

CARROLL HEAT SHRINK TUBING

The wide range of Carroll heat shrinkable products ensure that whether you are insulating, colour coding, strain relieving, protecting or sealing, the right product is available to do the job.

Grade- HS – General Purpose Tubing

This flexible Carroll Heat Shrink Tubing is manufactured from flame retardant, irradiated crosslinked, modified polyolefin. Recognised by Underwriters Laboratories (UL) and Canadian Standards (CSA), the tubing exhibits a VW-1 flame retardant rating, (except clear), is rated at 600V and has an operating temperature range of -25°C to 125°C. Shrink temperature is 70-125°C and the shrink ratio is 2:1. Designed to insulate, colour code, strain relieve and provide abrasion and mechanical protection. Tubing is supplied in either 1.2m (4 ft) lengths or full spools. A complete range of diameters is available from 1mm to 102mm.

Grade- DWL – Dual Wall Tubing

Carroll Dual Wall Tubing is manufactured from a co-extrusion of flame-retardant, flexible, 3:1 shrink ratio heat shrinkable tubing and a special adhesive lining. When the tubing is heated, the adhesive lining melts and flows to form a positive environmental seal. The lining adheres to the outer tubing and the surface below, creating an excellent barrier to moisture penetration.

Typical applications include the sealing and insulation of electrical splices, terminations, connector backshells, battery terminals and repairs to damaged cable. Due to the tubing's flexibility, high shrink ratio and the wide variety of surfaces to which the adhesive will bond, the product is excellent in areas requiring corrosion and mechanical protection.

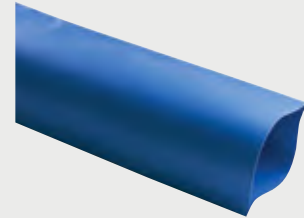
3:1 shrink ratio allows for insulation and sealing of irregular shapes. Dual wall provides increased mechanical protection while maintaining flexibility when installed. Adhesive bonds to a wide variety of plastics, rubber, and metals, including polyethylene, neoprene and steel.

Grade- HWL – Heavy Wall Tubing

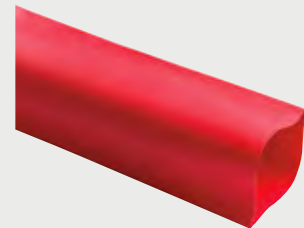
Carroll Heavy Wall Tubing is manufactured from chemically cross linked polyolefin heat shrinkable tubing with a shrink ratio greater than 2.5:1, and a special adhesive lining. When the tubing is heated, the adhesive lining melts and flows to form a positive environmental seal. The lining adheres to the outer tubing and the surface below, creating an excellent barrier to moisture penetration.

The tubing exhibits excellent insulation capability and is resistant to cracking.

Typical applications include the sealing and insulation of outdoor and indoor electrical power joints, terminations, and repairs to damaged cable up to 1Kv.



HS - GENERAL PURPOSE TUBING



DWL - DUAL WALL TUBING



HWL - HEAVY WALL TUBING

HS Grade General Purpose, Thin Wall Tubing

Carroll General Purpose Thin Wall Tubing is designed to insulate, colour code, strain relieve and provide abrasion and mechanical protection.

Manufactured from a 2:1 shrink ratio, flexible, flame retardant, irradiated crosslinked, heat-shrinkable, modified polyolefin tubing.

