



THIN WALL TUBES

GSC: Thin Wall Flame Retardant Tube

GSC & GSC/YG are Heat Shrink Thin Wall Tubes suitable for below applications:

GSC Series:

- Light duty wire harnessing for electrical & electronic applications.
- Provides electrical insulation and protection for in-line components.
- Used as strain relief for electrical wire connection.
- Bus-bar insulation for switchgear.
- Color coding for wires, cables, terminals and components.

GSC/YG Series:

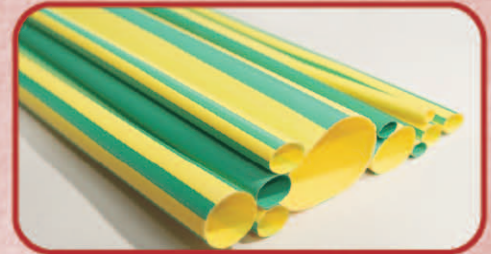
GSC/YG range of tubing is extremely flexible, flame-retardant, thin wall with yellow and green striped heat shrink polyolefin tubing especially for electrical equipment ground lead applications. The unique dual color striping of yellow and green provides an instant identification for ground wires.

GENERAL PROPERTIES OF PRODUCT:

- Halogen free, Flame retardant and self-extinguishing
- For Electrical Insulation up to 600 volts
- Resistance to chemical, copper corrosion and fungus
- Standard Colors: Black, White, Yellow, Red, Blue, Green, Yellow/Green and Clear.
- Shrink ratio 2:1
- UV stabilized
- Meets RoHS Compliance

SPECIFICATIONS:

MIL-1-23053/5 Class 2 & 3,  UL224 (File no. E328538) 125°C VW1, CSA C22.2



TECHNICAL DATA

PROPERTIES

Physical :

Tensile Strength	ASTM-D-638	16 N/mm ² (Min.)
Elongation	ASTM-D-638	300 % (Min.)
Water Absorption	ASTM-D-570	0.15% (Max.)
Low Temperature Flexibility	ASTM-D-2671	-55°C
Specific Gravity	ASTM-D-792	1.4
Longitudinal Change	ASTM-D-638	-10% (Max.)
Flammability	UL224 VW1	Pass

Thermal :

Operating Temperature	IEC216	-55°C to +125°C
Heat Shock (250°C for 4 hrs)		No dripping, cracking or flowing

Chemical :

Fungus Resistance	MIL-1-7444	Inert
Copper Corrosion	ASTM D 2671 B	Good
Chemical Resistance	ASTM-D-2671	Good

Electrical :

Dielectric Strength	ASTM-D-2671	>20kV / mm
Dielectric Constant	ASTM-D-150	3.0 (Max.)
Volume Resistance	ASTM-D-257	10 ¹⁴ Ohm cm (Min.)

