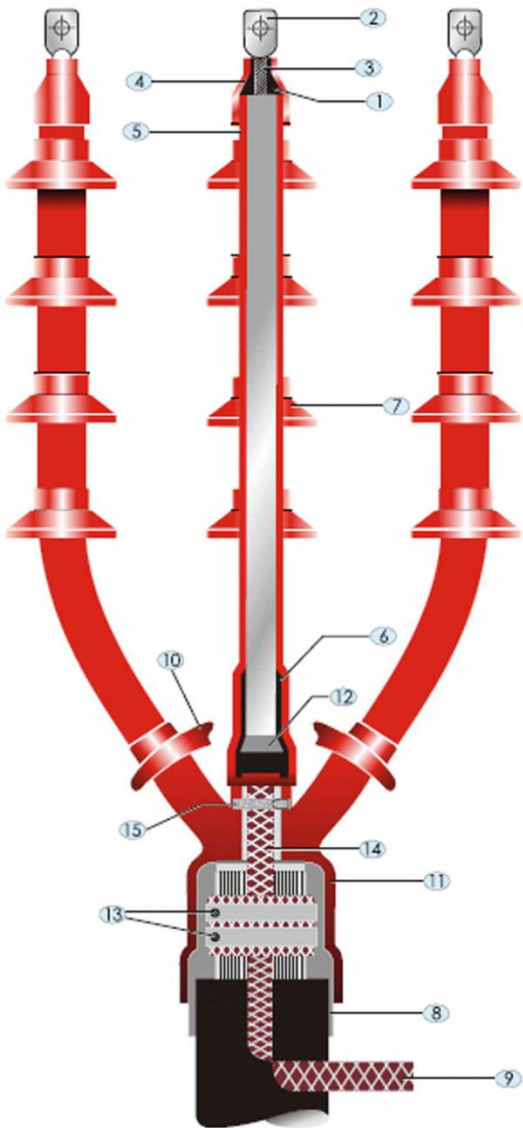




HEAT SHRINK INDOOR/OUTDOOR 3 CORE  
TERMINATIONS , HMO/I-1133 SERIES



KIT COMPONENTS

1.	Red Mastic	9.	Ground Copper Braid
2.	Lugs	10.	Heat Shrink Umbrella
3.	Conductor	11.	Heat Shrink Breakout
4.	Heat Shrink Lug Sleeve	12.	Stress Control Mastic
5.	Heat Shrink Anti Tracking Insulating Sleeve	13.	Worm Drives
6.	Heat Shrink Stress Control Tubing	14.	Copper Braid
7.	Heat Shrink Rain Shed	15.	Solder Tack
8.	Black Sealing Mastic	16.	Installation Instruction Sheet



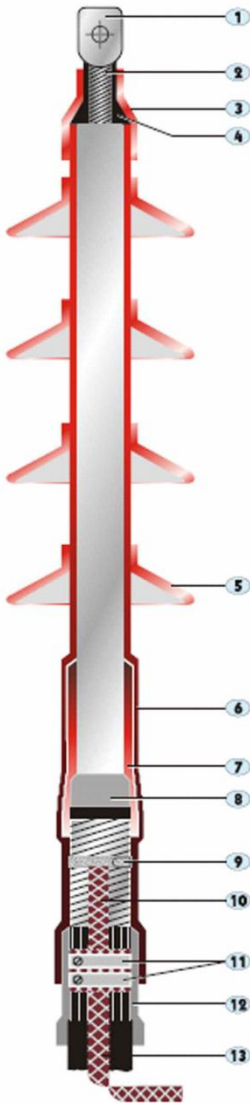
ELECTRICAL PERFORMANCE

Test	11KV	22KV	33KV
A.C Dry Withstand Voltage	35KV/1 Minute	50KV/1 Minute	75KV/1 Minute
D.C Withstand , 30 Minute	48KV	96KV	144KV
Impulse Withstand Voltage	75KV	125KV	170KV
Partial Discharge	12.7KV<5Pc	25KV<5Pc	38KV<5Pc

KIT SELECTION GUIDE

OUTDOOR TERMINATION			INDOOR TERMINATION		
11KV	22KV	33KV	11KV	22KV	33KV
3X16-35-HMO-9	3X16-50-HMO-5	3X25-50-HMO-1	3X16-35-HMI-9	3X16-50-HMI-5	3X25-50-HMI-1
3X50-95-HMO-10	3X70-120-HMO-6	3X70-120-HMO-2	3X50-95-HMI-10	3X70-120-HMI-6	3X70-120-HMI-2
3X120-HMO-11	3X150-185-HMO-7	3X150-185-HMO-3	3X120-HMI-11	3X150-185-HMI-7	3X150-185-HMI-3
3X150-225-HMO-12	3X240-400-HMO-8	3X240-400-HMO-4	3X150-225-HMI-12	3X240-400-HMI-8	3X240-400-HMI-4
3X240-300-HMO-13			3X240-300-HMI-13		
3X400-HMO-14			3X400-HMI-14		

HEAT SHRINK SINGLE CORE TERMINATIONS  
INDOOR/OUTDOOR , MSIX/MSOX-1133 SERIES



KIT COMPONENTS

1.	Lug	8.	Stress Control Mastic
2.	Conductor	9.	Solder Tack
3.	Heat Shrink Lug Sleeve	10.	Copper Braid
4.	Red Mastic	11.	Worm Drives
5.	Heat Shrink Rain Shed	12.	Black Sealing Mastic
6.	Heat Shrink Anti Tracking Insulating Sleeve	13.	Ground Copper Braid
7.	Heat Shrink Stress Control Tubing	14.	Installation Instruction Sheet



ELECTRICAL PERFORMANCE

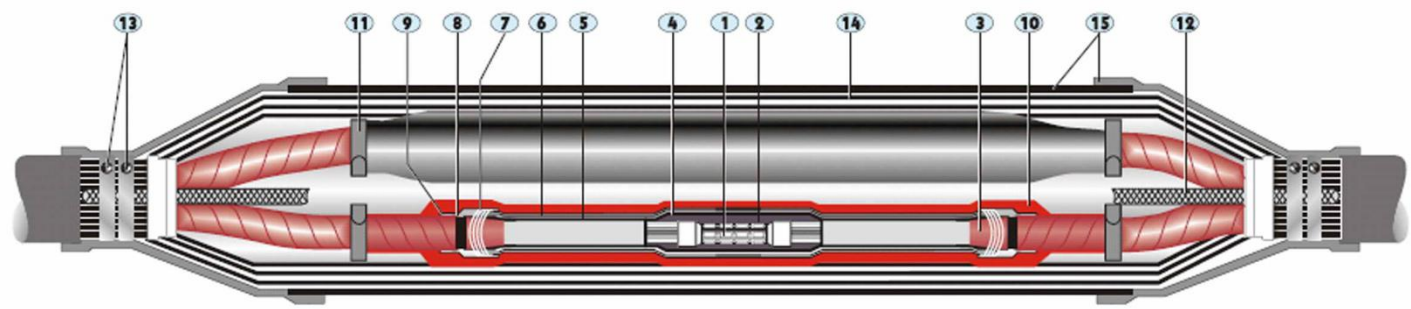
Test	11KV	22KV	33KV
A.C Dry Withstand Voltage	35KV/1 Minute	50KV/1 Minute	75KV/1 Minute
D.C Withstand , 30 Minute	48KV	96KV	144KV
Impulse Withstand Voltage	75KV	125KV	170KV
Partial Discharge	12.7KV<5Pc	25KV<5Pc	38KV<5Pc

