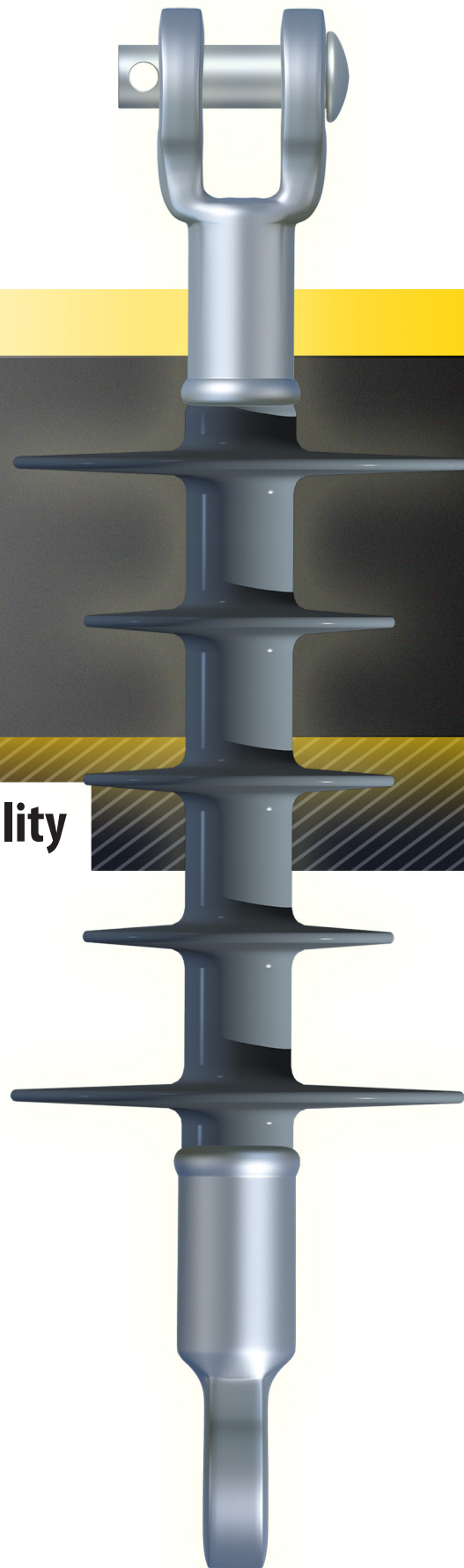


# Veri\*Lite™ Deadend & Suspension Insulators

for 15-69kV Applications

**Experience & Reliability**



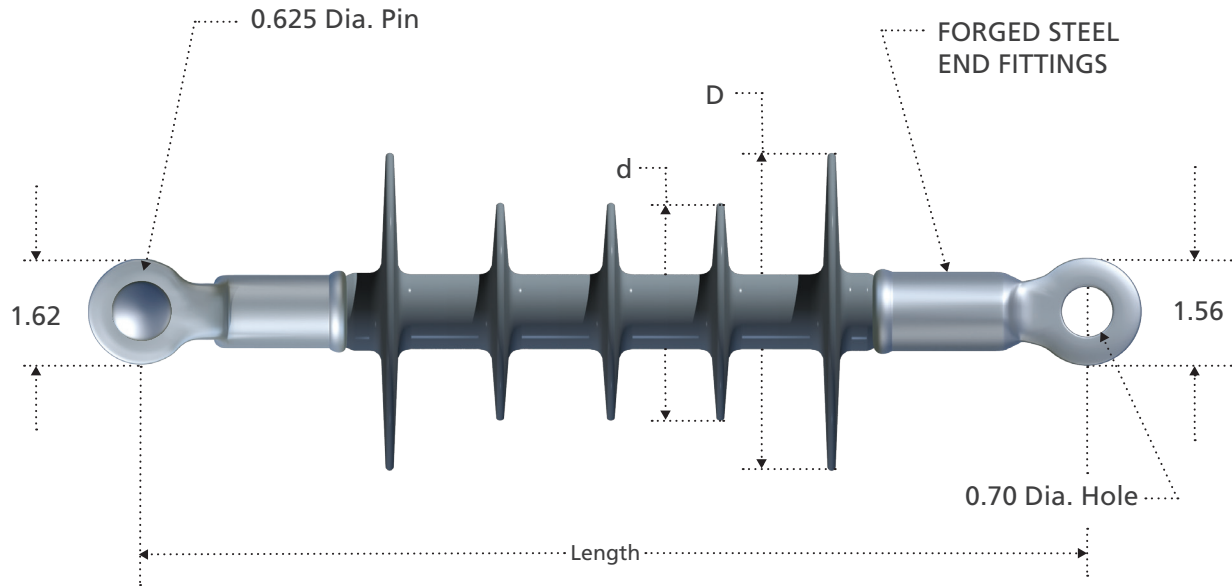
**OHIO BRASS**



# PDI Mechanical Characteristics

PDI/VLS

## 0.625" (16mm) Diameter Rod Deadend Insulators



### Mechanical Characteristics

Catalog Number	No. of Sheds	Length Inches (mm)	Diameter Inches (mm)		Net Wt. pounds (kg)	Standard Package Qty		Torsion ft-lb (N-m)	<sup>2</sup> SML pounds (kN)	<sup>3</sup> RTL pounds (kN)	<sup>4</sup> Proof pounds (kN)
			D	d		Box	Pallet				
4010150215	5	12.50 (318)	3.9 (99)	2.7 (69)	2.3 (1.0)	15	540	35 (47)	15,000 (70)	7,500 (35)	10,000 (44.5)
