

Irrax™ tube B8

(Semi-rigid heat-resistant tubing with
UL and Electrical Appliance And Material Safety Law)

Catalog No. 838, 897

Irrax™ tube B8 with catalog No. 838 acquires UL and the Electrical Appliance And Material Safety Law.

Irrax™ tube B8 with catalog No. 897 acquires Electrical Appliance And Material Safety Law.

● Basic Properties

★ RoHS Compliant

- (1) Materials : Cross-linked, semi-rigid, flame-retardant polyolefin resin
- (2) Continuous operating temperature : -55 to 125°C

● Features & Benefits

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

● Specifications & Approvals

UL224 (for Catalog No. 838)

File No.: E75077

Operating temperature : 125°C

Voltage rating : 600V

Flammability rating : VW-1

Electrical Appliance And Material Safety Law (for Catalog No. 838, 897)

Registration of flammability rating (-F-)

(Registration No. : STS3-009 to STS3-016)

● Markings

The following letters are printed on the surface of Irrax™ tube B8.

- ◆ VW-1 SUMITOMO IRRAX B8 125°C-F- (for Catalog No. 838)
- ◆ SUMITOMO IRRAX B8 -F- (for Catalog No. 897)

● Applications

- (1) Insulation, protection of electric terminations where mechanical strength is required.
- (2) Reinforcement of objects to be covered.

● Colors

Standard colors : Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray and White

● Properties

Properties	Items	Requirements	Typical values
Mechanical	Tensile Strength (before aging)	13.8MPa min.	19.0MPa
	Tensile Strength (after aging)	158°C×7 days, 9.7MPa min.	17.1MPa
	Ultimate Elongation (before aging)	200% min.	340%
	Ultimate Elongation (after aging)	158°C×7 days, 100% min.	340%
	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)	158°C×7 days, A.C.2.5kV×60 sec., No breakdown	Pass
	Dielectric Voltage Breakdown (before aging)	A.C.2.5kV min.	15.0kV
	Dielectric Voltage Breakdown (after aging)	158°C×7 days, Percent of original 50% min.	Pass
	Volume Resistivity	$1.0 \times 10^{14} \Omega \cdot \text{cm}$ min.	$2.3 \times 10^{16} \Omega \cdot \text{cm}$
Chemical	Copper Corrosion	After leaving for 24 hours at relative humidity 95% and temperature 23°C, 158°C×7 days, No corrosion	Pass
	Copper Stability	After leaving for 24 hours at relative humidity 95% and temperature 23°C, 158°C×7 days, Elongation 100% min.	304%
	Flammability	Flame-retardant, Pass VW-1	Pass

● Sizes

For Catalog No. 838

Nominal Size	Inside Diameter (mm)	Wall Thickness (mm)	Unit Length (m)
AWG24	0.55±0.10	0.50±0.06	500 min.
AWG22	0.65±0.10	0.50±0.06	500 min.
AWG20	0.80±0.10	0.50±0.06	500 min.
AWG19	0.90±0.10	0.50±0.06	500 min.
AWG18	1.00±0.10	0.50±0.06	250 min.
AWG17	1.15±0.10	0.62±0.06	250 min.
AWG16	1.30±0.10	0.62±0.06	250 min.
AWG15	1.45±0.10	0.62±0.06	200 min.
AWG14	1.65±0.10	0.62±0.06	200 min.
AWG13	1.80±0.15	0.62±0.06	200 min.
AWG12	2.10±0.15	0.62±0.06	400 min.
AWG11	2.30±0.15	0.62±0.06	400 min.
AWG10	2.60±0.15	0.62±0.06	400 min.
AWG9	2.90±0.15	0.62±0.06	400 min.
AWG8	3.30±0.15	0.62±0.06	400 min.
AWG7	3.70±0.15	0.62±0.06	400 min.
AWG6	4.10±0.20	0.62±0.06	200 min.
AWG5	4.60±0.20	0.62±0.06	200 min.
AWG4	5.20±0.20	0.62±0.06	200 min.
AWG3	5.80±0.20	0.62±0.06	100 min.
AWG2	6.5±0.2	0.62±0.06	100 min.
AWG1	7.3±0.3	0.62±0.06	100 min.
AWG0	8.3±0.3	0.62±0.06	100 min.

Longitudinal change : -10% min. (200°C×5 minutes)

For Catalog No. 897

Nominal Size	Inside Diameter (mm)	Wall Thickness (mm)	Unit Length (m)
1×0.4	1.00±0.10	0.38 min.	500 min.
1.5×0.4	1.50±0.10	0.38 min.	300 min.
2×0.4	2.00±0.20	0.38 min.	200 min.
3×0.4	3.00±0.20	0.38 min.	400 min.
4×0.4	4.00±0.30	0.38 min.	400 min.
5×0.4	5.00±0.30	0.38 min.	200 min.
6×0.4	6.0±0.5	0.38 min.	200 min.
7×0.4	7.0±0.5	0.38 min.	100 min.
8×0.4	8.0±0.5	0.38 min.	100 min.
9×0.4	9.0±0.5	0.38 min.	100 min.
10×0.4	10.0±0.5	0.38 min.	100 min.

Longitudinal change : -10% min. (200℃×5 minutes)

●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.