG, JAPAN PLUGS ETC







WELDING CABLES

99.97% Cu Purity | 101 % Conductivity

Application :

For the transmission of high currents from the electric welding machine to the welding tool. Suitable for flexible use under rough conditions, on assembly lines and conveyor systems, in machine tool & motor car manufacturing, shipbuilding manually and automatically operated line and spot welding machines.

TECHNICAL CHARACTERISTIC

Flame Propagation Property :
Flame Retardant Test as per IEC-60332-1

Voltage Rating :
1100V AC voltage

Operating Temperature Rating
-20 TO +105 DEG

Minimum Bending Radius :
6x Overall Dia

CABLE CONSTRUCTION

Conductor :
Extra Flexible Annealed Bare Copper As per IEC-60288 (CLASS-6)

Separator :
PET (Polyester Tape)

Insulation :
1. HOFR (Heat. Oil & Flame Resistance)+TPR
2. TPR+ TPR (Thermoplastic Rubber)

TYPES OF WELDING CABLES

1. **NBR SINGLE INSULATED**
2. **NBR INSULATED + NBR SHEATHED**
3. **H0FR INSULATED + NBR SHEATHED**
4. **H0FR SINGLE INSULATED**

FEATURES WELDING CABLES

Magnificient Electrical, Flame & Heat Resistance Properties

High Conductivity Copper Conductor

Exceptionally Resistance To Oil, Chemical, Solvent & Ozone



High Resistance To Cuts, Tears And Abrasion

Excellent Flexibility Hence Lasts Longer

AVAILABLE COLOR

BLACK ORANGE

Also Available In Other Colour As Per Requirement



WELDING CABLES

99.97% Cu Purity | 101 % Conductivity

Axelon Wire & Cables

CURRENT RATING

The maximum current ratings of flexible welding cables for different duty cycles are based on an ambient air temperature of 25°C and a maximum conductor temperature of 105°C. The percentage duty cycles for various processes and applications are as follows :

- Automobile Welding : up to 100%
- Semi-Automatic Welding : 30% to 85%
- Manual Welding : 0% to 60%
- Very intermittent or Occasional Welding : up to 20%

VOLTAGE DROP

When total cable lengths in excess of 1.5 mtrs., are involved, it may be necessary to use cables of larger cross section to ensure that the voltage drop is not excessive and welding currents are maintained at adequate levels.

TECHNICAL INFORMATION

Cross Sectional Area	Copper Construction	Inner Dia.	Outer Dia Appx	Max. Conductor Resistance at 20 °C	Current rating					Non-Welding Application
					Welding applications					
					Duty Cycle					
					100%	85%	60%	30%	20%	
Sq. mm	*Nos. X Dia. mm*	*mm*	*mm*	*Ω/km*	*amp*	*amp*	*amp*	*amp*	*amp*	*amp*
10	322 X 0.20	6.30	9.90	1.910	105	115	135	190	235	110
16	511 X 0.20	8.00	10.70	1.210	135	145	175	245	302	138
25	798 X 0.20	9.50	12.10	0.780	180	195	230	330	402	187
35	1121 X 0.20	11.00	14.20	0.554	225	245	290	410	503	233
50	1596 X 0.20	12.30	16.30	0.386	285	310	370	520	637	295
70	2220 X 0.20	14.40	18.70	0.272	355	385	460	650	794	372
95	1349 X 0.30	16.60	20.80	0.206	430	470	560	790	961	449
120	608 X 0.50	18.20	23.00	0.161	500	540	650	910	1118	523
150	760 X 0.50	21.10	27.60	0.129	580	620	740	1040	1297	608
185	943 X 0.50	23.80	30.80	0.106	660	715	850	1200	1476	690
240	1225 X 0.50	26.80	34.00	0.0801	710	770	916	1296	1587	744
300	1498 X 0.50	30.30	37.50	0.0641	800	850	1035	1450	1790	840
400	2035 X 0.50	33.60	41.30	0.0486	925	1000	1195	1690	2070	970

*The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360

*In view of continuous improvements in our design and process, specifications given here in are subject change without notice.

Rating Factors for variation in ambient temperature

Ambient Temperature °C	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°
Rating Factor	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.69	0.64	0.57

INSTRUMENTATION SHIELDED CABLES

100% Spark Tested I 99.97%
Cu Purity I 101% Conductivity

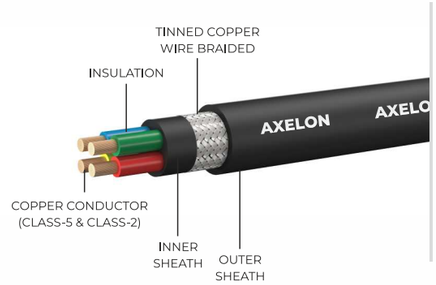
Axelon manufactures a wide variety of cables suitable for process instrumentation which plays a vital role in the measurement, supervision and control of the process. The introduction of microprocessor-based / computerized instrumentation has demanded stringent quality requirements along with special electrical parameters for instrumentation cables. Very low-level electrical signals pass between measuring end and display units/controllers which are situated far off. These low level signals are prone to external noise pickups and heavy attenuation during transmission. Hence the cables used for instrumentation are designed and manufactured very meticulously. Axelon maintains high-quality standards and follow stringent in-process quality control during the manufacturing of instrumentation cables, meeting the design parameters of the customers.

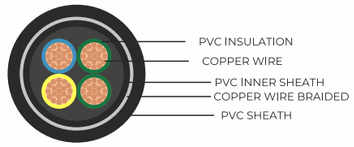
Conductor :	0.25 Sq. mm to 2.5 Sq mm or higher sizes of solid/stranded Tinned/untinned copper conductors.
Insulation :	PVC/Polyethylene/XLPE/LSZH as per requirement.
	Elements / Core: Pair/Triad/Quad, colour coded / number printed
Screening :	Aluminium polyester tape (Overall Aluminium myler tape and polyester tape with overall shielded with ATC drain wire)
Armouring :	Galvanised steel wire / Flat wire armoured.
Sheathing :	PVC, FR PVC, FRLS, LSOH
Outer sheath colour:	Black , Light blue and any other customer requirement
Specification:	BS:5308(1 & 2), IEC-189 (1 & 2), VDE 0815, ENI 0181.00, IS 7098 (part 1) and IS 1554 (Part 1) and customers specifications.

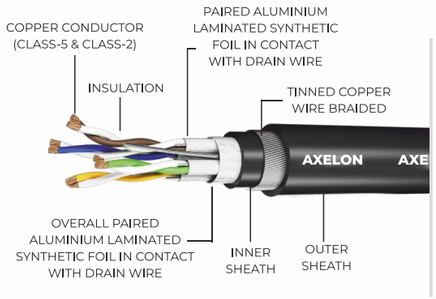
FEATURES OF INSTRUMENTATION CABLE

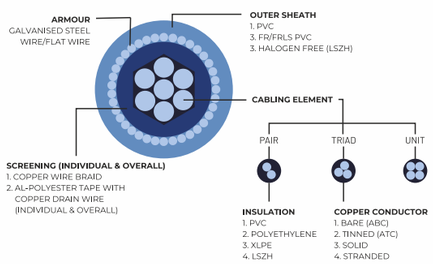
- Excellent Noise Reduction Property
- Great Mechanical Strength With Flexibility
- Enhanced Transmission Performance With Desired L/R Ratio
- Resistance to Electromagnetic Interference

CONSTRUCTION OF INSTRUMENTATION CABLE

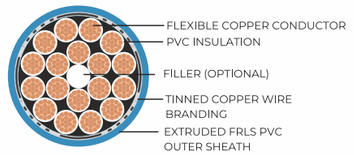












INSTRUMENTATION SHIELDED CABLES

Axelon Wire & Cables

TYPES OF INSTRUMENTATION CABLE



INDIVIDUAL & OVERALL PAIR SHIELDED



INDIVIDUAL & OVERALL PAIR SHIELDED ARMOURED



MULTICORE SHIELDED



MULTICORE SHIELDED ARMOURED



OVERALL PAIR SHIELDED



OVERALL PAIR SHIELDED ARMOURED



FIRE SURVIVAL CABLES

High safety Fire Survival Cables for fire-prone areas also known as CIRCUIT INTEGRITY CABLES, is designed to sustain high temperatures for a defined minimum period under direct fire. They find applications in Hazard prone areas where people and equipment are exposed to the threat of fire like airports, thermal power plants, metro rail projects, rail terminals, etc. With qualities that will prevent them from overheating, they can withstand temperatures of up to 650 °C, 750 °C, and 950 °C as per various conditions of operation and applications.



Application
Fire Survival Cables for fire hazardous/ prone areas
To maintain circuit integrity during the fire | Standard Specifications IS/IEC/BS

Type
Annealed electrolytic copper conductor heat barrier, XLPE, LSZH
inner sheath G.S. wire & LSZH outer sheath

Designed for Critical Installation
Airports, Thermal Power Plants, Metro Rail Projects, Rail Terminals,
Nuclear, Interstate Bus Terminals, Installation Prone to Fire

General Construction
Solid/Stranded Copper conductor lapped with glass mica tape, insulated with XLPE forms the core. Cores laid-together form power cable/ control cable / instrumentation cable with fire survival properties.

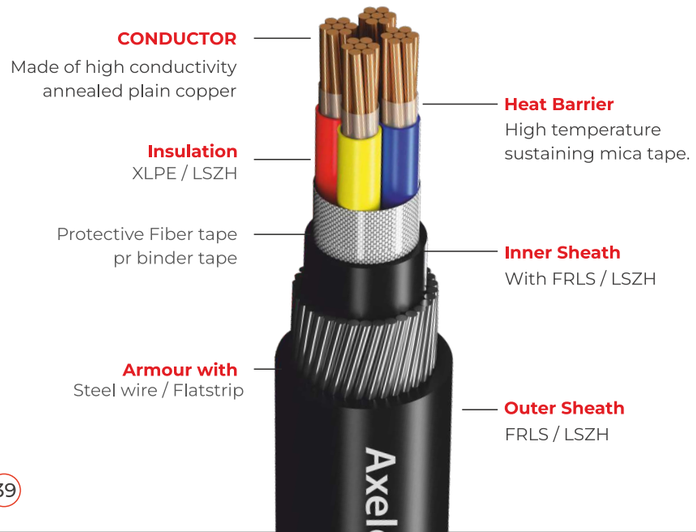
Conductor
Copper, bare or tinned. Circular or sector shaped with glass mica tape

Insulation:
XLPE/LSZH | Inner sheath: FRLS I Armour Wire or Strip | Outer Sheath: FRLS/LSZH

Range Copper 1.5 SQMM TO 400 SQMM

Special characteristics:
Withstands flame temperature of 750 degree centigrade up to 3 hours without electrical breakdown at rated voltage.

