

Furler System Information

The furler you have purchased is designed for the furling of sails with a “straight” luff, such as code zero sails, screechers or staysails. These sails are generally for sailing at true wind angles less than 90°. The furler is designed to have the tack of the sail attached to the furler and the head of the sail attached to the top swivel. This will provide furling along the entire length of the luff.

With the addition of a Top Down Adapter (TDA), soft luff and full mid-section sails such as reachers and gennakers can be furled. These sails are generally for sailing at true wind angles of greater than 90°. The top-down furler is designed to have the tack of the sail attached to the “floating” swivel collar on the TDA unit, and the head of the sail attached to the top swivel. Furling begins at the top of the sail and continues progressively from the head down to the tack.

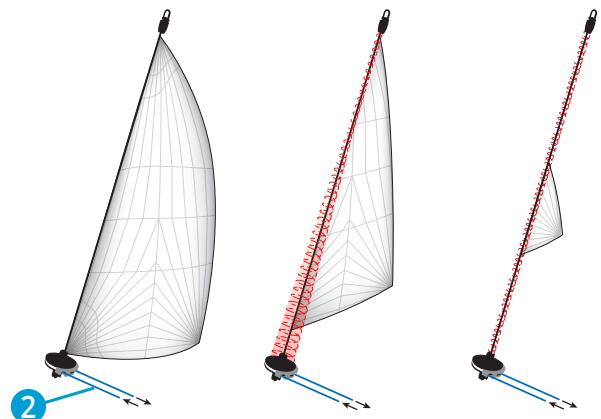
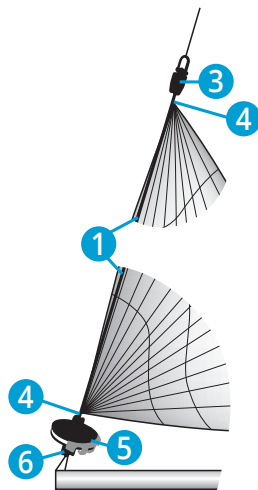
For both of these two options the sail must be either completely unfurled or completely furled – the furler cannot be used with a partially furled sail.

You will require a synthetic luff cable (torsion line) with a thimble at each end, connected between the fork of the furler at the bottom and the swivel at the top. We recommend you discuss options with your sail maker for torsion line type, diameter and length, to suit your requirements.

Ronstan provides a range of accessories to suit this furler which can be found at the end of this manual.

FURLER SETUP – STRAIGHT LUFF SAILS:

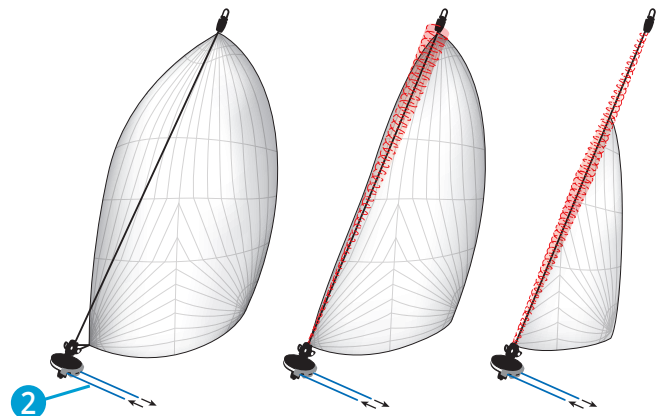
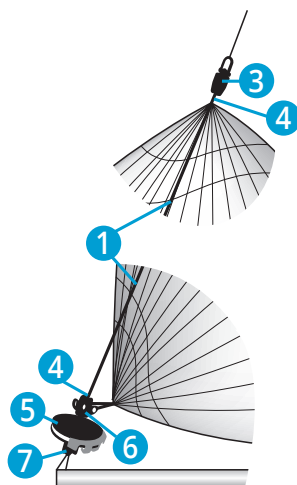
- 1 Torsion rope
- 2 Continuous Furling Line
- 3 Top Swivel
- 4 Thimble
- 5 Furler
- 6 Shackle or 3:1 fairlead



As furling drum rotates, sail furls around the luff cable along its entire length.

