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2013 SAILBOAT HARDWARE CATALOGUE

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It is no secret that the sailing industry has had its challenges over the past few years. But as they say, *When the going gets tough the tough get going*, and this catalogue bears testament to this philosophy, with an enormous amount of progress in evidence from Ronstan. Our most significant development since our last full line catalogue has been the addition of Andersen winches. They are showcased here in all their high quality, polished stainless steel glory.

Another major development at Ronstan has been the investment in our new purpose built factory in Australia. It is from here, and from our factory in Denmark that most of the products on these 274 pages originate. 274 pages is, by the way, a record range offering for us.

Enjoy reading and using this latest Ronstan catalogue and we will continue to develop, innovate and provide you with the world's best products and service.

Alistair Murray and the team at Ronstan

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"I love how light it is and how I can tie anywhere on the boat. It is amazing the difference just one of these blocks makes and perfect where weight is critical"

"Trimming is easier and really smooth. I like 'em!"

Mal Page/Mat Belcher - Current 470 World Champions,
Mal Page-Gold Medal Olympian, Beijing, 5 x 470 World Champion,
1 x Farr40 World Champion

Nathan Outteridge - 3 x 49er World Champion, Current
Moth World Champion, 3 x ISAF World Youth Titles,
AC45 Skipper/Helmsman-Team Korea



ORBITBLOCK™

Orbit Blocks™ represent the future of racing sailboat hardware. The choice of the world's best racing sailors, they offer a no-compromise solution.

Their flexible Dyneema® Link technology comes from the latest trends in development classes and grand prix ocean racing. The product of meticulous engineering, they deliver the ultimate in strength, weight saving, holding power and control.

Advanced fibre and polymer technology that is up to ten times stronger than steel delivers a product that is more compact and lighter too.

Through 3D modelling, Finite Element stress analysis and mould flow analysis, our engineers made sure that everything performs both in the laboratory and in the real world.

Months of on-water testing by elite sailors pushed the product to their limits. After further strengthening and fine-tuning, they're now ready for you to test for yourself.

"There's not much gear on a Laser that you can change. But when it comes with a Ronstan ratchet, why would you? I never sail without it."

Glenn Ashby - Silver medallist - Tornado, Beijing, 14 x World
Champion multihull classes, AC45 wing trimmer-Emirates Team NZ

"Where weight, speed and control is everything on a multihull, the Orbit blocks are awesome and super light and smooth to use under load. I have been really happy with them and they're standard deck gear of each and every A class I use and race."

Tom Slingsby - 4 x Laser World Champion - Rolex World
Sailor of the year 2010, AC45 tactician - Oracle Racing

BB Less Friction, Ultimate Performance

Ball Bearing Orbit Blocks™ boast the highest strength-to-weight ratio available. This is achieved through all-composite reinforced polymer materials and a Dyneema® rope link head. Their precision design allows the optimum number of ball bearings in loaded areas and eliminates them in inactive areas. Ineffective mass is reduced even further through fibre-reinforced composites in the block head, cleat arms and becket.

RT Less Fatigue, More Control

For two decades Ronstan has been making the world's best ratchet blocks. This continues with the current generation of Orbit Blocks™. They have the same superior holding power, but with superior rope wear performance. They're lighter, and the only ratchet blocks with both manual and full automatic modes*2. Control switches on both sides of the block remain accessible whether fitted on port or starboard side, and the NC-machined alloy sheave and simple mechanism ensures superb reliability and durability.

Lightweight

Kilogram for kilogram of working load, BB and RT Orbit Blocks™ are the world's lightest*1. To gain peak performance, we engineered out the heavy steel load straps, head post, full-length fasteners, and cleating accessories. Through extensive research and development, we replaced all possible metal components with high-tech polymers and fibre equivalents.

The unique BB block orbital design allows the bearing to only be in the active areas of the floating sheave. This minimises the mass of the inactive return race and hub.

Weight and bulk are further reduced in the different block configurations. Some models feature a through-sheave becket arrangement. The result? The lowest weight possible!

Multi-sheave blocks have only single intermediate cheeks and an ultra-light and efficient head arrangement. This gives a 30% weight saving advantage over the nearest competitor. Other brands just link together their single blocks. This results in unnecessary double cheeks between each sheave, held together by a heavy steel channel across the top of the block.

Highest working load in its class

The orbital ball-bearing arrangement gives the largest possible bearing race diameter. This maximises load performance. The proven Ronstan 2-stage bearing system features high compression grade Acetal ball bearings and a secondary full-contact bearing. This gives minimum friction across the full working load range.

The Dyneema® Link is produced from FSE Robline SK75 fibre, which is 10 times stronger and lighter than steel, and provides the final connection from the block to the load point.

Simple and secure attachment

The Dyneema® Link is easily fitted and is retained securely by a moulded retainer clip. The flexible link can be left with one end attached to the block when fitting - no more lost shackle pins.

The flexible Dyneema® Link provides lowest possible weight and profile with controlled rotation and 0° or 90° orientation. Stainless steel swivel shackle head models are also available for continuous rotation and ultimate durability.

High performance cleating

Both Ronstan BB and RT Orbit Blocks™ feature strong, lightweight fibre-reinforced cleat arms. They have a wide range of adjustment and calibration marks, perfect for selecting your preferred cleating angle settings. The race-proven carbon-fibre reinforced Ronstan C-Cleat™ give secure rope holding with low entry and exit efforts, and are fitted with fairleads for fast action from any angle.

Awesome ratchet block holding power

Quite simply, Ronstan Ratchet Orbit Blocks™ have the highest holding power available.

The sophisticated NC-machined sheave features Generation 2 of our patented sheave cross-hole geometry. Its holding power is up to 25:1*3, almost double that of our nearest competitor.

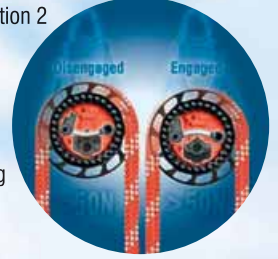
The unique sheave design has up to 12*3 gripping faces which directly resist loaded line movement.

Traditional designs have only 8 faces or less with an angled resistance to line movement. Our Generation 2 design has straight resistance faces which both distribute the load and minimise rope wear.

Automatic and manual ratchet in one block

Now you can enjoy the flexibility of setting up your ratchet blocks to suit yourself. Ronstan is the only company that offers a ratchet block with both auto and manual engagement modes*2. In auto mode, the ratchet mechanism engages when load is applied, but switches off when it's released. This lets the sheet run out smoothly and freely - great for rapid easing of the sheet and for gybing asymmetric spinnakers. In manual mode, the ratchet mechanism can be switched on or off as required - popular main for sheeting.

*1 Dyneema® Link models. *2 Selected Series 55 models. *3 Series 70 models.



Series 20 & 30

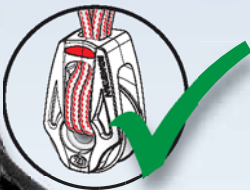
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RF25109

Includes
750mm 1.7mm
diam. lashing
cord

✓ Suits up to 4mm (5/32") lashing



30

Integrated becket



Use with RF1850S



RF35100
RF35100D



RF35202



RF35302



RF35101
RF35101D



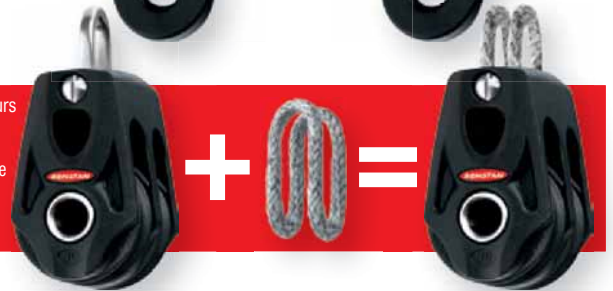
RF35212



RF35312



CONVERT The choice is yours when it comes to attachment. In a matter of seconds change from the stainless steel shackle to the incredibly light and flexible Dyneema® link for ultimate performance.



- ✓ RF35101 and RF35100 - Ultra low profile through-sheave becket
- ✓ Low friction 2-stage ball bearing system provides consistent performance over the full working load range
- ✓ RF35101 accepts RF1850S shackle in both orientations to create a conventional loop top block
- ✓ RF9003-07 Dyneema® link converts double and triple blocks to an ultra-light, high performance mode.
- ✓ "D" suffix blocks have a self-lubricating Nylatron® sheave and full contact bearing for high dynamic loads

- ✓ Mainsheet systems and spinnaker sheets on dinghies to 5m (16ft)
- ✓ Halyard, vang and backstay applications on boats to 5m (16ft)
- ✓ Control line applications
- ✓ Sheave: High compression strength carbon black Acetal
- ✓ Sheave - "D" suffix blocks: Self-lubricating Nylatron®
- ✓ Ball Bearings: High compression strength Acetal (RF25109 - stainless steel)
- ✓ Frame/Cheeks: Toughened Nylon (Series 30 - glass fibre reinforced)
- ✓ Link: UV stabilised, multi-strand impregnated SK75 Dyneema®

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing - Series 20											
RF25109	Series 20 Single, Dyneema® lashing, becket option, incl. 750mm (30") x 1.7mm (1/16") diam. lashing	20	6	250*1	550	9	3/4	1/4	550*1	1210	0.3
BB Ball Bearing - Series 30											
RF35100	Single, swivel shackle head, becket option	30	8	300	600	32	1 3/16	5/16	660	1320	1.1
RF35101	Single, lashing head, becket option	30	8	300	600	22	1 3/16	5/16	660	1320	0.8
RF35202	Double, non-swivel shackle head	30	8	450	900	56	1 3/16	5/16	990	1980	2.0
RF35212	Double, becket*2, non-swivel shackle head	30	8	450*3	900	57	1 3/16	5/16	990*3	1980	2.0
RF35302	Triple, non-swivel shackle head	30	8	550	1100	79	1 3/16	5/16	1210	2430	2.8
RF35312	Triple, becket*2, non-swivel shackle head	30	8	550*4	1100	81	1 3/16	5/16	1210*4	2430	2.9
Nylatron® Sheave/Bearing											
RF35100D	Single, swivel shackle head, becket option, Nylatron® sheave	30	8	300	600	31	1 3/16	5/16	660	1320	1.1
RF35101D	Single, lashing head, becket option, Nylatron® sheave	30	8	300	600	21	1 3/16	5/16	660	1320	0.7

*1 Block must be lashed through hub. The supplied Lashing line must have 3 passes through head and hub to achieve rated load.

M.W.L. & B.L. are dependent on the strength of lashing. Knots, splices, stitching will generally have a lower B.L. than the line itself.

*2 Becket suits up to 6mm (1/4") line. For lines above 6mm (1/4") use an additional Dyneema® link (sold separately)

*3 Total block load. Load on becket not to exceed 31% of block load. i.e. M.W.L. 140kg (310lb), B.L. 280kg (610lb). Suitable for 4:1 system at rated block load.

*4 Total block load. Load on becket not to exceed 25% of block load. i.e. M.W.L. 140kg (310lb), B.L. 280kg (610lb). Suitable for 6:1 system at rated block load.



- ✓ RF35322 & RF35332 - Composite C-Cleat and fairlead
- ✓ RF35151 - Recessed underside to suit curved mounting surface
- ✓ RF35286 - Stainless steel ring OD 40mm (1 1/2\"), 5mm (3/16\") bar material
- ✓ Multi-sheave blocks feature single intermediate cheeks and an ultra-light and efficient head arrangement (no heavy metal channel piece)
- ✓ Mainsheet systems and spinnaker sheets on dinghies to 5m (16ft)
- ✓ Halyard, vang and backstay applications on boats to 5m (16ft)
- ✓ Control line applications on larger yachts
- ✓ Primary lead blocks on dinghies and catamarans
- ✓ Sheave: High compression strength carbon black Acetal
- ✓ Ball Bearings: High compression strength Acetal
- ✓ 2nd Stage Bearing: stainless steel hub
- ✓ Frame/Cheeks: Toughened, glass fibre reinforced Nylon

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RF35100A	Single, slotted head post, swivel shackle head, becket option	30	8	300	600	31	1 3/16	5/16	660	1320	1.1
RF35140	Stand up, swivel	30	8	300	600	33	1 3/16	5/16	660	1320	1.2
RF35141	Stand up	30	8	300	600	36	1 3/16	5/16	660	1320	1.3
RF35151	Cheek	30	8	300	600	21	1 3/16	5/16	660	1320	0.7
RF35284	Linked	30	8	300	600	46	1 3/16	5/16	660	1320	1.6
RF35286	Clew ring	30	8	300	600	63	1 3/16	5/16	660	1320	2.2
RF35322	Triple, cleat, non-swivel shackle head	30	8	550* ⁴	1100	130	1 3/16	5/16	1210* ⁴	2430	4.6
RF35332	Triple, becket* ² , cleat, non-swivel shackle head	30	8	550* ^{3&4}	1100	132	1 3/16	5/16	1210* ^{3&4}	2430	4.7

Spare Parts & Conversion Accessories

PRODUCT No.	DESCRIPTION	BLOCKS SUITED
RF1849-2	Shackle, standard dee, 5mm (3/16\") hole* ¹ , 2 pack	Suits RF35202, RF35212, RF35302, RF35312, RF35322, RF35332
RF1850S-2	Shackle, wide dee, 1/8\" slotted pin, 2 pack	Suits RF35101, RF35101D (allows 0 or 90 degree orientation)
RF9003-07	Dyneema® link to suit S30 BB double & triple Orbit Blocks™	Suits RF35202, RF35212, RF35302, RF35312, RF35322, RF35332

*1 No internal thread.

*2 Becket suits up to 6mm (1/4\") line. For lines above 6mm (1/4\") use an additional Dyneema® link (sold separately).

*3 Total block load. Load on becket not to exceed 25% of block load. i.e. M.W.L. 140kg (310lb), B.L. 280kg (610lb). Suitable for 6:1 system at rated block load. *4 Line load through cleat not to exceed 125kg (280lb).

Series 40



- ✓ Single inner cheeks on doubles and triples for reduced weight and bulk.
- ✓ RF45110 & RF45111 - Ultra low profile integrated becket.
- ✓ RF45110 - Stainless steel shackle head for unlimited block rotation, ultimate durability and compatibility with harsh fixing points.

- ✓ Mainsheet systems and spinnaker sheets on dinghies to 5m (16ft).
- ✓ Halyard, vang and backstay applications on boats to 8m (26ft).
- ✓ Control line applications on larger yachts.
- ✓ Rope Link: UV stabilised, multi-strand impregnated SK75 Dyneema®.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RF45101	Single, Dyneema® link head	40	9	325	700	33	1 9/16	5/16	715	1540	1.2
RF45110	Single, becket, swivel shackle head	40	9	325* ¹	650	44	1 9/16	5/16	715	1430	1.6
RF45111	Single, becket, Dyneema® link head	40	9	325* ¹	700	36	1 9/16	5/16	715* ¹	1540	1.3
RF45130	Single, becket, adjustable cleat, swivel shackle head	40	9	325* ^{1&4}	700	105	1 9/16	5/16	715* ^{1&4}	1540	3.7
RF45131	Single, becket, adjustable cleat, Dyneema® link head	40	9	325* ^{1&4}	700	98	1 9/16	5/16	715* ^{1&4}	1540	3.5
RF45201	Double, Dyneema® link head	40	9	500	1000	67	1 9/16	5/16	1100	2200	2.4
RF45211	Double, becket, Dyneema® link head	40	9	500* ²	1000	72	1 9/16	5/16	1100* ²	2200	2.5
RF45301	Triple, Dyneema® link head	40	9	650	1350	98	1 9/16	5/16	1430	2970	3.5
RF45311	Triple, becket, Dyneema® link head	40	9	650* ³	1350	105	1 9/16	5/16	1430* ³	2970	3.7

*1 Total block load. Becket MWL 125kg (275lb), BL 250kg (550lb). Suitable for 3:1 system at rated block load.

*2 Total block load. Becket MWL 125kg (275lb), BL 250kg (550lb). Suitable for 4:1 system at rated block load.

*3 Total block load. Becket MWL 225kg (495lb), BL 450kg (990lb). Suitable for 6:1 system at rated block load.

*4 Line load through cleat not to exceed 125kg (275lb).



- ✓ RF45151 - Recessed underside suits flat or curved mounting surface.
- ✓ RF45511 & RF45531 - Lightweight integrated Dyneema® becket link.
- ✓ RF45131, RF45521 & RF45531 - Composite C-Cleat and fairlead.
- ✓ Spinnaker sheets on dinghies, sportsboats and small keel boats to 5m (16ft).

- ✓ Sheave: Carbon fibre reinforced, PTFE impregnated Nylon.
- ✓ Ball Bearings: High compression strength carbon black Acetal.
- ✓ Stage 2 Bearing: Glass fibre reinforced, MoS₂ impregnated Nylon.
- ✓ Frame/Cheeks: Toughened, glass fibre reinforced Nylon.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RF45140	Stand-up, becket, swivel	40	9	325	700	54	1 9/16	5/16	715	1540	1.9
RF45151	Cheek	40	9	325	700	32	1 9/16	5/16	715	1540	1.1
RF45501	Fiddle* ¹ , Dyneema® link head	40 + 22	9	325	700	47	1 9/16 + 7/8	5/16	715	1540	1.7
RF45511	Fiddle* ¹ , becket, Dyneema® link head	40 + 22	9	325	700	48	1 9/16 + 7/8	5/16	715	1540	1.7
RF45521	Fiddle* ¹ , adjustable cleat, Dyneema® link head	40 + 22	9	325* ²	700	108	1 9/16 + 7/8	5/16	715* ²	1540	3.8
RF45531	Fiddle* ¹ , becket, adjustable cleat, Dyneema® link head	40 + 22	9	325* ²	700	109	1 9/16 + 7/8	5/16	715* ²	1540	3.8
Accessories											
RF4	Swivel shackle base. Suits Series 40 & 55 Orbit Block™ Dyneema® links. 4.8mm (3/16") diam. pin	-	-	250	500	30	-	-	550	1100	1.1
RF2454	Stand-up base, suits S40 BB & RT Orbit Blocks™	-	-	325	700	11	-	-	715	1540	0.4

*1 Small fiddle block sheave has a high load full contact bearing (i.e. not ball bearing). Main sheave has two-stage, ball bearing.

*2 Line load through cleat not to exceed 125kg (275lb).

Series 40



RF46100



RF46101



RF46102



RF46121



RF46100M



RF46111



RF46112



RF46131


RF615
4mm (5/32") pin, suits RF46100 & RF46100M


RF46151



RF46151A

2 x 4mm
(5/32")

- ✓ RF46100 & RF46100M - Stainless steel swivel shackle head for unlimited block rotation, ultimate durability and compatibility with harsh fixing points.
- ✓ RF46111, RF46112 & RF46131 - Integrated becket; no loose parts.
- ✓ RF46121 & RF46131 - Composite C-Cleat and fairlead.
- ✓ Dinghy mainsheet systems.
- ✓ Mainsheet fine tune systems on sportsboats & small keel boats.
- ✓ Mainsheet systems on sportsboats using RF7 mainsheet swivel cleat unit.

- ✓ Spinnaker and jib sheets on dinghies – especially modern asymmetric classes.
- ✓ Control line applications on larger yachts.
- ✓ RF46100 & RF46100M - swivel shackle head fitting: grade 316 stainless steel.
- ✓ Sheave: Hard anodised Aluminium.
- ✓ Ball Bearings: High compression strength carbon black Acetal.
- ✓ Frame/Cheeks: Toughened, glass fibre reinforced Nylon.
- ✓ Rope Link: UV stabilised, multi-strand impregnated SK75 Dyneema®.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
RT Ratchet											
RF46100	Single, auto, swivel shackle head	40	9	175	500	38	1 9/16	5/16	385	1100	1.3
RF46100M	Single, manual, swivel shackle head	40	9	175	500	38	1 9/16	5/16	385	1100	1.3
RF46101	Single, auto, Dyneema® link head	40	9	175	500	35	1 9/16	5/16	385	1100	1.2
RF46102	Single, manual, Dyneema® link head	40	9	175	500	35	1 9/16	5/16	385	1100	1.2
RF46111	Single, becket, auto, Dyneema® link head	40	9	175* ¹	500	41	1 9/16	5/16	385* ¹	1100	1.4
RF46112	Single, becket, manual, Dyneema® link head	40	9	175* ¹	500	41	1 9/16	5/16	385* ¹	1100	1.4
RF46121	Single, adjustable cleat, auto, Dyneema® link head	40	9	175* ²	500	95	1 9/16	5/16	385* ²	1100	3.4
RF46131	Single, becket, adjustable cleat, auto, Dyneema® link head	40	9	175* ^{1&2}	500	101	1 9/16	5/16	385* ^{1&2}	1100	3.6
RF46151	Cheek, clockwise, auto	40	9	175	500	36	1 9/16	5/16	385	1100	1.3
RF46151A	Cheek, anti-clockwise, auto	40	9	175	500	36	1 9/16	5/16	385	1100	1.3

*¹ Total block load. Becket MWL 160kg (350lb). BL 320kg (700lb). Suitable for 2:1 or 3:1 system at rated block load.

*² Line load through cleat not to exceed 125kg (275lb).

Series 40

Team Ronstan - Nathan Outteridge / Iain Jensen
Photo: Jeff Crow / Sport the Library



PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
Bases											
RF4	Swivel shackle base. Suits Series 40 & 55 Orbit Block™ Dyneema® links. 4.8mm (3/16") diam. pin	-	-	250	500	30	-	-	550	1100	1.1
RF2454	Stand-up base, suits S40 BB & RT Orbit Blocks™	-	-	325	700	11	-	-	715	1540	0.4

Spare Parts

PRODUCT No.	BLOCKS SUITED
Dyneema® Links	
RF9003-07	S40 BB & RT single & fiddle Orbit Blocks™ RF45101, RF45111, RF45131, RF45501, RF45511, RF45521, RF45531, RF46101, RF46102, RF46111, RF46112, RF46121, RF46131
RF9004-08	S40 BB double & triple Orbit Blocks™ RF45201, RF45211, RF45301, RF45311
Link Retainer Clips (2 pack)	
RF40001	S40 BB & RT single & fiddle Orbit Blocks™ RF45101, RF45111, RF45131, RF45501, RF45511, RF45521, RF45531, RF46101, RF46102, RF46111, RF46112, RF46121, RF46131
RF40002	S40 BB double & triple Orbit Blocks™ RF45201, RF45211, RF45301, RF45311

Series 55



RF55110



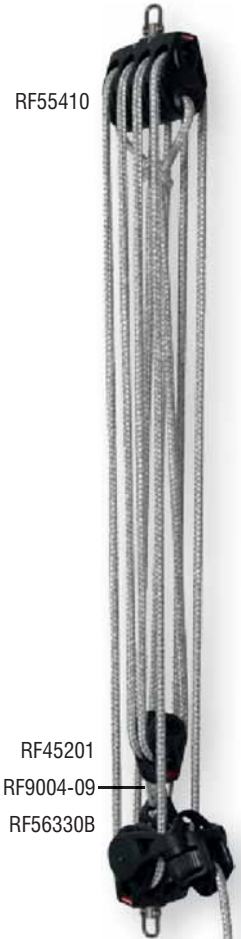
RF55210



RF55310



RF55410



RF55410

RF45201

RF9004-09

RF56330B

9:1 Mainsheet System

RF150
4.8mm (3/16") pin.

- ✓ Swivel shackle head for unlimited block rotation.
- ✓ Stainless steel shackle head for ultimate durability and compatibility with harsh fixing points.
- ✓ Single inner cheeks on multi-sheave blocks for reduced weight and bulk.
- ✓ Ultra low profile integrated becket.
- ✓ Mainsheet systems and spinnaker sheets on dinghies, catamarans, sportsboats and small keel boats to 9m (30ft).

- ✓ RF55410 when paired with a RF56330B and a RF45201 lashed to the becket with a RF9004-09, produces a powerful 9:1 mainsheet system for use on catamarans to 5.5m (18ft). 8mm (5/16) rope recommended.
- ✓ Halyard, vang and backstay applications on boats to 8m (26ft).
- ✓ Control line applications on larger yachts.
- ✓ Swivel shackle head fitting: grade 316 stainless steel.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RF55110	Single, becket, swivel shackle head	55	10	500*1	1000	88	2 5/32	3/8	1100*1	2200	3.1
RF55210	Double, becket, swivel shackle head	55	10	750*2	1500	172	2 5/32	3/8	1650*2	3300	6.1
RF55310	Triple, becket, swivel shackle head	55	10	750*2	1500	244	2 5/32	3/8	1650*2	3300	8.6
RF55410	Quad, becket, swivel shackle head	55	10	750*2	1500	316	2 5/32	3/8	1650*2	3300	11.2

*1 Total block load. Load on becket not to exceed 50% of block load. i.e. MWL 250kg (550lb), BL 500kg (1100lb). Suitable for 2:1 system at rated block load.

*2 Total block load. Load on becket not to exceed 33% of block load. i.e. MWL 250kg (550lb), BL 500kg (1100lb).

Series 55



Integrated becket

Low profile head

Team Ronstan - Mal Page / Mat Belcher, 470
Photo: Victor Kovalenko

- Single inner cheeks on doubles and triples for reduced weight and bulk.
- RF55111 - Ultra low profile integrated becket.
- Mainsheet systems and spinnaker sheets on dinghies, sportsboats and small keel boats to 9m (30ft).
- Halyard, vang and backstay applications on boats to 8m (26ft).
- Control line applications on larger yachts.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RF55101	Single, Dyneema® link head	55	10	500	1000	68	2 5/32	3/8	1100	2200	2.4
RF55111	Single, becket, Dyneema® link head	55	10	500*1	1000	75	2 5/32	3/8	1100*1	2200	2.6
RF55201	Double, Dyneema® link head	55	10	800	1600	134	2 5/32	3/8	1765	3520	4.7
RF55301	Triple, Dyneema® link head	55	10	1000	2000	205	2 5/32	3/8	2200	4410	7.2

*1 Total block load. Load on becket not to exceed 50% of block load. i.e. MWL 250kg (550lb), BL 500kg (1100lb). Suitable for 2:1 system at rated block load.

Series 55



RF55151

3 x 5mm (3/16")



RF55171

2 x 6mm (1/4")



RF55510



Integrated low profile Becket



RF55530



Adjustable cleat arms

RF150
4.8mm (3/16") pin.

- ✓ RF55530 - Composite C-Cleat™ and fairlead.
- ✓ Ultra low profile integrated becket.
- ✓ Swivel shackle head for unlimited block rotation.
- ✓ RF55151 - Recessed underside suits flat or curved mounting surface.
- ✓ Spinnaker sheets on dinghies, sportsboats and small keel boats to 9m (30ft).
- ✓ Halyard applications on boats to 8m (26ft).

- ✓ Control line applications on larger yachts.
- ✓ Sheave: Carbon fibre reinforced, PTFE impregnated Nylon.
- ✓ Ball Bearings: High compression strength carbon black Acetal.
- ✓ Stage 2 Bearing: Carbon fibre reinforced, PTFE impregnated Nylon.
- ✓ Frame/Cheeks: Toughened, glass fibre reinforced Nylon.
- ✓ Swivel shackle head fitting: grade 316 stainless steel.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RF55151	Cheek	55	10	500	1000	70	2 5/32	3/8	1100	2200	2.5
RF55171	Upright lead	55	10	500	1000	91	2 5/32	3/8	1100	2200	3.2
RF55510	Fiddle*1, becket, swivel shackle head	55 + 35	10	500	1000	101	2 5/32 + 1 3/8	3/8	1100	2200	3.6
RF55530	Fiddle*1, becket cleat, swivel shackle head	55 + 35	10	500*2	1000	237	2 5/32 + 1 3/8	3/8	1100*2	2200	8.4

*1 Small fiddle block sheave has a high load full contact bearing (i.e. not ball bearing). Main sheave has two-stage, ball bearing.

*2 Line load through cleat not to exceed 175kg (385lb).



