

HV THREE PIECE JOINTS WITH HEAT SHRINK REJACKETING (EHVS-170TWI/EHVS-170TWS) UP TO 170 kV

KEY FEATURES

- Prefabricated and factory tested silicone rubber joint body
- Type tested according to IEC 60840
- Tool free installation
- Short cut back dimensions
- No parking on cable semicon needed
- Size transition possible
- 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 three piece joints with heatshrink re- jacketing in-line or shield break (EHVS-170TWI / EHVS-170TWS) are designed for voltages up to 170 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 design consists of a three piece pre-moulded silicon rubber body with 2 adaptors and a main body with integrated stress control. It is factory tested and 100% routine tested. Multiple body sizes are available to cover a wide application range. Different adaptors can be used in combination with main body to customize the design for transition joints. 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 the 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 Three Piece Heat Shrink Wraparound Joints (EHVS-170TWI/EHVS-170TWS)







MECHANICAL DATA	
Total length of the joint (approx.)	2000 mm
Length of installed joint body (approx.)	645 mm
Outer diameter of joint (approx.)	250 mm
Weight approx.	50 kg
Packing information	1600 x 430 x 700 mm

DESIGN DATA		
Diameter over insulation	60 - 112 mm	
Diameter over sheath	130 mm	
Max. Cross section (Cu / Al)	Approx. 2500 mm ²	
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 inline 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	174 kV	
Partial discharge at ambient and elevated temperatures	131 kV	
Lightning impulse voltage 1.2μs/50μs	750 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	218 kV	
Partial discharge test	131 kV	

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Raychem High Voltage Cable Accessories

REV.

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OFFER DRAWING