FURLER SETUP – SOFT LUFF SAILS:

- 1 Torsion rope
- 2 Continuous Furling Line
- 3 Top Swivel
- 4 Thimble
- 5 Furler
- 6 Top Down Adapter (Tack Attachment)
- 7 Shackle or 3:1 fairlead



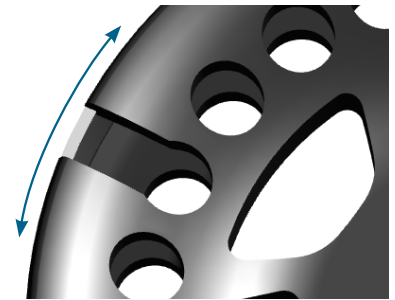
As furling drum rotates, the tack remains stationary on the “floating” collar. The torsion rope turns the top swivel, furling the sail from the top down.

CONTINUOUS FURLING LINE INSTALLATION & REMOVAL

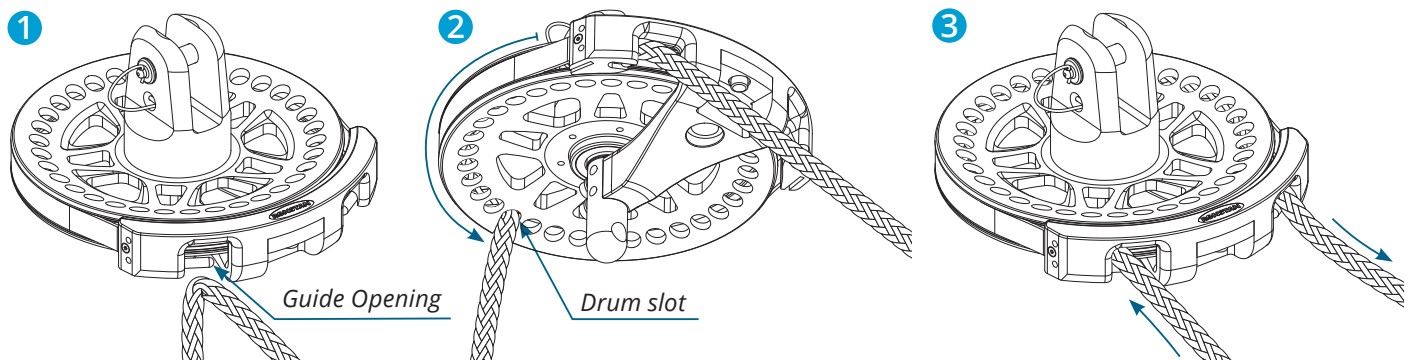
The furling line can be easily loaded and removed from the furler, for installations where the furling line is permanently routed back to the cockpit through blocks or fairleads.

The Series 280 furler is optimised for use with 12mm (1/2") rope. Rotate the drum to align the slot in the bottom plate of the drum with the guide opening.

- 1 Push the rope through the guide opening and deep in to the slot until the rope is in the hole.
- 2 Rotate the drum all the way around until the slot lines up with the guide opening on the other side of the guide.
- 3 Pull the rope out through the guide opening.

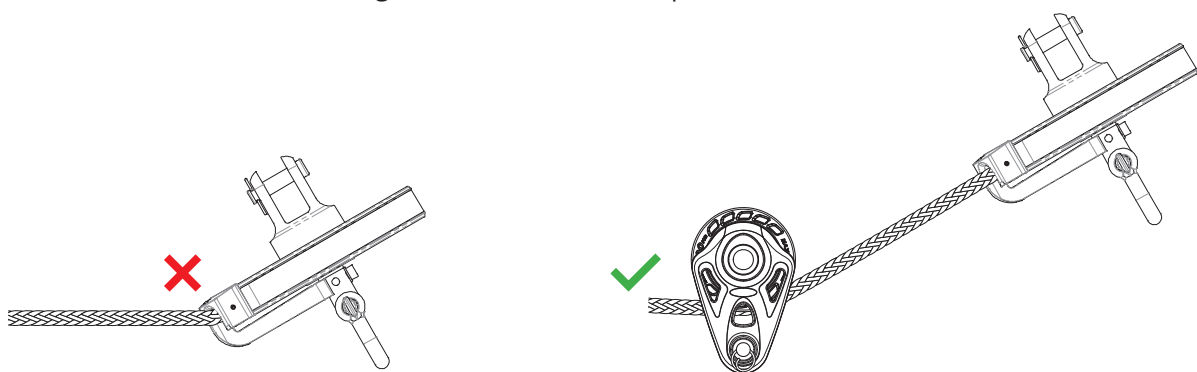


Drum slot



FURLING LINE ALIGNMENT

It is important that the furling line is correctly aligned with the guide as shown below. Blocks or fairleads should be used to guide the line where required.