- ✓ RF55511 & RF55531 - Lightweight integrated Dyneema® becket link.
- ✓ RF55521, RF55531 - Composite C-Cleat™ and fairlead.
- ✓ Sheave: Carbon fibre reinforced, PTFE impregnated Nylon.
- ✓ Ball Bearings: High compression strength carbon black Acetal.

- ✓ Stage 2 Bearing: Carbon fibre reinforced, PTFE impregnated Nylon.
- ✓ Frame/Cheeks: Toughened, glass fibre reinforced Nylon.
- ✓ Rope Link: UV stabilised, multi-strand impregnated SK75 Dyneema®.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RF55501	Fiddle*1, Dyneema® link head	55 + 35	10	500	1000	95	2 5/32 + 1 3/8	3/8	1100	2200	3.4
RF55511	Fiddle*1, becket, Dyneema® link head	55 + 35	10	500	1000	97	2 5/32 + 1 3/8	3/8	1100	2200	3.4
RF55521	Fiddle*1, adjustable cleat, Dyneema® link head	55 + 35	10	500*2	1000	231	2 5/32 + 1 3/8	3/8	1100*2	2200	8.1
RF55531	Fiddle*1, becket, adjustable cleat, Dyneema® link head	55 + 35	10	500*2	1000	233	2 5/32 + 1 3/8	3/8	1100*2	2200	8.2

*1 Small fiddle block sheave has a high load full contact bearing (i.e. not ball bearing). Main sheave has two-stage, ball bearing.

*2 Line load through cleat not to exceed 175kg (385lb).

Series 55



Team Ronstan - Tom Slingsby, Laser
Photo: Jeff Crow / Sport the Library



RF9005-10



RF9004-08



RF50003



RF50002



RF50001



RF2455

2 x 6mm (1/4")



Rope Link: UV stabilised, multi-strand impregnated SK75 Dyneema®.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
Accessories											
RF2455	Stand-up base, suits S55 BB & RT Orbit Blocks™	-	-	500	1000	26	-	-	1100	2200	0.9

Spare Parts

PRODUCT No.	BLOCKS SUITED
Dyneema® Links	
RF9004-08	S55 BB & RT single & fiddle Orbit Blocks™ RF55101, RF55111, RF55501, RF55511, RF55521, RF55531, RF56101, RF56111, RF56121, RF56131, RF56511, RF56531
RF9005-10	S55 BB & RT double & triple Orbit Blocks™ RF55201, RF55211, RF55301, RF55311, RF56331, RF56331B
Link Retainer Clips (2 pack)	
RF50001	S55 BB & RT single & fiddle Orbit Blocks™ RF55101, RF55111, RF55501, RF55511, RF55521, RF55531, RF56101, RF56111, RF56121, RF56131
RF50002	S55 BB double & RT triple Orbit Blocks™ RF55201, RF55211, RF56331
RF50003	S55 BB triple Orbit Blocks™ RF55301, RF55311



Series 55



RF56100



RF56130



RF56120



RF56110


RF615
4mm (5/32") pin

- ✓ Swivel shackle head for unlimited block rotation.
- ✓ RF56110 & RF56130 - Integrated becket; no loose parts.
- ✓ RF56120 & RF56130 - Composite C-Cleat™ and fairlead.
- ✓ Dinghy mainsheet systems.
- ✓ Mainsheet systems on sportsboats using RF7 mainsheet swivel cleat unit.
- ✓ Spinnaker sheets on dinghies – especially modern asymmetric classes.
- ✓ Spinnaker sheets on sportsboats and small keel boats (lateral lead blocks).
- ✓ Control line applications on larger yachts.
- ✓ Sheave: Hard anodised Aluminium.
- ✓ Swivel shackle head fitting: grade 316 stainless steel.
- ✓ Ball Bearings: High compression strength carbon black Acetal.
- ✓ Frame/Cheeks: Toughened, glass fibre reinforced Nylon.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
RT Ratchet											
RF56100	Single, auto & manual, swivel shackle head	55	10	250	650	82	2 5/32	3/8	550	1430	2.9
RF56110	Single, becket, auto & manual, swivel shackle head	55	10	250*1	650	86	2 5/32	3/8	550*1	1430	3.0
RF56120	Single, adjustable cleat, auto, swivel shackle head	55	10	250*2	650	204	2 5/32	3/8	550*2	1430	7.2
RF56130	Single, becket, adjustable cleat, auto, swivel shackle head	55	10	250*1&2	650	209	2 5/32	3/8	550*1&2	1430	7.4

*1 Total block load. Load on becket not to exceed block load. i.e. MWL 250kg (550lb), BL 750kg (1650lb). Suitable for 2:1 system at rated block load.

*2 Line load through cleat not to exceed 175kg (385lb).



RF56101



Adjustable cleat arms



RF56121



Auto & manual modes



Load sensing auto ratchet



RF56111


Ronstan Weta Competition Runner Up
Photo: Roman Breiner

- ✓ RF56111 - Integrated becket; no loose parts.
- ✓ RF56121 - Composite C-Cleat™ and fairlead.
- ✓ Dinghy mainsheet systems.
- ✓ Mainsheet systems on sportsboats using RF7 mainsheet swivel cleat unit.
- ✓ Spinnaker sheets on dinghies – especially modern asymmetric classes.
- ✓ Spinnaker sheets on sportsboats and small keel boats (lateral lead blocks).

- ✓ Control line applications on larger yachts.
- ✓ Sheave: Hard anodised Aluminium.
- ✓ Ball Bearings: High compression strength carbon black Acetal.
- ✓ Frame/Cheeks: Toughened, glass fibre reinforced Nylon.
- ✓ Rope Link: UV stabilised, multi-strand impregnated SK75 Dyneema®.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
RT Ratchet											
RF56101	Single, auto & manual, Dyneema® link head	55	10	250	750	78	2 5/32	3/8	550	1650	2.8
RF56111	Single, becket, auto & manual, Dyneema® link head	55	10	250*1	750	82	2 5/32	3/8	550*1	1650	2.9
RF56121	Single, adjustable cleat, auto, Dyneema® link head	55	10	250*2	750	200	2 5/32	3/8	550*2	1650	7.1

*1 Total block load. Load on becket not to exceed block load. i.e. MWL 250kg (550lb), BL 750kg (1650lb). Suitable for 2:1 system at rated block load.

*2 Line load through cleat not to exceed 175kg (385lb).

Series 55



RF56510



RF56530



Integrated low profile Becket



RF56330B

RF55410



RF56151



RF56151A

2 x 5mm (3/16")

RF45201

RF9004-09

RF56330B

9:1 Mainsheet System



RF615

4mm (5/32") pin

- ✓ RF56330B - Underhung becket is suitable for terminating the sheet, or attachment of a 'piggy back' block for greater purchase*2.
- ✓ Ultra low profile integrated becket.
- ✓ Swivel shackle head for unlimited block rotation.

- ✓ RF55410 when paired with a RF56330B and a RF45201 lashed to the becket with a RF9004-09, produces a powerful 9:1 mainsheet system for use on catamarans to 5.5m (18ft). 8mm (5/16) rope recommended.
- ✓ Swivel shackle head fitting: grade 316 stainless steel.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
RT Ratchet											
RF56151	Cheek, clockwise, auto & manual, swivel shackle head	55	10	250	700	76	2 5/32	3/8	550	1540	2.7
RF56151A	Cheek, anti-clockwise, auto & manual, swivel shackle head	55	10	250	700	76	2 5/32	3/8	550	1540	2.7
RF56330B	Triple, underhung becket, adjustable cleat, auto, swivel shackle head	55	10	750*2&3	1500	392	2 5/32	3/8	1650*2&3	3300	13.8
RF56510	Fiddle*1, becket, auto & manual, swivel shackle head	55 + 35	10	250	650	112	2 5/32 + 1 3/8	3/8	550	1430	3.9
RF56530	Fiddle*1, becket, adjustable cleat, auto, swivel shackle head	55 + 35	10	250*3	650	235	2 5/32 + 1 3/8	3/8	550*3	1430	8.3

*1 Fiddle sheave has a high load full contact bearing (i.e. not ball bearing). Main sheave has two-stage, ball bearing.

*2 Total block load. Load on underhung becket not to exceed 33% of block load. i.e. MWL 250kg (700lb), BL 500kg (1100lb). Underhung becket suits attachment of 'piggyback' block for creation of 7:1 or greater purchase.

*3 Line load through cleat not to exceed 175kg (385lb).



HOLDING POWER

20:1



Photo: Victor Kovalenko
Team Ronstan - 470 World champions Malcolm Page & Mathew Belcher

✓ RF56331 - Low profile becket take-off under cleat arm*2.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
RT Ratchet											
RF56331	Triple, becket, adjustable cleat, auto, Dyneema® link head	55	10	750*2&4	1500	345	2 5/32	3/8	1650*2&4	3300	12.2
RF56511	Fiddle*1, becket, auto & manual, Dyneema® link head	55 + 35	10	250	750	108	2 5/32 + 1 3/8	3/8	550	1650	3.8
RF56531	Fiddle*1, becket, adjustable cleat, auto, Dyneema® link head	55 + 35	10	250*4	750	231	2 5/32 + 1 3/8	3/8	550*4	1650	8.6

*1 Fiddle sheave has a high load full contact bearing (i.e. not ball bearing). Main sheave has two-stage, ball bearing.

*2 Total block load. Load on saddle/becket not to exceed 15% of block load. i.e. MWL 117kg (257lb), BL 234kg (514lb). Suitable for 6:1 system at rated block load.

*3 Total block load. Load on underhung becket not to exceed 33% of block load. i.e. MWL 250kg (700lb), BL 500kg (1100lb). Underhung becket suits attachment of 'piggyback' block for creation of 7:1 or greater purchase.

*4 Line load through cleat not to exceed 175kg (385lb).

Series 70



Photo: Chris Savage / www.kospictures.com

- ✓ Single inner cheek on double for reduced weight & bulk.
- ✓ RF75111 & RF75211 - Ultra low profile integrated becket.
- ✓ RF75151 - Recessed underside suits flat or curved mounting surface.
- ✓ Mainsheet systems and spinnaker sheets on sportsboats and small keel boats to 11m (36ft).
- ✓ Halyard, vang and backstay applications on boats to 9m (30ft).
- ✓ Control line applications on larger yachts.

- ✓ Sheave: Carbon fibre reinforced, PTFE impregnated Nylon.
- ✓ Ball Bearings: High compression strength carbon black Acetal.
- ✓ Stage 2 Bearing: Carbon fibre reinforced, PTFE impregnated Nylon.
- ✓ Frame/Cheeks: Toughened, glass fibre reinforced Nylon.
- ✓ Rope Link: UV stabilised, multi-strand impregnated SK75 Dyneema®.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RF75101	Single	70	12	700	1400	128	2 3/4	1/2	1540	3080	4.5
RF75111	Single, becket	70	12	700*1	1400	141	2 3/4	1/2	1540*1	3080	5.0
RF75211	Double, becket	70	12	1100*2	2200	274	2 3/4	1/2	2420*2	4840	9.7

*1 Total block load. Load on becket not to exceed 50% of block load. i.e. MWL 350kg (770lb), BL 700kg (1540lb). Suitable for 2:1 system at rated block load.

*2 Total block load. Load on becket not to exceed 27% of block load. i.e. MWL 300kg (660lb), BL 600kg (1320lb). Suitable for 4:1 system at rated block load.

Series 70



2 x 8mm (5/16")

RF2457



RF9006-12



RF9005-10



RF70001



RF70002



3 x 6mm (1/4")

RF75151



Photo: Chris Savage / www.kospictures.com

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RF75151	Cheek	70	12	700	1400	122	2 3/4	1/2	1540	3080	4.3
Accessories											
RF2457	Stand-up base, suits S70 BB & RT	-	-	700	1400	50	-	-	1540	3080	1.8

Spare Parts

PRODUCT No.	BLOCKS SUITED	
Dyneema® Links		
RF9005-10	S70 BB & RT single Orbit Blocks™	RF75101, RF75111, RF76101, RF76111
RF9006-12	S70 BB double Orbit Block™	RF75211
Link Retainer Clips (2 pack)		
RF70001	S70 BB & RT single Orbit Blocks™	RF75101, RF75111, RF76101, RF76111
RF70002	S70 BB double Orbit Block™	RF75211

Series 70



RF76101



RF76111



RF2457

2 x 8mm (5/16")



RF70001



RF9005-10

HOLDING POWER

25:1



CQ-6 Canting Keel Linq Boat / www.linqboats.com

- ✓ RF76111 - Integrated becket; no loose parts.
- ✓ Dinghy mainsheet systems - when maximum holding power is required.
- ✓ Mainsheet systems on sportsboats using RF7 mainsheet swivel cleat unit.
- ✓ Control line applications on larger yachts.
- ✓ Spinnaker sheets on sportsboats and small keel boats (lateral lead blocks).

- ✓ Spinnaker sheets on sports boats and small keel boats – especially modern asymmetric classes.
- ✓ Sheave: Hard anodised Aluminium.
- ✓ Ball Bearings: High compression strength carbon black Acetal.
- ✓ Frame/Cheeks: Toughened, glass fibre reinforced Nylon.
- ✓ Rope Link: UV stabilised, multi-strand impregnated SK75 Dyneema®.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
RT Ratchet											
RF76101	Single, auto	70	10	300	1250	150	2 3/4	3/8	660	2750	5.3
RF76111	Single, becket, auto	70	10	300*1	1250	162	2 3/4	3/8	660*1	2750	5.7
Accessories											
RF2457	Stand-up base, suits S70 BB & RT Orbit Blocks™	-	-	700	1400	50	-	-	1540	3080	0.9

*1 Total block load. Load on becket not to exceed 41% of block load. i.e. MWL 125kg (275lb), BL 250kg (550lb). Suitable for a 2:1 system at rated block load.

PRODUCT No.	BLOCKS SUITED
Dyneema® Links	
RF9005-10	S70 BB & RT single Orbit Blocks™ RF75101, RF75111, RF76101, RF76111
Link Retainer Clips (2 pack)	
RF70001	S70 BB & RT single Orbit Blocks™ RF75101, RF75111, RF76101, RF76111



USER INSTRUCTIONS

CONTENTS

1.0 Fitting of Orbit Blocks™ with Dyneema® Links

- 1.1 Attached at 90° (transverse)
- 1.2 Attachment at 0° (in-line)
- 1.3 Attachment to a pin, shackle, saddle, line, etc
- 1.4 Other attachments.

2.0 Fitting of Sheets/Lines to Beckets

1.0 Fitting of Orbit Blocks™ with Dyneema® Links

- For best results, the Dyneema® Link must be attached to a mounting point with a smooth, well rounded profile.
- Avoid attaching directly to fittings with sharp edges or rough surfaces that may damage the Dyneema® Link through abrasion or point loading. For this situation use a shackle with a smooth surface between the Link and the fitting.

1.1 Attachment at 90° (transverse) (Diagram 1.1)

- 1.1.1 Use a shackle key or small screwdriver to release one side of the Retainer Clip. Use a finger to hold the other side of the Retainer Clip in place.
- 1.1.2 Remove the free end of the Dyneema® Link from its recess in the head of the block.
- 1.1.3 Pass the Link through the mounting point.
- 1.1.4 Press the end of the Link over the Retainer Clip and firmly back into its recess in the block. A little tension on the Link may help to settle it into position.
- 1.1.5 Snap the Retainer Clip back into place over the Link. An audible “click” confirms secure attachment.

1.2 Attachment at 0° (in-line) (Diagram 1.2)

- 1.2.1 Use a shackle key or small screwdriver to release one side of the Retainer Clip.
- 1.2.2 Remove the end of the Dyneema® Link from its recess in the head of the block.
- 1.2.3 (Diagram 1.2.3) Twist the Link anti-clockwise 360° (i.e. first twist 180° to form a figure-8 shape, then twist again).
- 1.2.4 Pass the Link through the mounting point, taking care to keep it twisted as described above.
- 1.2.5 Press the end of the twisted Link over the Retainer Clip and firmly back into its recess in the block. A little tension on the Link may help to settle it into position.

3.0 Adjustment of Cleat Arm Angle

4.0 Stand-Up Kit

5.0 Ratchet Mode Operation

6.0 Cheek Block Alignment

7.0 Upright Lead Block Alignment

8.0 Care and Maintenance

9.0 Definitions

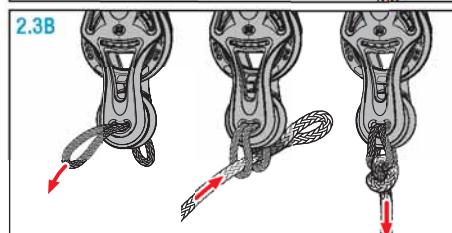
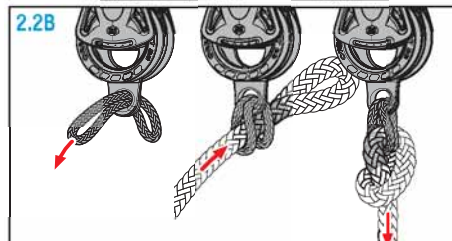
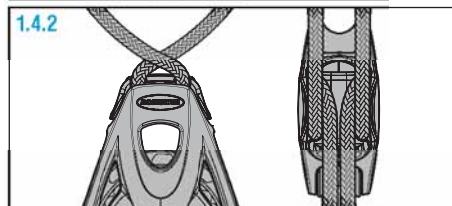
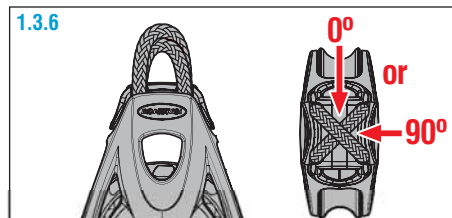
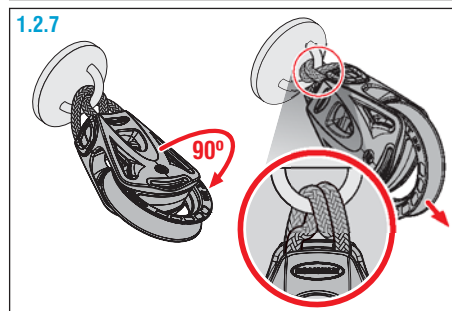
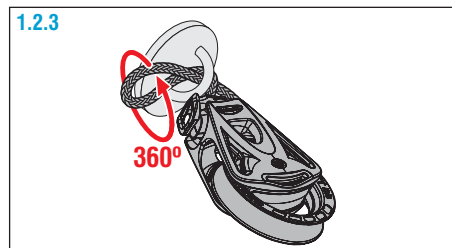
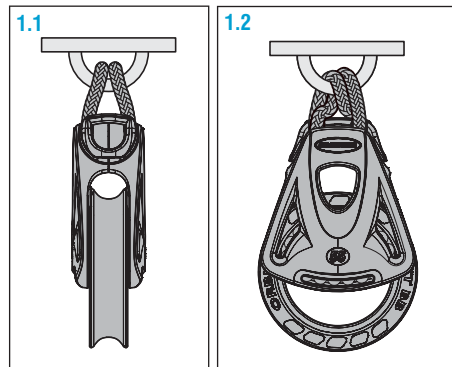
- 1.2.6 Snap the Retainer Clip back into place over the Link. An audible “click” confirms secure attachment.
- 1.2.7 (Diagram 1.2.7) Rotate the block clockwise back to 0° and pull slightly to align and tension the link symmetrically.

1.3 Attachment at 0° or 90° to a Pin, Shackle, Saddle, or Control line, etc.

- 1.3.1 Use a shackle key or small screwdriver to release one side of the Retainer Clip.
- 1.3.2 Remove the end of the Dyneema® Link from its recess in the head of the block.
- 1.3.3 Twist the Link anti-clockwise 180° to form a figure-8 shape.
- 1.3.4 Press the end of the twisted Link firmly back into its recess in the block. A little tension on the Link may help to settle it into position.
- 1.3.5 Snap the Retainer Clip back into place over the Link. An audible “click” confirms secure attachment.
- 1.3.6 (Diagram 1.3.6) Pass a shackle, saddle, pin, or rope end through the Link (which now has a single crossover) at 0° or 90° to the block, depending on the desired alignment.

1.4 Other Attachment

- 1.4.1 Snap shackles (fixed or swivel) can be fitted to Orbit Blocks™ using the methods described above for 0° or 90° attachment.
- 1.4.2 (Diagram 1.4.2) Custom lashings, strops or Links can be made from Dyneema® rope of the same diameter as the supplied link. Note; where required to fit around an object wider than the head of the block (eg a boom) the ends of the custom Link must cross each other prior to being fitted into the recesses in the head of the block. The Maximum Working Load and Breaking Load of the assembly (Block + Link) is limited by the strength of the rope and the joining method. Knots, splices, stitching, etc. will generally have a lower Breaking Load than the rope itself.



2.0 Fitting of Sheets/Lines to Beckets

IMPORTANT: Ronstan Orbit Blocks™ have several unique becket arrangements. To avoid improper loading or failure of the becket, use only the correct method of line attachment for each type as described below.

2.1 BB Single Blocks with Becket

- Pass the sheet end through the becket eye and secure with a bowline or eye splice.

2.2 BB Double & Triple Blocks with Becket; RT Single, & Single/Cleat Blocks with Becket

- **Method A:** Pass the sheet end through the becket

eye and secure with a bowline or eye splice.

- **Method B: (Diagrams 2.2B)** Pass a Dyneema® Link through the becket eye. Pass the sheet end through both loops of the Link and secure with a bowline or splice. If using a pre-spliced sheet, secure with a cow hitch through both loops of the Link.

2.3 BB Fiddle Blocks with Becket

- **Method A:** Pass a Dyneema® Link through the becket eye of the standard fiddle block. Pass the sheet end through both loops of the Link and secure with a bowline or splice.
- **Method B: (Diagrams 2.3B)** If using a pre-spliced sheet, secure with a cow hitch through both loops of the Link.

USER INSTRUCTIONS

3.0 Adjustment of cleat arm angle

(Diagram 3.0)

- 3.0.1 Loosen the screw at the centre of the cleat arm on each side (approximately 1 ½ turns).
- 3.0.2 Adjust the cleat arms to the required angle. The cleating angle can be adjusted from 0 degrees

(when the sheet is coming out of the block at right angles to the centre line of the block) to 60 degrees (40 degrees on RT triple, becket & cleat). The cleat arm angle is indicated by the number aligned with the centre line of the block.

- 3.0.3 Re-tighten the screw at the centre of the cleat arm on each side of the block.

4.0 Stand-up kit

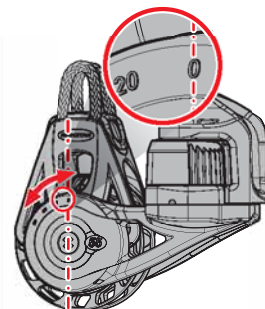
- 4.0.1 Use the method described in 1.3 above to set the link for 90° (transverse) or 0° (in-line).
- 4.0.2 Turn the rubber boot inside out and place it over the head of the block so the link protrudes.

- 4.0.3 (Diagram 4.0.3) Pass the saddle through the link in the required orientation.

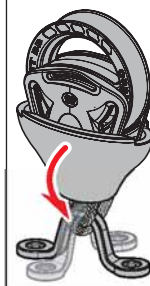
- 4.0.4 Fix the saddle to the mounting surface.

- 4.0.5 (Diagram 4.0.5) If attaching the block to a fitting that is already fixed in place, roll up the bottom half of the boot to simplify attachment of the Link and unroll it again when finished.

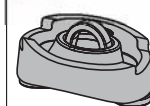
3.0



4.0.3



4.0.5



5.0 Ratchet mode operation

(Diagram 5.0)

- Some RT Orbit Blocks™ can be set to Automatic mode or Manual mode to suit the application or user's preference. RT blocks with cleats are fully automatic only.

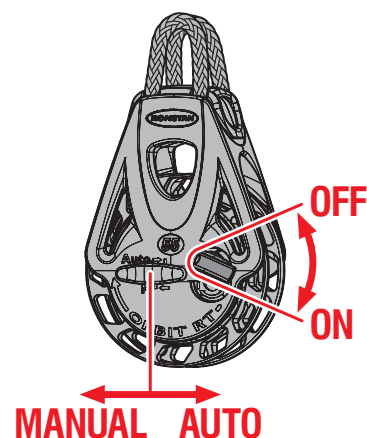
5.1 Manual Mode

- 5.1.1 RT blocks leave the factory in Manual mode, with the black MODE switches on both sides of the block positioned away from the red ON/OFF knob.
- 5.1.2 Use the red ON/OFF knob to turn the ratchet ON or OFF.

5.2 Auto Mode

- 5.2.1 With the block in Manual mode, turn the ratchet off by rotating the red ON/OFF knob to the OFF position.
- 5.2.2 Slide the black MODE switch firmly toward the red ON/OFF knob until it locks into the recess in the knob. Repeat with the MODE switch on the other side of the block.
- 5.2.3 The block is now in Auto mode.
- 5.2.4 To return to Manual mode, slide the black MODE switches on both sides of the block firmly away from the red ON/OFF knob. Now use the red ON/OFF knob to turn the ratchet ON and OFF.

5.0



6.0 Cheek block alignment

(Diagram 6.0)

- Cheek blocks must be properly aligned so that the

axis of the block bisects the angle between line entry and exit, which must be approximately in the same plane. **Misalignment or improper installation will reduce the load capacity of the block.**

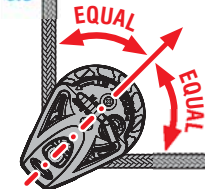
7.0 Upright Lead block alignment

(Diagram 7.0)

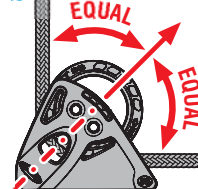
- The Upright Lead block is designed to provide a

90 degree change in line direction, with line entry at 90 degrees to the base and line exit parallel to the base. Any variation on these line angles will reduce the load capacity of the block.

6.0



7.0



8.0 Care and maintenance

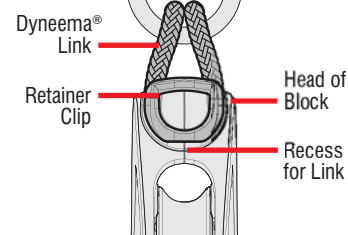
Dyneema® Link

- Ronstan BB and RT Orbit Blocks™ feature a unique Dyneema® Link head. Building on the latest trends in grand prix dinghy and ocean racing, it replaces the steel head post and shackle arrangement of traditional blocks. Ronstan Dyneema® Links are made from highest quality FSE Robline Ocean 3000 12 plait Dyneema® SK75 line, treated with S.Y.I.S. impregnation for high resistance to abrasion and UV protection. Dyneema® is a super strong polyethylene fibre that offers maximum strength combined with minimum weight. Dyneema® fibre's high tenacity allows it to match the strength of steel at one tenth of the weight. It is more durable than polyester and has a specific strength that is 40 percent greater than Aramid fibre.
- To receive the maximum performance benefit from the Dyneema® Link, it must be used correctly, inspected regularly and replaced when required.
- The Dyneema® Link must be attached to a mounting point with a smooth, well rounded profile without sharp edges or burrs. If in doubt, use a shackle with a smooth surface between the Link and the mounting point.

- The Dyneema® Link will eventually suffer degradation from fatigue, wear and UV exposure. Like all running and standing rigging, the Link should be inspected regularly and replaced if it shows significant amount of wear or fibre damage, or as a part of your regular boat maintenance program.

Orbit Blocks™

- Grit and sand will damage bearing systems. Ronstan Orbit Blocks™ have a precisely engineered bearing system that should be kept clean and free of sand and grit to ensure optimum performance and service life. Blocks, in particular the bearing areas, should be flushed with fresh water regularly and periodically cleaned with a mild detergent and water.
- Dry lubricants such as Ronstan Sailfast™ silicon spray may be used to lubricate the bearing system and ratchet controls. **Oil/petrochemical based lubricants must not be used.**
- Ronstan Orbit Blocks™ are designed and manufactured for applications on sailboats. See the Info section of the Ronstan web site and our catalogue for important customer considerations and warranty information.



