



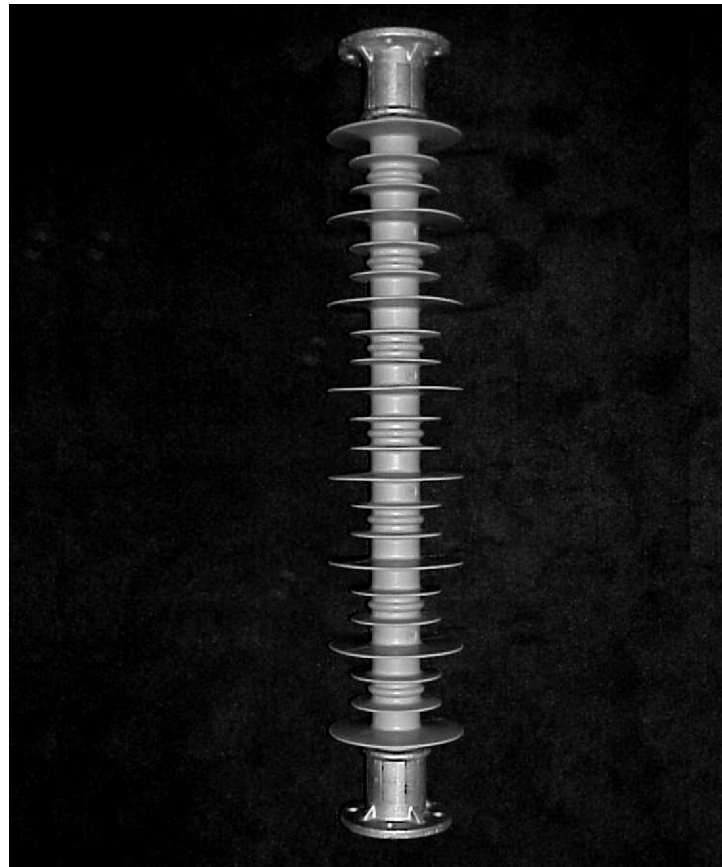
K-LINE INSULATORS LIMITED
TORONTO, ONTARIO, CANADA

Catalogue T-SP

TRANSMISSION SILICONE INSULATORS

Station Post

69 kV to 230 kV



ISO9001
SAI GLOBAL
FILE No. 000117

Transmission Silicone Insulators Station Post

One of the most critical assets of an electrical Transmission System is the station. Not only is this asset the heart of the supply to large electrical loads but it also serves many customers from industrial to residential. Therefore, power outages or interruptions due to insulation failures are costly and impact negatively on customer service. With **K-LINE INSULATORS LIMITED (KLI)** silicone Station Post Insulators these are greatly minimized through improved performance to reliability and savings in the life cycle cost.

Silicone's hydrophobic property allows **KLI** Station Post Insulators to electrically outperform ceramic insulators. The lightweight feature of polymer insulators makes them easy to handle and install. The size and fittings of polymer station insulators are compatible with existing Station Post hardware and arrangements. Experience with silicone polymer insulators has proven their superiority over ceramic insulators.

KLI silicone Transmission Station Post Insulators are manufactured and tested to world-class polymer insulator standards, CSA and ANSI.

K-LINE INSULATORS LIMITED is registered to ISO 9001 Quality Systems.

PERFORMANCE BENEFITS

The performance benefits of **KLI** Transmission Station Post Insulators are listed below.

- Improves Reliability (interruptions and outages due to vandalism, and flashovers in all types of environments are a thing of the past)
- Eliminates or Reduces Maintenance (such as washing and trouble calls) and are compatible with existing ceramic insulators
- Improves Power Quality (lower RI and TVI)
- Energy Efficiency (reduced losses due to lower leakage currents)
- Safety (light weight for handling and installation, eliminates catastrophic mechanical failures)
- Service Life (consistent performance over its service life)
- Life Cycle Cost (savings over ceramic insulators)

APPLICATION

Transmission Station Post Insulators are used in open-type stations operating at and above 60 kV. These insulators support the bus, leads, or other apparatus within the station.

