

# POWER CABLE ACCESSORIES

Connecting Power  
Network with Trust

POLYCAB





## About us

Polycab India Limited stands as a prominent player in the realm of Fast Moving Electrical Goods (FMEG), solidifying its position as India's largest manufacturer of Wires and Cables, while also exerting a formidable global presence. As a frontrunner in the industry, we dominate various

product categories such as Fans, Switches, Water Heaters, Switchgears, Luminaires tailored for residential, commercial, and industrial applications, Solar Panels, Conduits and Accessories, and cutting-edge Home Automation solutions.

**25%**

Market Share

**28**

Manufacturing  
Facilities

**79**

Countries  
Export Presence

**3800+**

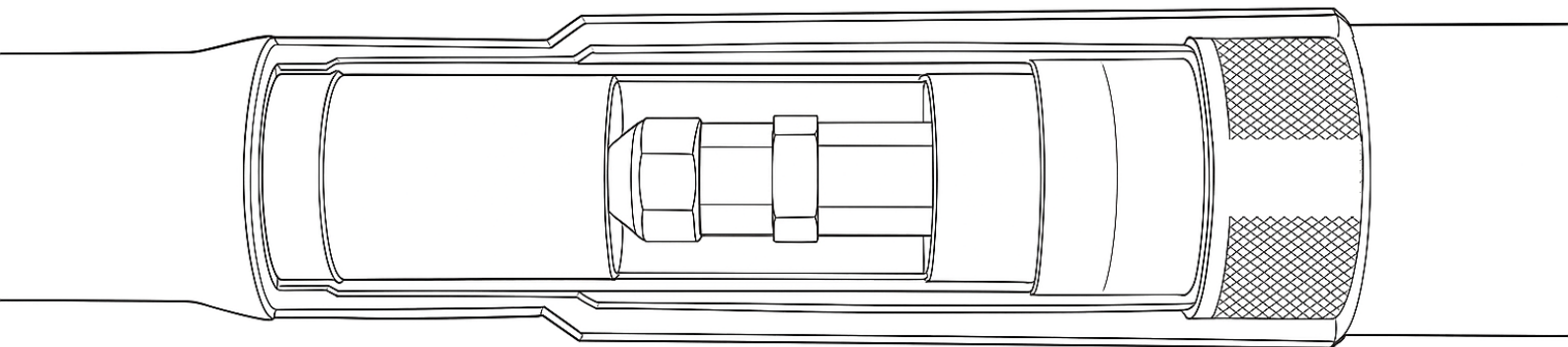
Authorised Distributors

**205000+**

Retailers

## Index

Polycab Reliable Partner	4
Manufacturing Facility	5
Testing Laboratory/ Facility/ Quality Checks	6
Designs	7
Heat Shrink Cable Accessories	8
Low Voltage Cable Accessories	9
Medium Voltage Cable Accessories	10
Thin Wall Tube	11
Services	12







## Polycab – A reliable partner for providing end to end power network solutions

Polycab manufactures, markets and services overhead and underground cable network solutions. The Polycab range includes a variety of house wires, LV, MV, HV and Speciality Cables.

Polycab was founded in the year 1964, and the company has extensive experience and knowhow of the utility and industrial power networks and the customer needs. This has helped us innovate and design end to end solutions that are optimal, smart, reliable and complete, suitable for diverse conditions.



Worldwide, cable terminations and joints have been identified as an important component of the power cable network. The reliability of a cable network is governed by the design, quality and installation technique of the cable accessory.