Lengths

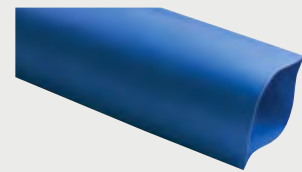
CODE	PART NO.	SUPPLIED ID mm	APPROX SUPPLIED LAYFLAT	COLOUR	LENGTH m	CODE	PART NO.	SUPPLIED ID mm	APPROX SUPPLIED LAYFLAT	COLOUR	LENGTH m
P	HSL1BK	1.5 + - 0.3	-	Black	1.22	P	HSL10BK	10.8 + - 0.5	16	Black	1.22
	HSL1BL	1.5 + - 0.3	-	Blue	1.22		HSL10BL	10.8 + - 0.5	16	Blue	1.22
	HSL1C	1.5 + - 0.3	-	Clear	1.22		HSL10C	10.8 + - 0.5	16	Clear	1.22
	HSL1G	1.5 + - 0.3	-	Green	1.22		HSL10G	10.8 + - 0.5	16	Green	1.22
	HSL1RD	1.5 + - 0.3	-	Red	1.22		HSL10GY	10.8 + - 0.5	16	Green/Yellow	1.22
	HSL1W	1.5 + - 0.3	-	White	1.22		HSL10RD	10.8 + - 0.5	16	Red	1.22
	HSL1Y	1.5 + - 0.3	-	Yellow	1.22		HSL10W	10.8 + - 0.5	16	White	1.22
	HSL1.5BK	2.0 + - 0.3	-	Black	1.22		HSL10Y	10.8 + - 0.5	16	Yellow	1.22
	HSL1.5BL	2.0 + - 0.3	-	Blue	1.22		HSL13BK	13.5 + - 0.5	20	Black	1.22
	HSL1.5C	2.0 + - 0.3	-	Clear	1.22		HSL13BL	13.5 + - 0.5	20	Blue	1.22
	HSL1.5G	2.0 + - 0.3	-	Green	1.22		HSL13C	13.5 + - 0.5	20	Clear	1.22
	HSL1.5RD	2.0 + - 0.3	-	Red	1.22		HSL13G	13.5 + - 0.5	20	Green	1.22
	HSL1.5W	2.0 + - 0.3	-	White	1.22		HSL13GY	13.5 + - 0.5	20	Green/Yellow	1.22
	HSL1.5Y	2.0 + - 0.3	-	Yellow	1.22		HSL13RD	13.5 + - 0.5	20	Red	1.22
	HSL2BK	2.5 + - 0.3	-	Black	1.22		HSL13W	13.5 + - 0.5	20	White	1.22
	HSL2BL	2.5 + - 0.3	-	Blue	1.22		HSL13Y	13.5 + - 0.5	20	Yellow	1.22
	HSL2C	2.5 + - 0.3	-	Clear	1.22		HSL16BK	16.5 + - 0.5	-	Black	1.22
	HSL2RD	2.5 + - 0.3	-	Red	1.22		HSL16RD	16.5 + - 0.5	-	Red	1.22
	HSL2W	2.5 + - 0.3	-	White	1.22		HSL19BK	21.5 + - 0.7	31	Black	1.22
	HSL2Y	2.5 + - 0.3	-	Yellow	1.22		HSL19BL	21.5 + - 0.7	31	Blue	1.22
	HSL3BK	3.5 + - 0.4	-	Black	1.22		HSL19C	21.5 + - 0.7	31	Clear	1.22
	HSL3BL	3.5 + - 0.4	-	Blue	1.22		HSL19G	21.5 + - 0.7	31	Green	1.22
	HSL3C	3.5 + - 0.4	-	Clear	1.22		HSL19GY	21.5 + - 0.7	31	Green/Yellow	1.22
	HSL3G	3.5 + - 0.4	-	Green	1.22		HSL19RD	21.5 + - 0.7	31	Red	1.22
	HSL3RD	3.5 + - 0.4	-	Red	1.22		HSL19W	21.5 + - 0.7	31	White	1.22
	HSL3W	3.5 + - 0.4	-	White	1.22		HSL19Y	21.5 + - 0.7	31	Yellow	1.22
	HSL3Y	3.5 + - 0.4	-	Yellow	1.22		HSL25BK	25.6 + - 0.7	39	Black	1.22
	HSL5BK	5.5 + - 0.4	8	Black	1.22		HSL25BL	25.6 + - 0.7	39	Blue	1.22
	HSL5BL	5.5 + - 0.4	8	Blue	1.22		HSL25C	25.6 + - 0.7	39	Clear	1.22
	HSL5C	5.5 + - 0.4	8	Clear	1.22		HSL25G	25.6 + - 0.7	39	Green	1.22
	HSL5G	5.5 + - 0.4	8	Green	1.22		HSL25GY	25.6 + - 0.7	39	Green/Yellow	1.22
	HSL5RD	5.5 + - 0.4	8	Red	1.22		HSL25RD	25.6 + - 0.7	39	Red	1.22
	HSL5W	5.5 + - 0.4	8	White	1.22		HSL25W	25.6 + - 0.7	39	White	1.22
	HSL5Y	5.5 + - 0.4	8	Yellow	1.22		HSL25Y	25.6 + - 0.7	39	Yellow	1.22
	HSL6BK	6.5 + - 0.4	11	Black	1.22		HSL38BK	41.5 + - 0.7	60	Black	1.22
	HSL6BL	6.5 + - 0.4	11	Blue	1.22		HSL38BL	41.5 + - 0.7	60	Blue	1.22
	HSL6C	6.5 + - 0.4	11	Clear	1.22		HSL38C	41.5 + - 0.7	60	Clear	1.22
	HSL6G	6.5 + - 0.4	11	Green	1.22		HSL38G	41.5 + - 0.7	60	Green	1.22
	HSL6GY	6.5 + - 0.4	11	Green/Yellow	1.22		HSL38GY	41.5 + - 0.7	60	Green/Yellow	1.22
	HSL6RD	6.5 + - 0.4	11	Red	1.22		HSL38RD	41.5 + - 0.7	60	Red	1.22
	HSL6W	6.5 + - 0.4	11	White	1.22		HSL38W	41.5 + - 0.7	60	White	1.22
	HSL6Y	6.5 + - 0.4	11	Yellow	1.22		HSL38Y	41.5 + - 0.7	60	Yellow	1.22





