

200 A 25 and 28 kV class loadbreak portable feedthru-Canadian Edition



General

Eaton's Cooper Power™ series 200 A, 25 and 28 kV Class loadbreak portable feedthru provides two internally bused 15.2/26.3 kV loadbreak interfaces meeting all requirements of IEEE Std 386™-2006 standard – Separable Insulated Connector Systems. It is used in pad-mounted equipment, underground vaults, and other apparatus to bypass transformers, to test and ground circuits, and to provide open point deadfront lightning arrester protection when used with Eaton's Cooper Power series M.O.V.E. arrester. Sectionalizing of cable runs, to find and isolate cable faults, is made easy when the portable feedthru is used with 25 and 28 kV Class loadbreak elbows and other accessories meeting the requirements of IEEE Std 386™-2006 standard. When mated with comparably rated products, the portable feedthru provides a fully shielded, submersible, separable connection for loadbreak operation.

The portable feedthru has a continuous solid current path of all copper alloy from finger contact to finger contact. No aluminum current carrying components are used. It also has an ablative arc snuffer with excellent de-ionizing properties. The body is molded of high quality peroxide-cured EPDM insulation and has a molded on peroxide-cured semi-conductive EPDM shield.

Eaton's latch indicator ring, located on the circumference of the bushing's collar, eliminates the guesswork of loadbreak elbow installation on the bushing interface. The bright yellow ring provides immediate feedback to determine if the elbow is properly installed on the bushing. If the yellow ring is completely covered by the loadbreak elbow, the elbow is fully "latched." If the ring is visible, the elbow is not fully installed, so the operator can correct it before any problems occur.

The portable feedthru is designed to be installed in the parking stand mounted on a transformer or other apparatus. It is available with horizontal, vertical or universal mountings. The vertical is recommended for applications where inadequate spacing is provided between bushings. In all types, the feedthru is secured in a stainless steel bracket with a stainless steel holddown bolt equipped with a brass pressure foot. The drain wire lug on the bracket allows attachment of a drain wire to ensure deadfront construction.

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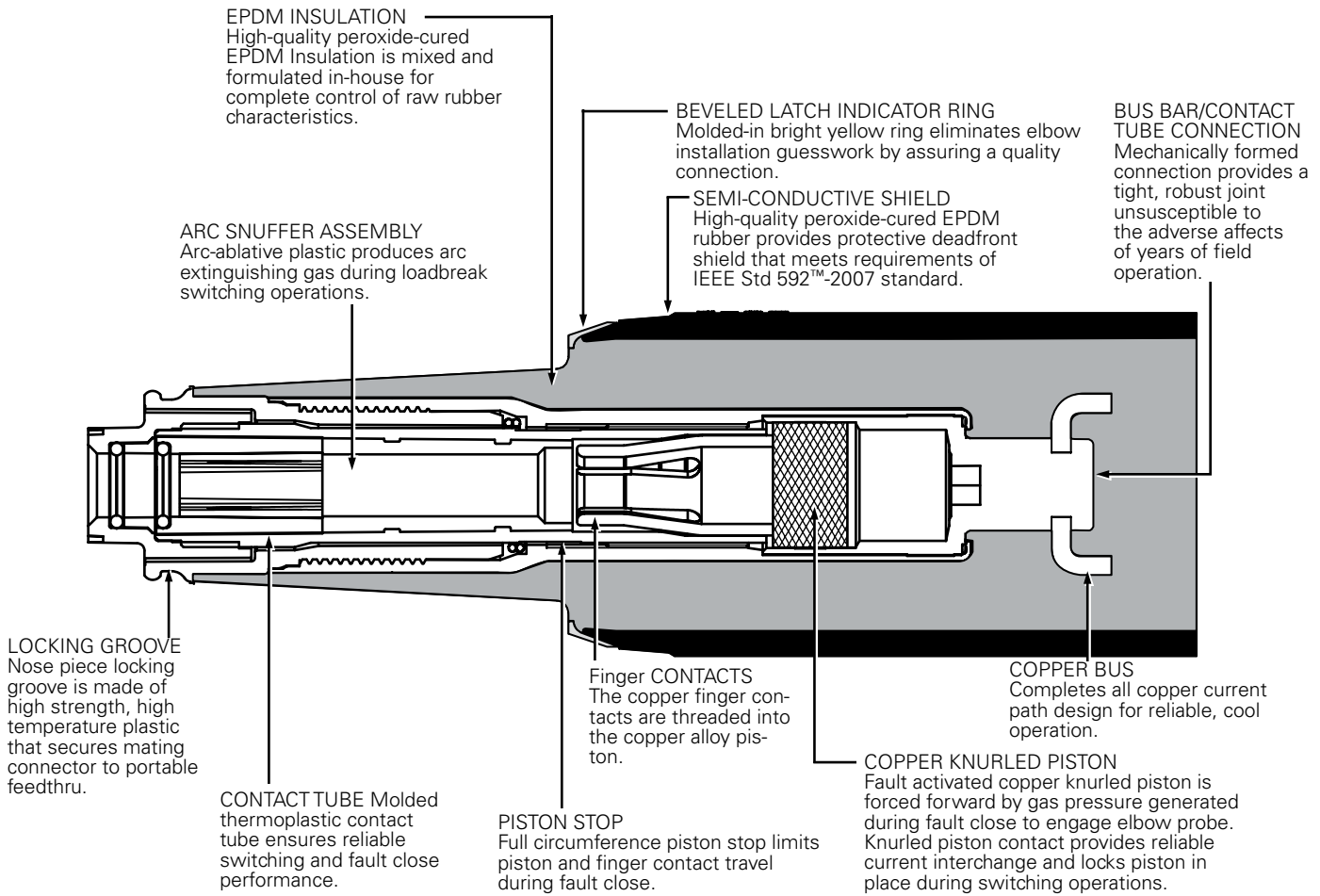


