

PANDUIT®

Cable Cleats For Short Circuit Protection



Available in a variety of sizes, Panduit's extensive line of cable cleat solutions ensures cables remain contained in the event of a short circuit fault, minimizing disruption and damage to personnel and property. Panduit's Cable Cleats are uniquely engineered for ease of installation in a range of applications and harsh environments. With a variety of cable cleats, Panduit has the right product to fit your needs while providing on the job productivity, reliability and safety.

IEC 61914:2015 is the latest, most comprehensive and globally accepted cable cleat testing standard. It provides requirements for:

- Temperature rating
- Adequate resistance to flame propagation
- Lateral load testing
- Axial load testing
- Impact resistance
- UV resistance
- Resistance to electromechanical forces
- Corrosion resistance

REDUCE PROJECT COSTS AND REDUCE INSTALLATION TIME



Simple and intuitive design leads to increased productivity

Tested to IEC 61914:2015, the latest and most globally recognized cable cleat testing standard

Compatible with a variety of ladder racks and cables

Collaborative and consultative approach to cable cleat specification, supported by a team

Industry-unique mounting brackets and installation tool

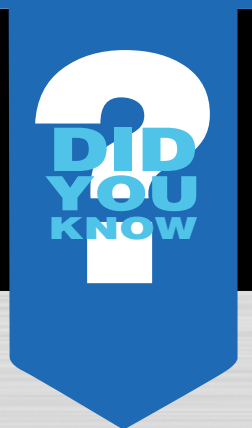
Applications:
Oil and Gas, Petrochemical, Shipbuilding, Rail, Utilities and Data Centers



During a short circuit fault, maximum electromechanical stress between conductors occurs at or before 0.005 second

Typical circuit breakers and other protection devices trip and interrupt a fault between 0.06 to 0.1 second

Cable cleats perform their function within those first 0.005 second (i.e. at peak kA) before a circuit breaker trips and interrupts a fault



...the NEC 392.20(C) doesn't specify how to protect against excessive cable movement due short circuit, however IEC 61914:2015 provides testing methodology to ensure compliance to the NEC requirements.

Panduit Research & Development has created a state-of-the-art ANSYS award-winning program that simulates the material composition of our cable cleats and the electromechanical forces present in a short circuit fault, preparing our cable cleats for testing to IEC 61914:2015.

The cleats are then subjected to a live short circuit fault at a testing laboratory to validate compliance with this standard. The simulation program is a powerful tool that helps us select the most appropriate materials for our cleats, so they perform to their tested kA rating during a short circuit fault.

Selecting the right Cable Cleat has never been so easy

Prevent damages resulting from a short circuit fault by specifying and installing Panduit Cable Cleats

- SELECT** cable layout
- INPUT** peak short circuit current
- INPUT** cable diameter

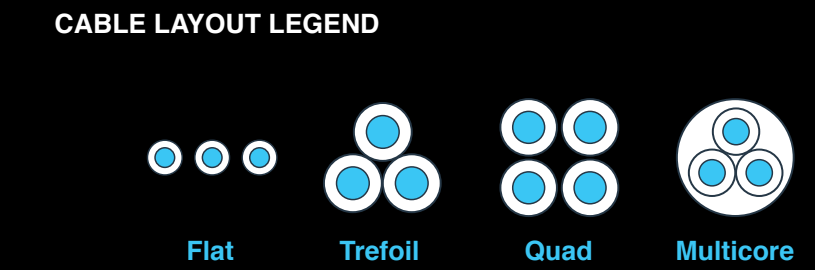
App provides part recommendations and IEC 61914:2015 short circuit test compliant cleat spacing.

Cleat kAlculator™ is available for download in the Apple Store or Google Play, and Panduit.com/cablecleat.

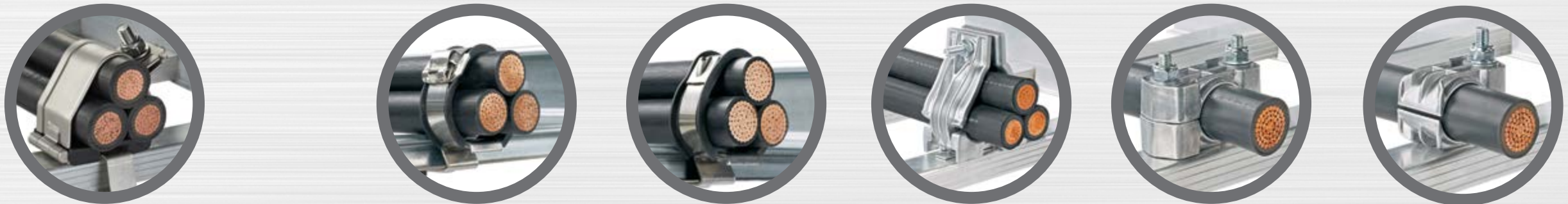


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PANDUIT CLEAT OVERVIEW



| Product | Trefoil Cleat | | Buckle Strap Cleat | Locking Strap Cleat | Trefoil Cleat | | Two-Hole Cleat | One-Hole Cleat | |
|------------------------|--|--|---|--|--|--|---|--|--------------------------|
| Material | Stainless Steel | | Stainless Steel | Stainless Steel | Aluminum | | Aluminum | Aluminum | |
| Parts | 12 Parts | | 6 Parts | 13 Parts | 14 Parts | | 7 Parts | 10 Parts | |
| Diameter Ranges | 20 - 25 mm 23 - 28 mm 26 - 32 mm 30 - 36 mm 34 - 40 mm 38 - 44 mm 42 - 48 mm 46 - 52 mm | 50 - 57 mm 54 - 61 mm 58 - 65 mm 62 - 69 mm | 12 - 45 mm 45 - 70 mm 70 - 95 mm 95 - 120 mm 120 - 150 mm 150 - 170 mm | 12 - 95 mm (5) 95 - 120 mm (1) 95 - 150 mm (3) 120 - 150 mm (1) 150 - 195 mm (3) | 23 - 26 mm 25 - 28 mm 27 - 30 mm 29 - 32 mm 31 - 35 mm 34 - 38 mm 37 - 41 mm 40 - 44 mm | 43 - 47 mm 46 - 51 mm 50 - 56 mm 50 - 56 mm 55 - 61 mm 60 - 67 mm 66 - 75 mm | 38 - 46 mm 46 - 58 mm 58 - 70 mm 70 - 83 mm 83 - 97 mm 97 - 109 mm 109 - 120 mm | 10 - 13 mm 13 - 16 mm 16 - 19 mm 19 - 23 mm 23 - 27 mm 27 - 32 mm 32 - 38 mm 38 - 46 mm | 46 - 51 mm 51 - 57 mm |



| Trefoil Cleat | Two-Hole Cleat | | One-Hole Cleat | |
|--|---|--|--|--|
| Polymer | Polymer | | Polymer | |
| 6 Parts | 10 Parts | | 10 Parts | |
| 22 - 28 mm 26 - 33 mm 31 - 39 mm 37 - 45 mm 43 - 52 mm 50 - 60 mm | 38 - 46 mm 46 - 58 mm 58 - 70 mm 70 - 83 mm 83 - 97 mm 97 - 109 mm | 109 - 120 mm 120 - 135 mm 135 - 150 mm 150 - 165 mm | 10 - 13 mm 13 - 16 mm 16 - 19 mm 19 - 23 mm 23 - 27 mm 27 - 32 mm | 32 - 38 mm 38 - 46 mm 46 - 51 mm 51 - 57 mm |

CUSTOM CLEAT SOLUTIONS AVAILABLE
 For global engineered custom solutions and technical support, reach out to your local Panduit Sales Representative.
 To learn more visit: www.panduit.com/cablecleat

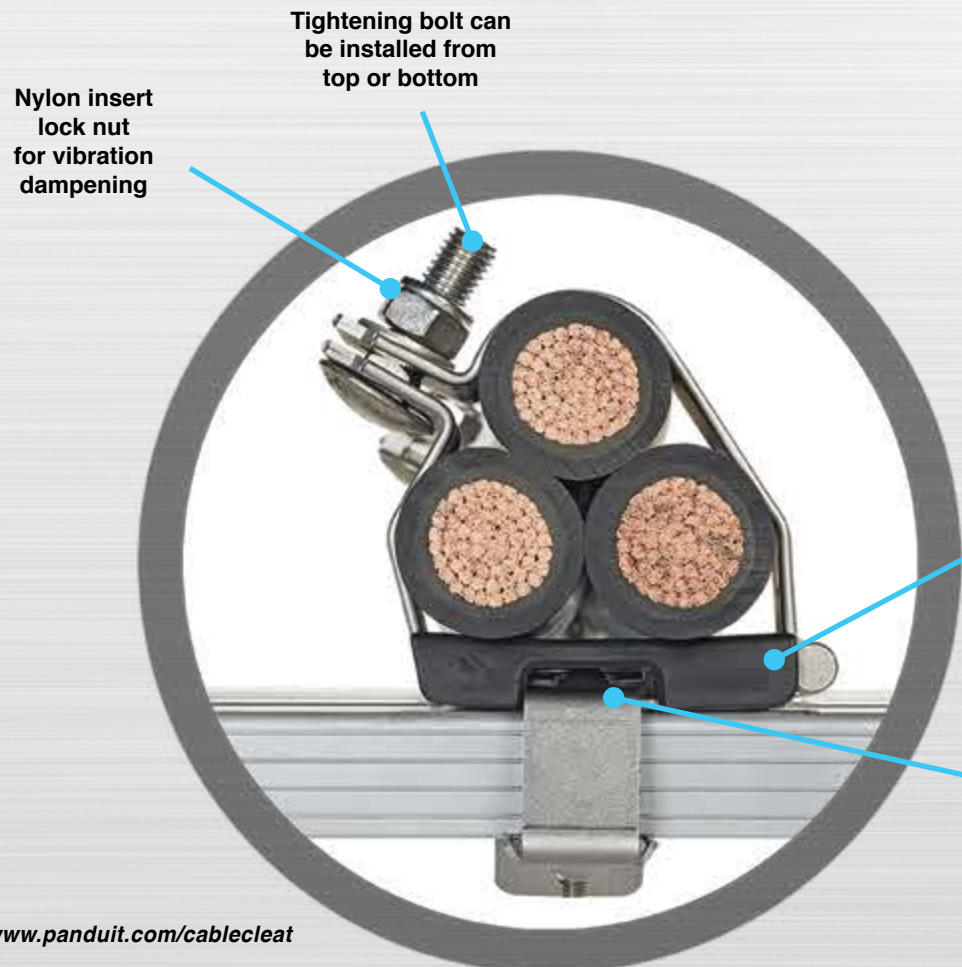
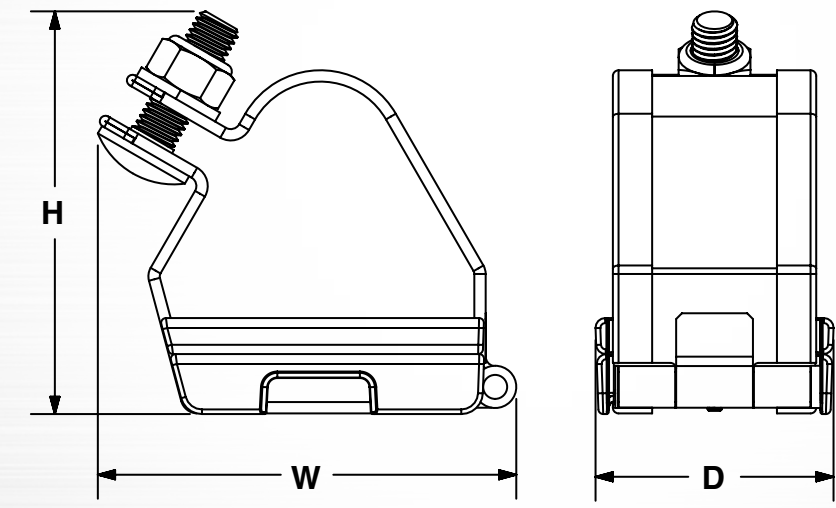


STAINLESS STEEL TREFOIL CLEAT



The **Stainless Steel Trefoil Cable Cleat** offers protection against extreme environments and high short circuit current faults. It is made of 316L stainless steel, available in multiple sizes with cable range taking capability, and suitable for trefoil cable arrangements.

The cleat can be installed after running cable using a Panduit mounting bracket or before running cable by installing direct to the cable tray rung through a fixing hole using an M8 bolt.