SELECTION CHART

Part Number / Size	Supplied I.D. mm	Recovered I.D. mm	Recovered Wall Thickness	Spools Mtr./Spool	Cut Lengths 1.2Mtr./Box	Part Number / Size	Supplied I.D. mm	Recovered I.D. mm	Recovered Wall Thickness	Spools Mtr./Spool	Cut Lengths 1.2Mtr./Box
GSC 1.0/0.5	1.0 mm	0.5 mm	0.28 mm	200 m	600	GSC 16.0/8.0	16.0 mm	8.0 mm	0.69 mm	100 m	100
GSC 1.5/0.75	1.5 mm	0.75 mm	0.32 mm	200 m	600	GSC 18.0/9.0	18.0 mm	9.0 mm	0.69 mm	100 m	80
GSC 2.0/1.0	2.0 mm	1.0 mm	0.35 mm	200 m	600	GSC 20.0/10.0	20.0 mm	10.0 mm	0.78 mm	100 m	65
GSC 2.5/1.2	2.5 mm	1.2 mm	0.44 mm	200 m	600	GSC 25.0/12.5	25.0 mm	12.5 mm	0.78 mm	50 m	40
GSC 3.0/1.5	3.0 mm	1.5 mm	0.44 mm	200 m	500	GSC 30.0/15.0	30.0 mm	15.0 mm	0.87 mm	50 m	30
GSC 4.0/2.0	4.0 mm	2.0 mm	0.44 mm	200 m	250	GSC 40.0/20.0	40.0 mm	20.0 mm	0.97 mm	50 m	20
GSC 5.0/2.5	5.0 mm	2.5 mm	0.56 mm	100 m	250	GSC 50.0/25.0	50.0 mm	25.0 mm	0.97 mm	25 m	15
GSC 6.0/3.0	6.0 mm	3.0 mm	0.56 mm	100 m	200	GSC 70.0/35.0	70.0 mm	35.0 mm	1.10 mm	25 m	10
GSC 7.0/3.5	7.0 mm	3.5 mm	0.56 mm	100 m	200	GSC 80.0/40.0	80.0 mm	40.0 mm	1.27 mm	25 m	10
GSC 8.0/4.0	8.0 mm	4.0 mm	0.56 mm	100 m	175	GSC 100/50.0	100.0 mm	50.0 mm	1.17 mm	25 m	5
GSC 10.0/5.0	10.0 mm	5.0 mm	0.56 mm	100 m	150						
GSC 12.7/6.35	12.7 mm	6.35 mm	0.56 mm	100 m	120						
GSC 14.0/7.0	14.0 mm	7.0 mm	0.69 mm	100 m	100						

* Code for Y/G Striped Tubes - GSC/YG



GLC3: Commercial Grade Tubing

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GLC3 (3:1) is Heat Shrink Thin Wall Tube, designed to be used in critical areas such as Tunnels & Mines.

GENERAL PROPERTIES OF PRODUCT:

- Shrink ratio 3:1
- For Electrical Insulation upto 600 volts.
- Standard Colors: Black, White, Yellow, Red, Blue, Green and Clear.
- Meets RoHS Compliance



SPECIFICATIONS :

ASTM, IEC

TECHNICAL DATA

PROPERTIES	TEST METHOD	TYPICAL VALUE
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Physical :

Tensile Strength	ASTM-D-638	14 N/mm ² (Min.)
Elongation	ASTM-D-638	300 % (Min.)
Water Absorption	ASTM-D-570	0.15% (Max.)
Specific Gravity	ASTM-D-792	1.0
Longitudinal Change	ASTM-D-638	-10% (Max.)

Thermal :

Operating Temperature	IEC216	-55°C to +125°C
Heat Shock (250°C for 4 hrs)		No dripping, cracking or flowing

Chemical :

Fungus Resistance	MIL-1-7444	Inert
Copper Corrosion	ASTM D 2671 B	Good
Chemical Resistance	ASTM-D-2671	Good

Electrical :

Dielectric Strength	ASTM-D-2671	>20kV / mm
Dielectric Constant	ASTM-D-150	3.0 (Max.)
Volume Resistance	ASTM-D-257	10 ¹⁴ Ohm cm (Min.)

SELECTION CHART

Part Number / Size	Internal Diameter (mm)		Recovered Wall Thickness (mm)	Packing Configurations	
	Supplied	Recovered		Spools Mtr./Spool	Cut Lengths 1.2 Mtr./Box
GLC3-1.5/0.5	1.5 mm	0.5 mm	0.45 ±0.10	200	1000
GLC3-3.0/1.0	3.0 mm	1.0 mm	0.55 ±0.10	200	500
GLC3-6.0/2.0	6.0 mm	2.0 mm	0.65 ±0.10	50	200
GLC3-9.0/3.0	9.0 mm	3.0 mm	0.75 ±0.20	50	150
GLC3-12.0/4.0	12.0 mm	4.0 mm	0.75 ±0.20	50	120
GLC3-18.0/6.0	18.0 mm	6.0 mm	0.85 ±0.10	50	80
GLC3-24.0/8.0	24.0 mm	8.0 mm	1.00 ±0.20	50	40
GLC3-39.0/13.0	39.0 mm	13.0 mm	1.15 ±0.20	25	20

GDW: Dual Wall Tubing

GDW is dual wall tubing manufactured by co-extrusion of polyolefin and hot melt adhesive. Designed to provide both insulation and sealing for protected articles.

