BUSHINGS & BOOTS



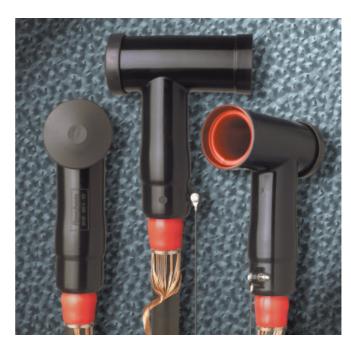
RSRB Heatshrink bushings up to 17.5kV

RICS Non-heatshrink bushings up to 24kV

RCAB Elastomeric insulating boots up to 17.5kV

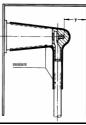
RSTI screened elbows up to 36kV 630A





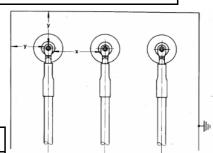
BUSHING INSULATING SLEEVES

For use in switchgear and transformers with compound cable boxes where clearances are insufficient for operation in air or to protect against flash over due to rodents or extreme humidity.



Application	Inline Sleeves	Right Angle Sleeves Part No.	
Range	Part No.		
10-35mm ²	RSRB 4022	RSRB 4042	
50-95mm ²	RSRB 4024	RSRB 4044	
120-300mm ²	RSRB 4026	RSRB 4046	

- 1. For voltages over 17.5kV please contact a Raychem representative.
- 2. Bushing sleeves will be sold for use with Raychem's termination only.



Air Clearances to AS 2067-1980

Voltage (BIL)	Ph/Ph (x)	Ph/Grd (y)
7.2kV (60)	104	90
12kV (95)	184	160
24kV (150)	320	280
36kV (200)	440	380

RIGHT-ANGLE INSULATED EQUIPMENT CONNECTIONS FOR UP TO 24Kv FOR BUSHINGS TO ANSI/IEEE 386, HN52-S61 AND DIN 47636.

Raychem's non heatshrinkable bushing adaptors are designed to be used with Raychem's plastic or paper terminations without increasing the overall length of the termination.

Provide a dead break disconnection with or without capacitive test point.



22kV		111	11kV Part No. Insulated Back Plug		11kV		With Test	Point Plug
XLPE	MIND	XLPE	MIND	400A	630A	400A	630A	
- 25 - 70 95 - 185 240 - 300	25 - 35 50 - 95 120 - 185 240 - 300	25 - 50 70 - 150 185 - 240 300	35 - 70 95 - 150 185 - 240 300	RICS 5112 RICS 5122 RICS 5132 RICS 5142	RICS 5113 RICS 5123 RICS 5133 RICS 5143	RICS 5212 RICS 5222 RICS 5232 RICS 5242	RICS 5213 RICS 5223 RICS 5233 RICS 5243	

POLE MOUNTING BRACKET

The bracket has been designed to be adjustable to suit the tail lengths for 7.2 to 36kV terminations. The brackets can be used to support Raychem's hybrid insulators or surge arrestors. The bracket is ordered separately.

Part number: RAYFPMBKT Fixed pole mount bracket

RA001123 Adjustable pole mount bracket

RCAB

Elastomeric insulating bushing boot for bushings up to 17.5kV

Features

- Tool free application
- High-performance insulation material
- Excellent track and erosion resistance
- Removable and reinstallable

Benefits

- Simple and easy installation
- Unlimited shelf life
- Connection can be energised immediately after installation
- One product for inline and right angle application

Technical data

Raychem elastomeric insulating boots are moulded parts which fit cable lug and the inline or right angled equipment bushing to improve phase-to-phase and phase-to-ground insulation. They are used switchgear and transformer cable boxes where the air clearances are insufficient for normal operation, or to protect against flashover due to rodents or high humidity.

The non-tracking elastomeric housing has excellent erosion resistance, dielectric properties and environmental resistance, giving superb performance in areas of high humidity and electrical stress.

RCAB boots works in combination with all Raychem termination product lines including both elastomeric and traditional heatshrink technology.

RCAB boots are quick and easy to install and do not require any taping of the bushing or the termination. The boot can easily be removed and reinstalled without the need for additional material or tooling, allowing access to the bushing connection for test purposes.

The universal screw EXRM-1366 is available on request.



	RCAB 4110	RCAB 4120
Maximum system voltage	17.5kV	17.5kV
Basic impulse level	95kV	95kV
Collar size	No.1	none
Bushing diameter	31 - 45mm	46 - 70mm
Bushing types: to DIN, CENELEC, ANSI	-	400/630A
Cable cross section	35 - 400mm²	35 - 400mm²



RCAB right angle or inline application up to 17.5kV



Ordering Information

RCAB-4110 RCAB-4120

Each kit contains elastomeric insulating boots, collars (if required) for three phases and installation instructions.

