

WILD LIFE / BIRD FAULT PROTECTION OVER 33/11KV LINES PLASTISOL BIRD GUARDS



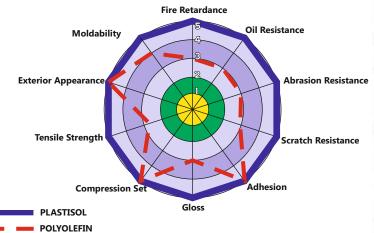






Birds are getting electrocuted during their flocking / take off from power lines in groups, specifically on top of PIN / POLYMER insulators over 33KV poles due to inter-contact of earth & live line with bird's conductive body, leading to electrocution of bird & line tripping. This problem can be avoided by using BIRD GUARDS which are designed for meeting wild life protection and extended periods of outdoor exposures along with proper fitment, insulation and easy to use.

COMPARISON OF PLASTISOL VS POLYOLEFIN







	Engineered Para	imeters : Plastisol	Bird Guards / Insuls	nrouds
Sno	Property Tested	Test Method	Required Value	Observed Value
1	Flammability	UL 94-2013	Self Extinguishing UL90-V0 Compliant)	Conforms
2	Comparative Tracking Index (CTI), Volts	IEC 60112-2003	>600 Volts	>600 Volts
3	Dielectric Strength in OIL at 25°C, KV/mm	IEC 60243-1-2013	Should withstand 36KV/mm for 1 Minute	Withstood 36KV for 1 Minute without puncture
4	Dielectric Strength in AIR at 25oC, KV/mm	IEC 60243-1-2013	> 8KV/mm	9.4 KV/mm
5	Volume Resistivity in AIR at 25°C, Ohms-cm	ASTM D257-2014	1x10 ⁹ - 1x10 ¹¹	1.9x10 ¹¹
6	Tensile Strength at Break, Mpa	ASTM D638-2010	>10 Mpa	12.5 Mpa
7	Elongation at Break, %	ASTM D638-2010	300%	396%
8	Water Absorption after 24 Hrs Immersion in Water at 24°C, %	ASTM D570-1998	0.8% Max	0.50%

Bird guards are customized as per the dimensions taken for the actual sizes of three variations of CERAMIC & POLYMER insulators for effective fitment to cover live portion over tower by placing and pressing the insulated buttons which is a comfortable and easy to workmen for installation. Along with Bird Guard, to cover 400 mm length of Dog Conductor on either side of insulator, plastisol insulcover can be installed for achieving complete insulation of around 1 meter length over tower to prevent electrocution & accidental tripping on account of flocking of birds. Bird Guard material is high performance, engineered Plastisol with UV stabilized, Weather resistant, Excellent Dielectric, porous free Dip moulded for complete integrity. Deigned for 33KV insulation. Colour of Bird Guard & Insulcover is Grey, which is an industrial grade being used across globe. Test certification of CPRI/ERDA is available for critical properties.



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PLASTISOL bird guards exhibits various advantages in terms of customized moldability, Fire Retardance property, resistance to oil, Abrasion Resistance, Scratch resistance, adhesion, compressive strength, tensile strength, excellent gloss for good exterior appearance.

Having expertise and facilities to design various sizes, shapes to meet desired insulation values up to 38kV, therefore custom designs for any sort of applications including other wild life contact prone areas like PTRs, Cts, bus bars, switchgear cabinets are possible.

These are flexible, facilitates ease of installation yet with desired mechanical strength and intended for extended periods of out door exposures without losing the physical and electrical properties. These bird guards can be removed during maintenance of insulators or for replacement and can be installed back - any number of times. Since the designs of bird guards are covering top side petticoats of insulators, contamination deposition and related flashovers will be automatically prevented.





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WILD LIFE CONTACT & ASSET PROTECTION

FOR PTR's 33KV & 11KV BUSHINGS -

PLASTISOL INSULSHROUDS

Crawling animals like snakes, reptile, long tail animals like squirrels, cats and even dogs when climbs PTR, cause short circuit between live parts to bushing, leading to electrocution, tripping and some times blows off bushings. By providing tailor made high dielectric plastisol / polyolefin bushing shrouds, this problem can be avoided.















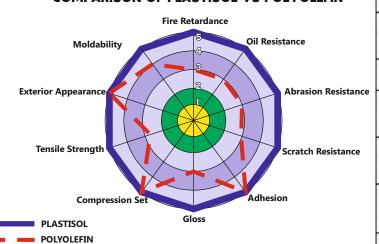








COMPARISON OF PLASTISOL VS POLYOLEFIN







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WILD LIFE CONTACT & ASSET PROTECTION

FOR PTR's 33KV & 11KV BUSHINGS -

PLASTISOL INSULSHROUDS













PLASTISOL INSULSHROUDS are customized as per the dimensions taken for the actual sizes of LV & HV bushings of 8.5MVA & 12.5MVA PTR's for effective fitment to cover live portion i.e., bushing rod-pad clamp-part of jumper and installation by just placing over bushings and pressing the insulated buttons which is a comfortable and easy to workmen for installation. Insulshrouds are manufactured with high performance, engineered Plastisol with UV stabilized, Weather resistant, Excellent Dielectric, porous free Dip moulded process for complete integrity. Deigned for 33KV & 11KV insulation relevant to LV & HV side bushings. Test certification of ERDA is available for critical properties. By using these PTR shrouds over all the bushings, PTR gets protected even when a crawling rodent / animal pass in between bushings or even when a foreign conductive material fall over bushings without any short circuit as all the live portions are covered with insulation.

These are flexible, facilitates ease of installation yet with desired mechanical strength and intended for extended periods of out door exposures without losing the physical and electrical properties. These INSULSHROUDS can be removed during maintenance of PTR bushings and can be installed back - any number of times. Since the shroud is having perforations, for distant look, any red hot conditions over pad clamps can be observed during night. A provision of drain hole at bottom of shroud apart from the tampered curve, rain water will be completely drained out.



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