

Cyclone I (LDSTR 2 Loop cable cleat)



The CMP Products Cyclone I Strap cable cleat is a metallic cable cleat consisting of a fabricated lightweight aluminium base and a stainless steel strap which have been designed, constructed, and tested in accordance with the International Standard 'cable cleats for Electrical Installations' IEC 61914:2009. The Cyclone I Strap cable cleat ensures the retention and securing of cables, whilst preventing damage to the cable when in normal operation, or in the event of a short circuit.

The cable cleats allow a wide range of applications including miscellaneous formations. They have an exceptional overlapping range and give the end user more flexibility when compared to more rigid cable cleats on the market. Each cleat is capable of securing various cable formations, such as single cable (multicore) or single cable in parallel formation, trefoil formation, and quad formation. Suitable for single cable applications in diameters of 36mm to 118mm in 8 sizes, in trefoil formation from diameters of 24mm to 145mm in 15 sizes and quad formation from 21mm to 68mm in 8 sizes.

The Cyclone I bases are manufactured from 5000 series aluminium, making the base lightweight, easy to handle and corrosion resistant. The Cyclone straps are manufactured in 316L stainless steel, providing excellent corrosion resistance, and the tensioned straps act as a coil during short circuit conditions to restrain the cable. The Cyclone strap wraps around the angled Cyclone I aluminium base ensuring the cables are always kept central. The strap is fastened to a stainless steel pin with a hexagon shaped head at one end allowing fast, easy installation via the use of a ratchet, power tool or other suitable mechanical device.

Features

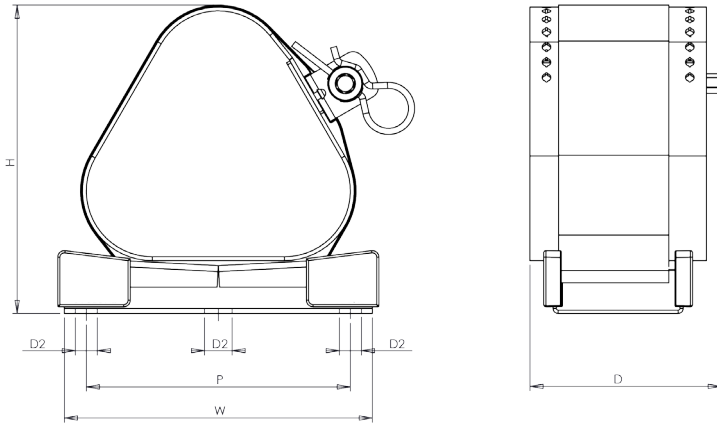
- Third party certification to IEC 61914:2009
- Lightweight aluminium base with 316L stainless steel strap
- 24 - 145mm in 15 sizes for trefoil formation / application
- 36 - 118mm in 8 sizes for multicore cables or single core parallel formations
- 21 - 68mm in 8 sizes for quad formations
- Short circuit rating of 124kA peak fault
- Operating temperature -50°C to +60°C
- Standard liners which are classified as Low Smoke & Fume (LSF), Zero Halogen (LSOH) and Phosphorus Free
- Combined single (M12) and two bolt (M10) base fixing design

The Cyclone I Aluminium Strap cable cleat has one M12 and two M10 fixing clearance holes within each base, allowing versatile installation and enabling the product to be secured to a variety of mounting surfaces. Due to the design of the Cyclone, the cables do not need to be lifted and placed in to the cable cleat, instead the cables are placed on to the Cyclone bases and the Cyclone straps then wrap around the cables securing them to the mounting surface of the Cyclone base.

The Cyclone I Cable Cleats and Cyclone intermediate straps come with standard liners, which are classified as Low Smoke & Fume (LSF), Zero Halogen (LSOH) and Phosphorus Free. The liners help to restrain the cables within vertical applications, providing a layer of protection between the cable sheath and the Cyclone stainless steel strap and base during normal operation where thermal elongation of cables occurs. The liners also prevent the cable from chafing on any mounting surface due to differential movements such as those found in marine and offshore applications, and protect the cable during short circuit conditions.