Technical Data

TREFOIL CLEAT

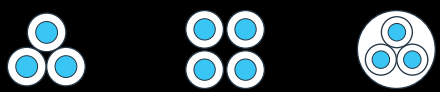
| Part Number | Description | Cable Diameter Range | | H | | W | | D | | Weight | | Mounting Holes |
|--------------|--|----------------------|---------|------|-----|------|-----|------|----|--------|-----|----------------|
| | | In. | mm | In. | mm | In. | mm | In. | mm | Lb. | g | |
| CCSSTR2025-X | Cable cleat, stainless steel, trefoil configuration with a cable diameter of 20 - 25 mm. | 0.79 - 0.98 | 20 - 25 | 3.43 | 87 | 3.39 | 86 | 2.48 | 63 | 0.92 | 417 | 1 X M8 |
| CCSSTR2328-X | Cable cleat, stainless steel, trefoil configuration with a cable diameter of 23 - 28 mm. | 0.91 - 1.10 | 23 - 28 | 3.58 | 91 | 3.54 | 90 | 2.48 | 63 | 0.97 | 439 | 1 X M8 |
| CCSSTR2632-X | Cable cleat, stainless steel, trefoil configuration with a cable diameter of 26 - 32 mm. | 1.02 - 1.26 | 26 - 32 | 3.74 | 95 | 3.82 | 97 | 2.48 | 63 | 1.06 | 480 | 1 X M8 |
| CCSSTR3036-X | Cable cleat, stainless steel, trefoil configuration with a cable diameter of 30 - 36 mm. | 1.18 - 1.42 | 30 - 36 | 3.94 | 100 | 4.13 | 105 | 2.48 | 63 | 1.14 | 518 | 1 X M8 |
| CCSSTR3440-X | Cable cleat, stainless steel, trefoil configuration with a cable diameter of 34 - 40 mm. | 1.34 - 1.58 | 34 - 40 | 4.25 | 108 | 4.37 | 111 | 2.48 | 63 | 1.21 | 547 | 1 X M8 |
| CCSSTR3844-X | Cable cleat, stainless steel, trefoil configuration with a cable diameter of 38 - 44 mm. | 1.50 - 1.73 | 38 - 44 | 4.25 | 108 | 4.69 | 119 | 2.48 | 63 | 1.28 | 581 | 1 X M8 |
| CCSSTR4248-X | Cable cleat, stainless steel, trefoil configuration with a cable diameter of 42 - 48 mm. | 1.65 - 1.89 | 42 - 48 | 4.41 | 112 | 4.96 | 126 | 2.48 | 63 | 1.35 | 613 | 1 X M8 |
| CCSSTR4652-X | Cable cleat, stainless steel, trefoil configuration with a cable diameter of 46 - 52 mm. | 1.81 - 2.05 | 46 - 52 | 4.61 | 117 | 5.24 | 133 | 2.48 | 63 | 1.43 | 647 | 1 X M8 |
| CCSSTR5057-X | Cable cleat, stainless steel, trefoil configuration with a cable diameter of 50 - 57 mm. | 1.97 - 2.24 | 50 - 57 | 4.84 | 123 | 5.63 | 143 | 2.48 | 63 | 1.51 | 686 | 1 X M8 |
| CCSSTR5461-X | Cable cleat, stainless steel, trefoil configuration with a cable diameter of 54 - 61 mm. | 2.13 - 2.40 | 54 - 61 | 5.12 | 130 | 5.91 | 150 | 2.48 | 63 | 1.59 | 720 | 1 X M8 |
| CCSSTR5865-X | Cable cleat, stainless steel, trefoil configuration with a cable diameter of 58 - 65 mm. | 2.28 - 2.56 | 58 - 65 | 5.43 | 138 | 6.18 | 157 | 2.48 | 63 | 1.66 | 754 | 1 X M8 |
| CCSSTR6269-X | Cable cleat, stainless steel, trefoil configuration with a cable diameter of 62 - 69 mm. | 2.44 - 2.72 | 62 - 69 | 5.71 | 145 | 6.50 | 165 | 2.48 | 63 | 1.72 | 782 | 1 X M8 |

Short Circuit Testing Summary¹

| Trefoil Formation 38 mm Cable Diameter | Trefoil Formation 38 mm Cable Diameter | Trefoil Formation 35 mm Cable Diameter | Trefoil Formation 38 mm Cable Diameter |
|--|---|--|---|
| One Short Circuit Event (Clause 6.4.4) 300 mm spacing | Two Short Circuit Events (Clause 6.4.5) 300 mm spacing | One Short Circuit Event (Clause 6.4.4) 600 mm spacing | Two Short Circuit Events (Clause 6.4.5) 600 mm spacing |
| 0.1 sec | 0.1 sec | 0.1 sec | 0.1 sec |
| 172 kA Peak | 167 kA Peak | 143 kA Peak | 125 kA Peak |
| 8926 lbs force (39.77 kN) | 8415 lbs force (37.4 kN) | 13398 lbs force (59.5 kN) | 9429 lbs force (41.9 kN) |

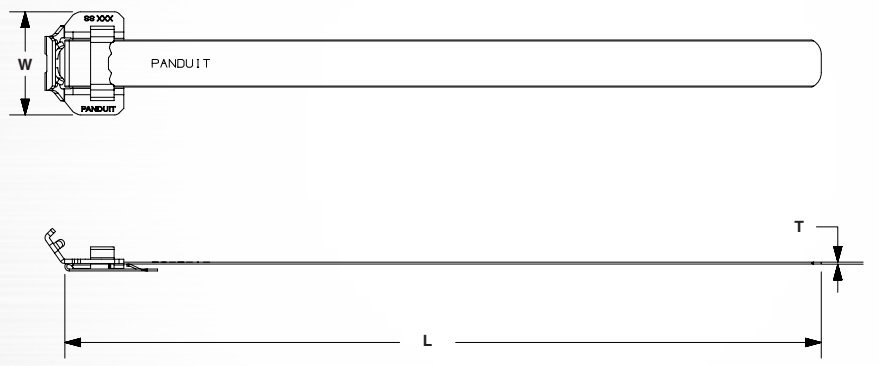
¹Test compliance to IEC 61914:2015 utilizing KEMA facility; Independent, ISO 17025 accredited testing, inspection, and certification services (IEEE, IEC, UL, and ANSI) for electric power equipment.

STAINLESS STEEL BUCKLE STRAP CLEAT



The **Stainless Steel Buckle Strap Cleat** is an effective option for protecting against high short circuit fault current requirements in harsh environments. The strap is made of 316L stainless steel, has inherent cable range-taking, and is compatible with quad, trefoil, and multicore cables.

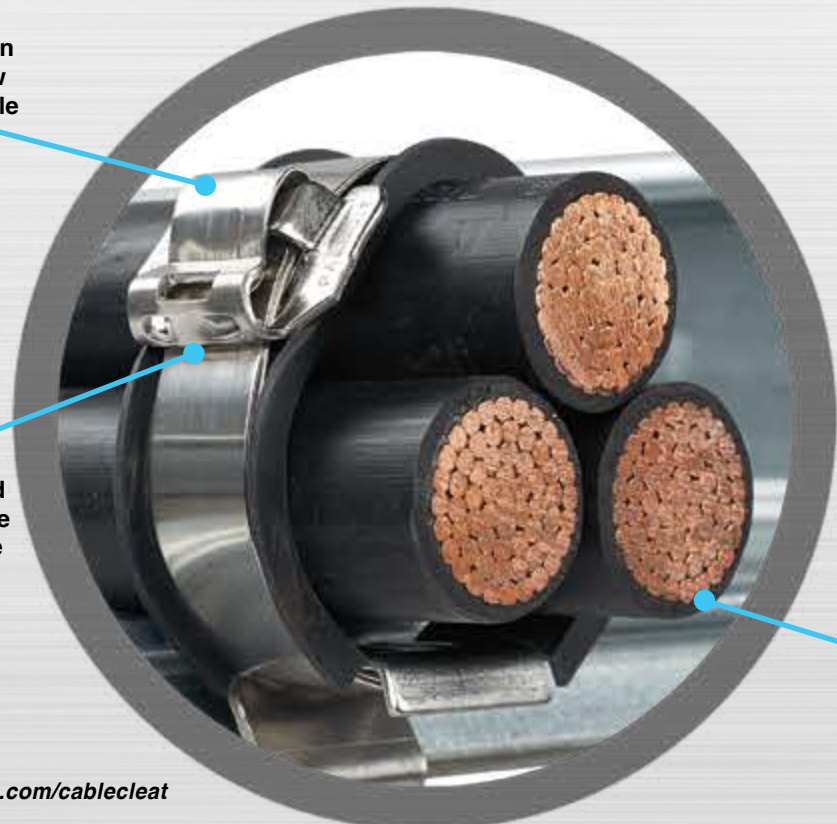
The cleat is installed after running the cable via a unique in the industry mounting bracket. It is tensioned and cut using a manually-operated, ratchet-style installation tool or a tension screw drive installation tool. The straps have rounded edges to protect from damaging the cable and are often used in combination with a cushion sleeve inserted between the strap and cable for added protection.



Buckle design provides low finished profile

Smooth surfaces and rounded edges reduce risk of cable insulation damage

Compatible with a variety of cable trays and cables



Technical Data

BUCKLE STRAP CLEAT

| Part Number | Description | Trefoil Double Loop Cable Diameter Range | | | | Trefoil Triple Loop Cable Diameter Range | | | | Flat Multicore Double Loop Cable Diameter Range | | | | Width | | Thickness | | Length | | Std. Pkg. Qty. |
|---------------|-------------------------------------|--|----|-------|----|--|----|-------|----|---|-----|-------|-----|-------|------|-----------|------|--------|------|----------------|
| | | From | | To | | From | | To | | From | | To | | | | | | | | |
| | | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | |
| MS4W75T30-Q6 | Stainless steel buckle strap cleat. | 0.472 | 12 | 0.787 | 20 | - | - | - | - | 0.472 | 12 | 1.772 | 45 | 0.75 | 19.1 | 0.03 | 0.76 | 19.6 | 498 | 25 |
| MS6W75T30-Q6 | Stainless steel buckle strap cleat. | 0.787 | 20 | 1.181 | 30 | 0.472 | 12 | 0.787 | 20 | 1.772 | 45 | 2.756 | 70 | 0.75 | 19.1 | 0.03 | 0.76 | 25.9 | 658 | 25 |
| MS8W75T30-Q6 | Stainless steel buckle strap cleat. | 1.181 | 30 | 1.654 | 42 | 0.787 | 20 | 1.024 | 26 | 2.756 | 70 | 3.740 | 95 | 0.75 | 19.1 | 0.03 | 0.76 | 32.1 | 815 | 25 |
| MS10W75T30-Q6 | Stainless steel buckle strap cleat. | 1.654 | 42 | 2.283 | 58 | 1.024 | 26 | 1.378 | 35 | 3.740 | 95 | 4.724 | 120 | 0.75 | 19.1 | 0.03 | 0.76 | 38.4 | 975 | 25 |
| MS12W75T30-Q6 | Stainless steel buckle strap cleat. | 2.283 | 58 | 2.835 | 72 | 1.378 | 35 | 1.732 | 44 | 4.724 | 120 | 5.906 | 150 | 0.75 | 19.1 | 0.03 | 0.76 | 44.7 | 1135 | 25 |
| MS14W75T30-Q6 | Stainless steel buckle strap cleat. | 2.835 | 72 | 3.386 | 86 | 1.732 | 44 | 2.087 | 53 | 5.906 | 150 | 6.693 | 170 | 0.75 | 19.1 | 0.03 | 0.76 | 50.1 | 1273 | 25 |

Short Circuit Testing Summary¹

| MS#W75T30-Q6 Double Loop Product | | | |
|--|---|--|---|
| Trefoil Formation 37 mm Cable Diameter | Trefoil Formation 38 mm Cable Diameter | Trefoil Formation 39 mm Cable Diameter | Trefoil Formation 39 mm Cable Diameter |
| One Short Circuit Event (Clause 6.4.4) 300 mm spacing | Two Short Circuit Events (Clause 6.4.5) 300 mm spacing | One Short Circuit Event (Clause 6.4.4) 600 mm spacing | Two Short Circuit Events (Clause 6.4.5) 600 mm spacing |
| 153 kA | 142 kA | 109 kA | 109 kA |
| 7254 lbs force (32.3 kN) | 6084 lbs force (27.1 kN) | 6960 lbs force (31.0 kN) | 6960 lbs force (31.0 kN) |

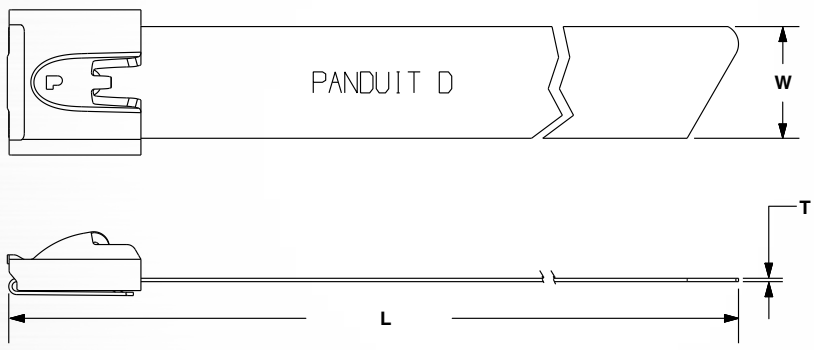
| MS#W75T30-Q6 Triple Loop Product | |
|--|---|
| Trefoil Formation 39 mm Cable Diameter | Trefoil Formation 39 mm Cable Diameter |
| One Short Circuit Event (Clause 6.4.4) 300 mm spacing | Two Short Circuit Events (Clause 6.4.5) 300 mm spacing |
| 188 kA | 188 kA |
| 10391 lbs force (46.2 kN) | 10391 lbs force (46.2 kN) |

¹Test compliance to IEC 61914:2015 utilizing KEMA facility; Independent, ISO 17025 accredited testing, inspection, and certification services (IEEE, IEC, UL, and ANSI) for electric power equipment.