9.0 Definitions

BB = Ball Bearing
RT = Ratchet
MWL = Maximum Working Load
BL = Breaking Load

Dyneema® is a trademark of Royal DSM NV. DSM is the inventor and manufacturer of Dyneema®, the world's strongest fibre™. "Dyneema®", and "Dyneema®, the world's strongest fibre™" are trademark(s) (applications) owned by Royal DSM NV.

Specify the Best

Orbit Blocks™ are a no-compromise product range developed to meet the demands and expectations of the very dedicated and increasingly professional racing sailor, with characteristics including:

- The highest strength-to-weight ratio.
- Minimal friction loss, especially when working at high loads.
- Totally reliable and trouble free performance.
- Simplicity of design and construction to facilitate maintenance and servicing.
- Elegant, functional styling and finish.

Bearing System

The Orbit sheave has captive Acetal or Torlon® ball bearings for side thrust loads, eliminating the need for side retainer plates. This reduces weight and allows for a wider bearing surface that can accommodate longer Torlon® needles – achieving a substantially higher strength-to-weight ratio.

Design Simplicity

There are only 3 primary components to the block: the twin side pieces, sculptured from solid high grade alloy, and the one-piece sheave with its captive ball bearings. Bearings are easily rinsed clear of salt and debris.

Foot Blocks

The bottom hub section is machined from solid alloy for maximum integrity of the load bearing structure. The top cover plate protects the sheave against impact, prevents dirt and grit from entering the hub area, and can be removed for service without removing the mounting bolts that secure the block through the base plate to the deck.

Halyard Blocks

These blocks have been designed primarily for attachment around the mast collar to lead halyards aft from the mast base to the winches. The head of the block has a removable pin which enables easy attachment to the deck padeyes or the mast collar. This method of attachment provides a low lead aft to organisers or winches.

Stand-Up Blocks

A number of stand-up solutions are available for Orbit Blocks™. These include assemblies incorporating padeye and rubber boot with 60° or 90° orientation at rest, or blocks with special swivels used with non-tumble padeyes.

Universal Head

Head posts of swivel blocks can be locked at 0° or 90°. The high resistance shackles are forged in grade 17-4PH stainless steel.

Runner Blocks

These blocks have a unique shape and Acetal guide rollers that help keep the line engaged with the sheave in running backstay applications.

Strop Blocks

The absence of a swivel head or shackle allows weight savings where a rope lashing attachment is suitable. When passed through the hub of the sheave this also provides a failsafe feature. See the SUPPORT tab on our website for instructions on proper strop attachment.



Series 60



- ✓ Exceptionally high strength-to-weight ratio.
- ✓ Captive ball bearings for side thrust loads require no side retainer plates, reducing weight and providing a wider bearing surface for the Torlon® needle rollers.
- ✓ Head posts of swivel blocks can be locked at 0° or 90°.
- ✓ Side cheeks incorporating head structure and hub are precision machined as a single part from solid alloy, leaving material only where it contributes to the load carrying capacity of the block and eliminating the need for additional fasteners.

- ✓ Removable becket pin allows lines to be spliced prior to fitting.
- ✓ Stand-up blocks have rubber support bases that relax to 90° (typically for foreguy/afterguy) or 60° (for halyard and other lead block applications).
- ✓ Halyard blocks have a removable pin for attachment to deck padeyes or the mast collar, providing a low lead aft to organisers or winches.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
OR Orbit Blocks™													
RF69100	Single block	60	12	8	1800	4000	260	2 3/8	1/2	5/16	3970	8820	9.2
RF69100L	Single block, light load	60	12	6	800	1600	133	2 3/8	1/2	1/4	1760	3530	4.7
RF69108	Halyard block	60	12	12	1800	4000	160	2 3/8	1/2	15/32	3970	8820	5.6
RF69110	Single block, becket	60	12	8	1800	4000	290	2 3/8	1/2	5/16	3970	8820	10.2
RF69140	Stand-up block, 90 degree	60	12	-	1800	3600	398	2 3/8	1/2	-	3970	7940	14.0
RF69140-60	Stand-up block, 60 degree	60	12	-	1800	3600	398	2 3/8	1/2	-	3970	7940	14.0
RF69200	Double block	60	12	8	2250	4500	436	2 3/8	1/2	5/16	4960	9920	15.4



- ✓ Strop blocks suit direct attachment to Dyneema® or similar strops for maximum weight saving and flexibility.
- ✓ Runner blocks have a unique cheek shape and guide rollers to help keep the line engaged with the sheave.
- ✓ Shape and edge radii of central hole in hub are compatible with fail-safe strops.
- ✓ Foot block base plate and hub section is machined in one piece from a single block of alloy, for maximum integrity. Mounting bolts are seated within the base plate and hub to minimise bending loads and prevent "racking over" of the block.
- ✓ Foot block cover plate can be removed for service access without removing the bolts that secure the block to the deck.

- Primary mainsheet, halyard and spinnaker systems on boats to 12m (40ft).
- Secondary mainsheet, vang systems on boats to 14m (46ft).
- Permanent and running backstay systems on boats to 10m (33ft).
- General control line and lead block applications on larger yachts.
- Fully machined Alloy cheek plates.
- Alloy sheaves with captive ball races.
- Torlon® needle rollers.
- Carbon black Acetal ball bearings.
- Grade 316 stainless steel head post.
- Grade 17-4PH stainless steel forged shackle.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
Orbit Blocks™													
RF69000	Sheave with balls & rollers	60	12	-	-	-	65	2 3/8	1/2	-	-	-	2.3
RF69108R	Runner block	60	12	12	1800	4000	183	2 3/8	1/2	15/32	3970	8820	6.5
RF69109	Strop block	60	12	-	1800	3600	148	2 3/8	1/2	-	3970	7940	5.2
RF69118R	Runner block, becket	60	12	12	1800	4000	211	2 3/8	1/2	15/32	3970	8820	7.4
RF69151	Foot block, single	60	12	-	1800	4000	190	2 3/8	1/2	-	3970	8820	6.7

Series 75



- ✓ Exceptionally high strength-to-weight ratio.
- ✓ Captive ball bearings for side thrust loads require no side retainer plates, reducing weight and providing a wider bearing surface for the Torlon® needle rollers.
- ✓ Side cheeks incorporating head structure and hub are precision machined as a single part from solid alloy, leaving material only where it contributes to the load carrying capacity of the block and eliminating the need for additional fasteners.
- ✓ Head posts of swivel blocks can be locked at 0° or 90°.
- ✓ Removable becket pin allows lines to be spliced prior to fitting.
- ✓ Halyard blocks have a removable pin for attachment to deck padeyes or the mast collar, providing a low lead aft to organisers or winches.
- ✓ Shape and edge radii of central hole in hub are compatible with fail-safe stops.
- ✓ Stand-up blocks have rubber support bases that relax to 90° (typically for foreguy/afterguy) or 60° (for halyard and other lead block applications).
- ✓ Runner blocks have a unique cheek shape and guide rollers to help keep the line engaged with the sheave.
- ✓ Foot block base plate and hub section is machined in one piece from a single block of alloy, for maximum integrity, with mounting bolts seated within the base plate and hub to minimise bending loads and prevent "racking over" of the block.
- ✓ Foot block cover plate can be removed for service access without removing the bolts that secure the block to the deck.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
OR Orbit Blocks™													
RF79100	Single block	75	14	8	2200	4500	340	3	9/16	5/16	4850	9920	12.0
RF79108	Halyard block	75	14	14	2450	4900	251	3	9/16	9/16	5400	10800	8.9
RF79110	Single block, becket	75	14	8	2200	4500	354	3	9/16	5/16	4850	9920	12.5
RF79140	Stand-up block, 90 degree	75	14	-	1990	3980	480	3	9/16	-	4390	8770	16.9
RF79200	Double block	75	14	8	3250	6500	575	3	9/16	5/16	7170	14330	20.3



RF79108R



RF79118R



RF79500



RF79109



RF79151

1 x 8mm (5/16")
1 x 10mm (3/8")



RF79000

- ✓ Strop blocks suit direct attachment to Dyneema® or similar strops for maximum weight saving and flexibility.
- ✓ Spreader blocks can accommodate a second spinnaker sheet for sail changes or an outboard genoa sheet for reaching.
- ✓ Primary mainsheet, halyard and spinnaker systems on boats to 14m (46ft).
- ✓ Secondary mainsheet, vang blocks on boats to 15m (50ft).
- ✓ Permanent and running backstay systems on boats to 12m (40ft).
- ✓ General control line and lead block applications on larger yachts.
- ✓ Fully machined Alloy cheek plates.
- ✓ Alloy sheaves with captive ball races.
- ✓ Torlon® needle rollers.
- ✓ Carbon black Acetal ball bearings.
- ✓ Grade 17-4PH stainless steel head post and forged shackle.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
Orbit Blocks™													
RF79000	Sheave with balls & rollers	75	14	-	-	-	95	3	9/16	-	-	-	3.4
RF79108R	Runner block	75	14	14	2200	4500	275	3	9/16	9/16	4850	9920	9.7
RF79109	Strop block	75	14	-	2200	4500	226	3	9/16	-	4850	9920	8.0
RF79118R	Runner block, becket	75	14	14	2200	4500	305	3	9/16	9/16	4850	9920	10.8
RF79151	Foot block, single	75	14	-	2200	4500	269	3	9/16	-	4850	9920	9.5
RF79500	Spreader block	75 + 60	14	8	2200	4500	476	3 + 2 3/8	9/16	5/16	4850	9920	16.8

Series 100



- ✓ Exceptionally high strength-to-weight ratio.
- ✓ Captive ball bearings for side thrust loads require no side retainer plates, reducing weight and providing a wider bearing surface for the Torlon® needle rollers.
- ✓ Side cheeks incorporating head structure and hub are precision machined as a single part from solid alloy, leaving material only where it contributes to the load carrying capacity of the block and eliminating the need for additional fasteners.

- ✓ Head posts of swivel blocks can be locked at 0° or 90°.
- ✓ Removable becket pin allows lines to be spliced prior to fitting.
- ✓ Stand-up blocks have rubber support bases that relax to 90° (typically for foreguy/afterguy) or 60° (for halyard and other lead block applications).
- ✓ Halyard blocks have a removable pin for attachment to deck padeyes or the mast collar, providing a low lead aft to organisers or winches.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
OR Orbit Blocks™													
RF109100	Single block	100	14	8	3000	6500	492	4	9/16	5/16	6610	14330	17.4
RF109108	Halyard block	100	14	16	3000	6500	391	4	9/16	5/8	6610	14330	13.8
RF109109	Strop block	100	14	-	3000	6500	361	4	9/16	-	6610	14330	12.7
RF109110	Single block becket	100	14	8	3000	6500	530	4	9/16	5/16	6610	14330	18.7
RF109200	Double block	100	14	10	4250	8500	1030	4	9/16	13/32	9370	18740	36.3



RF109500



RF109140



RF109000

4 x 6mm (1/4")



RF109151

1 x 8mm (5/16")
2 x 10mm (3/8")

- ✓ Foot block cover plate can be removed for service access without removing the bolts that secure the block to the deck.
- ✓ Foot block base plate and hub section is machined in one piece from a single block of alloy, for maximum integrity, with mounting bolts seated within the base plate and hub to minimise bending loads and prevent "racking over" of the block.
- ✓ Spreader blocks can accommodate a second spinnaker sheet for sail changes or an outboard genoa sheet for reaching.
- ✓ Exceptionally high strength-to-weight ratio.
- ✓ Primary mainsheet, halyard and spinnaker systems on boats to 15m (50ft).
- ✓ Secondary mainsheet, vang blocks on boats to 18m (60ft).
- ✓ Permanent backstay systems on boats to 14m (46ft).
- ✓ General control line and lead block applications on larger yachts.
- ✓ Fully machined Alloy cheek plates.
- ✓ Alloy sheaves with captive ball races.
- ✓ Torlon® needle rollers.
- ✓ Carbon black Acetal ball bearings.
- ✓ Grade 17-4PH stainless steel head post and forged shackle.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
Orbit Blocks™													
RF109000	Sheave with balls & rollers	100	14	-	-	-	180	4	9/16	-	-	-	6.3
RF109140	Stand-up block, 90 degree	100	14	-	2000	4000	600	4	9/16	-	4410	8820	21.2
RF109151	Foot block, single	100	14	-	3000	6500	447	4	9/16	-	6610	14330	15.8
RF109500	Spreader block	100 + 75	14	8	3000	6500	702	4 + 3	9/16	5/16	6610	14330	24.8

Series 125



- ✓ Exceptionally high strength-to-weight ratio.
- ✓ Captive ball bearings for side thrust loads require no side retainer plates, reducing weight and providing a wider bearing surface for the Torlon® needle rollers.
- ✓ Side cheeks incorporating head structure and hub are precision machined as a single part from solid alloy, leaving material only where it contributes to the load carrying capacity of the block and eliminating the need for additional fasteners.
- ✓ Head posts of swivel blocks can be locked at 0° or 90°.
- ✓ Primary mainsheet blocks on boats to 18m (60ft) - RF129100, RF129110.
- ✓ Primary mainsheet blocks on boats to 21m (69ft) - RF129100A, RF129110A.

- ✓ Secondary mainsheet blocks, spinnaker systems, halyards on boats to 22m (72ft) - RF129100, RF129110.
- ✓ Secondary mainsheet blocks, spinnaker systems, halyards on boats to 25m (82ft) - RF129100A, RF129110A.
- ✓ Running backstay systems on boats to 16m (53ft).
- ✓ Fully machined Alloy cheek plates.
- ✓ Alloy sheaves with captive ball races.
- ✓ Torlon® needle rollers.
- ✓ Carbon black Acetal ball bearings.
- ✓ Grade 17-4PH stainless steel head post and forged shackle.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
OR Orbit Blocks™													
RF129100	Single block	125	16	10	3750	8500	751	5	5/8	13/32	8270	18740	26.5
RF129100A	Single block	125	18	12.7	5000	10000	1240	5	3/4	1/2	11020	22050	43.7
RF129110	Single block, becket	125	16	10	3750	8500	830	5	5/8	13/32	8270	18740	29.3
RF129110A	Single block, becket	125	18	12.7	5000	10000	1330	5	3/4	1/2	11020	22050	46.9



Suits RF2434-16B fixed padeye and RF2435-16B removable padeye. See page 207 for padeye options



- ✓ Foot block cover plate can be removed for service access without removing the bolts that secure the block to the deck.
- ✓ Foot block base plate and hub section is machined in one piece from a single block of alloy, for maximum integrity, with mounting bolts seated within the base plate and hub to minimise bending loads and prevent "racking over" of the block.
- ✓ Shape and edge radii of central hole in hub are compatible with fail-safe stops.
- ✓ Exceptionally high strength-to-weight ratio.
- ✓ Captive ball bearings for side thrust loads require no side retainer plates, reducing weight and providing a wider bearing surface for the Torlon® needle rollers.

- ✓ Primary mainsheet blocks on boats to 18m (60ft) - RF129100, RF129110.
- ✓ Primary mainsheet blocks on boats to 21m (69ft) - RF129100A, RF129110A.
- ✓ Secondary mainsheet blocks, spinnaker systems, halyards on boats to 22m (72ft) - RF129100, RF129110.
- ✓ Secondary mainsheet blocks, spinnaker systems, halyards on boats to 25m (82ft) - RF129100A, RF129110A.
- ✓ Fully machined Alloy cheek plates.
- ✓ Alloy sheaves with captive ball races.
- ✓ Torlon® needle rollers.
- ✓ Carbon black Acetal ball bearings.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN / EYE DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN / EYE DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
Orbit Blocks™													
RF129000	Sheave with balls & rollers	125	16	-	-	-	245	5	5/8	-	-	-	8.6
RF129000AD	Sheave with balls & rollers	125	18	-	-	-	295	5	3/4	-	-	-	10.4
RF129106	Single block, swivel eye for stand-up	125	16	21	3750	8500	830	5	5/8	13/16	8270	18740	29.3
RF129106A	Single block, swivel eye for stand-up	125	18	21	5000	10000	1360	5	3/4	13/16	11020	22050	48.0
RF129151	Foot block, single	125	16	-	3750	8500	666	5	5/8	-	8270	18740	23.5
RF129151A	Foot block, single	125	18	-	5000	10000	750	5	3/4	-	11020	22050	26.5

Series 150



RF159100



RF159110



- ✓ Exceptionally high strength-to-weight ratio.
- ✓ Captive ball bearings for side thrust loads require no side retainer plates, reducing weight and providing a wider bearing surface for the Torlon® needle rollers.
- ✓ Side cheeks incorporating head structure and hub are precision machined as a single part from solid alloy, leaving material only where it contributes to the load carrying capacity of the block and eliminating the need for additional fasteners.

- ✓ Head posts of swivel blocks can be locked at 0° or 90°.
- ✓ Removable becket pin allows lines to be spliced prior to fitting.
- ✓ Fully machined Alloy cheek plates.
- ✓ Alloy sheaves with captive ball races.
- ✓ Torlon® needle rollers.
- ✓ Carbon black Acetal ball bearings.
- ✓ Grade 17-4PH stainless steel head post and forged shackle.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
OR Orbit Blocks™													
RF159100	Single block	150	20	12.7	6500	14200	1384	6	3/4	1/2	14330	31310	48.8
RF159110	Single block, becket	150	20	12.7	6500	14200	1496	6	3/4	1/2	14330	31310	52.8



RF159106



Suits RF2434-16B fixed padeye and RF2435-16B removable padeye. See page 207 for padeye options



RF159151

1 x 12mm (7/16")
3 x 16mm (5/8")



RF159000

- ✓ Foot block base plate and hub section is machined in one piece from a single block of alloy, for maximum integrity, with mounting bolts seated within the base plate and hub to minimise bending loads and prevent "racking over" of the block.
- ✓ Foot block cover plate can be removed for service access without removing the bolts that secure the block to the deck.

- ✓ Mainsheet and genoa sheet systems on boats to 25m (82ft).
- ✓ Spinnaker systems, halyards on boats to 28m (92ft).
- ✓ Fully machined Alloy cheek plates.
- ✓ Alloy sheaves with captive ball races.
- ✓ Torlon® needle rollers.
- ✓ Carbon black Acetal ball bearings.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
OR Orbit Blocks™													
RF159000	Sheave with balls & rollers	150	20	-	-	-	450	6	3/4	-	-	-	15.9
RF159106	Single block, swivel for stand-up	150	20	21	6500	14200	1384	6	3/4	13/16	14330	31310	48.8
RF159151	Foot block, single	150	20	-	6500	14200	1285	6	3/4	-	14330	31310	45.3

Series 180

Wot's Next - Sydney 47
Photo: Andrea Francolini / www.afrancolini.com



RF189100

RF189110

- ✓ Exceptionally high strength-to-weight ratio.
- ✓ Captive ball bearings for side thrust loads require no side retainer plates, reducing weight and providing a wider bearing surface for the Torlon® needle rollers.
- ✓ Side cheeks incorporating head structure and hub are precision machined as a single part from solid alloy, leaving material only where it contributes to the load carrying capacity of the block and eliminating the need for additional fasteners.
- ✓ Head posts of swivel blocks can be locked at 0° or 90°.
- ✓ Removable becket pin allows lines to be spliced prior to fitting.
- ✓ Mainsheet and genoa sheet systems on boats to 28m (92ft).
- ✓ Spinnaker systems, halyards on boats to 31m (102ft).

- Fully machined Alloy cheek plates.
- Alloy sheaves with captive ball races.
- Torlon® needle rollers.
- Torlon® ball bearings.
- Grade 17-4PH stainless steel head post and forged shackle.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
OR Orbit Blocks™													
RF189100	Single block	180	22	16	9750	19500	2530	7	7/8	5/8	21500	42990	89.2
RF189110	Single block, becket	180	22	16	9750	19500	2690	7	7/8	5/8	21500	42990	94.9



RF189151

1 x 16mm (5/8")
3 x 20mm (3/4")



RF189251

1 x 16mm (5/8")
3 x 20mm (3/4")



RF189000

- ✓ Foot block cover plate can be removed for service access without removing the bolts that secure the block to the deck.
- ✓ Foot block base plate and hub section is machined in one piece from a single block of alloy, for maximum integrity, with mounting bolts seated within the base plate and hub to minimise bending loads and prevent "racking over" of the block.

- ✓ Fully machined Alloy cheek plates.
- ✓ Alloy sheaves with captive ball races.
- ✓ Torlon® needle rollers.
- ✓ Torlon® ball bearings.
- ✓ Grade 17-4PH stainless steel head post and forged shackle.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
OR Orbit Blocks™													
RF189000	Sheave with balls & rollers	180	22	-	-	-	730	7	7/8	-	-	-	25.7
RF189151	Foot block, single	180	22	-	9750	19500	2075	7	7/8	-	21500	42990	73.2
RF189251	Foot block, double	180	22	-	9750*	19500*	3710	7	7/8	-	21500*	42990*	130.9

* Total block load. Maximum load on top sheave not to exceed 50% of total block load.

Series 180



RF189108R



RF189118R



Suits RF2434-20B fixed padeye and
RF2435-20B removable padeye.
See page 207 for padeye options



RF189106

26.5mm (1 1/16")

- ✓ Runner blocks have a unique cheek shape and guide rollers to help keep the line engaged with the sheave.
- ✓ Shape and edge radii of central hole in hub are compatible with fail-safe strops.

- ✓ Mainsheet and genoa sheet systems on boats to 28m (92ft).
- ✓ Spinnaker systems, halyards on boats to 31m (102ft).
- ✓ Running backstay systems on fractionally rigged boats to 23m (75ft) or 28m (92ft) masthead.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN / EYE DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN / EYE DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
OR Orbit Blocks™													
RF189106	Single block, swivel for stand-up	180	22	20	9750	19500	2690	7	7/8	13/16	21500	42990	94.9
RF189108R	Runner block	180	22	25	9750	19500	1898	7	7/8	1	21500	42990	66.9
RF189118R	Runner block, becket	180	22	25	9750	19500	2080	7	7/8	1	21500	42990	73.4



No Compromise

Lashing Orbit Blocks™ are a no-compromise product range with incredibly high breaking loads – up to 40,000kg – developed to meet the demands and expectations of the very dedicated and increasingly professional racing sailor. They are lightweight with a high strength-to-weight ratio, allowing for compact systems and significant weight savings. Versatile in many applications, the four lashing guide holes allowing for multiple attachment options including single, parallel and split lashings, and the central hole can be used for a becket in purchase systems.

The two screw-together side cheeks incorporating the bearing hub are precision machined from solid alloy, leaving material only where it contributes to the load carrying capacity of the block. The only fasteners used are for the guide rollers near the head. The Orbit sheave runs on extended length Torlon® rollers with captive ball bearings for side thrust loads, and is easily accessible for routine servicing. Every detail has been carefully executed to achieve the best optimisation of performance, size, weight and ultimate strength available today.




Central hole can be used as a becket take-off / dead end in purchase systems.



Lashing Blocks



- ✓ Extremely high breaking loads for size and weight.
- ✓ Minimal friction loss across the working load range.
- ✓ Reliable, proven performance.
- ✓ Simplicity of design and construction to facilitate maintenance and servicing.
- ✓ Elegant, functional styling and finish.
- ✓ Central hole can be used as a becket take-off/dead end in a 3:1 purchase system.
- ✓ Running backstays, mainsheet, spinnaker systems, genoa systems and more.
- ✓ Fully machined alloy cheeks.
- ✓ Alloy sheaves with captive Torlon® ball bearings.
- ✓ Torlon® needle rollers.
- ✓ Acetal guide rollers.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
 Lashing Orbit Blocks™											
RF69109A	Lashing block, single	60	10*	2400	6000	160	2 3/8	3/8*	5290	13220	5.7
RF89109A	Lashing block, single	80	14	3100	7750	310	3 1/8	9/16	6830	17080	10.9
RF109109A	Lashing block, single	100	16	5500	13750	450	4	5/8	12120	30310	15.9
RF129109A	Lashing block, single	125	18	6500	19500	930	5	3/4	14330	42990	32.8
RF159109A	Lashing block, single	150	24	9000	27000	1570	6	1	19840	59520	55.4
RF189109A	Lashing block, single	180	26	12000	30000	2450	7	1	26400	66000	89.9
RF209109A	Lashing block, single	200	28	15000	40000	3430	7 7/8	1 1/8	33000	88000	123.0

*10mm (3/8 in.) is the maximum rope size recommended if a becket is required through the central hub, for all other applications a maximum of 12mm (1/2 in.) rope can be used.

Foot Blocks

RF60151 **BB**

5 x 6mm (1/4")

RF60251 **BB**

5 x 6mm (1/4")

RF68151 **RB**

3 x 8mm (5/16")

RF68251 **RB**

3 x 8mm (5/16")



RF1391

RF78151 **RB**

2 x 8mm (5/16")
1 x 10mm (3/8")

RF78251 **RB**

2 x 8mm (5/16")
1 x 10mm (3/8")

✓ Foot blocks are available in single or double versions, with through-hub mounting for maximum strength.

✓ Cheek cut-outs for easy bearing maintenance.

✓ See pages 67 & 69 for Core Block™ Foot blocks

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RF60151	Foot block, single	60	10	600	1500	116	2 3/8	3/8	1320	3310	4.1
RF60251	Foot block, double	60	10	600*	1500*	172	2 3/8	3/8	1320*	3310*	6.1
RB Roller Ball Bearing											
RF68151	Foot block, single	60	14	1500	3000	194	2 3/8	9/16	3310	6610	6.8
RF68251	Foot block, double	60	14	1500*	3000*	291	2 3/8	9/16	3310*	6610*	10.3
RF78151	Foot block, single	75	14	1990	3980	304	3	9/16	4390	8770	10.7
RF78251	Foot block, double	75	14	1990*	3980*	536	3	9/16	4390*	8770*	18.9
Accessories											
RF1391	Jammer kit, suits RF68151, RF68251, RF78151, RF78251, RF108151, RF108251	-	-	-	-	90	-	-	-	-	3.2

* Total block load. Maximum load on top sheave not to exceed 50% of total block load.

Foot Blocks

RF108151 **RB**

5 x 8mm (5/16")

RF108251 **RB**

5 x 8mm (5/16")

RF128151 **RB**

5 x 10mm (3/8")

RF128251 **RB**

5 x 10mm (3/8")

RF158151 **RB**

2 x 12mm (7/16")
6 x 10mm (3/8")

RF158251 **RB**

2 x 12mm (7/16")
6 x 10mm (3/8")

- Foot blocks are available in single or double versions, with through-hub mounting for maximum strength.

- Alloy sheave and cheek plates.
- Torlon® needle rollers.
- Carbon black Acetal ball bearings.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
 Roller Ball Bearing											
RF108151	Foot block, single	100	14	2200	4400	480	4	9/16	4850	9900	16.9
RF108251	Foot block, double	100	14	2200*	4400*	850	4	9/16	4850*	9900*	30.0
RF128151	Foot block, single	125	16	3750	7500	850	5	5/8	8270	16530	30.0
RF128251	Foot block, double	125	16	3750*	7500*	1520	5	5/8	8270*	16530*	53.6
RF158151	Foot block, single	150	20	5600	11200	1483	6	3/4	12350	24690	52.3
RF158251	Foot block, double	150	20	5600*	11200*	2642	6	3/4	12350*	24690*	93.2

* Total block load. Maximum load on top sheave not to exceed 50% of total block load.

Upright & Pivoting Low Lead Blocks

RF68171 **RB**

2 x 8mm (5/16")

RF61171 **AP**RF61176 **AP**

2 x 8mm (5/16")

RF78171 **RB**2 x 10mm (3/8")
1 x 8mm (5/16")RF71171 **AP**RF108171 **RB**2 x 10mm (3/8")
1 x 8mm (5/16")RF128171 **RB**3 x 10mm (3/8")
1 x 8mm (5/16")RF158171 **RB**3 x 12mm (7/16")
1 x 10mm (3/8")

4 x 6mm (1/4")

RF68174 **RB**

4 x 6mm (1/4")

RF78174 **RB**

RF1391

- ✓ High static and dynamic load capacity achieved with alloy sheaves, Torlon® needle rollers for axial loads, Acetal ball bearings for side thrust loads.
- ✓ Jammers are a convenient way to temporarily lock off a control line.

