

# 25kV Cold Shrink R-800

Product Data Sheet

The Cold Shrink R-800 (CS8 Series) is an innovative blend of the Richards CSH Series and R-800. Like the traditional R-800, the CS8 Series is molded with a 200A Loadbreak Tap integral to the Deadbreak Elbow housing. Its cold shrinkable cable entrance eliminates the need for a cable adapter and separate jacket seal kit. By combining so many components into a single housing, the CS8 series is perfectly optimized for simplicity and reliability.

The Cold Shrink R-800 is equipped with a stainless steel Fastener, a specialized internal component that is engaged by assembly tool to torque the assembly of R-800, Lug and mating component. These fasteners are available in several types designed to provide configurations to meet every application.

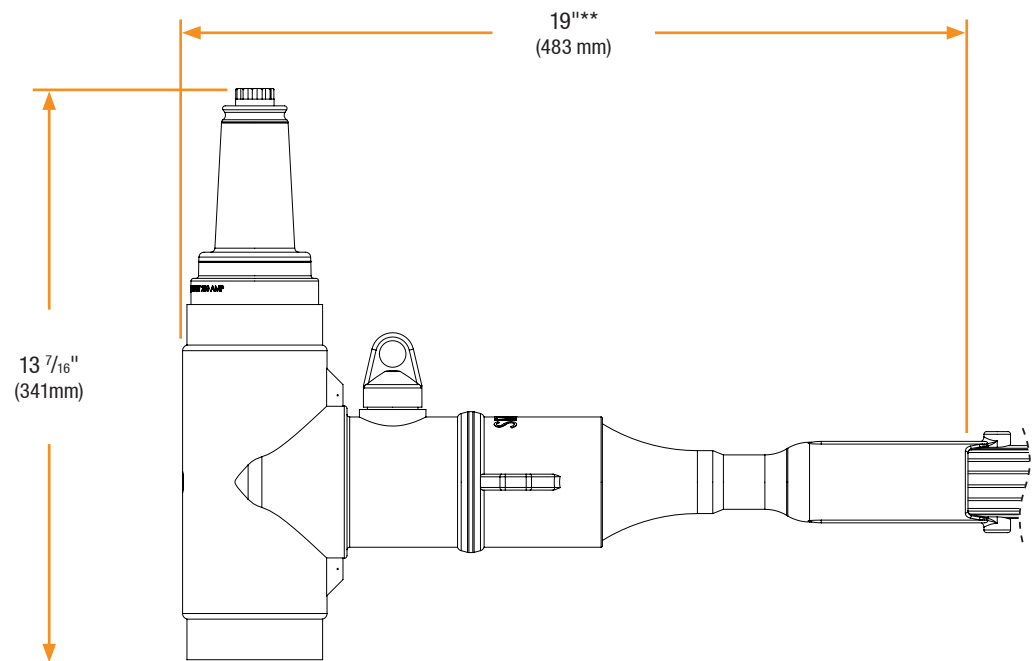


## Features

- Combines 200A Loadbreak tap and Deadbreak Elbow
- Available in multiple configurations to meet every application
- Includes installation tool that guarantees proper torque\*
- Reduces inventory and installation costs
- Range Taking
- 100% EPDM Composition
- Designed, Molded, and Tested in the USA
- Optional Capacitive Test Point

\* Applies to R-800's with 3/8" fasteners only.

## Basic Dimensions



\*\* Approximate length - varies by cable size.

# 25kV Cold Shrink R-800

## Product Ratings

Voltage Ratings	
Maximum Voltage Rating – (phase to ground)	15.2kV
Corona Voltage Level – (partial discharge extinction voltage)	21kV <sup>®</sup>
AC Withstand – (1 minute)	40kV
Impulse-Withstand Voltage – (BIL)	125kV BIL

Current Ratings (Deadbreak Side)	
Continuous – (Aluminum)	600A
Continuous – (Copper)	900A
Short-Time Current – (Aluminum)	40kA, 10c. and 10kA, 3s. <sup>®</sup>
Short-Time Current – (Copper)	40kA, 10c. and 10kA, 3s.

Current Ratings (Loadbreak Side)	
Continuous	200A
Short-Time Current	10kA, 10c. and 3.5kA, 3s.

The 25kV Class Cold Shrink R-800 is qualified to the following industry standards:

- IEEE Std 386: For Separable Insulated Connector Systems
- ANSI C119.4: For Electric Connectors
- IEEE Std 592: For Exposed Semiconducting Shields

## Production Testing

IEEE requires a Partial Discharge test and choice between AC withstand and Impulse.