STAINLESS STEEL LOCKING STRAP CLEAT

The **Stainless Steel Locking Strap Cleat** is an effective option for protecting against lower to medium short circuit fault current requirements in harsh environments. The strap is made of 316L stainless steel, has inherent cable range-taking, and is compatible with quad, trefoil, and multicore cables.

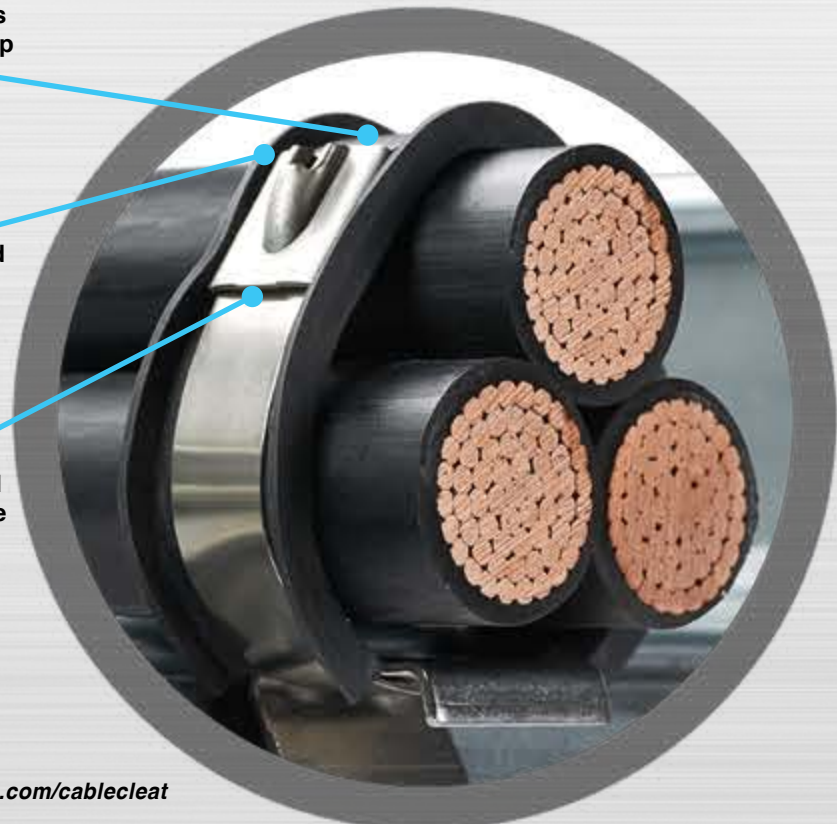
The cleat is installed after running the cable via a unique in the industry mounting bracket. It is tensioned and cut using a battery-operated, electromechanical or manually-operated, ratchet-style installation tool. The straps have rounded edges to protect from damaging the cable and are often used in combination with a cushion sleeve inserted between the strap and cable for added protection.



Cable tie cut off eliminates exposed sharp edges

Self-locking head for high-retained tension

Smooth surfaces and rounded edges reduce risk of cable insulation damage



Technical Data

LOCKING STRAP CLEAT

| Part Number | Description | Trefoil Double Loop Cable Diameter Range | | | | Flat Multicore Double Loop Cable Diameter Range | | | | Width | | Thickness | | Length | | Std Pkg. Qty. |
|----------------|--------------------------------------|--|----|-------|-----|---|-----|-------|-----|-------|------|-----------|------|--------|------|---------------|
| | | From | | To | | From | | To | | | | | | | | |
| | | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | |
| MLT4DH-L316 | Stainless steel locking strap cleat. | 0.472 | 12 | 1.654 | 42 | 0.472 | 12 | 3.740 | 95 | 0.31 | 7.9 | 0.010 | 0.25 | 28.0 | 711 | 50 |
| MLT4DH-L | Stainless steel locking strap cleat. | 0.472 | 12 | 1.654 | 42 | 0.472 | 12 | 3.740 | 95 | 0.31 | 7.9 | 0.010 | 0.25 | 28.0 | 711 | 50 |
| MLT4DEH15-Q316 | Stainless steel locking strap cleat. | 0.472 | 12 | 1.654 | 42 | 0.472 | 12 | 3.740 | 95 | 0.50 | 12.7 | 0.015 | 0.38 | 29.5 | 749 | 25 |
| MLT4DSH-Q316 | Stainless steel locking strap cleat. | 0.472 | 12 | 1.654 | 42 | 0.472 | 12 | 3.740 | 95 | 0.63 | 15.9 | 0.015 | 0.38 | 29.5 | 749 | 25 |
| MLT4DSH-Q | Stainless steel locking strap cleat. | 0.472 | 12 | 1.654 | 42 | 0.472 | 12 | 3.740 | 95 | 0.63 | 15.9 | 0.015 | 0.38 | 29.5 | 749 | 25 |
| MLT5DH-L316 | Stainless steel locking strap cleat. | 1.654 | 42 | 2.283 | 58 | 3.740 | 95 | 4.724 | 120 | 0.31 | 7.9 | 0.010 | 0.25 | 34.0 | 863 | 50 |
| MLT6DEH15-Q316 | Stainless steel locking strap cleat. | 1.654 | 42 | 2.835 | 72 | 3.740 | 95 | 5.906 | 150 | 0.50 | 12.7 | 0.015 | 0.38 | 41.5 | 1054 | 25 |
| MLT6DSH-Q316 | Stainless steel locking strap cleat. | 1.654 | 42 | 2.835 | 72 | 3.740 | 95 | 5.906 | 150 | 0.62 | 15.9 | 0.015 | 0.38 | 41.5 | 1054 | 25 |
| MLT6DSH-Q | Stainless steel locking strap cleat. | 1.654 | 42 | 2.835 | 72 | 3.740 | 95 | 5.906 | 150 | 0.62 | 15.9 | 0.015 | 0.38 | 41.5 | 1054 | 25 |
| MLT6DH-L316 | Stainless steel locking strap cleat. | 2.283 | 58 | 2.835 | 72 | 4.724 | 120 | 5.906 | 150 | 0.31 | 7.9 | 0.010 | 0.25 | 40.0 | 1016 | 50 |
| MLT8DEH15-Q316 | Stainless steel locking strap cleat. | 2.835 | 72 | 3.937 | 100 | 5.906 | 150 | 7.677 | 195 | 0.50 | 12.7 | 0.015 | 0.38 | 53.5 | 1359 | 25 |
| MLT8DSH-Q316 | Stainless steel locking strap cleat. | 2.835 | 72 | 3.937 | 100 | 5.906 | 150 | 7.677 | 195 | 0.63 | 15.9 | 0.015 | 0.38 | 53.5 | 1359 | 25 |
| MLT8DSH-Q | Stainless steel locking strap cleat. | 2.835 | 72 | 3.937 | 100 | 5.906 | 150 | 7.677 | 195 | 0.63 | 15.9 | 0.015 | 0.38 | 53.5 | 1359 | 25 |

Short Circuit Testing Summary¹

| MLT#DH-L316 Product | | | |
|--|---|--|---|
| Trefoil Formation 39 mm Cable Diameter | Trefoil Formation 39 mm Cable Diameter | Trefoil Formation 39 mm Cable Diameter | Trefoil Formation 39 mm Cable Diameter |
| One Short Circuit Event (Clause 6.4.4) 300 mm spacing | Two Short Circuit Events (Clause 6.4.5) 300 mm spacing | One Short Circuit Event (Clause 6.4.4) 600 mm spacing | Two Short Circuit Events (Clause 6.4.5) 600 mm spacing |
| 47.0 kA | 47.0 kA | 42.2 kA | 33.2 kA |
| 649 lbs force (2.89 kN) | 649 lbs force (2.89 kN) | 1047 lbs force (4.66 kN) | 648 lbs force (2.88 kN) |
| MLT#DSH-Q316 Product | | | |
| Trefoil Formation 38 mm Cable Diameter | Trefoil Formation 38 mm Cable Diameter | Trefoil Formation 39 mm Cable Diameter | Trefoil Formation 39 mm Cable Diameter |
| One Short Circuit Event (Clause 6.4.4) 300 mm spacing | One Short Circuit Event (Clause 6.4.4) 300 mm spacing | One Short Circuit Event (Clause 6.4.4) 600 mm spacing | Two Short Circuit Events (Clause 6.4.5) 600 mm spacing |
| 75.1 kA | 75.1 kA | 60.4 kA | 60.4 kA |
| 1702 lbs force (7.57 kN) | 1702 lbs force (7.57 kN) | 2145 lbs force (9.45 kN) | 2145 lbs force (9.45 kN) |
| MLT#DEH15-Q316 Product | | | |
| Trefoil Formation 38 mm Cable Diameter | — | Trefoil Formation 39 mm Cable Diameter | Trefoil Formation 39 mm Cable Diameter |
| One Short Circuit Event (Clause 6.4.4) 300 mm spacing | — | One Short Circuit Event (Clause 6.4.4) 600 mm spacing | Two Short Circuit Events (Clause 6.4.5) 600 mm spacing |
| 56.1 kA | — | 42.4 kA | 35.7 kA |
| 925 lbs force (4.11 kN) | — | 1057 lbs force (4.70 kN) | 749 lbs force (3.33 kN) |

¹Test compliance to IEC 61914:2015 utilizing KEMA facility; Independent, ISO 17025 accredited testing, inspection, and certification services (IEEE, IEC, UL, and ANSI) for electric power equipment.

THE COMPLETE PANDUIT CABLE CLEAT TOOLS

The manually-operated **BT2HTI** and **BT75SDT** tools are used to install Panduit's Buckle Strap Cleats.

The **BT2HTI** is a ratchet-style installation tool, allowing for high tension with minimal effort.

The **BT75SDT** tensions the strap using a screw drive mechanism, providing high tension while reducing operator fatigue.

Both tools use a lever to cut the strap so there is an appropriate length remaining to fold over and secure with the buckle tab. A side entry slot allows for easy strap insertion, streamlining installation. The BT2HTI is more suitable for higher volume installations, and the BT75SDT for lower volume.



For use with **Stainless Steel Buckle Strap Cleat**

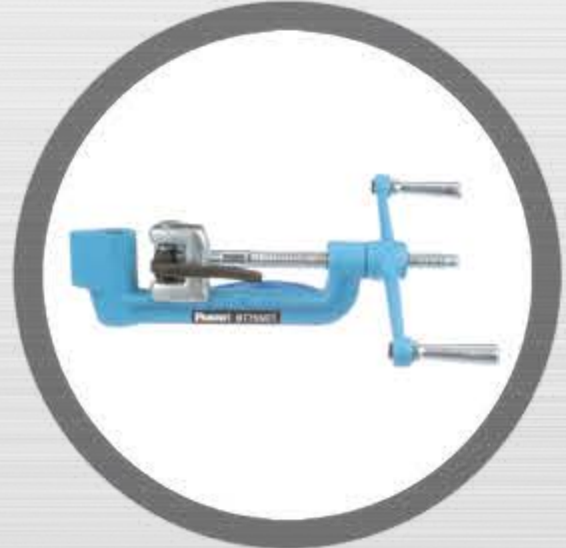


For use with **Stainless Steel Locking Strap Cleat**

| Part Number | Description | Length | | Width | | Used With | Std Pkg. Qty. |
|----------------|--|--------|-----|-------|-----|------------------------------------|---------------|
| | | In. | mm | In. | mm | | |
| BT2HTI | Installation tool for use with MS75 buckles. | 6.94 | 176 | 7.64 | 194 | Stainless Steel Buckle Strap Cleat | 1 |
| BT75SDT | Screw drive tension mechanism provides high tension with minimal effort, reducing operator fatigue; Heavy duty construction offers a longer service life; Strapping side entry allows quick side entry of the strap into tool to speed installation. | 15 | 381 | 8 | 203 | Stainless Steel Buckle Strap Cleat | 1 |



BT2HTI



BT75SDT

THE COMPLETE PANDUIT CABLE CLEAT TOOLS

The battery-operated **PBTMT** and manually-operated, ratchet-style **RT2HT** tools are used to install Panduit's Locking Strap Cleats.

Both tools tension the strap through its locking head using a gripping tooth mechanism and then cut the end flush, eliminating any sharp edges.

A side entry slot allows for easy strap insertion, streamlining installation. The PBTMT is more suitable for higher volume installations, and the RT2HT for lower volume.