Does not produce noxious smoke or propagate flame & fumes which hinder firefighting operations, thus endangering life.



FIRE ALARM & FIRE SURVIVAL CABLES

Axelon Wire & Cables

INTERNATIONAL STANDARDS

Fire Resistant	Flame retardant	Smoke emission	Acid gas emission	Oxygen index
IEC 60331; BS 6387: BS 8491: BS 8434/2	IEC 60754 - 1 & 3	ASTM-D-2863	IEC 60754	ASTM-D-2863

TESTING CATEGORIES

The Fire Resistant cable may categorise by a linear symbol (eg A) or series of symbols (as. CW2) in according to the requirements for fire resistance characteristics which they meet, the test temperature selected and the duration of the test for resistance to fire alone in according to BS 6387 as below

RESISTANCE TO FIRE ALONE			
650° C for 3 hours	750° C for 3 hour	950° C for 3 hours	950° C for 20 minute: (short duration)
A	B	C	s

RESISTANCE TO FIRE ALONE
W

RESISTANCE TO FIRE WITH MECHANICAL SHOCK		
650°C	750°C	950°C
X	Y	Z

FIRE & HIGH HEAT RESISTANT

NO SMOKE & TOXIC GAS EMISSIONS

LONG TERM CIRCUIT INTEGRITY IN A FIRE

ZERO HALOGEN GASES

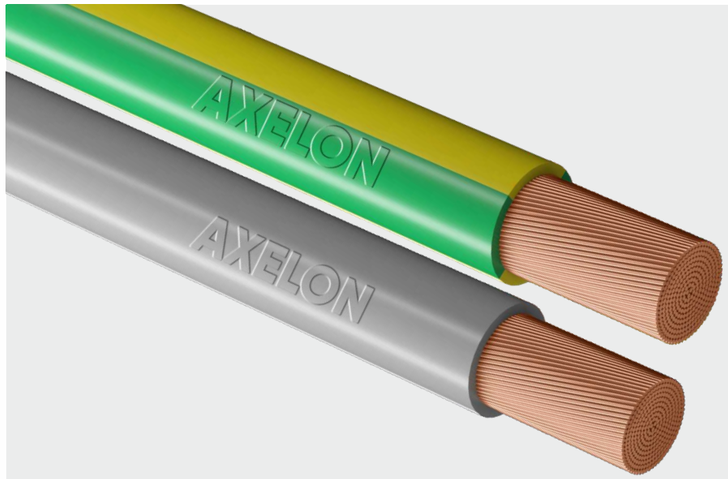


Flame Retardant Vs Fire Resistive – What's The Difference?

There is a vast difference between cables that are rated flame retardant and those that have earned the rating fire resistive. Flame retardant cables resist the spread of fire into a new area, while fire resistance cables maintain circuit integrity and continue to work for a specified time under defined conditions. Fire resistant cables continue to operate in the presence of a fire and are commonly referred to as circuit integrity cables. The difference between the two ratings are significant for the critical circuits required for life safety or a safe and immediate plant shut down. Additionally, Flame retardant cables are not rated to continue to operate in a fire and in all probability will not maintain circuit integrity during a fire.



NON CORROSIVE NON TOXIC LSZH HEAT RESISTANT RUBBER INSULATED NON SHEATHED CABLES FOR INTERNAL WIRING (H05Z-K ,H07Z-K)



Cable Structure

Conductor : Fine Stranded Copper (Class 5 - Flexible Plain Copper) to VDE 0295 IEC 60228
Insulation
Cross-linked Polymer : Polymer Compound, Flame Retardant, Low Smoke Halogen free EI5 LSZH
Colour : Green/Yellow, Blue, Black, Brown, Grey, Orange, Pink, Red, Violet, White, Green, Yellow or other Colours
Flame Propagation : Zero Halogen IEC 60754-2, Flame Retardant Test as Per IEC 60332-1

Technical Data

Operating Temp : -30°C to + 90°C
Nominal voltage : H05Z-K: 300/500 V H07Z-K: 450/750 V
Test voltage : H05Z-K: 2000 V H07Z-K: 2500 V
Insulation Resistance : Min. 10 MΩ x km
Min. Bending Radius : 4 x Cable Diameter

Cable Features

- Special Heat Resistant Thermosetting Insulation
- High Current Carrying Capacity
- LSZH and Ozone Resistant Insulation Material
- Better Fire Retardant Properties
- Non Corrosive & Non Toxic
- Long Flex Life
- Excellent Resistant to Moisture, Abrasion, Grease and Oil
- Excellent Mechanical & Electrical Properties
- Harmonized Acc. to European Standard

Application

H05Z-K, H07Z-K
Fixed Installation in Conduits And Under Plaster, for Appliance Wiring and Distribution Stations for Wiring of Lamps, Devices, Switchgear Cabinets and Distribution Boxes
Standard length Cable Packing:
Coils 100 and 200 m in Carton Boxes, Reels

NON CORROSIVE NON TOXIC LSZH HEAT RESISTANT RUBBER INSULATED NON SHEATHED CABLES FOR INTERNAL WIRING (H05Z-K ,H07Z-K)

Axelon Wire & Cables

H05Z-K (300/500 V)

Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
0.50	16/0.200	0.60	2.10	39.00
0.75	24/0.200	0.60	2.20	26.00
1.00	32/0.200	0.60	2.70	19.50

> All are class 5 flexible conductor

> Insulation grade is TI1

Note: The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360 or UI83

H07Z-K (450/750 V)

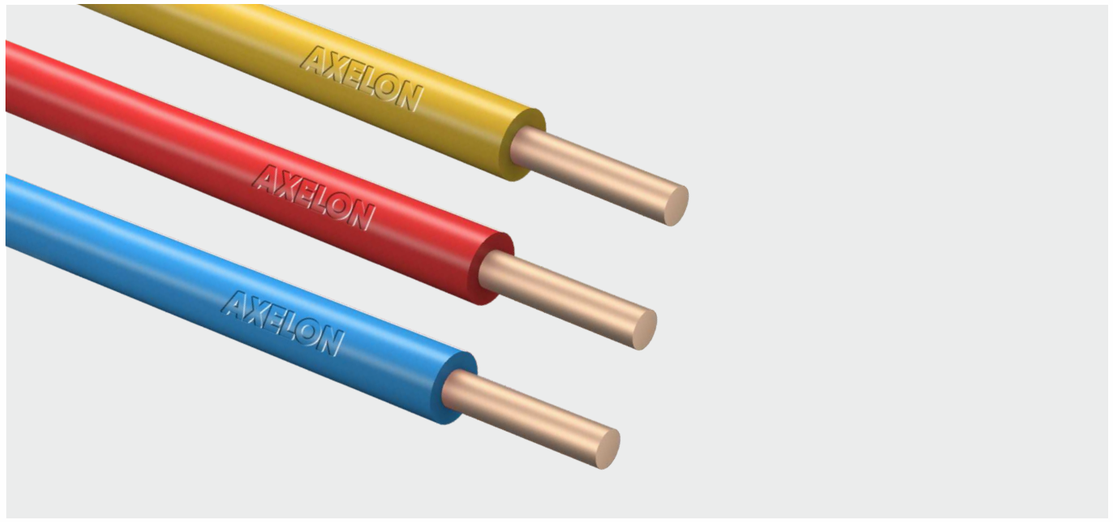
Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
1.50	30/0.250	0.70	3.25	13.30
2.50	50/0.250	0.80	3.80	7.98
4.00	56/0.300	0.80	4.50	4.95
6.00	84/0.300	0.80	5.25	3.30
10.00	140/0.300	1.00	6.50	1.91
16.00	224/0.300	1.00	8.00	1.21
25.00	350/0.300	1.20	10.10	0.780
35.00	490/0.300	1.20	11.30	0.554
50.00	703/0.300	1.40	13.50	0.386
70.00	988/0.300	1.40	15.30	0.272
95.00	1349/0.300	1.60	18.00	0.206
120.00	608/0.500	1.60	19.80	0.161
150.00	760/0.500	1.80	22.30	0.129
185.00	943/0.500	2.00	23.90	0.106
240.00	1225/0.500	2.20	26.80	0.0801

> All are class 5 flexible conductor

> Insulation grade is TI1

Note: The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360 or UI83

HEAT - RESISTANT PVC RUBBER INSULATED NON SHEATHED SINGLE CORE CABLES FOR INTERNAL WIRING (H05V2-U, H07V2-U)



Cable Structure

Conductor : Solid Copper Conductor, Class 1 DIN VDE 0281, IEC 60228
Insulation : Heat - Resistant Polyvinyl Chloride (PVC) insulation
Colour : Green/Yellow, Blue, Black, Brown, Grey, Orange, Pink, Red, Violet, White, Green, Yellow or other Colours
Flame Propagation: Flame Retardant Test as Per IEC 60332-1

Technical Data

Operating Temp :	-30°C to + 90°C	
Nominal voltage :	H05V-U: 300/500 V	H07V-U: 450/750 V
Test voltage :	H05V-U: 2000 V	H07V-U: 2500 V
Insulation Resistance :	20 MΩ x km	
Min. Bending Radius :	4 x Cable Diameter	

Cable Features

- Special Heat Resistant Insulation
- High Current Carrying Capacity
- Less Heat Energy Radiation
- Good Application of Insulation
- Excellent Resistant to Moisture, Abrasion, Grease and Oil
- Excellent Mechanical & Electrical Properties
- Harmonized Acc. to European Standards
- Insulation Is Highly Thermal Stable

