

Constrictor® Textile Rope Clutch

Unlike conventional clutches the Constrictor® system does not crush the rope between two metal surfaces. Instead, the loaded rope is held securely in a textile sock, itself attached to an anchor base. The rope runs freely through the sock in one direction, but is gripped instantly within the sock when running out in the opposite direction. This patented “constrictor effect”, provides increasing holding power as the load increases.

Stronger and Lighter

Twice the holding power and a third of the weight of conventional rope clutches.

No Line Abrasion or Rupture

The textile sock closes like an octopus on the line. The extraordinary grip is the result of fibre-to-fibre contact that is far less aggressive than a traditional metal cam, but much more effective

Release Under Load

The line can easily and safely be released under load without the use of a winch, simply by pulling the lanyard.

Remote Release

The Dyneema® lanyard can be extended to offer remote release; to reduce spar compression and minimise halyard creep.

Anatomy of the Constrictor®

Bi-Conical Titanium Base

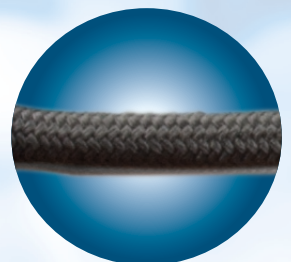
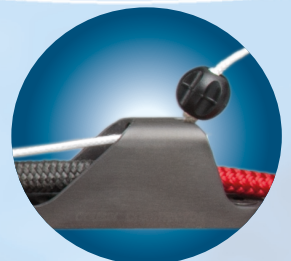
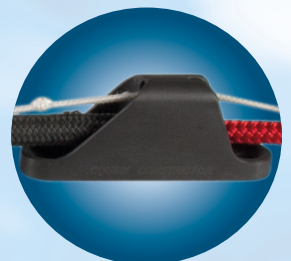
The patented textile sock element is locked in place between a titanium ring and the anchor base. The unique conical geometry allows easy insertion of the rope, and ensures that the sock is perfectly integrated with the anchor base in supporting the applied load.

Opening System

Pulling on the SK75 Dyneema® lanyard retracts the sock, relaxing the grip on the rope and allowing it to run freely in either direction. The lanyard can be fixed in the open position using the V-notch in the anchor base.

Textile Sock

- **Braid Orientation:** COUSIN Trestec's experience and expertise in rope manufacture has guided development of the critical braiding angle to maximise grip and minimise slippage.
- **Fibre Assembly:** Extensive knowledge of fibres combined with laboratory and field testing has resulted in an optimal fibre balance and density for unmatched strength.
- **Treatment:** A specialised surface treatment plays a critical role in extending the product life, boosting grip and reducing abrasion in stress areas.

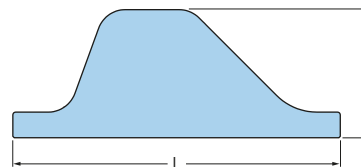
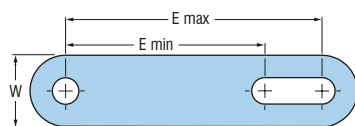


Constrictor® Textile Rope Clutches



- ✓ twice the holding power of conventional clutches.
- ✓ Three times lighter than conventional clutches.
- ✓ No line abrasion or rupture.
- ✓ Safe and easy release under load.
- ✓ Halyard and control applications on boats to 20m (65 ft).

- 🔩 Cast aluminium alloy anchor base
- 🔩 Titanium locking ring.
- 🔩 SK75 Dyneema® release lanyard.
- 🔩 Aramid sock.



| PRODUCT No. | DESCRIPTION | B.L.* | | W | L | H | Sock Length | E min | E max | Weight | B.L.* | | L | H | Sock Length | E min | E max | Weight |
|-------------|------------------------|-------|----|-----|----|-----|-------------|-------|-------|--------|-------|--------|-------|----------|-------------|-------|-------|--------|
| | | kg | mm | | | | | | | | lb | in. | | | | | | |
| CT306P001 | Constrictor 6 (1/4") | 1150 | 25 | 115 | 45 | 450 | 70 | 90 | 150 | 2600 | 1 | 4 9/16 | 4 1/2 | 17 3/4 | 2 3/4 | 3 1/2 | 5.3 | |
| CT308P001 | Constrictor 8 (5/16") | 1800 | 25 | 115 | 45 | 500 | 70 | 90 | 155 | 4050 | 1 | 4 9/16 | 4 1/2 | 19 11/16 | 2 3/4 | 3 1/2 | 5.4 | |
| CT310P001 | Constrictor 10 (3/8") | 2100 | 25 | 115 | 45 | 500 | 70 | 90 | 160 | 4720 | 1 | 4 9/16 | 4 1/2 | 19 11/16 | 2 3/4 | 3 1/2 | 5.6 | |
| CT312P001 | Constrictor 12 (1/2") | 3500 | 36 | 126 | 58 | 650 | 70 | 90 | 330 | 7870 | 1 3/8 | 5 | 5 | 25 9/16 | 2 3/4 | 3 1/2 | 11.6 | |
| CT314P001 | Constrictor 14 (9/16") | 4350 | 36 | 126 | 58 | 650 | 70 | 90 | 340 | 9780 | 1 3/8 | 5 | 5 | 25 9/16 | 2 3/4 | 3 1/2 | 12.0 | |

