

INSULIGN® POLYMER INSULATOR VISE TOP PIN TYPE

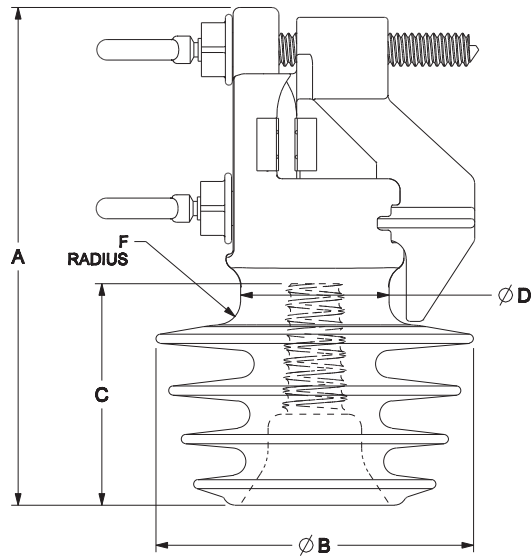
The Patented **Vise Top and Pivot Vise Top Polymer Insulator** utilizes a unique plastic clamp mechanism and nylon torque bolts to secure the conductor. The nylon torque bolt with a break-away ring is designed to ensure that the optimal holding force is applied while providing for a fast conductor clamping. Nylon inserts are offered for use with jacketed conductors. PLP also offers a patented universal insert design which is compatible with all conductors. It is recommended that the utility determine the suitability of the Vise Top/Pivot Vise Top Polymer Insulators for their application before installation.

The Pivot Top version eliminates the need to remove the top bolt when seating the conductor in the clamp mechanism.

FEATURES AND BENEFITS

- Superior moisture and contamination shedding
- UV-stabilized material
- High-impact resistance material
- Lightweight design
- Ideal for jumpers and stinger wires
- 100% recyclable
- 1" or 1-3/8" pins
- Universal insert design¹ to reduce the number of different insulators required
- Ideal for use with shot gun sticks
- Vise Top Stringing Tool available
- Pivot Top version features no loose hardware, reducing installation time

SPECIFICATIONS



INSULIGN Vise Top Pin Type Polymer Insulator / Pivot Vise Top Pin Type Polymer Insulator

Nominal Insulator Dimensions			
Catalog Number (Vise Top)	IP-15-VTX*	IP-25-VTX-Y*	IP-35-VTX-Y*
Catalog Number (Pivot Vise Top)	IP-15-PVTX*	N/A	IP-35-PVTX-Y*
A (in)	8.50	8.40	10.13
B (in)	5.50	7.30	8.00
C (in)	3.75	4.50	5.38
D (in)	2.50	2.50	2.50
F (Radius-in)	0.50	0.50	0.50
Number of Skirts	4	3	3
Tangent Vise Attachment Maximum Conductor OD (in)	1.86	1.86	1.86
Side Groove, Maximum Conductor OD (in)	1.00	1.00	1.00

* X references insert material

N = nylon insert

U = universal insert

* Y references mounting pin diameter

1 = 1" Pin

2 = 1-3/8" Pin



ORDERING INFORMATION

INSULIGN Vise Top Pin Type Polymer Insulator / Pivot Vise Top Pin Type Polymer Insulator

Catalog Number	Catalog Number	ANSI Class ¹	Insert	Application	Mounting Pin Diameter	Insulator Weight	Units per Carton	Weight per Carton
					in	lb	lb	lb
15 kV								
IP-15-VTU	IP-15-PVTU	55-3, 55-4	Universal ²	All Conductor Applications	1	2	18	39
IP-15-VTN	IP-15-PVTN		Nylon	Jacketed Conductors				
25 kV								
IP-25-VTU1	N/A	55-5	Universal ²	All Conductor Applications	1	2.2	12	31
IP-25-VTU2	N/A				1-3/8			
IP-25-VTN1	N/A		Nylon	Jacketed Conductors	1	2.3		32
IP-25-VTN2	N/A				1-3/8			
35 kV								
IP-35-VTU1	IP-35-PVTU1	55-6	Universal ²	All Conductor Applications	1	3.2	12	43
IP-35-VTU2	IP-35-PVTU2	55-7			1-3/8			
IP-35-VTN1	IP-35-PVTN1	55-6	Nylon	Jacketed Conductors	1			
IP-35-VTN2	IP-35-PVTN2	55-7			1-3/8			

¹ Insulators meet the electrical criteria defined in the applicable specification.