- ✓ Cheek cut-outs for easy bearing maintenance.
- ✓ Upright lead blocks keep lines close to the deck.
- ✓ Blocks can be disassembled for servicing.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
RB Roller Ball Bearing											
RF68171	Upright lead block	60	14	1500	3000	222	2 3/8	9/16	3310	6610	7.8
RF68174	Pivoting low lead block	60	14	1500	3000	341	2 3/8	9/16	3310	6610	12.0
RF78171	Upright lead block	75	14	1990	3980	352	3	9/16	4390	8770	12.4
RF78174	Pivoting low lead block	75	14	1750	3500	470	3	9/16	3860	7720	16.6
RF108171	Upright lead block	100	14	2200	4400	517	4	9/16	4850	9700	18.2
RF128171	Upright lead block	125	16	3750	7500	777	5	5/8	8270	16530	27.4
RF158171	Upright lead block	150	20	5500	11000	1714	6	3/4	12130	24250	60.5
AP All Purpose											
RF61171	Upright lead block	60	14	1000	3000	205	2 3/8	9/16	2200	6610	7.2
RF61176	Over-the-top block	60	14	1000	3000	215	2 3/8	9/16	2200	6610	7.6
RF71171	Upright lead block	75	14	1500	3980	329	3	9/16	3310	8770	11.6
Accessories											
RF1391	Jammer kit, suits RF68174, RF78174	-	-	-	-	90	-	-	-	-	3.2

Series 60 & 75 Pivoting Low Lead Blocks

Ronstan Bridge-to-Bridge Race
Photo: John French

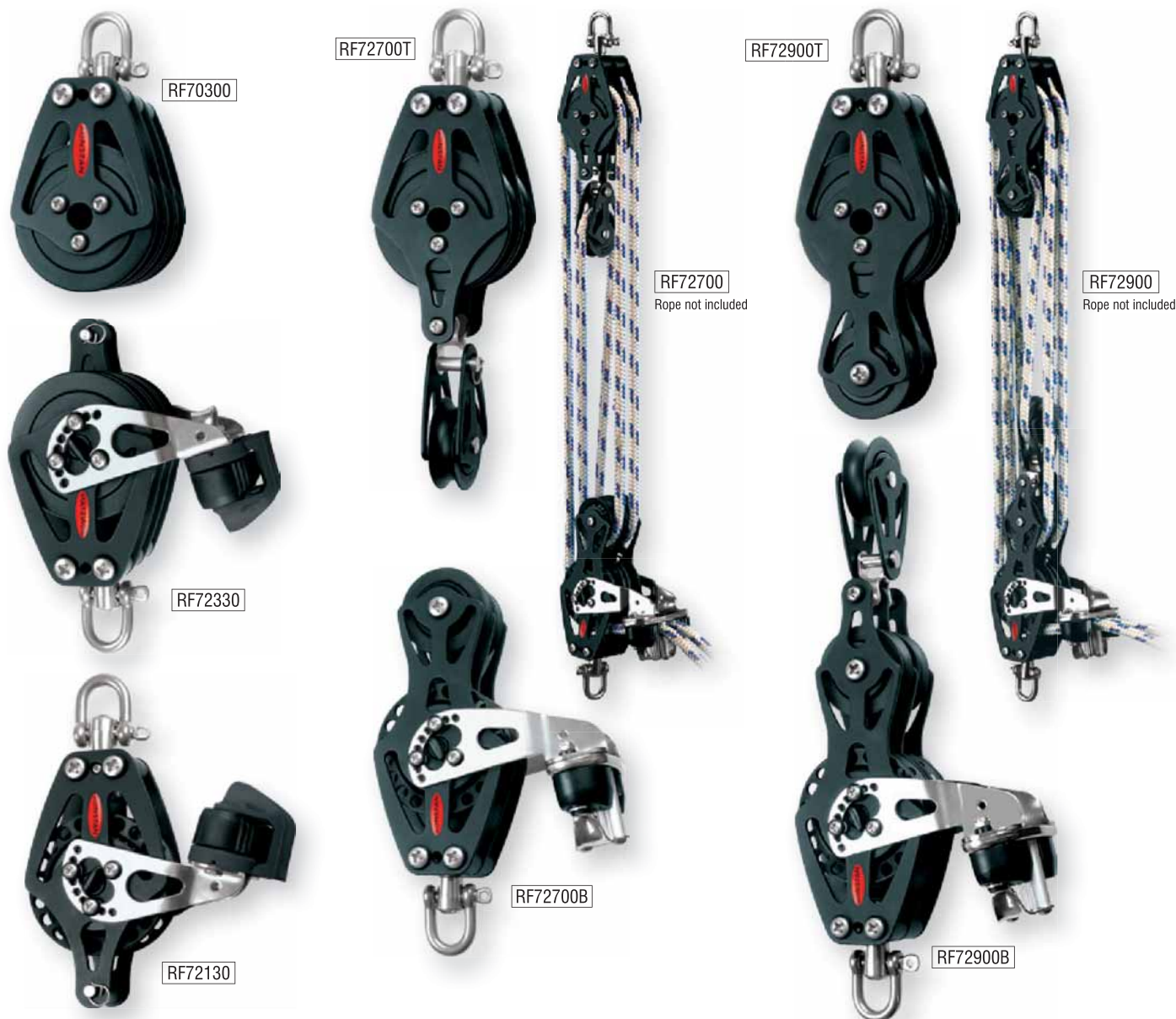


- ✓ Pivoting Lead blocks maintain alignment and keep lines close to the deck.
- ✓ RT - The patented extruded hole design provides up to 14:1 holding power (90° change of line direction).
- ✓ RT - On-Off switch is fitted to both sides of block so it can be used on port or starboard side.
- ✓ RT - Unique On/Off switch mechanism can be operated under load.

- ✓ Carbon black Acetal ball bearings.
- ✓ Alloy cheek plates and RT sheave.
- ✓ U.V. stabilised Acetal sheaves.
- ✓ Torlon® ratchet pawl.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
RT BB Ratchet											
RF62174	Pivoting low lead block	60	10	250	1370	147	2 3/8	3/8	550	3020	5.2
RF62175	Pivoting low lead block, cleat	60	10	250	1370	285	2 3/8	3/8	550	3020	10.1
RF72174	Pivoting low lead block	75	12	420	1370	270	3	1/2	930	3020	9.5
RF72175	Pivoting low lead block, cleat	75	12	420	1370	405	3	1/2	930	3020	14.3

Series 75 Two-Speed Mainsheet Systems



- Two-speed mainsheet systems allow fine tuning of the mainsheet when sailing upwind by using one of the sheet tails and keeping the other cleated. Using both the sheets at once allows the trimmer to blow off the main quickly when rounding the top mark and trim on quickly when hardening up after rounding the bottom mark.
- When fitting to traveller cars, ensure adequate support for the bottom block and use stand-up spring kit RF324-1 or RF324-2. (Refer to traveller section for more information).
- Mainsheets on sportsboats and keel boats to 12m (40ft).

MAXIMUM MAINSAIL AREA

RF72700: End boom = 38m² (409ft²), Mid boom = 23m² (248ft²)

RF72900: End boom = 42m² (452ft²), Mid boom = 27m² (290ft²)

- Carbon Black Acetal ball bearings.
- U.V. stabilised Acetal sheaves, alloy ratchet sheaves.
- Alloy cheeks.
- Torlon® ratchet pawl.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	ROPE DIAM. mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	ROPE DIAM. in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing & RT Ratchet													
RF70300	BB Triple block	75	10	7	1250	2500	632	3	3/8	9/32	2760	5510	22.3
RF72130	RT Single block, becket, cleat	75	10	7	420	2000	455	3	3/8	9/32	930	4410	16.0
RF72330	RT Triple block, becket, cleat	75	10	7	685	2000	790	3	3/8	9/32	1510	4410	27.9
RF72700	BB & RT 3:1 coarse, 6:1 fine	75 + 50	10	-	800	1700	1415	3 + 2	3/8	-	1760	3750	48.9
RF72700B	RT Bottom blocks for RF72700 two-speed system	75 + 50	10	-	800	1700	855	3 + 2	3/8	-	1760	3750	30.2
RF72700T	BB Top blocks for RF72700 two-speed system	75 + 50	10	-	800	1700	560	3 + 2	3/8	-	1760	3750	19.8
RF72900	BB & RT 4:1 coarse, 8:1 fine	75 + 50	10	-	1100	2300	1535	3 + 2	3/8	-	2430	5070	53.8
RF72900B	RT Bottom blocks for RF72900 two-speed system	75 + 50	10	-	1100	2300	960	3 + 2	3/8	-	2430	5070	33.9
RF72900T	BB Top blocks for RF72900 two-speed system	75 + 50	10	-	1100	2300	575	3 + 2	3/8	-	2430	5070	20.3

Snatch Blocks



RF6751



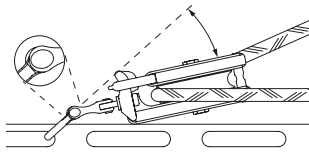
RF6721



RF6711



RF6741



Trunnion articulation provides correct lead when in restricted situations, such as toe-rail attachment.



RF6720



RF6710



RF6730

- ✓ Convenient solution for temporary leads and line deflection.
- ✓ Easily operated latch mechanism.
- ✓ Soft resilient cheeks reduce clatter and protect gelcoat and painted surfaces.
- ✓ Snap shackle head allows block swivel through 360°.
- ✓ Blocks with trunnion shackles allow additional articulation from side to side.
- ✓ Attachment point provided for a shock cord hanger.
- ✓ Removable spinnaker sheet deflector blocks for boats up to 10m (33ft).
- ✓ Temporary sheeting point while changing sheets for boats up to 10m (33ft).
- ✓ Temporary reefing block for boats up to 10m (33ft).
- ✓ Spare or replacement block for general use on larger boats depending on line angle and load.
- ✓ Temporary outboard sheet lead for headsail trimming.
- ✓ RF6730, RF6741: Grade 316 stainless steel frame, load strap and needle roller bearings; Hardcoat anodised alloy sheave; soft PVC cheeks.
- ✓ RF6751: Grade 316 stainless steel frame, load strap sheave and needle roller bearings; soft thermoplastic rubber cheeks.
- ✓ RF6710, RF6711, RF6720, RF6721: Grade 316 stainless steel frame, load strap and hub; U.V. stabilised Acetal sheaves; soft thermoplastic rubber cheeks.
- ✓ Investment cast Grade 15-5PH stainless steel snap shackle.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
RF6710	Snatch block	51	11	500	1000	250	2	7/16	1100	2200	8.8
RF6711	Snatch block, trunnion	51	11	500	1000	260	2	7/16	1100	2200	9.2
RF6720	Snatch block	64	12	1000	2000	480	2 1/2	1/2	2200	4410	16.9
RF6721	Snatch block, trunnion	64	12	1000	2000	510	2 1/2	1/2	2200	4410	18.0
RF6730	Snatch block, roller bearings	45	16	1600	3200	550	1 3/4	5/8	3530	7050	19.4
RF6741	Snatch block, trunnion, roller bearings	45	16	1500	3000	610	1 3/4	5/8	3310	6610	21.5
RF6751	Snatch block, trunnion, roller bearings	80	19	3000	6000	1480	3 1/8	3/4	6610	13230	52.2

Deck Organisers



- ✓ Deck organisers are an effective means of deflecting halyards and control lines to winches, stoppers and cleats.
- ✓ All-purpose bearing system provides maximum static load capacity.
- ✓ Light weight design with check cut-outs for easy bearing maintenance.
- ✓ Through-hub mounting for maximum strength.
- ✓ All sizes can be stacked to create double versions - M.W.L. of the top sheaves must not exceed 50% of the total block load rating.

- Series 40 - halyard and control line deflection on boats to 11m (36ft).
- Series 60 - halyard and control line deflection on boats to 14m (46ft).
- Line deflection on larger yachts (depending on load and angle of deflection).
- Alloy upper and lower cheek plates.
- U.V. stabilised Acetal sheaves.
- Grade 316 stainless steel hubs.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	LENGTH mm	HOLE SPACING mm	M.W.L. (per sheave) kg	B.L. (per sheave) kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	LENGTH in.	HOLE SPACING in.	M.W.L. (per sheave) lb	B.L. (per sheave) lb	WEIGHT oz
AP All Purpose															
RF41811	Cheek block, aluminium cheeks	40	12	67	-	400	1000	65	1 9/16	1/2	2 5/8	-	880	2200	2.3
RF41821	Double sheave organiser	40	12	116	48.5	500	1000	101	1 5/8	1/2	4 9/16	1 29/32	1100	2200	3.6
RF41831	Triple sheave organiser	40	12	164	48.5	500	1000	142	1 5/8	1/2	6 15/32	1 29/32	1100	2200	5.0
RF41841	Quadruple sheave organiser	40	12	213	48.5	500	1000	185	1 5/8	1/2	8 13/32	1 29/32	1100	2200	6.5
RF51151	Cheek block	50	12	75	-	500	1000	85	2	1/2	2 15/16	-	1100	2200	3.0
RF61821	Double sheave organiser	60	14	164	70.0	1000	2000	271	2 3/8	9/16	6 15/32	2 3/4	2200	4410	9.6
RF61831	Triple sheave organiser	60	14	234	70.0	1000	2000	392	2 3/8	9/16	9 7/32	2 3/4	2200	4410	13.8
RF61841	Quadruple sheave organiser	60	14	304	70.0	1000	2000	511	2 3/8	9/16	11 31/32	2 3/4	2200	4410	18.0

Use Them Anywhere

Ronstan's Ball Bearing (BB) and All Purpose (AP) blocks are a great all around solution.

Ball Bearing blocks have been conceived and engineered for the demands of competitive sailing. Used on boats of all sizes for sheet, fine tune and control line applications they utilise a highly efficient, low friction bearing system for optimum sheeting and trimming performance.

All Purpose Blocks with self-lubricating Acetal polymer sheaves running on polished Stainless Steel races perform equally well with dynamic loads and high static loads. For durability and a long service life, these blocks are the right choice for sheets, halyards and control line applications for cruising and racing.

Available in comprehensive range of sizes and configurations to suit a range of rope diameters and load requirements.

Smart Features™ designed into the blocks provide extra versatility.

BB Ball Bearing Blocks

Ball Bearing Blocks meet the high performance demands of running sheet applications with a unique two-stage bearing system.

Stage 1 - Under moderate loads, Acetal ball bearings ensure minimum friction.

Stage 2 - Under heavy loads, where deformation of ball bearings alone would result in increased friction, a sliding Acetal bearing on a polished Stainless steel race takes over, maintaining low friction performance.

Regular flushing with fresh water to remove salt and sand will maintain optimum performance over a long service life.

AP Dynamic and High Static Load Performance

UV stabilised Acetal sheaves provide bearing performance on a polished Stainless Steel race that performs equally well with dynamic and static loads.

Sheave design features side ribs to minimise weight and enhance strength. Self-lubricating Acetal polymer minimises friction and ensures dependable load bearing reliability.

Keyhole Becket Pins

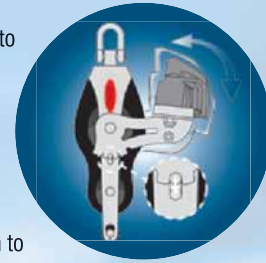
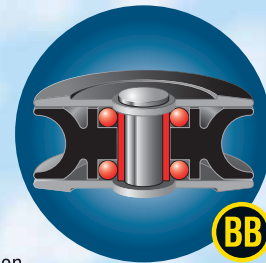
Becket pins lock into keyhole slots. No tools are required to remove the pins to fit pre-spliced lines or lock them back into place.

Adjustable Cleat Arms

The angle of the cleat arms can be adjusted easily. Sliding posts are simply pulled out of the stops to adjust (no tools required), and then snap back into locked position to secure the arms.

Captive Lock™ Universal Head

A simple sliding lock that can be engaged to lock the head post in either of two plains, or disengaged to allow the block to swivel.



Series 20



- ✓ Precision moulded Acetal sheaves running on stainless steel ball bearings provide high performance & low friction.
- ✓ High load versions feature a Nylatron® sheave suitable for rope and wire.
- ✓ High static and dynamic load capacity.
- ✓ Light weight.
- ✓ Versatile head fittings.
- ✓ Single blocks are available with swivel head or 2 way loop top.

- ✓ Double & triple blocks are supplied with shackle and have a 2 way head that can be fixed at 0° or 90°.
- ✓ Double & triple blocks allow the creation of powerful purchase systems.
- ✓ Upright lead blocks are available in low profile fixed or pivoting options.
- ✓ Exit blocks minimise friction in lines passing through the deck or exiting masts and booms. Supplied with cover plate, or low profile version with side tabs only.
- ✓ Linked blocks are used for dinghy barber haulers, cunningsams and spinnaker pole launching systems.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing															
RF20100	Single block, swivel shackle head	20	6	-	3	250	550	20	3/4	1/4	-	1/8	550	1210	0.7
RF20101	Single block, loop head	20	6	-	-	250	550	16	3/4	1/4	-	-	550	1210	0.6
RF20111	Single block, becket, loop head	20	6	-	-	250	550	18	3/4	1/4	-	-	550	1210	0.6
RF20141	Stand-up block	20	6	-	-	250	550	20	3/4	1/4	-	-	550	1210	0.7
RF20202	Double block, 2-axis shackle head	20	6	-	4	350	700	42	3/4	1/4	-	5/32	770	1540	1.5
RF20212	Double block, becket, 2-axis shackle head	20	6	-	4	350	700	44	3/4	1/4	-	5/32	770	1540	1.6
RF20281	Double block, in-line	20	6	-	-	250	550	28	3/4	1/4	-	-	550	1210	1.0
RF20284	Linked blocks, S20 & S20	20	6	-	-	250	550	30	3/4	1/4	-	-	550	1210	1.1
RF20302	Triple block, 2-axis shackle head	20	6	-	4	400	850	62	3/4	1/4	-	5/32	880	1870	2.2
RF20312	Triple block, becket, 2-axis shackle head	20	6	-	4	400	850	64	3/4	1/4	-	5/32	880	1870	2.3
RF20332	Triple block, becket, cam cleat, 2-axis shackle head	20	6	-	4	400*	850	122	3/4	1/4	-	5/32	880*	1870	4.3
HL High Load															
RF20101HL	Single block, loop head	20	6	3	-	275	550	14	3/4	1/4	1/8	-	610	1210	0.5

* Line load through cleat not to exceed 125kg (275lb).

Series 20

RF20151



2 x 4mm (5/32")

RF20151A



2 x 4mm (5/32")

RF20184



6mm (1/4")

RF20000HL



8mm (5/16")

RF20171



2 x 4mm (5/32")

RF20174



2 x 4mm (5/32")

RF20180



2 x 4mm (5/32")

RF20175



RF20711

RF20711HL



2 x 4mm (5/32")

RF20711A

RF20711AHL



2 x 4mm (5/32")



RF613S

3mm (1/8") pin, suits RF20100



RF615

4mm (5/32") pin, suits double & triple blocks

- ✓ Cheek block RF20151 has through-hub mounting for maximum strength.
- ✓ Cheek block RF20151A suits pop rivet mounting.
- ✓ Low profile swivelling hook for quick and easy attachment, suits rope, stainless steel and webbing fixing points

- ✓ Dinghy control lines and vang.
- ✓ Cunninghams.
- ✓ Traveller controls.
- ✓ U.V. stabilised Acetal sheaves.
- ✓ Stainless steel ball bearings.
- ✓ Grade 316 stainless steel hook

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing															
RF20151	Cheek block	20	6	-	-	250	550	14	3/4	1/4	-	-	550	1210	0.5
RF20151A	Cheek block, rivet mount	20	6	-	-	200	550	17	3/4	1/4	-	-	440	1210	0.6
RF20171	Upright lead block	20	6	-	-	250	550	18	3/4	1/4	-	-	550	1210	0.6
RF20174	Pivoting lead block	20	6	-	-	250	550	30	3/4	1/4	-	-	550	1210	1.1
RF20175	Pivoting lead block, cleat	20	6	-	-	150*	300	79	3/4	1/4	-	-	330*	660	2.8
RF20180	Single block, swivel hook head	20	6	-	-	135	270	21	3/4	1/4	-	-	300	590	0.7
RF20184	Single block, loop mount	20	6	-	-	250	550	22	3/4	1/4	-	-	550	1210	0.8
RF20711	Exit block, cover plate	20	6	-	-	250	1000	22	3/4	1/4	-	-	550	2200	0.8
RF20711A	Exit block, side tabs	20	6	-	-	250	1000	22	3/4	1/4	-	-	550	2200	0.8
HL High Load															
RF20000HL	Sheave, HL Nylatron®	20	6	3	-	-	-	2	3/4	1/4	1/8	-	-	-	0.1
RF20711HL	Exit block, cover plate	20	6	3	-	275	1000	22	3/4	1/4	1/8	-	610	2200	0.8
RF20711AHL	Exit block, side tabs	20	6	3	-	275	1000	22	3/4	1/4	1/8	-	610	2200	0.8

* Line load through cleat not to exceed 125kg (275lb).

Series 30



- ✓ Low friction 2-stage ball bearing system provides consistent performance over the full working load range.
- ✓ High static and dynamic load capacity.
- ✓ Light weight.
- ✓ Versatile head fittings.
- ✓ High Load blocks feature a Nylatron® sheave suitable for both rope and wire.
- ✓ Linked blocks are used for barber haulers, cunninghams and spinnaker pole launching systems.
- ✓ Primary lead blocks on dinghies and catamarans.
- ✓ Control lines on larger yachts.
- ✓ U.V. stabilised Acetal sheaves.
- ✓ Acetal ball bearings.
- ✓ High Load sheave uses self lubricating Nylatron®.
- ✓ Impact modified, fibre reinforced and U.V. stabilised Nylon cheeks.
- ✓ Grade 316 stainless steel load straps and head fittings.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing															
RF30100	Single block, swivel shackle head	30	8	-	4	300	750	34	1 3/16	5/16	-	5/32	660	1650	1.2
RF30101	Single block, loop head	30	8	-	-	300	750	28	1 3/16	5/16	-	-	660	1650	1.0
RF30110	Single block, becket, swivel shackle head	30	8	-	4	300	750	40	1 3/16	5/16	-	5/32	660	1650	1.4
RF30111	Single block, becket, loop head	30	8	-	-	300	750	34	1 3/16	5/16	-	-	660	1650	1.2
RF30141	Stand-up block	30	8	-	-	300	750	38	1 3/16	5/16	-	-	660	1650	1.3
RF30285	Linked blocks, S30 & S20	30+20	8+6	-	-	250	550	44	1 3/16+3/4	5/16+1/4	-	-	550	1210	1.6
HL High Load															
RF30100HL	Single block, swivel shackle head	30	8	3	4	375	750	28	1 3/16	5/16	1/8	5/32	830	1650	1.0
RF30101HL	Single block, loop head	30	8	3	-	375	750	28	1 3/16	5/16	1/8	-	830	1650	1.0



Team Ronstan - Daniel Fitzgibbon and Liesl Tesch racing in Melbourne
Photo: Jeff Crow / Sport the Library



- ✓ Upright lead blocks are available in low profile fixed or pivoting options.
- ✓ Pivoting lead block RF30174 allows trimming from different positions.
- ✓ Block with clevis pin head has an alloy sheave with oversize Torton® ball bearings to minimise friction.
- ✓ High Load blocks feature a Nylatron® sheave suitable for both rope and wire.
- ✓ Exit blocks minimise friction in lines passing through the deck or exiting masts and booms. Available in single or twin sheave versions.
- ✓ Stainless steel cheek, clevis pin head block is ideal for spinnaker halyards where speed and minimum friction are important.
- ✓ Upright lead blocks are a low profile solution for leading halyards or other rig and sail controls back to cleats or jammers. Pivoting version suits controls that need to be trimmed from either side of the boat.
- ✓ U.V. stabilised Acetal sheaves.
- ✓ Acetal ball bearings.
- ✓ Alloy sheave versions use Torton® ball bearings.
- ✓ High Load sheave uses self lubricating Nylatron®.
- ✓ Impact modified, fibre reinforced and U.V. stabilised Nylon cheeks.
- ✓ Grade 316 stainless steel load straps and head fittings.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing															
RF30171	Upright lead block	30	8	-	-	300	750	30	1 3/16	5/16	-	-	660	1650	1.1
RF30174	Pivoting lead block	30	8	-	-	300	650	50	1 3/16	5/16	-	-	660	1320	1.8
RF30711	Single exit block	30	8	-	-	300	750	35	1 3/16	5/16	-	-	660	1650	1.2
RF30721	Double exit block	30	8	-	-	300	750	60	1 3/16	5/16	-	-	660	1650	2.1
RF34000	Sheave, alloy, Torton® balls	30	5	-	-	165	-	10	1 3/16	3/16	-	-	360	-	0.4
RF34108	Single, clevis pin head, alloy sheave, Torton® balls	30	5	-	6	165	675	36	1 3/16	3/16	-	7/32	360	1490	1.3
HL High Load															
RF30711HL	Single exit block	30	8	3	-	300	750	43	1 3/16	5/16	1/8	-	660	1650	1.5

Series 40



- ✓ Low friction, 2-stage ball bearing system provides consistent performance over the full load range.
- ✓ Light weight.
- ✓ Cheek cut-outs for easy bearing maintenance.

- ✓ Removable becket pins allow lines to be spliced prior to fitting and are locked into position without the use of split rings or tools.
- ✓ High Load blocks feature a Nylatron® sheave suitable for both rope and wire.
- ✓ Captive Lock™ universal head can be fixed at 0° or 90°, or left free to swivel.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing															
RF40100	Single block, universal head	40	10	-	5	350	1000	70	1 9/16	3/8	-	3/16	770	2200	2.5
RF40101	Single block, loop head	40	10	-	-	350	1000	53	1 9/16	3/8	-	-	770	2200	1.9
RF40110	Single block, becket, universal head	40	10	-	5	350	1000	79	1 9/16	3/8	-	3/16	770	2200	2.8
RF40111	Single block, becket, loop head	40	10	-	-	350	1000	60	1 9/16	3/8	-	-	770	2200	2.1
RF40202	Double block, swivel head	40	10	-	5	500	1200	134	1 9/16	3/8	-	3/16	1100	2650	4.7
RF40212	Double block, becket, swivel head	40	10	-	5	500	1200	142	1 9/16	3/8	-	3/16	1100	2650	5.0
RF40500	Fiddle block, universal head	40 + 24	8	-	5	350	1000	90	1 9/16 + 15/16	5/16	-	3/16	770	2200	3.2
RF40530*	Fiddle block, becket, adjustable cleat, universal head	40 + 24	8	-	5	350	1000	163	1 9/16 + 15/16	5/16	-	3/16	770	2200	5.7
HL High Load															
RF40100HL	Single block, universal head	40	10	4	5	500	1000	69	1 9/16	3/8	5/32	3/16	1100	2200	2.4

* Line load through cleat not to exceed 125kg (275lb).