*For nominal rope diameter

Suitable for models CTP306P001, CTP308P001, CTP310P001, CTP312P001 & CTP314P001

Equipment Required

- Permanent Marker
- Drill
- Drill bit; 8mm (5/16") or 12mm (1/2")
- Brush
- Marine-grade sealant
- Spanner (to suit nuts)
- Screwdriver (to suit screws)
- Countersunk screws 2 x M8 (5/16") for the CT306, CT308 & CT310 or, 2 x M12 (1/2") for the CT312 & CT314
- 2 x flat washers
- 2 x lock nuts to suit screws
- Low stretch cord (pre-tensioner)
- Splicing fid to suit diameter of rope to be used in the Constrictor®

Method

- 1 Place Constrictor® base in the desired mounting location.



- 2 Mark where the holes are to be drilled.

If not using an existing fastening hole within the slotted area, position the new mounting hole so as to maximise the distance between the mounting screws.



- 3 Remove the base from the marked drill holes.



INSTALLATION INSTRUCTIONS

- 4 Drill the marked holes with 8mm (5/16") drill bit for CT306/CT308/CT310 models or, the 12mm (1/2") drill bit for CT312/CT314 models.



- 5 Clear away any debris from area after drilling.



- 6 Apply sealant to the drilled holes.

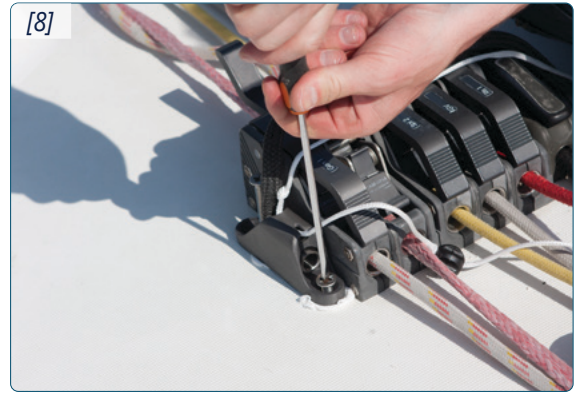


- 7 Place the Constrictor® base on the holes, avoiding contact between the textile sleeve and fresh sealant.



INSTALLATION INSTRUCTIONS

8 Affix the Constrictor® base with the screws, using the screwdriver to push the screws through the mounting surface.

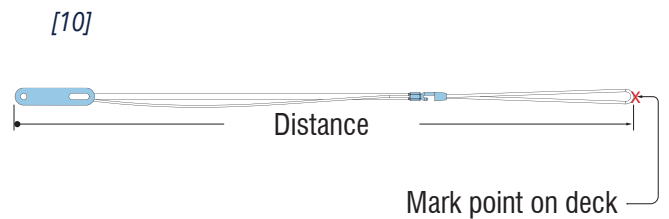


9 Place washers and nuts onto the screws and tighten the lock nuts, with the screwdriver in place above deck.



10 Mark a point on the deck directly in line with the Constrictor® as shown in the diagram, using the distance shown in the table below.

| PRODUCT No. | DISTANCE mm | DISTANCE in. |
|-------------|-------------|--------------|
| CT306P001 | 1000 | 39 3/8 |
| CT308P001 | 1085 | 42 |
| CT310P001 | 1085 | 42 |
| CT312P001 | 1210 | 47 5/8 |
| CT314P001 | 1210 | 47 5/8 |



11 Tie one end of the pre-tensioning cord to the elastic loop. Pull the cord to extend the elastic loop until it reaches the spot marked on the deck in step 10. Tie off the other end of the pre-tensioning cord to a suitable fixed point so as to maintain the tension on the Constrictor® sleeve.