For use with **Stainless Steel Locking Strap Cleat**



| Part Number | Description | Length | | Width | | Used With | Std Pkg. Qty. |
|----------------|--|--------|-------|-------|------|-------------------------------------|---------------|
| | | In. | mm | In. | mm | | |
| PBTMT/E | Battery powered installation tool, for use with Pan-Steel® Heavy, Extra-heavy, and Super-Heavy, Cross Section MLT Style Ties, and MLTD Double Wrapped Style Ties, 2 -12 volt lithium-ion batteries and 115 volt, 60 Hz charger included. | 10.33 | 262.4 | 3.17 | 80.5 | Stainless Steel Locking Strap Cleat | 1 |
| RT2HT | Hand Operated Tool for use with Extra-Heavy and Super-Heavy Cross Section Pan-Steel® Type MLT Ties. | 7.1 | 180 | 4.05 | 103 | Stainless Steel Locking Strap Cleat | 1 |



PBTMT/E



RT2HT

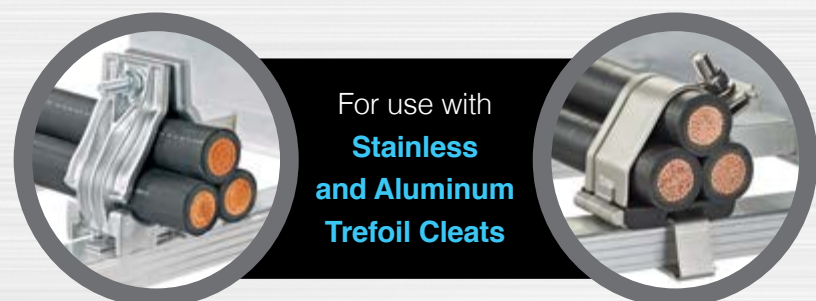
PANDUIT MOUNTING BRACKETS AND CUSHION SLEEVE

Mounting Brackets for Easy Installation and Labor Savings

Install cable cleats after the cable is pulled with Panduit mounting brackets that affix to the cable tray and cleat after the cable is run in the tray.

CBH Series Brackets are compatible with the CCSSTR Series Stainless Steel Trefoil Cleats and CCALTR Series Aluminum Trefoil Cleats.

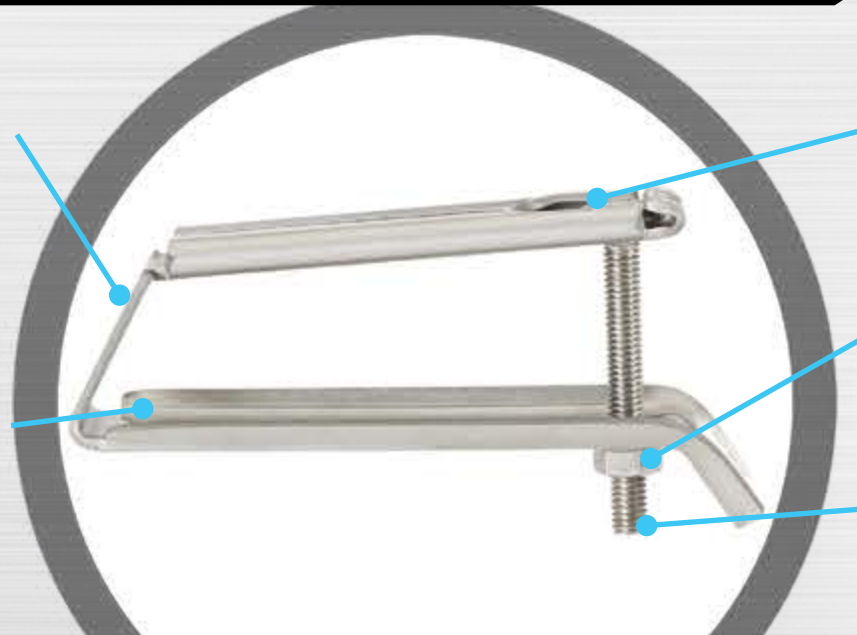
UC Series Brackets work in concert with Panduit's unique MLT Series Locking Strap Cleats and MS75 Series Buckle Strap Cleats.



For use with
**Stainless
and Aluminum
Trefoil Cleats**

No loose pieces eliminates lost parts.

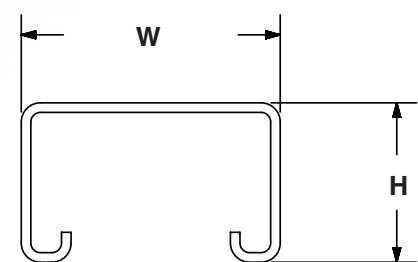
Mounting bracket eliminates the need to drill holes through rungs to secure cleats*



Capture slot for swing bolt provides added security

Peened nut prevents it from backing out completely off the screw

Easy-to-use swing bolt assembly

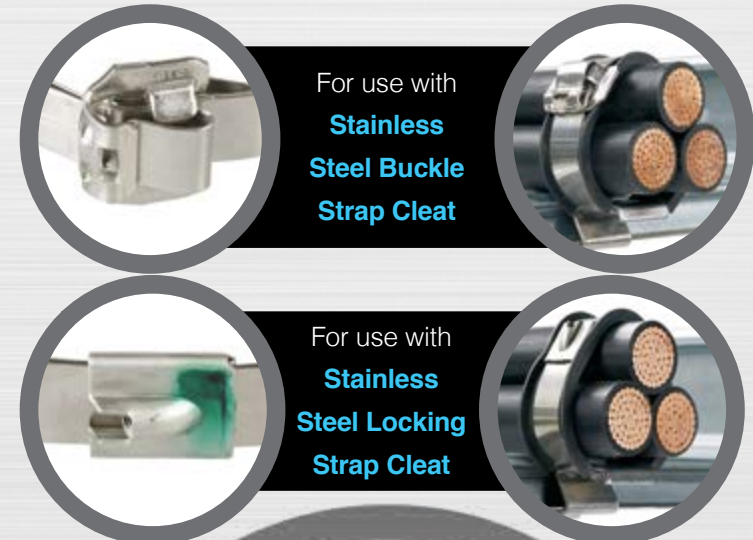


| Part Number | Description | Rung Height | | Rung Width | | Part Weight | |
|-------------|--|-------------|---------|------------|----|-------------|-----|
| | | In. | mm | In. | mm | lb. | g |
| CBH15L50-V6 | Cleat bracket, height 15 mm, length 50 mm, 316L stainless steel. | 0.59 | 15 | 1.97 | 50 | 0.32 | 145 |
| CBH20L50-V6 | Cleat bracket, height 20 mm, length 50 mm, 316L stainless steel. | 0.59 - 0.79 | 15 - 20 | 1.97 | 50 | 0.32 | 145 |
| CBH25L50-V6 | Cleat bracket, height 25 mm, length 50 mm, 316L stainless steel. | 0.79 - 0.98 | 20 - 25 | 1.97 | 50 | 0.33 | 151 |
| CBH30L50-V6 | Cleat bracket, height 30 mm, length 50 mm, 316L stainless steel. | 0.98 - 1.18 | 25 - 30 | 1.97 | 50 | 0.34 | 154 |

PANDUIT MOUNTING BRACKETS AND CUSHION SLEEVE



- 1 I-Beam Mounting Bracket*
- 2 Top Hat Mounting Bracket*
- 3 Round Type Mounting Bracket*
- 4 Strut Mounting Bracket*

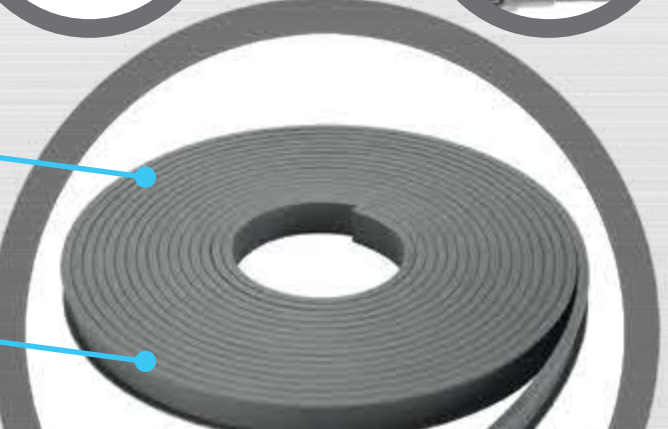


For use with
**Stainless
Steel Buckle
Strap Cleat**

For use with
**Stainless
Steel Locking
Strap Cleat**

Available in 100 ft. (30.5 m) rolls

TPE low-smoke, halogen-free, and flame-resistant



| Part Number | Description | Std. Pkg. Qty. | Length | | Width | | Std. Pkg. Qty. |
|-------------|---|----------------|--------|----|-------|----|----------------|
| | | | In. | mm | In. | mm | |
| UCSQ1-VC | Mounting bracket - Strut Type, galvanized steel. | 5 | | | | | |
| UCRND1-VC | Mounting bracket - Round, galvanized steel. | 5 | | | | | |
| UCIB1-VC | Mounting bracket - I-Beam, galvanized steel. | 5 | | | | | |
| UCTH1-VC | Mounting bracket - Top Hat, galvanized steel. | 5 | | | | | |
| UCFG1-V316 | Mounting bracket - Use with composite fiberglass cable trays, 316L stainless steel. | 5 | | | | | |
| UCSQ1-V316 | Mounting bracket - Strut Type, 316L stainless steel. | 5 | | | | | |
| UCRND1-V316 | Mounting bracket - Round, 31L stainless steel. | 5 | | | | | |
| UCIB1-V316 | Mounting bracket - I-Beam, 316L stainless steel. | 5 | | | | | |
| UCTH1-V316 | Mounting bracket - Top Hat, 316L stainless steel. | 5 | | | | | |

| Part Number | Description | Length | | Width | | Std. Pkg. Qty. |
|-------------|--|--------|------|-------|------|----------------|
| | | In. | mm | In. | mm | |
| PCSLSH-B-CR | Cushion sleeving used with locking strap cleats and buckle strap cleats. | 100 | 30.5 | 1.05 | 26.8 | 1 |

Pkg. -CR = 100 ft. (30.5 m) reel.

*Available in 316L stainless steel and galvanized steel.

ALUMINUM TREFOIL CLEAT

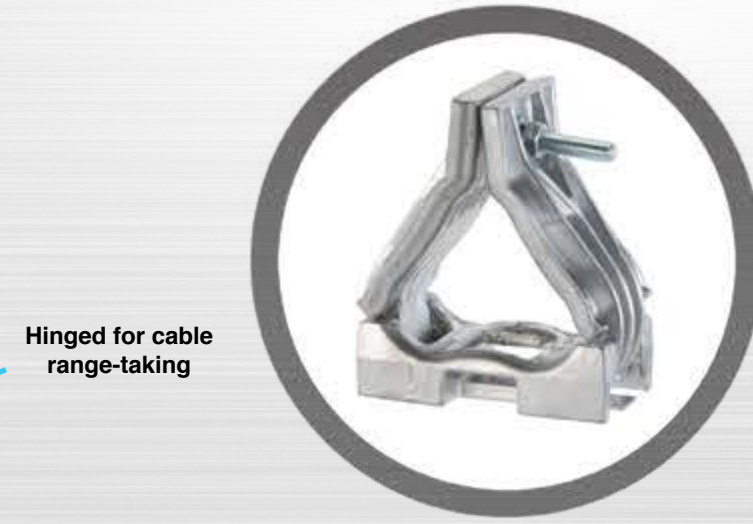
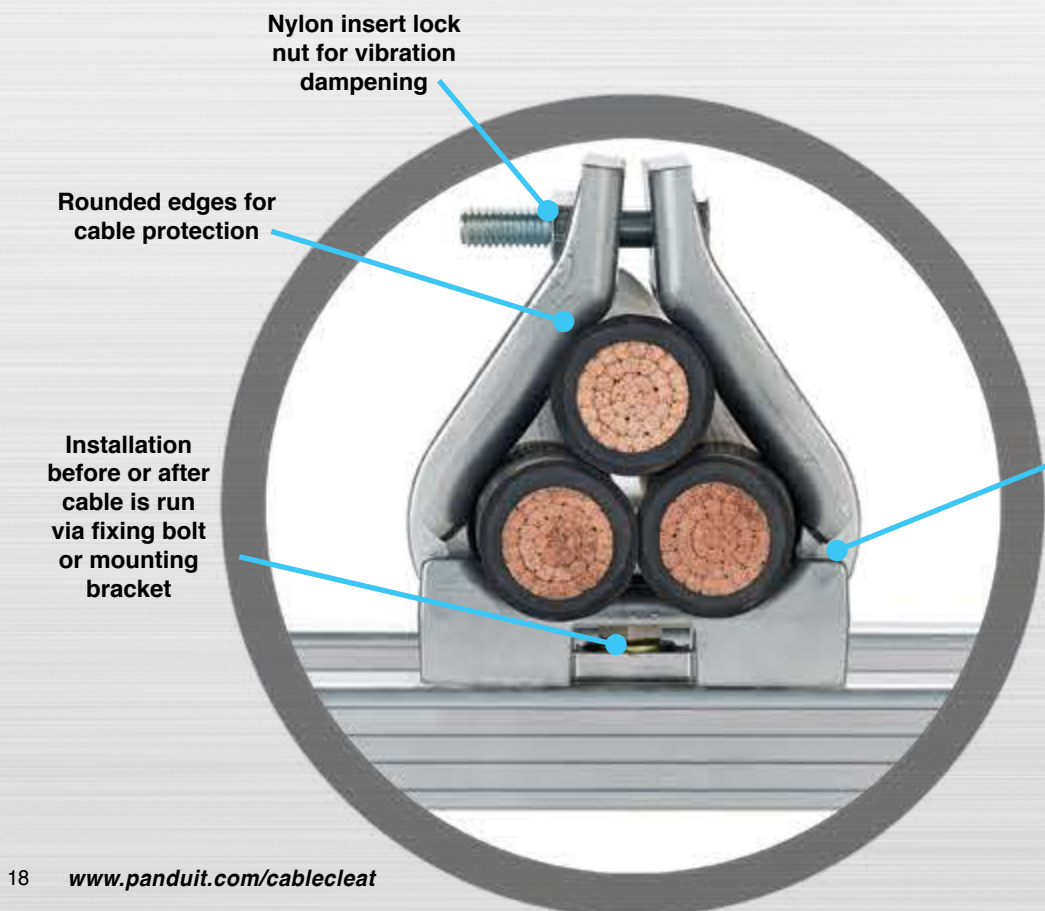
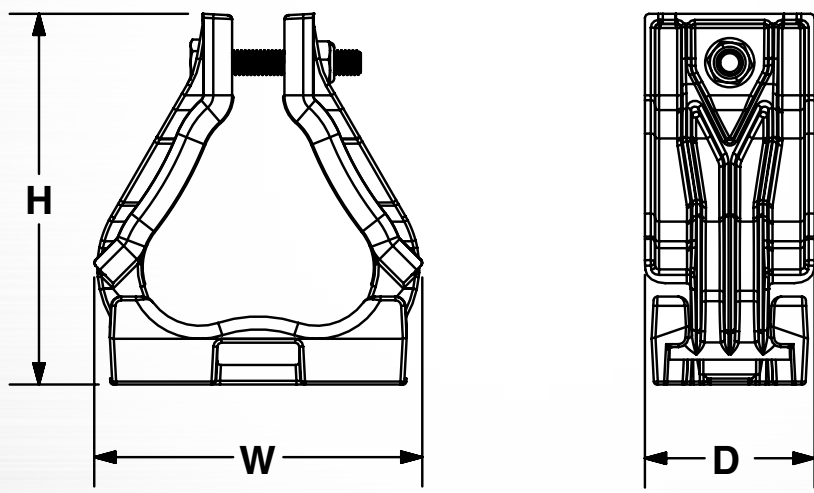