Team Ronstan - Darren Bundock and Glenn Ashby, Formula 18
Photo: Christophe Launay / www.sealaunay.com



RF40140

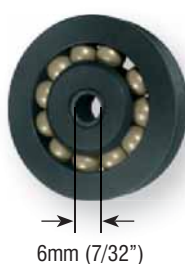


2 x 5mm (3/16")

RF44108



RF44000



6mm (7/32")

RF6170



RF6171



RF40171
RF40171HL



RF134, RF134A (countersunk holes)
Suits loop head blocks

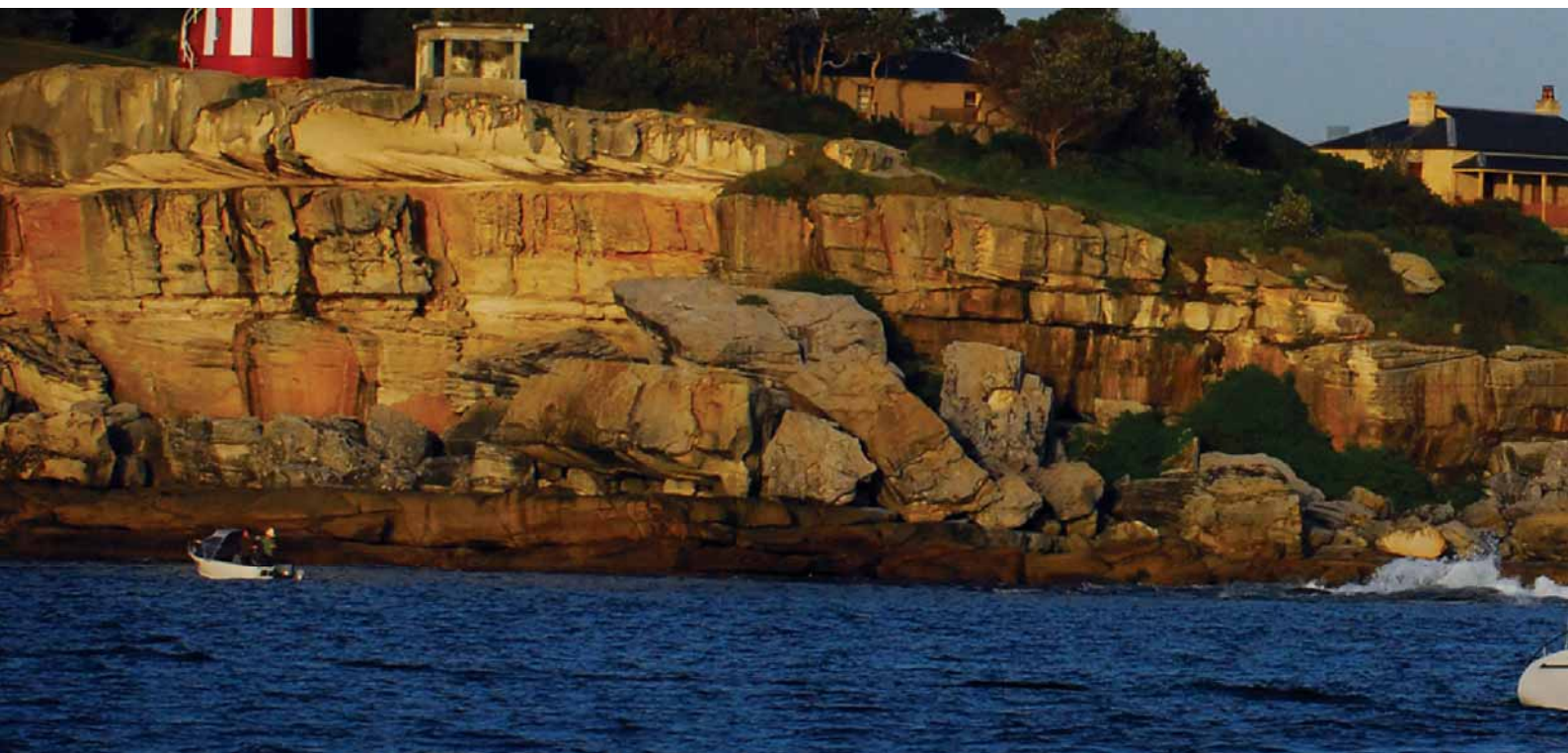


RF804
6mm (7/32") pin, suits RF44108

- ✓ Low profile stand-up block has swivel head post to allow full articulation and rotation.
- ✓ Clevis Pin head block has an alloy sheave with oversize Torlon® ball bearings to minimise friction.
- ✓ Snap shackle adapters suit single and fiddle blocks and are available in standard and trunnion versions.
- ✓ Mainsheet, halyard, vang and spinnaker control lines on off-the-beach catamarans, one design classes and sportsboats up to 8m (26ft).
- ✓ Acetal ball bearings.
- ✓ Alloy sheave versions use Torlon® ball bearings.
- ✓ U.V. stabilised Acetal sheaves. High Load blocks have a self lubricating Nylatron® sheave.
- ✓ Impact modified, fibre reinforced and U.V. stabilised Nylon cheeks.
- ✓ Grade 316 stainless steel load straps and head fittings.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing															
RF40140	Stand-up block, swivel head	40	10	-	-	350	800	71	1 9/16	3/8	-	-	770	1760	2.5
RF40171	Upright lead block	40	10	-	-	350	1000	60	1 9/16	3/8	-	-	770	2200	2.1
RF44000	Sheave, alloy, Torlon® balls	40	6	-	-	-	-	15	1 9/16	1/4	-	-	-	-	0.5
RF44108	Single block, clevis pin head, alloy sheave, Torlon® balls	40	6	-	6	240	1100	60	1 9/16	1/4	-	7/32	530	2430	2.1
HL High Load															
RF40171HL	Upright lead block	40	10	4	-	500	1000	59	1 9/16	3/8	5/32	-	1100	2200	2.1
Accessories															
RF6170	Snap shackle head adapter	-	-	-	5	500	1000	49	-	-	-	3/16	1100	2200	1.7
RF6171	Trunnion snap shackle head adapter	-	-	-	5	500	1000	62	-	-	-	3/16	1100	2200	2.2

Series 50



RF150
4.8mm (3/16") pin, suits
single blocks

RF151
6mm (1/4") pin, suits
double blocks

RF1057
Suits loop head and
shackle head blocks

RF321
Suits swivel
shackle head blocks

- ✓ Low friction, 2-stage ball bearing system provides consistent performance over the full load range.
- ✓ High static and dynamic load capacity.
- ✓ Light weight.

- ✓ Cheek cut-outs for easy bearing maintenance.
- ✓ Double block can be locked at 0° or 90°, or left free to swivel, by adjusting the head post grub screw.
- ✓ Removable becket pins allow lines to be spliced prior to fitting and are locked into position without the use of split rings or tools.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing															
RF50100	Single block, universal head	50	12	-	5	500	1500	117	2	1/2	-	3/16	1100	3310	4.1
RF50101	Single block, loop head	50	12	-	-	500	1500	97	2	1/2	-	-	1100	3310	3.4
RF50110	Single block, becket, universal head	50	12	-	5	500	1500	133	2	1/2	-	3/16	1100	3310	4.7
RF50200	Double block, universal head	50	12	-	6	800	2000	254	2	1/2	-	1/4	1760	4410	9.0



Seawind 1000XL2
Photo: Saltwater Images



4 x 5mm (3/16")



2 x 6mm (1/4")



RF6170



RF6171



RF51010
snap-in keyhole becket pin



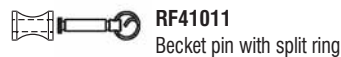
RF51011
becket pin with split ring

- ✓ A stand-up base adapter and snap shackle adapters add functionality to single and fiddle blocks.
- ✓ Snap shackle adapters suit single and fiddle blocks and are available in standard and trunnion versions.
- ✓ Acetal ball bearings.

- ✓ Alloy sheave versions use Torlon® ball bearings.
- ✓ High Load sheave uses self lubricating Nylatron®.
- ✓ U.V. stabilised Acetal sheaves.
- ✓ Impact modified, fibre reinforced and U.V. stabilised Nylon cheeks.
- ✓ Grade 316 stainless steel load straps and head fittings.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing															
RF50171	Upright lead block	50	12	-	-	500	1500	116	2	1/2	-	-	1100	3310	4.1
HL High Load															
RF50171HL	Upright lead block	50	12	5	-	800	1500	115	2	1/2	3/16	-	1760	3310	4.1
Accessories															
RF2450	Stand-up base, 51 x 75mm (2" x 2 31/32") base	-	-	-	5	500	1000	86	-	-	-	3/16	1100	2200	3.0
RF6170	Snap shackle head adapter	-	-	-	5	500	1000	49	-	-	-	3/16	1100	2200	1.7
RF6171	Trunnion snap shackle head adapter	-	-	-	5	500	1000	62	-	-	-	3/16	1100	2200	2.2

Series 40



- ✓ Self-lubricating Acetal polymer sheave ensures low friction and extreme durability.
- ✓ High static and dynamic load capacity.
- ✓ Long service life, virtually maintenance free.
- ✓ Captive Lock™ universal head can be fixed at 0° or 90°, or left free to swivel.

- ✓ Removable becket pins allow lines to be spliced prior to fitting and are locked into position without the use of split rings or tools.
- ✓ Double & triple blocks have a 2-way head that can be fixed at 0° or 90°.
- ✓ Low profile stand-up block has swivel head post to allow full articulation and rotation.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
AP All Purpose													
RF41100	Single block, universal head	40	10	5	400	1000	71	1 9/16	7/16	3/16	880	2200	2.5
RF41101	Single block, loop head	40	10	-	400	1000	54	1 9/16	7/16	-	880	2200	1.9
RF41110	Single block, becket, universal head	40	10	5	400	1000	80	1 9/16	7/16	3/16	880	2200	2.8
RF41111	Single block, becket, loop head	40	10	-	400	1000	61	1 9/16	7/16	-	880	2200	2.2
RF41140	Stand-up block, swivel head	40	10	-	400	800	72	1 9/16	7/16	-	880	1760	2.5
RF41202	Double block, 2-axis shackle head	40	10	5	600	1200	135	1 9/16	7/16	3/16	1320	2650	4.8
RF41212	Double block, becket, 2-axis shackle head	40	10	5	600	1200	143	1 9/16	7/16	3/16	1320	2650	5.0
RF41302	Triple block, 2-axis head	40	10	5	700	1400	195	1 9/16	7/16	3/16	1540	3090	6.9
RF41312	Triple block, becket, 2-axis head	40	10	5	700	1400	209	1 9/16	7/16	3/16	1540	3090	7.4



 **RF134, RF134A (countersunk holes)**
Suits loop head blocks

- ✓ Curved base adapter for cheek block facilitates mounting on masts or booms.
- ✓ Fiddle blocks are ideal for fine-tune mainsheet tackles, cunninghams, boom vang, backstays and other control line purchase systems.
- ✓ Captive Lock™ universal head can be fixed at 0° or 90°, or left free to swivel.
- ✓ Quick adjusting cleat arms require no tools to adjust and fix in desired position.
- ✓ Snap shackle adapters suit single and fiddle blocks and are available in standard and trunnion versions.
- ✓ Mainsheet and halyard applications, vang and spinnaker control lines on off-the-beach boats and small keelboats up to 8m (26ft).
- ✓ U.V. stabilised Acetal sheaves.
- ✓ Impact modified, fibre reinforced and U.V. stabilised Nylon cheeks.
- ✓ Grade 316 stainless steel bearing race, load straps and head fittings.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
AP All Purpose															
RF41151	Cheek block, stainless steel cheeks	40	10	-	-	400	1000	66	1 9/16	7/16	-	-	880	2200	2.3
RF41500	Fiddle block, universal head	40 + 24	8	-	5	400	1000	91	1 9/16 + 15/16	5/16	-	3/16	880	2200	3.2
RF41510	Fiddle block, becket, universal head	40 + 24	8	-	5	400	1000	98	1 9/16 + 15/16	5/16	-	3/16	880	2200	3.5
RF41520	Fiddle block, adjustable cleat, universal head	40 + 24	8	-	5	400*	1000	157	1 9/16 + 15/16	5/16	-	3/16	880*	2200	5.5
RF41530	Fiddle block, becket, adjustable cleat, universal head	40 + 24	8	-	5	400*	1000	164	1 9/16 + 15/16	5/16	-	3/16	880*	2200	5.8
HL High Load															
RF40171HL	Upright lead block	40	10	-	4	500	1000	59	1 9/16	3/8	-	5/32	1100	2200	2.1
Accessories															
RF6170	Snap shackle head adapter	-	-	-	5	500	1000	49	-	-	-	3/16	1100	2200	1.7
RF6171	Trunnion snap shackle head adapter	-	-	-	5	500	1000	62	-	-	-	3/16	1100	2200	2.2
RF41153	Curved surface adapter for RF41151 cheek block	-	-	-	-	-	-	9	-	-	-	-	-	-	0.3

* Line load through cleat not to exceed 125kg (275lb).

Series 50



View back from front of Metung YC fleet aboard Song of Mana
Photo: Captain Bryn

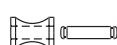
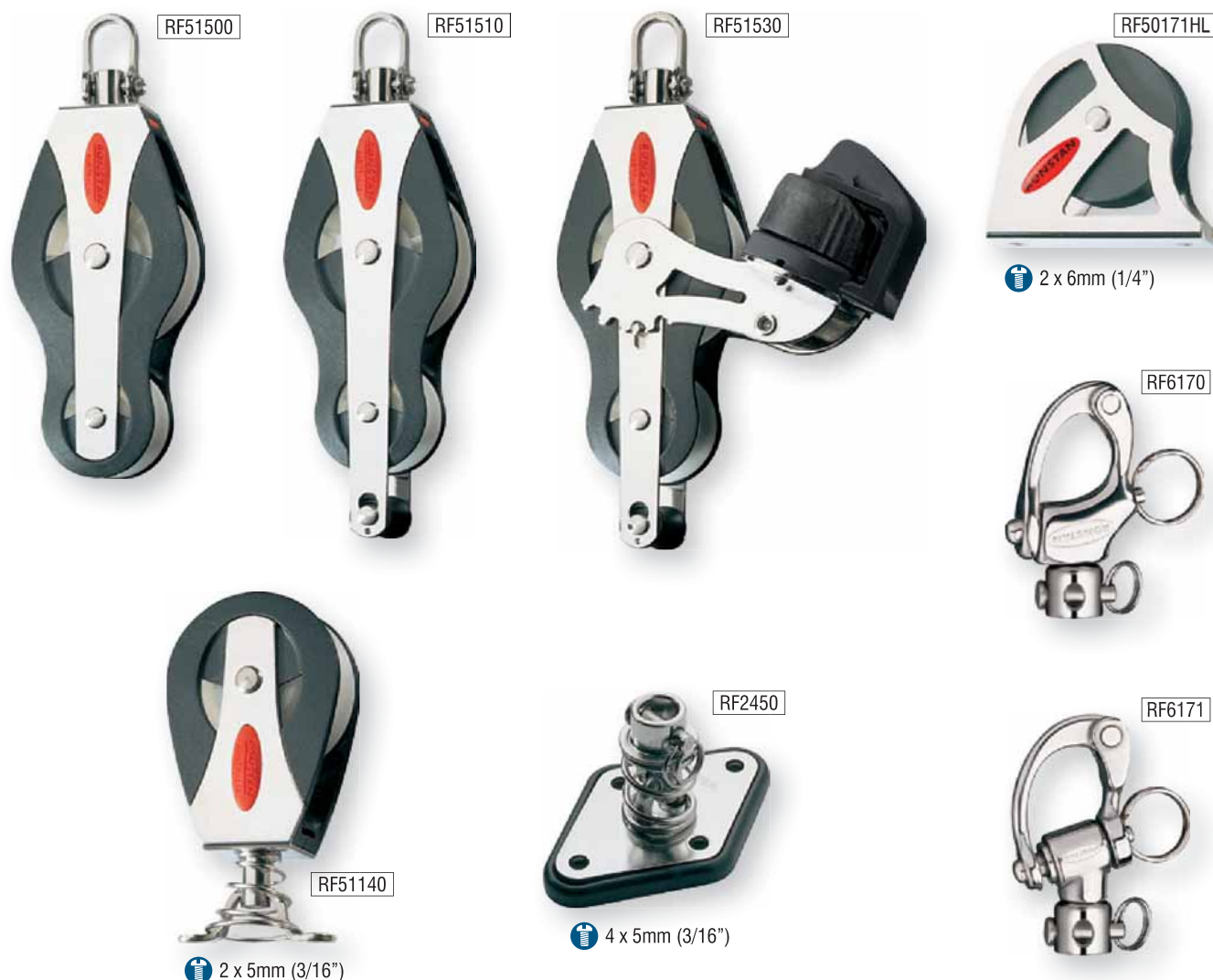
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RF150
4.8mm (3/16") pin, suits single and fiddle blocks
- 

RF151
6mm (1/4") pin, suits double and triple blocks

- Self-lubricating Acetal polymer sheave ensures low friction and extreme durability.
- High static and dynamic load capacity.
- Long service life, virtually maintenance free.
- Double & triple blocks have a 2-way head that can be fixed at 0° or 90°.
- Captive Lock™ universal head can be fixed at 0° or 90°, or left free to swivel.
- Removable becket pins allow lines to be spliced prior to fitting and are locked into position without the use of split rings or tools.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
AP All Purpose													
RF51100	Single block, universal head	50	12	5	750	1500	118	2	1/2	3/16	1650	3310	4.2
RF51101	Single block, loop head	50	12	-	750	1500	98	2	1/2	-	1650	3310	3.5
RF51110	Single block, becket, universal head	50	12	5	750	1500	134	2	1/2	3/16	1650	3310	4.7
RF51111	Single block, becket, loop head	50	12	-	750	1500	114	2	1/2	-	1650	3310	4.0
RF51200	Double block, universal head	50	12	6	1000	2000	255	2	1/2	1/4	2200	4410	9.0
RF51210	Double block, becket, universal head	50	12	6	1000	2000	271	2	1/2	1/4	2200	4410	9.6
RF51300	Triple block, universal head	50	12	6	1200	2400	369	2	1/2	1/4	2650	5290	13.0



RF51010
Snap-in keyhole becket pin



RF51011
Becket pin with split ring

- ✓ Fiddle blocks are ideal for fine-tune mainsheet tackles, cunninghams, boom vang, backstays and other control line purchase systems.
- ✓ Snap shackle adapters suit single and fiddle blocks and are available in standard and trunnion versions.
- ✓ A stand-up base adapter and snap shackle adapters add functionality to single and fiddle blocks.
- ✓ Quick adjusting cleat arms require no tools to adjust and fix in desired position.
- ✓ Low profile stand-up block has a swivel head post to allow full articulation and rotation.
- ✓ Mainsheet and halyard applications, vang and spinnaker control lines on boats to 10m (33ft).
- ✓ U.V. stabilised Acetal sheaves.
- ✓ Impact modified, fibre reinforced and U.V. stabilised Nylon cheeks.
- ✓ Grade 316 stainless steel bearing race, load straps and head fittings.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
AP All Purpose													
RF50171HL	Upright lead block	50	12	-	800	1500	115	2	1/2	-	1760	3310	4.1
RF51140	Stand-up block, swivel head	50	12	-	750	1500	118	2	1/2	-	1650	3310	4.2
RF51500	Fiddle block, universal head	54 + 34	10	5	750	1500	167	2 1/8 + 1 5/16	3/8	3/16	1650	3310	5.9
RF51510	Fiddle block, becket, universal head	54 + 34	10	5	750	1500	176	2 1/8 + 1 5/16	3/8	3/16	1650	3310	6.2
RF51530	Fiddle block, becket, adjustable cleat, universal head	54 + 34	10	5	750*	1500	318	2 1/8 + 1 5/16	3/8	3/16	1650*	3310	11.2
Accessories													
RF2450	Stand-up base, 51x75mm (2"x3") base	-	-	5	500	1000	86	-	-	3/16	1100	2200	3.0
RF6170	Snap shackle head adapter	-	-	5	500	1000	49	-	-	3/16	1100	2200	1.7
RF6171	Trunnion snap shackle head adapter	-	-	5	500	1000	62	-	-	3/16	1100	2200	2.2

* Line load through cleat not to exceed 175kg (385lb).

Use Them Anywhere

Core Blocks™ are a true all round solution. A tuned 2-stage bearing system provides excellent performance across the full working load range with an integrated thrust bearing feature and the resilience to handle high dynamic or static loads. Acetal & aluminium sheave options, alloy cheeks and stainless fixings complete the durable package. For reliability and a long service life, these blocks are the right choice for sheets, halyards and control line applications for cruising and racing.



**reddot design award
winner 2011**

UB Universal Bearing

Dynamic and high static load performance

The Ronstan Universal Bearing incorporates our proven 2-stage bearing system.

Stage 1 - Under moderate loads, Acetal ball bearings ensure minimum friction.

Stage 2 - Under heavy loads, where deformation of ball bearings alone would result in increased friction, a sliding Acetal bearing on a polished stainless steel race takes over, maintaining low friction performance.

Additionally the ball bearings are configured to act as a thrust bearing between the sheave and cheeks, preventing the sheave from rubbing on the cheeks and causing friction when the line lead in and out of the block isn't perfect. Particularly important for foot blocks.

Acetal & aluminium sheave options

Selected models are available with an aluminium sheave which has a deep groove profile specifically made for use with wire.

Aluminium alloy cheek plates

Block cheeks are manufactured from the highest quality aluminium alloy for maximum strength. Material optimisation and the cut-away design minimises weight and allows easy fresh water rinsing of salt and debris from the bearings.

Cheek design has been further styled with flaring at the block throat and reduced gap between the cheek and sheave, minimising rope wear, and the hollow hub can be used as a becket take-off or tie-up point.

Universal head

The head assembly incorporates a brass bearing washer to provide smooth 360° rotation of the post and shackle. A set screw arrangement allows the head to be locked at 0° or 90°.

Shackles are high quality forged grade 316 stainless steel.

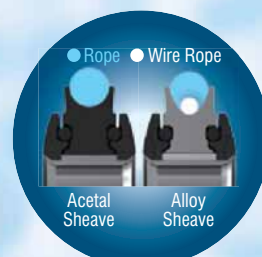
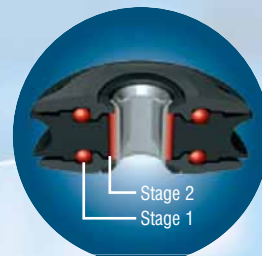
Suits pre-spliced lines

Removable becket pins allow fitting of pre-spliced lines. The flush fit becket pin head is kind on deck surfaces and won't snag lines.

Fully articulated stand-up

Stand-up models have a low profile linkage that provides full rotation and articulation. A high strength precision cast padeye minimises the footprint and a dedicated rubber boot ensures the block is held upright when not loaded.

- Degree of innovation
- Functionality
- Formal quality
- Ergonomics
- Durability
- Symbolic and emotive
- Self-explanation quality
- Ecological soundness





RF616H
4.8mm (3/16") pin

- ✓ High dynamic and static load capacity delivered by an efficient 2-stage bearing system. Ball bearings also counteract side thrust loads.
- ✓ Long service life; virtually maintenance free.
- ✓ Central hub hole can be used as a becket take-off point.
- ✓ RF44188 Halyard block incorporates a low profile swivel head fork with a removable screw pin for attaching to a padeye or 12mm (1/2") diam. mast collar post.
- ✓ RF44140 Stand-up block features a strong cast padeye base, and has a swivel head post to allow full rotation and articulation.
- ✓ Mainsheet, halyard and spinnaker sheet applications on boats to 10m (33ft).
- ✓ Various control line applications on larger yachts.
- ✓ Sheave: U.V. stabilised Acetal.
- ✓ Cheek body: Aluminium Alloy.
- ✓ Ball Bearings: High compression strength carbon black Acetal.
- ✓ Shackle, head post & hub: Grade 316 stainless steel
- ✓ Padeye: Grade 15-5PH stainless steel.
- ✓ Fork pin: 2205 stainless steel (RF44188)

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
Core Blocks™													
RF44100	Single block, swivel shackle head	45	12	5	700	1400	104	1 3/4	1/2	3/16	1540	3090	3.6
RF44140	Stand-up block, swivelling	45	12	-	700	1400	151	1 3/4	1/2	3/16	1540	3090	5.3
RF44188	Halyard block, swivel fork head	45	12	5	700	1400	121	1 3/4	1/2	3/16	1540	3090	4.2
Accessories													
RF1459	Mast base collar post	-	-	5	700	1400	23	-	-	3/16	-	-	0.8
RF2429-02	Padeye, 12mm (1/2")diam.	-	-	-	750	1500	26	-	-	-	1650	3300	0.9
RF6170	Snap shackle head adapter	-	-	5	500	1000	49	-	-	3/16	1100	2200	1.7
RF6171	Trunion snap shackle head adapter	-	-	5	500	1000	62	-	-	3/16	1100	2200	2.2

Series 60



- ✓ RF64140 stand-up block features a strong precision cast padeye base, and has a swivel head post to allow full articulation and rotation.
- ✓ RF64110 & RF64130 removable M8 (3/16'') becket pin suits pre-spliced lines.
- ✓ RF64108 Halyard block, screw pin with roller head
- ✓ RF64103 features a versatile trunnion snap shackle that provides quick & simple attachment and removal, and has 360° rotation with side-to-side articulation.
- Mainsheet, halyard and spinnaker sheet applications on boats to 12m (40ft).
- Various control line applications on larger yachts.

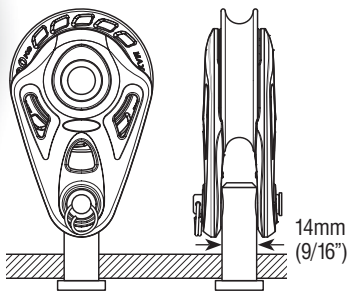
- Sheave: U.V. stabilised Acetal or anodised aluminium (AW models).
- Cheek plates & cleat arms: Aluminium alloy.
- Ball Bearings: High compression strength carbon black Acetal.
- Shackle, post & hub: Grade 316 stainless steel.
- Padeye & snap shackle: Grade 15.5PH stainless steel.
- Pins: Grade 2205 stainless steel (RF64108, RF64108A, RF64202).
- Snap shackle: 15-5PH investment cast stainless steel.
- Cleat: Fibre reinforced composite.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
RF64100	Single block, swivel shackle head	60	12	-	6	1000	2000	235	2 3/8	1/2	-	1/4	2200	4410	8.3
RF64100AW	Single block, aluminium wire sheave, swivel shackle head	60	12	5	6	1000	2000	292	2 3/8	1/2	3/16	1/4	2200	4410	10.3
RF64103	Single block, trunnion snap shackle head	60	12	-	-	1000	2000	285	2 3/8	1/2	-	-	2200	4410	10.1
RF64108	Halyard block, screw pin with roller head	60	12	-	8	1000	2000	186	2 3/8	1/2	-	5/16	2200	4410	6.6
RF64108AW	Halyard block, aluminium wire sheave, screw pin, roller head	60	12	5	8	1000	2000	212	2 3/8	1/2	3/16	5/16	2200	4410	7.5
RF64110	Single block, becket, swivel shackle head	60	12	-	6	1000	2000	275	2 3/8	1/2	-	1/4	2200	4410	9.7
RF64130	Single block, becket, cleat, swivel shackle head	60	12	-	8	1000*2	2000*2	450	2 3/8	1/2	-	5/16	2200*2	4410*2	15.9
RF64140	Stand-up block, swivelling	60	12	-	-	1000	2000	372	2 3/8	1/2	-	-	2200	4410	13.2
RF64202	Double block, non-swivel shackle head	60	12	-	-	1000	2000	390	2 3/8	1/2	-	-	2200	4410	13.8

*1 Full block rated load can only be achieved with uniformly distributed load across full length of clevis pin. i.e. 14mm (9/16'') diameter mast collar post or 14mm (9/16'') wide mast collar plate/tang.
 *2 Line load through cleat not to exceed 175kg (385lb)



RF617A
6mm (15/64") pin



RF64108A suits 14mm (9/16")
mast collar post (not supplied)

- ✓ RF64520 & RF64523 cleating angle is adjustable and are fitted with a high performance C-cleat and fairlead for secure and easy cleating.
- ✓ Fiddle blocks incorporate an integrated becket through the hub of the lower sheave, and are ideal for creating simple vang and mainsheet systems up to 4:1 on boats to 12m (40ft).
- ✓ RF64503 & RF64523 features a versatile trunnion snap shackle that provides quick & simple attachment and removal, and has 360° rotation with side-to-side articulation.
- ✓ RF64108A mast base block has a removable clevis pin for attaching to suit a 14mm (9/16") wide mast collar post.*
- ✓ Universal head can be fixed at 0° or 90° or left free to swivel, by using a 2.5mm Hex/Allen Key.
- ✓ Sheave: U.V. stabilised Acetal or anodised aluminium (AW models).
- ✓ Cheek plates: Aluminium alloy.
- ✓ Ball Bearings: High compression strength carbon black Acetal.
- ✓ Shackle, post & hub: Grade 316 stainless steel.
- ✓ Pins: Grade 2205 stainless steel (RF64108, RF64108A, RF64202).
- ✓ Snap shackle & pad eye: 15-5PH investment cast stainless steel.
- ✓ Cleat: Fibre reinforced composite.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
UB Core Blocks™															
RF64108A	Mast base block, clevis pin head	60	12	-	8	1000*1	2000*1	182	2 3/8	1/2	-	5/16	2200*1	4410*1	6.4
RF64500	Fiddle block, swivel shackle head	60+30	12	-	-	1000	2000	355	2 3/8+ 1 3/16	1/2	-	-	2200	4410	12.5
RF64503	Fiddle block, snap shackle head	60+30	12	-	-	1000	2000	405	2 3/8+ 1 3/16	1/2	-	-	2200	4410	14.2
RF64520	Fiddle block, cleat, swivel shackle head	60+30	12	-	-	1000*3	2000*3	490	2 3/8+ 1 3/16	1/2	-	-	2200*3	4410*3	17.3
RF64523	Fiddle block, cleat, snap shackle head	60+30	12	-	-	1000*3	2000*3	540	2 3/8+ 1 3/16	1/2	-	-	2200*3	4410*3	19.0
RF64151	Foot block, single	60	12	-	-	1000	2000	180	2 3/8	1/2	-	-	2200	4410	6.4
RF64251	Foot block, double	60	12	-	-	1000*2	2000*2	370	2 3/8	1/2	-	-	2200*2	4410*2	13.1

*1 Full block rated load can only be achieved with uniformly distributed load across full length of clevis pin, i.e. 14mm (9/16") diameter mast collar post or 14mm (9/16") wide mast collar plate/tang.
*2 Total block load. Maximum load on top sheave not to exceed 50% of total block load. *3 Line load through cleat not to exceed 175kg (385lb)

Series 75



'Pherusa' Contest 57 / www.contestyachts.com



- ✓ High static & dynamic load capacity achieved from 2-stage bearing system. Ball bearings also address side thrust loads.
- ✓ Universal head can be fixed at 0° or 90° or left free to swivel, by using a 2.5mm Hex/Allen Key.
- ✓ Long service life; virtually maintenance free.
- ✓ Central hub hole can be used as a becket take-off point.
- ✓ RF74140 Stand-up block features a strong precision cast padeye base, and has a swivel head post to allow full articulation and rotation.
- ✓ RF74110 Removable becket pin allows lines to be spliced prior to fitting.

