

# Porcelain Insulator

## Electronic Railway Insulators (T-Bar, Suspension, Stem)

### [Overview]

Electric railway insulator

1. The insulator that support electrical fence, and beams by using the accessories like power rails, catenary wires, prevention of vibration devices, curve tensioning devices.
2. The insulator using power rails, catenary wires by electrically.
3. The insulator support for brackets.



[102mm]



[180mm parallel Type]



[180mm clevis pin type]



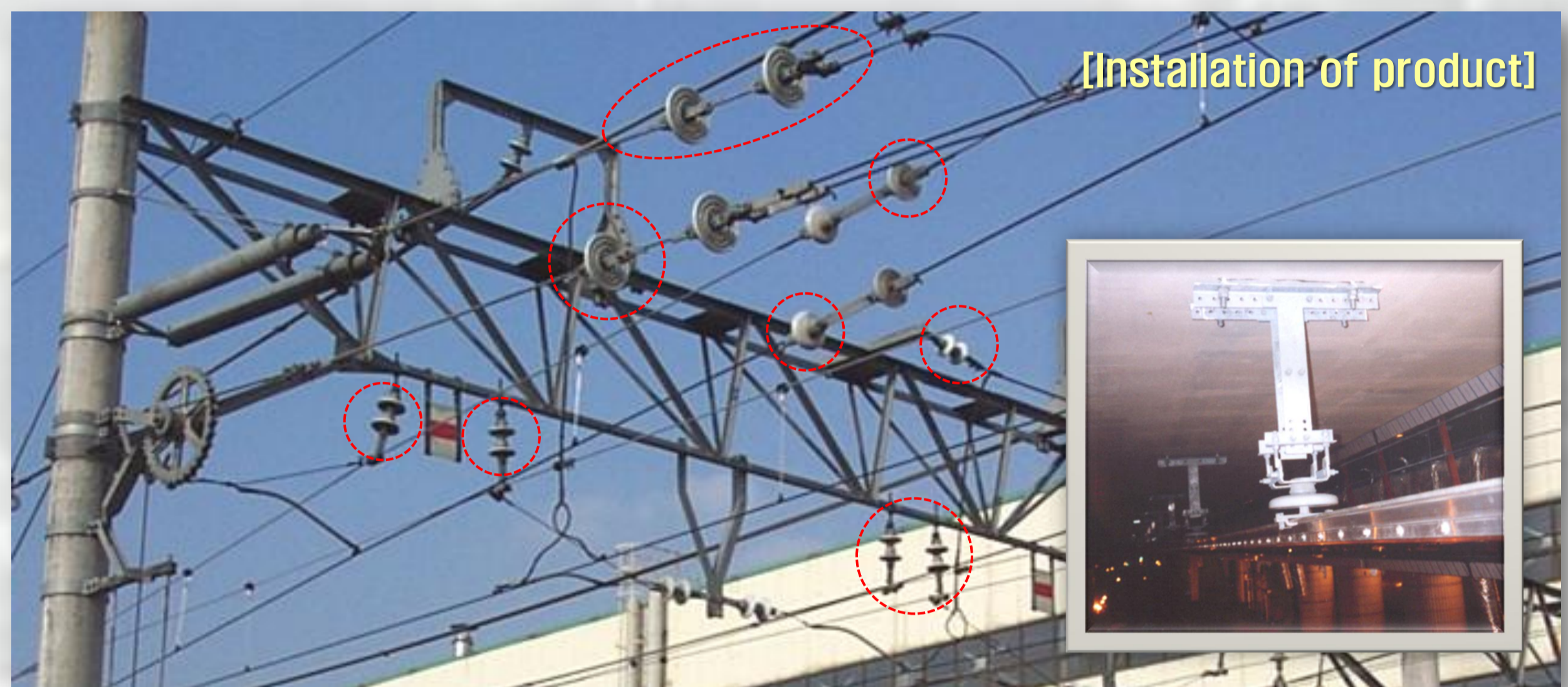
[250mm, EP-J]



[T-Bar]

