



## HV SINGLE PIECE JOINT WITH HEAT SHRINK REJACKETING (EHVS-145SWI/EHVS-145SWS) UP TO 145 kV

### KEY FEATURES

- Prefabricated and factory tested silicone rubber joint body
- Type tested according to IEC 60840
- Mechanical connector with shear-off bolt technology
- Suitable for single core and coaxial screen cables
- Available both as in-line and shield break
- Water immersion (Annex G) tested joints
- No tension set on the body

TE Connectivity's (TE) Raychem high voltage single piece joint with heat shrink re-jacketing, both in-line or shield break (EHVS-145SWI / EHVS-145SWS) are designed for voltages up to 145 kV and to operate under severe environmental conditions. The EHVS is designed such that it is compatible with polymeric insulated cables independent of the manufacturer and can be adapted with respect to grounding required for various cable constructions. The installation of the joint can be done by trained installers equipped with conventional tools. The joint is designed and tested according to the following standards: IEC 60840.

The joint body is a single piece pre-moulded silicon rubber with integrated stress control. It is also factory tested and 100% routine tested. Multiple body sizes are available to cover a wide application range. A shear-off bolt connector is used to connect the cables and is suitable for both non-milliken and milliken conductors made of both aluminium or copper. The entire design can be modified depending on the type of earthing required - In-line, Shield break or Grounding. A heat-shrinkable polymeric sleeve containing oil-resistant sealant encapsulates the complete joint body. The moisture protection is from the aluminium lined wraparound which also ensures mechanical protection.

The outer protection of the joint is customizable as per customer request. The outer protection can also be modified to include a copper case or a glass fiber resin box or both in case of heavy duty protection. The kits are also available with fibre optic kit and PD sensor to continue monitoring the cable status.

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

## HV Single Piece Heat Shrink Wraparound Joints (EHVS-145SWI/EHVS-145SWS)



MECHANICAL DATA	
Total length of the joint (approx.)	2200 mm
Length of installed joint body (approx.)	690 mm
Outer diameter of joint (approx.)	250 mm
Weight approx.	40 kg
Packing information	1600 x 430 x 700 mm

DESIGN DATA	
Diameter over insulation	50 – 112 mm
Diameter over sheath	145 mm
Max. Cross section (Cu / Al)	Approx. 2500 mm <sup>2</sup>
Material of connector	Aluminium / Copper
Type of the connector	Mechanical connector
Method of stress control	Geometric
Material of the Main joint body	Pre-fabricated silicone rubber
Max. Permissible dielectric stress	4 kV/mm (at insulation screen of cable)
Type of screening	Both in-line and shield break joints
Outer protection	Reinforced composite laminate wrap around with an integral moisture barrier
Installation temperature	0°C - +40°C
Operation temperature	-55°C - +55°C
Storage temperature	0°C - +40°C
Rated current	As per cable
Rated short-circuit current	As per cable
Rated short-circuit current (sheath)	45 kA/1s

ELECTRICAL TYPE TEST IEC 60840	
Heating cycle voltage	152 kV
Partial discharge at ambient and elevated temperatures	114 kV
Lightning impulse voltage 1.2µs/50µs	650 kV

ELECTRICAL TYPE TEST IEC 60840 ANNEX G	
DC voltage test 1 min	25 kV
Impulse voltage level between parts	75 kV
Impulse voltage level between each part to earth	37.5 kV

ELECTRICAL ROUTINE TEST IEC 60840	
AC withstand voltage	190 kV
Partial discharge test	114 kV

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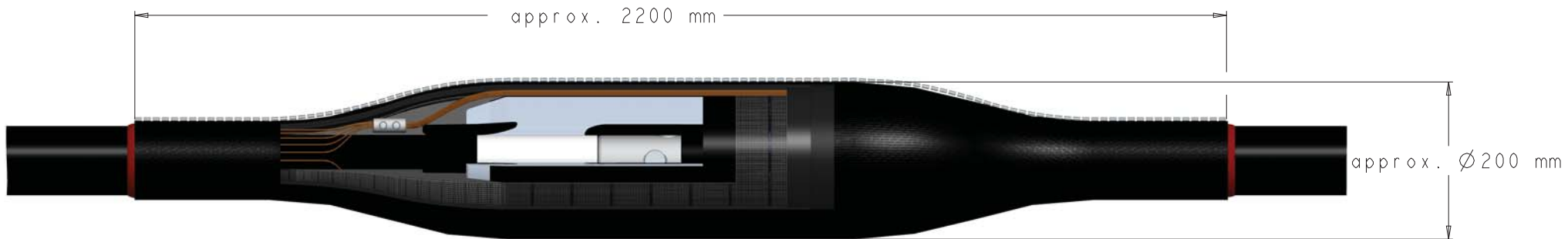
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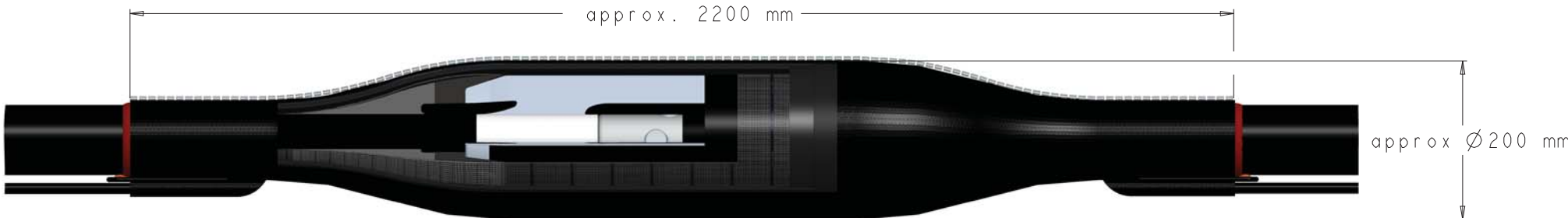
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INLINE 145 kV



SHIELD BREAK 145 kV

SINGLE PIECE INLINE AND  
SHIELD BREAK JOINT  
FOR 145 kV  
FOR POLYMERIC INSULATED CABLES

EHVS-145SWI  
AND  
EHVS-145SWS  
OFFER DRAWING



Raychem High Voltage Cable Accessories

TE Connectivity drawing no: EPD-204-2236-00 REV. 1