Technical Data

TREFOIL CLEAT

The Aluminum Trefoil Cable Cleat is ideal for medium-high short circuit faults in less corrosive environments. It is available in multiple sizes with cable range-taking capability and is suitable for trefoil cable arrangements.

The cleat can be installed after running cable via a unique in the industry mounting bracket or before running cable through it by installing direct to the cable tray rung via a fixing hole and M8 bolt. Insulating spacers and washers are available to protect against galvanic corrosion between dissimilar cable tray rung and cable cleat materials.



| Part Number | Description | Cable Diameter Range | | H | | W | | D | | Weight | | Mounting Holes |
|--------------|---|----------------------|---------|------|-----|------|-----|------|----|--------|-----|----------------|
| | | In. | mm | In. | mm | In. | mm | In. | mm | Lb. | g | |
| CCALTR2326-X | Cable cleat, aluminum, trefoil configuration with a cable diameter of 23 - 26 mm. | 0.91 - 1.02 | 23 - 26 | 3.92 | 100 | 3.98 | 101 | 2.17 | 55 | 0.81 | 370 | 1 x M8 |
| CCALTR2528-X | Cable cleat, aluminum, trefoil configuration with a cable diameter of 25 - 28 mm. | 0.98 - 1.10 | 25 - 28 | 4.06 | 103 | 4.15 | 105 | 2.17 | 55 | 0.85 | 385 | 1 x M8 |
| CCALTR2730-X | Cable cleat, aluminum, trefoil configuration with a cable diameter of 27 - 30 mm. | 1.06 - 1.18 | 27 - 30 | 4.19 | 107 | 3.86 | 98 | 2.17 | 55 | 0.85 | 388 | 1 x M8 |
| CCALTR2932-X | Cable cleat, aluminum, trefoil configuration with a cable diameter of 29 - 32 mm. | 1.14 - 1.26 | 29 - 32 | 4.33 | 110 | 3.87 | 98 | 2.17 | 55 | 0.87 | 397 | 1 x M8 |
| CCALTR3135-X | Cable cleat, aluminum, trefoil configuration with a cable diameter of 31 - 35 mm. | 1.22 - 1.38 | 31 - 35 | 4.55 | 116 | 3.96 | 101 | 2.17 | 55 | 0.92 | 418 | 1 x M8 |
| CCALTR3438-X | Cable cleat, aluminum, trefoil configuration with a cable diameter of 34 - 38 mm. | 1.34 - 1.50 | 34 - 38 | 4.77 | 121 | 4.18 | 106 | 2.17 | 55 | 0.93 | 424 | 1 x M8 |
| CCALTR3741-X | Cable cleat, aluminum, trefoil configuration with a cable diameter of 37 - 41 mm. | 1.46 - 1.61 | 37 - 41 | 4.99 | 127 | 4.41 | 112 | 2.17 | 55 | 0.98 | 448 | 1 x M8 |
| CCALTR4044-X | Cable cleat, aluminum, trefoil configuration with a cable diameter of 40 - 44 mm. | 1.57 - 1.73 | 40 - 44 | 5.24 | 133 | 4.63 | 118 | 2.17 | 55 | 1.05 | 477 | 1 x M8 |
| CCALTR4347-X | Cable cleat, aluminum, trefoil configuration with a cable diameter of 43 - 47 mm. | 1.69 - 1.85 | 43 - 47 | 5.52 | 140 | 4.85 | 123 | 2.17 | 55 | 1.14 | 516 | 1 x M8 |
| CCALTR4651-X | Cable cleat, aluminum, trefoil configuration with a cable diameter of 46 - 51 mm. | 1.81 - 2.01 | 46 - 51 | 5.83 | 148 | 5.05 | 128 | 2.17 | 55 | 1.23 | 558 | 1 x M8 |
| CCALTR5056-X | Cable cleat, aluminum, trefoil configuration with a cable diameter of 50 - 56 mm. | 1.97 - 2.20 | 50 - 56 | 6.20 | 158 | 5.50 | 140 | 2.17 | 55 | 1.32 | 602 | 1 x M8 |
| CCALTR5561-X | Cable cleat, aluminum, trefoil configuration with a cable diameter of 55 - 61 mm. | 2.17 - 2.40 | 55 - 61 | 6.57 | 167 | 5.72 | 145 | 2.17 | 55 | 1.42 | 647 | 1 x M8 |
| CCALTR6067-X | Cable cleat, aluminum, trefoil configuration with a cable diameter of 60 - 67 mm. | 2.36 - 2.64 | 60 - 67 | 7.01 | 178 | 6.15 | 156 | 2.17 | 55 | 1.55 | 706 | 1 x M8 |
| CCALTR6675-X | Cable cleat, aluminum, trefoil configuration with a cable diameter of 66 - 75 mm. | 2.60 - 2.95 | 66 - 75 | 7.93 | 193 | 6.72 | 171 | 2.17 | 55 | 1.73 | 787 | 1 x M8 |

Short Circuit Testing Summary¹

| Trefoil Formation 38 mm Cable Diameter | Trefoil Formation 38 mm Cable Diameter | Trefoil Formation 35 mm Cable Diameter | Trefoil Formation 38 mm Cable Diameter |
|--|---|--|---|
| One Short Circuit Event (Clause 6.4.4) 300 mm spacing | Two Short Circuit Events (Clause 6.4.5) 300 mm spacing | One Short Circuit Event (Clause 6.4.4) 600 mm spacing | Two Short Circuit Events (Clause 6.4.5) 600 mm spacing |
| 114 kA | 109 kA | 94.6 kA | 94.6 kA |
| 3921 lbs force (17.4 kN) | 3585 lbs force (15.9 kN) | 5401 lbs force (24.0 kN) | 5401 lbs force (24.0 kN) |

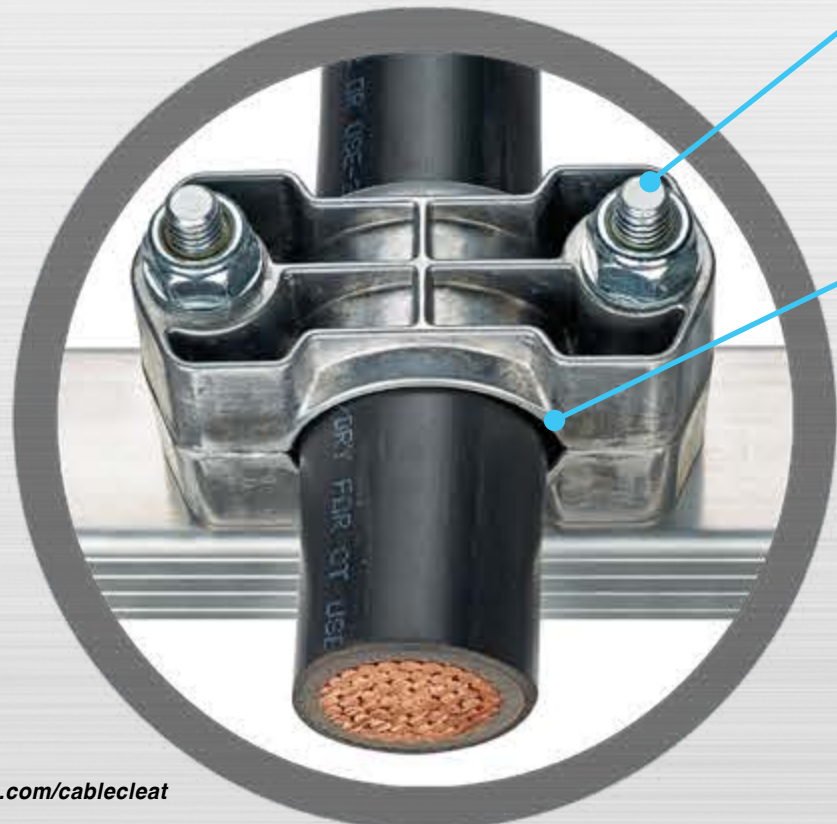
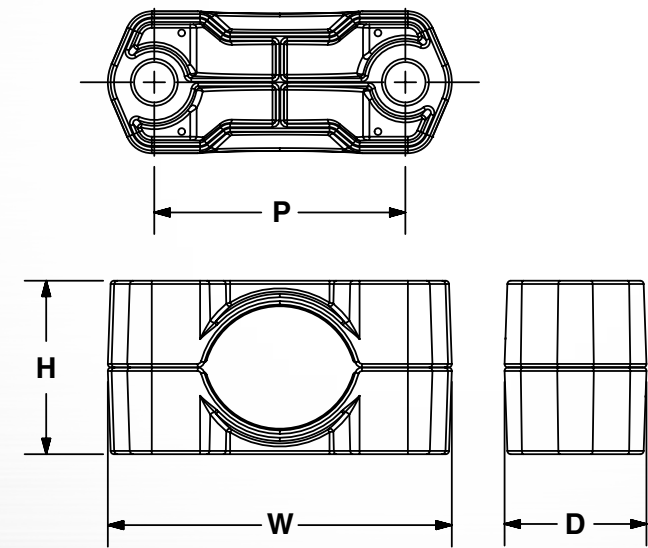
¹Test compliance to IEC 61914:2015 utilizing KEMA facility; Independent, ISO 17025 accredited testing, inspection, and certification services (IEEE, IEC, UL, and ANSI) for electric power equipment.

ALUMINUM TWO-HOLE CLEAT



The Aluminum Two-Hole Cleat is ideal for medium-high short circuit faults in less corrosive environments. It is available in multiple sizes with cable range-taking capability and is suitable for single conductor cables.

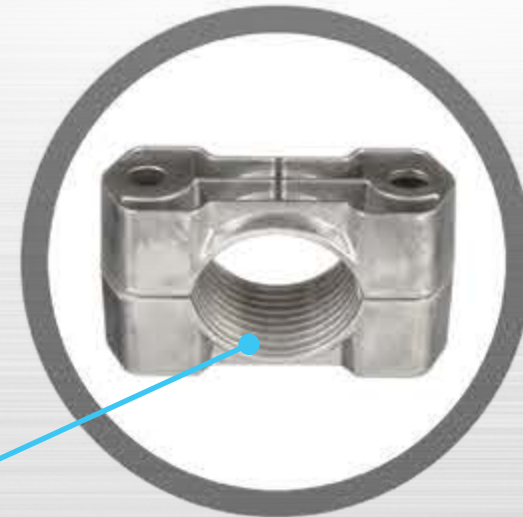
The cleat is installed after running cable by installing direct to the cable tray rung via fixing holes and two M10 bolts. Insulating spacers and washers are available to protect against galvanic corrosion in case of dissimilar cable tray rung and cable cleat materials.



