



CYG Insulator Co.,Ltd.(CYG Insulator), the leading composite insulator manufacturer in china, a controlled subsidiary of Changyuan Technology Group Ltd.(SH: 600525), established in 1994 ,is an national hi-tech enterprise specially engaged in the research & design, manufacture and sales of composite insulators for transmission line(TL), substation(SS), distribution line(DL), electrical railway(Rail), composite insulation components(CIC) and composite surge arrester for distribution line(CSA)

CYG Insulator has the capacity and ability of researching, manufacturing and inspection both $\pm 1100\text{kV}$ HVDC and 1100kV HVAC and below voltage. The factory has the advanced manufacturing facilities covering two sets of 100% auto silicone rubber lines, over 30sets of whole injection machines along with 300 injection moldings and over 10 sets finpower-made crimping machines. Also CYG Insulator has the test & inspection facilities covering the chemical/Physical lab, Mechanical Lab, Aging Lab and Electrical Lab.

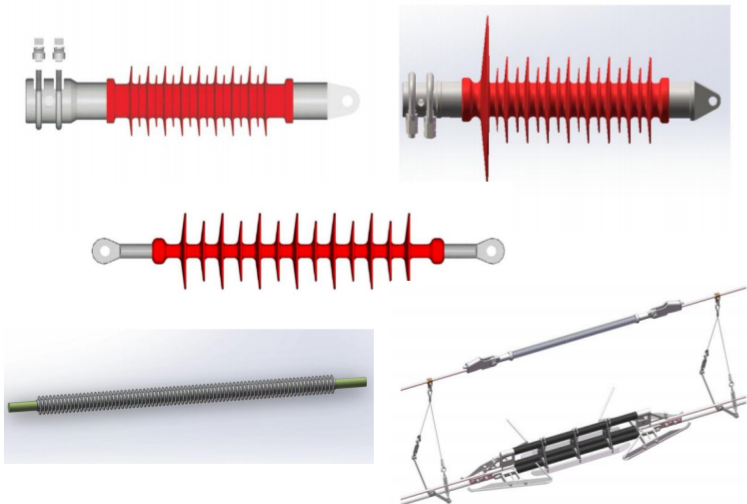
Now CYG Insulator has been one of the biggest famous insulators' company in manufacturing technology, production capacity, product quality and market shares. And his products have recognized and praised by various consumers worldwide

CYG Insulator is certified by ISO 9001/ISO14001/ISO45001

PERFORMANCE PHOTO



COMPOSITE INSULATOR FOR ELECTRICAL RAILWAY



Composite Railway Insulators offer the ultimate solution in improved performance. Because of its hydrophobicity, this material inherently resists water filming thereby limiting leakage currents. Insulators with reduced leakage currents, even when contaminated, require less frequent washing. The savings in such maintenance costs are added benefits of using silicone insulators.

Application: Composite Railway Insulators are used on overhead lines operating at or below 230 kV.

These insulators are used for catenary of Railway electrification and plays the role of mechanical connection and electrical insulation between catenary and tower.

Component: Composite Line Post Insulators are consisted of E-CR fiber reinforced polymer rod, metal fitting and housing materials. The glass must be electrically and chemically stable (ECR glass) and the housing(including the sheath and sheds) must be HTV silicone rubber with high hydrophobicity and high tracking & erosion resistance performance.

Technology Innovation: For HTV SR, CYG has its own patent formula and its own patent of the production process; For process, CYG creates the unique whole molding injection/sealing

DESIGNATION(Electric Railway)

Letters FQ (Long Rod Composite Insulator for Electric Railway)

Structure Style

Insulation Style

Rated Voltage and Mechanical force separated by a slash, the first one represents the rated voltage in kV and the second one the Mechanical force

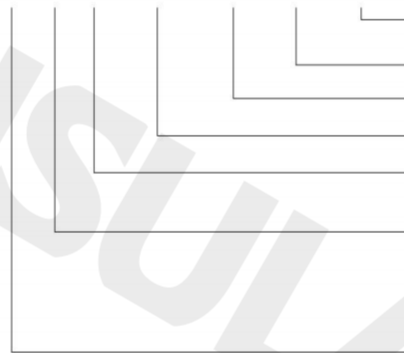
A dash followed by the creepage distance in mm

A Slash followed by the fitting type only for the Tension insulator

Designation Example(FQX27.5/120-1200/HH)

Composite electric railway insulator, Specific mechanical load equal to 120 kN, with Tongue fitting for the tower/ground side and Tongue fitting for the conductor side,the rated voltage equal to 27.5 kV and minimum creepage distance of 1200 mm.

