200A Loadbreak Elbow Series
(15kV/25kV/35kV)

Prysmian

OVERVIEW

Loadbreak Elbows provide utilities with products having high reliability and low maintenance expense.

The elbow, when mated with a loadbreak bushing product meeting the requirments of IEEE Standard 386, is suitable for energized loadmake / loadbreak operations by a qualified lineman using an 8' shotgun-type hot stick.

PRODUCT FEATURES

Molded External Shield - 1/8-inch thick, peroxide-cured EPDM conductive jacket is abrasive resistant and is an integral component of the deadfront design.

EPDM Insulation - peroxide-cured provides superior stress-relaxation characteristics and assures long life under high ambient temperatures. Compatible with all solid dielectric cable insulations and shields

Molded Conductive Insert - controls electrical stress and shields the compression connector.

Operating Eye - permits energized loadmake / loadbreak operations with suitable hot-stick tool. Designed and tested to withstand 500-lb static pull and 10 ft-lb torsion forces.

Compression Lug - meets all requirements of ANSI C119.4 for Class A connectors.

Test Point - allows for the installation of faulted circuit indicators and will indicate the presence of voltage when integrated with a high-impedance device.

Cable Entrance - the semi-conductive rubber continues the cable's insulation shield and helps control internal voltage stress. The interference fit along the cable insulation surface provides proper creep distance and dielectric strength.

Grounding Tabs -provides a means to connect a drain wire to ensure deadfront construction.

White-Black-White ID Band - identifies elbow as having a 3Ø rating for switching and fault-close.

Operating Interface -designed to mate with any component manufactured to the requir ements of IEEE Std. 386. (Fig. 5)

Locking Ring - secures the elbow to mating product. Initial pull-off force required to unseat from mating groove in bushing insert produces fast break necessary for loadbreak switching.

Loadbreak Probe - tin-plated copper body provides current path and reliable loadmake/loadbreak switching operations.

Prysmian Group
4 Tesseneer Drive, Highland Heights, KY 41076
+1-859-572-8000 / na.prysmiangroup.com
ACS-DS-0001-0520

200A Loadbreak Elbow Series

(15kV/25kV/35kV)

Prysmian

UNDERGROUND CONNECTORS

General Information

Underground connectors provide utilities with products having high reliability and low maintenance expense.

Separable connector bushing inserts and elbows are designed for use with single-conductor, concentric neutral power cables having extruded insulation shielding. With shield adapter products, the elbow can be used with cables having a metallic tape shield, wire shield, or lead sheath with tape or extruded insulation shielding.

All insulating and conducting rubber components are made of a special formulation of an EPDM elastomer using a peroxide curing process. The material and curing process provides superior elastomer stress relaxation characteristics under high ambient temperatures and contributes to reliable, long-time operation in either above-ground or subsurface installations.

Elbow connector/bushing insert combinations are suitable for energized loadmake/loadbreak operations by a qualified lineman using an 8' shotgun-type hot stick.

All elbow/bushing insert combinations are designed for use with subsurface (submersible to 6-feet of water) or pad-mounted installations.

8.3/4.4 - 25/28 kV CLASS UNDERGROUND CONNECTORS

General Information

- 10,000-amp fault-closing capability
- Piston-operated fault-close action
- Standard elbow and bushing insert loadbreak principle
- 1/8" thick molded shields
- Peroxide-cured EPDM compounds
- Full compliance with IEEE Standard 386 (Fig. 5)

Where to Use

15 kV loadbreak products are designed for operation on, and connection to, 15 kV Class (95 kV BIL systems) where the voltage ratings listed on this page are not exceeded.

25/28 kV loadbreak products are designed for operation on and connection to 25/28 kV class, 125 kV BIL systems where the voltage ratings listed on this page are not exceeded.

21.1/36.6 kV UNDERGROUND ELBOW CONNECTORS

General Information

- 10,000 ampere fault-closing capability
- Standard elbow and bushing loadbreak principle
- Molded shields
- Peroxide-cured EPDM compounds
- Full compliance with IEEE Standard 386
- 35kV Large Interface
- Purple cuffs for quick 35kV identification

Where to Use

35 kV loadbreak elbows are designed for operation on, and connection to, 35 kV Class (150 kV BIL systems) where the voltage ratings listed on this page are not exceeded.

Prysmian Group
4 Tesseneer Drive, Highland Heights, KY 41076
+1-859-572-8000 / na.prysmiangroup.com
ACS-DS-0001-0520

200A Loadbreak Elbow Series

(15kV/25kV/35kV)