Tightening bolts can be installed from top or bottom

Rounded edges for cable protection

Ridges to hold cable in place



TWO-HOLE CLEAT

Technical Data

| Part Number | Description | Cable Diameter Range | | H | | W | | D | | F | | Weight | | Mounting Holes |
|----------------|--|----------------------|-----------|------|-----|------|-----|------|----|------|-----|--------|-----|----------------|
| | | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | Lb. | g | |
| CCAL2H3846-X | Cable cleat, aluminum, two-hole configuration with a cable diameter of 38 - 46 mm. | 1.50 - 1.81 | 38 - 46 | 2.01 | 51 | 3.98 | 101 | 1.64 | 42 | 2.91 | 74 | 0.50 | 226 | 2 x M10 |
| CCAL2H4658-X | Cable cleat, aluminum, two-hole configuration with a cable diameter of 46 - 58 mm. | 1.81 - 2.28 | 46 - 58 | 2.36 | 60 | 4.52 | 115 | 1.69 | 43 | 3.39 | 86 | 0.64 | 291 | 2 x M10 |
| CCAL2H5870-X | Cable cleat, aluminum, two-hole configuration with a cable diameter of 58 - 70 mm. | 2.28 - 2.76 | 58 - 70 | 2.87 | 73 | 5.18 | 132 | 1.75 | 45 | 3.96 | 101 | 0.89 | 404 | 2 x M10 |
| CCAL2H7083-X | Cable cleat, aluminum, two-hole configuration with a cable diameter of 70 - 83 mm. | 2.76 - 3.27 | 70 - 83 | 3.39 | 86 | 5.71 | 145 | 1.81 | 46 | 4.47 | 114 | 1.09 | 496 | 2 x M10 |
| CCAL2H8397-X | Cable cleat, aluminum, two-hole configuration with a cable diameter of 83 - 97 mm. | 3.27 - 3.82 | 83 - 97 | 3.94 | 100 | 6.36 | 162 | 1.87 | 47 | 5.06 | 129 | 1.39 | 630 | 2 x M10 |
| CCAL2H97109-X | Cable cleat, aluminum, two-hole configuration with a cable diameter of 97 - 109 mm. | 3.82 - 4.29 | 97 - 109 | 4.53 | 115 | 6.87 | 175 | 1.93 | 49 | 5.55 | 141 | 1.66 | 754 | 2 x M10 |
| CCAL2H109120-X | Cable cleat, aluminum, two-hole configuration with a cable diameter of 109 - 120 mm. | 4.29 - 4.72 | 109 - 120 | 5.04 | 128 | 7.33 | 186 | 1.98 | 50 | 5.99 | 152 | 1.92 | 873 | 2 x M10 |

Short Circuit Testing Summary¹

| Flat Formation 105 mm Cable Spacing | Flat Formation 105 mm Cable Spacing |
|--|---|
| One Short Circuit Event (Clause 6.4.4) 600 mm spacing | Two Short Circuit Events (Clause 6.4.5) 600 mm spacing |
| 131 kA | 131 kA |
| 3748 lbs force (16.7 kN) | 3748 lbs force (16.7 kN) |

¹Test compliance to IEC 61914:2015 utilizing KEMA facility; Independent, ISO 17025 accredited testing, inspection, and certification services (IEEE, IEC, UL, and ANSI) for electric power equipment.

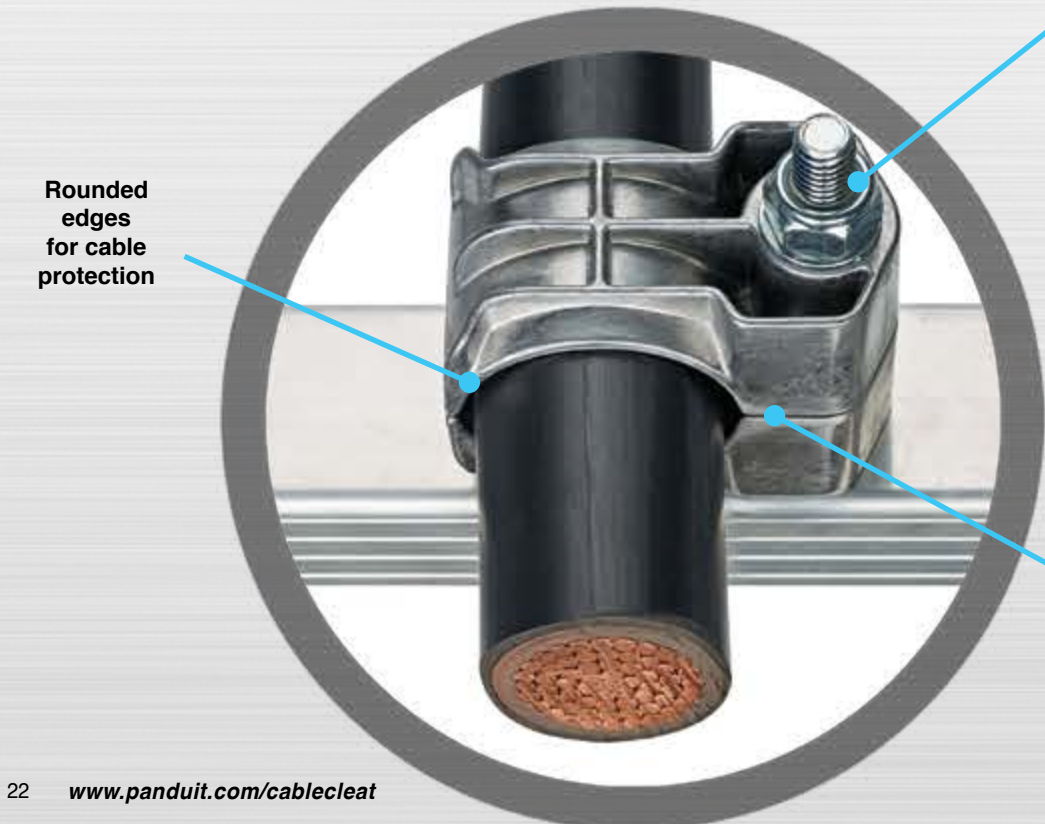
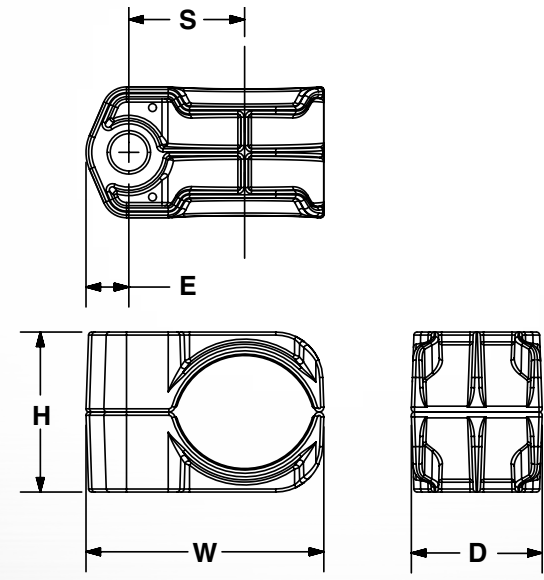
ALUMINUM ONE-HOLE CLEAT



ONE-HOLE CLEAT

The **Aluminum One-Hole Cleat** is ideal for lower to medium short circuit faults in less corrosive environments. It is available in multiple sizes with cable range-taking capability and is suitable for single conductor cables.

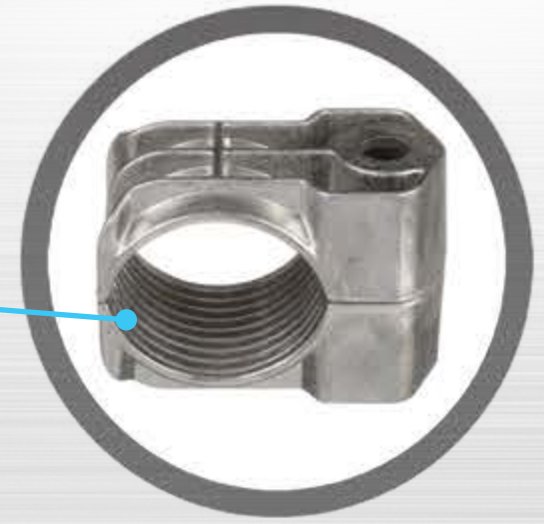
The cleat is installed after running cable by installing direct to the cable tray rung via a fixing hole and M10 bolt. Insulating spacers and washers are available to protect against galvanic corrosion in case of dissimilar cable tray rung and cable cleat materials.



Tightening bolt can be installed from top or bottom

Ridges to hold cable in place

Interlock feature prevents rotation between top and bottom pieces



Technical Data

| Part Number | Description | Cable Diameter Range | | H | | W | | D | | E | | S | | Weight | | Mounting Holes |
|--------------|--|----------------------|---------|------|----|------|----|------|----|------|----|------|----|--------|-----|----------------|
| | | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | Lb. | g | |
| CCAL1H1013-X | Cable cleat, aluminum, one-hole configuration with a cable diameter of 10 - 13 mm. | 0.39 - 0.51 | 10 - 13 | 0.91 | 23 | 1.59 | 40 | 1.60 | 41 | 0.48 | 12 | 0.77 | 20 | 0.11 | 50 | 1 x M10 |
| CCAL1H1316-X | Cable cleat, aluminum, one-hole configuration with a cable diameter of 13 - 16 mm. | 0.51 - 0.63 | 13 - 16 | 1.02 | 26 | 1.72 | 44 | 1.61 | 41 | 0.48 | 12 | 0.83 | 21 | 0.13 | 59 | 1 x M10 |
| CCAL1H1619-X | Cable cleat, aluminum, one-hole configuration with a cable diameter of 16 - 19 mm. | 0.63 - 0.75 | 16 - 19 | 1.14 | 29 | 1.88 | 48 | 1.61 | 41 | 0.50 | 13 | 0.91 | 23 | 0.15 | 68 | 1 x M10 |
| CCAL1H1923-X | Cable cleat, aluminum, one-hole configuration with a cable diameter of 19 - 23 mm. | 0.75 - 0.91 | 19 - 23 | 1.26 | 32 | 2.04 | 52 | 1.61 | 41 | 0.50 | 13 | 0.99 | 25 | 0.17 | 77 | 1 x M10 |
| CCAL1H2327-X | Cable cleat, aluminum, one-hole configuration with a cable diameter of 23 - 27 mm. | 0.91 - 1.06 | 23 - 27 | 1.42 | 36 | 2.28 | 58 | 1.62 | 41 | 0.51 | 13 | 1.07 | 27 | 0.20 | 89 | 1 x M10 |
| CCAL1H2732-X | Cable cleat, aluminum, one-hole configuration with a cable diameter of 27 - 32 mm. | 1.06 - 1.26 | 27 - 32 | 1.57 | 40 | 2.44 | 62 | 1.63 | 41 | 0.53 | 14 | 1.19 | 30 | 0.24 | 107 | 1 x M10 |
| CCAL1H3238-X | Cable cleat, aluminum, one-hole configuration with a cable diameter of 32 - 38 mm. | 1.26 - 1.50 | 32 - 38 | 1.77 | 45 | 2.68 | 68 | 1.63 | 42 | 0.53 | 14 | 1.30 | 33 | 0.27 | 125 | 1 x M10 |
| CCAL1H3846-X | Cable cleat, aluminum, one-hole configuration with a cable diameter of 38 - 46 mm. | 1.50 - 1.81 | 38 - 46 | 2.01 | 51 | 2.98 | 76 | 1.64 | 42 | 0.54 | 14 | 1.45 | 37 | 0.33 | 149 | 1 x M10 |
| CCAL1H4651-X | Cable cleat, aluminum, one-hole configuration with a cable diameter of 46 - 51 mm. | 1.81 - 2.01 | 46 - 51 | 2.36 | 60 | 3.25 | 83 | 1.65 | 42 | 0.56 | 14 | 1.58 | 40 | 0.40 | 181 | 1 x M10 |
| CCAL1H5157-X | Cable cleat, aluminum, one-hole configuration with a cable diameter of 51 - 57 mm. | 2.01 - 2.24 | 51 - 57 | 2.56 | 65 | 3.49 | 89 | 1.66 | 42 | 0.57 | 14 | 1.70 | 43 | 0.44 | 202 | 1 x M10 |

Short Circuit Testing Summary¹

| Flat Formation 105 mm Cable Spacing | Flat Formation 105 mm Cable Spacing |
|--|---|
| One Short Circuit Event (Clause 6.4.4) 600 mm spacing | Two Short Circuit Events (Clause 6.4.5) 600 mm spacing |
| 93.4 kA | 93.4 kA |
| 1904 lbs force (8.47 kN) | 1904 lbs force (8.47 kN) |