Lengths

CODE	PART NO.	SUPPLIED ID mm	APPROX SUPPLIED LAYFLAT	COLOUR	LENGTH m
P	HSL51BK	51.5 + - 0.7	80	Black	1.22
	HSL51BL	51.5 + - 0.7	80	Blue	1.22
	HSL51C	51.5 + - 0.7	80	Clear	1.22
	HSL51G	51.5 + - 0.7	80	Green	1.22
	HSL51RD	51.5 + - 0.7	80	Red	1.22
	HSL51W	51.5 + - 0.7	80	White	1.22
	HSL51Y	51.5 + - 0.7	80	Yellow	1.22
	HSL76BK	≥80	120	Black	1.22
	HSL76BL	≥80	120	Blue	1.22
	HSL76R	≥80	120	Red	1.22
	HSL76W	≥80	120	White	1.22
	HSL76G	≥80	120	Green	1.22
	HSL76Y	≥80	120	Yellow	1.22
	HSL76C	≥80	120	Clear	1.22
	HSL102BK	≥100	160	Black	1.22
	HSL102BL	≥100	160	Blue	1.22
	HSL102R	≥100	160	Red	1.22
	HSL102C	≥100	160	Clear	1.22
	HSL102G	≥100	160	Green	1.22
	HSL102W	≥100	160	White	1.22
	HSL102Y	≥100	160	Yellow	1.22