## Polycab's new innovative range of underground cable accessories

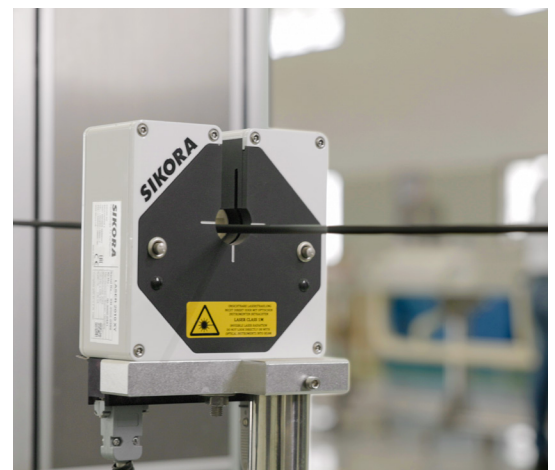
To ensure high reliability of a cable system, we have now invested in setting up a state of the art Cable Accessories plant in India. Polycab products have been designed to withstand large variations the environment - temperature, UV radiation, and humid and wet conditions. The reliability is based on strong product development, carried out in partnership with our customers. All products' electrical and mechanical properties are tested in various weather conditions in accordance with national and international standards.

With rapid urbanization, the share of underground cabling in the power supply system is growing, especially in densely populated areas. Polycab's underground cabling solutions offering includes an extensive range of low and medium voltage UG cables and cable accessories for the voltage range of 1.1 to 52kV.



This range includes Cable accessories for XLPE (Cross linked Polyethylene), EPR and PVC insulated cables. The products represent well-established Polycab quality and have been tested in independent test laboratories. Voice of customers and their specific needs have been incorporated in product development. These inputs have been used especially to make product installation and execution easier.

In addition to high-quality product packages, Polycab provides its customers with continuous training and expert customer service. Special emphasis has been placed on making information more readily available to our customers with technical and installation inputs available digitally.





## Rigorous Quality Assurance & Expert Support

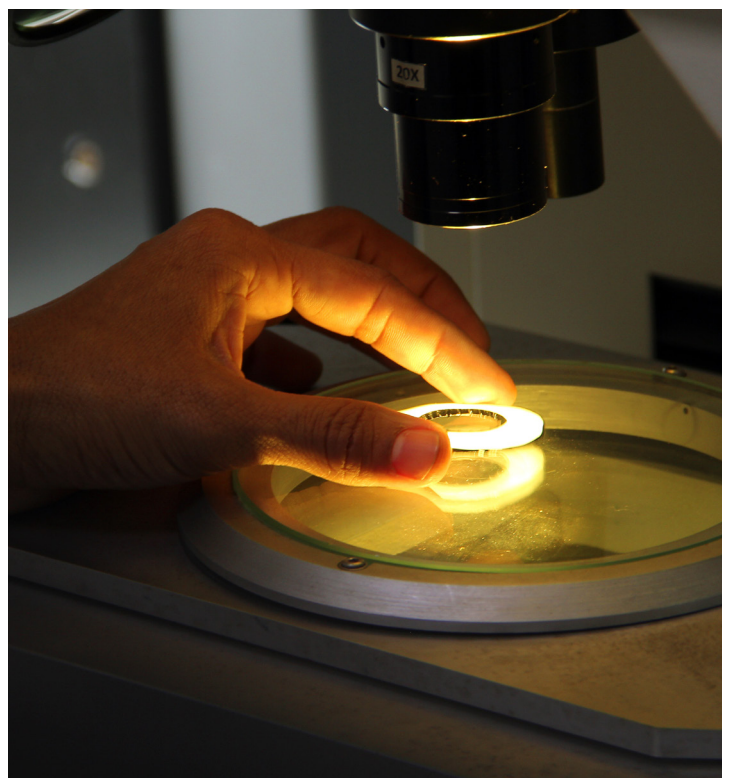
Polycab's commitment to uncompromising quality starts in our state-of-the-art testing facilities, where every cable accessory is put through rigorous trials like electrical, mechanical and environmental conditions. From high-voltage dielectric withstand and partial-discharge measurements to accelerated thermal-cycling ( $-50^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ ) and UV-weathering tests, all tests are done in our in-house Labs, which are accredited by NABL and IEC.

We ensure that insulation integrity, material endurance, and water-tightness far exceed both national (IS 7098, IS 13573 & IS 10418) and international (IEC 60502, IEEE 404) standards. With full batch-level traceability of polymers and metals, automated in-line process audits, and real-time statistical quality control, Polycab guarantees that every joint and termination you install is engineered for maximum reliability under India's harshest operating conditions.