KIT SELECTION GUIDE

OUTDOOR TERMINATION			INDOOR TERMINATION		
11KV	22KV	33KV	11KV	22KV	33KV
1X16-50-MSOX-11	1X16-50-MSOX-6	1X25-50-MSOX-1	1X16-50-MSIX-11	1X16-50-MSIX-6	1X25-50-MSIX-1
1X70-120-MSOX-12	1X70-185-MSOX-7	1X70-185-MSOX-2	1X70-120-MSIX-12	1X70-185-MSIX-7	1X70-185-MSIX-2
1X150-300-MSOX-13	1X185-300-MSOX-8	1X240-500-MSOX-3	1X150-300-MSIX-13	1X185-300-MSIX-8	1X240-500-MSIX-3
1X400-630-MSOX-14	1X400-630-MSOX-9	1X630-800-MSOX-4	1X400-630-MSIX-14	1X400-630-MSIX-9	1X630-800-MSIX-4
1X800-1000-MSOX-15	1X800-1000-MSOX-10	1X1000-MSOX-5	1X800-1000-MSIX-15	1X800-1000-MSIX-10	1X1000-MSIX-5

# HEAT SHRINK STRAIGHT THROUGH JOINT

## 3 CORE , HMS-1133 SERIES



### KIT COMPONENTS

1.	In Line Connector	9.	Heat Shrink Dual Wall Tubing
2.	Grey Mastic	10.	Copper Mesh Tape
3.	Stress Control Mastic	11.	Solder Tack
4.	Heat Shrink Stress Control Tubing	12.	Copper Earth Continuity Braid
5.	XLPE Insulation	13.	Worm Drives
6.	Heat Shrink Insulation Tubing	14.	G.I Mesh Tape
7.	Stress Control Mastic	15.	Heat Shrink Outer Jacket
8.	Semi-Conducting Paint	16.	Installation Instruction Sheet



### ELECTRICAL PERFORMANCE

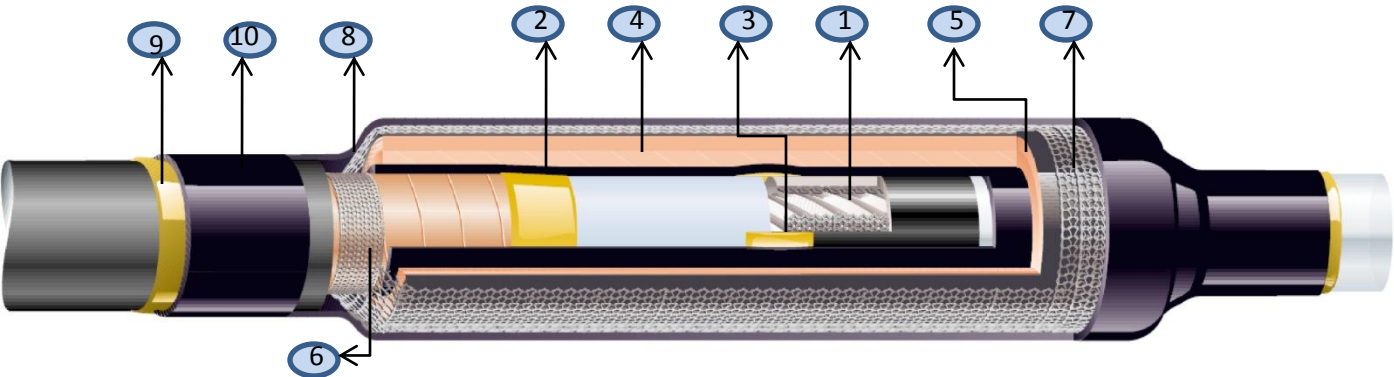
Test	11KV	22KV	33KV
A.C Dry Withstand Voltage	35KV/1 Minute	50KV/1 Minute	75KV/1 Minute
D.C Withstand , 30 Minute	48KV	96KV	144KV
Impulse Withstand Voltage	75KV	125KV	170KV
Partial Discharge	12.7KV<5Pc	25KV<5Pc	38KV<5Pc

### KIT SELECTION GUIDE

3 CORE STRAIGHT THROUGH JOINT		
11KV	22KV	33KV
3X16-50 – HMS-10	3X25-50 – HMS-5	3X35-70 – HMS-1
3X50-95 – HMS-11	3X70-95 – HMS-6	3X95-150 – HMS-2
3X120-185 – HMS-12	3X120-150 – HMS-7	3X185-300 – HMS-3
3X225-300 – HMS-13	3X185-240 – HMS-8	3X400 – HMS-4
3X400 – HMS-14	3X300-400 – HMS-9	



# HEAT SHRINK STRAIGHT THROUGH SINGLE CORE JOINT , MHSX-1133 SERIES



## KIT COMPONENTS

1.	In Line Connector	6.	Copper Mesh Tape
2.	Heat Shrink Stress Control Tube	7.	G.I Mesh Tape
3.	Grey Mastic	8.	Copper Earth Contunuity Braid
4.	Heat Shrink Insulating Tube	9.	Black Sealing Mastic
5.	Heat Shrink Dual Wall Tubing	10.	Heat Shrink Outer Jacket
		11.	Installation Instruction Sheet



## ELECTRICAL PERFORMANCE

Test	11KV	22KV	33KV
A.C Dry Withstand Voltage	35KV/1 Minute	50KV/1 Minute	75KV/1 Minute
D.C Withstand , 30 Minute	48KV	96KV	144KV
Impulse Withstand Voltage	75KV	125KV	170KV
Partial Discharge	12.7KV<5Pc	25KV<5Pc	38KV<5Pc