(HS) GENERAL PURPOSE HEATSHRINK

HS Grade General Purpose, Thin Wall Tubing

Spools

CODE	PART NO.	SUPPLIED ID mm	APPROX SUPPLIED LAYFLAT	COLOUR	LENGTH m
P	HS1BK	1.5 + - 0.3	-	Black	200
	HS1.5BK	2.0 + - 0.3	-	Black	200
	HS1.5C	2.0 + - 0.3	-	Clear	200
	HS1.5W	2.0 + - 0.3	-	White	200
	HS2BK	2.5 + - 0.3	-	Black	200
	HS2C	2.5 + - 0.3	-	Clear	200
	HS2Y	2.5 + - 0.3	-	Yellow	200
	HS3BK	3.5 + - 0.4	-	Black	200
	HS3BL	3.5 + - 0.4	-	Blue	200
	HS3C	3.5 + - 0.4	-	Clear	200
	HS3RD	3.5 + - 0.4	-	Red	200
	HS3W	3.5 + - 0.4	-	White	200
	HS5BK	5.5 + - 0.4	8	Black	100
	HS5BL	5.5 + - 0.4	8	Blue	100
	HS5C	5.5 + - 0.4	8	Clear	100
	HS5RD	5.5 + - 0.4	8	Red	100
	HS5W	5.5 + - 0.4	8	White	100
	HS5Y	5.5 + - 0.4	8	Yellow	100
	HS6BK	6.5 + - 0.4	11	Black	50
	HS6BL	6.5 + - 0.4	11	Blue	50
	HS6C	6.5 + - 0.4	11	Clear	50
	HS6GY	6.5 + - 0.4	11	Green/Yellow	61
	HS6RD	6.5 + - 0.4	11	Red	50
	HS6W	6.5 + - 0.4	11	White	50
	HS7C	6.5 + - 0.4	11	Clear	50
	HS10BK	10.8 + - 0.5	16	Black	50
	HS10BL	10.8 + - 0.5	16	Blue	50
	HS10C	10.8 + - 0.5	16	Clear	50
	HS10GY	10.8 + - 0.5	16	Green/Yellow	61
	HS10RD	10.8 + - 0.5	16	Red	50
	HS10W	10.8 + - 0.5	16	White	50
	HS10Y	10.8 + - 0.5	16	Yellow	50
	HS13BK	13.5 + - 0.5	20	Black	50
	HS13BL	13.5 + - 0.5	20	Blue	50
	HS13C	13.5 + - 0.5	20	Clear	50
	HS13GY	13.5 + - 0.5	20	Green/Yellow	61
HS13RD	13.5 + - 0.5	20	Red	50	
HS13W	13.5 + - 0.5	20	White	50	
HS16BK	16.5 + - 0.5	-	Black	50	
HS16BL	16.5 + - 0.5	-	Blue	50	
HS16C	16.5 + - 0.5	-	Clear	50	
HS16RD	16.5 + - 0.5	-	Red	50	
HS16W	16.5 + - 0.5	-	White	50	

CODE	PART NO.	SUPPLIED ID mm	APPROX SUPPLIED LAYFLAT	COLOUR	LENGTH m
P	HS19BK	21.5 + - 0.7	31	Black	50
	HS19BL	21.5 + - 0.7	31	Blue	50
	HS19C	21.5 + - 0.7	31	Clear	50
	HS19GY	21.5 + - 0.7	31	Green/Yellow	61
	HS19RD	21.5 + - 0.7	31	Red	50
	HS19W	21.5 + - 0.7	31	White	50
	HS25BK	25.6 + - 0.7	39	Black	50
	HS25BL	25.6 + - 0.7	39	Blue	50
	HS25C	25.6 + - 0.7	39	Clear	50
	HS25G	25.6 + - 0.7	39	Green	50
	HS25GY	25.6 + - 0.7	39	Green/Yellow	61
	HS25RD	25.6 + - 0.7	39	Red	50
	HS25W	25.6 + - 0.7	39	White	50
	HS30BL	30.1 + - 0.7	-	Blue	50
	HS38BK	41.5 + - 0.7	60	Black	50
	HS38BL	41.5 + - 0.7	60	Blue	50
	HS38C	41.5 + - 0.7	60	Clear	30
	HS38GY	41.5 + - 0.7	60	Green/Yellow	30
	HS38RD	41.5 + - 0.7	60	Red	50
	HS38W	41.5 + - 0.7	60	White	50
	HS51BK	51.5 + - 0.7	80	Black	25
	HS51BL	51.5 + - 0.7	80	Blue	25
	HS51C	51.5 + - 0.7	80	Clear	25
	HS51RD	51.5 + - 0.7	80	Red	25
	HS51W	51.5 + - 0.7	80	White	25
	HS51Y	51.5 + - 0.7	80	Yellow	25
	HS76BK	≥80	120	Black	25
	HS76BL	≥80	120	Blue	25
	HS76C	≥80	120	Clear	25
	HS76G	≥80	120	Green	25
	HS76RD	≥80	120	Red	25
	HS76W	≥80	120	White	25
	HS76Y	≥80	120	Yellow	25
	HS102BK	≥100	160	Black	25
	HS102BL	≥100	160	Blue	25
	HS102RD	≥100	160	Red	25
HS102C	≥100	160	Clear	25	
HS102G	≥100	160	Green	25	
HS102W	≥100	160	White	25	