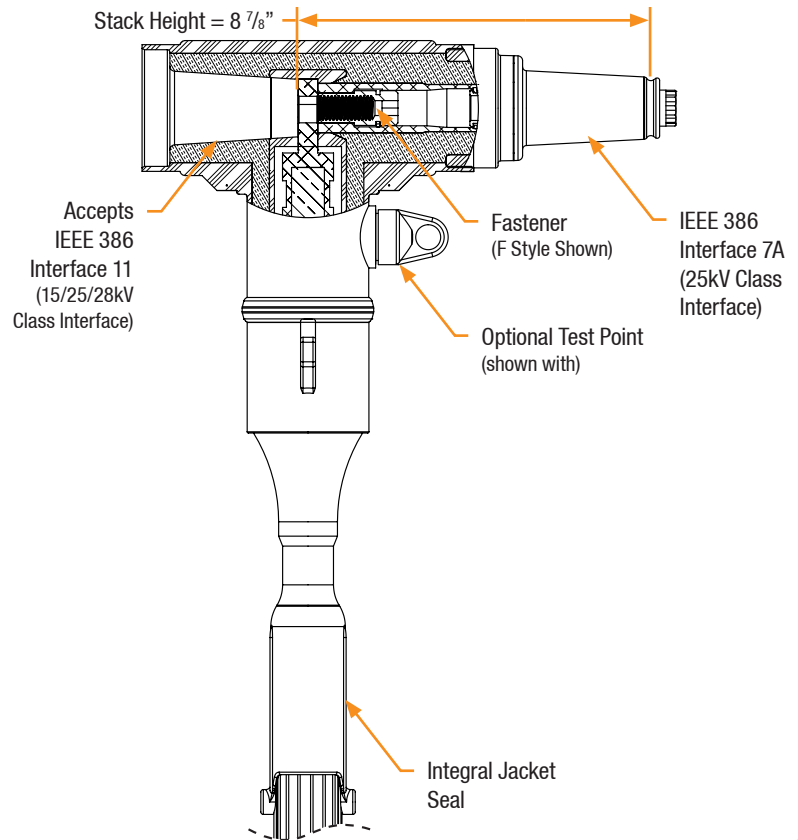
Richards runs 3/3 tests on **all** Medium Voltage products governed by IEEE 386. <sup>®</sup>

### 100% Routine Electrical Test:

- Partial Discharge
- AC Withstand
- Impulse Withstand

<sup>®</sup> Exceeds IEEE 386 requirement

## Detail View



## Related Products

### P625HIP-STUD

15/25kV Aluminum Threaded Stud

### P925HIP-STUD

15/25kV Copper Threaded Stud

### P6AL-X

Aluminum Compression Lug

### P9CU-X

Copper Compression Lug

### P6ALR-X

Aluminum Range Taking Lug

### P7ALCU-X

Copper-Top Compression Lug

### 22LBICG

25kV Loadbreak Insulating Cap

## 25kV Cold Shrink R-800

### Use Range-CS8 Table

The following product sizing information is based on AEIC/ICEA dimensional ranges. The true range of the CS8 Series on a particular cable construction may vary. To confirm sizing on non-standard cables, or to check sizing on cables that fall just outside our min or max, contact the factory.

Elbow Size	Voltage Class	Conductor Size	
		Minimum	Maximum
O Minimum Insulation Diameter = 0.725"	15kV (175 mil)	1/0 AWG*	500 kcmil
	15kV (220 mil)	#2 AWG**	
	25kV (260 mil)	#4 AWG	
P Minimum Insulation Diameter = 0.990"	15kV (175/220 mil)	350 kcmil***	750 kcmil
	25kV (260 mil)	4/0 AWG	
Q Minimum Insulation Diameter = 1.268"	15kV (175 mil)	750 kcmil	1500 kcmil
	15kV (220 mil)	600 kcmil	
	25kV (260 mil)	500 kcmil****	

\* May not fit some 1/0 AWG compressed/compact 100% (175mil) insulated power cables. Check minimum insulation diameter to confirm.

\*\* May not fit some #2 AWG compact 133% (220 mil) insulated power cables. Check minimum insulation diameter to confirm.

\*\*\* May not fit some 350 kcmil compact 100% (175 mil) insulated power cables. Check minimum insulation diameter to confirm.

\*\*\*\* May not fit some 500 kcmil compact insulated power cables. Check minimum insulation diameter to confirm.

### R-800 Fastener Styles

Currently Using:	Upgrade to R-800 Type:	Installation Torque	Tool Size	Lug	Stick Operable*	Male or Female**	One-Piece Design
Elbow Tap Plug (ETP) or Bushing Insert + Reducing Tap Well	F or H	55 ft-lbs	3/8"	Regular	No	Female	Yes
T-OP II	G	20 ft-lbs	5/16"	15/16" Hole	Yes		

\* Stick operability is defined here as the ability to remove the R-800 from the bushing without the assembly of R-800/Cable/Lug being separated.

\*\* Female R-800's come with a loose threaded stud. Male R-800's have the threaded stud built into the fastener.