Application

H05V-U, H07V-U
For Internal Wiring of Appliances as well as Installation in an Electrical Conduit Pipe either on or Underneath Plaster.
Standard length Cable Packing :
Coils 100 and 200 m in Carton Boxes, Reels

HEAT - RESISTANT PVC RUBBER INSULATED NON SHEATHED SINGLE CORE CABLES FOR INTERNAL WIRING (H05V2-U, H07V2-U)

Axelon Wire & Cables

H05V2-U (300/500 V)

Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
0.5	1/0.80	0.60	2.10	36.00
0.75	1/0.97	0.60	2.20	24.50
1.00	1/1.13	0.60	2.60	18.10

> All are class 1 solid conductor

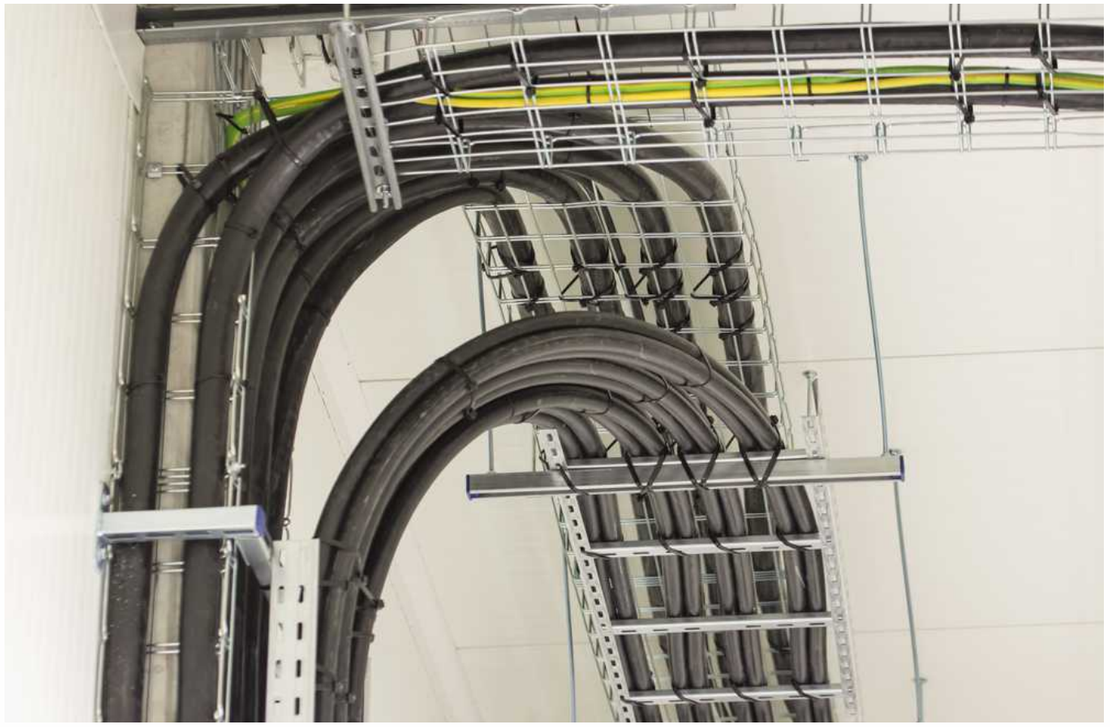
> Insulation grade is TI1

H07V2-U (450/750 V)

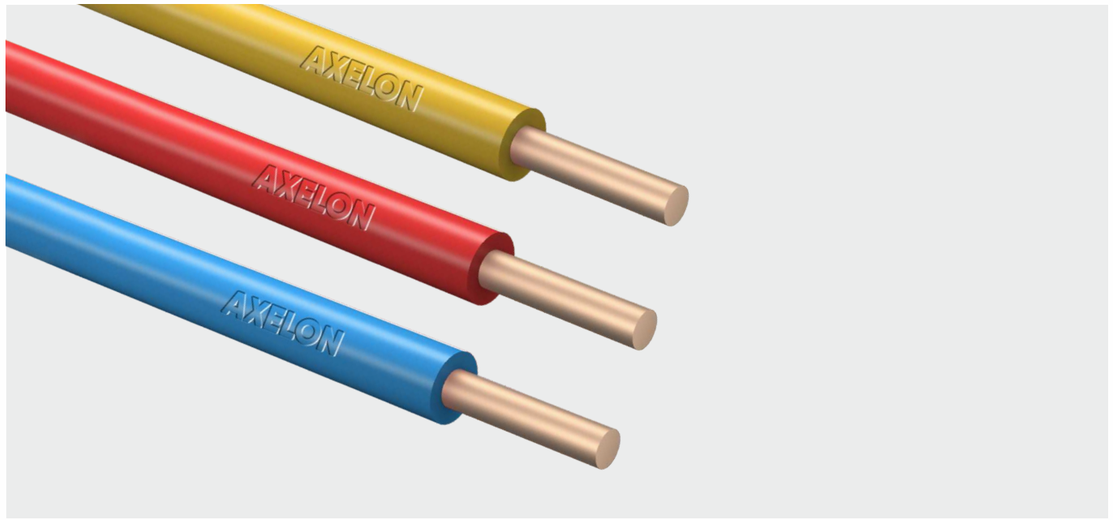
Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
1.50	1/1.38	0.70	3.00	12.10
2.50	1/1.78	0.80	3.60	7.41
4.00	1/2.24	0.80	4.10	4.61
6.00	1/2.78	0.80	4.70	3.08
10.00	1/3.57	1.00	5.80	1.83

> All are class 1 solid conductor

> Insulation grade is TI1



PVC RUBBER INSULATED NON SHEATHED SINGLE CORE CABLES FOR INTERNAL WIRING (H05V-U, H07V-U)



Cable Structure

Conductor : Solid Copper Conductor, Class 1 DIN VDE 0281, IEC 60228
Insulation : PVC Insulation Compound TI - 1
Colour : Green/Yellow, Blue, Black, Brown, Grey, Orange, Pink, Red, Violet, White, Green, Yellow or other Colours
Flame Propagation: Flame Retardant Test as Per IEC 60332-1

Technical Data

Operating Temp :	-20°C to max. + 80°C	
Nominal voltage :	H05V-U: 300/500 V	H07V-U: 450/750 V
Test voltage :	H05V-U: 2000 V	H07V-U: 2500 V
Insulation Resistance :	10 MΩ x km	
Min. Bending Radius :	4 x Cable Diameter	

Cable Features

- Good Application Of Insulation
- High Current Carrying Capacity
- Excellent Resistant To Moisture, Abrasion, Grease and Oil
- Excellent Mechanical & Electrical Properties
- Harmonized Acc. to European Standards
- Steam And Boiling Water Resistant

Application

H05V-U, H07V-U
Fixed Installation In Conduits And Under Plaster, For Appliance Wiring And Distribution Stations
Standard length Cable Packing :
Coils 100 and 200 m in Carton Boxes, Reels

PVC RUBBER INSULATED NON SHEATHED SINGLE CORE CABLES FOR INTERNAL WIRING (H05V-U, H07V-U)

Axelon Wire & Cables

H05V-U (300/500 V)

Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
0.50	1/0.80	0.60	2.10	36.00
0.75	1/0.97	0.60	2.20	24.50
1.00	1/1.13	0.60	2.60	18.10

> All are class 1 solid conductor

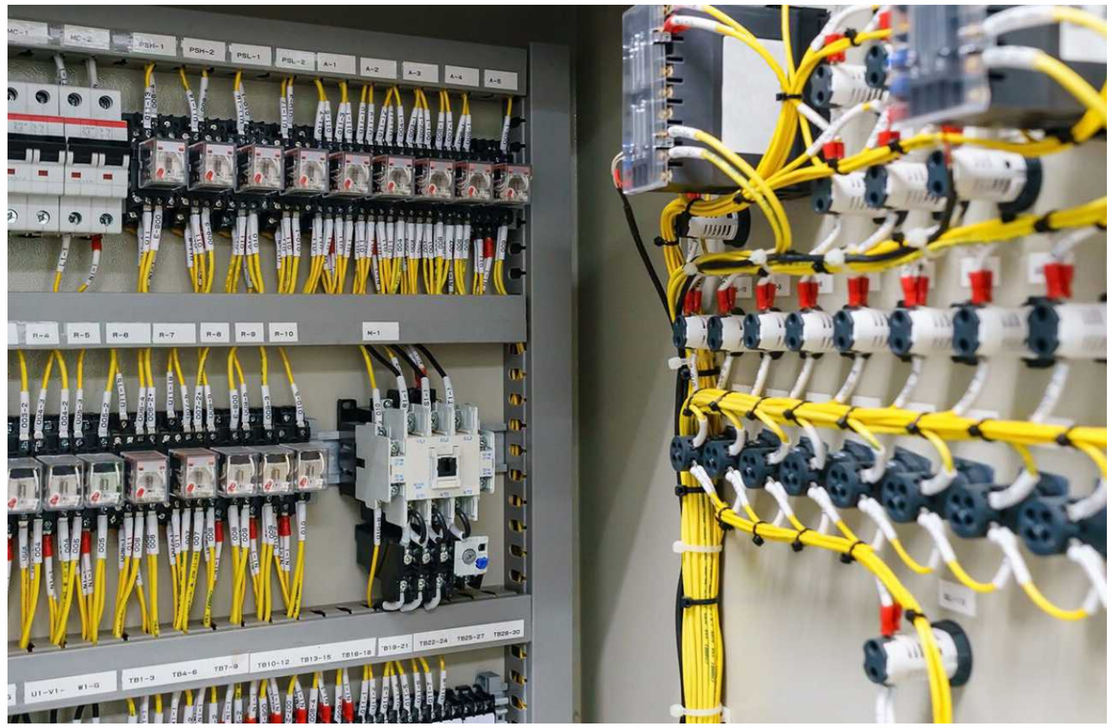
> Insulation grade is TI1

H07V-U (450/750 V)

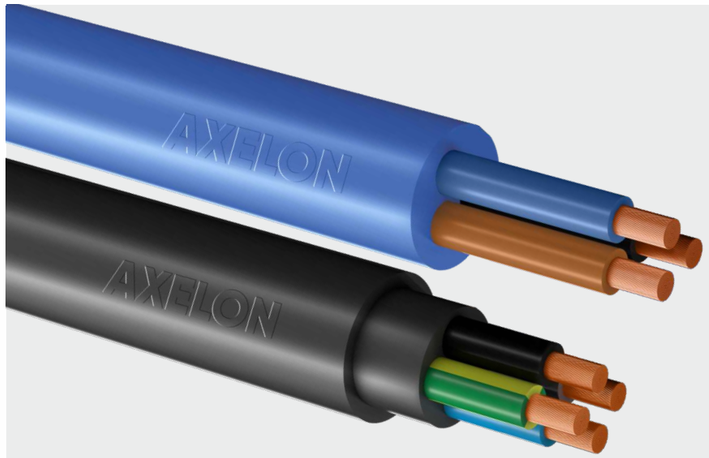
Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
1.50	1/1.38	0.70	3.00	12.10
2.50	1/1.78	0.80	3.60	7.41
4.00	1/2.24	0.80	4.10	4.61
6.00	1/2.78	0.80	4.70	3.08
10.00	1/3.57	1.00	5.80	1.83

> All are class 1 solid conductor

> Insulation grade is TI1



FLEXIBLE RUBBER CABLES FOR FLEXIBLE CONNECTION TO ELECTRICAL EQUIPMENT (H07RN-F)



Cable Structure

Generally Conforms to, DIN VDE 0282 PART 810, IEC 245, BS7655,BS7919/ HD22.1, HD22.4.