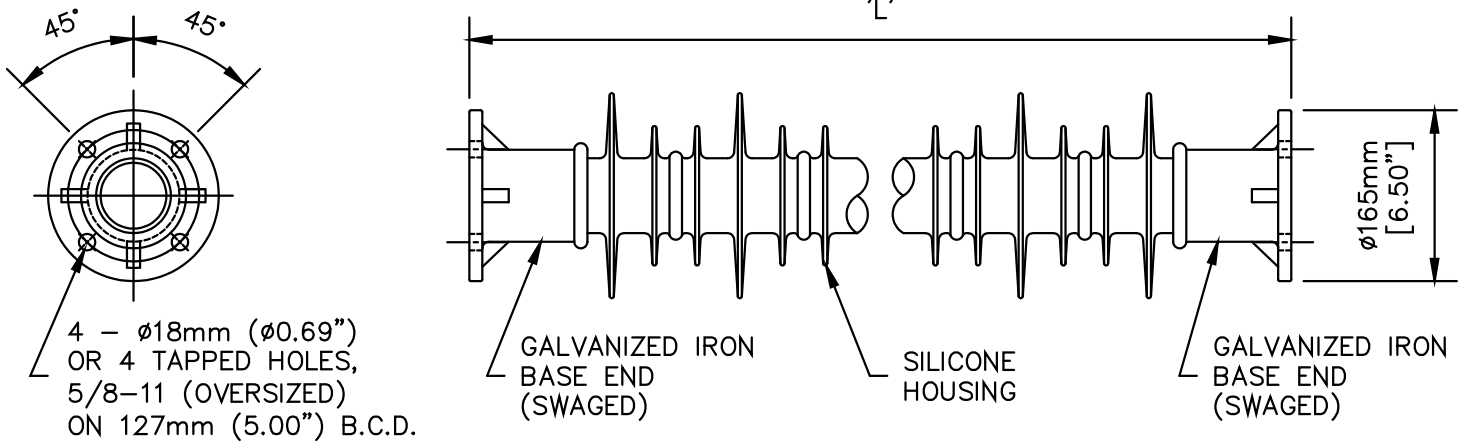
CORE ROD

The core rod of the insulator is made of a high quality, epoxy resin, E-Glass fiberglass rod that has been specially formulated for electrical and mechanical applications.

HOUSING

The housing (includes sheath and sheds) of the insulator is one piece, high temperature vulcanized, injection molded silicone rubber that is chemically bonded to the core rod. This ensures that the interface between the rubber and rod is impenetrable against moisture ingress. **KLI** uses its own proprietary silicone rubber formula in the manufacture of its insulators. The formulation has silicone rubber as the base polymer material with additives to enhance its performance in wet and contaminated environments