## KIT SELECTION GUIDE

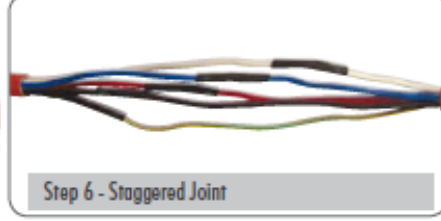
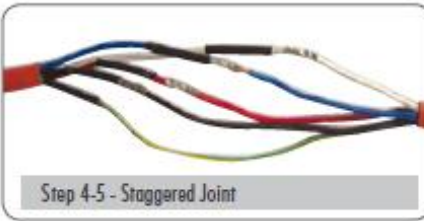
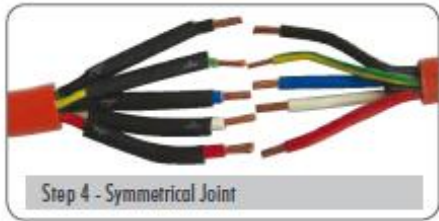
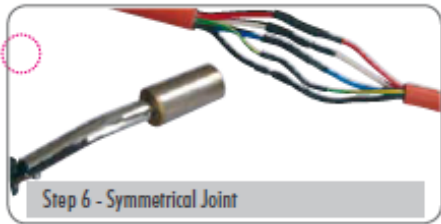
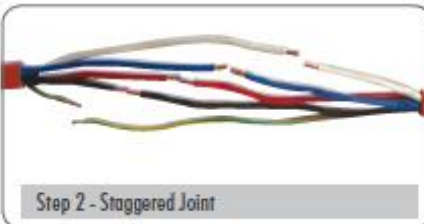
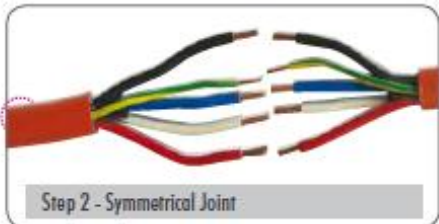
SINGLE CORE STRAIGHT THROUGH JOINT		
11KV	22KV	33KV
1X16-50 – MHSX-12	1X25-50 – MHSX-6	1X35-70 – MHSX-1
1X70-120 – MHSX-13	1X70-150 – MHSX-7	1X95-150 – MHSX-2
1X150-225 – MHSX-14	1X185-240 – MHSX-8	1X185-300 – MHSX-3
1X240-300 – MHSX-15	1X300-500 – MHSX-9	1X400-630 – MHSX-4
1X400-500 – MHSX-16	1X630-800 – MHSX-10	1X800-1000 – MHSX-5
1X630-1000 – MHSX-17	1X1000 – MHSX-11	

HEAT SHRINK STRAIGHT THROUGH LT  
JOINT , HMLT-1000 SERIES



KIT COMPONENTS

1.	Heat Shrink Outer Jacket	5.	Copper Earth Continuity Braid
2.	Heat Shrinkable Insulating Tubes	6.	Worm Drives
3.	In Line Connectors	7.	Black Sealing Mastic
4.	Red Mastic Tape	8.	Installation Instruction Sheet



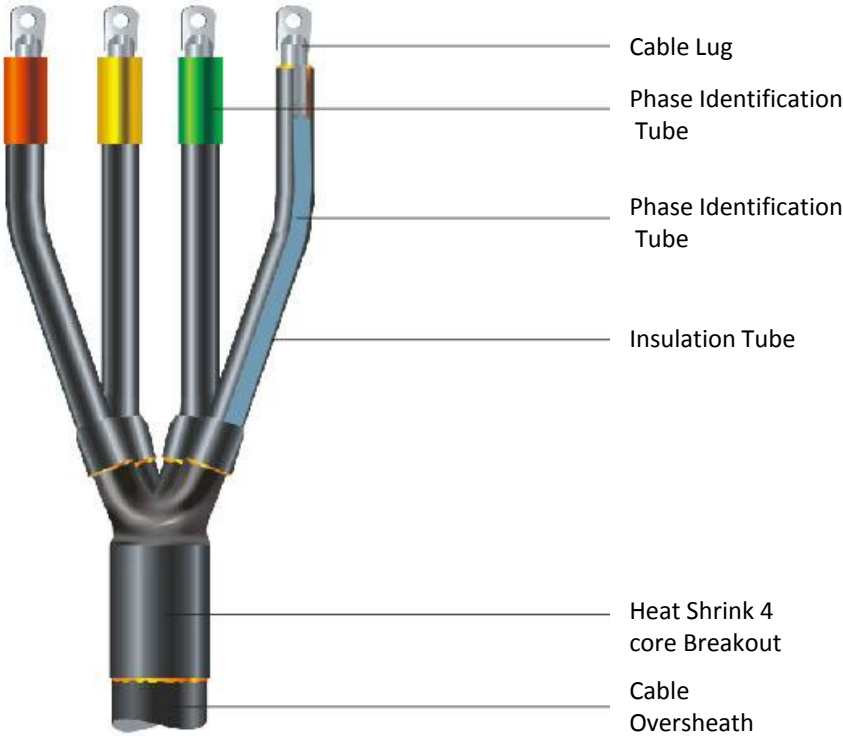
ELECTRICAL PERFORMANCE

Test	1.1KV
A.C Dry Withstand Voltage	3.5KV/1 Minute
D.C Withstand , 30 Minute	15KV/15 Minute

KIT SELECTION GUIDE

LT STRAIGHT THROUGH JOINT
1.1KV
3 ½ / 4 X 1.5 – 6 – HMLT-1
3 ½ / 4 X 10 – 16 – HMLT-2
3 ½ / 4 X 25 – 50 – HMLT-3
3 ½ / 4 X 70 – 150 – HMLT-4
3 ½ / 4 X 185 – 400 – HMLT-5

HEAT SHRINK END TERMINATION LT KIT ,  
HMLT(I)/(O)-1000 SERIES



ELECTRICAL PERFORMANCE

Test	1.1KV
A.C Dry Withstand Voltage	3.5KV/1 Minute
D.C Withstand , 30 Minute	15KV/15 Minute

KIT SELECTION GUIDE

LT END TERMINATION KIT
1.1KV OUTDOOR
3 ½ / 4 X 16 – 35 – HMLT(O)-1
3 ½ / 4 X 50 – 95 – HMLT(O)-2
3 ½ / 4 X 120 – 185 – HMLT(O)-3
3 ½ / 4 X 225 – 300 – HMLT(O)-4
3 ½ / 4 X 400 – 500 – HMLT(O)-5
1.1KV INDOOR
3 ½ / 4 X 16 – 35 – HMLT(I)-1
3 ½ / 4 X 50 – 95 – HMLT(I)-2
3 ½ / 4 X 120 – 185 – HMLT(I)-3
3 ½ / 4 X 225 – 300 – HMLT(I)-4
3 ½ / 4 X 400 – 500 – HMLT(I)-5



# HEAT SHRINK HIGH VOLTAGE TAPE, JHST-1133 SERIES

# Jointmask



## Applications :

- ❑ Emergency repair of electrical system
- ❑ Insulation and protection of odd-shaped electrified objects, where tubular sleeve shaped insulation materials are not applicable
- ❑ Reduce space allowance between phase to phase bus bar