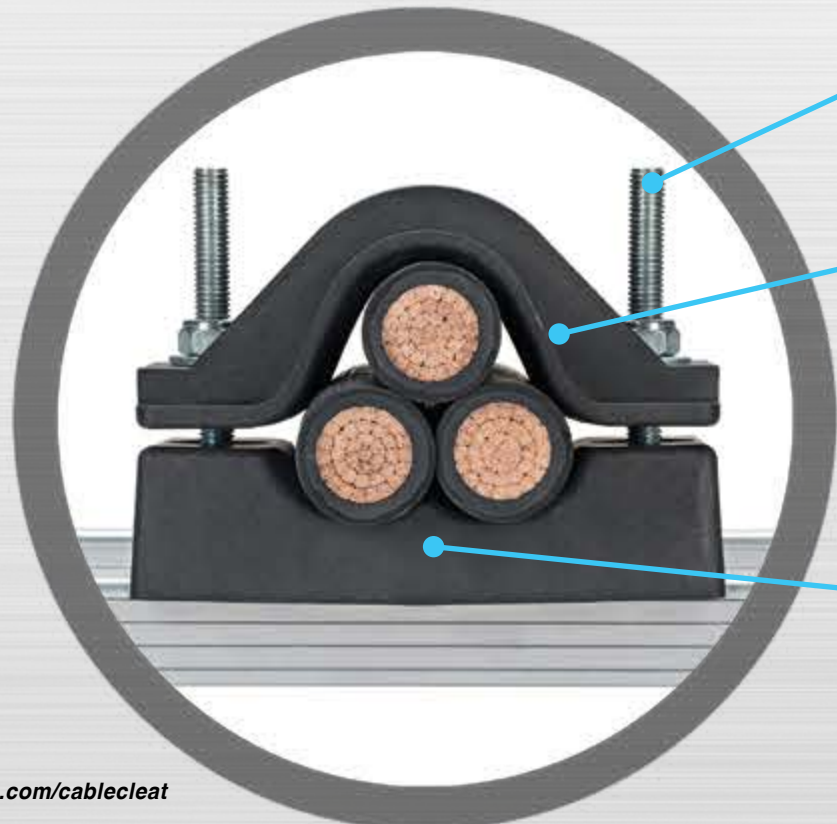
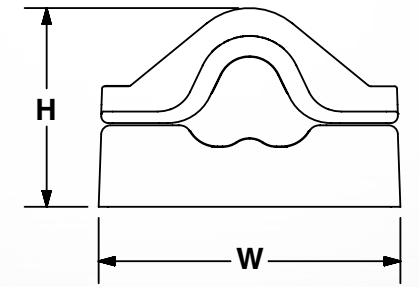
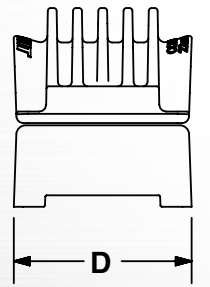
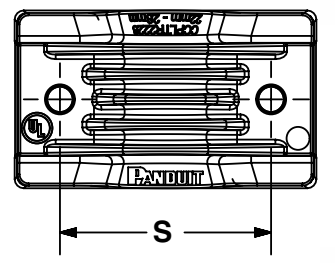
¹Test compliance to IEC 61914:2015 utilizing KEMA facility; Independent, ISO 17025 accredited testing, inspection, and certification services (IEEE, IEC, UL, and ANSI) for electric power equipment.

POLYMER TREFOIL CLEAT



The **Polymer Trefoil Cleat** is ideal for medium-high short circuit faults in less harsh environments. It is available in multiple sizes with cable range-taking capability and is suitable for trefoil cable arrangements.

The cleat is installed after running cable by installing direct to the cable tray rung via a fixing hole and M10 bolt.

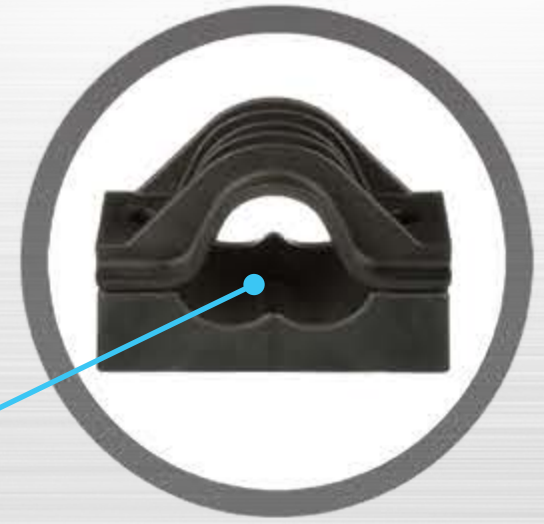


Dual bolt installation

Rounded edges for cable protection

Ridges to hold cable in place

Corrosion resistant body



Technical Data

TREFOIL CLEAT

| Part Number | Description | Cable Diameter Range | | H | | W | | D | | S | | Weight | | Mounting Holes |
|--------------|--|----------------------|---------|------|-----|------|-----|------|----|------|-----|--------|-----|------------------|
| | | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | Lb. | g | |
| CCPLTR2228-X | Cable cleat, polymer, trefoil configuration with a cable diameter of 22 - 28 mm. | 0.87 - 1.10 | 22 - 28 | 3.46 | 88 | 5.20 | 132 | 3.07 | 78 | 3.62 | 92 | 1.29 | 585 | 1 X M10, 2 X M10 |
| CCPLTR2633-X | Cable cleat, polymer, trefoil configuration with a cable diameter of 26 - 33 mm. | 1.02 - 1.30 | 26 - 33 | 3.86 | 98 | 5.59 | 142 | 3.07 | 78 | 4.02 | 102 | 1.39 | 630 | 1 X M10, 2 X M10 |
| CCPLTR3139-X | Cable cleat, polymer, trefoil configuration with a cable diameter of 31 - 39 mm. | 1.22 - 1.54 | 31 - 39 | 4.13 | 105 | 6.06 | 154 | 3.07 | 78 | 4.49 | 114 | 1.51 | 685 | 1 X M10, 2 X M10 |
| CCPLTR3745-X | Cable cleat, polymer, trefoil configuration with a cable diameter of 37 - 45 mm. | 1.46 - 1.77 | 37 - 45 | 4.61 | 117 | 6.54 | 166 | 3.07 | 78 | 4.96 | 126 | 1.64 | 745 | 1 X M10, 2 X M10 |
| CCPLTR4352-X | Cable cleat, polymer, trefoil configuration with a cable diameter of 43 - 52 mm. | 1.69 - 2.05 | 43 - 52 | 5.04 | 128 | 7.09 | 180 | 3.07 | 78 | 5.51 | 140 | 1.80 | 815 | 1 X M10, 2 X M10 |
| CCPLTR5060-X | Cable cleat, polymer, trefoil configuration with a cable diameter of 50 - 60 mm. | 1.97 - 2.36 | 50 - 60 | 5.55 | 141 | 7.76 | 197 | 3.07 | 78 | 6.14 | 156 | 1.97 | 895 | 1 X M10, 2 X M10 |

Short Circuit Testing Summary¹

| Trefoil Formation 38 mm Cable Diameter | Trefoil Formation 38 mm Cable Diameter | Flat Formation 38 mm Cable Diameter | Flat Formation 38 mm Cable Diameter |
|--|---|--|---|
| One Short Circuit Event (Clause 6.4.4) 300 mm spacing | Two Short Circuit Events (Clause 6.4.5) 300 mm spacing | One Short Circuit Event (Clause 6.4.4) 600 mm spacing | Two Short Circuit Events (Clause 6.4.5) 600 mm spacing |
| 136 kA | 130 kA | 109 kA | 109 kA |
| 5581 lbs force (24.8 kN) | 5099 lbs force (22.7 kN) | 7170 lbs force (31.0 kN) | 7170 lbs force (31.0 kN) |

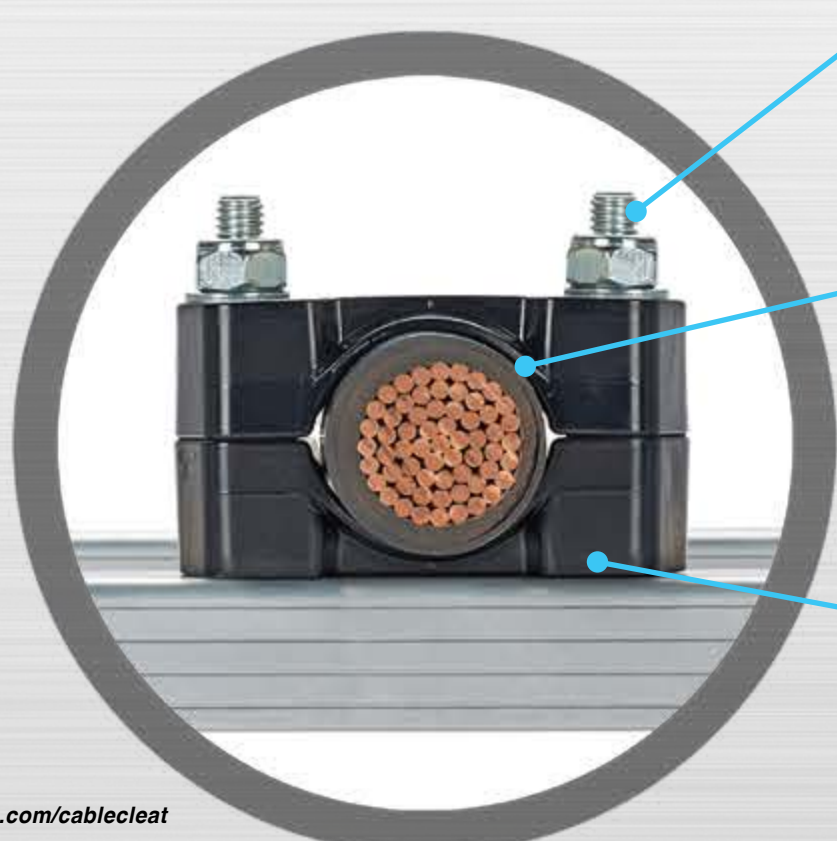
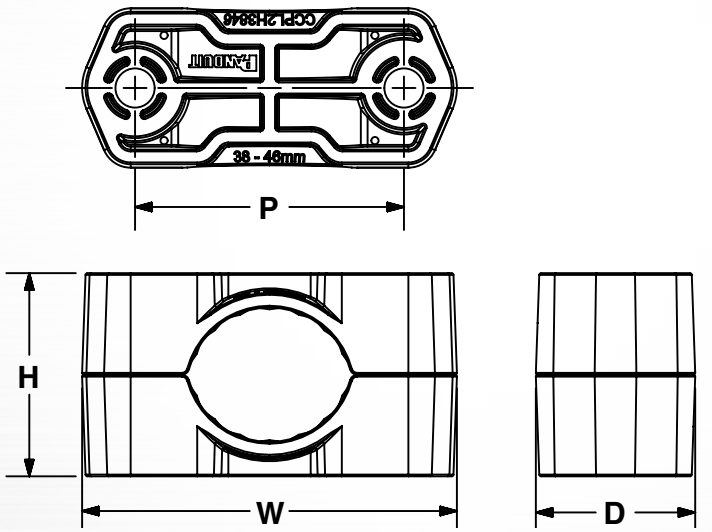
¹Test compliance to IEC 61914:2015 utilizing KEMA facility; Independent, ISO 17025 accredited testing, inspection, and certification services (IEEE, IEC, UL, and ANSI) for electric power equipment.

POLYMER TWO-HOLE CLEAT



The **Polymer Two-Hole Cleat** is ideal for lower to medium short circuit faults in less harsh environments. It is available in multiple sizes with cable range-taking capability and is suitable for single conductor cable arrangements.

The cleat is installed after running cable by installing direct to the cable tray rung via fixing holes and two M10 bolts.



