

Standard Type Suspension Toughened Glass Insulators LXP40-LXP160

Classes covered: U40B, U70BS, U70BL, U100BL, U120B, U160BS

Standards: GB, ANSI, BS, DIN, AS, IEC

Certification: ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

Lead time: 30 days production plus 30 days delivery



Product Overview

The working range of a transmission line. Six strength classes from a 40 kN U40B up to a 160 kN U160BS, all in the standard ribbed shed profile, all cap and pin toughened glass. Shed diameter runs 175 mm to 280 mm and spacing 110 mm to 146 mm, so these units drop into conventional tower geometry without redesigning clearances. Couplings are 11 mm on the smallest class and 16 mm across the U70B to U120B group that makes up most suspension string work.

Dimensional Mechanical And Electrical Values

Parameter	LXP40 U40B	LXP1-70 U70BS	LXP2-70 U70BL	LXP-100 U100BL	LXP-120 U120B	LXP1-160 U160BS
Coupling Size mm	11	16	16	16	16	20
Diameter D mm	175	255	255	255	255	180
Spacing H mm	110	127	146	146	146	146
Leakage Distance mm	190	320	320	320	320	400
Mechanical Failing Load kN	40	70	70	100	120	160
Tension Proof Load kN	20	35	35	50	60	80
Power Frequency Dry Withstand kV	55	70	70	70	70	75
Power Frequency Wet Withstand kV	30	40	40	40	40	45
Dry Lightning Impulse Withstand kV	75	100	100	100	110	110
Power Frequency Puncture Voltage kV	130	130	130	130	130	130
RIV Test Voltage To Ground kV	10	10	10	10	10	10
Maximum RIV At 1000 kHz microvolts	50	50	50	50	50	50
Net Weight kg	1.6	3.7	3.8	4.0	4.2	6.5

Values are the published Huasheng table for this family. Confirm the class against your own specification before ordering.

Key Benefits

- One family covers distribution through sub-transmission, 40 kN to 160 kN failing load
- Compact 175 mm to 280 mm diameters keep strings and tower clearances conventional
- Routine test tension published for each class, from 20 kN on U40B to 80 kN on U160BS
- Toughened glass shatters on dielectric failure, so defective units are found on ground patrol
- 16 mm coupling across the U70B to U120B classes matches common line hardware inventories

Materials

- Shell in thermally toughened pressed glass
- Cap in galvanised malleable cast iron
- Pin in galvanised forged steel
- Cement bonding between shell, cap and pin
- Split pin or W clip locking device with the coupling

Manufacturing Process

Glass batch melting → Shell pressing to profile → Thermal toughening → Thermal shock screening → Cap and pin cementing → Cement curing → Routine mechanical proof load → Electrical routine test → Marking and packing

Quality Control

- Thermal shock screening removes shells holding internal stress before assembly
- Every unit is proof loaded in tension to the routine test value for its class
- Electrical routine testing against the published withstand values
- Dimensional check of spacing, diameter and coupling before packing
- Production under an ISO 9001:2015 certified quality management system

Customization

- Private label marking with your own brand
- Production to GB, ANSI, BS, DIN, AS or IEC designs as your specification requires
- Packing specified for the destination and transport mode

- OEM support from our engineers on designation and coupling matching

Handling And Selection Notes

- Confirm the designation in your specification, whether written as GB LXP or IEC U class
- Match the coupling size to the hardware already in the string, 11, 16 or 20 mm here
- Size the string on the published tension proof load, not only the mechanical failing load
- Count units from the system voltage and the creepage your pollution level requires
- Handle and store units on their caps in the supplied packing until they go up the tower
- Inspect strings on routine patrol, a missing shell means that unit needs replacing