## Features/Benefits :

- ❑ Low melting point high polymer adhesive layer for easy installation
- ❑ Conform to irregular shaped objects where tubular sleeve shaped insulation materials are not applicable
- ❑ Compatible with most other insulation material

## Temperature Range :

- ❑ Operating Temperature : -40°C to 105°C
- ❑ Shrink Temperature : 125°C

## Colours Available :

RED , YELLOW , GREEN , BLUE , BLACK

## Ordering Information

ORDERING REF. Number	ROLL WIDTH (mm)	BACKING THICKNESS RECOVERED (mm)	ROLL LENGTH(mtr)
JHST - 1	25.0	1.00	5
JHST - 2	50.0	1.00	5

## Installation Instruction

A 2/3 overlap is recommended

One layer application required up to 11 kV

Two layer application required up to 22 kV

Three layer application required up to 33 kV



Flame Retardant

Voltage Class 1-33KV Ideal for emergency repair of electrical power system

Heat Shrinkable tape with low melting point adhesive layer for a round repair. Usually applied by enwinding around the electrified object with half of taps overlapping previous turn. The tape, when heated, shrinks around the substrate while hot melt adhesive fills the gaps and fuse with the tape to form an integrated insulation.



Properties	Requirements	Testing Method
<b>Physical</b>		
Tensile Strength	8 N/mm <sup>2</sup> (min.)	ASTM D 412, ISO 37
Ultimate Elongation	200% (min.)	ASTM D 412, ISO 37
Volume Resistivity	1 x 10 <sup>12</sup> ohms.cm.(min.)	ASTM D 257
<b>Low Temperature Flexibility</b>		
(4 hrs at - 20° C)	No cracking	ASTM D 2671
Flammability	Self Extinguishing	ASTM D 2671
<b>Heat Ageing (7 days at 175° C)</b>		
Tensile Strength	7 N/mm <sup>2</sup> (min.)	ASTM D 2671
Elongation	200% (min)	ASTM D 2671
Heat Shock	No cracking or flowing	ASTM D 2671
<b>Electrical</b>		
Dielectric Strength	500 V/mil (20 kV/mm)	ASTM D 149
Dielectric Constant	3.4	ASTM D 150
Tracking Resistance	Non-Trackig	ASTM D 2303
Corrosion	No corrosion	ASTM D 2671
Water Absorption	0.5% (max.)	ASTM D 570
<b>Adhesive</b>		
Adhesive Softening Point	100° C	ASTM D28
Low Temperature Flexibility	-25° C	ESI0913
Tracking Resistance	Non-Tracking	ASTM D2303



# OVERHEAD LINE PROTECTION SLEEVES OLPS-1133 SERIES

# Jointmask

## Slot Shape protective connector on bus bar

Suitable for application in slot-shape bus bar for protection. The good is qualifiedly produced uniformly by special producing to obtain the best insulation properly.



**Dielectric Strength** : 217KV/CM@1.27MM

No tracking and erosion resistant.

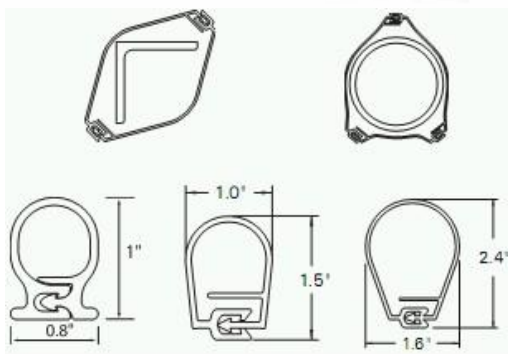
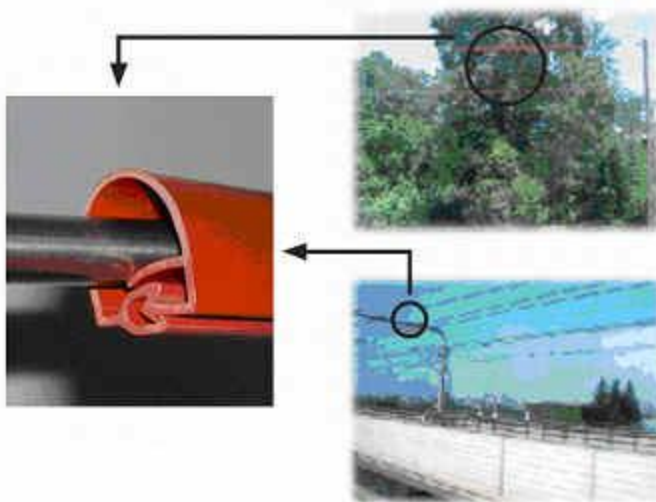
**Tensile Strength** : 10MPa min

**Ultimate Elongation** : 100%min

**Thermal Endurance** : 105'C min

**Water Absorption** : 1%MAX AFTER 336 Hrs AT 23'C.

Resistant to bird dropping : Uric Acid for 168 Hrs



## Self – locked protective tubing for medium voltage line cover.

Suitable for application on 11KV – 33KV aerial naked wires/conductors. Easy and quick to operate, mainly used in the insulation of naked-wire in substation and overhead conductors.



## Application

If overhead lines get across trees or are close to trees or buildings, it may lead to electrical outages caused by incidental contact from tree branches or wildlife. Medium voltage line cover can provide unique insulating protection solution for those kind of problems. (See picture) Medium voltage line cover used for railway contact network overhead line system, improve insulating performance and prevent electrical outages caused by incidental contact from tree branches or wildlife. insulation for overhead conductors to help prevent electrical outages caused by incidental contact from tree branches or wildlife. It provides unique insulation protect solution especially for railway overhead conductor. The sleeve may be applied selectively on problem spans to avoid costly conductor replacement. Installation is possible on energized lines utilizing the tool which attaches directly to the overhead conductor and remains stationary in a single location

### Features :

Live installation , Lightweight , Anti-tracking , Weather Resistance , Superior UV and Abrasion Resistance , Localized Installation , Range Taking  
Quick Installation from 16mm2-800mm2

HEAT SHRINK FLAME RETARDANT OUTER  
JACKETING TUBING, OJ- 1133 SERIES



Test Item	Test Method	Typical Value
Tensile strength	ASTM D2671	≥10Mpa
Break down elongation	ASTM D2671	≥450%
Tensile strength after ageing	ASTM D2671	≥10Mpa
Break down elongation after ageing	ASTM D2671	≥400%
Upright combustibility	ASTM D2863	FV-1
Water absorption	ASTM D570	≤0.5%
Heat shock	200°C for 30min	No drop , no flow
Low temperature flexibility	-40°C for 4hr	No cracking
Dielectric strength	ASTM D2671	≥15kV/mm
Peel off strength to PEX	ASTM D2671	≥30N/cm
Peel off strength to steel	ASTM D2671	≥30N/cm

Product Selection

Product Code	For Cable Diameter(mm)	Standard Length per piece(mm)
OJ30/12	10mm-20mm	1000
OJ50/20	25mm-35mm	1000
OJ75/24	40mm-50mm	1000
OJ95/35	55mm-65mm	1000
OJ120/40	70mm-100mm	1000
OJ150/50	110mm-130mm	1000



Flame Retardant

**Voltage Class 1.1-33kV Ideal for electrical insulation and protection of outdoor electrical equipments**

Outer Jacketing, flame retardant abrasion resistant heat shrinkable tubing with adhesive liner.