Beyond testing, we empower your teams with expert training and digital resources to ensure flawless field performance. Comprehensive hands-on workshops, live jointing demonstrations, and a 24x7 technical helpline complement our detailed video guides, torque tables, and installation



checklists—making optimal execution as seamless as product design. By choosing Polycab's quality-tested cable accessories, you not only safeguard your power network against unplanned outages and high maintenance costs, but also benefit from a partner dedicated to your long-term success and peace of mind.



## Design

### Stress Grading Tube

Stress control heat shrink tube are special polymer formulations, used primarily in medium voltage cable joints and terminations. Their main function is to manage and evenly distribute electrical stress, which helps prevent electrical breakdown and enhances the reliability of the insulation system.

### Anti-Tracking Tube

Anti-tracking tubes are specialized heat shrinkable insulating tubes used in Medium-voltage electrical systems to prevent surface electrical tracking and consequent flashovers. These tubes are especially important in indoor, outdoor and polluted environments where moisture and contaminants can compromise insulation.

### Double Layer Tube

A Co-Extruded double layer(Dual wall) screened tube is a specialized heat shrinkable tubing used primarily in medium voltage cable joints. It provides both electrical screening and insulation, making it essential for maintaining the integrity and safety of power systems.

### Stress Grading Mastic

Stress grading mastic is a critical component used in medium voltage cable accessories to manage electrical stress at the edge of semi conducting screen and over the connector and insulation interface with their void filling property, high permittivity and dielectric strength.



### Lugs and Ferrules

Are manufactured in-house under the branding of Dowell's by Polycab from pure high-grade copper or Aluminium material using fully automated machines. Lugs provide a secure mechanical and electrical connection between conductor of cable and terminal equipment's like transformer, switchgear, bus bar etc. Ferrules are used to connect the conductors of two cable ends being splice together. Both lugs and ferrules ensure low-resistance electrical path for continuity of network. Bi-Metallic lugs are also available for aluminium conductor to Copper Busbar connections.



Scan QR code to get more detail about Lugs and Ferrule

### Mechanical and Environment Sealing

Underground cables and joints are always vulnerable to external environment. So, heat shrink joint's mechanical and environmental sealing is very important and crucial. It is important to protect joint from physical damage and environment exposure. We protect joint from external damage by providing a metal canister for aluminium conductor to Copper Busbar connections it acts as a mechanical protection plus armour continuity.

### Earthing System

Manufactured In house, the critical parts e.g. flexible tinned plated copper braids with solder blocking for terminations, copper wire mesh, constant force spring ensure proper continuity and a rugged earthing system.

### Customization & Support

We offer custom sizes, colours, and printing options to meet your specific project needs. Our technical team is available to assist with product selection, application guidance, and compliance documentation.



## Heat Shrink Cable Accessories

A trusted solution across industries for electrical insulation, mechanical protection, environmental sealing, and stress relief. Polycab's range of heat shrink products is engineered to meet the highest standards of performance, safety, and durability.

### Key Features

- Shrink ratios from 2:1 to 3:1
- Excellent dielectric strength
- Resistance to abrasion, chemicals, and UV
- Wide Operating temperature range

### What is Heat Shrink Technology?

Heat shrink technology involves the use of specially formulated polymer materials that shrink in diameter when heated, conforming tightly to the shape of the underlying components. This process ensures a secure, protective, and professional finish for a wide variety of applications.

### Cross-Linking Process

Heat shrink products undergo a cross-linking process, which enhances their thermal and mechanical properties.

### Memory Effect

These products have a "memory effect," meaning they return to their original shape when heated, ensuring a tight and secure fit around cables.

## Product Categories

### Heat Shrink Tubing

Available in Thin wall, single wall, dual wall (adhesive-lined), and high-ratio shrink types

### Heat Shrink Moulded Shapes

Creepage Extenders/Rain sheds and Breakouts

### Specialty Heat Shrink Products

Flame-retardant, chemical-resistant, and high-temperature variants





## Low Voltage Cable Accessories

Polycab's low voltage cable accessories offers excellent flame-retardant property and insulation protection for full creepage length as well as colour code identification for each core.