Conductor : Flexible Class 5 Copper Conductor According to DIN VDE 0295,IEC 60228
Insulation : EPDM-rubber, core identification by colours
Sheathing : Weather and oil resistant rubber
Colour : Black or Blue *Any other Colour on specific request can also be supplied

Technical Data

Operating Temp : -25°C to + 90°C
Nominal voltage : 450/750 V
Test voltage : 2500 V
Min. Bending Radius : 8 x Cable Diameter
Flame Propagation : Flame Retardant test as per IEC 60332-1

Cable Features

- Temperature range -30°C to +90°C
- Designed for heavy duty use
- Cut, tear & abrasion resistant
- Exceptional long term performance
- Excellent resistant to oils, chemicals, ozone & solvents
- Excellent Weather Resistant
- Performs & Looks like Vulcanize Rubber
- Excellent Electrical Properties

Application

H07RN-F
Axelon H07RN-F rubber insulated and sheathed cables are intended for flexible connection to electrical equipment. They are suitable for both indoor and outdoor use in industrial and agricultural plant and on construction sites.
Standard length Cable Packing :
Coils 100 and 200 m in Carton boxes, Reels, 500 and 1000m in Wooden Drums

FLEXIBLE RUBBER CABLES FOR FLEXIBLE CONNECTION TO ELECTRICAL EQUIPMENT (H07RN-F)

Axelon Wire & Cables

Single Core

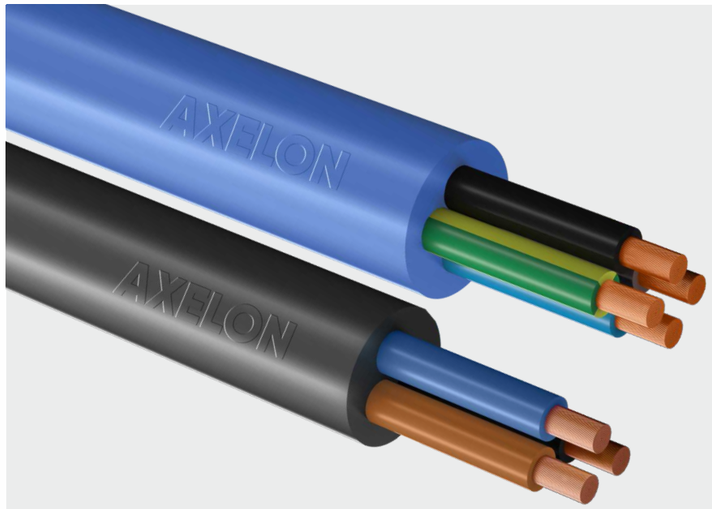
Sq. mm	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Core dia. In mm	Sheath Thickness in mm (nom.)	Cable dia. In mm (Nom.)	Max. C.R in ohm/km Copper
1 C X 1.5	22/0.300	0.80	3.25	1.40	6.20	12.10
1 C X 2.5	36/0.300	0.80	3.80	1.40	6.70	07.41
1 C X 4	56/0.300	0.90	4.50	1.50	7.50	4.95
1 C X 6	84/0.300	1.00	5.25	1.60	8.60	3.30
1 C X 10	140/0.300	1.00	7.00	1.80	10.80	1.91
1 C X 16	224/0.300	1.20	8.15	1.90	12.20	1.21
1 C X 25	350/0.300	1.20	9.95	2.00	14.20	0.780
1 C X 35	490/0.300	1.40	11.10	2.20	15.70	0.554
1 C X 50	703/0.300	1.40	13.30	2.40	18.30	0.386
1 C X 70	988/0.300	1.60	15.15	2.60	20.60	0.272
1 C X 95	1349/0.300	1.60	17.55	2.80	23.40	0.206
1 C X 120	608/0.500	1.80	19.45	3.00	25.70	0.161
1 C X 150	760/0.500	2.00	21.30	3.20	27.90	0.129
1 C X 185	943/0.500	2.20	23.90	3.40	30.80	0.106
1 C X 240	1225/0.500	2.40	27.10	3.50	34.10	0.0801
1 C X 300	1498/0.500	2.60	29.60	3.60	36.80	0.0641
1 C X 400	2035/0.500	2.80	33.80	3.80	41.60	0.0486

Note: The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360 or UI83

Two Core

Sq. mm	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Core dia. In mm	Sheath Thickness in mm (nom.)	Cable dia. In mm (Nom.)	Max. C.R in ohm/km Copper
2 C X 1	14/0.300	0.80	3.00	1.30	8.70	18.10
2 C X 1.5	22/0.300	0.80	3.25	1.50	9.60	12.10
2 C X 2.5	36/0.300	0.90	3.80	1.70	11.10	07.41
2 C X 4	56/0.300	1.00	4.50	1.80	12.90	04.95
2 C X 6	84/0.300	1.00	5.25	2.00	14.70	03.30
2 C X 10	140/0.300	1.20	6.50	3.10	19.40	01.91
2 C X 16	224/0.300	1.20	8.00	3.30	22.70	01.21
2 C X 25	350/0.300	1.40	10.10	3.60	27.50	0.780

Note: The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360 or UI83



Three Core

Sq. mm	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Core dia. In mm	Sheath Thickness in mm (nom.)	Cable dia. In mm (Nom.)	Max. C.R in ohm/km Copper
3 C X 1	14/0.300	0.80	3.00	1.40	9.45	
3 C X 1.5	22/0.300	0.80	3.25	1.60	10.20	12.10
3 C X 2.5	36/0.300	0.90	3.80	1.80	11.90	07.41
3 C X 4	56/0.300	1.00	4.50	1.90	13.50	4.95
3 C X 6	84/0.300	1.00	5.25	2.10	15.60	3.30
3 C X 10	140/0.300	1.20	6.50	3.30	20.60	1.91
3 C X 16	224/0.300	1.20	8.00	3.50	24.20	1.21
3 C X 25	350/0.300	1.40	10.10	3.80	29.10	0.780
3 C X 35	490/0.300	1.40	11.30	4.10	32.10	0.554
3 C X 50	703/0.300	1.60	13.30	4.50	38.10	0.386
3 C X 70	988/0.300	1.60	15.30	4.80	42.30	0.272
3 C X 95	1349/0.300	1.80	18.00	5.30	49.10	0.206
3 C X 120	608/0.500	2.00	19.80	5.90	54.60	0.161
3 C X 150	760/0.500	2.20	22.00	6.00	59.50	0.129
3 C X 185	943/0.500	2.400	23.70	6.50	64.30	0.106

Note: The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360 or UI83

FLEXIBLE RUBBER CABLES FOR FLEXIBLE CONNECTION TO ELECTRICAL EQUIPMENT (H07RN-F)

Four Core

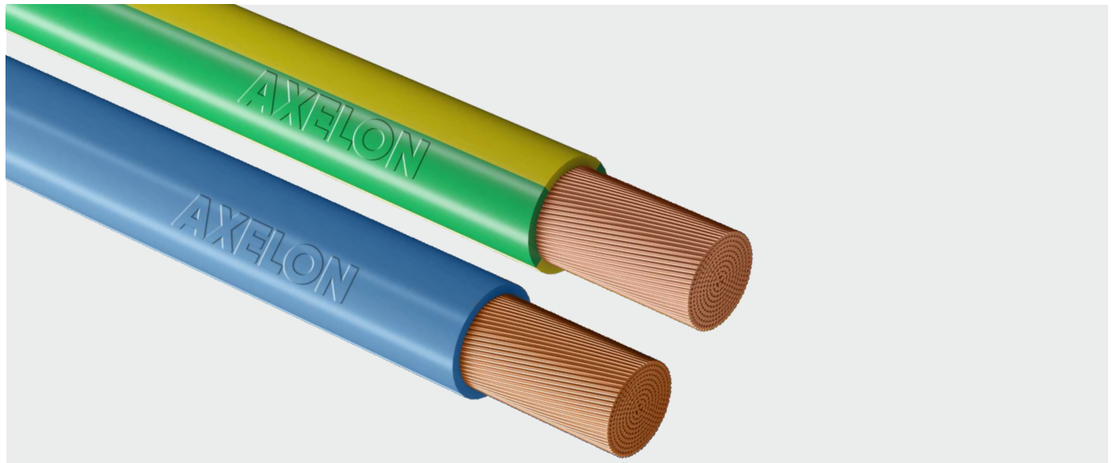
Sq. mm	Nos/ dia. (Nom.)	Insulation Thicknes in mm (nom.)	Core dia. In mm	Sheath Thickness in mm (nom.)	Cable dia. In mm (Nom.)	Max. C.R in ohm/km Copper
4 C X 1	14/0.300	0.80	3.00	1.50	10.70	18.10
4 C X 1.5	22/0.300	0.80	3.25	1.70	13.20	12.10
4 C X 2.5	36/0.300	0.90	3.80	1.90	13.00	07.41
4 C X 4	56/0.300	1.00	4.50	2.00	14.90	4.950
4 C X 6	84/0.300	1.00	5.25	2.30	17.50	3.300
4 C X 10	140/0.300	1.20	6.50	3.40	22.60	1.910
4 C X 16	224/0.300	1.20	8.00	3.60	27.10	1.210
4 C X 25	350/0.300	1.40	10.10	4.10	32.70	0.780
4 C X 35	490/0.300	1.40	11.30	4.40	36.20	0.554
4 C X 50	703/0.300	1.60	13.30	4.80	42.30	0.386
4 C X 70	988/0.300	1.60	15.30	5.20	48.20	0.272
4 C X 95	1349/0.300	1.80	18.00	5.90	55.60	0.206
4 C X 120	608/0.500	2.00	19.80	6.00	61.20	0.161
4 C X 150	760/0.500	2.20	22.00	6.50	66.00	0.129
4C X 185	943/0.500	2.40	23.70	6.90	71.50	0.106

