

Apparatus Insulators

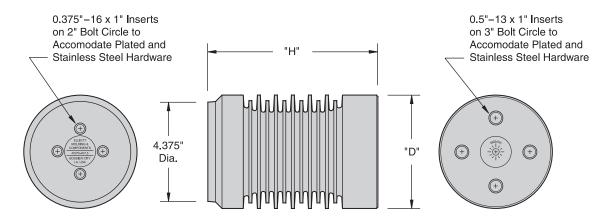
Indoor - Outdoor
Four 0.375"–16 Inserts and Four 0.5"–13 Inserts

Descriptive Bulletin

2375-001

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Extra Heavy Duty



ELRIM Cycloaliphatic Epoxy Provides:

Nontracking, self-scouring, nonweathering performance Superior dielectric strength, dielectric loss and power factor Choice of shapes allows design innovation Mechanical and thermal toughness Shatter-free arc flashover performance Oil resistant

Elliott Design Provides:

Cast-in-place inserts without metal end caps Contamination resistant Elliott square-edge skirts Generous dry arcing (strike) distance Increased leakage distance to resist contamination Thermal cycling withstand from +200° F to -200° F High strength - field proven performance Experience with cycloaliphatic epoxy since 1975

The extra-heavy-duty four-bolt apparatus insulator provides four 0.375"–16 inserts on a 2-inch bolt circle in the top and four 0.5"–13 inserts on a 3-inch bolt circle in the bottom. The insulator may be used as a direct replacement for porcelain and non-porcelain insulators. This unusually compact design may be mounted in any position. The unique Elliott square-edge skirt design provides unusually high performance in contaminated conditions - wet or dry. High cantilever strength and the other superior qualities of cycloaliphatic epoxy make this insulator a high-performance component.

Important:

Water that accumulates in the inserts and then freezes will damage epoxy insulators. When insulators are to be installed outdoors, inserts must be partially filled with no-oxide compound (or similar material) to prevent moisture accumulation in the inserts.

Ratings and Dimensions of Extra-Heavy-Duty Apparatus Insulators

Catalog	Nominal	Withstand Test Voltage Kilovolts			"H"	"D"	Minimum	Minimum Strike
Number	Voltage kV	Impulse 1.2 x 50	One Min. Dry.	10 Sec. Dew	Height Inches	Diameter Inches	Leakage Inches	Inches
2375-406	15	95	50	30	6	5	14	6
2375-407.5 2375-408.5	25 25	125 125	60 70	45 50	7.5 8.5	5 5	20 20.75	7.5 8.5
2375-410 2375-414	35 35	150 200	80 95	60 80	10 14	5 5.25	29 44.5	10 14
2375-418	46	250	120	100	18	6	60	18



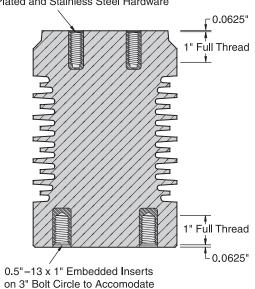
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0.375"-16 x 1" Embedded Inserts on 2" Bolt Circle to Accomodate Plated and Stainless Steel Hardware

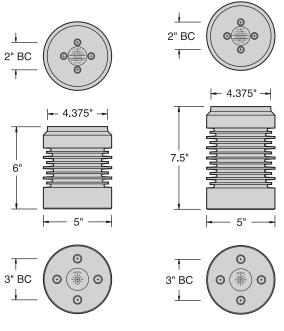


on 3" Bolt Circle to Accomodate Plated and Stainless Steel Hardware

Typical Construction

Important:

Water that accumulates in the inserts and then freezes will damage epoxy insulators. When insulators are to be installed outdoors, inserts must be partially filled with no-oxide compound (or similar material) to prevent moisture accumulation in the inserts.