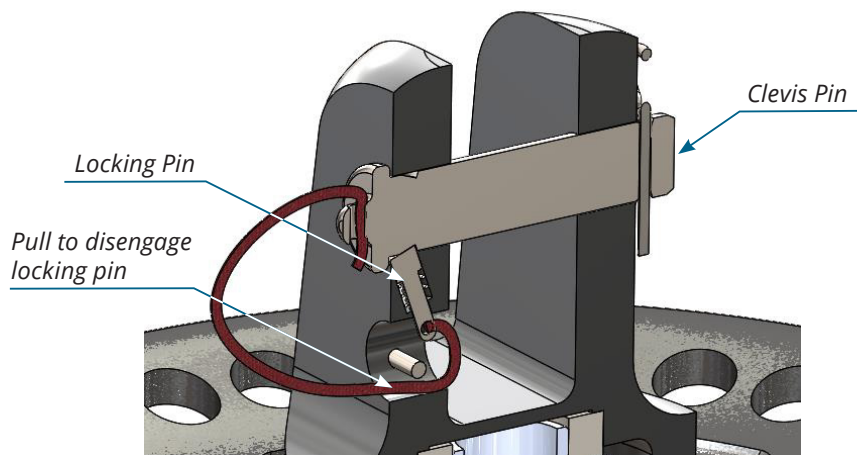
The furling line can be cleated to keep the sail from unfurling.

OPERATION OF THE FAST PIN

Series 280 furlers and accessories feature a “fast pin” feature for rapid connection and disconnection of furling components.

Pull the release cord from the base of the hole to disengage the locking pin and allow the clevis pin to be pulled back. The locking pin will then engage again to prevent accidental loss of the clevis pin. To secure the clevis pin again, pull the release cord to release the locking pin and simply push the clevis pin in until it locks.

An R-clip is supplied with all fast pins, and should be used to provide additional security for semi-permanent connections.

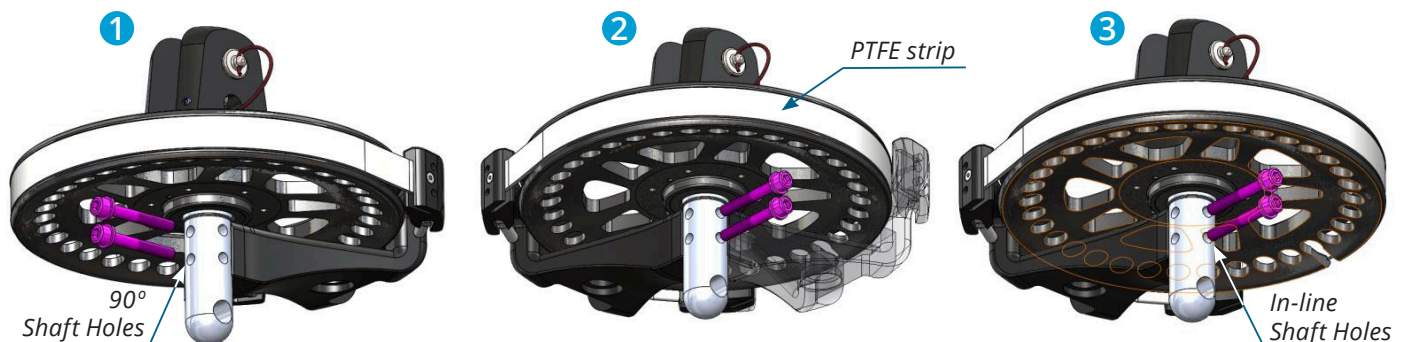


GUIDE ARM ALIGNMENT

The guide arm can be positioned in-line or at 90 degrees to correctly align the furler with the deck or bowsprit attachment.

To change the orientation of the guide arm:

- 1 Remove the screws located in the guide arm underneath the drum.
- 2 Rotate the guide arm and PTFE strip 90° until the holes in the guide arm lines up with the alternate holes in the shaft.
- 3 Re-connect the guide arm to the shaft using the same screws.



TACK ATTACHMENT

The tack of the sail is attached to the floating collar by means of lashing through the three holes as shown. This ensures an even load distribution on the collar and therefore effective free swivelling.

The offset nature of the three lugs and holes helps to keep the tack clear of the rotating torsion rope during furling.