- ✓ Mainsheet, spinnaker sheet, vang, halyard and backstay applications on boats to 14m (46ft).
- ✓ General applications on larger yachts.
- ✓ Sheave: U.V. stabilised Acetal, or anodised aluminium (AW models).
- ✓ Cheek plates: Aluminium alloy.
- ✓ Ball Bearings: High compression strength carbon black acetal.
- ✓ Shackle, post & hub: Grade 316 stainless steel.
- ✓ Padeye: Grade 15-5PH stainless steel.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
UB Core Blocks™															
RF74100	Single block, swivel shackle head	75	14	-	8	1500	3000	354	3	9/16	-	5/16	3300	6600	12.5
RF74100AW	Single block, aluminium wire sheave, swivel shackle head	75	14	8	8	1500	3000	432	3	9/16	5/16	5/16	3300	6600	15.3
RF74110	Single block, becket, swivel shackle head	75	14	-	8	1500	3000	428	3	9/16	-	5/16	3300	6600	15.1
RF74140	Stand-up block, swivelling	75	14	-	-	1500	3000	468	3	9/16	-	-	3300	6600	16.5



- ✓ High static & dynamic load capacity achieved from 2-stage bearing system. Ball bearings also address side thrust loads.
- ✓ Long service life; virtually maintenance free.
- ✓ Central hub hole can be used as a becket take-off point.
- ✓ RF74108 Halyard block has a removable 8mm (5/16\") threaded pin for attaching to mast collar or mainsail headboard.
- ✓ RF74108A Mast base block has removable 8mm (5/16\") clevis pin to suit a 14mm (9/16\") wide mast collar post.*
- ✓ Universal head can be fixed at 0° or 90° or left free to swivel, by using a 2.5mm Hex/Allen Key.

- ✓ Mainsheet, spinnaker sheet, vang, halyard and backstay applications on boats to 14m (46ft).
- ✓ General applications on larger yachts.
- ✓ Sheave: U.V. stabilised acetal, or anodised aluminium (AW models).
- ✓ Cheek plates: aluminium alloy.
- ✓ Ball Bearings: High compression strength carbon black Acetal.
- ✓ Shackle & hub: Grade 316 stainless steel.
- ✓ Pins: 2205 stainless steel (RF74108, RF74108A, RF74202).

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
RF74108	Halyard block, screw pin & roller head	75	14	8	1500	3000	234	3	9/16	5/16	3300	6600	8.3
RF74108A	Mast base block, clevis pin head	75	14	8	1500*1	3000*1	230	3	9/16	5/16	3300*1	6600*1	8.1
RF74151	Foot block, single	75	14	-	1500	3000	259	3	9/16	-	3300	6600	9.2
RF74202	Double block, non-swivel shackle head	75	14	-	1500	3000	506	3	9/16	-	3300	6600	17.9
RF74251	Foot block, double	75	14	-	1500*2	3000*2	530	3	9/16	-	3300*2	6600*2	18.7

*1 Full block rated load can only be achieved with uniformly distributed load across full length of clevis pin. i.e. 14mm (9/16\") diameter mast collar post or 14mm (9/16\") wide mast collar plate/tang.

*2 Total block load. Maximum load on top sheave not to exceed 50% of total block load.

Utility Blocks



RF13101 FITTING OPTIONS

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
RF280	Single block, loop head	29	8	300	600	20	1 1/8	5/16	660	1320	0.7
RF443	Single block, swivel ring head	29	10	250	500	44	1 1/8	3/8	550	1100	1.6
RF467	Single block, swivel shackle head	29	10	250	500	50	1 1/8	3/8	550	1100	1.8
RF469	Single block, ferrule eye head	29	10	350	500	40	1 1/8	3/8	770	1100	1.4
RF470	Single block, becket, ferrule eye head	29	10	350	500	45	1 1/8	3/8	770	1100	1.6
RF567	Single block, becket, swivel shackle head	29	10	250	500	55	1 1/8	3/8	550	1100	1.9
RF571	Single block, loop head	25	6	300	600	15	1	1/4	660	1320	0.5
RF572	Single block, becket, loop head	25	6	300	600	20	1	1/4	660	1320	0.7
RF573	Single block, swivel shackle head	25	6	150	300	20	1	1/4	330	660	0.7
RF661	Single block, tube rivet	19	5	150	450	10	3/4	3/16	330	990	0.4
RF662	Double block, tube rivet	19	5	300	600	20	3/4	3/16	660	1320	0.7
RF663	Single block, ferruled eye head	19	5	150	450	10	3/4	3/16	330	990	0.4
RF666	Single block, loop head	19	5	150	400	10	3/4	3/16	330	880	0.4
RF681	Single block, becket, loop head	29	8	300	600	25	1 1/8	5/16	660	1320	0.9
RF2332	Single block, swivel ring head	25	6	300	600	20	1	1/4	660	1320	0.7
RF13101-2	Single block, loop head, black (2 pack)	16	4	150	300	5	5/8	5/32	330	660	0.2
RF13101G-2	Single block, loop head, grey (2 pack)	16	4	150	300	5	5/8	5/32	330	660	0.2
RF13101R-2	Single block, loop head, red (2 pack)	16	4	150	300	5	5/8	5/32	330	660	0.2

Utility Blocks



RF806S
4.8mm (3/16") pin, suits RF662



RF807
4.8mm (3/16") pin, suits single and fiddle blocks

- ✓ Simple, versatile and economical blocks have many uses.
- ✓ Lightweight, durable construction.
- ✓ Stainless steel cheeks and Acetal sheaves ensure long service life with virtually no maintenance required. RF13101 has a Nylon body.
- ✓ Hollow rivets accept fixing screws, shackles or can be used as a becket for extra purchase.

- ✓ V-jam cleats allow fast secure cleating of control lines.
- ✓ Vang, cunningham and trapeze retriever systems on dinghies.
- ✓ Leech line tackles, bunk adjusters etc on larger yachts.
- ✓ U.V. stabilised Acetal sheaves.
- ✓ Grade 316 stainless steel cheeks.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
AP All Purpose											
RF81	Double block, loop head	29	8	450	1100	40	1 1/8	5/16	990	2420	1.4
RF82	Triple block, loop head	29	8	550	1100	60	1 1/8	5/16	1210	2420	2.1
RF83	Double block, becket, loop head	29	8	450	1100	50	1 1/8	5/16	990	2420	1.8
RF185	Single block, tube rivet	29	8	300	900	20	1 1/8	5/16	660	1980	0.7
RF186	Fiddle block, tube rivet	29	8	300	600	50	1 1/8	5/16	660	1320	1.8
RF187	Fiddle block, v-jam cleat, tube rivet head	29	8	300	600	60	1 1/8	5/16	660	1320	2.1
RF188	Single block, becket, tube rivet head	29	8	300	600	35	1 1/8	5/16	660	1320	1.2
RF285	Cheek block, curved base	29	8	300	600	42	1 1/8	5/16	660	1320	1.5
RF341	Single block, becket, v-jam cleat, removable pin head	25	5	225	450	30	1	3/16	500	990	1.1
RF343	Triple block, becket, v-jam cleat, loop head	25	5	500	1000	75	1	3/16	1100	2200	2.6
RF417	Double block, tube rivet	29	8	450	1300	40	1 1/8	5/16	990	2860	1.4
RF2335	Single block, narrow, tube rivet	25	5	175	350	65	1	3/16	390	770	2.3

Wire Blocks, Sheave Boxes & Exit Blocks



- ✓ Wire blocks have purpose designed narrow sheaves and grooves.
- ✓ Exit and sheave boxes are ideal for applications where lines (rope or wire) need to be led through decks, bulkheads or spars minimising friction and chafing.
- ✓ Wire blocks suit halyards, vang and backstay applications.
- ✓ Exit blocks minimise friction in lines passing through the deck or exiting masts and booms. Available in single or twin sheave versions.

- ✓ Stainless steel cheek, clevis pin head blocks are ideal for spinnaker halyards where speed and minimum friction are important.
- ✓ U.V. stabilised Acetal sheaves.
- ✓ Nylatron® sheaves (wire blocks and sheave boxes).
- ✓ Grade 316 stainless steel cheeks.

PRODUCT No.	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	A mm	B mm	C mm	D mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	A in.	B in.	C in.	D in.	M.W.L. lb	B.L. lb	WEIGHT oz
Sheave Boxes																				
RF452	22	3	3	25.5	26	7.5	5	160	320	30	7/8	1/8	1/8	1	1	5/16	3/16	350	700	1.1
RF31712	30	8	4	44.0	27	14.0	5	375	800	45	1 3/16	5/16	5/32	1 3/4	1 1/16	9/16	3/16	830	1760	1.6
RF41712	40	10	5	54.0	33	17.0	5	500	1000	75	1 9/16	3/8	3/16	2 1/8	1 5/16	11/16	3/16	1100	2200	2.6
RF51712	50	12	5	62.0	42	21.0	5	800	1500	145	2	1/2	3/16	2 7/16	1 5/8	13/16	3/16	1760	3300	5.1

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing Exit Blocks													
RF20711	Exit block, cover plate	20	6	-	250	1000	22	3/4	1/4	-	550	2200	0.8
RF20711A	Exit block, side tabs	20	6	-	250	1000	22	3/4	1/4	-	550	2200	0.8
RF30711	Single exit block	30	8	-	300	750	35	1 3/16	5/16	-	660	1650	1.2
RF30721	Double exit block	30	8	-	300	750	60	1 3/16	5/16	-	660	1650	2.1
HL High Load Exit Blocks													
RF20711HL	Exit block, cover plate	20	6	3	275	1000	22	3/4	1/4	1/8	610	2200	0.8
RF20711AHL	Exit block, side tabs	20	6	3	275	1000	22	3/4	1/4	1/8	610	2200	0.8
RF30711AHL	Exit block, side tabs	30	8	3	300	750	43	1 3/16	5/16	1/8	660	1650	1.5
Wire Blocks													
RF103	Single block, tubular rivet head, removable sheave	45	-	6	850	1700	88	1 3/4	-	1/4	1870	3740	3.1
RF104	Single block, ferrule top, removable sheave	45	-	6	850	1700	80	1 3/4	-	1/4	1870	3740	2.8
RF418	Single block, tubular rivet head	25	-	3	450	900	40	1	-	1/8	990	1980	1.4
RF418C	Single block, removable clevis pin head	25	-	3	450	900	39	1	-	1/8	990	1980	1.4
RF468	Single block, ferrule top, removable sheave	25	-	3	450	900	33	1	-	1/8	990	1980	1.2
RF560	Single block, ferrule eye	19	-	3	250	500	20	3/4	-	1/8	550	1100	0.7
RF667	Single block, loop top	19	-	2	200	400	20	3/4	-	3/32	440	880	0.7

Small Boat Upright Lead Blocks



RF2416



RF919



RF453



RF568



RF569



RF917



RF2379



RF20171

2 x 4mm (5/32")



RF20174

2 x 4mm (5/32")



RF30171

2 x 5mm (3/16")



RF30174

2 x 5mm (3/16")



RF50171

RF50171HL

2 x 6mm (1/4")



RF40171

RF40171HL

2 x 5mm (3/16")



RF55171

2 x 6mm (1/4")

Upright lead blocks are a low profile solution for leading lines to cleats or jammers.

U.V. stabilised Acetal sheaves.
Grade 316 stainless steel cheeks.

PRODUCT No.	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	M.W.L. lb	B.L. lb	WEIGHT oz
Upright Lead Blocks												
RF453	22	3	3	160	320	30	7/8	1/8	1/8	350	700	1.1
RF568	19	5	-	250	500	20	3/4	3/16	-	550	1100	0.7
RF569	19	8	-	250	500	20	3/4	5/16	-	550	1100	0.7
RF917	19	8	-	250	500	20	3/4	5/16	-	550	1100	0.7
RF919	29	6	-	600	1200	50	1 3/32	1/4	-	1320	2640	1.8
RF2379	13	5	-	250	500	20	19/32	3/16	-	550	1100	0.7
RF2416	32	5	-	300	800	40	1 1/4	3/16	-	660	1760	1.4

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	MAX. WIRE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	MAX. WIRE in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing													
RF20171	Upright lead block	20	6	-	250	550	18	3/4	1/4	-	550	1210	0.6
RF20174	Pivoting lead block	20	6	-	250	550	30	3/4	1/4	-	550	1210	1.1
RF30171	Upright lead block	30	8	-	300	750	30	1 3/16	5/16	-	660	1650	1.1
RF30174	Pivoting lead block	30	8	-	300	650	50	1 3/16	5/16	-	660	1320	1.8
RF40171	Upright lead block	40	10	-	350	1000	60	1 9/16	3/8	-	770	2200	2.1
RF50171	Upright lead block	50	12	-	500	1500	116	2	1/2	-	1100	3310	4.1
RF55171	Upright lead	55	10	-	500	1000	91	2 5/32	3/8	-	1100	2200	3.2
HL High Load													
RF40171HL	Upright lead block	40	10	4	500	1000	59	1 9/16	3/8	5/32	1100	2200	2.1
RF50171HL	Upright lead block	50	12	5	800	1500	115	2	1/2	3/16	1760	3310	4.1

Sheaves



Acetal -
Ball Bearing



Acetal -
Ball Bearing



Acetal -
Brass Bearing



Acetal -
Solid Bearing



Glass Reinforced Nylon



Nylatron®



Aluminium Ratchet-
Acetal Ball Bearing

ACETAL SHEAVES

- ✓ Choice of bearings
- ✓ Acetal ball bearings - minimum friction under moderate loads.
- ✓ Solid bearing - high strength and durability, utilizing the self-lubricating properties of Acetal.
- ✓ Brass bearing - for highest load applications.
- ✓ U.V. resistant Acetal sheaves.

GLASS REINFORCED NYLON SHEAVES

- ✓ Glass reinforced for greater strength and abrasion resistance.

NYLATRON® SHEAVES

- ✓ Cast partially cross-linked polyamide compound, modified with a MoS₂ filler for lubrication and to minimise wear.
- ✓ Suitable for use with wire or rope.

ALUMINIUM SHEAVES

- ✓ Brass bearing - for highest load applications.
- ✓ Anodised aluminium for corrosion resistance and high strength.

PRODUCT No.	DIAM. mm	BORE mm	WIDTH mm	MAX. ROPE mm	MAX. WIRE mm	DIAM. in.	BORE in.	WIDTH in.	MAX. ROPE in.	MAX. WIRE in.	BLOCK SUITED
ACETAL – Ball Bearing											
RF1020	28.0	5.0	11.1	6	-	1 1/8	3/16	7/16	1/4	-	-
RF1766	38.0	8.0	15.0	10	-	1 1/2	5/16	19/32	3/8	-	-
RF1767	50.4	8.0	14.3	10	-	2	5/16	9/16	3/8	-	-
RF60000	60.0	3 x 6.2	16.6	10	-	2 3/8	3 x 7/32	21/32	3/8	-	Series 60 BB
RF70000	75.0	3 x 6.2	20.8	12	-	3	3 x 7/32	13/16	1/2	-	Series 75 BB
ACETAL – Solid Bearing											
RF1741	19.0	6.6	6.4	6	-	3/4	1/4	1/4	1/4	-	-
RF1743	19.0	8.2	9.5	6	-	3/4	5/16	3/8	1/4	-	-
RF578	25.0	6.5	9.5	6	-	1	1/4	3/8	1/4	-	-
RF128	28.0	8.1	15.2	12	-	1 1/8	5/16	19/32	1/2	-	-
RF129	28.0	6.6	9.9	8	-	1 1/8	1/4	3/8	5/16	-	-
RF41000	40.0	8.1	14.4	10	-	1 9/16	5/16	9/16	13/32	-	Series 40 AP
RF1006	38.0	12.7	15.5	12	-	1 1/2	1/2	19/32	1/2	-	Series 38 Deck Organisers
RF1751	38.0	8.2	10.2	6	-	1 1/2	11/32	13/32	1/4	-	-
RF1759	50.0	8.1	15.6	14	-	1 15/16	11/32	19/32	9/16	-	-
RF1765	66.0	8.2	15.1	5	-	2 5/8	11/32	15/32	3/16	-	-
RZ1000	75.0	21.7	20.5	14.0	-	2 15/16	7/8	13/16	9/16	-	Series 75 Industrial
GLASS REINFORCED NYLON											
PNP98JR	75.0	13.0	15.8	10	-	2 15/16	15/32	19/32	3/8	-	-
PNP98KR	100.0	13.0	19.0	12	-	3 15/16	15/32	3/4	1/2	-	-
NYLATRON®											
RF30000HL	30.0	8.1	11.4	8	3	1 3/16	5/16	7/16	5/16	1/8	Series 30 HL
RF40000HL	40.0	8.1	13.4	10	4	1 1/2	5/16	17/32	3/8	5/32	Series 40 HL
RF132	45.0	8.0	9.5	-	6	1 3/4	5/16	3/8	-	1/4	RF103, RF104
RF50000HL	50.0	10.2	18.0	12	5	1 31/32	13/32	23/32	1/2	3/16	Series 50 HL
ALUMINIUM - Brass Bearing											
RZ1000AW	75.0	21.7	20.2	-	8.0	-	7/8	13/16	-	5/16	Series 75 Industrial
ALUMINIUM RATCHET - ACETAL Ball Bearing											
RF62000	60.0	3 x 6.1	16.6	10	-	2 3/8	3 x 7/32	21/32	3/8	-	Series 60 RT
RF72000	75.0	3 x 6.1	20.8	12	-	3	3 x 7/32	13/16	1/2	-	Series 75 RT

Sheaves

**RB ROLLER BALL SHEAVES**

- ☞ Anodised alloy sheaves.
- ☞ Torton® needle rollers.
- ☞ Carbon black Acetal ball bearings.

AP ALL PURPOSE SHEAVES

- ☞ Acetal sheaves.
- ☞ Stainless steel hub bushes.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	SHEAVE WIDTH mm	MAX. ROPE mm	M.W.L. kg	WEIGHT g	SHEAVE DIAM. in.	SHEAVE WIDTH in.	MAX. ROPE in.	M.W.L. lb	WEIGHT oz
RB Roller Ball Bearing											
RF68000	Sheave	60	20.5	14	1500	85	2 3/8	13/16	9/16	3310	3.0
RF68000W	Sheave, wide	60	33.0	25	1150	128	2 3/8	1 5/16	1	2540	4.5
RF78000	Sheave	75	20.5	14	1750	142	3	13/16	9/16	3850	5.0
RF78000W	Sheave, wide	75	41.5	25	2800	280	3	1 5/8	1	6160	9.9
RF108000	Sheave	100	20.5	14	2000	262	4	13/16	9/16	4400	9.2
RF108000W	Sheave, wide	100	41.5	25	3900	497	4	1 5/8	1	8600	17.5
RF128000	Sheave	125	20.5	16	3000	448	5	13/16	5/8	6600	15.8
RF128000W	Sheave, wide	125	41.5	32	6650	817	5	1 5/8	1 1/4	14660	28.8
RF158000	Sheave	150	27.5	20	5000	739	6	1 3/32	3/4	11000	26.1
RF158000W	Sheave, wide	150	41.5	32	8100	1164	6	1 5/8	1 1/4	17860	41.1
AP All Purpose											
RF61000	Sheave	60	20.5	14	1000	67	2 3/8	13/16	9/16	2200	2.4
RF71000	Sheave	75	20.5	14	1500	128	3	13/16	9/16	3310	4.5

Engineered for Performance

Intensive development efforts have produced this high performance range of cleats that provide unbeatable holding power while allowing easy cleating and releasing of control lines in every application and load condition.

Through the use of advanced composites, these cleats achieve superior performance while overcoming the limitations of metal alloys. Ronstan cam cleats are strong, light and corrosion free.

Design Optimisation

Computer optimised Cam profile results in superior gripping ability over a wide range of rope sizes.

Slotted Bearings

Self lubricating, self-cleaning slotted bearings provide lower frictional resistance and quicker response times than ball bearings which deform under load, as well as superior resistance to sand and salt.

Multi-Coil Spring

The multi-coil spring recessed in the upper part of the cam generates near constant torque. This constant torque ensures secure cleating of even the smallest lines with minimal abrasion or rope wear and low line entry and exit efforts.

Carbon Cams

Lightweight ultra rigid carbon fibre composite cams are corrosion free, suffer virtually no tooth wear and are non-rope abrasive.

Unique Teeth and Entry Profiles

Low entry and exit efforts due to unique teeth and entry profiles. Reversible cams.

Advanced Composite Base

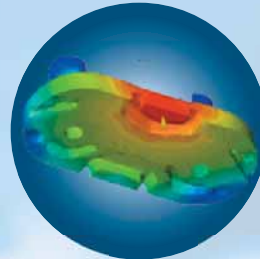
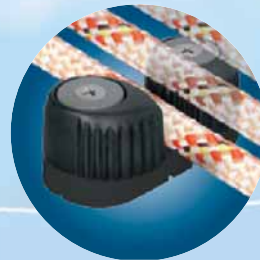
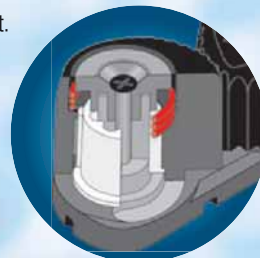
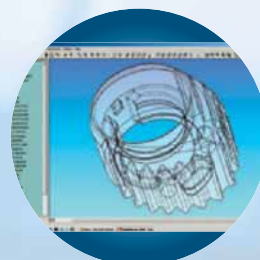
Base produced from long fibre reinforced polymer, a result of advanced composite technology providing metal replacement.

Customisation

A comprehensive range of specialist cleat accessories allow customisation of the cleat set-up to optimise performance by controlling inward lead, outward lead, cleating and uncleating angle and height.

Total Control

Swivel bases further enhance the function of cleats providing articulation, and with some models, setting of cleating angle and direction (up or down cleating) to allow control of lines and sheets from various positions on the boat.



C-Cleats™ & T-Cleats™



Team Ronstan - Lindsay Irwin / Andrew Perry, International 14' Skiff
Photo: Andrea Francolini / www.afrancolini.com



- ✓ Design, materials selection and advanced manufacturing methods combine to deliver superior strength and holding power, light weight and corrosion resistance.
- ✓ Carbon fibre composite cam material provides maximum resistance to heat and abrasion.
- ✓ Unique self-cleaning, self-lubricating slotted bearings ensure consistent high performance even when subjected to high static loads.

- ✓ Cam profile and multi-coil spring minimise line entry and release effort.
- ✓ Carbon fibre composite cams (C-Cleats™).
- ✓ Glass fibre composite cams (T-Cleats™).
- ✓ Long strand glass fibre reinforced polymer base.
- ✓ PTFE impregnated Acetal slotted bearing.
- ✓ Stainless steel multi-coil spring.

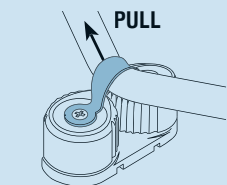
TYPE & SIZE	ROPE CAPACITY mm	HOLE SPACING mm	FASTENER SIZE mm	DIMENSIONS mm	M.W.L. kg	B.L. kg	WEIGHT g	ROPE CAPACITY in.	HOLE SPACING in.	FASTENER SIZE in.	DIMENSIONS in.	M.W.L. lb	B.L. lb	WEIGHT oz
C-Cleats™														
SMALL (RF5000 & RF5400...)	2-8	27	M4	48L x 24W x 20H	75	150	20	3/32-5/16	1 1/16	5/32	1 7/8L x 1W x 3/4H	165	330	0.7
MEDIUM (RF5010 & RF5410...)	3-12	38	M5	66L x 31W x 26H	125	250	50	1/8-1/2	1 1/2	3/16	2 5/8L x 1 1/4W x 1H	275	550	1.8
LARGE (RF5020 & RF5420...)	6-16	51	M6	88L x 41W x 35H	230	460	110	1/4-5/8	2	1/4	3 1/2L x 1 5/8W x 1 3/8H	510	1010	3.9
T-Cleats™														
SMALL (RF5001)	2-8	27	M4	48L x 24W x 20H	75	150	20	3/32-5/16	1 1/16	5/32	1 7/8L x 1W x 3/4H	165	330	0.7
MEDIUM (RF5011)	3-12	38	M5	66L x 31W x 26H	125	250	50	1/8-1/2	1 1/2	3/16	2 5/8L x 1 1/4W x 1H	275	550	1.8

Camcleat Accessories

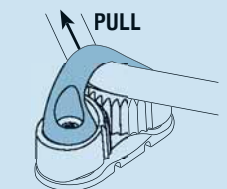
SMALL T-Cleat™ & C-Cleat™

MEDIUM T-Cleat™ & C-Cleat™

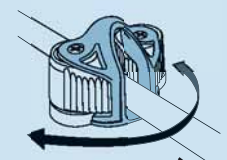
LARGE C-Cleat™



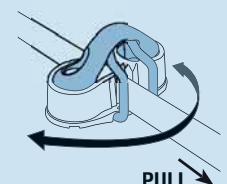
Saddle - stainless steel



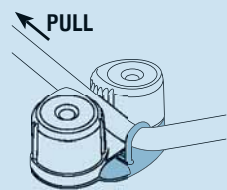
Saddle, stainless steel liner



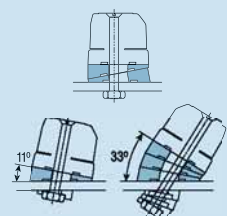
Front mounted fairlead



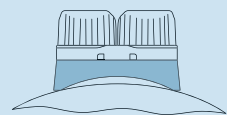
Heavy duty front mounted fairlead



Rope guide



Wedge Kit



Riser/curved surface adapter



RF5003

4g (0.1oz)



RF5013

8g (0.3oz)



RF5023

15g (0.5oz)



RF5013A

8g (0.3oz)



RF5413A

8g (0.3oz)



RF5005

7g (0.2oz)



RF5405

7g (0.2oz)



RF5015

14g (0.5oz)



RF5415

14g (0.5oz)



RF5017*

20g (0.7oz)



RF5417*

20g (0.7oz)



RF5404

5g (0.2oz)



RF5414

10g (0.4oz)



RF5402

5g (0.2oz)



RF5412

11g (0.4oz)



RF5416

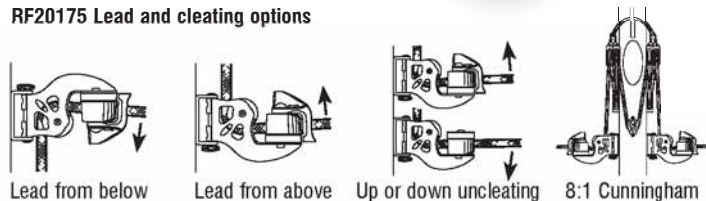
30g (1.1oz)

* The RF5017 heavy duty fairlead can only be used with medium C-Cleats™ and T-Cleats™ manufactured from mid-2005 - indicated by two protruding vertical lines on the cleat base, located between the entry points for the fairlead stainless steel base wire element.

