## RSES, RSSS - Screened, separable elbow and straight connection system for gas insulated switchgears and transformers with bushings according to EN 50181 type A (250 A), 10 kV, 15 kV and 20 kV

Raychem screened separable elbow RSES-52xx and straight RSSS-52xx connection systems are designed to connect single-core polymeric cables to gas-insulated switchgears or transformers up to 24 kV. The adapter seals on bushings according to EN 50181 type A (250 A).

#### Design

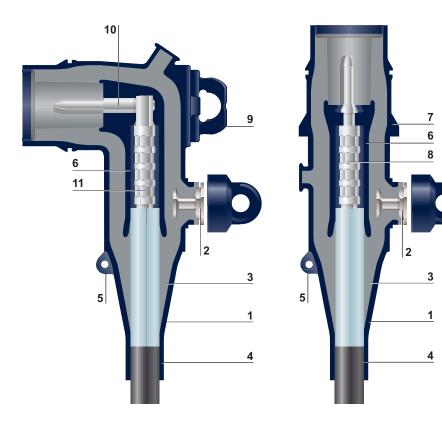
The thick walled separable connection system with an integrated stress control provides sealing and electrical connection to the cone of the bushing and the cable. Made of crosslinked EPDM and protected with a minimum 3 mm moulded conductive shield connected to the earth, the connection system is suitable for both indoor and outdoor installations. The special design and material selection of the connection system allow its use on a wide range of cable dimensions. Thus the connection system is independent of cable tolerances and special cable adapters are not required. The cable preparation and cut-back dimensions are the same for both straight and elbow connection system.

The connection system is equipped with a capacitive test point to ensure that the circuit is not energized before disconnection. The capacitive test point is protected by a conductive cap.

High strength bimetallic DIN-compression connectors tested to VDE 0220 are supplied within the kit to connect both aluminium and copper conductor cables.

Screened elbow connection system

Screened straight connection system



- 1 Screened body
- 2 Capacitive test point
- 3 Stress cone
- 4 Conductive Cable Entrance
- 5 Earthing eye
- 6 Inner Screen
- 7 Retaining Shoulder
- 8 Compression pin-connector
- 9 Lifting Eye
- 10 Pin
- 11 Compression Connector

#### Installation

After a cable preparation and crimping of the connector, the connection system can be simply slid into place virtually under all conditions. For elbow connection system, the connection pin is screwed into the connector, a hexagon wrench is provided with the kit. A separable mounting system allows an easy installation of the Raychem connection system to the bushing. To provide a reliable environmental seal between the connection system and the oversheath a cold-applied Rayvolve tubing or a heat-shrinkable phase marking tubing is offered.





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Scope of supply

# RSES- Elbow connection system The screened body, compression connector (for aluminium and copper conductors), pin, hexagonal wrench, retaining clamp and lubricant supplied in a 3-phase set complete with installation instruction. Kits with modification code -R include in addition the Rayvolve sealing system, kits with modification code -P the heat-shrinkable phase marking tubing.

RSSS - Straight connection system
The screened body, pin connector (for
aluminium and copper conductors),
retaining collar and lubricant supplied in
a 3-phase set complete with installation
instruction. Kits with modification code -R
include in addition the Rayvolve sealing
system, kits with modification code -P the
heat-shrinkable phase marking tubing.

Nominal voltage U₀/U (kV)	Cross section (mm²)	Diameter over core insulation (mm)	Ordering description of Elbow	connection system Straight
6/10	25	13,5-17,4	RSES-5202	RSSS-5202
	35	13,5-17,4	RSES-5203	RSSS-5203
	50	13,5-17,4	RSES-5205	RSSS-5205
	70	16,3-20,8	RSES-5217	RSSS-5217
	95	16,3-20,8	RSES-5219	RSSS-5219
	120	19,6–24,1	RSES-5224	
8,7/15	25	13,5–17,4	RSES-5202	RSSS-5202
	35	16,3-20,8	RSES-5213	RSSS-5213
	50	16,3-20,8	RSES-5215	RSSS-5215
	70	19,6-24,1	RSES-5227	RSSS-5227
	95	19,6-24,1	RSES-5229	RSSS-5229
	120	23,1-28,7	RSES-5234	
12/20	25	16,3-20,8	RSES-5212	RSSS-5212
	35	16,3-20,8	RSES-5213	RSSS-5213
	50	19,6-24,1	RSES-5225	RSSS-5225
	70	19,6-24,1	RSES-5227	RSSS-5227
	95	23,1-28,7	RSES-5239	
	120	23,1-28,7	RSES-5234	

Add modification code -P for connection system with heat shrinkable phase marking tubing. For example: RSES-5225-P Add modification code -R for connection system with Rayvolve sealing tubing. For example: RSES-5225-R

Note: Connection systems including mechanical connectors are available on request.

### Superior environmental seal

The roll-on Rayvolve sleeve is used in conjunction with pressure sensitive mastic and is simply rolled into place to provide a reliable moisture seal.

Kits with modification code -R include the Rayvolve sealing system.

The heat-shrinkable phase marking tubing provides a moisture seal and additional phase marking. Kits with modification code -P include the phase marking tubing.



