



# Cable Transition Joints

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G&W EPOX cable transition joints provide an efficient method of connecting extruded cable using separable connectors to 3 conductor oil filled, paper insulated, lead cable (PILC) for systems rated through 35kV. Various models permit either deadend or feedthrough of the PILC cable. Both 200A and 600A bushing interfaces conform to ANSI/IEEE 386 standards.

## Features

- A positive oil stop prevents migration of oil from the PILC to extruded cable
- Rugged epoxy design uses time-proven process to assure a void-free, extremely durable system impervious to environmental contamination.
- 35kV model available with oil retaining glove for high pressure oil-filled cable.
- For 15/25kV modules, the system ground shield is accomplished through the stress cone on the PILC cable to the permanently bonded, external semi-conducting coating of the module housing providing a fully shielded system.
- For 35kV modules, an internal copper band around each interface point is carried through the module housing to the external semi-conducting coating providing a fully shielded system.
- 200A and 600A bushing interfaces available.
- Conforms to applicable requirements of ANSI/IEEE-386. Production tests include X-ray, corona, withstand and pressure tests.



Deadend style, 25kV cable transition joint shown. Feed through styles available.

## Cable Specifications

**PILC cable:** 3 conductor oil filled, paper insulated from #2 AWG (34mm<sup>2</sup>) - 1000 kcmil (507mm<sup>2</sup>). Model available for high pressure oil cable, 35kV only. Connectors available in both a copper solder lug and copper/aluminum spunweld design. Also suitable for use on sector cables.

**EXTRUDED CABLE:** Accommodates maximum area size as allowed by elbow connector manufacturer.

## RATINGS

<b>Voltage class, kV:</b>	15	25	35
<b>Voltage rating, kV:</b>			
- Phase-to-ground:	8.3	15.2	21.1
- Phase-to-phase:	14.4	26.3	36.6
<b>BIL Impulse, kV:</b>	95	125	200
<b>Continuous Current, A:</b>	600	600	600/200*
<b>One Minute AC:</b>			
- Withstand, kV:	34	40	50
<b>Fifteen Minute, DC:</b>			
- Withstand, kV:	53	78	103
<b>Corona Extinction at 3 pc sensitivity, kV:</b>	11	19	26

\*Deadend style only



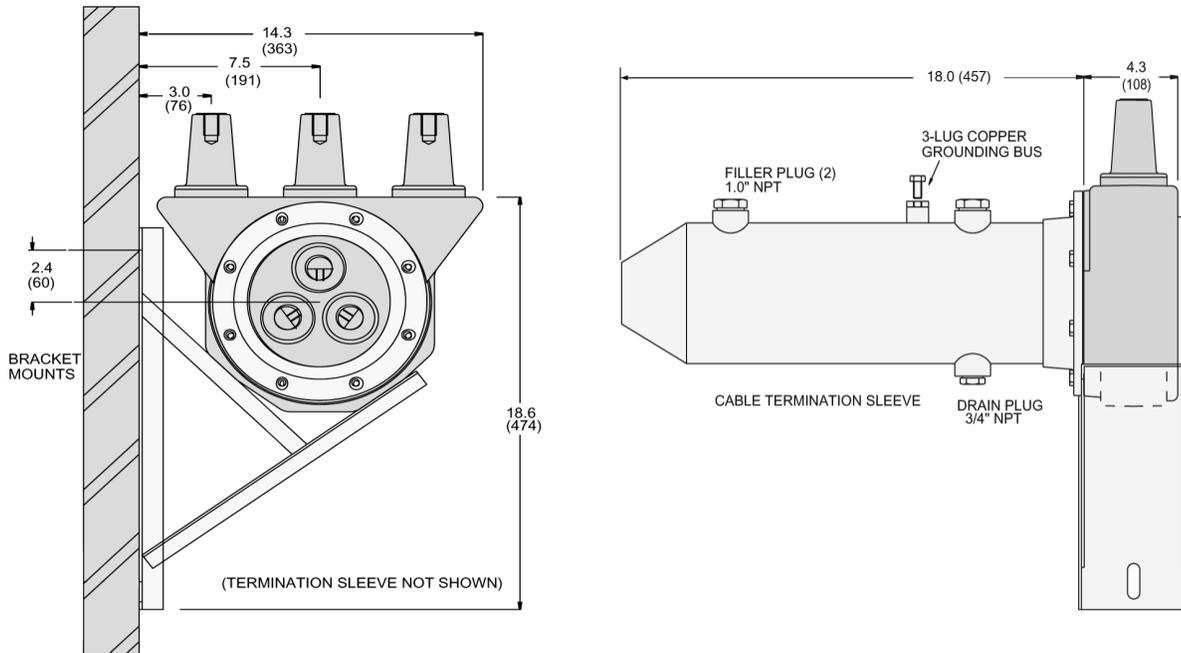
G&W's 15/25kV deadend joint in a vault application.