² Patented

ACCESSORIES



Torque Bolt
Catalog Number: PT-01



Stringing Tool
Catalog Number: IP-VLST-01

Torque Bolt

Two torque bolts are supplied with each Vise Top Insulator. The breakaway torque ring is designed to ensure that the proper torque and optimum holding force to the conductor will be applied during initial installation.

New torque bolts should be used whenever conductors are removed from the Vise Top Insulator, or any time the bolts are unscrewed and initial torque is lost.



Hook Tool
Catalog Number: VTHT-01

Torque Bolt Hook Tool

An aluminum hook tool accessory is offered for use with hydraulic or power wrenches for easy installation of torque bolts.

Vise Top Stringing Tool

The polyurethane Vise Top Stringing Tool (VLST) is offered to aid jacketed conductor installation. The VLST temporarily installs in the vise top clamp, by hand or with hot sticks, and is designed to permit short-span, low-tension, jacketed conductor stringing without the need for stringing blocks.

NOTE: The VLST is not recommended for use with bare conductors, long spans, or line or sag angles over 10 degrees. A properly sized stringing block should be used at the first and last pole at large line or sag angles, or long spans throughout the pull, rather than the stringing tool.

It is recommended that harsh material pulling ropes, such as nylon, be avoided to minimize excessive wear to the inner surface of the stringing tool. It is also suggested that low pulling speeds be used when pulling rope or cable through the tool to avoid excessive wear. The stringing tool can be reused; it is recommended the tool be inspected after each pull to ensure it is suitable for further use. Areas of wear on the tool from previous pulls can be rotated away from where the rope and conductors will rest in the bore during subsequent pulls. Do not reuse the tool if excessive wear is present throughout all areas of the inner bore.

TESTING RESULTS

INSULIGN Vise Top Pin Type Polymer Insulator / Pivot Vise Top Pin Type Polymer Insulator

Test Results Based on ANSI C29 Standard									
Insulator Data	15 kV Applications		25 kV Applications			35 kV Applications			
	PLP	ANSI C29.5 55-3/55.4	PLP	PLP	ANSI C29.5 55-5	PLP	ANSI C29.5 55-6	PLP	ANSI C29.5 55-7
Catalog Number and Application	IP-15-VT(N/U) IP-15-PVT(N/U)	N/A	IP-25-VT(N/U)-1	IP-25-VT(N/U)-2	N/A	IP-35-VT(N/U)-1 IP-35-PVT(N/U)-1	N/A	IP-35-VT(N/U)-2 IP-35-PVT(N/U)-2	N/A
Nominal ANSI Class	55-3	55-3/55-4	55-5	55-5	55-5	55-6	55-6	55-7	55-7
Neck Size/Style	N/A	C/F	N/A	N/A	F	N/A	F/J	N/A	F/J
Typical Operating Voltage Application, kV	15	15	25	25	25	35	35	35	35
Leakage Distance (in)	16.1	7/9	18.1	17.9	12	23.5	15	23.3	15
Dry Arcing Distance (in)	7	4.5/5	8.7	8.5	6.25	10.5	8	10.4	8
Pin Hole Diameter (in)	1	1	1	1-3/8	1	1	1	1-3/8	1-3/8
Suggested Minimum Pin Length (in)	6	5	6	6	6	7.5	7.5	7.5	7.5
60Hz Dry Flashover (kV)	101	55/65	88 (1)	88	85	128 (1)	100	128	100
60Hz Wet Flashover (kV)	50	30/35	55 (1)	55	45	72 (1)	50	72	50
Positive Impulse Flashover (kV)	147	90/105	150 (1)	150	140	188 (1)	150	188	150
Negative Impulse Flashover (kV)	201	-110/-130	-219 (1)	-219 (1)	-170	-272 (1)	-170	-272	-170
Low Frequency Puncture (kV)	174	90/95	228	191	115	206	135	219	135
RIV @ 1 MHZ									
10 kV to grd, μ V	<4	<50 μ V @10 kV	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15 kV to grd, μ V	N/A	N/A	<0.5 (1)	<0.5	100 μ V @15 kV	N/A	N/A	N/A	N/A
22 kV to grd, μ V	N/A	N/A	N/A	N/A	N/A	<6 (1)	100 μ V @15 kV	<6	100 μ V @22 kV
Cantilever Strength (lb)	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Approximate Weight (lb)	2	N/A	2.3	2.3	N/A	3	N/A	3.2	N/A
Maximum Operating Temperature (°C)	120	N/A	120	120	N/A	120	N/A	120	N/A

(1) Electrical test data extrapolated from similar design of Polymer Insulator Pin Hole 1-3/8".