

Thin Wall Crosslinked Polyolefin FR

Description:

FR is a flame retardant tubing (except clear) offering good physical, chemical and electrical properties. FR is used extensively for lightweight cable harnessing, insulation, identification and colour coding. Available in sizes from 1,2mm (3/64") to 101,6mm (4").

DIMENSIONS

Expanded Internal diameter (min)		Recovered Internal	
mm	IN	Diameter mm (max)	Wall thickness mm (nom)
1,2	3 / 64	0,6	0,45
1,6	1 / 16	0,8	0,45
2,4	3 / 32	1,2	0,51
3,2	1 / 8	1,6	0,51
4,8	3 / 16	2,4	0,51
6,4	1 / 4	3,2	0,64
9,5	3 / 8	4,8	0,64
12,7	1 / 2	6,4	0,64
16,0	5 / 8	8,0	0,64
19,0	3 / 4	9,5	0,76
25,4	1	12,7	0,89
32,0	1 1 / 4	16,0	0,89
38,1	1 1 / 2	19,0	1,02
50,8	2	25,4	1,14
76,2	3	38,1	1,27
101,6	4	50,8	1,40

PHYSICAL DATA

Property	Test Method	Typical Performance coloured	Typical Performance clear
Tensile Strength	IEC 60684-2	15,0 Mpa	19,0 Mpa
Elongation	IEC 60684-2	450%	530%
Longitudinal Change	ASTM-D 2671	±10% max.	±10% max.
Secant Modulus	ASTM-D 882	175 Mpa max.	175 Mpa max.
Specific Gravity	ASTM-D 792, A-I	1,25 g/cm³	1,0 g/cm³
Elongation after heat aging (168 hrs at 150 °C)	UL 224	300%	490%
Elongation after heat shock (4 hrs at 200 °C)	IEC 811-1-2	400%	500%
Low temperature Flexibility	ASTM-D 2671 meth. C	Does not break at -55 °C	Does not break at -55 °C
Flammability	UL 224 (coloured)	Flame retardant	-
	FMVSS 302 (clear)	-	Passed

ELECTRICAL DATA

Dielectric Strength	VDE 0303 part 2	24kV/mm	26 kV/mm
Volume Resistivity	VDE 0303 part 3	10 ¹⁵ Ω x cm	10 ¹⁵ Ω x cm

CHEMICAL

Corrosive Action	ASTM-D 2671 - meth. A	Non-corrosive	Non-corrosive
Copper Compatibility	ASTM-D 2671 - meth. B	Non-corrosive	Non-corrosive
Chemical Resistance		Good	Good
Water Absorption	VDE 0472	0,15%	0,30%

Standard colours:

Black, clear, red, yellow, blue, white and green.
Special colours on request.

Material:

Modified Polyolefin

The operating temperature is:

-55 °C to +125 °C.

Shrink Temperature:

120 °C – 200 °C

Specifications:



UL 224 – E223418
CSA C22.2 - LR 66150

Compliant with:

EU 2002/95/EG, RoHS-directive

Applications:

This sleeving combines good mechanical resistance, flexibility, chemical resistance and dielectric strength.

Handling:

Product should be stored at temperatures under 30 °C (86F), in a dust free, dry environment. Shelf life under these conditions would be at least 36 months.

Notes:

This information and data is believed to be accurate and reliable. Although the information and recommendations set forth herein are presented in good faith and believed to be correct as of this date, Brady makes no representations as to the completeness or accuracy thereof. We place at your disposal the technical information necessary for the correct use of our products. As conditions and methods of use are beyond our control, that the person receiving the same will make their own determination as to the suitability for their purpose. We reserve the right to modify characteristics with the aim of improving the product and adapting it to the requirements of the market.