ACCESSORIES

RS228010 – Top Swivel

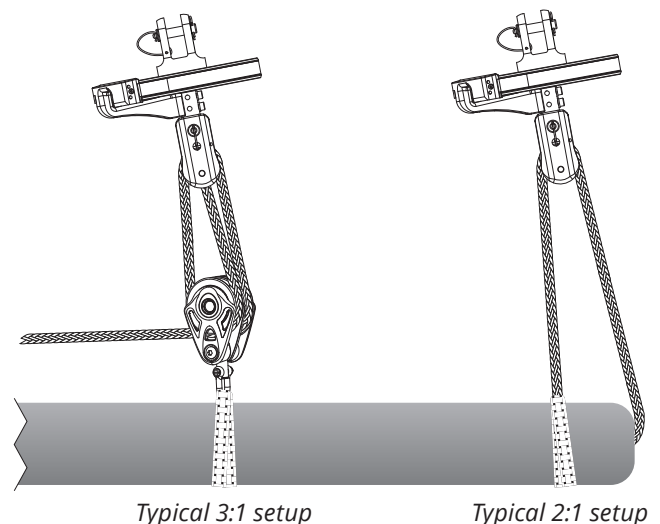
The top half of the continuous line furling system, the top swivel is matched to furler load rating and the fork is designed for use with our dedicated torsion line thimble. It features a fork/fork configuration for direct halyard soft eye attachment, retained pins and a fast pin to facilitate easy changeover of sails sharing a common furler set.

RS228030 - 3:1 Fairlead

Use in place of the shackle on the furler to provide a 3:1 or 2:1 purchase on the furler attachment.

For a 3:1 purchase the tack line is dead ended on the becket point located on the fairlead. The rope then runs down to the bowsprit around a sheave and then up and over the fairlead. Finally the rope then feeds back down to a second sheave and back along the deck to a clutch.

Alternatively the fairlead can be setup as a 2:1 purchase with the tack line dead ended at the bowsprit and running up and over the fairlead, back down to the end of the bowsprit and then back to a clutch. The becket point can then be used for a pullback line to assist with peeling between different furled sails.



RS228040 – Thimble

Used to terminate the torsion rope at both ends by wrapping the torsion rope around the thimble and then either stitching it to itself, or splicing it. The thimble also has an additional hole for lashing the tack or head of the sail. Lashing the sail to the thimble and not to the furler allows the torsion line and sail to be easily removed from the furler and top swivel as required.

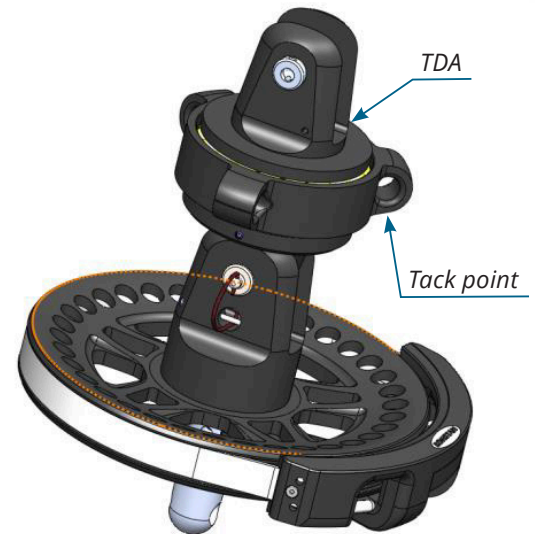
RS020050R – HR Shackle

Replacement shackles can be ordered to suit the furler.

RS228060 – Top Down Adapter

With the addition of a Top Down Adapter (TDA), soft luff and full mid-section sails such as coded asymmetrics, reachers and gennakers can be furled. These sails are generally for sailing at true wind angles of greater than 90°. The top-down furler is designed to have the tack of the sail attached to the “floating” swivel collar on the TDA, and the head of the sail attached to the top swivel. Furling begins at the top of the sail and continues progressively from the head down to the tack.

