

IRRAX™ TUBE ER2

[150°C heat-resistant flame-retarded tubing]

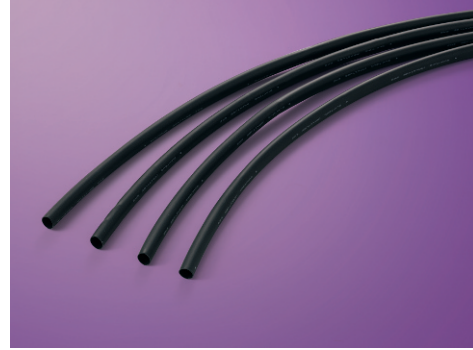
✓ RoHS directive

Waterproofing

Flame-retarded

UL recognized

CSA recognized



Basic Properties

- Material: Cross-linked flexible flame-retarded polyolefin
- Continuous operating temperature: -55 to 150°C

Features

- Highly heat resistant
- Flame-retarded (PBDE/PBB-free)
- Excellent abrasion resistance

Specifications/Approvals

SFP standard (R1-2998)

Marking on Surface

◆ SUMITOMO IRRAX™ TUBE ER2

Applications

- Insulation and heat protection of wire harnesses and parts for automobiles
- Protection of wiring where flame retardance is required
- Protection of lead wires and parts which are subject to high temperature

Colors

- Black

Properties

Properties	Items	Requirements	Typical values*1
Mechanical	Tensile strength (before aging)	min. 15.7MPa	23.4MPa
	Tensile strength (after aging)	180°C x 200 hours, min. 9.8MPa	22.2MPa
	Elongation (before aging)	min. 150%	430%
	Elongation (after aging)	180°C x 200 hours, min. 50%	420%
	Heat shock	250°C x 4 hours, no crack	Pass
	Cold bend	-55°C x 4 hours, no crack	Pass
Electrical	Secant modulus	107.9±19.6MPa	106.4MPa
	Dielectric withstand (before aging)	AC2.5kV x 60 sec., no breakdown	Pass
	Dielectric withstand (after aging)	180°C x 200 hours, AC2.5kV x 60 sec., no breakdown	Pass
Chemical	Volume resistivity	min. 1.0 x 10 ¹⁰ Ω·cm	1.8 x 10 ¹⁵ Ω·cm
	Flammability	Flame-retarded (UL224 All Tubing Flame Test)	Pass

*1: For reference use only

Sizes

Nominal size (mm)	Inside diameter (mm)	Wall thickness (mm)	Unit length (m)
6 × 0.45	6.0 ± 0.5	0.45 ± 0.05	200 min.
8 × 0.45	8.0 ± 0.5	0.45 ± 0.05	100 min.
10 × 0.45	10.0 ± 0.5	0.45 ± 0.05	100 min.
12 × 0.45	12.0 ± 0.5	0.45 ± 0.05	100 min.

Longitudinal change: min. -10% (125°C x 5 minutes)

SUMITUBE™

A
LA
A4
C
C (UL)
D
A2

B
LB

F (Z)
F3 (Z)
NHR2
NHR4
R
V (300V)

F2 (Z)
F4 (Z)
B2
B2 (3X)
B8
V (600V)
K

K2

AN25

B6

O2C
W3C

O2B2
W3F2
W3B2
W3B2 (4X)
SA2
SA3

W

IRRAX™ TUBE IRRAX™ TAPE

A
B
F2
F2 (UL)
V2
IRRAX™ TUBE RP3
B8
ER2
NHR
NHR4
FE2
IRRAX™ TAPE VZL

IRRAX™ SLEEVE

SCM2
SBI 300/350
SCD
SNHM

Composite articles

SUMISEAL
SA3 CAP

Processing equipment

SUMISHRINKER / HEATING GUN