

● Basic Properties

★ RoHS Compliant

- (1) Materials :Flexible, flame-retardant polyvinyl chloride resin
- (2) Continuous operating temperature : -30 to 105°C

● Features & Benefits

- (1) Compliant with UL224 and CSA
- (2) Flame-retardant

● Specifications & Approvals

UL224

- File No. : E48762
- Operating temperature : 105°C
- Voltage rating : 300V or 600V
- Flammability rating : VW-1

CSA C22.2 No.198.1

- File No. : LR33298
- Operating temperature : 105°C
- Voltage rating : 300V or 600V
- Flammability rating : VW-1

Electrical Appliance and Material Safety Law
Registration of flammability rating (-F-)
(Registration No. : F-ST3-001 to F-ST3-008)

*Operating voltage and colors differ according to catalogue No., so refer to the table below.

Catalogue No.	Operating temperature	Operating voltage	Colors
806	105°C	300V	Colored
807	105°C	600V	Colored
816	105°C	300V	Clear
817	105°C	600V	Clear

● Markings

The following letters are printed on the surface of Irrax™ tube V2.

RU 105°C VW-1 ◆ SUMITOMO-K IRRAXTUBE V2 CAT XXX CSA 105°C VW-1 -F-

- RU indicates UL logotype.
- XXX indicates catalogue No.

● Applications

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

● Colors

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

● Properties

Properties	Items	Requirements	Typical values
Mechanical	Tensile Strength (before aging)	10.4MPa min.	28.6MPa
	Tensile Strength(after aging)	136°C×7 days, 7.3MPa min.	29.0MPa
	Ultimate Elongation (before aging)	100% min.	310%
	Ultimate Elongation (after aging)	136°C×7 days, 100% min.	320%
	Deformation	131°C×1hour, 35% max.	25%
	Heat Shock	180°C×4hours, 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.	Pass
	Dielectric Voltage Breakdown (after aging)	136°C×7 days Percent of original 50% min.	Pass
	Volume Resistivity	1.0×10 ¹⁰ Ω · cm min.	4.8×10 ¹² Ω · cm
Chemical	Copper Corrosion	After leaving for 24hours at relative humidity 95% and temperature 23°C, 136°C×7 days, No corrosion	Pass
	Copper Stability	After leaving for 24hours at relative humidity 95% and temperature 23°C, 136°C×7 days, Stretch 100% min.	190%
	Flammability	Flame-retardant, Pass VW-1	Pass

● Sizes

Catalogue No. 806, 816 (300V, Colored and Clear)

Nominal Size	Inside Diameter (mm)	Wall Thickness (mm)	Unit Length (m)
AWG24	0.55±0.10	0.32±0.06	1,000 min.
AWG22	0.65±0.10	0.32±0.06	500 min.
AWG20	0.80±0.10	0.40±0.06	500 min.
AWG19	0.90±0.10	0.40±0.06	500 min.
AWG18	1.00±0.10	0.40±0.06	500 min.
AWG17	1.15±0.10	0.40±0.06	250 min.
AWG16	1.30±0.10	0.40±0.06	250 min.
AWG15	1.45±0.10	0.40±0.06	200 min.
AWG14	1.65±0.10	0.40±0.06	200 min.
AWG13	1.80±0.15	0.40±0.06	200 min.
AWG12	2.10±0.15	0.40±0.06	400 min.
AWG11	2.30±0.15	0.40±0.06	400 min.
AWG10	2.60±0.15	0.40±0.06	400 min.
AWG9	2.90±0.15	0.50±0.06	400 min.
AWG8	3.30±0.15	0.50±0.06	400 min.
AWG7	3.70±0.15	0.50±0.06	400 min.
AWG6	4.10±0.20	0.50±0.06	200 min.
AWG5	4.60±0.20	0.50±0.06	200 min.
AWG4	5.20±0.20	0.50±0.06	200 min.
AWG3	5.80±0.20	0.50±0.06	100 min.
AWG2	6.5±0.2	0.50±0.06	100 min.
AWG1	7.3±0.3	0.50±0.06	100 min.
AWG0	8.3±0.3	0.50±0.06	100 min.

Longitudinal change : 0±5% (100°C×2 hours)

Catalogue No. 807, 817 (600V, Colored and Clear)

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.
3/8IN	9.5±0.3	0.62±0.06	100 min.
7/16IN	11.1±0.4	0.62±0.06	100 min.
1/2IN	12.7±0.4	0.62±0.06	100 min.
9/16IN	14.2±0.4	0.80±0.09	100 min.
5/8IN	15.9±0.4	0.80±0.09	100 min.
3/4IN	19.0±0.5	0.86±0.09	100 min.
7/8IN	22.2±0.5	0.86±0.09	100 min.
1IN	25.4±0.5	0.86±0.09	100 min.
1-1/16IN	27.0±0.5	0.86±0.09	100 min.

Longitudinal change : 0±5% (100°C×2 hours)

●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.