Medium wall insulation heat shrink tubes are designed to provide a balance between mechanical protection and electrical insulation, making them ideal for medium-duty applications in electrical and power systems.

### Features

#### Voltage Rating

Up to 1.1 kV

#### Cable Cross Section

10-400 sq.mm.

#### Applicable Standard

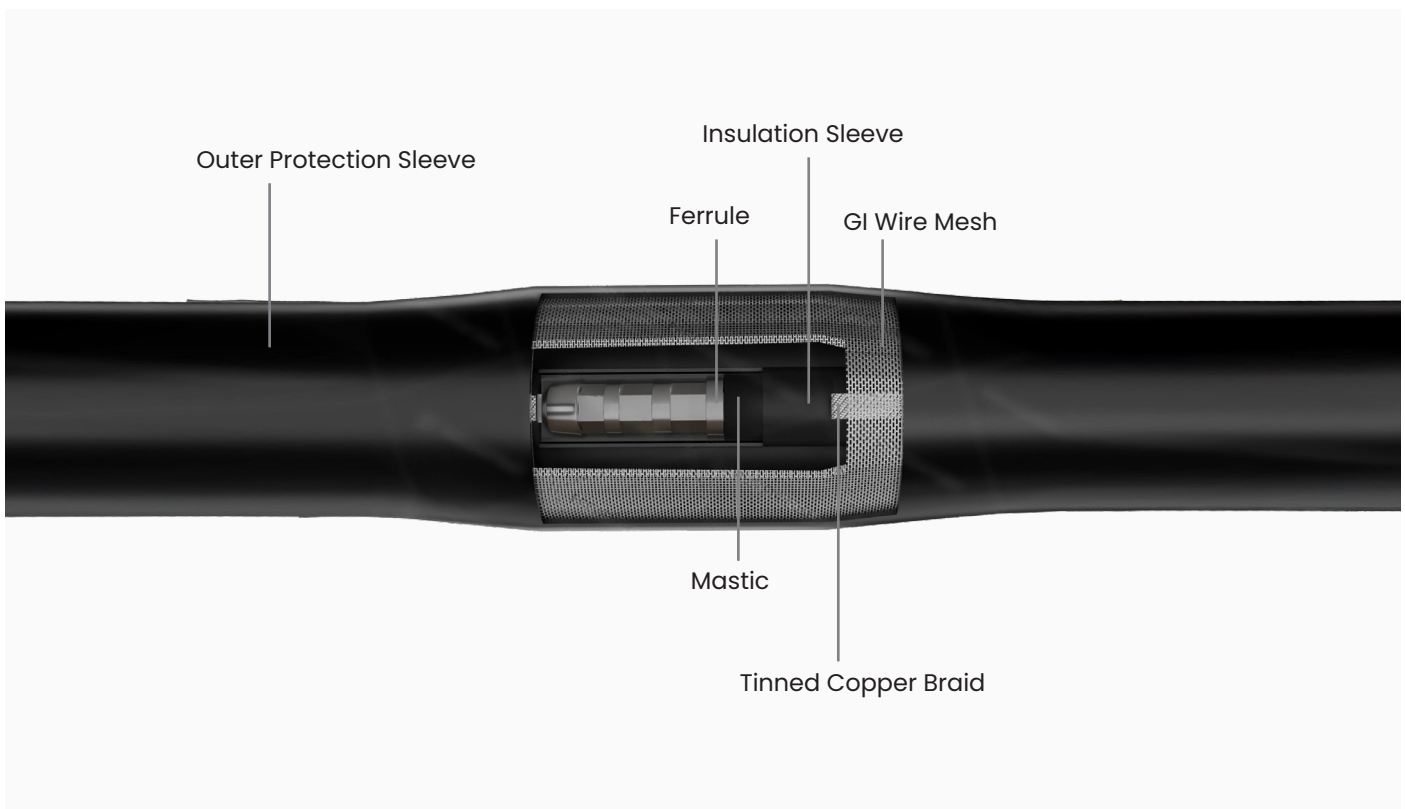
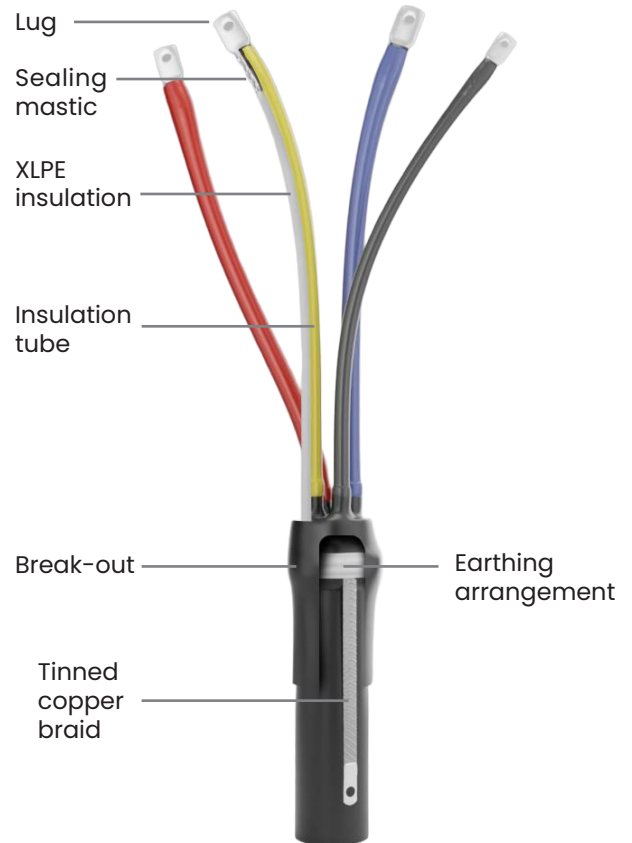
IS 13573 Part-I