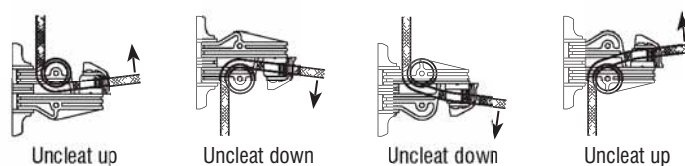
Swivel Cleat Bases



RF20175 Lead and cleating options



RF5 Lead and cleating options



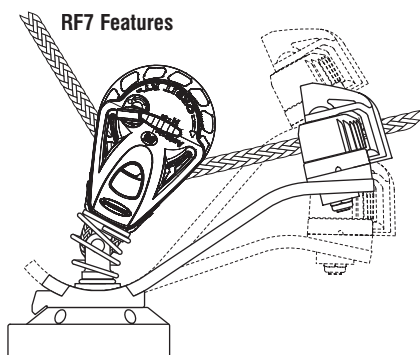
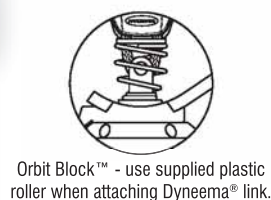
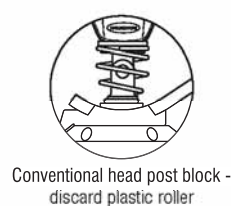
- ✓ Swivel cleat bases permit easy cleating and releasing from any angle.
- ✓ The RF60 features adjustable stops to limit rotation, which can be removed to allow full 360° rotation.
- ✓ Cleating plates are heavy gauge alloy for stiffness and minimum distortion under load.
- ✓ Deadeyes have flared stainless steel liners for minimum rope wear and long service life.
- ✓ The RF5 is manufactured in lightweight fibre reinforced composite materials – position of sheave can be changed to feed control line from below.

- ✓ Sheet leads and halyards on dinghies and catamarans.
- ✓ Cunningham, vang, foreguy, pole topping lift and other control lines on larger yachts.
- ✓ Alloy cleating arms.
- ✓ Fibre reinforced Nylon body (RF5).
- ✓ Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	SUITS ROPE mm	WEIGHT g	SUITS ROPE in.	WEIGHT oz
RF4	Swivel shackle base. Suits Series 40 & 55 Orbit Block™ Dyneema® links. 4.8mm (3/16") diam. pin. M.W.L. 250kg (550lb), B.L. 500kg (1100lb)	-	30	-	1.1
RF5	Swivelling cleat platform. 28mm (1 1/8") diam. ball bearing sheave, small T-Cleat and fairlead. M.W.L. 150kg (330lb); B.L. 300kg, (660lb). ^{*1}	2 – 8	100	3/32 – 5/16	3.5
RF58	Swivelling deadeye, cleat unit. Aluminium arm, 360° rotation, medium T-Cleat & fairlead. ^{*2}	3 – 12	171	1/8 – 1/2	6.0
RF59	Deadeye with stainless steel liner. 14mm (9/16") hole clearance.	Up to 14	17	Up to 9/16	0.6
RF60	Swivelling deadeye, cleat unit. Aluminium arm, adjustable rotation stops, medium C-Cleat & fairlead. ^{*2}	3 – 12	257	1/8 – 1/2	9.1
RF67	Swivelling deadeye, cleat unit. Aluminium arm, 360° rotation, small T-Cleat & fairlead. ^{*3}	2 – 8	121	3/32 – 5/16	4.3
RF1455	Swivel base with block post socket. 4.8mm (3/16") diam. pin. Suits Series 40 & 50 BB & AP blocks. M.W.L. 200kg (440lb); B.L. 1000kg, (2200lb)	-	65	-	2.3
RF2358	Deadeye with stainless steel liner. 16mm (5/8") hole clearance.	Up to 16	26	Up to 5/8	0.9
RF20175	Swivelling cleat platform. 20mm (3/4") sheave with stainless steel ball bearings, small T-Cleat & fairlead. M.W.L. 150kg (330lb); B.L. 300kg, (660lb). ^{*1}	2 – 6	79	3/32 – 1/4	2.8

^{*1} Load ratings are for the cleat base assembly and are based upon a 90° change in line direction. Line load should be limited to: M.W.L. 125kg (275lb), B.L. 250kg (550lb).
^{*2} Line load should be limited to: M.W.L. 175kg (385lb), B.L. 350kg (770lb). ^{*3} Line load should be limited to: M.W.L. 125kg (275lb), B.L. 250kg (550lb).

Swivel Cleat Bases

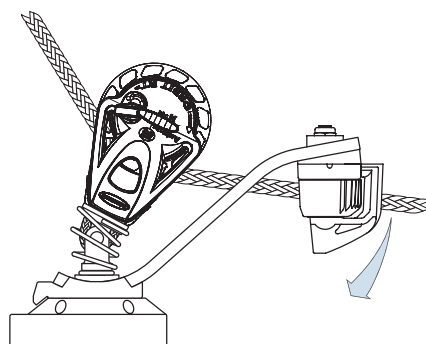
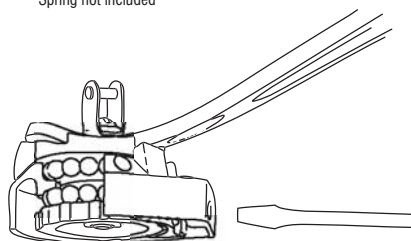


RF7 Features



RF7KIT

Spring not included



Height adjustable arm for optimum cleating angle.

Twin ball bearing race minimises friction. Adjustable ratchet system prevents the arm from falling to leeward.

Cleat and wedge kit can be mounted upside down to help achieve the optimum cleating angle or suit downward uncleating if preferred.

- ✓ Adjustable height and angle of RF7 cleating arm for optimum control.
- ✓ Twin rows of ball bearings support the RF7 cleating arm. Stops are provided to limit travel to 260°, and can be removed to allow full 360° rotation.
- ✓ An adjustable ratchet in the RF7 base allows the cleating arm to remain in its most recently used position. The ratchet can be turned off for free swivelling.
- ✓ Fork fittings have a 5mm pin to permit direct attachment to the head post of a block (i.e. not using the shackle).
- ✓ Cleat mounting can be reversed on both RF7 and RF8, to fit under the cleating arm for downward release action.

- ✓ The swivel arm of the RF8 is fabricated from 8mm (5/16") alloy plate for heavy duty applications.
- ✓ RF7 suits traditional post/shackle head blocks and Dyneema® Link head Orbit Blocks™
- ✓ Mainsheet systems on dinghies and sportsboats to 8m (26ft).
- ✓ Alloy cleating arms.
- ✓ Fibre reinforced Nylon base (RF7).
- ✓ Grade 316 stainless steel fittings.

PRODUCT No.	DESCRIPTION	M.W.L. kg	B.L. kg	WEIGHT g	M.W.L. lb	B.L. lb	WEIGHT oz
RF7	Ball bearing swivelling cleat base, medium C-Cleat, 5mm (3/16") pin*	260	520	342	570	1145	12.1
RF7KIT	Adapter kit to convert pre-2008 model RF7 products to suit Orbit Block™ Dyneema® link attachment	-	-	18	-	-	0.6
RF8	Swivelling cleat base, medium C-Cleat, 5mm (3/16") pin*	300	600	370	660	1320	13.1

*Load ratings are for the cleat base assembly, and are based on a 120° change in line direction. Line load ratings should be limited to: M.W.L. 175kg (385lb), B.L. 350kg (770lb).

470 Fleet
Photo: Victor Kovalenko



RF5100

2 x 4mm (5/32")



RF5105

2 x 5mm (3/16")



RF5110

2 x 6mm (7/32")



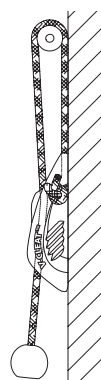
RF5101

2 x 4mm (5/32")



RF5106

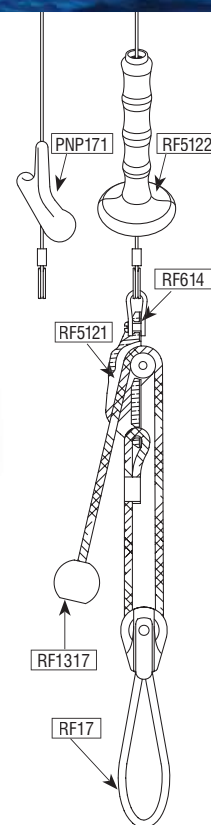
2 x 5mm (3/16")



RF5101, RF5106
Becket take-off
for simple 2:1
purchase system



RF5121



**2:1 ADJUSTABLE
TRAPEZE SYSTEM**

- ✓ Lightweight and corrosion proof.
- ✓ Greater abrasion resistance than traditional plastic cleats.
- ✓ Low, snag-free profile.
- ✓ Base profile suits mounting on flat and curved surfaces.
- ✓ Cut-away in base of fairlead cleats can be used as a becket for a 2:1 purchase system (refer diagram above.)

- ✓ RF5121 trapeze Clamcleat® is made from Hardcoat anodised alloy for maximum wear resistance and incorporates a roller for easy 2:1 adjustment under load (refer diagram above.)

- ✓ Control lines on dinghies and catamarans.
- ✓ PTFE impregnated, glass and carbon fibre composite cleats.
- ✓ Hardcoat anodised alloy RF5121.

PRODUCT No.	DESCRIPTION	FASTENER SIZE	HOLE SPACING	ROPE SIZE	WEIGHT	FASTENER SIZE	HOLE SPACING	ROPE SIZE	WEIGHT
		mm	mm	mm	g	in.	in.	in.	oz
RF5100	V-Cleat™, small, open	4	36	3-6	9	3/16	1 7/16	1/8-1/4	0.3
RF5101	V-Cleat™, small, fairlead	4	48	3-6	11	3/16	1 7/8	1/8-1/4	0.4
RF5105	V-Cleat™, medium, open	5	55	5-8	23	3/16	2 5/32	3/16-5/16	0.8
RF5106	V-Cleat™, medium, fairlead	5	66	5-8	27	3/16	2 9/16	3/16-5/16	1.0
RF5110	V-Cleat™, large, open	6	72	8-12	51	1/4	2 13/16	5/16-1/2	1.8
RF5121	Trapeze cleat, Aluminium	-	-	4-8	46	-	-	5/32-5/16	1.6

TILLER EXTENSIONS

Ultimate Performance and Control

Introducing the next generation of sailing weaponry, the Ronstan Battlestick™. A range of carbon composite and alloy tiller extensions providing the highest level of control for quick, decisive helm response in every situation.

Carbon Battlestick™

Positive Grip

The unique lightweight grip remains effective when wet. Its slim profile transitions smoothly from the carbon tube to a comfortable ergonomic shape to minimise fatigue. The ribbed finish on the tube provides additional positive grip along its full length, and an end stop is fitted for comfort and safety. Short tiller extensions have smaller grip diameters to match typically smaller hands.

Lightweight & Strong

The dual laminate construction has been precisely engineered for minimum weight, without sacrificing the durability required to meet the rigours of modern sailing. A combination of full length longitudinal and 45° lateral glass and carbon fibres balances optimum stiffness with extra resilience to resist breakage.

Tapered Carbon Composite Tube

The tapered design maximises rigidity and strength at the helmsman's end for positive feel and resistance to breakage over the gunwale when things get ugly.

Alloy Battlestick™

Evalon® Grip

This firm non-slip grip material does not absorb water. End knob for safety and positive hand positioning. Large grip diameter contrasts ergonomically with mainsheet diameter to relieve fatigue.

Fluted Alloy Tube

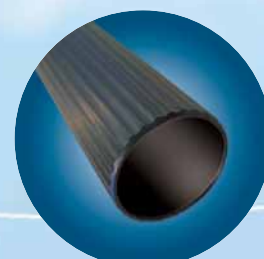
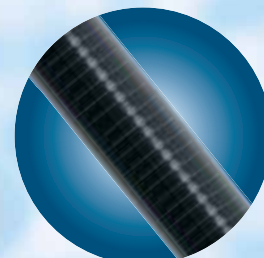
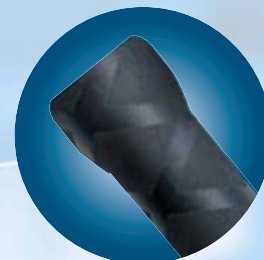
Ronstan's aluminium tiller extensions have a unique fluted profile that adds extra rigidity to the lightweight alloy section. Tubes have a black anodised finish for corrosion protection.

The Right Length

Battlesticks™ are available in six standard lengths from 610mm to 2500mm (24" to 98") to suit virtually any class or personal preference. To facilitate cutting of the tube to a custom length the 2500mm (98") RF3137C does not include a grip or end cap. Telescopic alloy versions are available in four configurations, up to the maximum of 2500mm (98") long with 960mm (38") of adjustment.

Urethane Universal Joint

The universal joint in high grade, U.V. resistant urethane provides smooth, uniform articulation and flexibility in all directions for a quick and firm response to steering movements. The snap-on base cover allows quick fitting and removal of the tiller extension from the fixed base for ease of transport, storage or security. A curved surface adapter is available for mounting on round tiller sections.



CARBON BATTLESTICK™

Tiller Extensions & Accessories



PRODUCT No.	DESCRIPTION	LENGTH mm	TUBE DIAM.*2		GRIP DIAM. mm	WEIGHT g	LENGTH in.	TUBE DIAM.*2		GRIP DIAM. in.	WEIGHT oz
			MIN mm	MAX mm				MIN in.	MAX in.		
RF3128C	Carbon fibre, tapered	610	16	20	22	108	24	5/8	3/4	7/8	3.8
RF3129C	Carbon fibre, tapered	840	16	22	24	137	33	5/8	7/8	1	4.8
RF3130C	Carbon fibre, tapered	1030	16	23	25	155	41	5/8	7/8	1	5.5
RF3135C	Carbon fibre, tapered	1250	16	24	26	179	49	5/8	1	1	6.3
RF3137C*1	Carbon fibre, tapered	2500	16	25	-	310	98	5/8	1	-	10.9

PRODUCT No.	DESCRIPTION	LENGTH mm	TUBE DIAM. mm	GRIP DIAM. mm	WEIGHT g	LENGTH in.	TUBE DIAM. in.	GRIP DIAM. in.	WEIGHT oz
RF3128	Alloy, lightweight	610	16	25	150	24	5/8"	1"	5.3
RF3129	Alloy, lightweight	840	16	25	180	33	5/8"	1"	6.4
RF3130	Alloy, lightweight	1030	16	25	215	41	5/8"	1"	7.6
RF3135	Alloy, lightweight	1250	16	25	260	49	5/8"	1"	9.2
RF3122	Alloy, lightweight	2030	16	25	415	80	5/8"	1"	14.7
RF3137	Alloy, lightweight	2500	16	25	515	98	5/8"	1"	18.2
RF3134	Alloy, telescopic, split grip	740-1120	16+20	30	310	29-44	5/8+3/4"	1 1/4"	10.9
RF3131	Alloy, telescopic, inboard grip	740-1210	16+20	30	285	29-48	5/8+3/4"	1 1/4"	10.1
RF3132	Alloy, telescopic, inboard grip	1070-1770	16+20	30	400	42-70	5/8+3/4"	1 1/4"	14.1
RF3124	Alloy, telescopic, outboard grip	1530-2490	16+20	30	485	60-98	5/8+3/4"	1 1/4"	17.1

Accessories

RF1121	Stainless steel bolt-through universal joint. Suits 16mm (5/8") dia. tube. Incorporating 1/4" U.N.C.x1 3/4" (45mm) long bolt	64							2.3
RF1127	Stainless Steel screw down universal joint. Suits 16mm (5/8") dia. tube	56							2.0
RF1135-16	Nylon Tiller extension retaining clip. Suits 16mm (5/8") dia. tube	7							0.2
RF1135-20	Nylon Tiller extension retaining clip. Suits 20mm (3/4") dia. tube	4							0.1
RF3133	Urethane universal joint. Suits 13.5mm (17/32") I.D. tube	35							1.2
RF3136	Round tiller adapter for RF3133. Suits 25-32mm (1-1 1/4") tiller	7							0.2

*1 Grip and end cap not included. *2 Tapered.

T-TRACK SYSTEMS

Tough, Lightweight and Low Profile

For small keel boats and sportsboats, T-Track jib lead and spinnaker pole slides are a great blend of performance and functionality in a simple, efficient package. Composite slide bodies with plunger stops run on anodised aluminium track, and allow quick and easy manual adjustment.

Lightweight

Composite jib lead cars continue the design philosophy of the award winning Ronstan BB and RT Orbit Blocks™, with virtually all metal components now replaced with high-tech polymers and fibre equivalents. The car design has been modelled and optimised using finite element analysis and rapid prototyping techniques to achieve maximum strength-to-weight characteristics. Orbit Block™ models use a Dyneema® Link which is 10 times stronger and lighter than steel, to provide the articulated connection between block and car.

Integrated Functionality

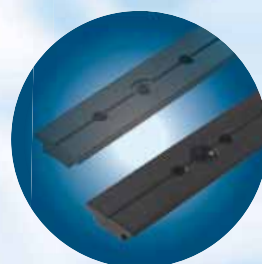
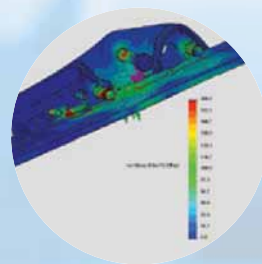
The clever 2-piece car body is moulded from a composite material that delivers low friction on the alloy track without the need for separate inserts. It also provides the required mechanical strength without the weight and corrosion drawbacks of metal parts. An integrated becket at the forward end of the car suits 2:1 sheet systems and the removable threaded pin allows easy fitting of alternate blocks and accessories.

Low Profile and Compact

Sleek styling and the positioning of the attachment pin provide a low lead aft from the lead block. The Dyneema® Link allows full articulation. The plunger stop button has a flush finish and the contoured form of the car eliminates the chance of lines and sails becoming snagged.

Precise Adjustment

The ergonomic plunger stop toggle combined with low friction of the car body allows for easy one-handed adjustment. The toggle is located at the rear of the car for easy access from the cockpit on sports boats and small keel boats. An arrow is located on the side to indicate the position of the stop for repeatable settings. A new 'Racing' track has 25mm (63/64") stop hole spacing for even more precise control of the car position and sheeting angle.





Integrated becket for 2:1 sheet system

- ✓ Low profile and light weight, T-Track is a simple, reliable system for adjustable sheet leads.
- ✓ Composite slides have a removable attachment pin to suit either a Dyneema® Link or a shackle.
- ✓ Composite slides have a spring-loaded toggle plunger stop for fast, positive positioning.
- ✓ Composite slides have an integrated becket for 2:1 headsail sheet systems, popular on modern sport boats.*1
- ✓ Stand-up blocks on composite slides provide optimum alignment and low profile lead.
- ✓ The main pin recess in the composite slide can accept up to 8mm (5/16") line attached directly to the pin.
- ✓ A convenient Racing Kit is available for sports boats (RC72540).
- ✓ Headsail sheet leads on boats up to 8m (26ft).
- ✓ Toughened, glass fibre reinforced Nylon slide.
- ✓ Anodised aluminium alloy track.

PRODUCT No.	DESCRIPTION	LENGTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
Slides									
RC72504	Composite slide, removable M4 pin, toggle plunger stop, includes RC00030 buffer	102	500	1000	107	4	1100	2200	3.8
RC72536	Composite slide, Series 40 BB Orbit Block™, stand up, suits 9mm (5/16") rope, toggle plunger stop	102	325	700	144	4	715	1540	5.1
RC72537	Composite slide, Series 55 BB Orbit Block™, stand up, suits 10mm (3/8") rope, toggle plunger stop	102	500	1000	180	4	1100	2200	6.3

*1 Maximum rope size 10mm (3/8")

Series 25



TRACK FASTENINGS – 5mm (3/16") countersunk fasteners at 100mm (3 15/16") centres. **STOP HOLES** – 25mm (63/64") centres for Racing track, 50mm (1 31/32") on all other tracks.

PRODUCT No.	DESCRIPTION	LENGTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
Slides									
RC72540	Racing Kit, including 2 x 465mm (1' 6") racing tracks, 2 x composite slides with Series 55 BB Orbit Block™, 4 x track ends, 10 x track bolt insulators	-	500	1000	816	-	1100	2200	28.8
RC72544	Composite spinnaker pole slide, toggle plunger stop. Ring: 35mm (1 3/8") I.D., 7.5mm (19/64") thickness.	102	400	800	215	4	880	1760	7.6
Accessories									
RC00030	Flexible buffer, suits Dyneema® Link or shackle	-	-	-	4	-	-	-	0.1
RC7250-INS	Track bolt insulator	-	-	-	3	-	-	-	0.1
RC72581	Track end, plastic	-	-	-	5	-	-	-	0.2
RF9004-09	Dyneema® Link to suit use of Series 55 & Series 40 BB Orbit Blocks™ with Series 25 T-Track composite slide*2	-	-	-	-	-	-	-	-
Track - Supplied with RC7250-INS inserts									
RC7251-0.5A	Racing track, black, 25mm (63/64") stop hole centres	465	-	-	188	1' 6"	-	-	6.6
RC7251-1.0A	Racing track, black, 25mm (63/64") stop hole centres	996	-	-	405	3' 3"	-	-	14.2
RC7251-1.5	Track, black, 50mm (1 31/32") stop hole centres	1496	-	-	631	4' 11"	-	-	22.2
RC7251-2.0	Track, black, 50mm (1 31/32") stop hole centres	1996	-	-	841	6' 7"	-	-	29.7
RC7251-3.0	Track, black, 50mm (1 31/32") stop hole centres	2996	-	-	1263	9' 10"	-	-	44.5
RC7251-6.0	Track, black, 50mm (1 31/32") stop hole centres	5996	-	-	2528	19' 8"	-	-	89.1

*2 RF9004-09 is longer than the standard Series 40 and Series 55 Dyneema® link. It is required to allow the block to achieve correct, uninhibited lead.



- ✓ The lead block on RC73234 has articulation in 3 planes and an integrated anti-clatter rubber buffer.
- ✓ Jib sheet leads suit boats to 12m (40ft).
- ✓ RC73231 genoa car can accommodate two sheets for easy headsail changes, and has a plunger stop that can be locked in the "up" position.

- Anodised aluminium alloy track.
- Grade 316 stainless steel slide bodies.
- U.V. stabilised Acetal sheaves.
- Nylon slide liners.

TRACK FASTENINGS – 6mm (1/4") countersunk fasteners at 100mm (3 15/16") centres

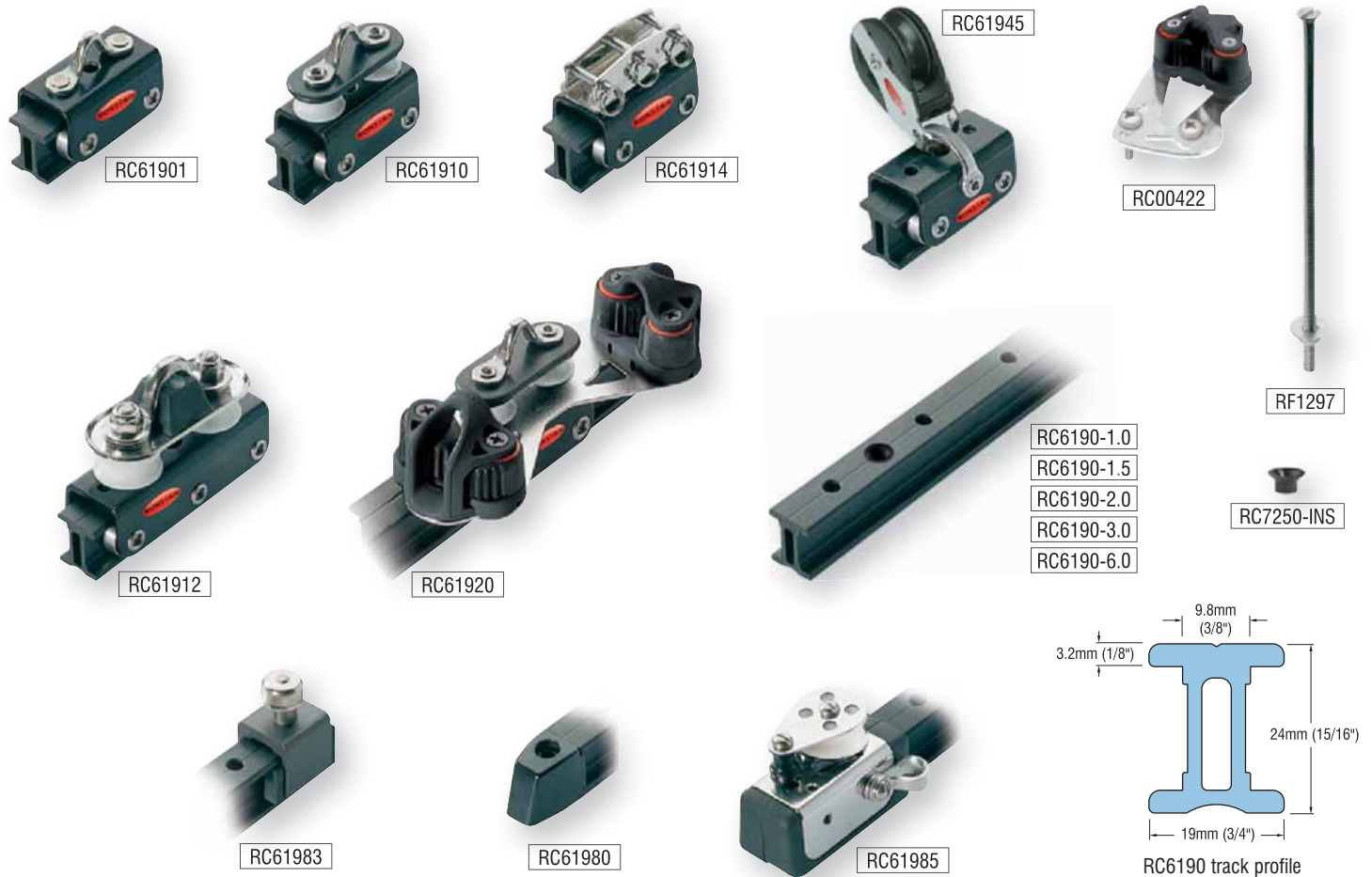
STOP HOLES – 50mm (1 31/32") centres

PRODUCT No.	DESCRIPTION	LENGTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
RC00476	Slide liners (pair), plastic, suits RC73201, RC73202, RC73233	107	-	-	7	4 7/32	-	-	0.3
RC00477	Slide liners (pair), Molybdenum Disulphide impregnated plastic, suits RC73231	152	-	-	11	6	-	-	0.4
RC00478	Slide liners (pair), plastic, suits RC73234	107	-	-	7	4 7/32	-	-	0.3
RC7320-INS	Track bolt insulator	-	-	-	3	-	-	-	0.1
RC73201	Slide, loop top	102	1000*2	2000*2	185	4	2200*2	4400*2	6.5
RC73202	Slide, loop top, plunger stop	102	1000*2	2000*2	240	4	2200*2	4400*2	8.5
RC73231	Genoa car, suits up to twin 16mm (5/8") sheets, lock up/down plunger stop	146	1500	3000	480	5 3/4	3300	6600	17.0
RC73234	Genoa car, S60 Core Block™, suits 12mm (1/2") sheet, lock up/down plunger stop	104	1000	2000	400	4 1/8	2200	4400	14.1
RC73243	Slide, spinnaker pole ring, plunger stop	102	-	-	315	4	-	-	11.1
RC73280	Track end, plastic	32	-	-	35	1 1/4	-	-	1.2
Track – Supplied with RC7320-INS Nylon inserts									
RC7320-1.0*1	Track, black	996	-	-	670	3'3"	-	-	23.6
RC7320-1.5*1	Track, black	1496	-	-	1000	4'11"	-	-	35.3
RC7320-2.0*1	Track, black	1996	-	-	1330	6'7"	-	-	46.9
RC7320-3.0*1	Track, black	2996	-	-	2000	9'10"	-	-	70.5
RC7320-6.0*1	Track, black	5996	-	-	4000	19'8"	-	-	141.1