#2375-406 #2375-407.5

Catalog Number	2375-406	2375-407.5	
Electrical Rating, kV			
Nominal Voltage	15	25	
BIL	95	125	
AC Withstand - 1 Min. Dry	50	60	
AC Withstand - 10 Sec. Dew	30	45	
Height of Insulator, Inches	6	7.5	
Leakage Distance, Inches	14	20	
Dry Arcing Distance, Inches	6	7.5	
Mechanical-Strength Rating, Pounds			
Cantilever, Ultimate 2.5 inches above top*	3,000	3,000	
Tensile, Pounds	10,000	10,000	
Torsion, Inch-Pounds	8,000	8,000	
Compression, Pounds	20,000	20,000	
Insert Thread Size (Top / Bottom)	0.375"-16 / 0.5"-13	0.375"-16 / 0.5"-13	
Net Weight, Pounds (kg)	6.42 (2.91)	7.57 (3.43)	

^{*} To attain their rated cantilever strengths, insulators must be mounted with the large end on a flat surface that is at least as wide as the diameter of the base of the insulator. Furthermore, the mounting surface must be free of protrusions, such as lumps from galvanizing, to prevent cracking of the insulator when mounting bolts are tightened.



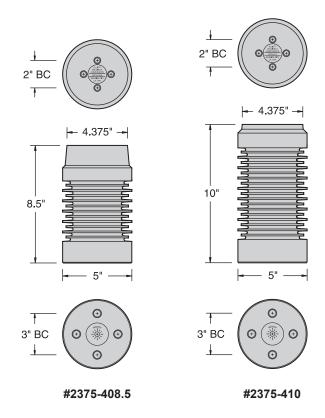
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Catalog Number	2375-408.5	2375-410	
Electrical Rating, kV			
Nominal Voltage	25	35	
BIL	125	150	
AC Withstand - 1 Min. Dry	70	80	
AC Withstand - 10 Sec. Dew	50	60	
Height of Insulator, Inches	8.5	10	
Leakage Distance, Inches	20.75	29	
Dry Arcing Distance, Inches	8.5	10	
Mechanical-Strength Rating, Pounds			
Cantilever, Ultimate 2.5 inches above top*	3,000	2,500	
Tensile, Pounds	12,000	12,000	
Torsion, Inch-Pounds	10,000	10,000	
Compression, Pounds	20,000	20,000	
Insert Thread Size (Top / Bottom)	0.375"-16 / 0.5"-13	0.375"-16 / 0.5"-13	
Net Weight, Pounds (kg)	8.79 (3.99)	9.49 (4.30)	



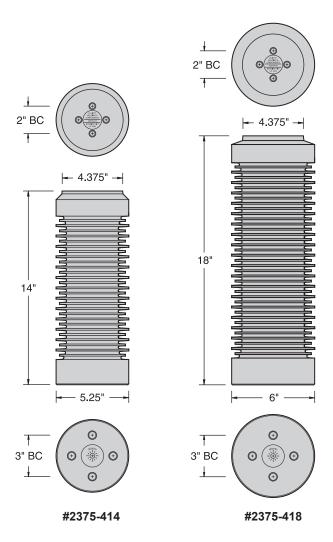
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Catalog Number	2375-414	2375-418	
Electrical Rating, kV			
Nominal Voltage	35	46	
BIL	200	250	
AC Withstand - 1 Min. Dry	95	120	
AC Withstand - 10 Sec. Dew	80	100	
Height of Insulator, Inches	14	18	
Leakage Distance, Inches	44.5	60	
Dry Arcing Distance, Inches	14	18	
Mechanical-Strength Rating, Pounds			
Cantilever, Ultimate 2.5 inches above top*	2,000	2,000	
Tensile, Pounds	12,000	14,000	
Torsion, Inch-Pounds	10,000	12,000	
Compression, Pounds	20,000	20,000	
Insert Thread Size (Top / Bottom)	0.375"-16 / 0.5"-13	0.375"-16 / 0.5"-13	
Net Weight, Pounds (kg)	13.80 (6.26)	22.30 (10.12)	