Irrax tubeER2 (Heat-resistant, flame-retardant tubing for general purpose)

Basic Properties

(1) Materials : Cross-linked, flexible, flame-retardant polyolefin resin

(2) Continuous operating temperature: -55 to 150°C

• Features & Benefits

- (1) Flame-retardant
- (2) Excellent in abrasion resistance

• Specifications & Approvals

SFP standard (RE1-2999)

- Marking
- SUMITOMO IRRAXTUBE ER2
- Applications
- 1) Insulation and heat protection of wire harnesses and parts for automobile
- 2) Protection of wiring inside an airplane where flame-retardance is required
- 3) Protection of lead wires and parts which are subject to high temperature
- Colors

Standard colors: Black

Properties

Properties	Items	Requirements	Typical values*
Mechanical	Tensile Strength(before aging)	15.7MPa min.	23.4MPa
	Ultimate Elongation(before aging)	150% min.	430%
	Tensile Strength(after aging)	180°CX200hours, 9.8MPa min.	22.2MPa
	Ultimate Elongation(after aging)	180°CX200hours, 50% min.	420%
	Secant Modulus	107.9±9.6MPa	106.4MPa
	Heat shock	250°C×4hours, No crack	Pass
	Cold bend	-55°C×4hours	Pass
Electrical	Dielectric Voltage Withstand	A.C.2.5kV×60 sec. No breakdown	Pass
	(before aging)		
	Volume Resistivity	1.0×10¹⁰Ω•cm min.	1.1×10¹8Ω•cm
Chemical	Flammability	Flame-retardant	Pass
		(according to AFT*)	

^{*1:} Some are not guaranteed performance

Sizes

Nominal Size	Inside Diameter (mm)	Wall Thickness (mm)	Unit Length (m)
6X0.45	6.0±0.5	0.45±0.05	200 min.
8X0.45	8.0±0.5	0.45±0.05	100 min.
10X0.45	10.0±0.5	0.45±0.05	100 min.
12X0.45	12.0±0.5	0.45±0.05	100 min.

Longitudinal change: -10% min. (125°C×5inute)

•Caution!

All statements and technical information contained herein are based on tests we believe to be liable and only general properties are described. Therefore, safety of each specific application by the users should not be guaranteed. The users themselves should determine product conformance to your specific applications and assume all responsibility for all damages that may be caused directly or indirectly when using the products.

^{*2:} AFT:All tubing flame test(UL224)