#### Compatibility

Suitable for XLPE insulated/ PVC power cables, copper or aluminium conductor, armoured or unarmoured

#### Application

Indoor, outdoor and underground use for power distribution in industry, commercial, and utility networks



## Medium Voltage Cable Accessories

### Features

#### Voltage Rating

3.3/6.6(7.2) kV up to 33/33(52) kV

#### Cable Cross section

25-1000 sq.mm.

#### Applicable Standard

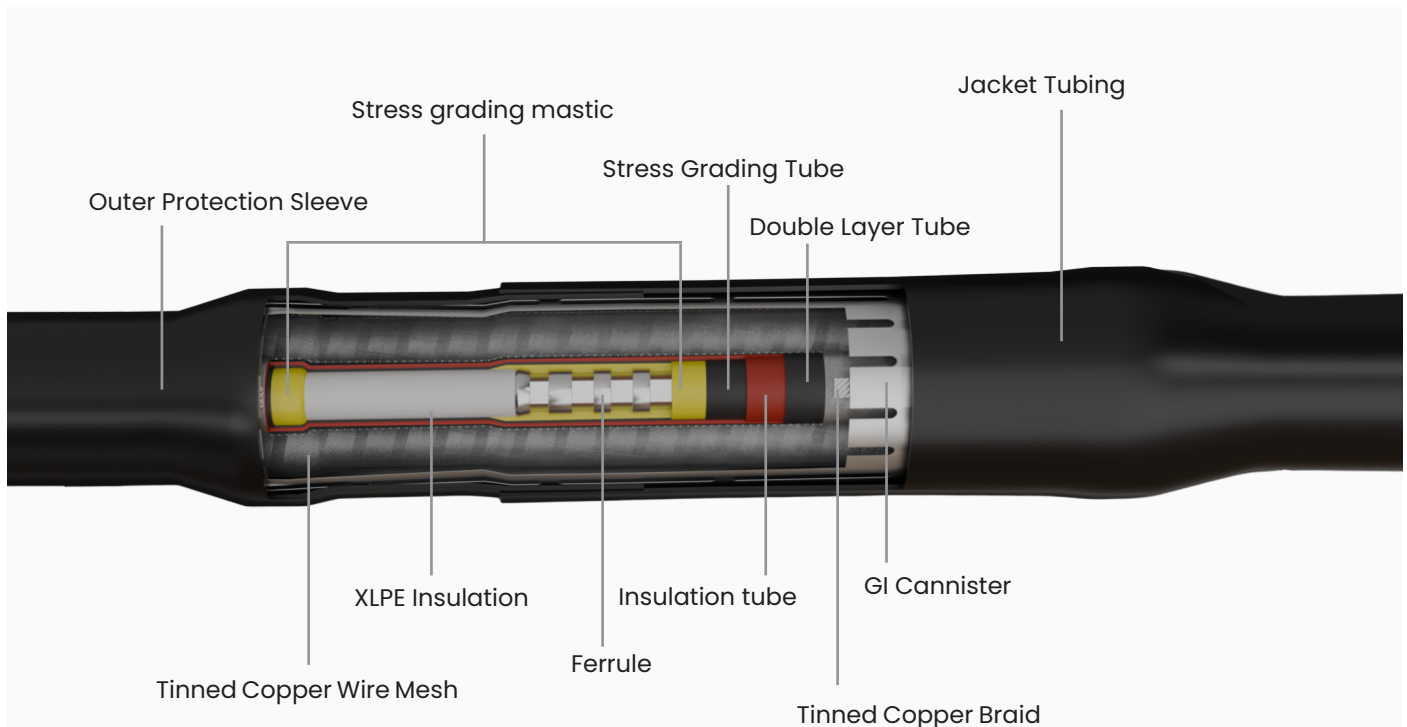
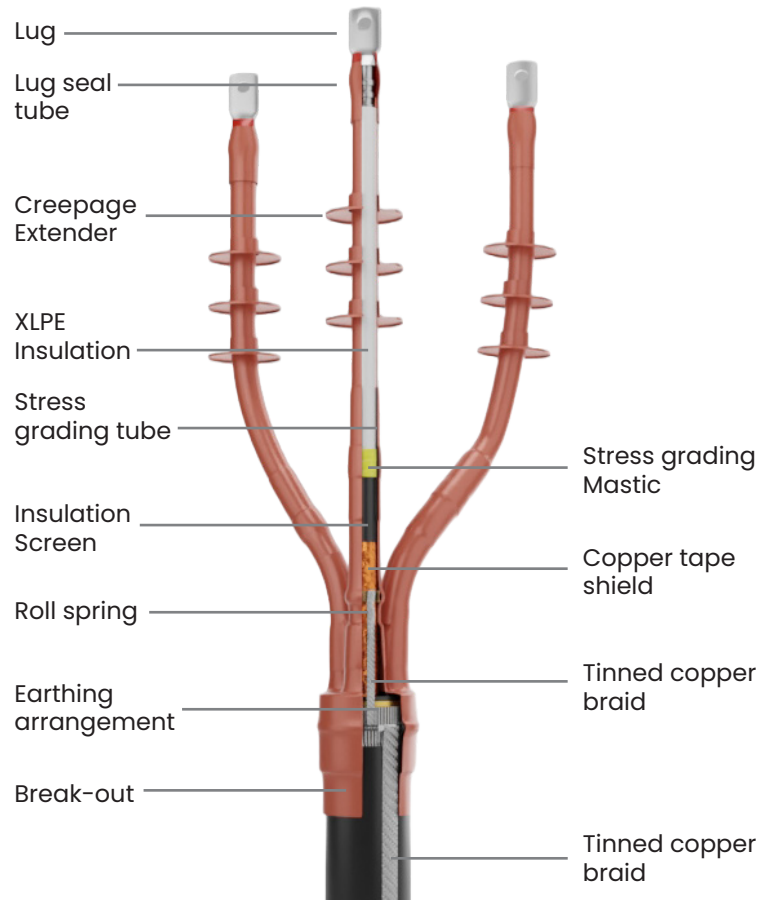
IS 13573 Part-II / IEC 60502  
Part-IV, IEC 60840

#### Compatibility:

Suitable for 1 Core and 3 core  
XLPE or EPR cable, copper  
or aluminium conductor,  
armoured or unarmoured,  
Earth and un-earth system