Figure 1. Cutaway illustration with design features. Field proven, all copper alloy current path ensures the coolest operating temperatures and reliability.

Installation

No special tools are required. A clampstick tool is used to place the portable feedthru in the parking stand on the apparatus front plate. Refer to *Service Information S500-14-1 200 A 15, 25, and 35 kV Class Portable Feedthru Installation Instructions* for details.

Production tests

Tests conducted in accordance with IEEE Std 386™-2006 standard:

- AC 60 Hz 1 Minute Withstand
 - 25 kV - 40 kV
 - 28 kV - 45 kV
- Minimum Corona Voltage Level
 - 25 kV - 19 kV
 - 28 kV - 21.5 kV
- Test Point Voltage Test

Tests conducted in accordance with Eaton requirements:

- Physical Inspection
- Periodic Dissection
- Periodic X-ray Analysis

Table 1. Voltage Ratings and Characteristics

Description	25 kV	28 kV
Standard Voltage Class	25	28
Maximum Rating Phase-to-Phase	26.3	28
Maximum Rating Phase-to-Ground	15.2	16.2
AC 60 Hz 1 Minute Withstand	40	45
DC 15 Minute Withstand	78	100
BIL and Full Wave Crest	125	125
Minimum Corona Voltage Level	19	21.5

Voltage ratings and characteristics are in accordance with IEEE Std 386™-2006 standard.

