

HEAT-SHRINKABLE TUBING

IRRAX™ SLEEVE

IRRAX™ SLEEVE SNHM

Halogen Free, Flame Retardant, Medium Wall Tubing

IRRAX™ SLEEVE SNHM is irradiated cross-linked, halogen-free, polyolefin heat-shrinkable tubing which has excellent flame retardancy with reduced acid gas emission and smoke generation and has a mastic adhesive inner which can adhere even at room temperature.

■ FEATURES

- Halogen free
- Reduced acid gas emission and smoke generation in case of fire
- Flame retardant
- High shrink ratio, 3 : 1
- Excellent encapsulation

■ APPLICATIONS

- Protection of cable and pipe for mass transit vehicles, ships or in tunnels or buildings
- Encapsulation of connector and cable

■ LAYER PROPERTIES

Items	Test Method	Requirement	Typical Data
Tensile Strength	IEC 60684	7.8 MPa min.	11.3 MPa
Ultimate Elongation	IEC 60684	200 % min.	530 %
Accelerated Aging : at 140°C for 168 hours			
Tensile Strength (obtained with original)	IEC 60684	70 % min.	96 %
Ultimate Elongation	IEC 60684	100 % min.	320 %
Specific Gravity	ASTM D 792	—	1.35
Low Temperature Flexibility : at -30°C for 1 hour	ASTM D 2671	No Cracking	No Cracking
Hardness	ASTM D 2240 (Type D)	—	42
Volume Resistivity	IEC 60684	$1 \times 10^{12} \Omega \cdot \text{cm}$ min.	$8 \times 10^{14} \Omega \cdot \text{cm}$
Weather Resistance : for 4,000 hours			
Tensile Strength (obtained with original)	JIS A 1415 (Type WS)	—	98 %
Ultimate Elongation (obtained with original)			72 %
Flammability	※1	Flame retardant	Flame retardant
Smoke Generation			
Flaming Mode	ASTM E 662	—	50
Non-Flaming Mode	ASTM E 662	—	150
Chlorine Gas Generation	JIS No.53	—	0 mg/g
Oxygen Index	ASTM D 2863	—	26
Copper Mirror Corrosion : at 175°C for 16 hours	SEA-AMS-DTL- 23053	No Corrosion	Pass
Shrinking Temperature (Start / Finish)	—	—	60 °C / 100 °C

※1 : Combustion standards for railway vehicle materials by Japan Railway Rollingstock & Machinery Association



SUMITOMO ELECTRIC INDUSTRIES, LTD.

SIZES

Trade Size	As Supplied	After Shrinkage		Unit Length (min.) [mm]
	Inside Diameter (min.) [mm]	Inside Diameter *1 (max.) [mm]	Wall Thickness *1 (nom.) [mm]	
11 / 25 - 900	25.0	11.0	1.70	900
16 / 40 - 900	40.0	16.0	1.70	
20 / 50 - 900	50	20.0	1.70	
24 / 65 - 900	65	24.0	2.30	
28 / 75 - 900	75	28.0	2.30	
32 / 85 - 900	85	32.0	2.30	
33 / 110 - 900	110	33.0	2.30	
55 / 150 - 900	150	55	3.00	

Longitudinal Change : -10 % min.

*1 Outer layer only

COLOR

Black

MARKING

No marking

(Notice) The information contained in this catalogue is believed to be correct and in accordance with accepted engineering practices. Because of the varied nature of the uses for these products each user should make their own evaluations regarding the suitability of these products for their specific application. Sumitomo Electric Industries, Ltd. makes no warranties regarding the accuracy and completeness of the information and data contained herein, and disclaims any liability from the use or misuse of its products.

Sumitomo Electric Industries, Ltd. shall not be liable for any injury, loss or damage either directly, indirectly or as a consequence arising from the use or misuse of its products mentioned in this catalogue, other than replacement of materials considered defective.



SUMITOMO ELECTRIC INDUSTRIES, LTD.

Japan [Sales]

SUMITOMO ELECTRIC INDUSTRIES, LTD.

Shibaura Renasite Tower, 3-9-1, Shibaura, Minato-ku, Tokyo 108-8539, JAPAN

Tel: +81-3-6722-3344 Fax: +81-3-6722-3345

Overseas [Sales & Manufacture]

SUMITOMO ELECTRIC INTERCONNECT PRODUCTS, INC.

915, Armolite Drive, San Marcos, CA 92069-1440, USA

Tel: +1-760-761-0600 Fax: +1-760-761-0625

SUMITOMO ELECTRIC SCHRUMPF-PRODUKTE, GmbH

Oststrasse 89, D-22844 Norderstedt, GERMANY

Tel: +49-40-526-5010 Fax: +49-40-526-4808

SUMITOMO ELECTRIC INTERCONNECT PRODUCTS (HONG KONG) LTD.

Suite 2301, 23rd Fl., Caroline Centre, Lee Gardens II, 28 Yun Ping Rd., Causeway Bay, HONGKONG

Tel: +852-2805-6777 Fax: +852-2504-4690

[Manufacture]

SUMITOMO ELECTRIC FINE POLYMER, INC.

1-950, Asashironishi, Kumatori, Sennan, Osaka 590-0451, JAPAN

Tel: +81-72-452-1301 Fax: +81-72-453-0397

SUMI-PAC CORPORATION

8 Fl., No.34, Chung Shan North Rd., Sec.3, Taipei, TAIWAN R.O.C.

Tel: +886-2-2599-7382 Fax: +886-2-2599-7377

Sumitomo Electric Fine Polymer (Suzhou) Ltd.

Shanghai branch

Room F, 12/ F Huamin Empire Plaza No.728 Yan An Road (W)

Shanghai, CHINA

Tel: +021-6212-6600 Fax: +021-5237-3196