#### Application:

Indoor, outdoor and  
underground use for power  
distribution in industry,  
commercial, and utility  
networks





## Thin Wall Tubing

Thin wall heat shrink tubes offer several benefits that make them highly valuable due to following

### Features

- Electrical Insulation and protection
- Shrink ratio 2:1
- Ease of use
- Colour Identification for cables and terminals
- Reinforce connections and prevent wires from bending or breaking at stress points
- Flame retardant

**Specifications:** UL 224, VW-1

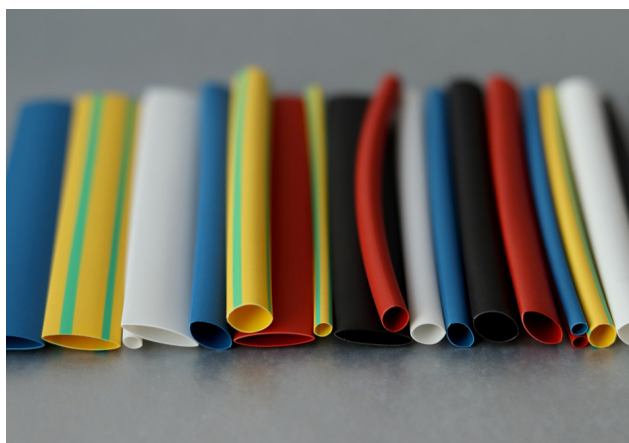
### Applications:

Insulation of wires  
Automotive  
Appliances  
Wire harnessing  
Electronics



## Thin Wall Tubing Selection Chart

Size	Supplied (mm)	Recoverd (mm)	Recovered wall thickness (mm)	Standard packing	
	D	d	T	"Cut lengths in Mtr. (06)"	"Mtr./spool (10)"
1	1	0.5	0.28	1	400
2	1.5	0.75	0.32	1	400
3	2	1	0.35	1	400
4	2.5	1.2	0.44	1	400
5	3	1.5	0.44	1	400
6	4	2	0.44	1	400
7	5	2.5	0.56	1	200
8	6	3	0.56	1	200
9	7	3.5	0.56	1	100
10	8	4	0.56	1	100
11	10	5	0.56	1	100
12	12	6	0.56	1	100
13	14	7	0.69	1	100
14	16	8	0.69	1	100
15	18	9	0.69	1	100
16	20	10	0.78	1	100
17	25	12.5	0.78	1	50
18	30	15	0.87	1	50
19	40	20	0.97	1	50
20	50	25	0.97	1	25
21	60	30	0.96	1	25
22	70	35	1.1	1	25
23	80	40	1.27	1	25
24	100	50.5	1.17	1	25



### Steps for Thin Wall Tube Selection:

1. Select thin wall tube color e.g. RTW for red color
2. Select standard packing number e.g. 06 or 10
3. Select size of thin wall tube e.g. 12
4. Share RTW-0612 with manufacturer to select correct product

## Services

We at Polycab manufacture heat shrink cable accessories in compliance to international standards. Cable accessories are supplied as a kit and when it is installed over the cables in the field, the final product emerges. While the kit is produced in the factory under controlled conditions, the installation at site is in open environment and requires skilled, experienced installers and fitters to do a perfect job.

We therefore provide these field services to ensure proper installations. Training and certifications of eligible installers is also carried out at our works.



**1. Jointer trainings and certifications**

**2. Evaluation of existing installations and retrofitting**

**3. Design of tailor-made solutions**

**4. Installation services**

**5. Analysis of failed accessories**





# POLYCAB

## POLYCAB INDIA LIMITED

#29, The Ruby, 21st Floor, Senapati Bapat Marg,  
Tulsi Pipe Road, Dadar (West),  
Mumbai - 400 028, Maharashtra (India)  
Ph.: +91-22-2432 7070/4, 6735 1400  
Send 'Hi' on 7304485540

✉ Enquiry@polycab.com

☎ 1800 267 0008

🌐 www.polycab.com

FOLLOW US ON

