

## 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 inked polyolefin material.

- Optional hot melt adhesive lining for complete environmental protection and insulation, according to IP 68 (Ingress Protection).
- Excellent resistance to weathering, UV rays, chemical and solvents.
- Maximum cut length available - 1500 mm. for tube size upto size 250 mm.
- Custom dimensions, thickness, length & colours available on request.
- Conforms to IEC 60684-3-247 standard.

### Technical Specification

PROPERTIES	VALUE	STANDARD
<b>Physical</b>		
Tensile Strength	11 N/mm <sup>2</sup> (Mpa) (min.)	ASTM D638
Ultimate Elongation	350 % (min)	ASTM D638
Longitudinal Change	-10% (max.)	ASTM D2671
Hardness	45 ±10 Shore D	ASTM D2240
Water absorption	0.5 % (max.)	ASTM D570
<b>Thermal</b>		
Accelerated ageing	(120°C for 500 hrs)	ASTM D2671
Tensile Strength	11 N/mm <sup>2</sup> (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 to +110°C	IEC 216
<b>Electrical</b>		
Dielectric Strength	12 KV/mm.(min)	ASTM D149
Volume Resistivity	1 x 10 <sup>14</sup> Ohm.cm (min)	ASTM D257
Dielectric constant	5 (max.)	ASTM D150

### 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 19/6	19	6	2.0	GHW 22/6*	22	6	2.5
GMW 22/6*	22	6	2.0	GHW 30/8	30	8	3.0
GMW 27/8	27	8	2.5	GHW 43/12	43	12	4.0
GMW 30/8	30	8	2.6	GHW 51/16	51	16	4.0
GMW 33/10	33	10	2.6	GHW 72/22	72	22	4.0
GMW 40/12	40	12	2.7	GHW 85/25	85	25	4.0
GMW 50/16	50	16	2.7	GHW 105/30	105	30	4.0
GMW 70/22	70	22	2.7	GHW 120/36	120	36	4.0
GMW 90/28	90	28	3.0	GHW 140/42	140	42	4.2
GMW 105/30	105	30	3.0	GHW 160/50	160	50	4.3
GMW 115/34	115	34	3.2	GHW 180/55	180	55	4.3
GMW 130/36	130	36	3.2	GHW 200/60	200	60	4.3
GMW 140/42	140	42	3.2	GHW 250/70*	250	70	4.3
GMW 160/50	160	50	3.3	GHW 320/90*	320	90	4.5
GMW 180/55	180	55	3.3	GHW 375/110*	375	110	4.5
GMW 200/60	200	60	3.5	GHW 425/120*	425	120	4.5
GMW 250/70*	250	70	3.5				
GMW 320/90*	320	90	3.5				
GMW 375/110*	375	110	3.5				
GMW 425/120*	425	120	3.5				

\* New Sizes D,d: Internal Diameter

### Ordering Information

