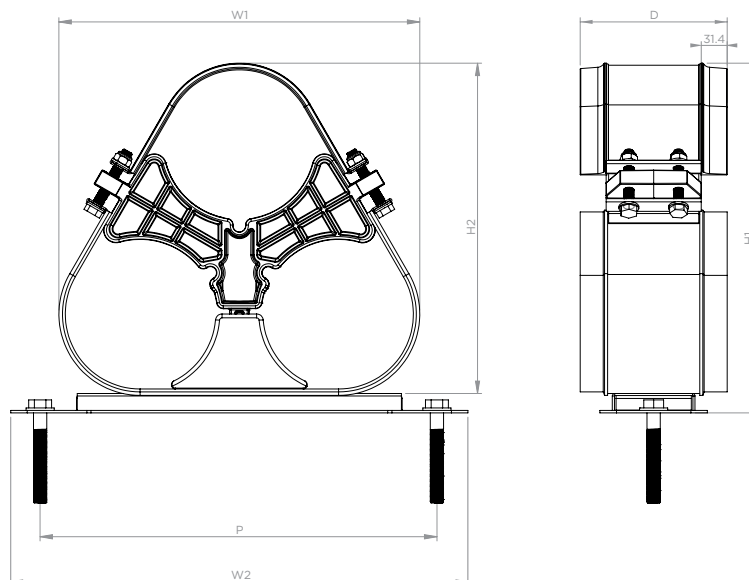
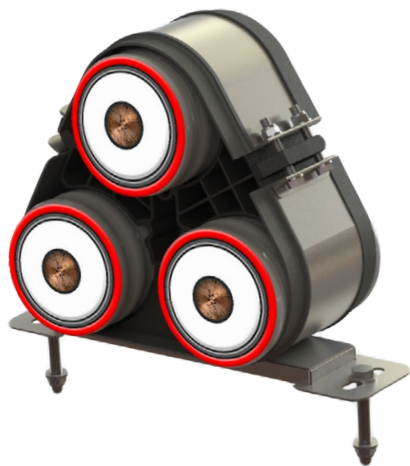


HVSS-EC



CMP HVSS-EC trefoil cable cleat is a composite cable cleat which has been designed, constructed and tested in accordance with the International Standard 'cable cleats for electrical installations' IEC 61914:2015 to ensure the securing and retention of cables, without sustaining damage to the cable(s).

The stainless steel section of this cable cleat can be optionally coated with an extremely high performance UL94 V0 flame retardant, halogen free, low smoke & fume, low toxicity polymer alloy coating which is resistant to: impact, abrasion, salt spray, chemical attack, weathering & UV and is perfectly suited for use in rail and tunnel applications.

The HVSS-EC trefoil range of cable cleats are designed to be installed as a system for use with High Voltage cable installations and are manufactured to suit a range of cable diameters. The range consists of three cable cleats designed to be installed as a system; a fixed cleat, a slide cleat, and an intermediate restraint. The HVSS-EC fixed cleat is designed to secure the cables in a trefoil formation to a mounting surface, providing excellent axial and lateral retention. In between these fixed cleats, slide cleats are installed to allow for the expansion and contraction of the cables in their normal operating conditions. Slide cleats are designed with a fixed bracket rail on the underside of the cable cleat base; this enables the cleat to move along the rail ensuring a trefoil formation and cable integrity. This allows HV cables to move within their cable 'snaked' formation as a trefoil configuration, keeping the 3 phase system as balanced as possible. The addition of intermediate restraints fitted midway between two cable cleats protects against cable damage by preventing large cable 'arches' from forming between the cleats in the event of a short-circuit. These large cable 'arches' could allow the cable to damage the cable tray / trough, or to interfere with neighbouring components which may damage the cable itself. The two cleats and intermediate restraint are designed to be used together as a system for the safe retention and securing of High Voltage cables in normal operation.

All three cleat styles are designed with expanded cable centres. These expanded conductor to conductor centres allow air to circulate around the cables to assist heat dissipation during their operation.

The modular design aids installation, allowing the installer to secure two cables in place within the cleat between the base and intermediate (middle) part, as the cable cleat is secured to the mounting surface, before the final cable is installed and secured to the middle part of the cleat. This design allows easier installation of larger diameter cables.