Dual bolt installation

Rounded edges for cable protection

Ridges to hold cable in place

Corrosion resistant body



TWO-HOLE CLEAT

Technical Data

| Part Number | Description | Cable Diameter Range | | H | | W | | D | | P | | Weight | | Mounting Holes |
|----------------|---|----------------------|-----------|------|-----|------|-----|------|----|------|-----|--------|-----|----------------|
| | | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | Lb. | g | |
| CCPL2H3846-X | Cable cleat, polymer, two-hole configuration with a cable diameter of 38 - 46 mm. | 1.50 - 1.81 | 38 - 46 | 2.20 | 56 | 4.07 | 103 | 1.73 | 44 | 2.92 | 74 | 0.31 | 143 | 2 x M10 |
| CCPL2H4658-X | Cable cleat, polymer, two-hole configuration with a cable diameter of 46 - 58 mm. | 1.81 - 2.28 | 46 - 58 | 2.56 | 65 | 4.53 | 115 | 1.74 | 44 | 3.37 | 86 | 0.38 | 175 | 2 x M10 |
| CCPL2H5870-X | Cable cleat, polymer, two-hole configuration with a cable diameter of 58 - 70 mm. | 2.28 - 2.76 | 58 - 70 | 3.07 | 78 | 5.04 | 128 | 1.76 | 45 | 3.85 | 98 | 0.48 | 220 | 2 x M10 |
| CCPL2H7083-X | Cable cleat, polymer, two-hole configuration with a cable diameter of 70 - 83 mm. | 2.76 - 3.27 | 70 - 83 | 3.19 | 81 | 5.56 | 141 | 1.85 | 47 | 4.36 | 111 | 0.60 | 273 | 2 x M10 |
| CCPL2H8397-X | Cable cleat, polymer, two-hole configuration with a cable diameter of 83 - 97 mm. | 3.27 - 3.82 | 83 - 97 | 4.13 | 105 | 6.13 | 156 | 1.95 | 50 | 4.91 | 125 | 0.74 | 335 | 2 x M10 |
| CCPL2H97109-X | Cable cleat, polymer, two-hole configuration with a cable diameter of 97 - 109 mm. | 3.82 - 4.29 | 97 - 109 | 4.72 | 120 | 6.64 | 169 | 2.06 | 50 | 5.40 | 137 | 0.88 | 402 | 2 x M10 |
| CCPL2H109120-X | Cable cleat, polymer, two-hole configuration with a cable diameter of 109 - 120 mm. | 4.29 - 4.72 | 109 - 120 | 5.24 | 133 | 7.10 | 180 | 2.09 | 53 | 5.84 | 148 | 1.01 | 460 | 2 x M10 |
| CCPL2H120135-X | Cable cleat, polymer, two-hole configuration with a cable diameter of 120 - 135 mm. | 4.72 - 5.31 | 120 - 135 | 5.71 | 145 | 7.69 | 195 | 2.17 | 55 | 6.42 | 163 | 1.17 | 533 | 2 x M10 |
| CCPL2H135150-X | Cable cleat, polymer, two-hole configuration with a cable diameter of 135 - 150 mm. | 5.31 - 5.91 | 135 - 150 | 6.34 | 161 | 8.31 | 211 | 2.19 | 56 | 7.01 | 178 | 1.35 | 615 | 2 x M10 |
| CCPL2H150165-X | Cable cleat, polymer, two-hole configuration with a cable diameter of 150 - 165 mm. | 5.91 - 6.50 | 150 - 165 | 6.97 | 177 | 8.92 | 227 | 2.29 | 58 | 7.61 | 193 | 1.57 | 712 | 2 x M10 |

Short Circuit Testing Summary¹

| Flat Formation 105 mm Cable Spacing | Flat Formation 105 mm Cable Spacing |
|--|---|
| One Short Circuit Event (Clause 6.4.4) 600 mm spacing | Two Short Circuit Events (Clause 6.4.5) 600 mm spacing |
| 85.4 kA | 85.4 kA |
| 1593 lbs force (7.09 kN) | 1593 lbs force (7.09 kN) |

¹Test compliance to IEC 61914:2015 utilizing KEMA facility; Independent, ISO 17025 accredited testing, inspection, and certification services (IEEE, IEC, UL, and ANSI) for electric power equipment.

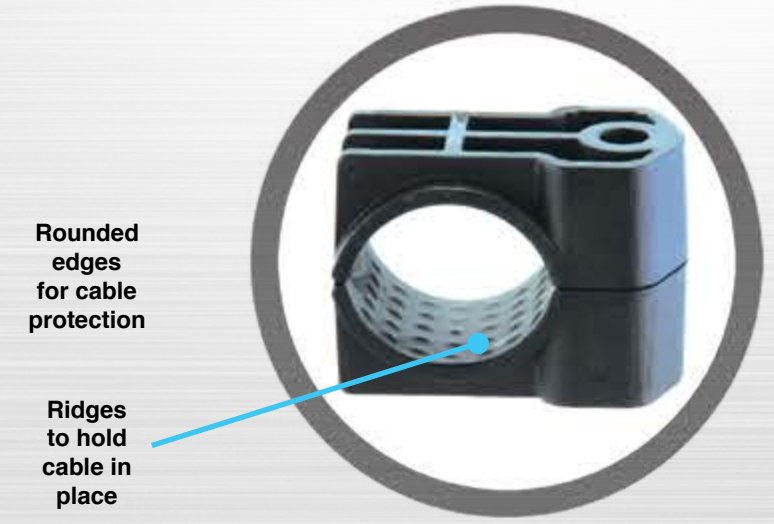
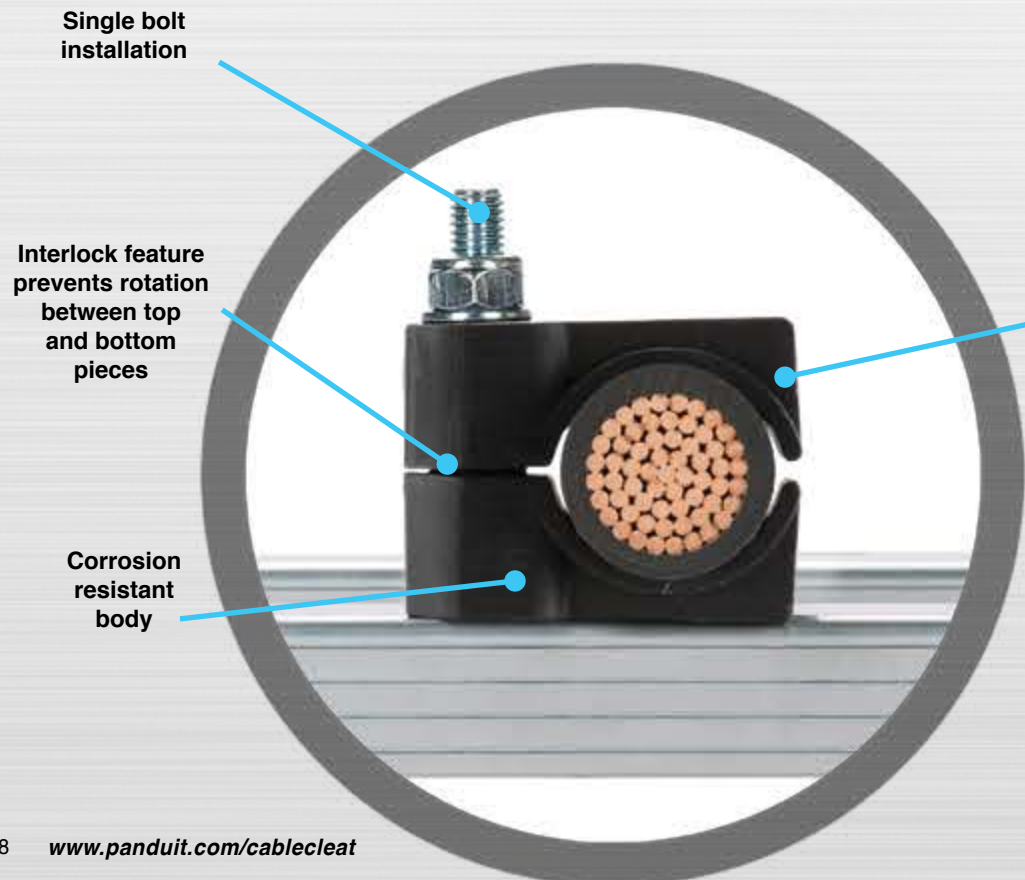
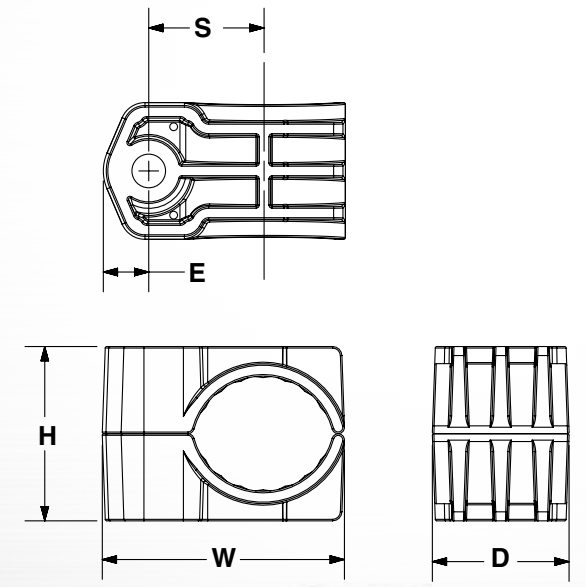
POLYMER ONE-HOLE CLEAT



ONE-HOLE CLEAT

The **Polymer One-Hole Cleat** is ideal for lower to medium short circuit faults in less harsh environments. It is available in multiple sizes with cable range-taking capability and is suitable for single conductor cable arrangements.

The cleat is installed after running cable by installing direct to the cable tray rung via a fixing hole and M10 bolt.



Technical Data

| Part Number | Description | Cable Diameter Range | | H | | W | | D | | E | | S | | Weight | | Mounting Holes |
|--------------|---|----------------------|---------|------|----|------|----|------|----|------|----|------|----|--------|-----|----------------|
| | | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | Lb. | g | |
| CCPL1H1013-X | Cable cleat, polymer, one-hole configuration with a cable diameter of 10 - 13 mm. | 0.39 - 0.51 | 10 - 13 | 1.10 | 28 | 1.74 | 44 | 1.69 | 43 | 0.56 | 14 | 0.81 | 21 | 0.08 | 38 | 1 x M10 |
| CCPL1H1316-X | Cable cleat, polymer, one-hole configuration with a cable diameter of 13 - 16 mm. | 0.51 - 0.63 | 13 - 16 | 1.22 | 31 | 1.87 | 48 | 1.69 | 43 | 0.56 | 14 | 0.87 | 22 | 0.10 | 44 | 1 x M10 |
| CCPL1H1619-X | Cable cleat, polymer, one-hole configuration with a cable diameter of 16 - 19 mm. | 0.63 - 0.75 | 16 - 19 | 1.34 | 34 | 2.00 | 51 | 1.70 | 43 | 0.56 | 14 | 0.94 | 24 | 0.11 | 49 | 1 x M10 |
| CCPL1H1923-X | Cable cleat, polymer, one-hole configuration with a cable diameter of 19 - 23 mm. | 0.75 - 0.91 | 19 - 23 | 1.46 | 37 | 2.15 | 55 | 1.70 | 43 | 0.56 | 14 | 1.01 | 26 | 0.12 | 56 | 1 x M10 |
| CCPL1H2327-X | Cable cleat, polymer, one-hole configuration with a cable diameter of 23 - 27 mm. | 0.91 - 1.06 | 23 - 27 | 1.61 | 41 | 2.32 | 59 | 1.71 | 43 | 0.56 | 14 | 1.09 | 28 | 0.14 | 63 | 1 x M10 |
| CCPL1H2732-X | Cable cleat, polymer, one-hole configuration with a cable diameter of 27 - 32 mm. | 1.06 - 1.26 | 27 - 32 | 1.77 | 45 | 2.52 | 64 | 1.71 | 44 | 0.57 | 14 | 1.19 | 30 | 0.16 | 72 | 1 x M10 |
| CCPL1H3238-X | Cable cleat, polymer, one-hole configuration with a cable diameter of 32 - 38 mm. | 1.26 - 1.50 | 32 - 38 | 1.97 | 50 | 2.75 | 70 | 1.72 | 44 | 0.57 | 15 | 1.31 | 33 | 0.18 | 82 | 1 x M10 |
| CCPL1H3846-X | Cable cleat, polymer, one-hole configuration with a cable diameter of 38 - 46 mm. | 1.50 - 1.81 | 38 - 46 | 2.28 | 58 | 3.06 | 78 | 1.73 | 44 | 0.57 | 15 | 1.46 | 37 | 0.21 | 96 | 1 x M10 |
| CCPL1H4651-X | Cable cleat, polymer, one-hole configuration with a cable diameter of 46 - 51 mm. | 1.81 - 2.01 | 46 - 51 | 2.56 | 65 | 3.29 | 84 | 1.74 | 44 | 0.58 | 15 | 1.57 | 40 | 0.25 | 114 | 1 x M10 |
| CCPL1H5157-X | Cable cleat, polymer, one-hole configuration with a cable diameter of 51 - 57 mm. | 2.01 - 2.24 | 51 - 57 | 2.76 | 70 | 3.53 | 90 | 1.75 | 44 | 0.58 | 15 | 1.69 | 43 | 0.28 | 125 | 1 x M10 |

Short Circuit Testing Summary¹

| Flat Formation 105 mm Cable Spacing | Flat Formation 105 mm Cable Spacing |
|--|---|
| One Short Circuit Event (Clause 6.4.4) 600 mm spacing | Two Short Circuit Events (Clause 6.4.5) 600 mm spacing |
| 69.5 kA | 69.5 kA |
| 1055 lbs force (4.69 kN) | 1055 lbs force (4.69 kN) |

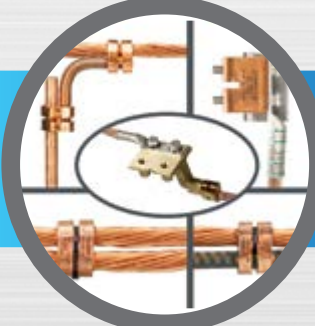
¹Test compliance to IEC 61914:2015 utilizing KEMA facility; Independent, ISO 17025 accredited testing, inspection, and certification services (IEEE, IEC, UL, and ANSI) for electric power equipment.

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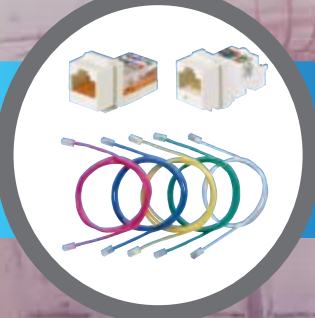
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