



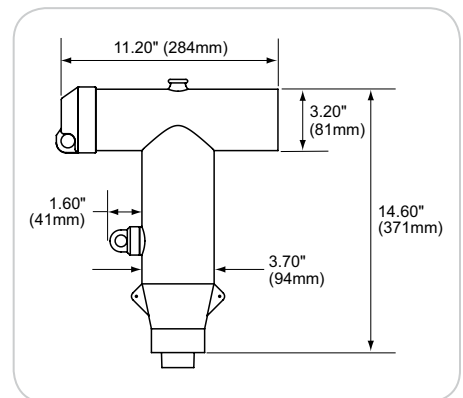
## Raychem ELB-35 Series 600/900 Amp 35 kV Class T-Body Elbow Connector

### KEY FEATURES

- Peroxide cured EPDM rubber ensures low tension set and high dielectric strength
- 100% factory production tested for partial discharge and AC Hipot per IEEE 386
- Optional capacitive test point provided on elbow
- Fits 35 kV cables up to 1250 kcmil
- Molded semiconducting shield provides ground shield continuity per the requirements of IEEE 592
- Meets IEEE 386-2006 specification requirements
- 900 A capability is available

The ELB-35-600 and ELB-35-610 elbows are designed to terminate underground cables to high-voltage apparatus such as transformers and switchgear. They are fully shielded and fully submersible and meet the requirements of IEEE Standard 386. They are interchangeable with other manufacturers' products that conform with this industry standard.

They are designed for use on extruded (XLPE or EPR) solid dielectric cable. The conductor range is from 1/0 AWG to 1250 kcmil for aluminum or copper conductors with insulation diameters from .930" to 2.145". The ELB-35-610 elbow has a capacitive test point molded into the elbow body which provides a means of sensing voltage and provides an attachment point for test point fault indicators. 900 A ratings can be achieved by ordering the kit with a copper shearbolt terminal.



**Raychem**  
from TE Connectivity

**Optional ShearBolt Terminal**

As an option, the elbow can also be ordered with TE Connectivity's new line of Aluminum or Copper ShearBolt Terminals. These are range taking mechanical connectors that will accommodate a conductor range from #2 compact to 1250 kcmil stranded, Class B.

The ShearBolt Terminal design incorporates shear head bolts, which ensures that the correct torque is applied to each bolt and consequently the optimal contact force is generated

to minimize connection resistance. Eliminating the need for crimp tooling and dies, they are therefore ideal when installation space is confined.

Ratings	
Voltage Class 35 kV	
Max Rating Phase-to-Ground 21.1 kV	
AC 1 Minute Withstand 50 kV	
DC 15 Minute Withstand 103 kV	
BIL and Full Wave Crest 150 kV	
Minimum Corona Level 26 kV (3pC)	
Continuous 600 A rms	
24 Hour Overload 1,000 A rms	
Momentary:	
25,000 A symmetrical 10 cycles	
10,000 A symmetrical 3.00 sec	
100% Production Test	
Minimum Corona Level 26 kV (3pC)	
AC 1 Minute Withstand 50 kV	

**Ordering Formula Example:**

The part number for a 35 kV Elbow, 600 A with test point, an insulation OD of 1.755", and 750 kcmil stranded cable is ELB-35-610R750. (Or with AL ShearBolt ELB-15/28-610K-A3)

ELB-35-	1	2	3
35 kV Elbow	600 AMP with Test point	1.755" Insulation OD	750 kcmil Stranded Cond.
= ELB-35-	<b>610</b>	<b>R</b>	<b>750</b>

**Ordering Notes:**

- To include a sealing kit, add "-ESA" suffix for heat-shrinkable and "-CES" suffix for cold applied closure. "-GES" suffix for cold applied GelWrap ES closure.
- If using copper tape shield cable, sealing/grounding ELB-35-600-GRDx (heat-shrink) or ELB-600-CES-GRDX (cold applied), (x = 1, 2, or 3) is required and ordered separately.

**ELB Kit Contents:**

Elbow, Insulating Plug\*, Cable Adapter, Stud\*, Connector\*, Silicone Lubricant, Installation Instruction, Jacket Seal (optional)

\* *When 900 Series is specified, kit will include copper insulating plug, copper stud, and either a copper-top connector or copper ShearBolt.*

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**Ordering Formula**



1	Current Rating   Test Point Code
600	= 600 AMP WITHOUT test point
610	= 600 AMP WITH test point
900	= 900 AMP WITHOUT test point
910	= 900 AMP WITH test point

2 Cable Insulator O.D. Range		
Code	Inches	mm
E	.930 - 1.040	23.6 - 26.4
F	.980 - 1.115	24.9 - 28.3
G	1.040 - 1.175	26.4 - 29.8
H	1.095 - 1.240	27.8 - 31.5
J	1.160 - 1.305	29.5 - 33.1
K	1.220 - 1.375	31.0 - 34.9
L	1.285 - 1.395	32.6 - 35.4
M	1.355 - 1.520	34.4 - 39.0
N	1.485 - 1.595	37.7 - 40.5
P	1.530 - 1.640	38.9 - 41.7
Q	1.575 - 1.685	40.0 - 42.8
R	1.665 - 1.785	42.3 - 45.3
S	1.775 - 1.875	45.1 - 47.6
T	1.845 - 1.965	46.9 - 50.0
U	1.935 - 2.055	49.1 - 52.2
V	2.025 - 2.145	51.4 - 54.5

3	Compression Lugs   Conductor Size (Aluminum or Copper)		
Code	Str/Comp	Compact	Solid
1	—	1/0	1/0
10	1/0	2/0	2/0
20	2/0	3/0	3/0
30	3/0	4/0	4/0
40	4/0	250	—
250	250	300	—
300	300	350	—
350	350	400	—
400	400	450/500	—
450	450	500/550	—
500	500	600	—
550	550	650	—
600	600	700	—
650	650	750/800	—
750	700/750	900	—
800	800	900	—
900	900	1000	—
1000	1000	—	—
1100	1100	—	—
1250	1250	—	—

Copper ShearBolt & Conductor Size	
Code	Compression, Compact, Strand
-C1	2 - 4/0
-C2	4/0 - 500
-C3	500 - 750
-C4	750 - 1000
-C5	1000 - 1250

Aluminum ShearBolt & Conductor Size	
Code	Compression, Compact, Strand
-A1	2 - 350
-A2	350 - 750
-A3	750 - 1000
-A4	1000 - 1250

**Related Test Reports:**

EDR-5482, EDR-5476, EDR-5502, EDR-5503



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