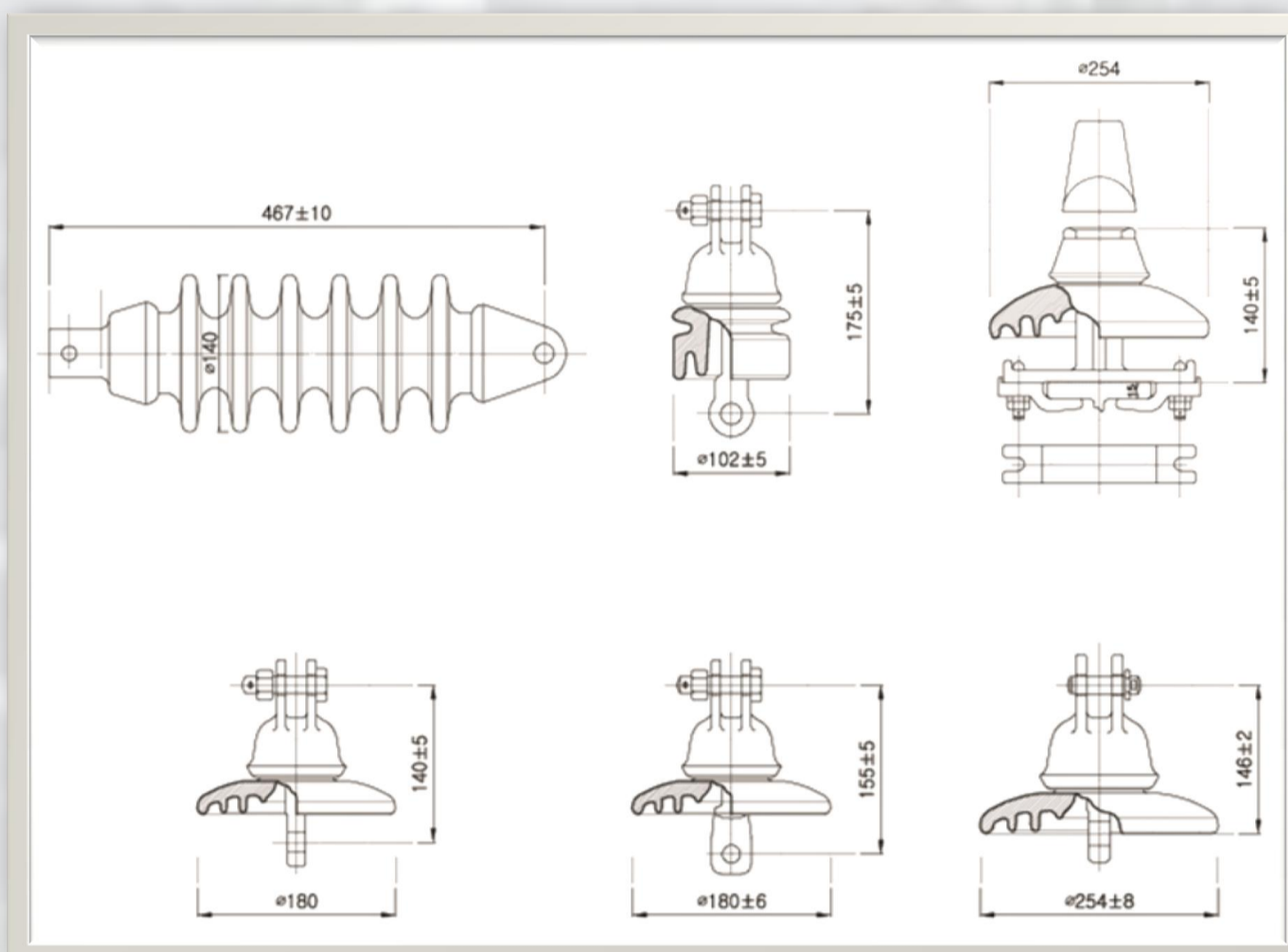


[Stem]



[Installation of product]

### [Drawing: 6 type of railway insulator]



### [Specification of T-Bar]

No.	Test item	Rating
1	Low-frequency Dry flashover voltage	60KV
2	Low-frequency Wet flashover voltage	30KV
3	50% Critical impulse flashover voltage	100KV
4	Power-frequency puncture voltage	140KV
5	Low-frequency Wet withstand voltage	22KV
6	Low-frequency Dry withstand voltage	55KV
7	Critical impulse withstand voltage	80KV
8	Torsional withstand load	310kgf
9	Electro-mechanical failing load	500kgf

### [Suspension type of Railway insulator (Japan Industrial Standard)]

Test item	100mm	180mm	250mm		
	100 C	180 EP 180 E 180 C	250 EP 250 E 250 C	250 T	250 EP-J
Low-frequency Wet withstand voltage (kV)	24	24	40	22	40
Critical impulse withstand voltage (kV)	75	75	105	80	105
Power-frequency puncture voltage (kV)	100	120	140	140	140
Electro-mechanical failing load (kgf)	4,000	7,500	7,000	1,000	12,000
Surface creepage distance (mm)	Min. 200	Min. 170	Min. 290	Min. 290	Min. 280
Low-frequency Dry withstand voltage (kV)	50	55	75	55	75
Tensile proof load(kgf)	1,300	2,500	2,300	-	4,000
Bending failing load(kgf)	-	-	-	500	-
Surface area (reference dimension)	Top[cm <sup>2</sup> ]	-	250	600	550
	Bottom[cm <sup>2</sup> ]	-	415	910	850

