

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.

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

Technical Qualification Report : QR 1013

Ordering Information