4010280215	10	17.50 (445)	3.3 (84)	2.4 (61)	2.5 (1.1)	15	360	35 (47)	15,000 (70)	7,500 (35)	10,000 (44.5)
4010250215	10	18.75 (475)	3.8 (97)	2.8 (71)	2.7 (1.2)	15	360	35 (47)	15,000 (70)	7,500 (35)	10,000 (44.5)
4010350215	8	25.00 (635)	3.0 (76)		2.8 (1.3)	15	300	35 (47)	15,000 (70)	7,500 (35)	10,000 (44.5)
4010460215	10	23.00 (584)	4.4 (112)	3.0 (76)	2.9 (1.3)	15	300	40 (55)	15,000 (70)	7,500 (35)	10,000 (44.5)

RUS Accepted

<sup>2</sup>SML — Specified Mechanical Load is the tension load that a Veri\* Lite insulator can withstand during a 90-second test without failure. SML is comparable to the M&E strength rating of porcelain insulators.

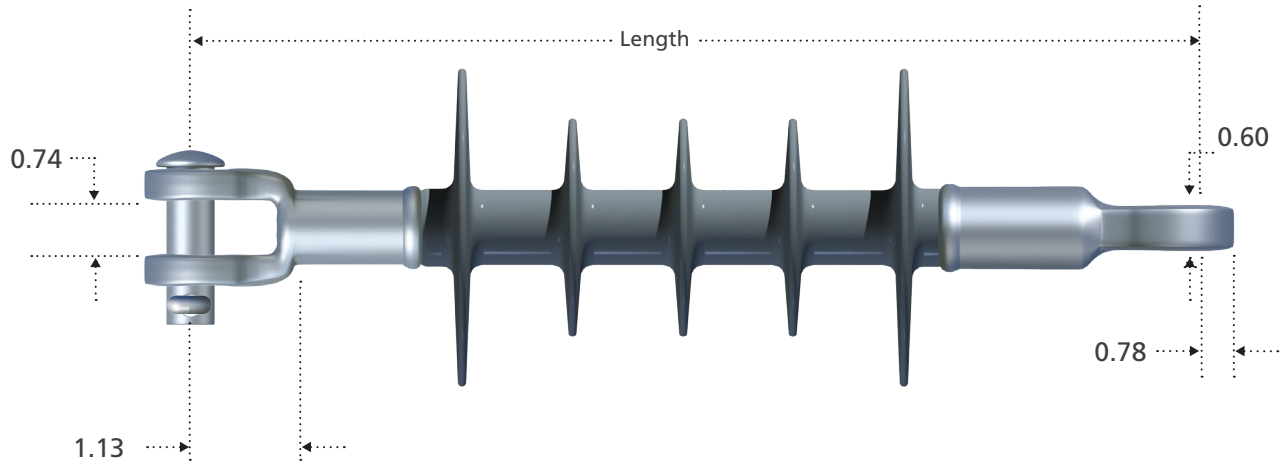
<sup>3</sup>RTL — A Routine Test Load value is equal to 50% of the SML value.

