

# Irrax™ tube RP3

(Very flexible heat-resistant tubing with UL and  
Electrical Appliance And Material Safety Law)

Catalog No. 702

## ● Basic Properties

★ RoHS Compliant

- (1) Materials : Cross-linked, very flexible, flame-retardant polyolefin resin
- (2) Continuous operating temperature : -55 to 105°C

## ● Features & Benefits

- (1) Compliant with UL224 and Electrical Appliance And Material Safety Law
- (2) Very Flexible
- (3) Flame-retardant

## ● Specifications & Approvals

### UL224

- File No.: E75077
- Operating temperature : 105°C
- Voltage rating : 300V
- Flammability rating : VW-1

### Electrical Appliance and Material Safety Law

- Registration of flammability rating (-F-)
- (Registration No. : F-STS3-009 to F-STS3-016)

## ● Markings

The following letters are printed on the surface of Irrax™ tube RP3.

- RU 105°C VW-1 ◆SUMITOMO-K IRRAXTUBE RP3 -F-  
RU indicates UL logotype.

## ● Applications

- (1) Insulation, protection and reinforcement of terminations and joints of electric wires
- (2) Identification and bundling of electric wires

## ● Colors

Standard colors : Black

## ● Properties

Properties	Items	Requirements	Typical values
Mechanical	Tensile Strength (before aging)	10.4MPa min.	12.5MPa
	Tensile Strength(after aging)	136°C×7 days, 7.3MPa min.	12.8MPa
	Ultimate Elongation (before aging)	200% min.	425%
	Ultimate Elongation (after aging)	136°C×7 days, 100% min.	450%
	Heat Shock	250°C×4 hours, No cracking	Pass
	Cold Bend	-30°C×1 hour, No cracking	Pass
Electrical	Dielectric Voltage Withstand (before aging)	A.C.2.5kV×60 sec., No breakdown	Pass
	Dielectric Voltage Withstand (after aging)	136°C×7 days, A.C.2.5kV×60 sec., No breakdown	Pass
	Dielectric Voltage Breakdown (before aging)	A.C.2.5kV min.	16.4kV
	Dielectric Voltage Breakdown (after aging)	136°C×7 days Percent of original 50% min.	Pass
	Volume Resistivity	1.0×10 <sup>14</sup> Ω ·cm min.	3.0×10 <sup>14</sup> Ω ·cm
Chemical	Copper Corrosion	After leaving for 24 hours at relative humidity 95% and temperature 23°C, 136°C×7 days, No corrosion	Pass
	Copper Stability	After leaving for 24 hours at relative humidity 95% and temperature 23°C, 136°C×7 days, Stretch 100% min.	425%
	Flammability	Flame-retardant, Pass VW-1	Pass

## ● Sizes

Nominal Size	Inside Diameter (mm)	Wall Thickness (mm)	Unit Length (m)
3×0.5	3.00±0.15	0.50±0.06	400 min.
4×0.5	4.00±0.20	0.50±0.06	200 min.
5×0.5	5.00±0.20	0.50±0.06	200 min.
6×0.5	6.0±0.2	0.50±0.06	100 min.
7×0.5	7.0±0.3	0.50±0.06	100 min.
8×0.5	8.0±0.3	0.50±0.06	100 min.
9×0.5	9.0±0.3	0.50±0.06	100 min.
10×0.5	10.0±0.4	0.50±0.06	100 min.
12×0.5	12.0±0.4	0.50±0.06	100 min.

Longitudinal change : 0±5%

## ● Disclaimer

All statements and technical information contained herein are based on tests we believe to be reliable and only general properties are described. Therefore, safety of each specific application by the users is not 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.