GALA
Innovative Insulating Solutions

INSULTUBE COMMERCIAL™

# HEAT SHRINK MEDIUM & HEAVY WALL TUBING


Insultube is Heat shrink Medium & Heavy wall tubing.
Medium wall tubes (GMW) are used for environmental protection of low voltage cable termination and insulating the connectors for low voltage straight through joints / splice rated upto 3.3kV. Heavy wall tubes (GHW) are used for mechanical protection and outer sealing of underground straight through cable joints / splice upto 36kV.
These tubes are manufactured from high quality cross Linked polyolefin material.

- Optional hot melt adhesive for complete environmental protection and insulation, according to IP 68 (Ingress Protection.)
- Conforms to IEC 60684-3-247 standard.
- Halogen Free.
- Excellent resistance to weathering, UV rays, chemical and solvents.
- Custom dimensions, thickness, length & colours available on request.
- The maximum available cut length for GMW/GHW varies based on sizes: upto 250/70-1200mm; up to 320/90-1000mm; above 375/110-500mm.

## Technical Specification

| PROPERTIES | VALUE | STANDARD |
|---|---|---|
| **Physical** | | |
| Tensile Strength | 12 N/mm$^2$ (Mpa) (min.) | ASTM D638 |
| Ultimate Elongation | 350% (min.) | ASTM D638 |
| Density | 1.0 ± 0.2 gm/cm$^3$ | ASTM D792 |
| Longitudinal Change | -10% (max.) | ASTM D2671 |
| Hardness | 45 ± 10 Shore D | ASTM D2240 |
| Water Absorption | 0.5% (max.) | ASTM D570 |
| **Thermal** | | |
| Accelerated Ageing | (150°C for 168 hrs.) | ASTM D2671 |
| Tensile Strength | 10 N/mm$^2$ (Mpa) (min.) | ASTM D638 |
| Ultimate Elongation | 300% (min.) | ASTM D638 |
| Low Temperature Flexibility (-40°C for 4 hrs.) | No Cracking | ASTM D2671 |
| Heat Shock (250°C for 30 min.) | No cracking or flowing | ESI 09-11 |
| Shrink Temperature | 125°C | IEC 216 |
| Continuous Temperature Limit | -40°C to +110°C | IEC 216 |
| **Electrical** | | |
| Dielectric Strength (2mm Wall) | 12 kV/mm (min.) | ASTM D149 |
| Volume Resistivity | 1 x 10$^{12}$ Ohm.cm (min.) | ASTM D257 |
| Dielectric Constant | 5 (max.) | ASTM D150 |

**Weathering :** The material from which Medium and Heavy wall tubing are manufactured contains carbon black to protect it from UV light.

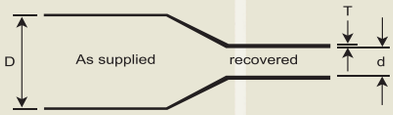
Technical Qualification Report : QR 1013

## Selection Chart

| Code | D min. (mm) | d max. (mm) | T±10% (mm) | Code | D min. (mm) | d max. (mm) | T±10% (mm) |
|---|---|---|---|---|---|---|---|
| GMW 10/3 | 10 | 3 | 1.5 | GHW 12/3 | 12 | 3 | 2.4 |
| GMW 12/4 | 12 | 4 | 1.8 | GHW 19/6 | 19 | 6 | 2.5 |
| GMW 16/5* | 16 | 5 | 2.0 | GHW 22/6 | 22 | 6 | 2.7 |
| GMW 19/6 | 19 | 6 | 2.0 | GHW 25/8 | 25 | 8 | 2.8 |
| GMW 22/6 | 22 | 6 | 2.3 | GHW 30/8 | 30 | 8 | 3.0 |
| GMW 25/8 | 25 | 8 | 2.5 | GHW 33/10* | 33 | 10 | 3.0 |
| GMW 30/8 | 30 | 8 | 2.6 | GHW 40/12 | 40 | 12 | 4.0 |
| GMW 33/10* | 33 | 10 | 2.6 | GHW 50/16* | 50 | 16 | 4.0 |
| GMW 40/12 | 40 | 12 | 2.7 | GHW 65/19* | 65 | 19 | 4.0 |
| GMW 50/16 | 50 | 16 | 2.7 | GHW 70/22* | 70 | 22 | 4.0 |
| GMW 65/19* | 65 | 19 | 2.7 | GHW 75/22 | 75 | 22 | 4.0 |
| GMW 70/22* | 70 | 22 | 2.7 | GHW 95/25* | 95 | 25 | 4.0 |
| GMW 75/22 | 75 | 22 | 2.7 | GHW 105/30 | 105 | 30 | 4.0 |
| GMW 95/25* | 95 | 25 | 3.0 | GHW 115/34* | 115 | 34 | 4.0 |
| GMW 105/30 | 105 | 30 | 3.0 | GHW 130/36* | 130 | 36 | 4.0 |
| GMW 115/34 | 115 | 34 | 3.2 | GHW 140/42 | 140 | 42 | 4.2 |
| GMW 130/36 | 130 | 36 | 3.2 | GHW 160/50 | 160 | 50 | 4.3 |
| GMW 140/42 | 140 | 42 | 3.2 | GHW 180/55 | 180 | 55 | 4.3 |
| GMW 160/50 | 160 | 50 | 3.3 | GHW 200/60 | 200 | 60 | 4.3 |
| GMW 180/55 | 180 | 55 | 3.3 | GHW 250/70 | 250 | 70 | 4.3 |
| GMW 200/60 | 200 | 60 | 3.5 | GHW 320/90 | 320 | 90 | 4.5 |
| GMW 250/70 | 250 | 70 | 3.5 | GHW 375/110 | 375 | 110 | 4.5 |
| GMW 320/90 | 320 | 90 | 3.5 | GHW 425/120 | 425 | 120 | 4.5 |
| GMW 375/110 | 375 | 110 | 3.5 | | | | |
| GMW 425/120 | 425 | 120 | 3.5 | | | | |

* New Sizes  D,d : Internal Diameter

### Ordering Information



DYMER SINCE 1979 IAF EIACI 085-CB-QMS
An ISO 9001, ISO 14001 & ISO 45001:2018 Certified Company

GALA THERMO SHRINK PVT. LTD.

M : 88791 22705 | E: info@galathermo.com | W: www.galathermo.com


Issue 2 | Feb. 2025