Related Product Information Test report PPR 1336



RSTI

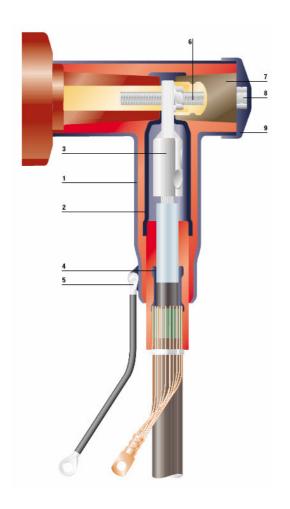
Screened, separable connection system 630A up to 24kV

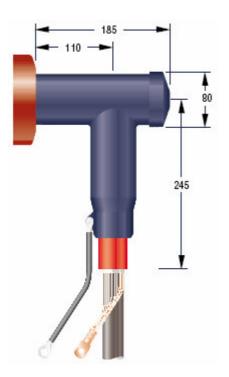
- The insulation of the connector is made of a highly modified silicone rubber characterised by high tracking resistance, elongation at break and non-flammability.
- A thick-walled screen is permanently bonded onto the insulation and
- protects the connection system against unintentional contact
- The screened connector need not be removed for oversheath testing.
- The screened cable connector exceeds CENELEC HD 629.1 S1
- requirements, which includes BS,
 VDE and other international
- specifications.
- Design fits 630A bushings as
- specified by CENELEC HD506 S1, DIN 47636, EN 50180 and EN 50181.
- The compact design supports the use of double "T" connections inside standard terminal boxes
- The wide application range covers cross-sections from 25 to 300mm².
- Conductor connection with
- mechanical or DIN lugs.
- Easily accessible rear plug with
- capacitive test point.
- Few accessories required for system test, double "T" and earth connection.
- Complete kit including lugs facilitates installation and storage.





DESIGN AND CONSTRUCTION





1. Screened body

A thick-walled moulded conductive outer screen is permanently bonded to the silicone rubber insulating material of the body

2. Inner screen

A conductive inner layer, as a faraday cage around the compression or mechanical lug, prevents corona at rated voltage.

3. Compression or mechanical lugs

Specially designed DIN compression lugs and mechanical lugs with shear bolts for connecting either aluminium or copper conductor cables.

4. Stress cone adaptor

Relieves electrical stress at the point where the cable screen is cut. The insulated section extending beyond the wire shielding, provides a convenient point for oversheath testing.

5. Earthing eye and ground lead

Provides a connection point for earthing the screen

6. Threaded pin

A threaded pin together with a spring washer and hex nut ensure a high-performance electrical and mechanical contact with the bushing.

7. Rear plug with test point

Removable rear plug is used with capacitive test point.

8. Test point

The test point is used to determine whether the circuit is energised; alternatively it can be used for phasing.

9. Conductive end cap

Electrical screen and protection of the rear end of the separable connector.

RSTI

Screened, separable connection system 630A up to 24kV

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	12-24kV	36kV
Cable insulation diameter range	12.7 - 34.6mm	22.4 - 40.0mm
Connector cross-section range	25 - 300mm ²	
Maximum system voltage	24kV	
Continuous current rating	630A	
Basic impulse level	125kV	
Partial discharge at 2Uo	<6pC	
AC voltage withstand, 1min	57kV	
DC voltage withstand, 15min	76kV	
Thermal short circuit, 1s	33kA	
Dynamic short circuit	84kA	
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The adapters meet the international CENELEC HD 629.1 S1 specification

SELECTION TABLE

Screened separable connection with mechanical lugs and shear bolts

Cross section	12kV Diameter core insulation		Reference number Conductor material
mm²	min	max	Al or Cu
35-95	12.7-	25.0mm	RSTI-5651
95-150	12.7-	25.0mm	RSTI-5653
185-240	21.2-	34.6mm	RSTI-5654

Cross section	24kV Diameter core insulation		Reference number Conductor material
mm²	min	max	Al or Cu
35-95	12.7-	25.0mm	RSTI-5651
95-240	21.2-	34.6mm	RSTI-5654

Cross section	36kV Diameter core insulation		Reference number Conductor material
mm²	min	max	Al or Cu
35-95	22.4-	33.6mm	RSTI-6651
95-120	22.4-	33.6mm	RSTI-6652
150-240	28.9-	40.0mm	RSTI-6653
300	28.9-	40.0mm	RSTI-6655

Connecting plug RSTI-56CP