All three styles within this cleat system are fabricated in non-magnetic 316L stainless steel with an optional polymer alloy coating, giving it high creep strength whilst providing excellent corrosion resistance in the harshest environments. Flame retardant Low Smoke and Fume (FRLSF) fixed liners are standard, helping to restrain the cables within vertical applications, providing a layer of protection the cable sheath and the cable cleat during normal operation where thermal elongation of cable occurs, protecting the cable from chafing on any mounting surface due to differential movements such as those found in marine and offshore applications. The flame retardant Low Smoke and Fume (FRLSF) liners also assist in the extra protection of cables in the event of short circuit fault conditions.

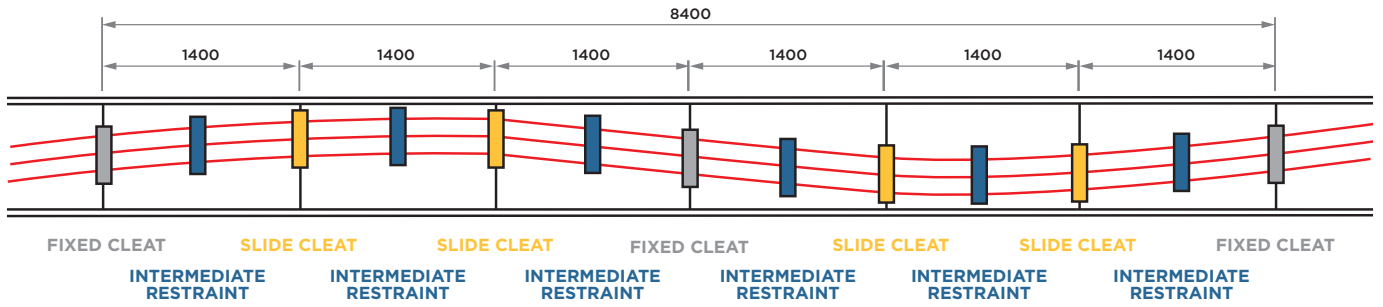
Features

- Third party certification to IEC 61914
- 316L stainless steel with optional polymer alloy coating
- Flame retardant Low Smoke & Fume (FRLSF) as standard
- Operating temperature -50°C to +60°C
- Three cleat system design (see page 2):
 - Fixed cleat version
 - Slide cleat version
 - Intermediate restraint

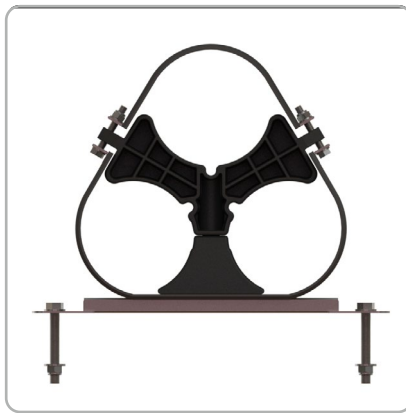
Technical Data & Classification	
Type	Composite HVSS-EC - High Voltage Stainless Steel with optional polymer alloy coating
Design Specification	IEC 61914:2015
Temperature for permanent application	-50°C to +60°C
Needle Flame Test	Pass - 120 second flame application time
Material	316L Stainless Steel with flame retardant Low Smoke and Fume (FRLSF) liners and optional polymer alloy coating

