

IRRAX™ TUBE V2

[Heat-resistant tubing] UL and CSA recognized

Catalog No. 806, 807, 837, 834

✓ RoHS directive 10 substances

Waterproofing Flame-retarded UL recognized CSA recognized



Basic Properties

- Material: Flexible flame-retarded polyvinyl chloride
- Continuous operating temperature: -30 to 105°C

Features

- Flame-retarded

Specifications/Approvals

Colored :
UL224

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

Clear :

Electrical Appliance and Material Safety Law (Japan)
Registration of flammability rating (-F-)
(Registration No.: F-ST53-001 to F-ST53-008)

CSA C22.2 No.198.1

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

Note: Operating voltage and colors differ according to
Catalog No., see table to right.

Marking on Surface

Colored : 105°C vw-1 SUMITOMO-K IRRAXTUBE V2 CAT XXX CSA 105°C VW1-F-

Clear : us 105°C vw1 SUMITOMO-K IRRAXTUBE V2 CAT XXX-F-
(XXX : Colors : 806or807, clear : 837or834)

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, Clear

Catalog No.	Operating temperature	Operating voltage	Colors
806	105°C	300V	Colored
807	105°C	600V	Colored
837	105°C	300V	Clear
834	105°C	600V	Clear

Properties

Properties	Items	Requirements	Typical values*
Mechanical	Tensile strength (before aging)	min. 10.4MPa	28.6MPa
	Tensile strength (after aging)	136°C x 7 days, min. 7.3MPa	29.0MPa
	Elongation (before aging)	min. 100%	310%
	Elongation (after aging)	136°C x 7 days, min. 100%	320%
	Deformation	131°C x 1 hour, max. 35%	25%
	Heat shock	180°C x 4 hours, no crack	Pass
Electrical	Cold bend	-30°C x 1 hour, no crack	Pass
	Dielectric withstand (before aging)	AC2.5kV x 60 sec., no breakdown	Pass
	Dielectric withstand (after aging)	136°C x 7 days AC2.5kV x 60 sec., no breakdown	Pass
	Dielectric breakdown (before aging)	min. AC2.5kV	Pass
	Dielectric breakdown (after aging)	136°C x 7 days, min. 50% of original	Pass
Chemical	Volume resistivity	min. $1.0 \times 10^{10} \Omega \cdot \text{cm}$	$4.8 \times 10^{12} \Omega \cdot \text{cm}$
	Corrosion against bare copper	136°C x 7 days, no corrosion after leaving under 95% humidity, 23°C x 24 hours	Pass
	Stability against copper Flammability	136°C x 7 days, elongation min. 100% after leaving under 95% humidity, 23°C x 24 hours Flame-retarded, pass VW-1	190% Pass

*: For reference use only

Sizes

Catalog No. 806, 816 (300V, Colored and Clear)				Catalog No. 807, 817 (600V, Colored and Clear)							
Trade size	Inside diameter (mm)	Wall thickness (mm)	Unit length (m)	Trade size	Inside diameter (mm)	Wall thickness (mm)	Unit length (m)	Trade size	Inside diameter (mm)	Wall thickness (mm)	Unit length (m)
AWG24	0.55±0.10	0.32±0.06	1,000 min.	AWG24	0.55±0.10	0.50±0.06	500 min.	AWG 6	4.10±0.15	0.62±0.06	200 min.
AWG22	0.65±0.10	0.32±0.06	500 min.	AWG22	0.65±0.10	0.50±0.06	500 min.	AWG 5	4.60±0.20	0.62±0.06	200 min.
AWG20	0.80±0.10	0.40±0.06	500 min.	AWG20	0.80±0.10	0.50±0.06	500 min.	AWG 4	5.20±0.20	0.62±0.06	200 min.
AWG19	0.90±0.10	0.40±0.06	500 min.	AWG19	0.90±0.10	0.50±0.06	500 min.	AWG 3	5.80±0.20	0.62±0.06	100 min.
AWG18	1.00±0.10	0.40±0.06	500 min.	AWG18	1.00±0.10	0.50±0.06	250 min.	AWG 2	6.5 ±0.20	0.62±0.06	100 min.
AWG17	1.15±0.10	0.40±0.06	250 min.	AWG17	1.15±0.10	0.62±0.06	250 min.	AWG 1	7.3 ±0.2	0.62±0.06	100 min.
AWG16	1.30±0.10	0.40±0.06	250 min.	AWG16	1.30±0.10	0.62±0.06	250 min.	AWG 0	8.3 ±0.3	0.62±0.06	100 min.
AWG15	1.45±0.10	0.40±0.06	200 min.	AWG15	1.45±0.10	0.62±0.06	200 min.	3/8IN	9.5 ±0.3	0.62±0.06	100 min.
AWG14	1.65±0.10	0.40±0.06	200 min.	AWG14	1.65±0.10	0.62±0.06	200 min.	7/16IN	11.1 ±0.4	0.62±0.06	100 min.
AWG13	1.80±0.15	0.40±0.06	200 min.	AWG13	1.80±0.15	0.62±0.06	200 min.	1/2IN	12.7 ±0.4	0.62±0.06	100 min.
AWG12	2.10±0.15	0.40±0.06	400 min.	AWG12	2.10±0.15	0.62±0.06	400 min.	9/16IN	14.2 ±0.4	0.80±0.09	100 min.
AWG11	2.30±0.15	0.40±0.06	400 min.	AWG11	2.30±0.15	0.62±0.06	400 min.	5/8IN	15.9 ±0.4	0.80±0.09	100 min.
AWG10	2.60±0.15	0.40±0.06	400 min.	AWG10	2.60±0.15	0.62±0.06	400 min.	3/4IN	19.0 ±0.5	0.86±0.09	100 min.
AWG 9	2.90±0.15	0.50±0.06	400 min.	AWG 9	2.90±0.15	0.62±0.06	400 min.	7/8IN	22.2 ±0.5	0.86±0.09	100 min.
AWG 8	3.30±0.15	0.50±0.06	400 min.	AWG 8	3.30±0.15	0.62±0.06	400 min.	1IN	25.4 ±0.5	0.86±0.09	100 min.
AWG 7	3.70±0.15	0.50±0.06	400 min.	AWG 7	3.70±0.15	0.62±0.06	400 min.	1-1/16IN	27.0 ±0.5	0.86±0.09	100 min.
AWG 6	4.10±0.20	0.50±0.06	200 min.								
AWG 5	4.60±0.20	0.50±0.06	200 min.								
AWG 4	5.20±0.20	0.50±0.06	200 min.								
AWG 3	5.80±0.20	0.50±0.06	100 min.								
AWG 2	6.5 ±0.2	0.50±0.06	100 min.								
AWG 1	7.3 ±0.3	0.50±0.06	100 min.								
AWG 0	8.3 ±0.3	0.50±0.06	100 min.								

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

SUMITUBE™

A
C
A4
LA
C (UL)
D
A2

B
LB

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

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

K
K2

KH200 (TW)

KH230 (TW)

B6
R
AN25

W

O2C
W3C

O2B2
W3F2
W3B2
W3B2 (4X)
SA2
SA3

IRRAX™ TUBE IRRAX™ TAPE

A
B
F2
F2 (UL)
V2
IRRAXTUBE
RP3
B8
ER2
NHR
FE2
IRRAXTAPE
VZL

IRRAX™ SLEEVE

SCM2
IRRAXSLEEVE
SBI
300/350
SNHM

Composite articles

SUMISEAL
SUMITUBE SA3 CAP

Processing equipment

SUMISHRINKER / HEATING GUN