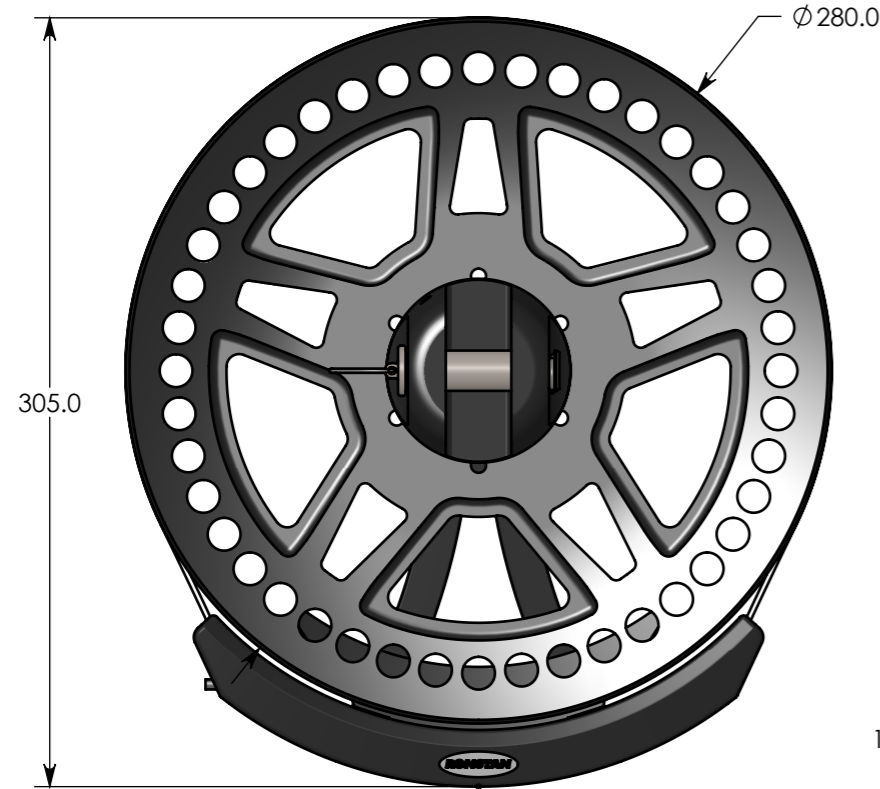
To install the TDA simply remove the “fast pin” from the furler and insert the TDA between the forks. Push the fast pin back into place to secure. Having a separate TDA allows the sail to be permanently attached to the TDA. The TDA and sail can then be removed from the furler and the furler can then be used with other sails.



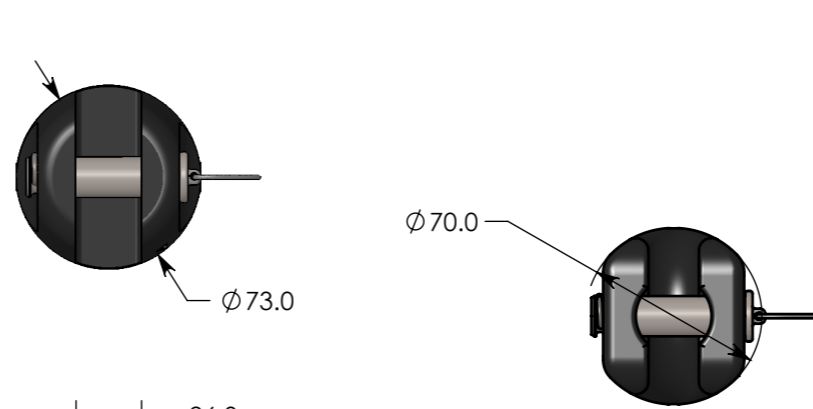
MAINTENANCE

- Rinse regularly with fresh water to remove salt.
- Apply Ronstan RF3000 Sailfast™ (or a similar silicon based lubricant) over the body and components to enhance performance and prolong service life. (Do not use petro-chemical lubricants).
- Periodically remove fasteners and re-apply Tef-Gel® (TG-10) to prevent corrosion.
- Factory sealed bearings are maintenance free. Bearing and seal replacement can be arranged through your local Ronstan re-seller.
- Furlers have a three year warranty – refer to www.ronstan.com for terms and conditions.