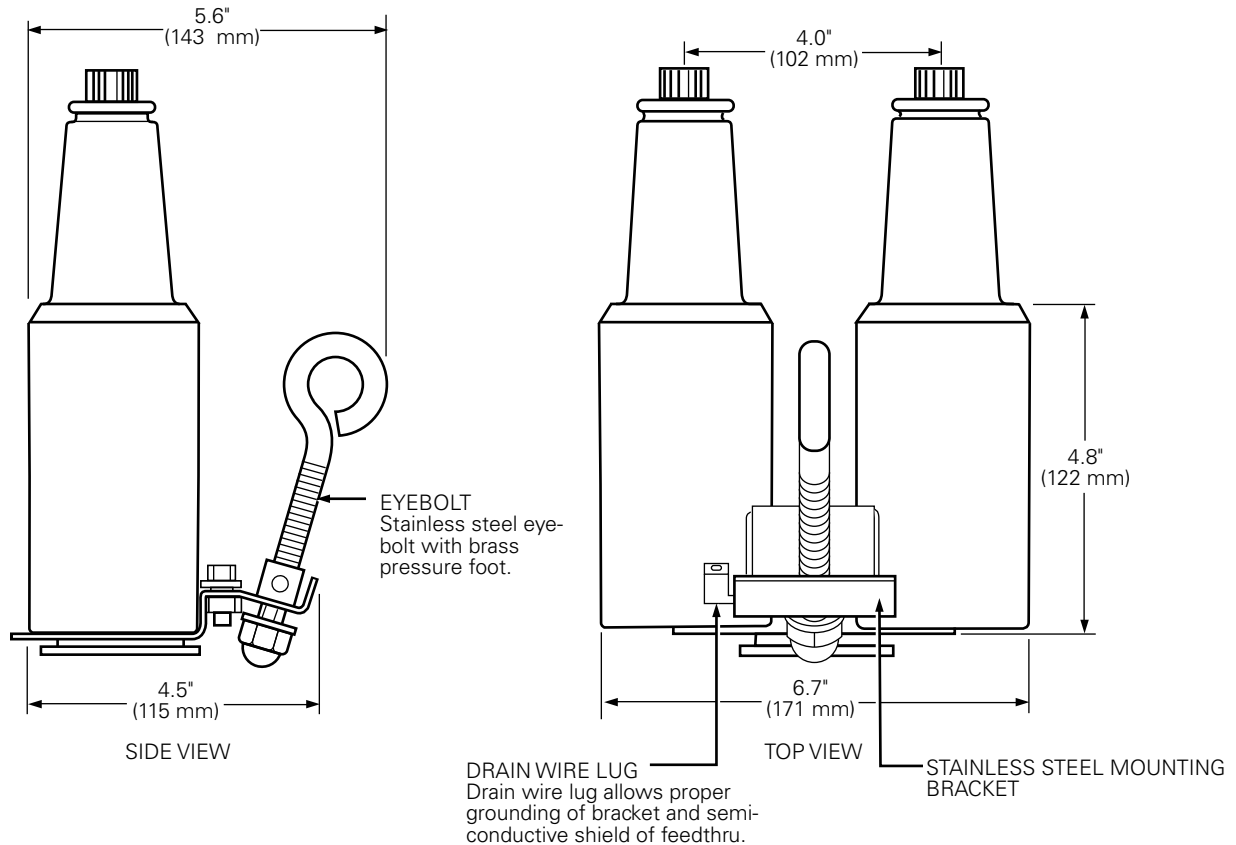


Figure 2. Side view and back view of loadbreak portable feedthru with mounting bracket.

Note: Dimensions given are for reference only.

Table 2. Current Ratings and Characteristics

Description	25 kV - Amperes
Continuous	200 A rms
Switching	10 operations at 200 A rms at 26.3 kV
Fault Closure	10,000 A rms symmetrical at 26.3 kV for 0.17 s after 10 switching operations
Short Time	10,000 A rms symmetrical for 0.17 s 3,500 A rms symmetrical for 3.0 s
Description	28 kV - Amperes
Continuous	200 A rms
Switching	10 operations at 200 A rms at 28.0 kV
Fault Closure	10,000 A rms symmetrical at 28.0 kV for 0.17 s after 10 switching operations
Short Time	10,000 A rms symmetrical for 0.17 s 3,500 A rms symmetrical for 3.0 s

Current ratings and characteristics are in accordance with IEEE Std 386™-2006 standard.

Ordering information

To order the 25 and 28 kV Class Portable Feedthru Kits, refer to Table 3.

Table 3. Portable Feedthru Kits

Description	Catalog Number
25 kV	
Horizontal Feedthru	LPF225H
Vertical Feedthru	LPF225V
Universal Feed Thru	LPF225U
28 kV	
Horizontal Feedthru	LPF228H
Vertical Feedthru	LPF228V
Universal Feed Thru	LPF228U

Each kit contains:

- Portable Feedthru with Stainless Steel Bracket
- Shipping Caps (2637269B04) (not for energized operation)
- Installation Instruction Sheet

	25 kV	
	Horizontal	Vertical
S3	3.86" (98 mm)	3.86" (98 mm)
S4	4.54" (115 mm)	4.54" (115 mm)
S5	3.14" (80 mm)	3.14" (80 mm)
S6	1.64" (42 mm)	1.64" (42 mm)
S7	0.75" (19 mm)	0.75" (19 mm)
S8	8.63" (219 mm)	8.77" (223 mm)

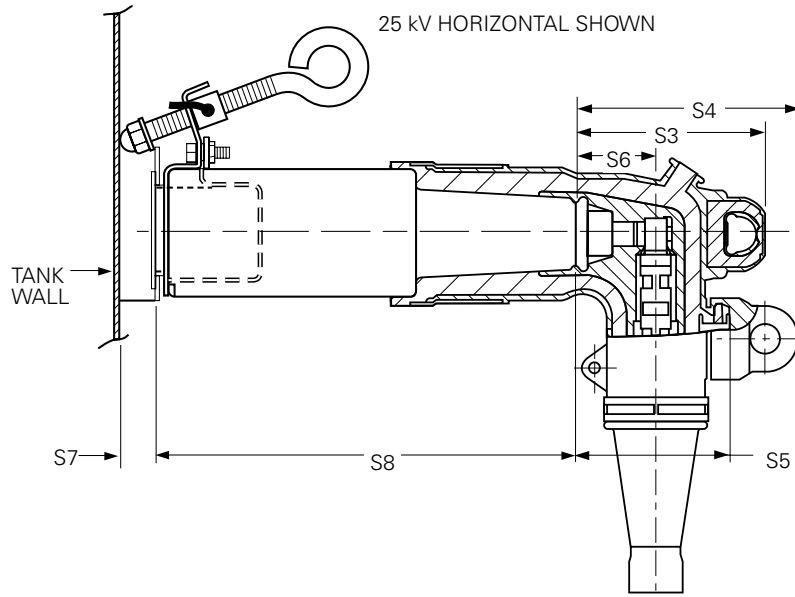


Figure 3. Loadbreak portable feedthru showing stacking dimensions.

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