Prysmian

RATINGS			
	15 kV	**25/28 kV**	**35 kV**
Max. continuous voltage:	8.3 kV phase-to-ground 14.4 kV phase-to-phase	16.2 kV phase-to-ground 28 kV phase-to-phase	21.1 kV phase-to-ground 36.6 kV phase-to-phase
Continuous current:	200-amp rms	200 amp rms	200 amp rms
SHORT-TIME CURRENT RATINGS			
0.17-second duration	10,000-amp rms symmetrical	10,000 amp rms symmetrical	10,000 amp rms symmetrical
3.00-second duration	3,500-amp/rms symmetrical	3,500 amps rms symmetrical	3,500 amps rms symmetrical
INSULATION WITHSTAND VOLTAGES			
Basic Impulse Level (1.2 x 50 µsec wave)	95 kV crest	125 kV crest	150 kV crest
60 Hertz (1-minute)	34 kV rms	45 kV rms	50 kV rms
DC (15-minutes)	53 kV	84 kV	103 kV
Corona extinction voltage (3-picocoulombs)	11 kV rms	21.5 kV rms	26 kV
ALL VOLTAGE CLASSES	**SWITCHING**		
10 loadmake/loadbreak operations at 200 amps with 90% parallel and 10% series resistance - reactance load at 0.8 power factor.	1-phase and 3-phase circuits 8.3 kV phase-to-ground, 14.4 kV maximum across the open contacts.	1-phase and 3-phase circuits 15.2 kV phase-to-ground, 26.3 kV maximum across the open contacts.	1-phase and 3-phase circuits 21.1 kV phase-to-ground, 36.6 kV maximum across the open contacts.
ALL VOLTAGE CLASSES	**FAULT CLOSURE**		
10,000 amps rms symmetrical, 10 cycles (0.17 seconds).	One fault-close operation at 8.3 kV phase-to-ground, or 14.4 kVphase-to-phase; 10,000 amps rms symmetrical, 10 cycles, (0.17 seconds).	One fault-close operation at 15.2 kV phase-to-ground, or 26.3 kV phase-to-phase; 10,000 amps rms symmetrical, 10 cycles, (0.17 seconds).	One fault-close operation at 21.1 kV phase-to-ground, or 36.6 kVphase-to-phase; 10,000 amps rms symmetrical, 10 cycles,(0.17 seconds).
ALL VOLTAGE CLASSES	**PRODUCTION TESTS**		
100% factory test for partial discharge	100% factory test for partial discharge and either AC Hi-Pot (34kV for 60 seconds) or impulse (BIL) (95kV 1.2 x 50µ sec.).	100% factory test for partial discharge and either AC Hi-Pot (45kV for 60 seconds) or impulse (BIL) 125kV, 1.2 x 50 microsecond wave.	100% factory test for partial discharge and either AC Hi-Pot (50kV for 60 seconds).

Prysmian Group
4 Tesseneer Drive, Highland Heights, KY 41076
+1-859-572-8000 / na.prysmiangroup.com
ACS-DS-0001-0520

200A Loadbreak Elbow Series

(15kV/25kV/35kV)

Prysmian

200A Loadbreak Elbows with Test Point

Body Part No.	Cable Insulation Diameter Range (in.)	5kV 100%	5kV 133% / 8kV 100%	8kV 133%	15kV 100%	15kV 133%
15LB_3	0.498-0.730	#2 AWG - 4/0 AWG	#4 AWG - 3/0 AWG	#4 AWG - 2/0 AWG	#4 AWG to 1/0 AWG	—
15LB_4	0.635-0.905	2/0 AWG - 250 kcm	2/0 AWG - 250 kcm	1/0 AWG - 250 kcm	#2 AWG - 2/0 AWG	#2 AWG - 2/0 AWG
15LB_5	0.760-1.135	—	—	—	3/0 AWG - 250 kcm	3/0 AWG - 250 kcm

Body Part No.	Cable Insulation Diameter Range (in.)	25kV 100%	25kV 133%/28kV 100%	28kV 133%
2528LB_3	0.610-0.880	#4 AWG - #1 AWG	#4 AWG	—
2528LB_4	0.800-1.140	#1 AWG - 2/0 AWG	#1 AWG - 2/0 AWG	—
2528LB_5	0.920-1.310	3/0 AWG - 250 kcm	3/0 AWG - 250 kcm	—
2528LB_5A	0.920-1.310	—	—	1/0 AWG - 250 kcm

Body Part No.	Cable Insulation Diameter Range (in.)	35kV 100%	35kV 133%
35LB_5	1.020-1.310	1/0 AWG - 250 kcm	1/0 AWG - 4/0 AWG

Note: Replace "_" with "CN" for Conentric Neutral Cable
Example: For a 2/0 AWG Stranded 15kV 100% Cable with CN use body 15LBCN4-200LB6

Note : Replace "_" with "CTS" for Copper Tape Shield or LC Shield Cables
Example: For a 250 AWG Compact 15kV 133% Cable with LC or Copper Tape Shield use body 15LBCTS5-200LB8

Remember to add the required lug to the body part number per the Connector Table.

200A Connector Code

Part No.	Stranded / Compressed	Compact / Solid
200LB1	#6 AWG	#4 AWG
200LB2	#4 AWG, #3 AWG	#3 AWG, #2 AWG
200LB3	#2 AWG	#1 AWG
200LB4	#1 AWG	1/0 AWG
200LB5	1/0 AWG	2/0 AWG
200LB6	2/0 AWG	3/0 AWG
200LB7	3/0 AWG	4/0 AWG
200LB8	4/0 AWG	250 kcm

Prysmian Group
4 Tesseneer Drive, Highland Heights, KY 41076
+1-859-572-8000 / na.prysmiangroup.com
ACS-DS-0001-0520