Note: The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360 or UI83

Five Core

Sq. mm	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Core dia. In mm	Sheath Thickness in mm (nom.)	Cable dia. In mm (Nom.)	Max. C.R in ohm/km Copper
5 C X 1	14/0.300	0.80	3.00	1.60	11.50	18.10
5 C X 1.5	22/0.300	0.80	3.25	1.80	12.60	12.10
5 C X 2.5	36/0.300	0.90	3.80	2.00	14.50	07.41
5 C X 4	56/0.300	1.00	4.50	2.20	16.80	04.95
5 C X 6	84/0.300	1.00	5.25	2.50	19.40	03.30
5 C X 10	140/0.300	1.20	6.50	3.60	25.10	01.91
5 C X 16	224/0.300	1.20	8.00	3.90	29.70	01.21
5 C X 25	350/0.300	1.40	10.10	4.40	36.40	0.780
5 C X 35	490/0.300	1.40	11.30	4.60	40.00	0.554

Note: The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360 or UI83



Cable Structure

Conductor : Fine Stranded Flexible Copper to VDE 0295 IEC 60228
Insulation : Rubber compound E13, Halogen free, DIN VDE-282
Colour : Green/Yellow, Blue, Black, Brown, Grey, Orange, Pink, Red, Violet, White, Green, Yellow or other Colours
Flame Propagation: Flame retardant test as per IEC 60332-1

Technical Data

Operating Temp :	-40°C to +110°C	
Nominal voltage :	H05G-K: 300/500 V	H07G-K: 450/750 V
Test voltage :	H05G-K: 2000 V	H07G-K: 2500 V
Insulation Resistance :	10 MΩ x km	
Min. Bending Radius :	5 x Cable Diameter	

Cable Features

- Special Heat Resistant Rubber Insulation
- High Current Carrying Capacity
- High Elasticity
- Excellent Resistant to Moisture, Abrasion, Grease and Oil
- Longer Flex Life
- Excellent Mechanical & Electrical Properties
- Harmonized Acc. to European Standards

Application

H05G-K, H07G-K
For Inside Wiring of Switch Board and Distributors as Well as for Operating Parts Such as Switching On the lights with normal voltage
Standard length Cable Packing :
Coils 100 and 200 m in Carton Boxes, Reels

HEAT RESISTANT RUBBER INSULATED NON SHEATHED, CABLES FOR INTERNAL WIRING OF ELECTRICAL & ELECTRONIC APPLIANCES IN DRY AREA (H05G-K,H07G-K)

Axelon Wire & Cables

H05G-K (300/500 V)

Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
0.50	16/0.200	0.60	2.10	39.00
0.75	24/0.200	0.60	2.20	26.00
1.00	32/0.200	0.60	2.70	19.50

> All are class 5 flexible conductor

> Insulation grade is TI1

Note: The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360 or UI83

H07G-K (450/750 V)

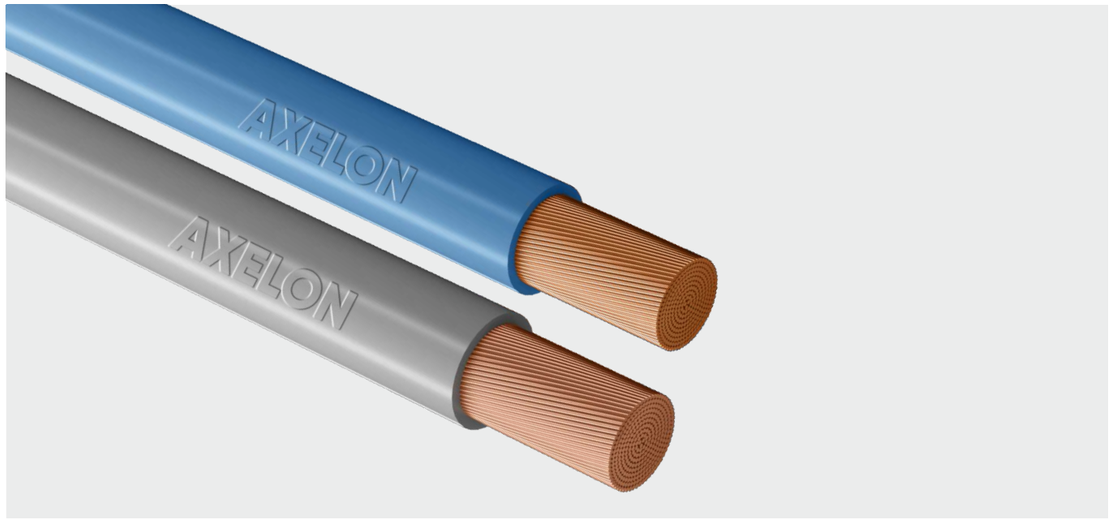
Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
1.50	30/0.250	0.70	3.25	13.30
2.50	50/0.250	0.80	3.80	7.98
4.00	56/0.300	0.80	4.50	4.95
6.00	84/0.300	0.80	5.25	3.30
10.00	140/0.300	1.00	6.50	1.91
16.00	224/0.300	1.00	8.00	1.21
25.00	350/0.300	1.20	10.10	0.780
35.00	490/0.300	1.20	11.30	0.554
50.00	703/0.300	1.40	13.50	0.386
70.00	988/0.300	1.40	15.30	0.272
95.00	1349/0.300	1.60	18.00	0.206
120.00	608/0.500	1.60	19.80	0.161
150.00	760/0.500	1.80	22.30	0.129
185.00	943/0.500	2.00	23.90	0.106
240.00	1225/0.500	2.20	26.80	0.0801

> All are class 5 flexible conductor

> Insulation grade is TI1

Note: The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360 or UI83

HEAT-RESISTANT PVC RUBBER INSULATED NON SHEATHED, SINGLE CORE FLEXIBLE CABLES FOR INTERNAL WIRING (H05V2-K ,H07V2-K)



Cable Structure

Conductor : Fine Flexible Copper (Class 5 - Flexible Plain Copper) to VDE 0295 IEC 60228
Insulation : Heat - resistant PVC core insulation
Colour : Green/Yellow, Blue, Black, Brown, Grey, Orange, Pink, Red, Violet, White, Green, Yellow or other Colours
Flame Propagation: Flame Retardant Test as Per IEC 60332-1

Technical Data

Operating Temp :	-30°C to +90°C	
Nominal voltage :	H05V2-K: 300/500 V	H07V2-K: 450/750 V
Test voltage :	H05V2-K: 2000 V	H07V2-K: 2500 V
Insulation Resistance :	20 MΩ x km	
Min. Bending Radius :	4 x Cable Diameter	

Cable Features

- Special Heat Resistant Rubber Insulation
- High Current Carrying Capacity
- Less Heat Energy Radiation
- High Flexibility
- Excellent Mechanical & Electrical Properties
- Excellent Resistant to Moisture, Abrasion, Grease and Oil
- Insulation is Highly Thermal Stable
- Harmonized Acc.to European Standards

Application

H05V2-K, H07V2-K
For Internal Wiring of Appliances as Well as Installation in an electrical conduit pipe either on or underneath plaster
Standard length Cable Packing :
Coils 100 and 200 m in Carton Boxes, Reels

HEAT-RESISTANT PVC RUBBER INSULATED NON SHEATHED, SINGLE CORE FLEXIBLE CABLES FOR INTERNAL WIRING (H05V2-K ,H07V2-K)

Axelon Wire & Cables

H05V2-K (300/500 V)

Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
0.50	16/0.200	0.60	2.10	39.00
0.75	24/0.200	0.60	2.20	26.00
1.00	32/0.200	0.60	2.70	19.50

> All are class 5 flexible conductor

> Insulation grade is TI1

Note: The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360 or UI83

H07V2-K (450/750 V)

Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
1.50	30/0.250	0.70	3.25	13.30
2.50	50/0.250	0.80	3.80	7.98
4.00	56/0.300	0.80	4.50	4.95
6.00	84/0.300	0.80	5.25	3.30
10.00	140/0.300	1.00	6.50	1.91
16.00	224/0.300	1.00	8.00	1.21
25.00	350/0.300	1.20	10.10	0.780
35.00	490/0.300	1.20	11.30	0.554
50.00	703/0.300	1.40	13.50	0.386
70.00	988/0.300	1.40	15.30	0.272
95.00	1349/0.300	1.60	18.00	0.206
120.00	608/0.500	1.60	19.80	0.161
150.00	760/0.500	1.80	22.30	0.129
185.00	943/0.500	2.00	23.90	0.106
240.00	1225/0.500	2.20	26.80	0.0801

> All are class 5 flexible conductor

> Insulation grade is TI1

Note: The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360 or UI83

HEAT-RESISTANT PVC RUBBER INSULATED NON SHEATHED, SINGLE CORE CABLES FOR INTERNAL WIRING (H05V2-R ,H07V2-R)



Cable Structure

Conductor : Multiple-wire, Round Copper Conductor Class 2, DIN VDE 0281, IEC 60228
Insulation : Heat - Resistant Polyvinyl Chloride (PVC) Insulation
Colour : Green/Yellow, Blue, Black, Brown, Grey, Orange, Pink, Red, Violet, White, Green, Yellow or other Colours
Flame Propagation: Flame Retardant Test as Per IEC 60332-1

