

# **RAYCHEM ELB-15/28 SERIES**

# 600/900 AMP 15/28 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 15/28 kV cables up to 1250 kcmil
- 900A capability is available
- RUS approved

TE Connectivity's (TE) Deadbreak Elbow series (ELB-15/28) 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.

Molded semiconducting shield provides ground shield continuity per the requirements of IEEE 592. Meets IEEE 386-2006 specification requirements.

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 .640" to 1.965". The ELB-15/28-610 and ELB-15/28-910 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. 900A ratings can be achieved by ordering the kit with a copper ShearBolt terminal.

Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.



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#### **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.

#### Ordering Formula Example:

The part number for a 15/28 kV Elbow, 600A with test point, an insulation OD of 1.7", and 1000 kcmil stranded cable is ELB-15/28-610K1000. (Or with AL ShearBolt ELB-15/28-610K-A3).

ELB-15/28-	1	2	3
15/28 kV Elbow	600 AMP with Test point	1.7" Insulation OD	1000 kcmil Stranded Cond.
= ELB-15/28-	610	К	1000

#### 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.
- To include a copper stud in a 600A kit, add -CU to the end of the product description.

#### **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 copper shearbolt.

#### RATINGS

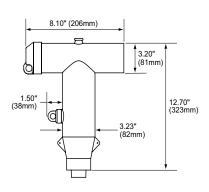
Voltage Class 15/28 kV
Max Rating Phase-to-Ground 16.2 kV
AC 1 Minute Withstand 45 kV
DC 15 Minute Withstand 88 kV
BIL and Full Wave Crest 140 kV
Minimum Corona Level 21.5 kV (3pC)
Continuous 600 A rms
24 Hour Overload 1,000 A rms
Momentary:

25,000 A symmetrical 10 cycles 10,000 A symmetrical 3.00 sec

#### 100% PRODUCTION TEST

Minimum Corona Level 19 kV (3pC)

AC 1 Minute Withstand 40 kV



#### **Ordering Formula**

ELB-15/28- 1 2

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

3	COMPRESSION LUGS   CONDUCTOR SIZE (ALUMINUM OR COPPER)		
CODE	STR/COMP	СОМРАСТ	SOLID
1	1	1/0	1/0
2	2	2	2
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	-	-

2	CABLE INSULATOR O.D. RANGE	
CODE	INCHES	
А	0.640 - 0.760	16.3 - 19.3
В	0.720 - 0.845	18.3 - 21.5
С	0.785 - 0.970	19.9 - 24.6
D	0.910 - 1.065	23.1 - 27.1
Е	0.980 - 1.140	24.9 - 29.0
F	1.080 - 1.280	27.4 - 32.5
G	1.220 - 1.420	31.0 - 36.1
Н	1.360 - 1.560	34.5 - 39.6
J	1.480 - 1.700	37.6 - 43.2
K	1.640 - 1.840	41.7 - 46.7
L	1.780 - 1.965	45.2 - 49.9

ALUMINUM SHEARBOLT & CONDUCTOR SIZE		
CODE	COMPRESSION, COMPACT, STRAND	
-A1	2 - 350	
-A2	350 - 750	
-A3	600 - 1000	
-A4	1000 - 1250	
-A5	1500	

COPPER SHEARBOLT & CONDUCTOR SIZE		
CODE	COMPRESSION, COMPACT, STRAND	
-C1	2 - 4/0	
-C2	2/0 - 500	
-C3	300 - 750	
-C4	500 - 1000	
-C5	1000 - 1250	

COPPER-TOP SHEAR BOLT & CONDUCTOR SIZE		
CODE	COMPRESSION, COMPACT, STRAND	
-CT1	1/0 - 350	
-CT2	500 - 1000	
-CT3	1250 - 1500	

#### **Related Test Reports:**

EDR-5482, EDR-5502, EDR-5503, EDR-5698, EDR-5699.

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