

DISC SUSPENSION INSULATOR

Porcelain & Toughened Glass · Standard / Double-Shed / Fog / Aerodynamic · SML 40–530 kN · IEC 60815 Class A–E



PRODUCT OVERVIEW

Vuulcan disc suspension insulators are manufactured in porcelain and toughened glass across four anti-pollution profiles: standard (XP), double-shed (XWP), fog bell-shape (XHP), and aerodynamic (XMP). Cap-and-pin ball & socket per IEC 60305. SML 40–530 kN covers distribution through EHV transmission. IEC 60815 Class A–E coverage from clean inland to extreme coastal environments.

KEY FEATURES

- ✓ 4 anti-pollution profiles — IEC 60815 Class A through E
- ✓ Porcelain & toughened glass — same IEC 60305 socket
- ✓ SML 40–530 kN — distribution to 500 kV EHV lines
- ✓ XHP4-300: 690 mm creepage — Arabian Gulf / SE Asia coastal
- ✓ Ball & socket per IEC 60305 — fully interchangeable
- ✓ HDG hardware $\geq 86 \mu\text{m}$ zinc per ISO 1461
- ✓ 100% mechanical load tested · KEMA type tested
- ✓ DNV ISO 9001 · CRCC certified

PORCELAIN — STANDARD PROFILE (XP SERIES) · IEC 60815 CLASS A/B

TYPE	IEC CLASS	D (MM)	H (MM)	CREEPAGE (MM)	SML (KN)	WET F/O (KV)	BIL (KV)
XP-70	U70BL	255	146	295	70	40	100
XP-100	U100BL	280	146	320	100	40	100
XP-160	U160BM	255	155	305	160	45	110
XP-210	U210B	280	170	335	210	45	120
XP-300	U300B	320	195	370	300	50	140
XP-530	U530B	380	240	600	530	55	140

ANSI equivalents: 52-3 (U70C) · 52-5 (U70BS) · 52-8 (U100BL) · 52-10 (U100BL) · Full range 40–530 kN available

PORCELAIN — DOUBLE & TRI-SHED (XWP SERIES) · IEC 60815 CLASS C

TYPE	IEC CLASS	D (MM)	H (MM)	CREEPAGE (MM)	SML (KN)	WET F/O (KV)	BIL (KV)
XWP-70	U70BELI	255	155	400	70	42	120
XWP-100	U100BL	255	160	400	100	42	120
XWP-160	U160BM	300	155	400	160	45	130
XWP2-160	U160BM/LP	300	170	450	160	45	130
XWP-210	U210BP	300	170	450	210	45	130
XWP-300	U300BP	330	195	450	300	50	135

FOG BELL-SHAPE (XHP) & TOUGHENED GLASS (LXY / LXHY) · IEC 60815 CLASS D/E

FOG TYPE PORCELAIN — XHP SERIES

TYPE	IEC CLASS	D (MM)	H (MM)	CREEPAGE (MM)	SML (KN)	WET F/O (KV)	BIL (KV)
XHP-70	U70BLP	255	146	450	70	42	120
XHP-100	U100BEL	280	160	430	100	45	120
XHP-160	U160BMP	300	155	450	160	45	130
XHP-210	U210BP	300	170	450	210	45	130
XHP-300	U300BP	330	200	505	300	45	130
XHP4-300	U300BP	380	195	690	300	60	140

XHP4-300: 690 mm creepage — designed for Arabian Gulf and SE Asian coastlines · XMP-70 aerodynamic: D=350 mm, creepage 300 mm, SML 70 kN

STANDARD TOUGHENED GLASS — LXY SERIES

TYPE	IEC CLASS	D (MM)	H (MM)	CREEPAGE (MM)	SML (KN)	WET F/O (KV)	BIL (KV)
LXY-70	U70BL	255	146	320	70	40	130
LXY-100	U100BL	255	146	320	100	40	130
LXY-160	U160BS	280	146	400	160	45	130
LXY3-210	U210BS	280	170	400	210	45	130
LXY3-300	U300B	320	195	485	300	50	130
LXY-530	U530B	380	240	600	530	55	140

FOG ANTI-POLLUTION TOUGHENED GLASS — LXHY SERIES

TYPE	IEC CLASS	D (MM)	H (MM)	CREEPAGE (MM)	SML (KN)	WET F/O (KV)	BIL (KV)
LXHY4-70	U70BP	255	146	400	70	50	120
LXHY4-160	U160BP	280	170	450	160	50	125
LXHY3-210	U210BLP	320	170	550	210	55	140
LXHY3-300	U300BP	380	195	635	300	60	155

DC variants (LXZY) and clevis-type fittings available on request

Profile Selection Guide: XP (Class A/B, 295–370 mm) → XWP (Class C, 400–450 mm) → XHP / LXHY (Class D, 430–505 mm) → XHP4-300 (Class E, 690 mm) · Free pollution-class report available — share site location & IEC 60815 class.

ROUTINE TESTS — PER PRODUCTION BATCH

1	Mechanical load test (100% SML, 1 min)	IEC 60305 §7	2	Puncture withstand voltage test	IEC 60305 §8
3	Galvanising thickness ≥ 86 µm (mag. gauge)	ISO 1461	4	Cement bonding & dimensional inspection	IEC 60305 §6
5	Thermal-mechanical test (type test, each series)	IEC 60305 §10	6	KEMA type-test reports — available on request	IEC 60305

APPLICABLE STANDARDS & CERTIFICATIONS

PRIMARY (IEC)

IEC 60305

US EQUIVALENT

ANSI C29.2

QUALITY SYSTEM

DNV ISO 9001:2015

POLLUTION CLASS

IEC 60815 A–E

GALVANISING

ISO 1461 / ASTM A153

PRODUCTION CERT

CRCC · KEMA

IEC 60305

ANSI C29.2

IEC 60815

DNV ISO 9001

CRCC

KEMA

ORDERING INFORMATION

Porcelain: **VDS – XHP-300 – 300kN – CL-D** Glass: **VDS – LXHY3-300 – 300kN – CL-E**

VDS = Vuulcan Disc Suspension · Series = XP / XWP / XHP / XHP4 / XMP / LXY / LXHY · SML = 70 / 100 / 160 / 210 / 300 / 530 kN · CL-A/B/C/D/E = IEC 60815 pollution class

Porcelain and glass discs available on single PO with identical IEC 60305 socket dimensions · DC variants (LXZY) and clevis fittings on request · Contact:

inquiry@vuulcaninsulators.com · vuulcaninsulators.com