<sup>4</sup>Proof Test — The mechanical tension load applied at the factory to each insulator for ten (10) seconds.

NOTE: PDI Type insulators are intended for applications which are within 75° of horizontal to allow proper shed drainage.

# PDI Electrical Characteristics

## 0.625" (16mm) Diameter Rod Deadend Insulators



PDI/VLS

### Electrical Characteristics

Catalog Numbers	Type	Leakage Distance Inches (mm)	Dry Arc Distance Inches (mm)	Flashover ANSI - kV		Critical Impulse Flashover		RIV		Power Arc kA cycles	SL of # of 4-1/4 Bells	Insulator Class
				Dry-kV	Wet-kV	Pos-kV	Neg-kV	Test kV	Max.			
4010150215	PDI-15	16 (406)	8.1 (205)	100	80	150	170	15	<10	150	2	DS15
4010280215	PDI-28	26 (660)	12.6 (320)	140	120	235	250	20	<10	150	—	DS28
4010250215	PDI-25	31 (787)	14.3 (363)	155	135	270	280	30	<10	150	3	DS35
4010350215	PDI-35	33 (838)	20 (508)	200	160	325	360	30	<10	150	4	—
4010460215	PDI-46	37.6 (955)	19.1 (485)	195	175	360	365	30	<10	150	—	DS46

### KEY TO THE CATALOG NUMBERS X01XXXX215

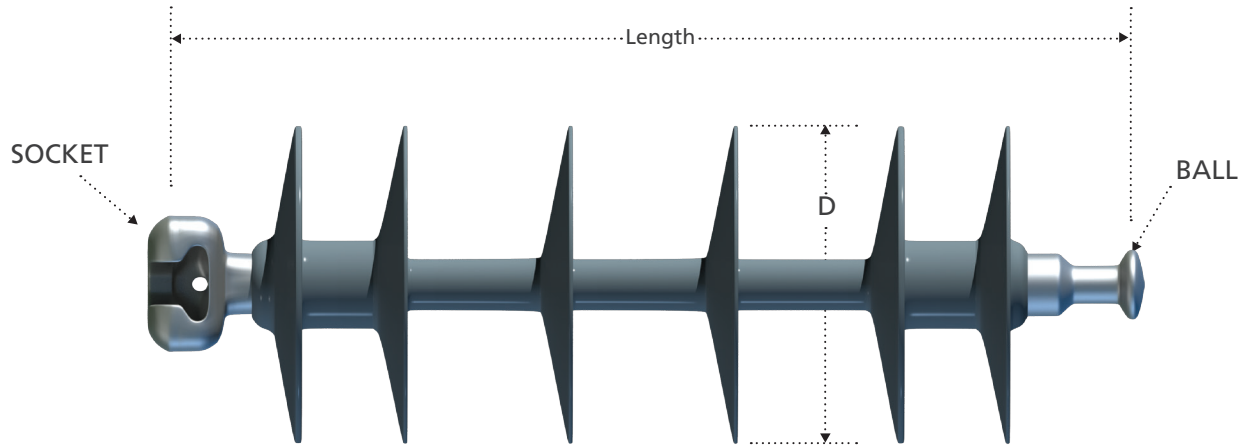
- 4 = ESP™ Rubber
  - 8 = Silicone Rubber
  - 0 = Standard Pin
  - 1 = Hex Pin
  - 3 = Standard Pin Rotated End-fitting
  - 5 = ANSI 52-3 Ball & Socket
  - 6 = IEC 16mm Ball & Socket
- Type
- 0 = Standard Marking
  - 6 = CSA or Sample Testing
- SML
- Ferrous End-fitting

**Example:** Cat. #4013250215 is a Veri\*Lite insulator, 25 kV. Rated with standard pin and rotated end-fitting (ferrous) 15,000 lbs. SML, plus standard markings.