**Applications**

Insulation protection for outdoor electrical equipments and connections (such as hanging lamps, external lighting system, electrical cable for motors and other cabling joints) in sea-going vessel, off-shore oil platform, shipyard and harbor.

Water sealant applications for outdoor electrical equipments

Other applications which require mechanical protection and waterproof sealing against seawater, moisture and other common contaminates

**Features/Benefits**

Adhesive-lined, sealing against water, moisture and/or other common contaminants

Flame retardant

Abrasion resistant

**Temperature Range**

Operating Temperature : -55~ 105 °C

Shrink Temperature : 105 ~ 135 °C

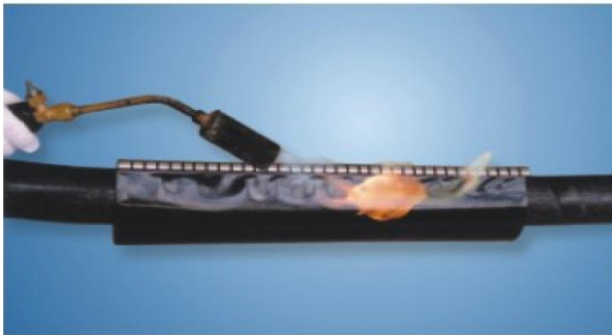
**Color:** Black





# HEAT SHRINK FLAME RETARDANT CABLE REPAIR SLEEVE, RJ- 1133 SERIES

**Jointmask**



**Voltage Class** 11kV - 33kV ideal for emergency repair of electrical power system 'JOINTMASK' heat shrink repair sleeves are a fast and emergency cable repair and sealing system. The repair sleeve is quickly fitted in breakdowns.

**Applications**

- ☐Emergency repair of electrical system
- ☐Insulation and protect of odd-shaped electrified objects, where tubal sleeve shaped insulation materials are not applicable

**Features Benefits**

Moisture-proof  
Insulating and tight-fitting repair is then obtained in one step by heating, which makes the sleeve diameter shrink and the adhesive coating melt and flow into interstices.  
Abrasion and corrosion resistant semi-rigid out layer

**Temperature Range**

Operating Temperature: -25°C-90°C  
Shrink Temperature: 135°C

**Colour:** Black



Flame Retardant

**Ordering Information**

Product Code	For Cable Diameter(mm)	Standard Length per piece(mm)
RS30/12	10mm-20mm	1000
RS50/20	25mm-35mm	1000
RS75/24	40mm-50mm	1000
RS95/35	55mm-65mm	1000
RS120/40	70mm-100mm	1000
RS150/50	110mm-130mm	1000



# HEAT SHRINKBALE HIGH VOLTAGE BUS BAR SLEEVES HVBBS - 1133 SERIES



### Durable

Heat Shrinkable Bus Bar tubing is made of specially formulated, cross-linked, flame retardant, track resistant polyolefin. This material has high resistance to splitting, while providing the flexibility to conform to bends in certain applications. Superior split resistance can prevent insulation failure and resulting down times.

### Reliable

Heat Shrinkable Bus Bar tubing is unaffected by normal cleaning fluids and is resistant to physical damage. Good thermal endurance (up to 110°C / 230°F) contributes to longer life and more stable performance. Excellent dielectric strength allows the required space between bus bars and metal enclosures to be substantially reduced. Closer spacing reduces both the overall size of the assembly, and the overall cost.

### Cost Effective

In the past, it was expensive to replace otherwise good electrical equipment that had been damaged by fire or had failed due to insulation deterioration. Replacing burned insulation or retrofitting with flame-retardant. Heat Shrinkable Anti Tracking Bus Bar Tubing is an extremely cost-effective alternative to buying new bus gear. It will shrink to fit rectangular, square or round bus bar and will handle voltage ranges from 600 volts to 36KV. This reduces your inventory requirements, and saves you time and money.



Flame Retardant

## Ordering Information

Product Code	Inner Dia of the Tube before shrinking (mm)	Inner Dia of the Tube after shrinking (mm)	Available Length per Roll
HVBBS-1	10 mm	6 mm	50 mtr
HVBBS-2	18 mm	9 mm	25 mtr
HVBBS-3	30 mm	12 mm	20 mtr
HVBBS-4	40 mm	16 mm	20 mtr
HVBBS-5	50 mm	20 mm	20 mtr
HVBBS-6	65 mm	25 mm	20 mtr
HVBBS-7	75 mm	30 mm	20 mtr
HVBBS-8	100 mm	40 mm	20 mtr
HVBBS-9	120 mm	50 mm	20 mtr
HVBBS-10	150 mm	60 mm	20 mtr

Colours : Reddish Brown





HEAT SHRINK MEDIUM THIN WALL VOLTAGE  
BUS BAR SLEEVE MVBBS - 6000 SERIES



Application

Heat Shrinkable Medium Voltage Thin Wall Bus Bar Sleeve has excellent physical, chemical and electrical proprieties, widely used for bus-bar insulation for up to 6.6KV because of their rapid, easy to installation. Can also be used to provide insulation and strain relief of electrical connections and wire termination, identification of wires and packaging components

Heat Shrinkable Medium Voltage Thin Wall Bus Bar Sleeve is widely used for electrical insulation and protects in-line components, disconnect terminals and splices with its high strength and excellent resilience. Bundles wires for very flexible light-duty harness. Identifies or colour codes, wires, cables, terminals, and components.

Features / Benefits

Low shrunk temperature reduces installation time and the risk of damage to temperature sensitive components.

Hot stamps extremely well

Very flexible, does not easily wrinkle when bent.

Higher temperature rating, better thermal stability and higher resistance to physical abuse than non-cross linked materials.

