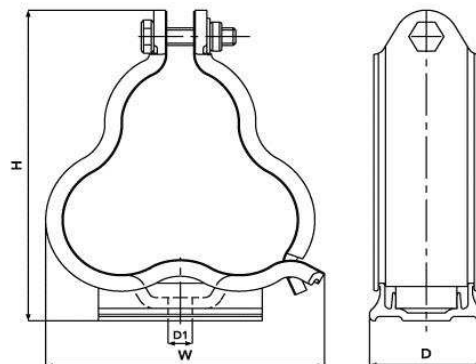


Alpha Trefoil Cleat Data Sheet

Alpha Cable Cleats are available for trefoil cable applications where moderate to low levels of short circuit withstand are required. The unique patented design allows rapid installation. Manufactured from extruded aluminium (6000 series), the product is lighter and tougher than the cast product it is designed to replace. The cleats are supplied with zinc plated closing fasteners. Alpha Cleats are available with two base options: Aluminium or polymer. The polymeric LSF zero halogen base can be used to prevent galvanic corrosion, where this could be a problem.



UK Patent GB 240 5900

Selection Table for Trefoil Cable Application

| Aluminium Base | LSF Zero Halogen Base | Min dia. mm | Max dia. mm | W mm | H mm | D mm | Fixing Hole (mm) | Weight g |
|----------------|-----------------------|-------------|-------------|------|------|------|------------------|----------|
| ALP-01-AN0 | ALP-01-AN1 | 23.2 | 25.1 | 76 | 93 | 48.5 | 1 x M10 | 168 |
| ALP-02-AN0 | ALP-02-AN1 | 25.1 | 27.1 | 79 | 96 | 48.5 | 1 x M10 | 178 |
| ALP-03-AN0 | ALP-03-AN1 | 27.1 | 29.3 | 82 | 101 | 48.5 | 1 x M10 | 185 |
| ALP-04-AN0 | ALP-04-AN1 | 29.3 | 31.7 | 86 | 105 | 48.5 | 1 x M10 | 195 |
| ALP-05-AN0 | ALP-05-AN1 | 31.7 | 34.2 | 91 | 110 | 48.5 | 1 x M10 | 205 |
| ALP-06-AN0 | ALP-06-AN1 | 34.2 | 37.0 | 96 | 116 | 48.5 | 1 x M10 | 217 |
| ALP-07-AN0 | ALP-07-AN1 | 37.0 | 40.0 | 101 | 121 | 48.5 | 1 x M10 | 229 |
| ALP-08-AN0 | ALP-08-AN1 | 40.0 | 43.2 | 106 | 127 | 48.5 | 1 x M10 | 241 |
| ALP-09-AN0 | ALP-09-AN1 | 43.2 | 46.7 | 113 | 134 | 48.5 | 1 x M10 | 255 |
| ALP-10-AN0 | ALP-10-AN1 | 46.7 | 50.2 | 119 | 141 | 48.5 | 1 x M10 | 272 |
| ALP-11-AN0 | ALP-11-AN1 | 50.5 | 54.6 | 127 | 148 | 48.5 | 1 x M10 | 288 |
| ALP-12-AN0 | ALP-12-AN1 | 54.6 | 59.0 | 135 | 156 | 48.5 | 1 x M10 | 307 |
| ALP-13-AN0 | ALP-13-AN1 | 59.0 | 63.8 | 144 | 165 | 48.5 | 1 x M10 | 327 |
| ALP-14-AN0 | ALP-14-AN1 | 63.8 | 69.0 | 153 | 175 | 48.5 | 1 x M10 | 348 |
| ALP-15-AN0 | ALP-15-AN1 | 69.0 | 74.6 | 163 | 186 | 48.5 | 1 x M10 | 372 |

Testing Information

The Alpha Cleats have been tested in line with the International Standard of 'Cable Cleats for Electrical Installations' IEC 61914:2009. The results are detailed below:

| Properties | IEC 61914:2009 Classification Clause | Units / Classification | Alpha Trefoil Cable Application Test Data |
|------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------------------------|---------------------------------------------|
| Cleat Type | 6.1, 6.1.1 | Metallic or Composite | - |
| Impact Resistance | 6.3, 6.3.5, 9.2 | Very Heavy Classification (5.0kg @ 400mm) | Pass |
| Resistance to Electromechanical Force. (Undertaken at Damstra Laboratories NL). | 6.4, 6.4.3, 9.5 | kA @ 600mm Centres (withstanding one short circuit) | 96 (Peak) (Report No. PDL-06.137.1.1) |
| Resistance to Electromechanical Force. (Undertaken at Damstra Laboratories NL). | 6.4, 6.4.4, 9.5 | kA @ 600mm Centres (withstanding more than one short circuit) | 72.4 (Peak) (Report No. PDL-07.161.1) |
| Temperature for Permanent Application | 6.2 | °C | -40 to 90 (60 for polymeric base version) |
| Needle Flame Test | 10.0, 10.1 | Application Time (seconds) | >120 |
| Lateral Load Test | 9.3 | Newtons (N) | Refer to Ellis Patents for further details. |
| Axial Movement Test | 9.4 | Newtons (N) | 400 |



London Underground

The Alpha Cable Cleats are compliant with the requirements of London Underground Standard 1-085. Product Register No. 360.