# VLS Mechanical Characteristics

## 0.625" (16mm) Diameter Rod Suspension Insulators



### Mechanical Characteristics

Catalog Numbers	No. of Sheds	Length Inches (mm)	D Diameter Inches (mm)	Net Wt. pounds (kg)	Standard Package Qty		<sup>1</sup> SML pounds (kN)	<sup>2</sup> RTL pounds (kN)	<sup>3</sup> Proof pounds (kN)
					Carton	Pallet			
4050021301	4	11.5 (292)	5.9 (150)	4 (1.8)	12	96	15,000 (70)	7,500 (35)	10,000 (44.5)
4050029001**	4	12.5 (318)	5.9 (150)	4 (1.8)	12	96	15,000 (70)	7,500 (35)	10,000 (44.5)
4050031301	6	17.25 (438)	5.9 (150)	4 (1.8)	12	96	15,000 (70)	7,500 (35)	10,000 (44.5)
4050041301	8	23 (584)	5.9 (150)	5 (2.3)	12	96	15,000 (70)	7,500 (35)	10,000 (44.5)
4050051301	10	28.75 (730)	5.9 (150)	6 (2.8)	12	48	15,000 (70)	7,500 (35)	10,000 (44.5)
4050061301	12	34.5 (876)	5.9 (150)	7 (3.2)	12	48	15,000 (70)	7,500 (35)	10,000 (44.5)

<sup>1</sup>SML — Specified Mechanical Load is the tension load that a Veri\*Lite insulator can withstand during a 90-second test without failure. SML is comparable to the M&E strength rating of porcelain insulators.

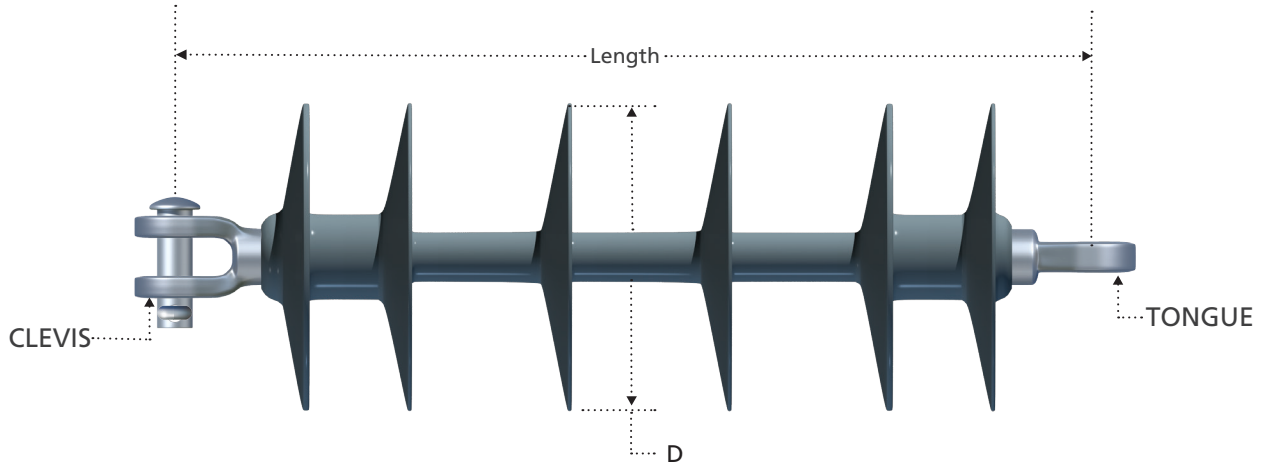
<sup>2</sup>RTL — A Routine Test Load value is equal to 50% of the SML value.

<sup>3</sup>Proof Test — The mechanical tension load applied at the factory to each insulator for ten (10) seconds.

# VLS Electrical Characteristics

PDI/VLS

## 0.625" (16mm) Diameter Rod Suspension Insulators



### Electrical Characteristics

Catalog Numbers	Type	Leakage Distance Inches (mm)	Dry Arc Distance Inches (mm)	Flashover ANSI - kV		Critical Impulse Flashover		RIV		Power Arc kA cycles	Equivalent number of 5 3/4" X 10" Bells	Volt*/ Class
				Dry-kV	Wet-kV	Pos-kV	Neg-kV	Test kV	Max. $\mu$ V			
4050021301	VLS-2	23 (584)	11.75 (298)	135	110	225	255	21	<10	150	2	15/25
4050029001**	VLS-2	23 (584)	11.75 (298)	135	110	225	255	21	<10	150	2**	15/25
4050031301	VLS-3	39 (991)	18 (457)	190	140	320	330	32	<10	150	3	35/46
4050041301	VLS-4	54 (1372)	23.7 (602)	255	190	420	435	48	<10	150	4	46/69
4050051301	VLS-5	69 (1753)	29.5 (749)	315	245	500	510	48	<10	150	5	69
4050061301	VLS-6	84 (2134)	35.2 (894)	370	305	610	580	48	<10	150	6	69

\* Phase-to-Phase voltage.