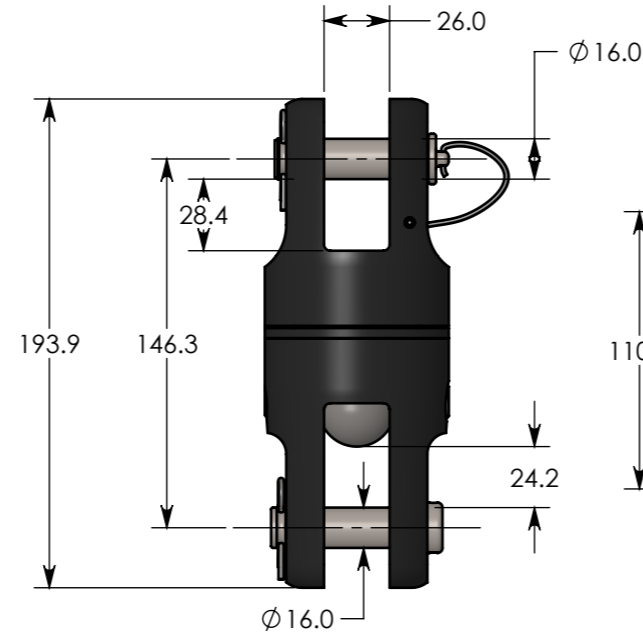
*Tef-Gel® is a registered trademark of Ultra Safety Systems Inc.
 Sailfast™ is a trademark of Ronstan International Pty. Ltd.*



