

LSA



Dual Wall Adhesive-Lined Heat-Shrink Polyolefin Tubing

Adhesive lined heat shrinkable tubing with environmental sealing capability for a wide variety of electrical applications, including automotive and marine wire harness, wire splices, breakouts, and connector-to-cable transitions

Features and Application

2:1 shrink ratio

Superior sealing against water, moisture or other contaminants

Inner adhesive bonds to plastics, steel and polyethylene

Out jacket flame retardant

Continuous operating temperature: -45°C -125°C

Shrink Temperature: min. 125°C

UL E361238

Dimensions 2:1 (2X)

Size		AS Supplied	After Recovery			Standard Package	
Inch	mm	Internal Diameter mm(min)	Internal Diameter mm(max)	Total Wall Thickness mm(nom)	Adhesive Thickness mm(nom)	Length/m Pool Stick	
1/16	1,6	1,6	0,8	0,60±0,30	0,30±0,20	200	1,22
3/32	2,4	2,4	1,2	0,70±0,30	0,35±0,20	200	1,22
1/8	3,2	3,2	1,6	0,70±0,30	0,35±0,20	200	1,22
3/16	4,8	4,8	2,4	0,80±0,30	0,40±0,20	100	1,22
1/4	6,4	6,4	3,2	0,80±0,30	0,40±0,20	100	1,22
5/16	7,9	7,9	3,9	0,90±0,30	0,45±0,20	100	1,22
3/8	9,5	9,5	4,8	0,90±0,30	0,45±0,20	50	1,22
1/2	12,7	12,7	6,4	0,95±0,40	0,45±0,20	25	1,22
5/8	16,0	16,0	7,9	0,95±0,40	0,45±0,20	25	1,22
3/4	19,1	19,1	9,5	1,00±0,40	0,45±0,20	25	1,22
1	25,4	25,4	12,7	1,10±0,40	0,50±0,20	25	1,22
1-1/4	31,8	31,8	15,0	1,15±0,40	0,50±0,20	25	1,22
1-1/2	38,1	38,1	19,0	1,25±0,40	0,50±0,20	25	1,22
1-3/4	50,8	50,8	25,4	1,50±0,40	0,60±0,20	25	1,22

other diameters upon request

TECHNICAL DATA SHEET

Revision Number. 1

Last Edited 3. juli 2023

Dimensions 3:1 (3X)

Size		Expanded	After Recovery			Standard Package	
Inch	mm	Internal Diameter mm(min)	Internal Diameter mm(max)	Total Wall Thickness mm(nom)	Adhesive Thickness mm(nom)	Length/m Spool Stick	
3/32	2,4	2,4	0,8	0,80±0,30	0,40±0,20	200	1,22
1/8	3,2	3,2	1,0	0,90±0,30	0,40±0,20	200	1,22
3/16	4,8	4,8	1,6	1,05±0,30	0,40±0,20	100	1,22
1/4	6,4	6,4	2,0	1,25±0,30	0,45±0,20	100	1,22
5/16	7,9	7,9	2,7	1,35±0,30	0,50±0,20	100	1,22
3/8	9,5	9,5	3,0	1,45±0,30	0,50±0,20	50	1,22
1/2	12,7	12,7	4,0	1,65±0,30	0,50±0,20	25	1,22
5/8	16,0	16,0	5,2	1,80±0,30	0,55±0,30	25	1,22
3/4	19,1	19,1	6,0	1,95±0,30	0,60±0,30	25	1,22
1	25,4	25,4	8,0	2,00±0,40	0,60±0,30	25	1,22
1-1/4	31,8	31,8	10,2	2,15±0,40	0,65±0,30	25	1,22
1-1/2	38,1	38,1	13,0	2,45±0,40	0,60±0,30	25	1,22
2	50,8	50,8	17,0	2,75±0,40	0,75±0,30	25	1,22
3	76,2	76,2	25,0	3,05±0,40	1,05±0,40	25	1,22

other diameters upon request

Dimensions 4:1 (4X)

Size		Expanded	After Recovery			Standard Package	
Inch	mm	Internal Diameter mm(min)	Internal Diameter mm(max)	Total Wall Thickness mm(nom)	Adhesive Thickness mm(nom)	Length/m Spool Stick	
5/32	4,0	4,0	1,0	1,00±0,15	0,40±0,15	200	1,22
1/4	6,0	6,0	1,5	1,10±0,15	0,40±0,15	100	1,22
5/16	8,0	8,0	2,0	1,50±0,15	0,50±0,15	50	1,22
1/2	12,0	12,0	3,0	1,70±0,15	0,50±0,15	25	1,22
5/8	16,0	16,0	4,0	2,00±0,15	0,60±0,15	25	1,22
25/32	20,0	20,0	5,0	2,30±0,25	0,60±0,15	25	1,22
1	24,0	24,0	6,0	2,60±0,25	0,60±0,15	25	1,22
1-1/4	32,0	32,0	8,0	3,00±0,30	0,70±0,15	25	1,22
1-1/2	40,0	40,0	10,0	3,00±0,30	0,70±0,15	25	1,22
2	52,0	52,0	13,0	3,30±0,30	0,70±0,15	25	1,22

other diameters upon request

Technical Data

Property	Test method	Standard Performance
Tensile strength(MPa)	ASTM D 2671	≥10,4
Elongation(%)	ASTM D 2671	≥300
Tensile strength after aging(MPa)	UL224 158°Cx168h	≥7,3
Elongation after aging (%)	UL224 158°Cx168h	≥200
Dielectric strength(kV/mm)	IEC 60243	≥15
Volume resistivity(Ω.cm)	IEC 60093	≥10 ¹⁴

Adhesive

Property	Test method	Standard Performance
Water Absorption	ASTM D 570	<0,2%
Softening Point(°C)	ASTM E 28	95°C
Peel strength (PE)	ASTM D 1000	120N/25mm
Peel strength (AL)	ASTM D 1000	80N/25mm

***transparent not flame retardant**

***transparent operating temperature 105°C**