\*\* Replaces two 10" x 6-1/4" distribution deadend bells.

\*\*\* Y-Clevis fitting only available on 405003 and above.

VLS insulators are available with ANSI and IEC ball/socket end fittings and also with clevis/ tongue end fittings. Please use the following 4-digit suffix codes after the first 6-digits of the catalog number.

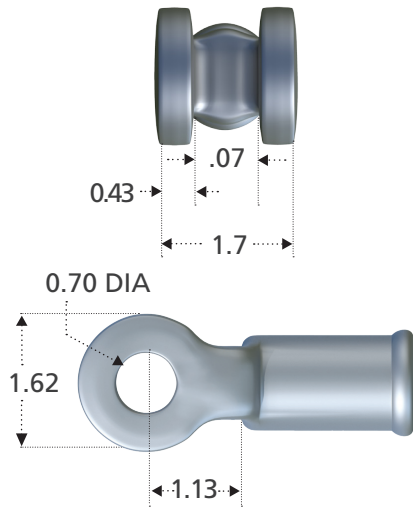
Suffix Code	Tower-end	Line-end
1201***	ANSI Y-Clevis	ANSI 52-3 Ball
1301	ANSI 52-3 Socket	ANSI 52-3 Ball
1400	ANSI 52-6 Clevis	ANSI 52-6 Tongue
2A07	IEC 16 mm Socket	IEC 16 mm Ball



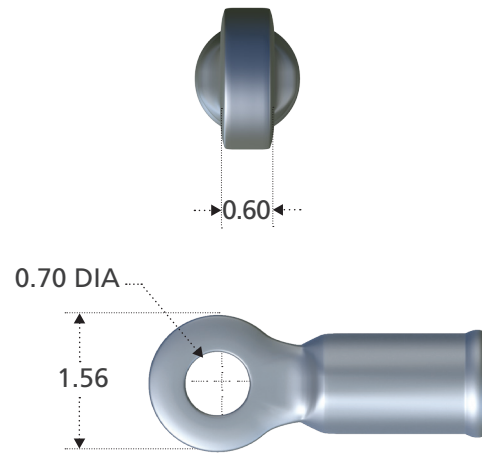
# End Fitting Details (Inches)

PDI/VLS

**PDI Clevis**

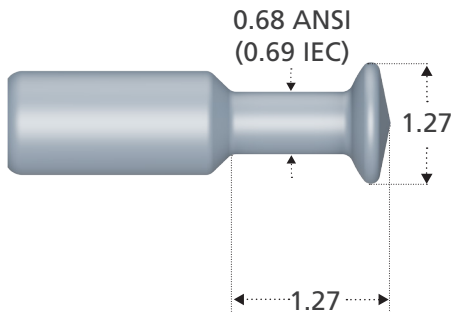


**PDI Tongue**



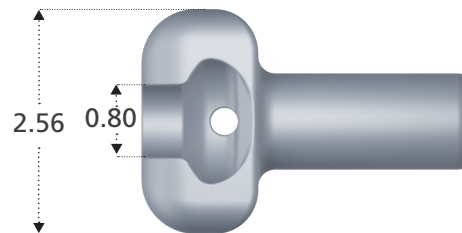
**PDI Ball**

ANSI 52-3 & IEC-16 mm



**PDI Socket**

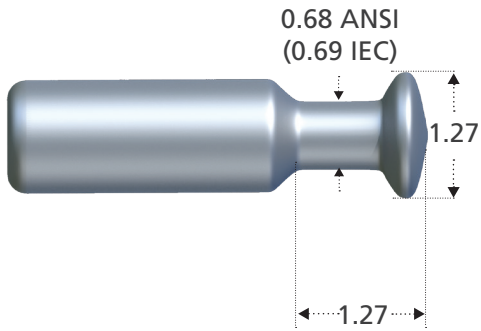
ANSI 52-3 & IEC-16 mm



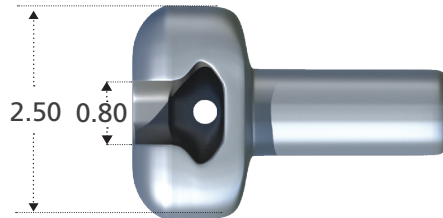
# End Fitting Details (Inches)