Technical Data

Operating Temp :	-30°C to max. +90°C	
Nominal voltage :	H05V2-R: 300/500 V	H07V2-R: 450/750 V
Test voltage :	H05V2-R: 2000 V	H07V2-R: 2500 V
Insulation Resistance :	20 MΩ x km	
Min. Bending Radius :	4 x Cable Diameter	

Cable Features

- Speclal Heat Resistant Rubber Insulation
- High Current Carrying Capacity
- Less Heat Energy Radiation
- Excellent Resistant to Moisture, Abrasion, Grease and Oil
- Excellent Mechanical & Electrical Properties
- Insulation is Highly Thermal Stable
- Long Flex Life
- Harmonized Acc. to European Standards

Application

H05V2-R, H07V2-R
For Internal Wiring of Appliances as Well as Installation in an electrical conduit pipe either on or underneath plaster
Standard length Cable Packing :
Coils 100 and 200 m in Carton Boxes, Reels

HEAT-RESISTANT PVC RUBBER INSULATED NON SHEATHED, SINGLE CORE CABLES FOR INTERNAL WIRING (H05V2-R ,H07V2-R)

Axelon Wire & Cables

H05V2-R (450/750 V)

Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
0.50	7 /0.30	0.60	2.20	36.00
0.75	7/0.37	0.60	2.30	24.50
1.00	7/0.43	0.60	2.70	18.10

> All are class 2 flexible conductor

> Insulation grade is TI1

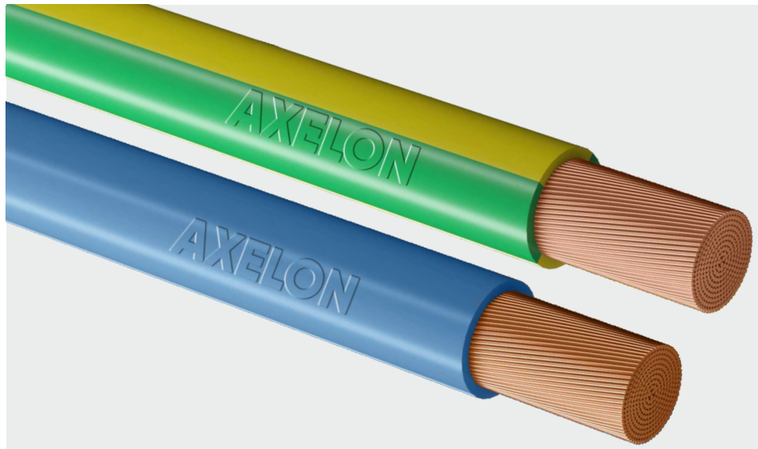
H07V2-R (300/500 V)

Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
1.50	7/0.52	0.70	3.00	12.1
2.50	7/0.67	0.80	3.60	7.41
4.00	7/0.85	0.80	4.30	4.61
6.00	4/0.30	0.80	4.80	3.08
10.00	7/1.35	1.00	6.10	1.83
16.00	7/1.71	1.00	7.40	1.15
25.00	7/2.14	1.20	8.90	0.727
35.00	7/2.52	1.20	10.10	0.524
50.00	19/1.83	1.40	11.90	0.387
70.00	19/2.14	1.40	14.00	0.268
95.00	19/2.52	1.60	13.30	0.193
120.00	37/2.03	1.60	17.80	0.153
150.00	37/2.27	1.80	20.00	0.124
185.00	37/2.52	2.00	23.80	0.0991
240.00	61/2.24	2.20	26.50	0.0754
300.00	61/2.50	2.40	29.60	0.0601
400.00	61/2.88	2.60	34.00	0.047
500.00	61/3.23	2.80	37.70	0.0366
630.00	91/2.97	2.80	42.60	0.0283

> All are class 2 flexible conductor

> Insulation grade is TI1

PVC RUBBER INSULATED NON SHEATHED SINGLE CORE CABLES FOR INTERNAL WIRING (H05V-K ,H07V-K)



Cable Structure

Conductor : Fine Stranded Copper (Class 5 - Flexible Plain Copper) to VDE 0295 IEC 60228
Insulation : PVC Insulation Compound TI-1
Colour : Green/Yellow, Blue, Black, Brown, Grey, Orange, Pink, Red, Violet, White, Green, Yellow or other Colours
Flame Propagation: Flame Retardant test as Per IEC 60332-1

Technical Data

Operating Temp :	-20°C to +80°C	
Nominal voltage :	H05V-K: 300/500 V	H07V-K: 450/750 V
Test voltage :	H05V-K: 2000 V	H07V-K: 2500 V
Insulation Resistance :	10 MΩ x km	
Min. Bending Radius :	4 x Cable Diameter	

Cable Features

- High Current Carrying Capacity
- Excellent Resistant To Moisture, Abrasion, Grease and Oil
- Fine Copper Wires
- Longer Flex Life
- Excellent Mechanical & Electrical Properties
- Harmonized Acc. to European Standards
- Steam And Boiling Water Resistant

Application

H05V-K, H07V-K
Fixed Installation in Conduits and Under Plaster, For Appliance Wiring and Distribution Stations
Standard length Cable Packing :
Coils 100 and 200 m in Carton Boxes, Reels

PVC RUBBER INSULATED NON SHEATHED SINGLE CORE CABLES FOR INTERNAL WIRING (H05V-K ,H07V-K)

Axelon Wire & Cables

H05V-K (300/500 V)

Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
0.5	16/0.200	0.60	2.10	39.00
0.75	24/0.200	0.60	2.20	26.00
1	32/0.200	0.60	2.70	19.50

> All are class 5 flexible conductor

> Insulation grade is TI1

Note: The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360 or UI83

H07V-K (450/750 V)

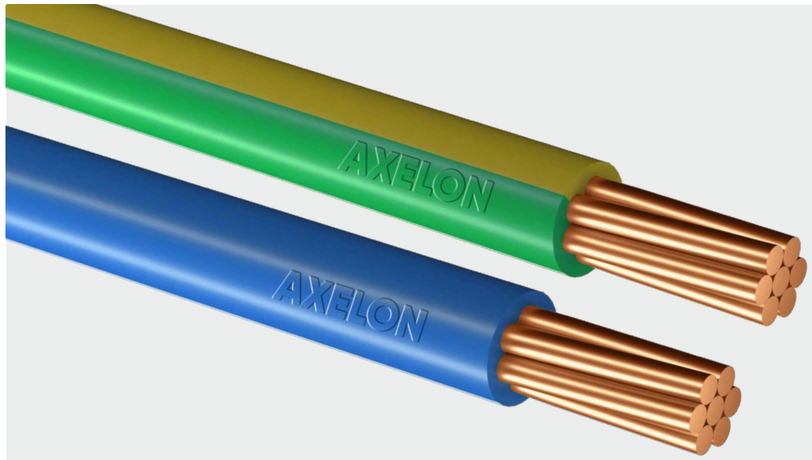
Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
1.50	30/0.250	0.70	3.25	13.30
2.50	50/0.250	0.80	3.80	7.98
4.00	56/0.300	0.80	4.50	4.95
6.00	84/0.300	0.80	5.25	3.30
10.00	140/0.300	1.00	6.50	1.91
16.00	224/0.300	1.00	8.00	1.21
25.00	350/0.300	1.20	10.10	0.780
35.00	490/0.300	1.20	11.30	0.554
50.00	703/0.300	1.40	13.50	0.386
70.00	988/0.300	1.40	15.30	0.272
95.00	1349/0.300	1.60	18.00	0.206
120.00	608/0.500	1.60	19.80	0.161
150.00	760/0.500	1.80	22.30	0.129
185.00	943/0.500	2.00	23.90	0.106
240.00	1225/0.500	2.20	26.80	0.0801

> All are class 5 flexible conductor

> Insulation grade is TI1

Note: The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360 or UI83

PVC RUBBER INSULATED NON SHEATHED SINGLE CORE CABLES FOR INTERNAL WIRING (H05V-R ,H07V-R)



Cable Structure

Conductor : Multiple-wire, Round Copper Conductor Class 2, DIN VDE 0281, IEC 60228
Insulation : PVC Insulation Compound TI-1
Colour : Green/Yellow, Blue, Black, Brown, Grey, Orange, Pink, Red, Violet, White, Green, Yellow or other Colours
Flame Propagation: Flame Retardant Test As Per IEC 60332-1

Technical Data

Operating Temp :	-20°C to max. +80°C	
Nominal voltage :	H05V-R: 300/500 V	H07V-R: 450/750 V
Test voltage :	H05V-R: 2000 V	H07V-R: 2500 V
Insulation Resistance :	Min. 10 MΩ x km	
Min. Bending Radius :	4 x Cable Diameter	

Cable Features

- High Current Carrying Capacity
- Excellent Resistant to Moisture, Abrasion, Grease and Oil
- Longer Flex Life
- Excellent Mechanical & Electrical Properties
- Harmonized Acc. to European Standards
- Steam and Boiling Water Resistant

Application

H05V-R, H07V-R
Fixed Installation in Conduits and Under Plaster, For Appliance Wiring and Distribution Stations
Standard length Cable Packing :
Coils 100 and 200 m in Carton Boxes, Reels

PVC RUBBER INSULATED NON SHEATHED SINGLE CORE CABLES FOR INTERNAL WIRING (H05V-R ,H07V-R)

Axelon Wire & Cables

H05V-R (450/750 V)

Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
0.5	7 /0.30	0.60	2.20	36.00
0.75	7/0.37	0.60	2.30	24.50
1	7/0.43	0.60	2.70	18.10