Size Selection

Always order the largest that will shrink snugly over the component to be recovered, special ordered sizes are available on request

Ordering Information

Product Code	Inner Dia of the Tube before shrinking (mm)	Inner Dia of the Tube after shrinking (mm)	Available Length per Roll
MVBBS-1	10 mm	5 mm	100 mtr
MVBBS-2	20 mm	10 mm	100 mtr
MVBBS-3	30 mm	15 mm	50 mtr
MVBBS-4	40 mm	20 mm	50 mtr
MVBBS-5	50 mm	25 mm	50 mtr
MVBBS-6	60 mm	30 mm	50 mtr
MVBBS-7	75 mm	32 mm	50 mtr
MVBBS-8	100 mm	50 mm	20 mtr
MVBBS-9	120 mm	60 mm	20 mtr
MVBBS-10	150 mm	75 mm	20 mtr

Operating Temperature : -55°C to 125°C

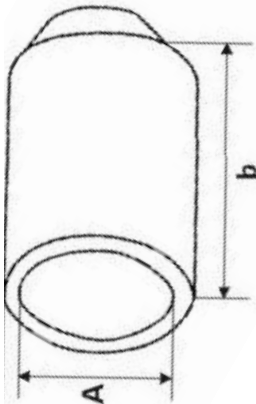
Colours : Red , Yellow , Black , Blue



Flame Retardant



# HEAT SHRINK CABLE END CAPS JEC - SERIES



Heat Shrink Cable End Caps are used to seal the ends of all types of Cables & protect from ingress of water/moisture. The caps are manufactured from high quality cross linked polyolefin material.

Compatible with most commonly used Cable Jackets i.e. XLPE, PVC, PILC or Rubber Sheathed Cable.

Hot Melt adhesive lining provides seal on irregular cable sheaths.

Excellent resistance to weathering, moisture, contamination and adverse environmental conditions.

- 1 Valved End caps (V) available for pressurized application for Telecom cables. 2 Special Relief valved End Caps (RV) available for degassing application in High Voltage Power cables. 3 High voltage (non tracking) End Caps available for sealing live parts. 4 Conductive End Caps are available with Conductive mastic. 5 Live End Cap Kits available for sealing live Cables. 6 Customized dimensions of End Caps available on request.

Product Selection Chart Heat Shrinkable End Caps					
Code	A		b	T	Cable Range
	S	F	S	F	2-4
	Min	Max	Min	±10%	4-8
JEC-1	6	2	25	2.0	4-8
JEC-2	12	4	40	2.3	4-11
JEC-3	12	4	58	2.3	4-11
JEC-4	14	4	38	2.3	8-16
JEC-5	14	4	58	2.3	8-16
JEC-6	20	7.5	55	2.3	8-20
JEC-7	20	8	75	2.5	8-20
JEC-8	25	8	55	2.3	12-26
JEC-9	25	8	75	2.5	12-30
JEC-10	30	11	75	2.5	16-35
JEC-11	35	11	75	2.5	16-35
JEC-12	40	15	90	3.3	16-40
JEC-13	40	15	120	3.3	16-40
JEC-14	45	15	90	3.3	16-40
JEC-15	45	15	120	3.3	16-40
JEC-16	55	25	125	3.8	25-47
JEC-17	55	25	170	3.8	25-47
JEC-18	63	25	125	3.8	25-55
JEC-19	63	25	170	3.8	25-55
JEC-20	75	35	140	4.0	35-68
JEC-21	75	35	180	4.0	35-68
JEC-22	85	36	140	4.0	36-78
JEC-23	85	35	180	4.0	36-78
JEC-24	100	45	160	4.0	45-90
JEC-25	100	45	200	4.0	45-90
JEC-26	120	45	160	4.0	45-110
JEC-27	120	45	200	4.0	45-110
JEC-28	130	60	160	4.6	64-120
JEC-29	154	60	165	4.6	70-145
JEC-30	230	125	220	4.0	140-200
JEC-31	310	120	220	7.0	140-280
JEC-32	400	204	220	4.0	230-360
JEC-33	500	200	220	6.0	230-460

S : As supplied , F : After free recovery





# HEAT SHRINK LT BRAKOUT LVB-1000 SERIES



Product Selection Chart (All Dimension in mm)

Code No.	Core	D		d		L		I		Tb	Tc
		s	f	s	f	s	f	s	F	f±10 %	f±10 %
LVB-1	2	22	8	10	3	70	85	14	20	2.2	2.0
LVB-2	2	32	8	14	3	70	85	15	20	2.2	2.0
LVB-3	2	32	10	14	4	70	85	15	20	2.2	2.0
LVB-4	2	42	11	14	4	65	85	14	20	2.2	2.0
LVB-5	2	60	20	24	7	95	120	25	34	3.0	2.5
LVB-6	2	110	65	45	15	100	140	40	60	2.2	2.0
LVB-7	2	156	65	50	15	100	140	40	60	2.2	2.0
LVB-8	3	37	14	15	4	80	100	15	21	2.2	2.0
LVB-9	3	53	20	25	8	160	188	55	62	3.7	2.8
LVB-10	3	80	30	36	13	185	215	60	75	3.9	3.1
LVB-11	3	95	30	39	13	185	215	60	75	3.9	3.1
LVB-12	3	110	45	55	20	200	235	70	88	4.3	3.0
LVB-13	3	125	45	60	21	190	230	65	90	4.6	3.4
LVB-14	3	140	56	70	28	215	250	80	90	4.6	3.4
LVB-15	3	180	58	70	29	200	250	75	90	4.6	3.4
LVB-16	4	40	12	14	3	80	100	15	25	2.4	1.7
LVB-17	4	41	16	14	4	80	100	15	23	2.4	1.7
LVB-18	4	50	17	17	4	75	95	15	23	2.4	1.7
LVB-19	4	58	26	21	7	140	170	32	48	3.5	2.5
LVB-20	4	70	28	25	8	130	165	32	46	3.5	2.5
LVB-21	4	70	30	25	9	155	190	35	48	3.7	2.6
LVB-22	4	80	31	31	10	150	190	32	47	3.7	2.6
LVB-23	4	90	42	35	13	170	210	40	52	3.7	2.6
LVB-24	4	100	44	35	13	170	208	40	51	3.7	2.6
LVB-25	4	125	44	40	14	175	208	40	51	3.7	2.6
LVB-26	5	50	16	15	4	85	110	23	33	3.2	2.6
LVB-27	5	57	17	15	4	75	110	23	33	3.2	2.6
LVB-28	5	80	32	26	8	155	190	55	65	3.3	2.8
LVB-29	5	100	33	32	8	150	190	50	65	3.3	2.8
LVB-30	6	85	37	23	7	100	140	30	46	3.2	2.6

D, d : Internal Diameter, s : as supplied ; f : after free recovery ; Tb, Tc : Thickness of body & core

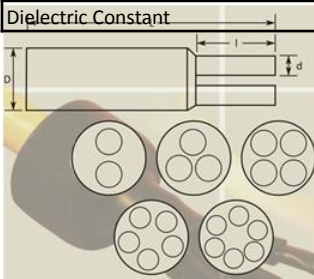
Heat Shrink Low Voltage Cable Breakouts provide a strong and permanent environmental seal to the crutch of 2, 3, 4, 5 & 6 core PVC, XLPE Rubber and PILC cables upto 1.1KV rated voltage.