TRANSMISSION STATION POST INSULATOR



TECHNICAL DATA

Catalogue Number (See Notes 1, 2, & 3)	Voltage Class	Section Length	Dry Arcing Distance	Leakage Distance	Impulse Withstand	Low Frequency Flashover		Specified Cantilever Load (SCL)	Maximum Design Cantilever Load (MDCL)	Specified Tensile Load (STL)	Approx. Weight	Equivalent Height to ANSI Technical Reference Number
		L				Dry	Wet					
	kV	mm (in)	mm (in)	mm (in)	kV	kV	kV	kN (lbs)	kN (lbs)	kN (lbs)	kg (lbs)	
KL69ASP13	69	762 (30.0)	605 (23.8)	1534 (60.4)	355	245	220	27.1 (6090)	13.5 (3045)	120 (27,000)	16.6 (36.5)	TR216/278
KL69ASP16		895 (35.2)	732 (28.8)	1890 (74.4)	425	290	260	24.0 (5410)	12.0 (2705)	120 (27,000)	18.4 (40.5)	-
KL69ASP19		1019 (40.1)	856 (33.7)	2238 (88.1)	495	335	295	21.1 (4750)	10.6 (2375)	120 (27,000)	19.8 (43.5)	-
KL115ASP22	115	1143 (45.0)	991 (39.0)	2583 (101.7)	565	385	330	18.2 (4085)	9.1 (2043)	120 (27,000)	21.6 (47.5)	TR286/287
KL115ASP25		1267 (49.9)	1115 (43.5)	2931 (115.4)	635	430	365	15.2 (3415)	7.6 (1707)	120 (27,000)	23.0 (50.5)	-
KL138ASP28	138	1372 (54.0)	1220 (48.0)	3256 (128.2)	690	470	405	13.8 (3100)	6.9 (1550)	120 (27,000)	24.8 (54.5)	TR288/289
KL138ASP31		1515 (59.6)	1351 (53.2)	3622 (142.6)	760	515	450	12.3 (2775)	6.2 (1388)	120 (27,000)	26.1 (57.5)	-
KL161ASP34	161	1639 (64.5)	1476 (58.1)	3970 (156.3)	830	555	470	10.8 (2440)	5.4 (1220)	120 (27,000)	28.0 (61.5)	-
KL161ASP37		1763 (69.4)	1600 (63.0)	4315 (169.9)	900	595	490	9.4 (2105)	4.7 (1053)	120 (27,000)	29.3 (64.5)	-
KL230ASP22X2	230	2286 (90.0)	2032 (80.0)	5166 (203.4)	1145	740	565	8.0 (1794)	4.0 (897)	120 (27,000)	54.6 (120)	-
KL230ASP25X2		2534 (99.8)	2281 (89.8)	5862 (230.8)	1285	820	605	7.2 (1610)	3.6 (805)	120 (27,000)	57.3 (126)	-
KL230ASP28X2		2743 (108.0)	2494 (98.2)	6515 (256.5)	1405	890	640	6.6 (1482)	3.3 (741)	120 (27,000)	60.0 (132)	-

230kV Post Insulators have a $\phi 300\text{mm}$ ($\phi 12''$) Corona Ring

Ordering Information:

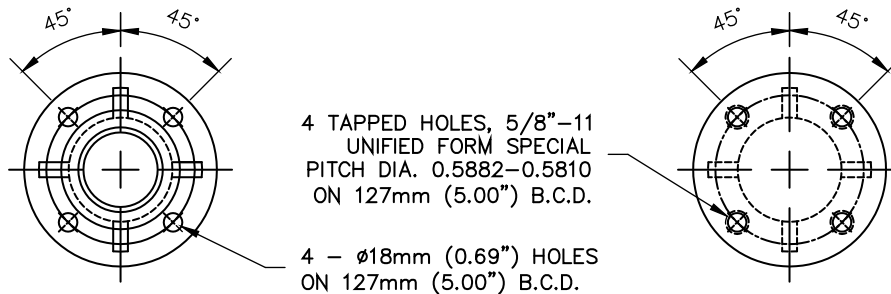
1. Above catalogue numbers apply to insulators with through holes on both ends.
2. Add T1 to catalogue numbers for insulators with one end tapped & the other with through holes.
3. Add T2 to catalogue number for insulators with both ends tapped.

END BASES

The standard base fittings are flat round iron bases that are available with bolt circle mounting holes with either through or tapped holes. These bases are compatible with the ceramic Station Post Insulator standard.

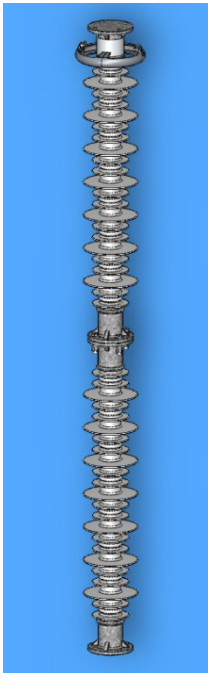
The end bases are radially swaged onto the core rod to provide the mechanical performance and reduce stress concentration. Our proprietary design insures a watertight seal between the rubber and end fitting. This special silicone rubber to metal fittings sealing process prevents moisture ingress to the fiberglass core rod. For other special base requirements, please contact **KLI**.

Corrosion protection of the end bases is provided by hot-dip galvanizing to CSA G164 or ASTM A153 specifications.



230kV & ABOVE

Station Post insulators can be stacked to achieve higher voltage classes. Stacked posts have the advantage of easier transportation, lighter weight for handling and installation.



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