INSTALLATION INSTRUCTIONS

12 Feed the intended line or halyard into the textile sleeve using the splicing fid.



13 Thread the rope through the entire length of the textile sleeve until it comes out the other end of the body.



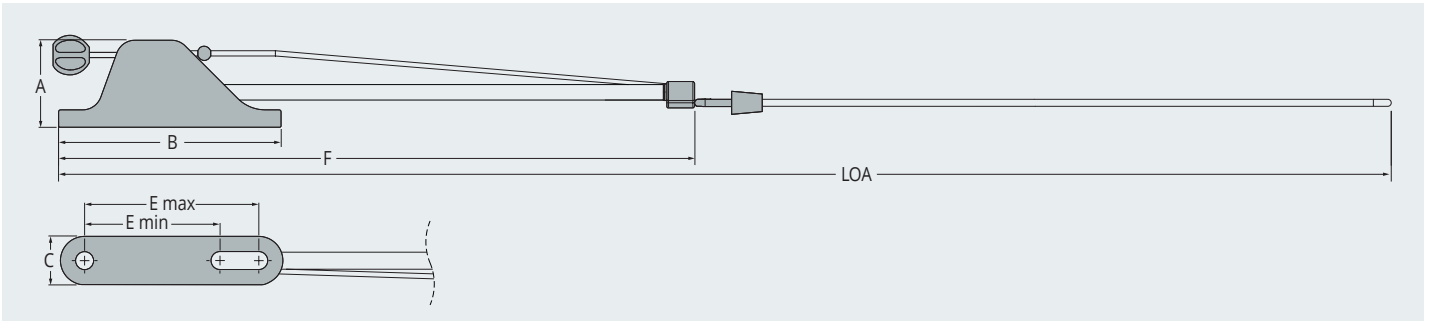
14 Hook the elastic loop to the end of the textile sleeve. This pre-tension on the sleeve helps to ensure a positive initial grip when transferring the load on the line or halyard from the winch to the Constrictor®. Manually "milking" the textile sleeve in the direction of the load prior to releasing from the winch will minimise movement of the line as the load is taken up by the Constrictor®.



15 The Constrictor® is now ready for use.



INSTALLATION INSTRUCTIONS



| PRODUCT No. | ROPE SIZES | B.L.*1 kg | A mm | B mm | C mm | E MIN. mm | E MAX. mm | F mm | L.O.A.*2 mm | WEIGHT g | B.L.*1 lb | A in | B in | C in | E MIN. in | E MAX. in | F in | L.O.A.*2 in | WEIGHT oz |
|-----------------------------|--------------|--------------|---------|---------|---------|--------------|--------------|---------|----------------|-------------|--------------|---------|---------|---------|--------------|--------------|---------|----------------|--------------|
| With Alloy Base Unit | | | | | | | | | | | | | | | | | | | |
| CT306P001 | 5mm (3/16") | 460 | 45 | 115 | 25 | 70 | 90 | 588 | 1000 | 150 | 1010 | 1 3/4 | 4 9/16 | 1 | 2 3/4 | 3 1/2 | 23 5/32 | 39 3/8 | 5.3 |
| | 6mm (1/4") | 750 | | | | | | | | | 1670 | | | | | | | | |
| CT308P001 | 6mm (1/4") | 710 | 45 | 115 | 25 | 70 | 90 | 638 | 1085 | 155 | 1560 | 1 3/4 | 4 9/16 | 1 | 2 3/4 | 3 1/2 | 25 1/8 | 42 23/32 | 5.4 |
| | 8mm (5/16") | 1170 | | | | | | | | | 2570 | | | | | | | | |
| CT310P001 | 8mm (5/16") | 1220 | 45 | 115 | 25 | 70 | 90 | 638 | 1085 | 160 | 2680 | 1 3/4 | 4 9/16 | 1 | 2 3/4 | 3 1/2 | 25 1/8 | 42 23/32 | 5.6 |
| | 10mm (3/8") | 2240 | | | | | | | | | 4920 | | | | | | | | |
| CT312P001 | 10mm (3/8") | 1530 | 58 | 126 | 36 | 70 | 90 | 787 | 1210 | 330 | 3360 | 2 1/4 | 5 | 1 3/8 | 2 3/4 | 3 1/2 | 31 | 47 5/8 | 11.6 |
| | 12mm (1/2") | 2850 | | | | | | | | | 6270 | | | | | | | | |
| CT314P001 | 12mm (1/2") | 1830 | 58 | 126 | 36 | 70 | 90 | 787 | 1210 | 340 | 4020 | 2 1/4 | 5 | 1 3/8 | 2 3/4 | 3 1/2 | 31 | 47 5/8 | 12.0 |
| | 14mm (9/16") | 3770 | | | | | | | | | 8290 | | | | | | | | |

*1 For nominal rope diameter.

*2 Minimum total deck length required for installation. Includes Constrictor® alloy base unit, textile sleeve and elastic loop.