The breakouts are manufactured from high quality cross linked polyolefin material that offer an exceptional insulation and long term service reliability.

The breakouts are internally coated with hot melt adhesive. These breakouts when installed in position provide 100% water/moisture proof sealing to the system.

## TECHNICAL SPECIFICATION

PROPERTIES	VALUE	STANDARD
<b>Physical</b>		
Tensile Strength	12N/mm <sup>2</sup> (Mpa) (min.)	ASTM D638
Ultimate Elongation	350% (min.)	ASTM D638
Density	1.15 ± 0.2gm/cm <sup>3</sup>	ASTM D792
Hardness	45 ± 10 Shore D	ASTM D2240
Water Absorption	0.5% (max.)	ASTM D570
<b>Thermal</b>		
Accelerated Ageing	(120°C for 500 hrs.)	ASTM D2671
Tensile Strength	11N/mm <sup>2</sup> (Mpa) (min.)	ASTM D638
Ultimate Elongation	300% (min.)	ASTM D638
Low Temp. Flexibility (-40°C for 4 hrs.)	No Cracking	ASTM D2671
Heat Shock (250°C for 30 min.)	No Cracking / Flowing	ESI 09-11
Shrink Temperature	125°C	IEC 216
Continuous Temperature Limit	-40 to +100°C	IEC 216
<b>Electrical</b>		
Dielectric Strength	12 KV/mm. (min.)	ASTM D149
Volume Resistivity	1x10 <sup>10</sup> Ohm.cm (min.)	ASTM D257
Dielectric Constant	5 (max.)	ASTM D150



# HEAT SHRINK HT BRAKOUT HVB-1133 SERIES

# Jointmask



Heat Shrink Anti Tracking Cable Breakout provide permanent environmental seal to the crutch of 3 core XLPE & PILC cable rating upto 36KV.

Manufactured from high quality non tracking cross linked polyolefin material that offers exceptional insulation and long term service reliability.

The breakouts are internally coated with water resistant mastic.

Excellent weather / UV resistance

Good resistance to chemical, solvent, corrosion and fungus.

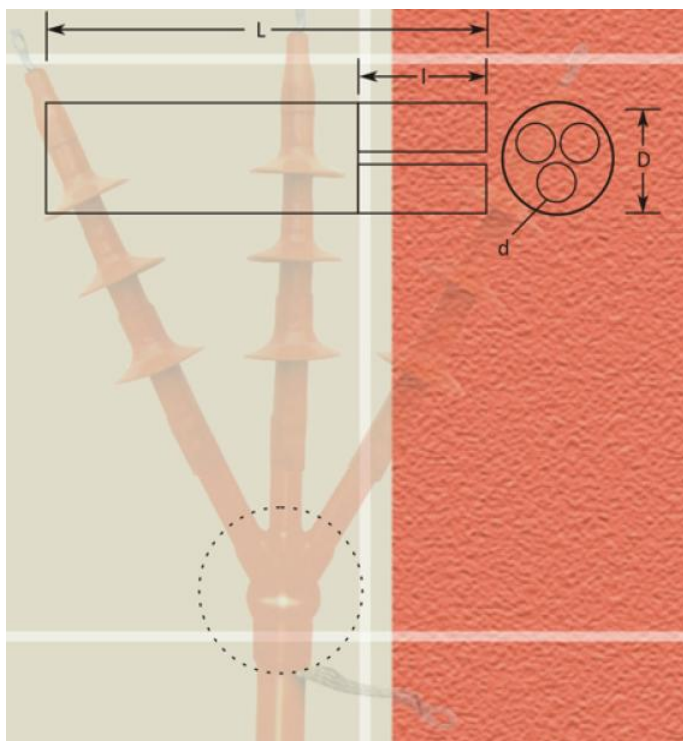
Product Selection Chart ( All dimensions are in mm.)

Code	No. of Cores	D		d		L		l		Tb	Tc
		s	f	s	f	s	f	s	f	f	f
		Min	Max	Min	Max	Min	Max	Min	Max	+10%	+10%
HVB-1	3	55	20	25	8	160	188	52	62	3.7	2.8
HVB-2	3	80	30	39	13	185	215	60	75	3.9	3.1
HVB-3	3	95	30	39	13	185	215	60	75	3.9	3.1
HVB-4	3	110	45	55	20	200	230	70	90	4.3	3.0
HVB-5	3	125	45	60	21	190	230	65	90	4.3	3.0
HVB-6	3	140	56	70	28	215	250	80	90	4.6	3.4
HVB-7	3	180	56	70	29	230	255	80	90	4.6	3.4

D : Internal Diameter ; s : as supplied ; f : after free recovery ; Tb, Tc : Thickness of body & core

## TECHNICAL SPECIFICATION

PROPERTIES	VALUE	STANDARD
<b>Physical</b>		
Tensile Strength	12N/mm <sup>2</sup> (Mpa) (min.)	ASTM D638
Ultimate Elongation	350% (min.)	ASTM D638
Density	1.15 ± 0.2gm/cm <sup>3</sup>	ASTM D792
Hardness	45 ± 10 Shore D	ASTM D2240
Water Absorption	0.5% (max.)	ASTM D570
<b>Thermal</b>		
Accelerated Ageing	(120°C for 500 hrs.)	ASTM D2671
Tensile Strength	11N/mm <sup>2</sup> (Mpa) (min.)	ASTM D638
Ultimate Elongation	300% (min.)	ASTM D638
Low Temperature Flexibility (-40°C for 4 hrs.)	No Cracking	ASTM D2671
Heat Shock (250°C for 30 min.)	No Cracking or Flowing	ESI 09-11
Shrink Temperature	125°C	IEC 216
Continuous Temperature Limit	-40 to +100°C	IEC 216
<b>Electrical</b>		
Dielectric Strength	15 KV/mm. (min.)	ASTM D149
Volume Resistivity	1x10 <sup>14</sup> Ohm.cm (min.)	ASTM D257
Dielectric Constant	5 (max.)	ASTM D150
Resistant to track & erosion	No Tracking, erosion or flame failure upto 3.25KV for 20min.	ASTM D2303