HS SPOOLS

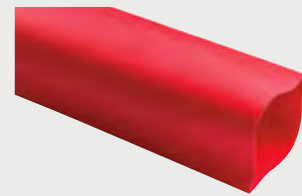


DWL Grade Dual Wall Tubing

Carroll Dual Wall Tubing is manufactured from a co-extrusion of flame-retardant, flexible, 3:1 shrink ratio heat shrinkable tubing with a special adhesive lining. When the tubing is heated, the adhesive lining melts and flows to form a positive environmental seal. The lining adheres to the outer tubing and the surface below, creating an excellent barrier to moisture penetration. Typical applications include the sealing and insulation of electrical splices, terminations, connector backshells, battery terminals and repairs to damaged cable. Due to the tubing's flexibility, high shrink ratio and the wide variety of surfaces to which the adhesive will bond, the product is excellent in areas requiring corrosion and mechanical protection.

Lengths

CODE	PART NO.	SUPPLIED ID mm	COLOUR	LENGTH m
PA	DWL3/1	3.5+ - 0.3	Black	1.22
	DWL6/2	6.8+ - 0.4	Black	1.22
	DWL9/3	9.9+ - 0.4	Black	1.22
	DWL12/4	13.2+ - 0.5	Black	1.22
	DWL12/4R	13.2+ - 0.5	Red	1.22
	DWL19/6	19.6+ - 0.5	Black	1.22
	DWL19/6R	19.6+ - 0.5	Red	1.22
	DWL24/8	25.4+ - 0.8	Black	1.22
	DWL24/8R	25.4+ - 0.8	Red	1.22
	DWL40/13	40.0+ - 0.8	Black	1.22



**DWL GRADE
DUAL WALL TUBING**

Spools

CODE	PART NO.	SUPPLIED ID mm	COLOUR	LENGTH m
PA	DW3/1	3.5+ - 0.3	Black	200
	DW6/2	6.8+ - 0.4	Black	100
	DW9/3	9.9+ - 0.4	Black	50
	DW12/4	13.2+ - 0.5	Black	25
	DW12/4R	13.2+ - 0.5	Red	25
	DW19/6	19.6+ - 0.5	Black	25
	DW24/8	25.4+ - 0.8	Black	25
	DW24/8R	25.4+ - 0.8	Red	25
	DW40/13	40.0+ - 0.8	Black	25



DW SPOOL

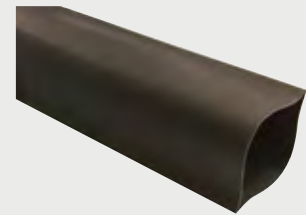


HWL Heavy Wall Adhesive Lined Tubing

Heavy Wall tubing provides a fast, clean, permanent, safe and cost effective method of sealing, insulating and protecting cable joints and terminations in underwater or underground applications. Voltage rated for 0.6/1kv applications, the tubing has a high variable shrink ratio, is UV resistant, and operates within a -55°C to +90°C temperature range. The polyamide - based adhesive provides a high bond strength and protection against moisture, aggressive fluids and corrosion.

Lengths

CODE	PART NO.	SUPPLIED ID mm	RECOVERED ID mm	COLOUR	LENGTH m
PA	HWL12/5	12	5	Black	1.22
	HWL20/8	20	8	Black	1.22
	HWL30/12	30	12	Black	1.22
	HWL40/17	40	17	Black	1.22
	HWL52/20	52	20	Black	1.22
	HWL68/26	68	26	Black	1.22
	HWL80/30	80	30	Black	1.22
	HWL102/44	102	44	Black	1.22
	HWL122/52	122	52	Black	1.22
	HWL146/58	148	58	Black	1.22



**HWL HEAVY WALL
ADHESIVE LINED TUBING**

High Shrink Ratio, Thick Adhesive Lined Tubing

This adhesive lined heat shrink tubing has a high shrink ratio, in excess of 4:1, specially designed for environmental sealing of terminations and splices. It is relatively rigid when shrunk and features extra adhesive. The broad operating temperature range of -40°C to 130°C makes the tubing especially suitable for use in higher temperature environments eg: engine compartments etc.

