

IRRAX™ TUBE F2

[Flexible heat-resistant tubing compliant with Electrical Appliance and Material Safety Law]

Catalog No. 901  RoHS directive 10 substances

   



IRRAX™ TUBE F2 is made of the same materials as IRRAX™ TUBE F2 (UL). (Both products are compliant with the UL224 standard and the Electrical Appliance and Material Safety Law.) The description of the markings, colors, and sizes are shown below.

Basic Properties

- Material: Cross-linked flexible flame-retarded polyolefin
- Continuous operating temperature: -55 to 125°C

Features

- Flexible
- Flame-retarded (PBDE/PBB-free)

Specifications/Approvals

Electrical Appliance and Material Safety Law (Japan)
 Operating temperature 125°C (provisional registration)
 (Registration No.: 004CC0176)
 Registration of flammability rating (-F-)
 (Registration No.: F-ST53-009 to F-ST53-016)

Marking on Surface

◆ SUMITOMO IRRAX F2 125°C -F-

Applications

- Insulation, protection and reinforcement of terminations and joints of electric wires
- Identification and bundling of electric wires

Colors

- Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White

Properties

Properties	Items	Requirements	Typical values*
Mechanical	Tensile strength (before aging)	min. 10.4MPa	12.1MPa
	Tensile strength (after aging)	158°C x 7 days, min. 7.3MPa	11.7MPa
	Elongation (before aging)	min. 200%	300%
	Elongation (after aging)	158°C x 7 days, min. 100%	325%
	Heat shock	250°C x 4 hours, no crack	Pass
	Cold bend	-30°C x 1 hour, no crack	Pass
Electrical	Dielectric withstand (before aging)	AC2.5kV x 60 sec., no breakdown	Pass
	Dielectric withstand (after aging)	158°C x 7 days, AC2.5kV x 60 sec., no breakdown	Pass
	Dielectric breakdown (before aging)	min. AC2.5kV	19.7kV
	Dielectric breakdown (after aging)	158°C x 7 days, min. 50% of original and min. AC2.5kV	Pass
Chemical	Volume resistivity	min. $1.0 \times 10^{14} \Omega \cdot \text{cm}$	$1.3 \times 10^{16} \Omega \cdot \text{cm}$
	Corrosion against bare copper	158°C x 7 days, no corrosion after leaving under 95% humidity, 23°C x 24 hours	Pass
	Stability against copper	158°C x 7 days, elongation min. 100% after leaving under 95% humidity, 23°C x 24 hours	350%
	Flammability	Flame-retarded, pass VW-1	Pass

*: For reference use only

Sizes

Trade size (mm)	Inside diameter (mm)	Wall thickness (mm)	Unit length (m)
1 × 0.4	1.00 ± 0.10	0.40 min.	500 min.
1.5 × 0.4	1.50 ± 0.10	0.40 min.	300 min.
2 × 0.4	2.00 ± 0.20	0.40 min.	200 min.
3 × 0.4	3.00 ± 0.20	0.40 min.	400 min.
4 × 0.4	4.00 ± 0.30	0.40 min.	400 min.
5 × 0.4	5.00 ± 0.30	0.40 min.	200 min.
6 × 0.4	6.0 ± 0.5	0.40 min.	200 min.
7 × 0.4	7.0 ± 0.5	0.40 min.	100 min.
8 × 0.4	8.0 ± 0.5	0.40 min.	100 min.
9 × 0.4	9.0 ± 0.5	0.40 min.	100 min.
10 × 0.4	10.0 ± 0.5	0.40 min.	100 min.

Longitudinal change: min. -20% (125°C x 1 minute)

SUMITUBE™

	A
	C
	A4
SUMITUBE	LA
	C (UL)
	D
	A2

SUMITUBE	B
	LB

	F (Z)
	F3 (Z)
SUMITUBE	NHR2
	NHR4
	V (300V)
	V (600V)

	F2 (Z)
	F4 (Z)
SUMITUBE	B2
	B2 (3X)
	B8

SUMITUBE	K
	K2

SUMITUBE	KH200 (TW)
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SUMITUBE	KH230 (TW)
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	B6
SUMITUBE	R
	AN25

SUMITUBE	W
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SUMITUBE	O2C
	W3C

	O2B2
	W3F2
SUMITUBE	W3B2
	W3B2 (4X)
	SA2
	SA3

IRRAX™ TUBE IRRAX™ TAPE

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

IRRAX™ SLEEVE

	SCM2
IRRAX SLEEVE	SBI 300/350
	SNHM

Composite articles

SUMISEAL	
SUMITUBE SA3 CAP	

Processing equipment

SUMISHRINKER / HEATING GUN