

# 28KV 200A LOADBREAK ELBOW SURE-BREAK™



### Ratings

Maximum Continuous Voltage.....16.2 kV Phase-to-Ground  
28.0 kV Phase-to-Phase  
Continuous Current.....200 A

### Short-Time Current Ratings

0.17 Sec. Duration.....10,000 A rms Symmetrical  
3.00 Sec. Duration.....3,500 A rms Symmetrical

### Insulation Withstand Voltages

Basic Impulse Level.....125 kV Crest (1.2 x 50 μSec. wave)  
60 Hz (60 Sec.).....45 kV rms  
Partial Discharge Extinction Voltage (5 pC).....21.5 kV rms

### Operating Interface Withstand

The Hubbell Sure-Break™ Elbow meets OIACW Level 1

### Switching

1-Phase & 3-Phase Circuits 16.2 kV Phase-to-Ground, 28.0 kV maximum across the open contacts. 10 make/break operations at 200 A with 0.70-0.80 lagging power factor.

### Fault Closure

One Fault-Close Operation at max 16.2 kV Phase-to-Ground, or max 28.0 kV Phase-to-Phase; max 10,000 A rms Symmetrical, 10 Cycles (0.17 Sec.).

### Production Tests

100% factory tested for Partial Discharge and either AC 60 Hz (45 kV for 60 Sec.) or Impulse (BIL) (125 kV 1.2 x 50 μSec. wave).

### Benefits

- Tested with a worst case, non vented bushing, to achieve Level 1 (highest level) requirements of IEEE 386 Clause 7.5.2 for partial vacuum flash-over
- Two times the amount of strike distance compared to a standard load-break elbow

#### ORDERING INFORMATION

1. SELECT ELBOW SIZE (X) BASED ON INSULATION DIAMETER
2. SELECT CONNECTOR SIZE (Y) BASED ON CONDUCTOR, OR "0" FOR NO CONNECTOR
3. ADD "P" TO THE END IF A PROBELOK CONNECTOR IS REQUIRED
4. ADD "T" TO THE END IF A TEST POINT IS REQUIRED
5. ADD "J" TO THE END IF A JACKET SEAL KIT IS REQUIRED
6. ADD "S" TO THE END IF A SHIELD ADAPTER KIT IS REQUIRED

228LESxy(P)(T)(J)(S)

#### EXAMPLE 1: 228LES45

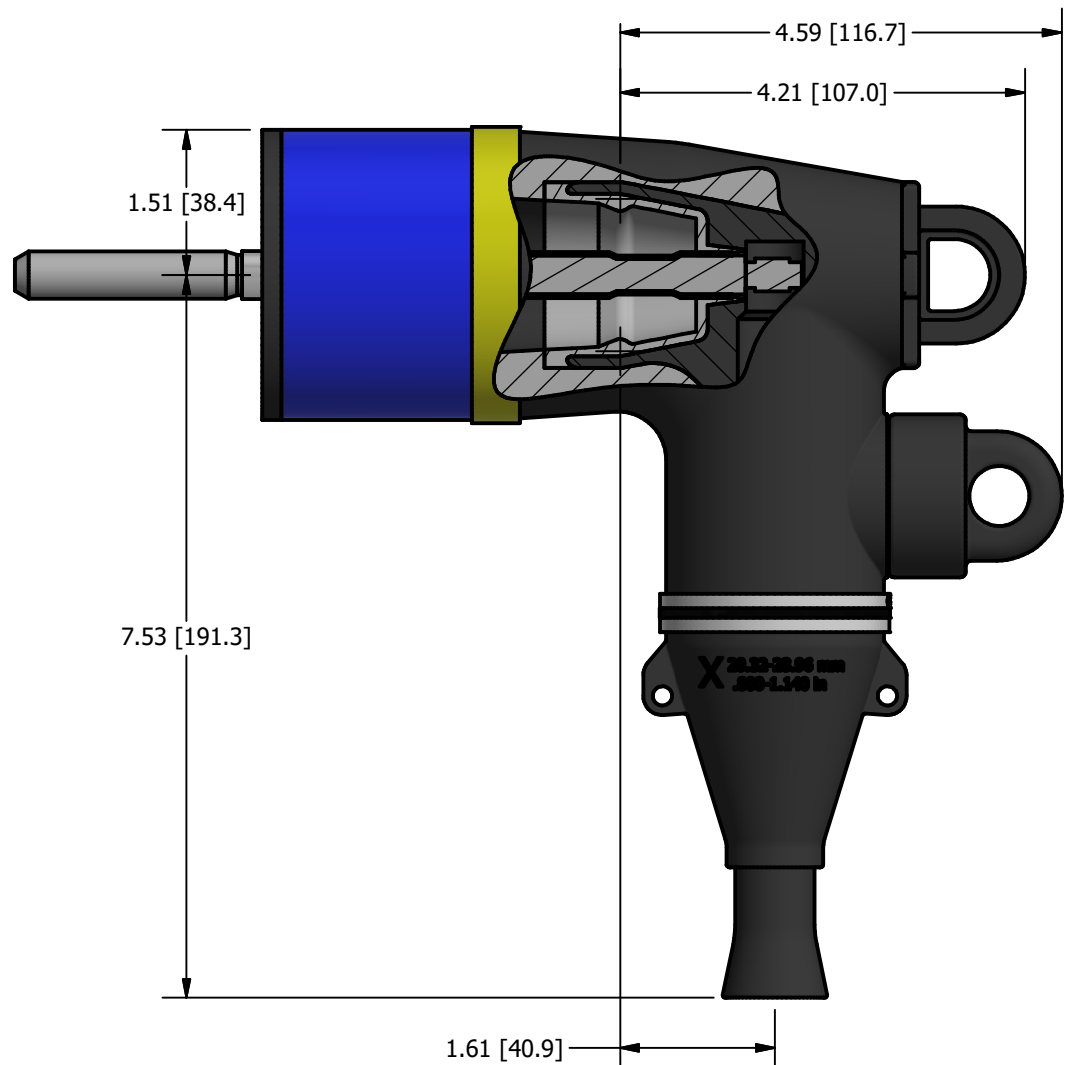
28KV 200A SURE-BREAK™ ELBOW SIZE 4 WITH A SIZE 5 CONNECTOR

#### EXAMPLE 2: 228LES34TS

28KV 200A SURE-BREAK™ ELBOW SIZE 3 WITH SIZE 4 CONNECTOR, A TEST POINT AND A SHIELD ADAPTER

DIAMETER ACROSS INSULATION		
SIZE (X)	INCH	MM
3	0.610 - 0.880	15,5 - 22,4
4	0.800 - 1.140	20,3 - 29,0
5	0.920 - 1.310	23,4 - 33,3
6	1.070 - 1.310	27,2 - 33,3

CONN. CODE "Y"	CONDUCTOR SIZE	
	STD OR COMPRESSED	SOLID OR COMPACTED
1	6	4
2	4-3	2-3
3	2	1
4	1	1/0
5	1/0	2/0
6	2/0	3/0
7	3/0	4/0
8	4/0	250



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HUBBELL POWER SYSTEMS, Inc.

TITLE  
**28KV 200A  
SURE-BREAK™ ELBOW**

SIZE <b>SB</b>	DWG NO. ---	CAT / PART / ASSY NO. <b>228LES</b>	REV <b>0</b>
DO NOT SCALE THIS DRAWING	DRN BY BVB	DATE 03/19/2021	SHEET 1 OF 1