

IRRAX™ SLEEVE SBI300 / SBI350

[Halogen-free, insulation for busbars in switchgear, heat-shrinkable tubing]

✓ RoHS directive 10 substances

Waterproofing Flame-retarded UL recognized CSA recognized



Basic Properties

- Material: Cross-linked flexible flame-retarded polyolefin
- Shrink temperature : min. 115°C
- Shrink ratio : Radial change: min. 50%
: Longitudinal change: min. -15%
- Continuous operating temperature: -40 to 120°C

Features

- Excellent electrical performance
- Protection against flashover
- Stable performance for continuous use in switchgear
- Flexible enough to heat-shrink on bent (90°) busbars
- Flame retardancy (self-extinguishing)

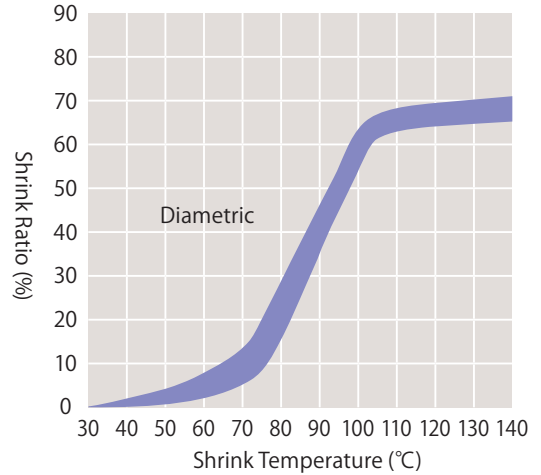
Marking on Surface

- SB1300 :
◆SUMITOMO IRRAX SLEEVE SBI300 XX/YY HF(XX/YY : SIZE)
- SB1350 :
◆SUMITOMO IRRAX SLEEVE SBI350 XX/YY HF(XX/YY : SIZE)

Applications

- Insulation for busbars in switchgear up to 36kV

Shrink Properties



Colors

- Red

Properties

Properties	Items	Requirements	Typical values*1
Mechanical	Tensile strength (before aging)	min. 5.0MPa	7.6MPa
	Tensile strength (after aging)	160°C x 168 hours, min. 5.0 MPa	9.6MPa
	Elongation (before aging)	min. 300%	525%
	Elongation (after aging)	160°C x 168 hours, min. 200%	490%
	Specific gravity	—	1.31
	Low temperature flexibility	-40°C x 4 hours, no crack	Pass
Electrical	Dielectric strength	min. 10.0kV/mm	39.5kV/mm (wall thickness 0.94mm)
	Volume resistivity	—	7.8 x 10 ¹⁶ Ω·cm
	Dielectric constant	—	2.7
Chemical	Water absorption	23°C x 24 hours	0.45
	Flammability (UL224)	Pass (All tubing flame Test)	Pass
	Shrinking temperature (start/finish)	—	70°C / 100°C

*1: For reference use only

Sizes

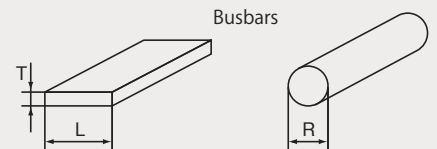
IRRAX™ SLEEVE SBI300								
Trade size (mm)	As supplied (mm)		After recovered (mm)		Unit length (min.) (m)	Suitable busbar size (mm)		
	Inside diameter (min.)	Wall thickness (nom.)	Inside diameter (max.)	Wall thickness (nom.)		Rectangular L+T (min.) (max.)	Round R (min.) (max.)	
6/15	15.0	1.10	6.00	2.00	25	12 — 18	6.5 — 12.0	
12/30	30.0	1.10	12.0	2.30	25	22 — 38	13.5 — 25.0	
20/50	50.0	1.10	20.0	2.50	25	36 — 65	22.0 — 43.0	
30/75	75.0	1.10	30.0	2.50	25	55 — 95	33.0 — 63.0	
40/100	100.0	1.10	40.0	2.50	25	70 — 130	44.0 — 86.0	
50/120	120.0	1.30	50.0	3.00	25	90 — 165	55.0 — 105.0	

IRRAX™ SLEEVE SBI350								
Trade size (mm)	As supplied (mm)		After recovered (mm)		Unit length (min.) (m)	Suitable busbar size (mm)		
	Inside diameter (min.)	Wall thickness (nom.)	Inside diameter (max.)	Wall thickness (nom.)		Rectangular L+T (min.) (max.)	Round R (min.) (max.)	
10/25	25.0	1.60	10.0	4.00	25	17 — 28	11.0 — 20.0	
16/40	40.0	1.60	16.0	4.00	25	28 — 45	18.0 — 32.0	
25/65	65.0	1.60	25.0	4.00	25	45 — 67	28.0 — 47.0	
40/100	100.0	1.60	40.0	4.00	25	67 — 102	44.0 — 72.0	

Longitudinal change: min. -15%

Minimum Clearances (Typical Values)

	Commercial voltage	Impulse voltage	Phase to phase clearances for rectangular busbars
IRRAX™ SLEEVE SBI300	12kV	75kV	20mm
	24kV	125kV	70mm
IRRAX™ SLEEVE SBI350	36kV	170kV	120mm



SUMITUBE	A
	C
	A4
SUMITUBE	LA
	C (UL)
	D
	A2
SUMITUBE	B
	LB
	F (Z)
	F3 (Z)
SUMITUBE	NHR2
	NHR4
	V (300V)
	V (600V)
	F2 (Z)
	F4 (Z)
SUMITUBE	B2
	B2 (3X)
	B8
SUMITUBE	K
	K2
SUMITUBE	KH200 (TW)
SUMITUBE	KH230 (TW)
	B6
SUMITUBE	R
	AN25
SUMITUBE	W
	O2C
SUMITUBE	W3C
	O2B2
	W3F2
SUMITUBE	W3B2
	W3B2 (4X)
	SA2
	SA3
IRRAX™TUBE	
IRRAX™TAPE	
	A
	B
	F2
	F2 (UL)
IRRAXTUBE	V2
	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	