G&W's 15/25kV deadend joint in a substation application.

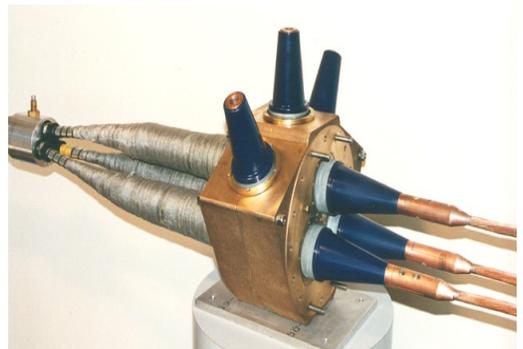
### Assembled 15/25kV Model - Dimensions shown in inches (mm)

G&W offers a 15/25kV model in feedthrough and deadend designs, both with 600A bushing interfaces. Shown below are typical dimensions for an assembled 15/25kV deadend unit in a wall-mounted bracket. *Accessory kit options are described on page 4.*

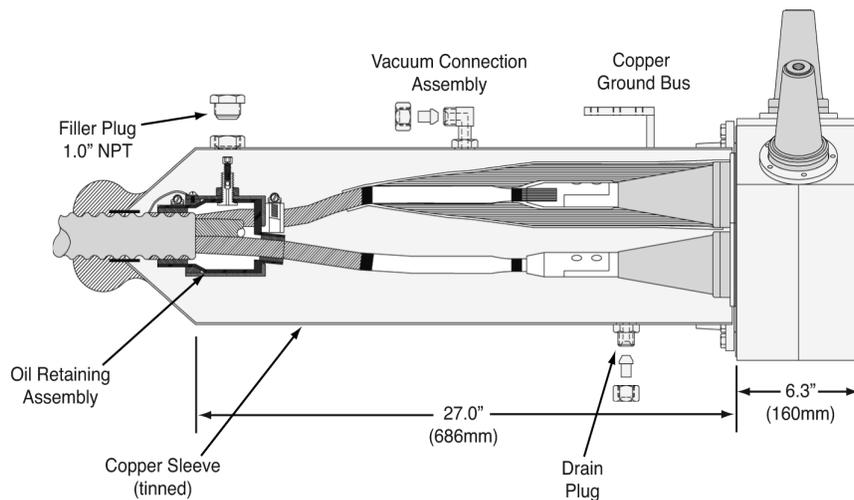


### Assembled 35kV Model - Dimensions shown in inches (mm)

G&W offers a 35kV standard model (right) and a 35kV model for high pressure, oil filled cable (below). Both models are available either in a feed-through design with 600A bushing interfaces or a deadend design with 200A or 600A bushing interfaces. Shown below are typical dimensions for an assembled 35kV high pressure, deadend unit. The high pressure (HP) kit includes a special oil retaining glove assembly and a longer, tinned copper sleeve.