# HEAT SHRINK RAIN SHED/SKIRT JRS- 1133 SERIES

**Jointmask**

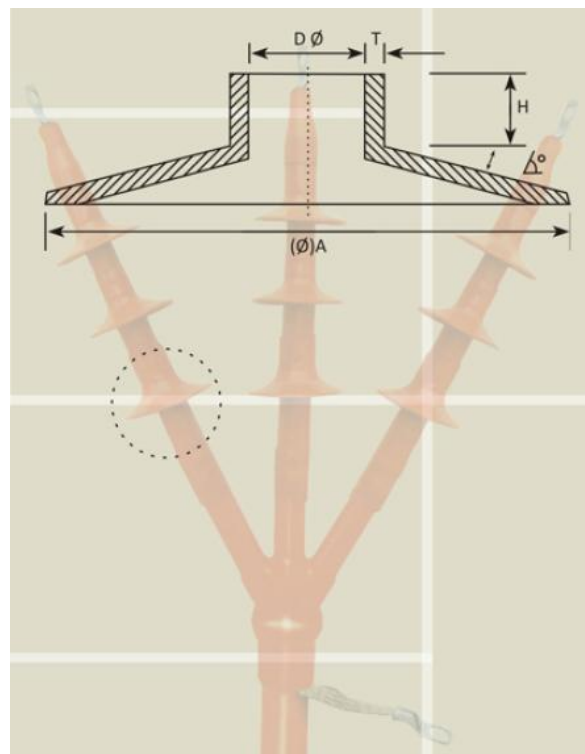


Heat Shrink Creepage Extension Skirts are used to increase the surface creepage distance of the cores of the cable termination without increasing the tail length. They are also used to avoid continuity during rainy season to avoid short circuiting of the electrical network.

The rainsheds are made from high quality cross linked polyolefin material that offers exceptional non tracking behavior, insulation and long term service reliability for indoor and outdoor applications. The creepage extension sheds are internally coated with water resistant mastic.

SELECTION CHART						
CODE	ØA (min)	Ds (min)	Df (min)	Hs (min)		Tf (min)
JRS 1	91	36	12	17	10	2.6
JRS 2	124	51	21	20	10	3.5
JRS 3	140	67	31	24	10	3.5
JRS 4	140	80	35	24	10	3.5
JRS 5	140	105	35	42	10	3.5

TECHNICAL SPECIFICATION		
PROPERTIES	VALUE	STANDARD
<b>Physical</b>		
Tensile Strength	12N/mm <sup>2</sup> (Mpa) (min.)	ASTM D638
Ultimate Elongation	350% (min.)	ASTM D638
Density	1.15 ± 0.2gm/cm <sup>3</sup>	ASTM D792
Hardness	45 ± 10 Shore D	ASTM D2240
Water Absorption	0.5% (max.)	ASTM D570
<b>Thermal</b>		
Accelerated Ageing	(120°C for 500 hrs.)	ASTM D2671
Tensile Strength	11N/mm <sup>2</sup> (Mpa) (min.)	ASTM D638
Ultimate Elongation	300% (min.)	ASTM D638
Low Temperature Flexibility (-40°C for 4 hrs.)	No Cracking	ASTM D2671
Heat Shock (250°C for 30 min.)	No Cracking or Flowing	ESI 09-11
Shrink Temperature	125°C	IEC 216
Continuous Temperature Limit	-40 to +100°C	IEC 216
<b>Electrical</b>		
Dielectric Strength	15 KV/mm. (min.)	ASTM D149
Volume Resistivity	1x10 <sup>14</sup> Ohm.cm (min.)	ASTM D257
Dielectric Constant	5 (max.)	ASTM D150
Resistant to track & erosion	No Tracking, erosion or flame failure upto 3.25KV for 20min.	ASTM D2303



# HEAT SHRINK RIGHT ANGLE & STRAIGHT BOOT JRAB / JSB-1133 SERIES

**Jointmask**



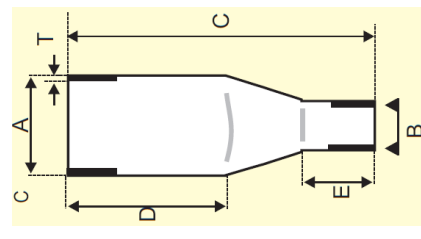
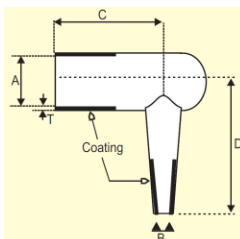
Heat Shrink Right Angle / Straight Boots provide insulation to the bushings in the cable termination box, where the clearance between phase to phase and phase to earth is less than the normal air clearance. These boots provide protection against flashover in the event of humidity, rodent menace and surge impulse.

The boots are made from high quality cross linked non tracking polyolefin material. They are internally coated with water resistant red mastic.

TECHNICAL SPECIFICATION		
PROPERTIES	VALUE	STANDARD
<b>Physical</b>		
Technical Strength	12 N/mm <sup>2</sup> (Mpa) (min)	ASTM D638
Ultimate Elongation	350 % (min)	ASTM D638
Density	1.15 ± 0.2 gm/cm <sup>3</sup>	ASTM D792
Hardness	45 ± 10 Shore D	ASTM D2240
Water Absorption	0.5 % (max)	ASTM D570
<b>Thermal</b>		
Accelerated Ageing	(120°C for 500 hrs)	ASTM D2671
Tensile Strength	11 N/mm <sup>2</sup> (Mpa) (min)	ASTM D638
Ultimate Elongation	300 % (min)	ASTM D638
Low Temperature Flexibility (-40°C for 4 hrs)	No Cracking	ASTM D2671
Heat Shock (250°C for 30 min)	No Cracking or Flowing	ESI 09-11
Shrink Temperature	125°C	IEC 216
Continuous Temperature Limit	-40 to 100°C	IEC 216
<b>Electrical</b>		
Dielectric Strength	15KV/mm (min)	ASTM D149
Volume Resistivity	1 x 10 <sup>-4</sup> Ohm.cm(min)	ASTM D257
Dielectric Constant	5 (max)	ASTM D150
Resistant to Track & Erosion	No Tracking , Erosion or Flame Failure upto 3.25 KV for 20 min.	ASTM D2303

Product Selection Chart Heat Shrinkable Right Angle Boot							
Code	A		B		D	C	T
	S	F	S	F	S	F	F
	Min	Max	Min	Max	Min	Max	±10%
JRAB-1	78	35	34	16	160	130	4.0
JRAB-2	78	37	52	27	170	140	4.5
JRAB-3	90	37	67	27	170	140	4.5
JRAB-4	145	72	67	34	170	150	4.5

S : As supplied , F : After free recovery



Product Selection Chart Heat Shrinkable Straight Boot								
Code	A		B		D	C	E	T
	S	F	S	F	F	F	F	F
	Min	Max	Min	Max	Min	Min	Min	±10%
JSB-1	80	34	34	21	140	225	30	3.6
JSB-2	80	34	57	21	140	225	30	3.6
JSB-3	100	34	57	21	140	225	30	3.6
JSB-4	140	65	90	33	155	325	40	4.2
S : As supplied , F : After free recovery								

S : As supplied , F : After free recovery



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