

# RAYCHEM SCREENED ELBOW/STRAIGHT SEPARABLE CONNECTORS RSES/RSSS

FOR INTERFACE A (EN 50180/EN 50181): 250 A, UP TO 24 KV

#### **KEY FEATURES**

- Range taking mechanical shearbolt cable lugs
- Hybrid material design for excellent mechanical and electrical performance
- Reliable operation even under harsh environmental conditions
- Screened connector body for improved safety
- Optional Voltage Detection point (VD)<sup>1</sup>

TE Connectivity (TE) has decades of experience in the field of medium voltage termination systems for distribution networks. With TE's new Raychem Screened Elbow and Straight Separable connectors RSES/RSSS, TE further extends its comprehensive and reliable switchgear connect portfolio.

TE's Raychem Screened Elbow and Straight Separable connectors RSES/RSSS are designed to connect single-core polymeric cables to medium voltage gas insulated switchgears and other equipments using bushings type "A" (according to EN 50180/EN 50181) specified for 250A continuous current. RSES and RSSS connectors are compliant with CENELEC HD 629.1 S2 02/2006+A1:2008. and tested for a system voltage up to 24 kV.

Made of a combination of durable EPDM rubber for the outer body and highly modified silicone rubber for the inner insulation, RSES and RSSS connectors are equally suited for indoor and outdoor installations even in harshest environments while offering superior electrical performance. The separable connectors are screened by an earthed outer conductive layer that ensures a safe and reliable operation.

Using mechanical shearbolt cable lugs, RSES and RSSS are easy and quick to install while supporting wide ranges of different cable cross sections (16-95 mm<sup>2</sup> and 70-150 mm<sup>2</sup>). TE's RSES and RSSS connectors can be equipped with a capacitive Voltage Detection point (VD)<sup>1</sup> to determine the presence of voltage in the cable network.

Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.



## **Raychem Screened Separable Connectors RSSS/RSES**

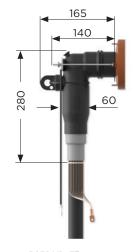


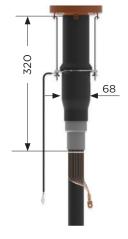


RSES and RSSS separable connectors have been tested in accordance with the international specifications (e.g. CENELEC HD 629.1 S2 02/2006+A1:2008) based on the ratings given below. The cable lugs supplied with the separable connectors have been tested in accordance with IEC 61238-1 on aluminium and copper conductors in the given ranges.

TECHNICAL DATA			
Conductor Cross section Range	16 - 150 mm²		
Diameter over conductor (round, stranded)	5.6 - 15.0 mm		
Diameter over conductor (round, solid)	5.2 - 13.8 mm		
Cable Insulation Diameter Range	15.3 - 28.5 mm		
Maximum System Voltage	24 kV		
Continuous Current Rating	250 A		
Basic Impulse Level	125 kV		
Partial Discharge at 2 U <sub>o</sub>	< 3 pc		
AC Voltage Withstand, 5 min	50 kV		
DC Voltage Withstand, 15 min	96 kV		

All RSES and RSSS separable connectors pass a 100% routine test procedure including: AC Voltage Withstand and Partial Discharge Test.





RSES VD: Elbow connector with test point

RSSS VD: Straight connector with test point

PRODUCT SELECTION TABLE							
Kit Designation	Connector Type	Integrated Voltage Detection Point	12 kV Cross Section (mm²)	24 kV Cross Section (mm²)	Diameter over Round Stranded conductor (mm)	Diameter over Round Solid conductor (mm)	Diameter over Insulation (mm)
RSSS-5251	Straight		50 - 95²	16 - 95	5.6 - 12.9	5.2 - 11.0	15.3 - 25.0
RSSS-5252	Straight			70 - 150	9.3 - 15.0	8.7 - 13.8	21.9 - 28.5
RSSS-VD-5251	Straight	Yes <sup>1</sup>	50 - 95²	16 - 95	5.6 - 12.9	5.2 - 11.0	15.3 - 25.0
RSSS-VD-5252	Straight	Yes <sup>1</sup>		70 - 150	9.3 - 15.0	8.7 - 13.8	21.9 - 28.5
RSES-5251	Elbow		50 - 95²	16 - 95	5.6 - 12.9	5.2 - 11.0	15.3 - 25.0
RSES-5252	Elbow			70 - 150	9.3 - 15.0	8.7 - 13.8	21.9 - 28.5
RSES-VD-5251	Elbow	Yes <sup>1</sup>	50 - 95²	16 - 95	5.6 - 12.9	5.2 - 11.0	15.3 - 25.0
RSES-VD-5252	Elbow	Yes <sup>1</sup>		70 - 150	9.3 - 15.0	8.7 - 13.8	21.9 - 28.5

By default all kits do not contain accessories for earthing of the cable screen. To add this to the kit's contents please use the following kit modification codes: Add "-E" to the end of the kit designation for a kit that includes wire screen earthing accessories.

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 $<sup>^{\</sup>rm 1}$  Optional Voltage Detection point (VD) with expected launch in July 2017.  $^{\rm 2}$  Larger cross sections on demand.