The Cyclone Strap is designed to be used as an intermediate restraint (where applicable) between two Cyclone cable cleats to bind cables together giving a cost effective, easy application fixing system. Using the Cyclone I Strap cable cleat and the Cyclone Intermediate Restraint alternatively will dramatically reduce installation time and cost, when compared to alternative cable cleat only solutions.

Technical Data



Technical Data & Classification

Type	6.1.3 Composite Strap Cable Cleat - 2 Loop Cyclone I
Design Specification	IEC 61914:2009
Temperature for permanent application	-50 to +60°C
Needle Flame Test	Pass - 120 second flame application time IEC 61914:2009 clause 10.0, 10.1, IEC 60695-11-5
Lateral Load Test	Single and Trefoil, Refer to CMP Products, IEC 61914:2009 clause 9.3
Axial Load Test	Single and Trefoil, Refer to CMP Products, IEC 61914:2009 clause 9.4
Impact Resistance	Very Heavy IEC 61914:2009 clause 6.3, 6.3.5, 9.2
Material	5000 Series Aluminium, 316L Stainless Steel Strap with Standard Liner <i>Standard liners are classified as Low Smoke & Fume (LSF), Zero Halogen (LS0H) and Phosphorus Free</i>

300mm CAT 1 Cyclone I (0.1 sec)	
Cable OD (mm)	Peak kA
36	124.0
38	127.4
43	135.5
59	158.7
65	166.6

Short Circuit Testing to IEC 61914:2009 - Clause 9.5

Trefoil Formation		
One short circuit (6.4.3) 300mm fixed cleat centres	Two short circuits (6.4.4) 300mm fixed cleat centres	Two short circuits (6.4.4) 300mm fixed cleat centres
0.1 sec	0.1 sec	3 sec
124kA Peak	116kA Peak	61kA Peak
56.3kA RMS	52.7kA RMS	29.0kA RMS

Cable cleat selection table

Cyclone I Part No.	Intermediate Restraint Part No.	Cable Ø Range Take (mm)			Dimensions (mm)						Weight (g)
		Single	Trefoil	Quad	W	H	D	P	Fixing Hole Ø		
									D1	D2	
1CYC024034	2STR024034	36-50	24-34	21-29	108	96	89	80	2 x M10	1 x M12	347
1CYC030041	2STR030041	45-60	30-41	26-35	108	109	89	80	2 x M10	1 x M12	358
1CYC037047	2STR037047	55-69	37-47	32-40	128	120	89	100	2 x M10	1 x M12	393
1CYC043054	2STR043054	64-80	43-54	37-46	128	134	89	100	2 x M10	1 x M12	406
1CYC050060	2STR050060	75-88	50-60	43-51	148	145	89	120	2 x M10	1 x M12	465
1CYC056067	2STR056067	83-99	56-67	49-57	148	158	89	120	2 x M10	1 x M12	478
1CYC063073	2STR063073	94-108	63-73	55-62	168	170	89	140	2 x M10	1 x M12	514
1CYC069080	2STR069080	103-118	69-80	60-68	168	183	89	140	2 x M10	1 x M12	527
1CYC072085	2STR072085		72-85		188	193	89	160	2 x M10	1 x M12	596
1CYC082095	2STR082095		82-95		188	212	89	160	2 x M10	1 x M12	615
1CYC092105	2STR092105		92-105		210	231	89	100	2 x M10	1 x M12	653
1CYC102115	2STR102115		102-115		210	250	89	100	2 x M10	1 x M12	672
1CYC112125	2STR112125		112-125		235	269	89	100	2 x M10	1 x M12	751
1CYC122135	2STR122135		122-135		235	288	89	100	2 x M10	1 x M12	771
1CYC132145	2STR132145		132-145		250	307	89	120	2 x M10	1 x M12	808

Note: Cyclone I cable cleat consists of one base and one strap, additional Cyclone cable straps (restraints) ordered separately.

Order reference example for epoxy coating of cable cleat base suffix EC (1CYC024034EC).

Fasteners required to secure the cable cleat to the support structure are not included with the ordering references shown in the selection table but can be supplied on request.