PDI/VLS

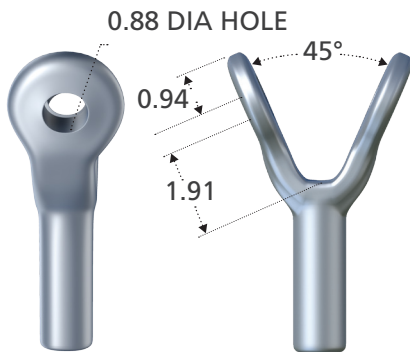
**VLS Ball**  
ANSI 52-3 & IEC-16 mm



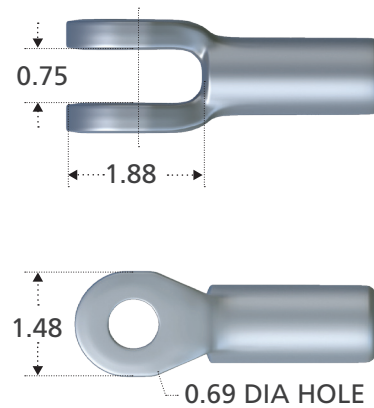
**VLS Socket**  
ANSI 52-3 & IEC-16 mm



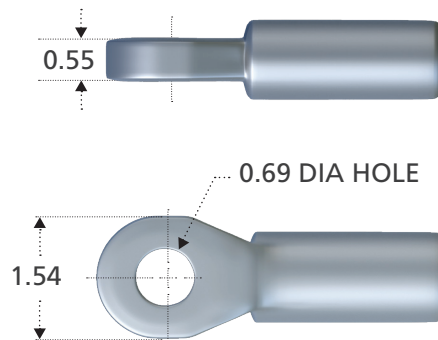
**VLS Y-Clevis**



**VLS Clevis**



**VLS Tongue**

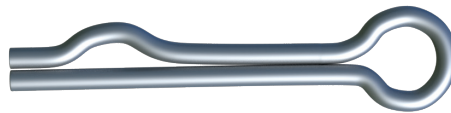


# End Fitting Details (Inches)

PDI/VLS

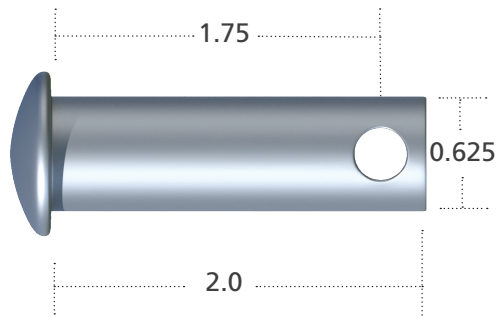
## Cotter

Part No. 86166-4002



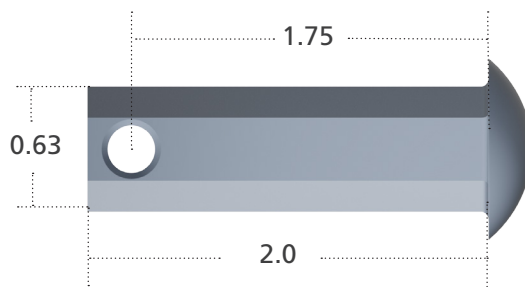
## Clevis Pin

Part No. 81257-4206



## Hex Pin

Part No. 89858-4206







## About Hubbell Power Systems

Hubbell Power Systems (HPS) manufactures a wide variety of transmission, distribution, substation, OEM and telecommunications products used by utilities. HPS products are also used in the civil construction, transportation, gas and water industries. Our product line includes construction and switching products, tools, insulators, arresters, pole line hardware, cable accessories, test equipment, transformer bushings and polymer precast enclosures and equipment pads.

Because Hubbell has a policy of continuous product improvement. We reserve the right to change design and specifications without notice.

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Catalog CA\_08\_051\_E

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