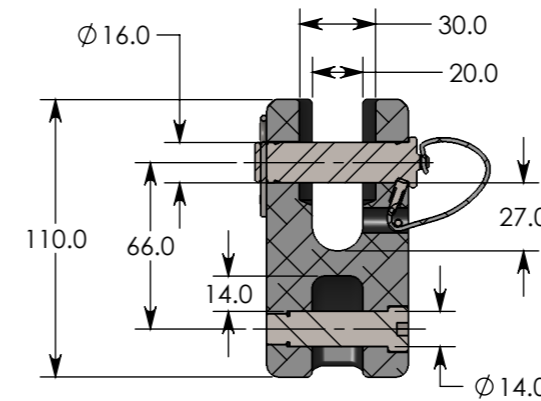
**FURLER
RS228000**



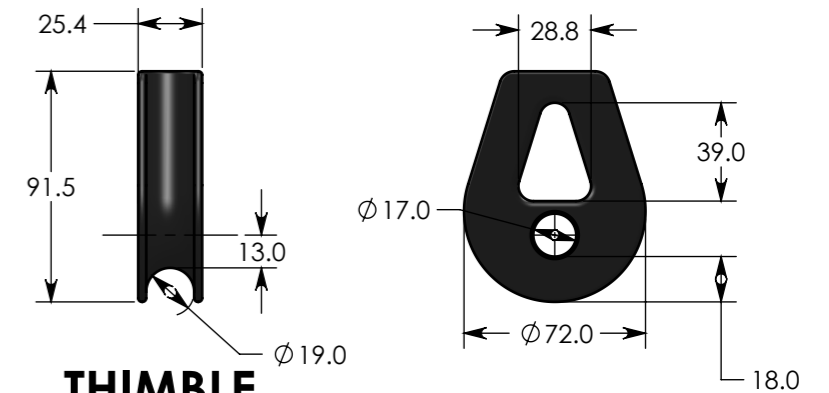
**TOP SWIVEL
RS228010**



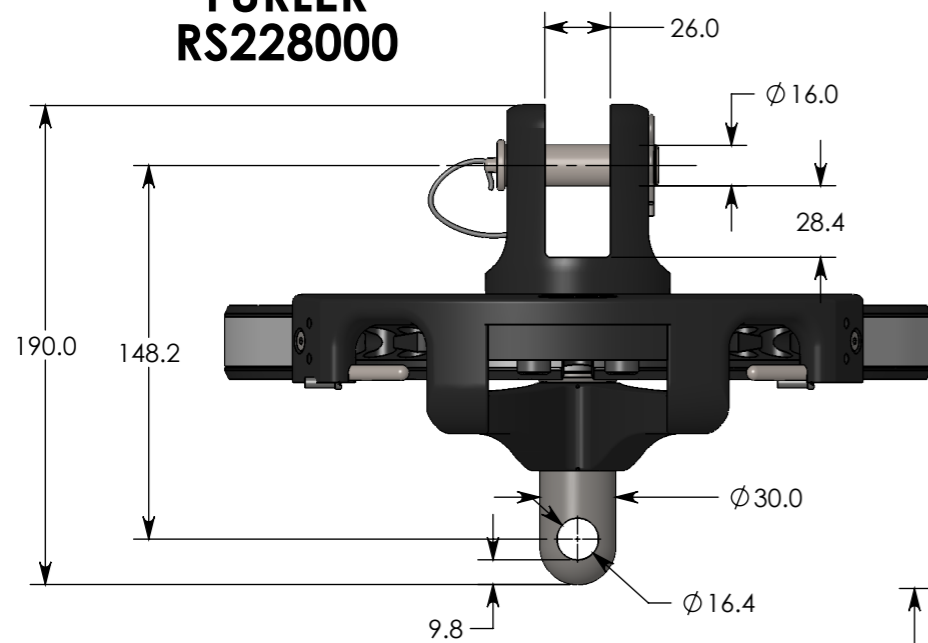
**3:1 FAIRLEAD
RS228030**



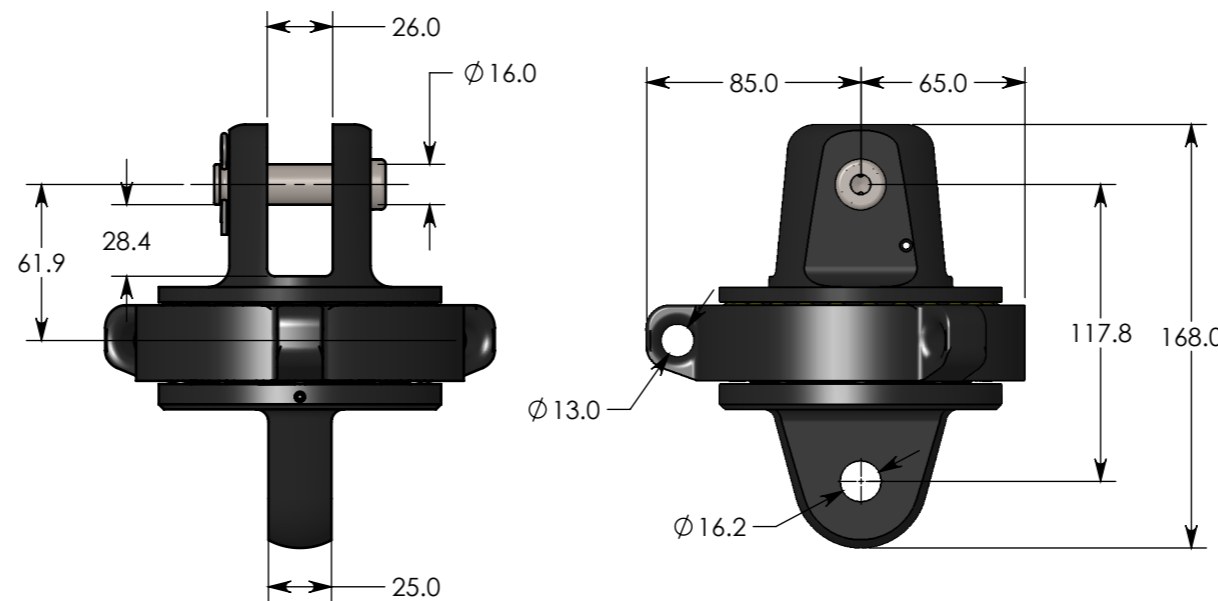
**TOP DOWN ADAPTER
RS228060**



**THIMBLE
RS228040**



**HR SHACKLE
RS020050R**



SPECIFICATIONS: SERIES 280 FURLERS

FURLER RS228000
 MWL = 8000KG (17630lb)
 BREAKING LOAD = 16000KG (35270lb)
 WEIGHT = 3250g (114.6oz)
 FURLER LINE = 12mm (1/2")

TOP SWIVEL RS228010
 MWL = 8000KG (17630lb)
 BREAKING LOAD = 16000KG (35270lb)
 WEIGHT = 1750g (61.7oz)

TOP DOWN ADAPTER RS228060
 MWL (ROTATING COLLAR) = 5000KG (11020lb)
 MWL (CLEVIS PINS) = 8000KG (17630lb)
 BREAKING LOAD = 16000KG (35270lb)
 WEIGHT = 2000g (71oz)

3:1 FAIRLEAD RS228030
 MWL = 8000KG (17630lb)
 BREAKING LOAD = 16000KG (35270lb)
 WEIGHT = 800g (28.2oz)

THIMBLE RS228040
 WEIGHT = 164g (5.8oz)
 MATERIAL = ALUMINIUM 6061

HR SHACKLE RS020050R
 BREAKING LOAD = 19000KG (41800lb)
 WEIGHT = 470g (16.6oz)

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