APPLICATIONS:

- Provides permanent waterproof barrier & environmental seal for electrical components such as wire splices & harness in automobile & communication industry.
- Used as an alternative to moulded parts and cable breakouts
- High shrink ratio enables insulation of cables with connectors of various sizes-Suitable for use in telecommunication, industrial equipment, automotive and avionics.

GENERAL PRODUCT PROPERTIES:

- Shrink ratio 3:1
- Operating temperature ranges from -55°C to +125°C
- Flame retardant and self-extinguishing
- Chemical, copper corrosion and fungus resistance
- Dielectric strength of 15KV/mm.
- Meets RoHS Compliance
- Meets IP 68 (Ingress Protection)

SPECIFICATIONS:

IEC, ASTM, AND MIL-SPEC



TECHNICAL DATA

PROPERTIES	TEST METHOD	TYPICAL VALUE
Physical		
Tensile Strength	ASTM-D-638	12 N/mm ² (Min.)
Elongation	ASTM-D-638	300% (Min.)
Water Absorption	ASTM-D-570	0.15 (Max).
Low Temperature Flexibility	ASTM-D-2671	-55°C
Specific Gravity	ASTM-D-792	1.4
Longitudinal Change	ASTM-D-638	-10%(Max)
Flammability	ASTM-D-2671	Pass
Thermal:		
Operating Temperature	IEC216	-55°C to +125°C (Outer Wall)
Heat Shock@ 250°C 4 hrs		No dripping, cracking or flowing (Outer Wall)
Chemical:		
Fungus Resistance	MIL-1-7444	Inert
Copper Corrosion	ASTM-D-2671 B	Good
Chemical Resistance	ASTM-D-2671	Good
Electrical :		
Dielectric Strength	ASTM-D-2671	>15kV / mm
Dielectric Constant	ASTM-D-150	3.0(Max.)
Volume Resistance	ASTM-D-257	10 ¹⁴ Ohm.cm (Min)

SELECTION CHART

Part Number/Size	Internal Dia. (mm)		Recovered Thickness	Recovered Adhesive	Standard Package
	Supplied	Recovered	(Incl. Adhesive)	Thickness	
GDW 3/1	3.0 mm	1.0 mm	1.0 mm	0.4 mm.	200m/spool
GDW 4.8/1.6	4.8 mm	1.6 mm	1.0 mm.	0.5 mm.	100m/spool
GDW 6/2	6.0 mm	2.0 mm	1.1 mm.	0.5 mm.	100m/spool
GDW 9/3	9.0 mm	3.0 mm	1.3 mm	0.6 mm.	50m/spool
GDW 12/4	12.0 mm	4.0 mm	1.5 mm	0.7 mm.	30m/spool
GDW 18/6	18.0 mm	6.0 mm	2.0 mm	0.8 mm.	30m/spool
GDW 24/8	24.0 mm	8.0 mm	2.3 mm	0.9 mm.	30m/spool
GDW 39/13	39.0 mm	13.0 mm	2.5 mm	1.0 mm.	20m/spool
GDW 50/17	50.0 mm	17.0 mm.	2.5 mm.	1.2 mm.	15m/spool
GDW 75/25	75.0 mm	25.0 mm.	2.5 mm.	1.2 mm.	15m/spool
GDW 100/34	100.00 mm.	34.0 mm.	2.5 mm.	1.2 mm.	15m/spool