

Stepless shear bolt connectors



## Fast, reliable connections with shear bolt technology



Eaton's Cooper Power series BT-TAP connector outfitted with shear bolt technology



Increase reliability with stepless shear bolt connectors

Save time and increase reliability in the field by reducing error potential during installation with Eaton's Cooper Power™ series shear bolt connectors.

The stepless shear bolt connector, used in 600 and 900 A deadbreak terminations, ensures more installation consistency than conventional shear bolt connectors and eliminates the need for compression tools and dies. It is now available in Eaton's Cooper Power series 15, 25 and 35 kV class BOL-T™ and BT-TAP™ deadbreak connector systems.

The shear bolt connectors are fitted with stepless bolts that shear off when the optimum contact force has been reached, and provide electric continuity for both aluminum and copper conductors.

### Cleaner connections with shear bolt technology

- Bolts with stepless technology shear below the surface and don't require filing—unlike conventional shear bolts
- EPDM rubber insulation will not be damaged upon installation of the tee-body because no sharp metal protrudes from the shearing process
- Friction discs minimize tip friction on the conductor, allowing consistent compression force every time
- Maximum compressive force is always applied, regardless of conductor size or type
- No special tools required for installation
- Consistent installation integrity is ensured, promoting higher reliability than traditional compression connections
- No crimping required
  - Saves time
  - Less potential for error
- No separate centering inserts required



Powering Business Worldwide

Increase reliability of your medium-voltage collector systems with Eaton's Cooper Power series industry-proven terminations and stepless shear bolt technology.

### Stepless technology

The stepless shear bolt has no pre-set shear points and makes use of the maximum number of bolt threads possible to apply a compressive force to the conductor. The stepless technology ensures that the bolt will shear off below the surface of the connector, eliminating the need for filing sharp metal edges.

### Friction disc

As the bolt is screwed in, the friction disc at the base of the bolt makes contact with the conductor and no longer rotates. The bolt rotates freely above the friction disc without putting torque on the conductor, allowing the shear bolt to apply the optimum amount of contact force without damaging even finely stranded conductors.

### Hex head bolts

No special tools are required to install the connector because the shear bolts are equipped with hex key fittings. Only 5 mm and 8 mm standard hex keys are needed.

### Available connectors

Shear bolt connectors are available in 15, 25 and 35 kV BOLT and BT-TAP separable connectors designed for conductor sizes 3/0–1500 kcmil.



Shear bolt connectors provide optimum contact force for both copper and aluminum conductors

Pairing shear bolt technology with EPDM rubber terminations creates the highest quality deadbreak connector system available



Envirotran™ solar transformer with shear bolt connectors

**Eaton**  
1000 Eaton Boulevard  
Cleveland, OH 44122  
United States  
Eaton.com

**Eaton's Power Systems Division**  
2300 Badger Drive  
Waukesha, WI 53188  
United States  
Eaton.com/cooperpowerseries

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