Part No.	Description	Cable Ø range take (mm)	Centre to Centre Conductor Distance (mm)	Cable Snake Installation (See Page 2)		Dimensions mm						
				Short Circuit (RMS)	Short Circuit (Peak)	W1	W2	H1	H2	D	P	Fixing Hole Ø
HVSS-EC-400KV-FX-TA	FIXED TYPE	167.0 - 175.0	240	80 kA	200 kA	426.5	553	417.8	394.3	178	480	2 X M16
HVSS-EC-400KV-SL-TA	SLIDE TYPE	167.0 - 175.0				426.5	556.1	417.8	394.3	178	480	2 X M16
HVSS-EC-400KV-FX-FUCI	FIXED TYPE	173.0 - 182.0				436.5	553	423	399.4	178	480	2 X M16
HVSS-EC-400KV-SL-FUCI	SLIDE TYPE	173.0 - 182.0				436.5	556.1	423	399.4	178	480	2 X M16
2STR-EC-167182	RESTRAINT	167.0 - 182.0				428.3	N/A	N/A	396.1	150	N/A	N/A
HVSS-EC-230KV-FX	FIXED TYPE	144.4 - 154.4	240	63kA	160kA	413	540	401	377	156	480	2 x M16
HVSS-EC-230KV-SL	SLIDE TYPE	144.4 - 154.4				413	540	401	377	156	480	2 x M16
HVSS-EC-230KV-FL	FLOAT TYPE	144.4 - 154.4				413	540	401	377	156	480	2 x M16
HVSS-EC-230KV-FX-P	FIXED TYPE	152.0 - 158.0				418	540	409	385	156	480	2 x M16
HVSS-EC-230KV-SL-P	SLIDE TYPE	152.0 - 158.0				418	540	409	385	156	480	2 x M16
HVSS-EC-230KV-FL-P	FLOAT TYPE	152.0 - 158.0				418	540	409	385	156	480	2 x M16
HVSS-EC-66KV-FX	FIXED TYPE	96.0 - 104.0	240	Contact CMP	Contact CMP	357.7	540	346.2	323.9	156	480	2 X M16
HVSS-EC-66KV-SL	SLIDE TYPE	96.0 - 104.0				357.7	540	346.2	323.9	156	480	2 X M16
2STR-EC-95105	RESTRAINT	96.0 - 105.0				345.8	N/A	N/A	313.2	150	N/A	N/A

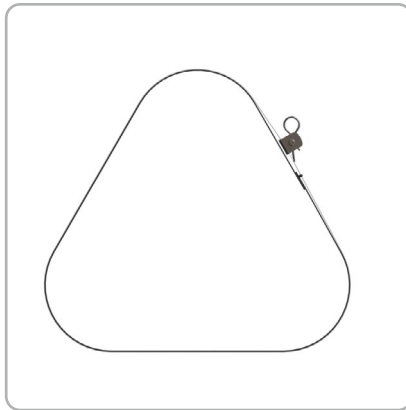
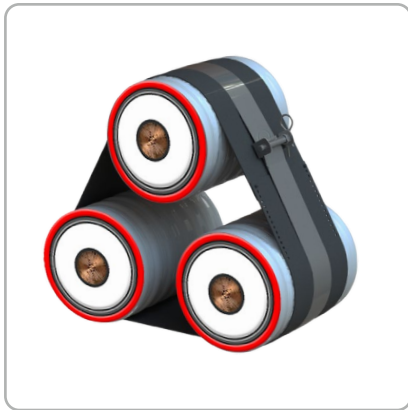
Cable Snake Installation



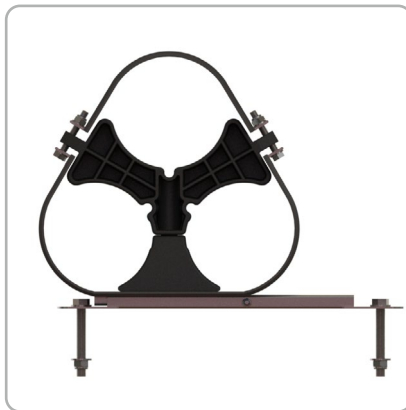
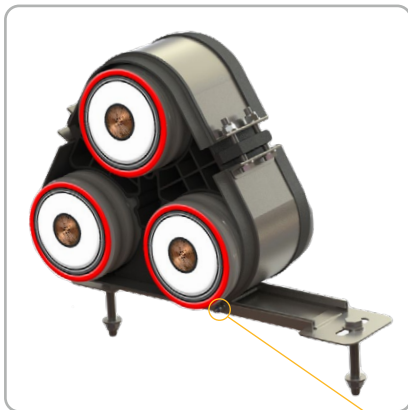
All dimensions in mm



Fixed Type Cable Cleat



Intermediate Restraint



Slide Type Cable Cleat

Fixings shown as examples

The Slide Cleat base channel includes a stop position, to limit the slide distance in each direction.