Lengths

CODE	PART NO.	SUPPLIED OD mm	AFTER HEATING OD mm	COLOUR	LENGTH m
PA	HSRL1	5.72	1.27	Black	1.22
	HSRL2	7.44	1.65	Black	1.22
	HSRL3	10.85	2.41	Black	1.22
	HSRL4	17.78	4.45	Black	1.22

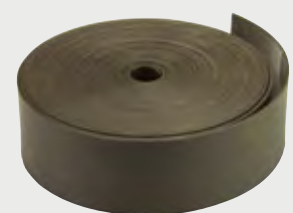


HIGH RATIO HEAT SHRINK

HEAT SHRINK TAPE

Carroll Heat Shrink Tape is an easy to work with, flexible tape that exhibits both the advantages of heat shrink tubing and a self-amalgamating tape. A simple and economical method of repairing damage to cable insulations. Easy forming of T joints, multiple breakouts or junctions. Effective sealing of complex shapes. The tape is wound loosely ensuring tape overlaps by approximately 15mm or 2/3rds of the tape width, then heat and shrink. Further layers can then be applied until desired thickness is achieved. Operating Temperature -55 to 105°C.

CODE	PART NO.	COLOUR	LENGTH	WIDTH mm	THICKNESS mm
PB	HST25BK	Black	5	25	1



HEAT SHRINK TAPE

Heat Shrink Kits

An assortment of popular sizes, red and black general purpose heat shrink tubing supplied in a boxed grab kit.

CODE	PART NO.	SIZE RANGE	LENGTHS mm	COLOURS	TOOL QTY
P	HSKB	2-25mm	Assorted	Black & Red	1

Heat Shrinkable End Caps - Adhesive Lined

Carroll heat shrinkable end caps are hot melt adhesive lined and are used to provide protection to cable ends against oxidation, ozone, UV and more.

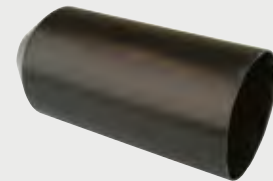
Continuous operating temperature: -45°C to 105°C

Shrink temperature: start 110°C, fully recovered 130°C

CODE	PART NO.	SUPPLIED mm	RECOVERED ID mm	PACK QTY
PA	EC24/11	25	11	1
	EC33/18	35	17	1
	EC50/27	55	26	1
	EC70/38	75	30	1
	EC100/48	100	40	1
	EC120/59	120	57	1



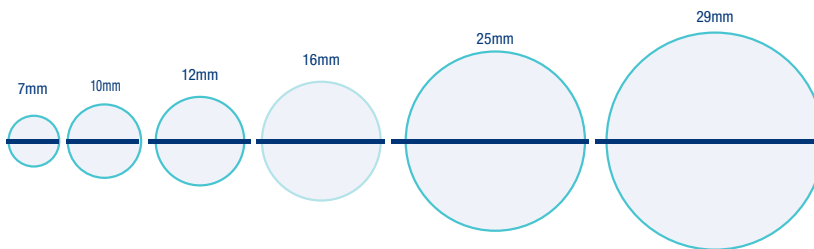
HEAT SHRINK KIT



END CAPS

SIZE SELECTION CHART

To identify ordering diameter, match flattened tubing against the horizontal line.



Heat Shrink Bus Bar Selection Chart

For applicable Heat Shrink Diameters

CODE	DEPTH	WIDTH	12mm	19mm	25mm	38mm	51mm	76mm	102mm	125mm
P			1/2"	3/4"	1"	1.5"	2"	3"	4"	5"
	3.2mm	1/8	HS13	HS19	HS25	HS38	HS51	HS76	HS102	HS102
	4.8mm	3/16	HS13	HS19	HS25	HS38	HS51	HS76	HS102	HS102
	6.4mm	1/4	-	HS19	HS25	HS38	HS51	HS76	HS102	HS102
	9.5mm	3/8	-	-	-	HS38	HS51	HS76	HS102	HS102
	13mm	1/2	-	-	-	-	HS51	HS76	HS102	HS102

Note: Bends may require larger diameter heat shrink. Pre-heat bus bar before applying tubing for a more even finish.