> All are class 2 stranded conductor

> Insulation grade is TI1

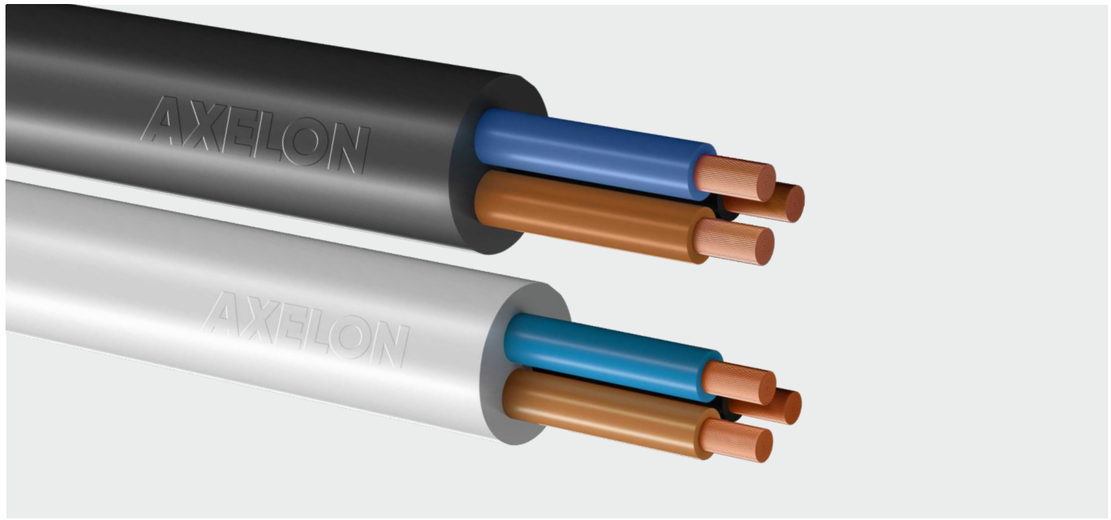
H07V-R (300/500 V)

Size in mm²	Nos/ dia. (Nom.)	Insulation Thickness in mm (nom.)	Outer Dia in mm (Appx.)	Max. C.R in ohm/km Copper
1.5	7/0.52	0.70	3.00	12.1
2.5	7/0.67	0.80	3.60	7.41
4	7/0.85	0.80	4.30	4.61
6	7/1.05	0.80	4.80	3.08
10	7/1.35	1.00	6.10	1.83
16	7/1.71	1.00	7.40	1.15
25	7/2.14	1.20	8.90	0.727
35	7/2.52	1.20	10.10	0.524
50	19/1.83	1.40	11.90	0.387
70	19/2.14	1.40	14.00	0.268
95	19/2.52	1.60	13.30	0.193
120	37/2.03	1.60	17.80	0.153
150	37/2.27	1.80	20.00	0.124
185	37/2.52	2.00	23.80	0.0991
240	61/2.24	2.20	26.50	0.0754
300	61/2.50	2.40	29.60	0.0601
400	61/2.88	2.60	34.00	0.047
500	61/3.23	2.80	37.70	0.0366
630	91/2.97	2.80	42.60	0.0283

> All are class 2 stranded conductor

> Insulation grade is TI1

NORMAL / HEAT RESISTANT PVC FLEXIBLE MULTICORE CABLE (H05VV-F ,H05V2V2-F)



Cable Structure

Conductor : Fine Stranded Copper (Class 5 - Flexible Plain Copper) to VDE 0295 IEC 60228
Insulation / Sheath : H05VVF : PVC H05V2V2F : Heat Resistant PVC
Colour : White, Black, Blue or as per Party Order

Technical Data

Operating Temp :	H05VV-F : 20°C to + 80°C	H05V2V2-F : 20°C to +80°C
Nominal voltage :	H05VV-F : 300/500 V	H05V2V2-F : 450/750 V
Test voltage :	H05VV-F : 2.5KV	H05V2V2-F : 2.5KV
Insulation Resistance :	Min. 20 MΩ x km	
Min. Bending Radius :	7 x Cable Diameter	

Cable Features

- Special Heat Resistant Insulation
- High Current Carrying Capacity
- Less Heat Energy Radiation
- Longer Flex Life
- High Compatibility of Cores
- Excellent Resistant to Moisture, Abrasion, Grease and Oil
- Excellent Mechanical & Electrical Properties
- Insulation Is Highly Thermal Stable
- Harmonized Acc. to European Standards

Application

H05VV-F, H05V2V2-F
Cordage is a Flexible PVC Insulated, PVC Jacketed Harmonized Cord Recommended for use in Electronic and Electrical Equipment such as Office.
Standard length Cable Packing :
100, 200, 500, 1000 m. in Reels

NORMAL / HEAT RESISTANT PVC FLEXIBLE MULTICORE CABLE (H05VV-F ,H05V2V2-F)

Axelon
Wire & Cables

H05VV-F, H05V2V2-F (300/500 V)

Nom. Sq.Area	Copper Configuration	Nominal insulation Thickness	Nominal Sheath Thickness in mm				Appx.overall Diameter in mm				Max Conductor Resistance at 20°C
			2 core	3 core	4 core	5 core	2 core	3 core	4 core	5 core	
sq mm	Nos/ mm. (Nom.)	mm	mm	mm	mm	mm	mm	mm	mm	mm	Ω/km
0.75	24/0.200	0.60	0.80	0.80	0.80	0.90	6.20	6.50	7.10	8.00	26.00
1.00	32/0.200	0.60	0.80	0.80	0.90	0.90	7.20	7.60	8.50	9.30	19.50
1.50	30/0.250	0.70	0.80	0.90	1.00	1.10	7.80	8.45	9.50	10.55	13.30
2.50	50/0.250	0.80	1.00	1.00	1.10	1.20	9.40	9.95	11.10	12.35	7.98
4.00	56/0.300	0.80	1.10	1.20	1.20	1.40	10.60	11.40	12.50	14.10	4.95

> All are class 5 flexible conductor
> Insulation grade is TI2
> Sheathing grade is TM2

> All are class 5 flexible conductor
> Insulation grade is TI3
> Sheathing grade is TM3

Note: The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360 or UI83



MANUFACTURING OF CABLES

Cables with Aluminium and Copper conductor and polymer insulation are manufactured at AXELON WIRES AND CABLES. Essentially cables comprise of conductors, insulation, inner-sheath, armour and outersheath. The brief description of the process is mentioned as under:

CONDUCTOR

AXELON CABLES are available with both Aluminium and Copper conductors. It is manufactured with Solid / Stranded / Circular Shaped Aluminium / Copper Conductor. Stranding makes Cables flexible and easy to handle while shaping makes them compact.

All Conductors For **Axelon Wires And Cables** *Are Manufactured Strictly In Accordance With National And International Specifications.*

National Standards	**IS:8130**
International Standards	**IEC:60228 / BS:6360**

DIELECTRIC INSULATION

Insulation for AXELON CABLES is strictly as per National and International specifications. Cables are designed and manufactured with polymer dielectrics to bear thermal and thermomechanical stresses safely at continuous normal and short circuit temperature conditions.

AXELON CABLES, *are available with both thermoplastic & thermosetting insulations.*

- **PVC Cables** Thermoplastic dielectric
- **XLPE Cables** Thermosetting dielectric

AXELON CABLES *are friendly during continuous, emergency and short circuit conditions.*

National Standards	**IS:5831/IS:7098**
International Standards	**BS:6746/BS:5467/IEC:60502**

LAYING UP

Cores are tested on line during production of both, physical and electrical characteristics. Control is observed within tight tolerance limits for dimensions in case of PVC/XLPE insulation. For multicore cable cores are laid up on our latest laying up machine equipped with sector correction equipment. In case of XLPE insulated cores the same are cured so as to impart the requisite characteristics both electrical and mechanical and then are laid up.

INNERSHEATH

Laid-up cables are provided with an inner sheath with high-quality PVC which acts as bedding for steel wire/strip armoring. Wherever required, filler cords are provided to maintain the circularity to lay up cables. Polymers used for inner sheath are softer than insulation or outer sheath & are compatible with temperature ratings of cables & do not have a deleterious effect on any other component of cable.
The inner sheath is applied either with extrusion or by wrapping. In AXELON CABLES, though the inner sheath is closely applied on the laid-up cores, the same can be stripped with ease without damaging the insulation. The inner sheath dimensions are maintained strictly by the laid down specification.

ARMOURING

- Mechanical protection to the cable is provided with armouring. In AXELON CABLES, single-core cables are armoured with Aluminium or Aluminium alloy wire/strips, thus avoiding magnetic hysteresis losses on A. C. System.
- Multicore cables are provided with galvanized steel wire/strips.
- AXELON CABLES are provided with galvanized wire armouring, where cables are to run vertically and are subjected to stresses.
- AXELON CABLES mining cables are armoured with steel wire and tinned copper wires, to provide a conductivity of armour more than 75% of the main conductor of the cable.
- AXELON CABLES armour wires/strips are of low resistivity material and meet the requirements of IS: 3975

OUTER SHEATH

All AXELON CABLES are provided with PVC/polymer outer sheath.

General purpose sheathing Compound	ST1
Heat resistant Compound for sheath (H.R.)	ST2
Fire Retardant Low Smoke Compound (FRLS)	IEC 754 Part I IEC 60332 Part I& III IEEE-383 ASTM-2843 ASTM-2863

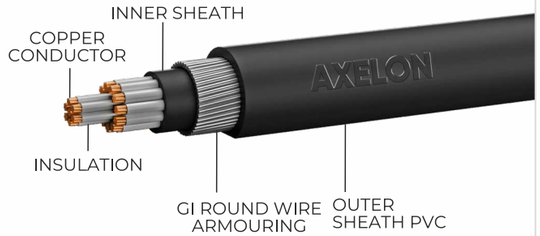
POWER AND CONTROL CABLE

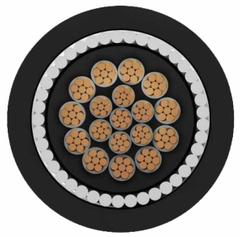
Axelon Wire & Cables

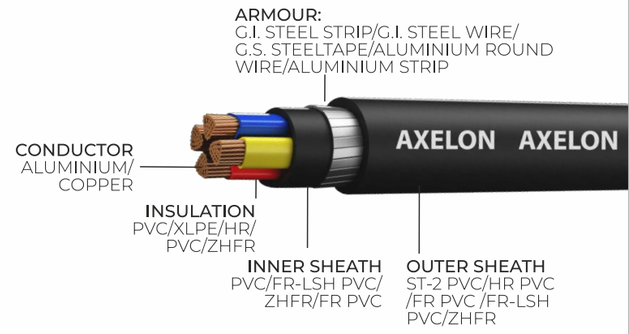
CONSTRUCTION OF CABLE

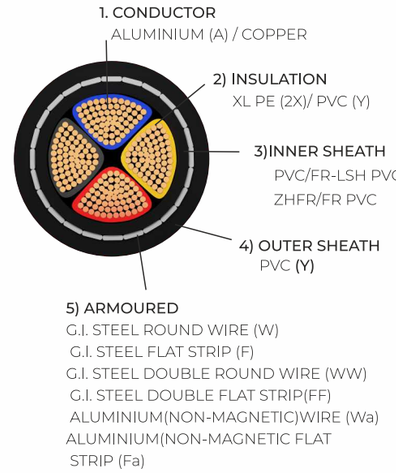
SPECIFICATION

For PVC Cables	IS:1554 (Part-I)
For XLPE Cables	IS:7098 (Part-I)