FQ □ □ 27.5/□ - □ [□]



Fitting Type(Only for Tension: HH means Tongue-Tongue)

Creepage Distance

Mechanical Force Value

Rated Voltage:27.5kV

Insulation Style : No letter means "Single Insulation"
S means "Double Insulation"

Structural Style:

X: Tension Composite Insulator

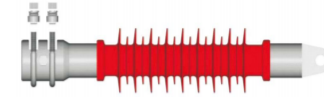
B:Cantilever Composite Insulator

G: Phase Segmented Composite Insulator

Long Rod Composite Insulator for Electric Railway

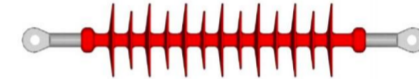
INSULATOR CATAGLOGUE FOR TRAIN SYSTEM

Cantilever Composite Insulator



SN	Designation	Voltage (kV)	SCL (kN)	STL (kN)	Insulation Style	Height (mm)	Dry Arc (mm)	Minimum Leakage Distance (mm)	Dry Lightning impulse withstand voltage(KV)	Dry Power Frequency withstand Voltage (kV)	Wet Power Frequency withstand Voltage (kV)
1	FQB27.5/8-1200	27.5	8	80	Single	760	490	1200	270	160	130
2	FQB27.5/8-1400	27.5	8	80	Single	800	490	1400	290	175	140
3	FQB27.5/8-1600	27.5	8	80	Single	800	520	1600	310	190	150
4	FQBS27.5/8-1200	27.5	8	80	Double	850	490	1200/145	270	160	130
5	FQBS27.5/8-1400	27.5	8	80	Double	890	490	1400/145	290	175	140
6	FQBS27.5/8-1600	27.5	8	80	Double	890	520	1600/145	310	190	150

Tension Composite Insulator



SN	Designation	Voltage (kV)	SCL (kN)	STL (kN)	Insulation Style	Height (mm)	Dry Arc (mm)	Minimum Leakage Distance (mm)	Dry Lightning impulse withstand voltage(KV)	Dry Power Frequency withstand Voltage (kV)	Wet Power Frequency withstand Voltage (kV)
1	FQX27.5/120-1200/HH	27.5	/	120	Single	700	500	1200	270	160	130
2	FQX27.5/120-1400/HH	27.5	/	120	Single	750	550	1400	290	175	140
3	FQX27.5/120-1600/HH	27.5	/	120	Single	800	600	1600	310	190	150
4	FQXS27.5/120-1200/HH	27.5	/	120	Double	790	500	1200/145	270	160	130
5	FQXS27.5/120-1200/HH	27.5	/	120	Double	840	550	1400/145	290	175	140
6	FQXS27.5/120-1200/HH	27.5	/	120	Double	890	600	1600/145	310	190	150

Phase Segmented Composite Insulator



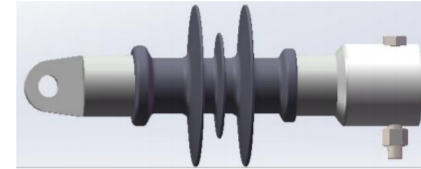
SN	Designation	Voltage (kV)	SCL (kN)	STL (kN)	Insulation Style	Height (mm)	Dry Arc (mm)	Minimum Leakage Distance (mm)	Dry Lightning impulse withstand voltage(KV)	Dry Power Frequency withstand Voltage (kV)	Wet Power Frequency withstand Voltage (kV)
1	FQXG-27.5/100-1600	27.5	/	100	Single	/	/	1600	310	190	150
2	FQXG-27.5/100-1800	27.5	/	100	Single	/	/	1800	420	250	200
3	FQXG-27.5/100-2000	27.5	/	100	Single	/	/	2000	420	250	200

Remark:

- 1) All the designs are in accordance with the ANSI/IEC relative standards and can also be customized as per actual request.
- 2) The other type of end fittings are also available if needed.

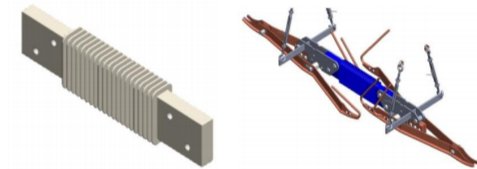
INSULATOR CATALOGUE FOR METRO SYSTEM

Cantilever Composite Insulator



SN	Voltage (kV)	SCL (kN)	STL (kN)	Section Length (mm)	Minimum Leakage Distance (mm)	Dry Lightning impulse withstand voltage(KV)	Dry Power Frequency withstand Voltage (kV)	Wet Power Frequency withstand Voltage (kV)
1	1.5	18	100	332	350	125	60	30

Phase Segmented Square Insulator



SN	Voltage (kV)	STL (kN)	Minimum Leakage Distance (mm)	Dry Lightning impulse withstand voltage(KV)	Dry Power Frequency withstand Voltage (kV)	Wet Power Frequency withstand Voltage (kV)
1	3	42	450	95	/	38

Phase Segmented Teflon Insulator



SN	Voltage (kV)	STL (kN)	Minimum Leakage Distance (mm)	Dry Lightning impulse withstand voltage(KV)	Dry Power Frequency withstand Voltage (kV)	Wet Power Frequency withstand Voltage (kV)
1	3	100	600	125	90	/
2	3	70	1200	352	166	/
3	3	70	2000	550	395	230
4	3	70	2500	550	395	230

Remark:

- 1) All the designs are in accordance with the ANSI/IEC relative standards and can also be customized as per actual request.
- 2) The other type of end fittings are also available if needed.