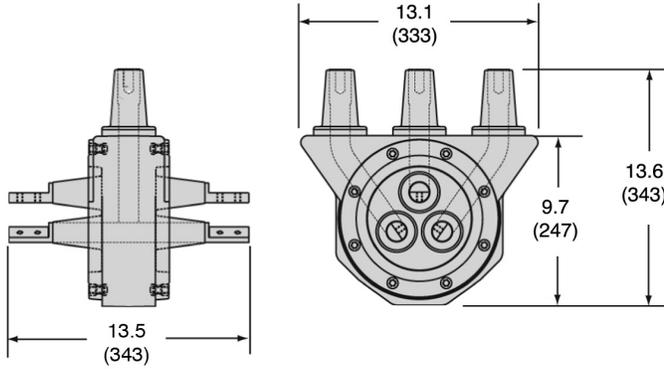


*For more information on standard and HP kits see page 4.*

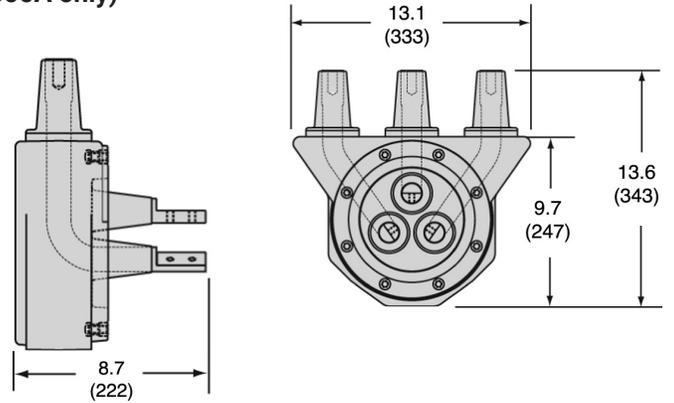


**Approximate Dimensions - Dimensions shown in inches (mm)**

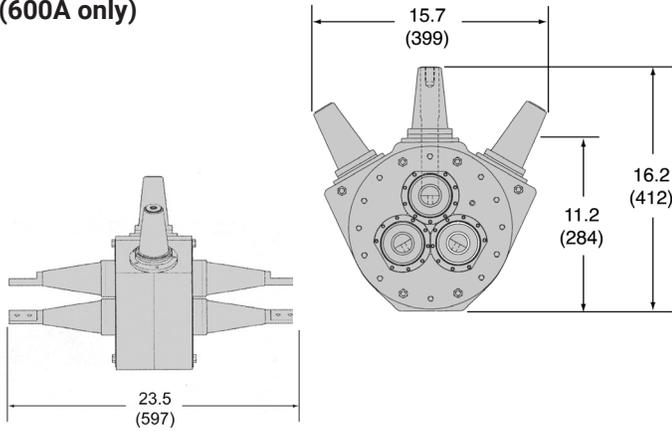
**15/25kV Feedthrough Style  
(600A only)**



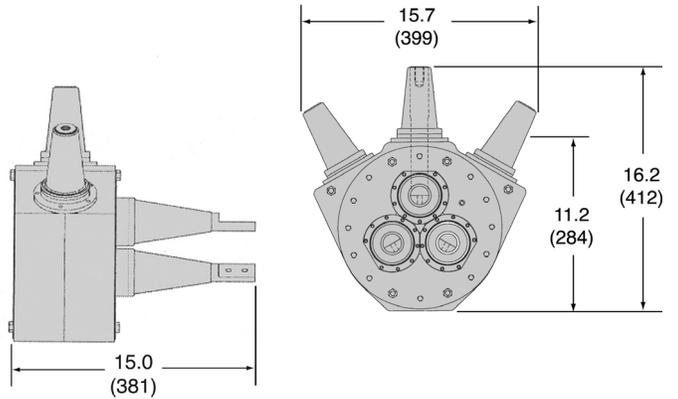
**15/25kV Deadend Style  
(600A only)**



**35kV Feedthrough Style  
(600A only)**



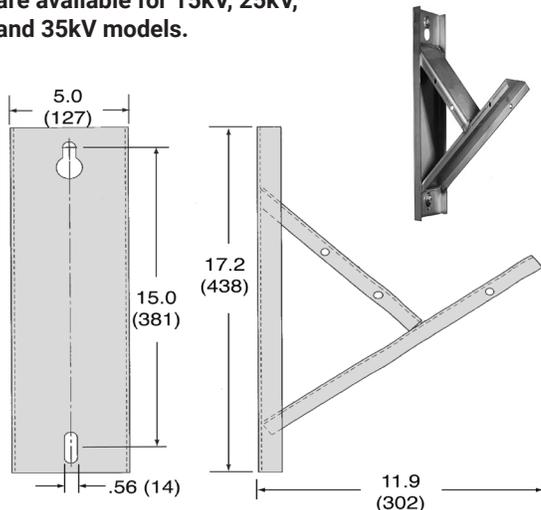
**35kV Deadend Style  
(600A and 200A\* available; 600A shown below)**