Size	Single core 1.50 to 1000 SQ.MM. | Multi core 1.50 to 630 SQ.MM.
No of Cores	1/2/3/3.5/4
Conductor	Stranded/Solid / Circular / Shaped as per IS:8130, IEC 60228, BS 6360
Material	Aluminium / Copper
Insulation	PVC /XLPE/HR PVC / Zero Halogen
Armour	G.S STEEL ROUND WIRE /G.S. STEEL FORMED WIRE (STRIP)/G.S. STEEL TAPE/ ALUMINIUM ROUND WIRE/ ALUMINIUM FORMED WIRE (STRIP)/ALUMINIUM TAPE as per IS 3975, IEC 60502 P-1.
Outer Sheath	PVC/HR PVC/FR/FRLS PVC/Zero Halogen as per IS 5831, IEC 60502, BS 7655.
Voltage Grade	650/1100 V

POWER AND CONTROL CABLE

100% Spark Tested I 99.97% Cu Purity
101% Conductivity

ADVANTAGES OF PVC CABLES

1. A non-hydroscopic insulation almost unaffected by moisture.
2. Non-migration of compound permitting vertical installation.
3. Complete protection against most forms of electrolytic and chemical corrosion.
4. A tough and resilient sheath with excellent fire-resisting qualities.
5. Good aging characteristics.

ADVANTAGES OF XLPE CABLES

1. Higher Current Rating.
2. Higher Short Circuit Rating.
3. Longer Service Life.
4. For a short time it can withstand a maximum of 260^{0}C and is favorable to endure short circuit stresses.
5. It is less sensitive to the setting of network protection.
6. Because of the thermosetting process taking place due to the effect of cross-linking, the crack resistance is increased.
7. Due to the chemical cross-linking internal stresses are reduced. Consequently, the material is less sensitive during the manufacturing process to the setting of the cooling gradient.
8. The thermal resistivity of cross-linked material is low, compared to the thermoplastic material.
9. The low dielectric loss is a significant advantage.
10. The excellent mechanical features of the insulation improve the protection against external effects.
11. The resistance of the XLPE to acids, alkalies is outstanding and is often compensating the adverse environmental influences.

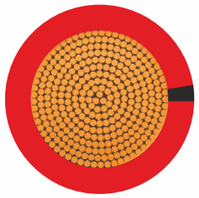


AUTO CABLES

100% Spark Tested I 99.97%
Cu Purity I 101% Conductivity

Axelon Wire & Cables

Application	:	These cables are used as original equipments for wiring automobiles and auto harnesses
Conductor	:	Flexible Bare Copper Wire
Insulation	:	PVC Insulation
Type	:	FLRY - A and FLRY - B
Cable Standard	:	DIN 72551-6 & ISO 6722-B, JIS C 3406, JASO D 611/608, IS 2465, BS 6862 : PART 1

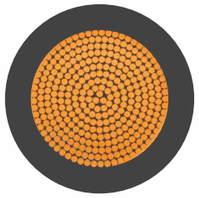




BATTERY CABLES

100% Spark Tested I 99.97%
Cu Purity I 101% Conductivity

Application	:	These wires are used low voltage circuit in automobiles such as Vehicles and Motor cycle where high flexibility is required
Conductor	:	Bare annealed Copper flexible conductor, class 5 & class 6
Separator	:	Polyester tape
Insulation	:	HR PVC or H0FR (TRP Rubber)
Cable Standard	:	SAE J1127 CDE 0295, IEC 60228, IS 2465, BS 6862





APPROVED VENDORS

Gujarat State Road Transport Corporation

Maharashtra Housing & Area Devlopment Authority (MHADA)

Road & Building Department (R&B)

Deendayal Port Trust (DPT)

Jharkhand State Livelihood Promotion Society (JSLPS)

Telangana State Northen Power Distribution Company Limited (TSNPDCL)

National Thermal Power Corporation

City and Industrial Development Corporation of Maharashtra (CIDCO)

Abu Dhabi Defence

West Bengal State Electricity Distribution Company

State Water & Sanitation Mission (SWSM), Uttar Pradesh

GUJARAT CHEMICAL PORT TERMINAL COMPANY LIMITED

INDIAN RAILWAY

GAIL (INDIA) Ltd.

दिल्ली मेट्रो रेल कॉरपोरेशन लिमिटेड
Delhi Metro Rail Corporation Limited

Gujarat Energy Transmission Corporation Limited (GETCO)

Indian Navy

Mazagon Dock Shipbuilders Limited

National Hydro Power Corporation (NHPC)

Indian Ordarnance Factory

Public Works Department (PWD), Uttar Pradesh

Project & Development India Limited (PDIL)

Rural Water Supply and Sanitation (RWSS), Odisha

Jal Nigam Uttar Pradesh

CERTIFICATION

RoHS COMPLIANT | CE | CPRI | ISO 9001:2015 | ISO 14001:2015 | ISO 45001:2018

IS : 694	IS : 7098	IS : 1554	IS : 1293
CM/L - 7600107912	CM/L - 7600133012	CM/L - 7600132911	CM/L - 7900112110

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BUREAU VERITAS

CROWN AGENTS

पी डी आई एल PDIL ENGINEERING THE FUTURE
Project & Development India Limited (PDIL)

WHY AXELON ?



MANUFACTURING CAPABILITY DETAILS

- OUR FACTORY IS SPREAD OVER 200,000 SQ. FT.
- CURRENT PRODUCTION 400 TONS PER MONTH
- FULLY AUTOMATIC GERMAN NIEHOFF PLANT
- IN HOUSE MACHINES LIKE RBD, MMH, BUNCHERS, EXTRUDERS, STRANDING MACHINES, DRUM TWISTERS & ARMOURING MACHINES



QUALITY CONTROL

- 100% ONLINE SPARK TESTING
- FULLY FUNCTIONAL LABORATORY WITH IS 694, IS 1554 AND IS 7098 APPROVALS ABLE TO CONDUCT TYPE TEST / ROUTINE TEST / ACCEPTANCE TEST
- ISO 9001, 14001 AND 45001, CE, ROHS & CPRI CERTIFICATIONS



PRODUCTS – FULL RANGE OF LT CABLES AVAILABLE AT SINGLE STOP

House Wires –

FR, FR-LSH, ZHFR, Equilay bunched HRFR

- SINGLE CORE FLEXIBLES (TILL 630.00 SQ MM), MULTICORE FLEXIBLES (TILL 61 CORES), SUBMERSIBLE FLAT CABLES
- LAN CABLES, CO AXIAL CABLES, CCTV SURVELLIANCE CABLES, TELEPHONE CABLES, SPEAKER CABLES
- SOLAR DC CABLES, WELDING CABLES, ALUMINIUM CABLES
- INSTRUMENTATION SHIELDED CABLES, ARMOURED CABLES, FIRE SURVIVAL AND FIRE ALARM CABLES
- HARMONIC CABLES AND ANY SPECIAL CABLES
- POWER CABLES – LT ALUMINIUM AND COPPER CABLES (TILL 4 CORE X 630.00 SQ MM)



FINANCIAL STRENGTH

- LAST YEAR GROUP TURNOVER OF USD 71.00 MILLION
- ZERO DEBT COMPANY
- STAR EXPORT HOUSE, RECOGNIZED BY THE GOVERNMENT OF INDIA, RECEIVED THE EXPORTER AWARD FOR THE LAST THREE YEARS.

OTHER KEY POINTS

- CURRENTLY EXPORTING TO MORE THAN 29 COUNTRIES
- FAMILY OWNED COMPANY
- MORE THAN 35 YEARS OF FAITH & COMMITMENT (TOWARDS CUSTOMERS AND ALL STAKEHOLDERS)
- HIGHLY EXPERIENCED TEAM OF PRODUCTION & MARKETING 100% EC GRADE COPPER USED

WORLD WIDE EXPORT



Canada
USA
Mexico
Kuwait
Qatar
Bahrain
Russia
Hong Kong
Panama
Venezuela
Colombia
Peru
Netherland
Iraq
Myanmar
Singapore
Ireland
U.K
Belgium
Denmark
Sweden
Germany
Thailand
Japan
Senegal
Spain
Hungary
Ghana
Tunisia
Libya
Algeria
Australia
Solvakia
Romania
Bulgaria
Greece
Turkey
Egypt
Fiji
Saudi Arabia
Congo
Zambia
South Africa
Tanzania
Kenya
Uganda
Ethiopia
Yemen
Iran
Syria
UAE
Nepal
Vietnam
Malaysia
Philippines
Indonesia
New Zealand
Sudan
Oman
Lebanon
Jordan

AWARDS & ACCOLADES









Our awards serve as a testament to the company's ongoing efforts and success. We are dedicated to giving our clients the finest support possible and are pleased to highlight our success. The awards we have been honored to receive demonstrate our commitment to providing the highest quality services for our customers.



CORPORATE SOCIAL RESPONSIBILITY



"A HAND LOSES NOTHING BY HOLDING ANOTHER HAND"

Our mission is to give back to society through a partnership approach as part of our corporate social responsibility. We are dedicated to sharing and caring. We encourage our employees through difficult times as members of society. To assist in providing wholesome meals during pandemic scenarios, we delivered over 5000 food kits. Our organization set up and sponsored a program that focuses on giving girls access to high-quality education in elementary, secondary, and upper secondary schools as part of our unwavering efforts to ensure that everyone has access to a great education.