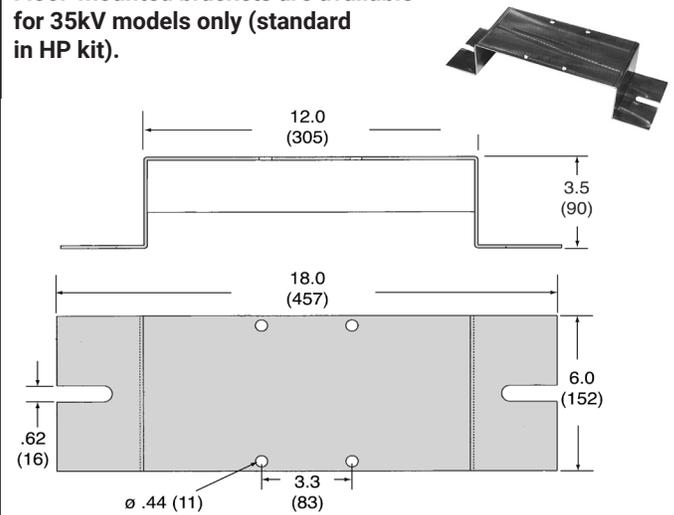
*\*For 200A interface, subtract 3 inches (76mm) from overall height.*

**Stainless Steel Mounting Brackets - Approximate dimensions shown in inches (mm)**

**Wall-mounted saddle brackets  
are available for 15kV, 25kV,  
and 35kV models.**



**Floor-mounted brackets are available  
for 35kV models only (standard  
in HP kit).**



## CATALOG NUMBERING

Style	Voltage Class (kV)	Amp Rating	Kits*	Catalog No.
Feed-through	15	600	JX	CTM-9B-15JX
			K	CTM-9B-15K
			SK500	CTM-9B-15SK
	25	600	JX	CTM-9B-25JX
			K	CTM-9B-25K
			SK500	CTM-9B-25SK
	35	600	JX	CTM-9B-35JX
			K	CTM-9B-35K
			SK600	CTM-9B-35SK
HP			CTM-9B-35HP	
Deadend	15	600	JX	CTM-11B-15JX
			K	CTM-11B-15K
			SK500	CTM-11B-15SK
	25	600	JX	CTM-11B-25JX
			K	CTM-11B-25K
			SK500	CTM-11B-25SK
	35	600	JX	CTM-11B-35JX
			K	CTM-11B-35K
			SK600	CTM-11B-35SK
			HP	CTM-11B-35HP
	35	200	JX	CTM-15B-35JX
			K	CTM-15B-35K
SK600			CTM-15B-35SK	
HP			CTM-15B-35HP	

\* When ordering a kit for a feedthrough style, a quantity of (2) of each item except bracket is supplied. NOTE: Connector type and size must be specified separately (see chart on right for available connectors).

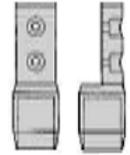
## ACCESSORY KIT OPTIONS

**JX** - Includes a bronze flange for use with wiping sleeve, three copper solder lugs, wall-mounted saddle bracket and hardware.

**K** - Includes an 18" copper wiping sleeve with mounting hardware, three copper solder lugs, wall-mounted saddle bracket and hardware.

**SK** - Includes a copper wiping sleeve with mounting hardware (18" for SK500, 24" for SK600), three copper solder lugs, wall-mounted saddle bracket with hardware, stress control tapes, copper braid and Novoid A compound.

**HP** - Includes a 24" wiping sleeve with mounting hardware, three copper solder lugs, floor-mounted bracket with hardware, glove assembly for oil cable, stress control tapes and copper braid.



## CONNECTORS

Conductor Size (AWG/KCM)	Cu Solder Lug	Cu/Al Spunweld Lug
SC*	Part #	Part #
#2	SL-2	CUAL-2
#1	SL-1	CUAL-1
1/0	SL-1/0	CUAL-1/0
2/0	SL-2/0	CUAL-2/0
3/0	SL-3/0	CUAL-3/0
4/0	SL-4/0	CUAL-4/0
250	SL-250	CUAL-250
300	SL-300	CUAL-300
350	SL-350	CUAL-350
400	SL-400	CUAL-400
450	SL-450	CUAL-450
500	SL-500	CUAL-500
550	SL-550	CUAL-550
600	SL-600	CUAL-600
650	SL-650	CUAL-650
700	SL-700	CUAL-700
750	SL-750	CUAL-750
800	SL-800	CUAL-800
1000	SL-1000	CUAL-1000

\* For compact (CR) cable, use the next lowest size down when ordering (i.e. for 350kcmil compact round copper conductor, order the SL-300 connector).

Note: Slotted lugs also available for easier soldering (copper solder only). Contact your G&W representative for more information.



Contact us today

+1.708.388.5010 or [info@gwelec.com](mailto:info@gwelec.com)



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