*1 Silver track available - Order as RCxxxxxs

*2 Load ratings based on pull perpendicular to track

Series 19



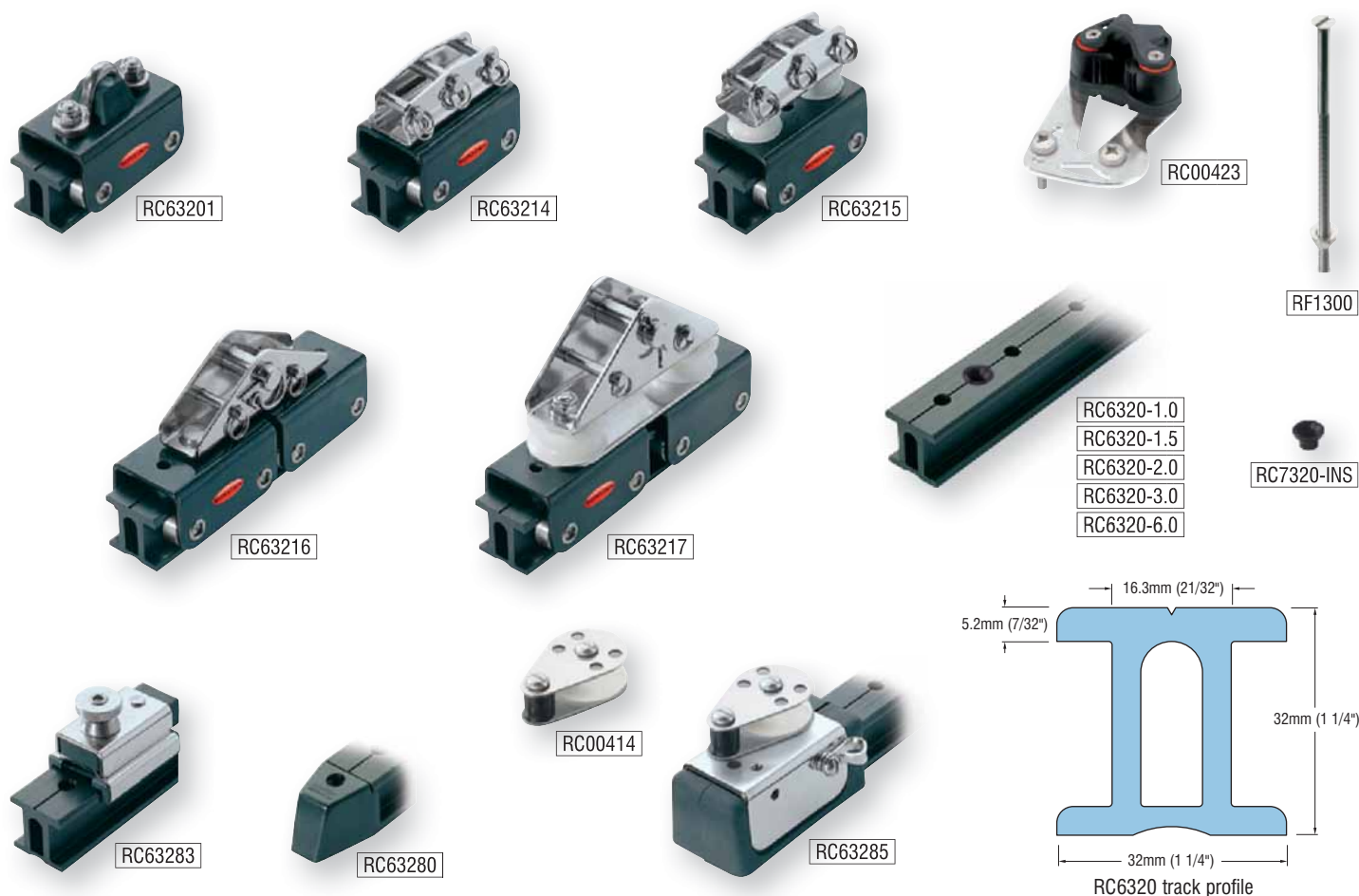
- ✓ Strong stainless steel bodies with black chrome finish.
- ✓ Flared sides and angled ball bearing wheels provide high load capacity and smooth operation.
- ✓ Modular track end fittings can be assembled to provide up to 4:1 purchase; cleat plates can be fitted to suit vertical or horizontal pull of control line.
- ✓ Control sheaves suit up to 6mm (1/4") rope.

- ✓ Single cars – Mainsheet and self-tacking jib travellers on dinghies and catamarans.
- ✓ Tandem cars – Mainsheet systems on boats up to 9m (28ft).
- ✓ Black chromed, grade 316 stainless steel car bodies.
- ✓ Grade 316 stainless steel wheels and control block cheeks.
- ✓ UV stabilised Acetal control sheaves.
- ✓ Anodised aluminium alloy track.

TRACK FASTENINGS – M5 (3/16") countersunk fasteners at 100mm (3 15/16") centres

STOP HOLES – 50mm (1 31/32") centres

PRODUCT No.	DESCRIPTION	LENGTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
RC61901	Car, saddle top	51	250	650	115	2	550	1430	4.1
RC61910	Car, saddle top, single control sheaves	51	250	650	125	2	550	1430	4.4
RC61912	Car, saddle top, single control sheaves	86	325	1400	260	3 3/8	715	3080	9.2
RC61914	Car, channel top	51	250	650	140	2	550	1430	4.9
RC61920	Car, saddle top, single control sheaves, two cleats	51	250	650	210	2	550	1430	7.4
RC61945	Car, Series 30 HL block top	51	250	650	144	2	550	1430	5.1
RC61980	End cap, plastic	25	-	-	10	1	-	-	0.4
RC61983	Adjustable stop	25	-	-	40	1	-	-	1.4
RC61985	Control end, 28mm (1 1/8") diameter, single sheave, becket	70	-	-	130	2 3/4	-	-	4.6
RC7250-INS	Track bolt insulator	-	-	-	3	-	-	-	0.1
RF1297	Track bolt, 3/16" UNC x 152mm (6"), nut, washer	-	-	-	25	-	-	-	0.9
RC00422	Control end cleat addition kit	-	-	-	110	-	-	-	3.9
Track – Supplied with RC7250-INS track bolt insulators									
RC6190-1.0	Track, black	996	-	-	830	3'3"	-	-	29.3
RC6190-1.5	Track, black	1496	-	-	1240	4'11"	-	-	43.8
RC6190-2.0	Track, black	1996	-	-	1650	6'7"	-	-	58.3
RC6190-3.0	Track, black	2996	-	-	2480	9'10"	-	-	87.6
RC6190-6.0	Track, black	5996	-	-	4960	19'8"	-	-	175.3



- ✓ Strong stainless steel bodies with black chrome finish.
- ✓ Flared sides and angled ball bearing wheels provide high load capacity and smooth operation.
- ✓ Modular track end fittings can be assembled to provide up to 4:1 purchase; cleat plates can be fitted to suit vertical or horizontal pull of control line.
- ✓ Control sheaves suit up to 8mm (5/16") rope.

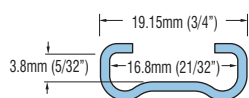
- ✓ Single cars – Mainsheet and self-tacking jib travellers on boats up to 9m (28ft).
- ✓ Tandem cars – Mainsheet systems on boats up to 12m (40ft).
- ✓ Black chromed grade 316 stainless steel car bodies.
- ✓ Grade 316 stainless steel wheels and control block cheeks.
- ✓ UV stabilised Acetal control sheaves.
- ✓ Anodised aluminium alloy track.

TRACK FASTENINGS – M6 (1/4") countersunk fasteners at 100mm (3 15/16") centres

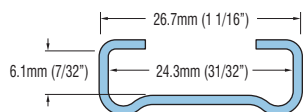
STOP HOLES – 50mm (2") centres

PRODUCT No.	DESCRIPTION	LENGTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
RC00414	Control end sheave addition kit	-	-	-	70	-	-	-	2.5
RC00423	Control end cleat addition kit	-	-	-	140	-	-	-	4.9
RC7320-INS	Track bolt insulator	-	-	-	3	-	-	-	0.1
RC63201	Car, saddle top, rubber stand-up pad	76	650	2000	320	3	1430	4400	11.3
RC63214	Car, channel top	76	650	1400	370	3	1430	3080	13.1
RC63215	Car, channel top, single control sheaves	76	650	1400	390	3	1430	3080	13.8
RC63216	Car, tandem, channel top	157	1300	4200	735	6 3/16	2860	9240	26.0
RC63217	Car, tandem, channel top, single control sheaves	157	1300	4200	950	6 3/16	2860	9240	33.6
RC63280	End cap, plastic	40	-	-	10	1 9/16	-	-	0.4
RC63283	Adjustable stop	64	-	-	180	2 1/2	-	-	6.3
RC63285	Control end, 38mm (1 1/2") diameter, single sheave, becket	98	-	-	330	3 7/8	-	-	11.6
RF1300	Track bolt, 1/4" UNC, nut, washer	152	-	-	40	6	-	-	1.4
Track – Supplied with RC7320-INS track bolt insulators									
RC6320-1.0	Track, black	996	-	-	1210	3'3"	-	-	42.8
RC6320-1.5	Track, black	1496	-	-	1810	4'11"	-	-	64.0
RC6320-2.0	Track, black	1996	-	-	2410	6'7"	-	-	85.2
RC6320-3.0	Track, black	2996	-	-	3620	9'10"	-	-	127.9
RC6320-6.0	Track, black	5996	-	-	7240	19'8"	-	-	255.8

Series 19 & 27



RC8190 track profile - Series 19



RC8270 track profile - Series 27

- ✓ Spring-loaded plunger stops allow fast, positive positioning of track slides.
- ✓ Slides are available with fixed or swivelling cleat fairleads to suit different crewing positions.
- ✓ Dinghy and small catamaran jib sheet leads.

- ✓ Adjustable hiking strap systems.
- ✓ Grade 316 stainless steel track.
- ✓ Chrome plated brass slides.

TRACK FASTENINGS – 6mm (1/4") countersunk fasteners at 100mm (3 15/16") centres **STOP HOLES** – 50mm (1 31/32") centres

PRODUCT No.	DESCRIPTION	LENGTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
Series 19									
RC8190-0.3	Track	300	-	-	90	11 13/16	-	-	3.2
RC8190-0.45	Track	450	-	-	130	17 23/32	-	-	4.6
RC8190-1.5	Track	1500	-	-	435	5' 0"	-	-	15.4
RC8190-3.0	Track	3000	-	-	870	10' 0"	-	-	30.7
RC81901	Slide saddle top	56	225	450	45	2 3/16	500	990	1.6
RC81940	Slide saddle top, plunger stop	71	225	450	70	2 25/32	500	990	2.5
RC81941	Slide, swivelling fairlead, plunger stop	65	-	-	62	2 9/16	-	-	2.2
RC81942	Slide, swivelling fairlead, cleat, plunger stop	65	-	-	185	2 9/16	-	-	6.5
RC81943	Slide, dead eye, cleat, plunger stop (Sold as a pair, 1 L/H & 1 R/H)	77	-	-	202	3 1/32	-	-	7.1
RC81944	Slide, fairlead, plunger stop (Sold as a pair)	92	-	-	95	3 5/8	-	-	3.4
RC81980	Track end, plastic	17	-	-	5	11/16	-	-	0.2
RC81983	Adjustable stop	16	-	-	20	5/8	-	-	0.7
Series 27									
RC8270-1.5	Track	1500	-	-	635	5' 0"	-	-	22.4
RC8270-3.0	Track	3000	-	-	1270	10' 0"	-	-	44.9
RC82701	Slide, saddle top	64	275	550	85	2 1/2	610	1210	3.0
RC82740	Slide, saddle top, plunger stop	80	275	550	115	3 5/32	610	1210	4.1
RC82780	Track end, plastic	20	-	-	5	25/32	-	-	0.2

Smooth Control

Ronstan traveller systems deliver the performance required for optimising sail trim, responding quickly to changing conditions and getting the right balance from the loads on sails, rig and foils. Ronstan systems have been put to the test by Volvo Race teams, Offshore Multihull and Around Alone challengers, and the professionals on the international Grand Prix circuit who demand the highest performance and dependability, with no room for compromise.

Attention to Detail

Car bodies are machined to precise specifications, then honed to an exceptional finish before being treated and anodised for maximum corrosion protection. Stainless steel elements are put through a special high energy finishing process to achieve a uniquely smooth edge and surface finish.

Tracks

7 track sizes are available in the standard product range, to match system specifications to individual requirements.

Standard low profile tracks have holes for adjustable track stops and cars with plunger stops. Also available in lightweight version with machined slots between fasteners to remove all non-essential material.

Beam track options are available for unsupported spans (cockpit, companionway hatches, etc.). Curved track can be supplied with bend in either horizontal or vertical plane. Minimum bend radius depends on car length. See page 125 for options and details.

BB Cars

Machined alloy car bodies with alloy end caps provide high strength and durability with minimum weight.

Low profile cars ensure that sheets and control lines run close to the deck.

Highly efficient recirculating Torlon® ball bearing systems allow precision adjustment and control even in the most demanding conditions.

SR Cars

Sliderod genoa cars are machined from dedicated Sliderod body profiles for highest possible strength-to-weight ratio. They are used in applications where the sheet lead position does not require adjustment under load.

Plunger stops can be locked in the "up" position, and installation and removal from tracks is fast and simple.

Control Accessories

Cam cleat supports can be adjusted to the optimum cleating angle.

Low friction ball bearing control sheaves provide purchase systems for mainsheet travellers and genoa sheet lead adjustment.

Sheave and becket addition kits are available for cars and track control ends to provide extra control line purchase where required.





TRACK FASTENINGS – 4mm (5/32") countersunk fasteners at 50mm (1 31/32") centres

- ✓ Low profile, lightweight alloy cars and end caps.
- ✓ Twin rows of recirculating Torlon® ball bearings provide smooth, low friction performance under load.
- ✓ Loop and fork style fittings are easily added for becket and control line block attachment.
- ✓ Compact sheave arrangements for neat, low profile control line purchase systems. Control sheaves are 24mm (15/16") diameter and suit up to 6mm (1/4") rope.

- ✓ Cleats, fairleads and cheek blocks can be mounted directly on deck or cockpit sides to complete the control line systems.
- ✓ Dinghy and catamaran traveller and jib sheet systems.
- ✓ Alloy track, car bodies and end caps.
- ✓ Torlon® ball bearings.
- ✓ Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC1141J	Track joiner	40	-	-	-	1	1 9/16	-	-	-	0.1
RC11401	Car, 2 mounting holes*1, 35mm (1 3/8") hole spacing	68	41	150	400	51	2 11/16	1 5/8	330	880	1.8
RC11402	Car, pivoting shackle top	47	41	125	400	48	1 7/8	1 5/8	280	880	1.7
RC11403	Car, pivoting shackle top, 2 mounting screws	78	41	180	400	91	3 1/16	1 5/8	400	880	3.2
RC1140-1.0*2	Track, black	996	14	-	-	230	39 1/4	9/16	-	-	8.1
RC1140-1.5*2	Track, black	1496	14	-	-	345	59	9/16	-	-	12.2
RC1140-2.0*2	Track, black	1996	14	-	-	460	78 5/8	9/16	-	-	16.2
RC1140-3.0*2	Track, black	2996	14	-	-	690	118	9/16	-	-	24.3
RC1140-6.0*2	Track, black	5996	14	-	-	1380	236 1/4	9/16	-	-	48.7
RC11410	Car, saddle top, single control sheaves	68	41	150	400	89	2 11/16	1 5/8	330	880	3.1
RC11480	End cap, plastic	28	20	-	-	6	1 1/8	25/32	-	-	0.2
RC11484	Control end, single sheave	52	33	-	-	15	2	1 5/16	-	-	0.5
RC11485	Control end, single sheave & becket	64	33	-	-	23	2 1/2	1 5/16	-	-	0.8
Accessories											
RC00520	Ball bearing, Torlon®, 5.00mm (0.197") diam.	-	-	-	-	1	-	-	-	-	0.1
RF134	Saddle, control line termination point	-	-	-	-	5	-	-	-	-	0.2
RF1050	Control becket, 8mm (5/16") eye, suits RC11403	-	-	-	-	6	-	-	-	-	0.2
RF1052	Control becket fork, 5mm (3/16") pin, suits RC11403	-	11	-	-	9	-	7/16	-	-	0.3
RF5400	Cleat, suits 2mm - 8mm (3/32" - 5/16") rope	-	-	75	150	20	-	-	165	330	0.7
RF5405	Fairlead, suits RF5400 cleat	-	-	-	-	7	-	-	-	-	0.2
RF20151	Cheek block, for leading control lines	-	-	250	550	14	-	-	550	1210	0.5
RF20151A	Cheek block rivet mount, for leading control lines	-	-	200	550	17	-	-	440	1210	0.6

*1 RC11401 holes are countersunk on underside of car.

*2 Silver track available - order a RCxxxxxS

Series 19



- ✓ Low profile, lightweight alloy cars and end caps.
- ✓ Twin rows of recirculating Torlon® ball bearings provide smooth, low friction performance under load.
- ✓ Loop and fork style fittings are easily added for becket and control line block attachment.
- ✓ Cleats, fairleads and cheek blocks can be mounted directly on deck or cockpit sides to complete the control line systems.

- ✓ Compact sheave arrangements for neat, low profile control line purchase systems. Control sheaves are 24mm (15/16\") diameter and suit up to 6mm (1/4\") rope.
- ✓ Low profile, lightweight alloy cars and end caps.
- ✓ Twin rows of recirculating Torlon® ball bearings allow smooth adjustment of sheet lead position under load.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC11902	Car, pivoting shackle top	50	47	300	1050	65	2	1 7/8	660	2310	2.3
RC11903	Car, pivoting shackle top, 2 mounting screws	70	47	400	1490	90	2 3/4	1 7/8	880	3280	3.2
RC11910	Car, saddle top, single control sheaves	85	47	500	1240	125	3 11/32	1 7/8	1100	2730	4.4
RC11911	Car, saddle top, double control sheaves	85	47	500	1240	145	3 11/32	1 7/8	1100	2730	5.1
RC11920	Car, saddle top, single control sheaves, 2 cleats	85	47	500	1240	330	3 11/32	1 7/8	1100	2730	11.6
RC11921	Car, saddle top, double control sheaves, 2 cleats	85	47	500	1240	350	3 11/32	1 7/8	1100	2730	12.3
RC11945	Car, 20mm (3/4\") BB block	50	47	250	550	65	2	1 7/8	550	1210	2.3
Accessories											
RC00520	Ball bearing, Torlon®, 5.00mm (0.197\") diam.	-	-	-	-	1	-	-	-	-	0.1
RF1050	Control becket, 8mm (5/16\") eye, suits RC11903	-	-	-	-	6	-	-	-	-	0.2
RF1052	Control becket fork, 5mm (3/16\") pin, suits RC11903	-	11	-	-	9	-	7/16	-	-	0.3



Team Ronstan USA - Todd Riccardi and Trevor Burd, Formula 18
Photo: Margi Goldstein



- Dinghy and catamaran mainsheet traveller and jib lead sheeting systems.
- Mainsheet systems on sportsboats and keel boats to 7m (23ft).

- Alloy track, car bodies and end caps.
- Torlon® ball bearings.
- Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC11912	Car, pivoting saddle top, single control sheaves	100	47	605	1670	220	3 15/16	1 7/8	1330	3680	7.8
RC11922	Car, pivoting saddle top, single control sheaves & cleat	100	47	605	1670	370	3 15/16	1 7/8	1330	3680	13.0
Accessories											
RF134	Saddle, control line termination point	-	-	-	-	5	-	-	-	-	0.2
RF5400	Cleat, suits 2mm - 8mm (3/32" - 5/16") rope	-	-	75	150	20	-	-	165	330	0.7
RF5405	Fairlead, suits RF5400 cleat	-	-	-	-	7	-	-	-	-	0.2
RF5410	Cleat, suits 3mm-12mm (1/8" - 1/2") rope	-	-	125	250	50	-	-	275	550	1.8
RF5415	Fairlead, suits RF5410 cleat	-	-	-	-	14	-	-	-	-	0.5

Series 19



RC11930



RC11932



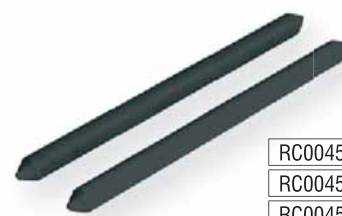
RC51930 **SR**



RC51940 **SR**



2 x M6 thread **RC00410**

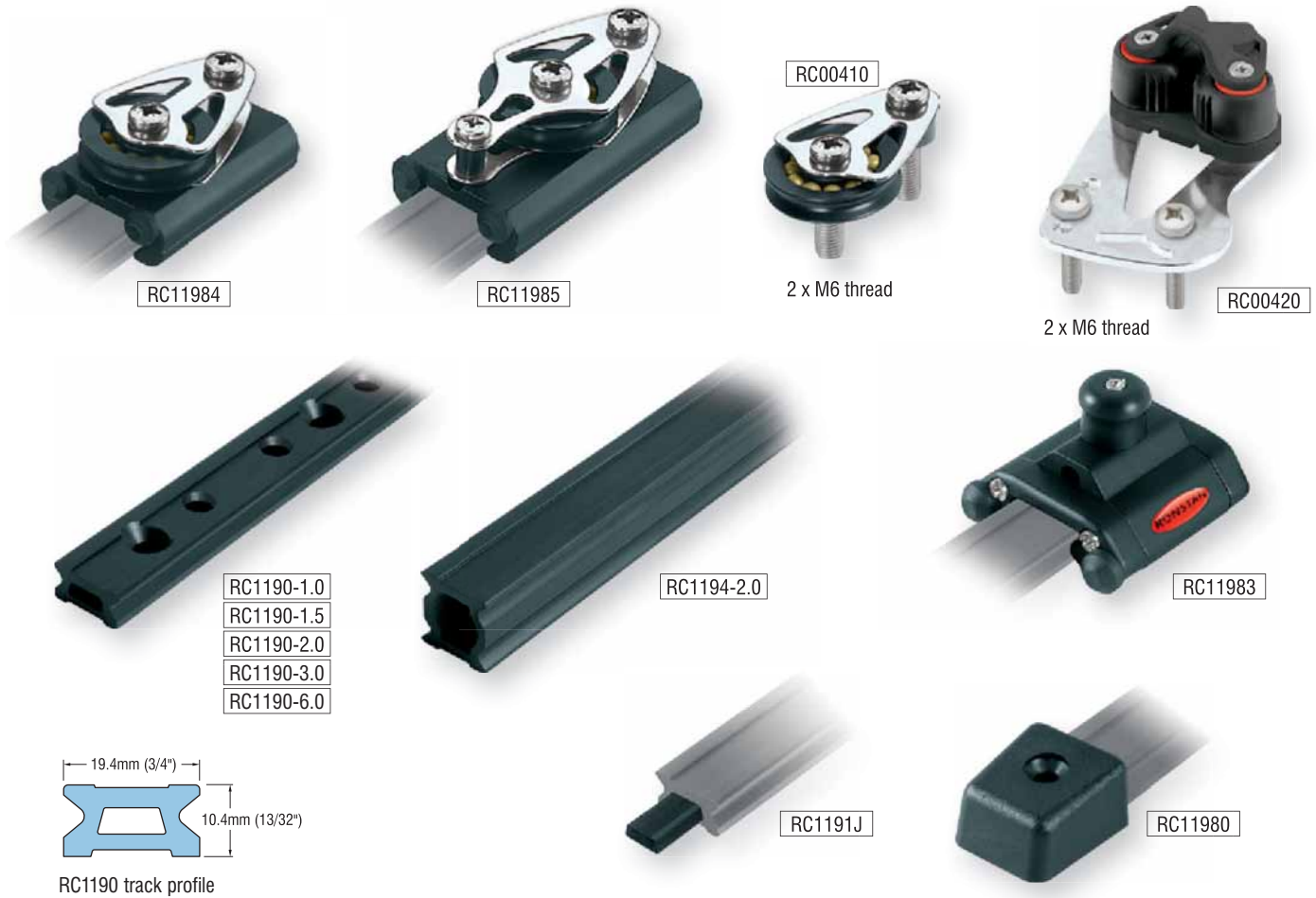


RC00451
RC00452
RC00453

- ✓ Low profile, lightweight alloy cars and end caps.
- ✓ Twin rows of recirculating Torlon® ball bearings allow smooth adjustment of sheet lead position under load.
- ✓ Genoa cars pivot to 45° from vertical for optimum alignment with sheet load.
- ✓ Genoa car sheaves are of either 40mm (1 9/16") or 50mm (2") diameter. They are wide enough to accept two sheets for easy headsail changes.

- ✓ The Sliderod car is a simple option for a sheet lead that does not require adjustment under load, and has a plunger stop for precise and repeatable positioning.
- ✓ Extra control line purchase can easily be added using the block addition kit (supplied with mounting screws).
- ✓ Adjustable stops can be fitted on track aft of genoa cars and used to relieve load on adjustment tackle.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC00410	Control sheave addition kit, suits RC11932	39	30	165	675	33	1 9/16	1 3/16	360	1490	1.2
RC11930	Genoa car, control becket	100	47	605	1430	250	3 15/16	1 7/8	1330	3150	8.8
RC11932	Genoa car, single control sheave, becket return	148	47	825	2000	365	5 7/8	1 7/8	1820	4410	12.9
SR Sliderod											
RC00451	Sliderods, suits 82mm car (pair)	72	5	-	-	6	2 13/16	3/16	-	-	0.2
RC00452	Sliderods, suits RC11983 (pair)	45	5	-	-	4	1 3/4	3/16	-	-	0.1
RC00453	Sliderods, suits 57mm car (pair)	37	5	-	-	3	1 7/16	3/16	-	-	0.1
RC51930	Genoa car, sliderods, plunger stop	82	39	660	1430	235	3 1/4	1 9/16	1460	3150	8.3
RC51940	Car, sliderods, pivoting shackle top & plunger stop	55	39	310	1050	100	2 3/16	1 9/16	680	2310	3.5



TRACK FASTENINGS – 5mm (3/16") countersunk fasteners at 100mm (3 15/16") centres

- ✓ Control ends with high performance Torlon® ball bearing sheaves are used with mainsheet traveller and genoa sheeting systems to create purchase systems for easy adjustment of car position under load.
- ✓ Control end sheaves are 30mm (1 3/16") diameter and suit up to 6mm (1/4") rope.
- ✓ Standard low profile track has stop holes for cars fitted with plunger stops.
- ✓ Cleat kits include mounting screws and are easily fitted to control ends – supports can be adjusted to optimum cleating angle.
- ✓ High profile and beam track can be used for unsupported spans to bridge cockpits and companionway hatches.

STOP HOLES – 50mm (1 31/32") centres

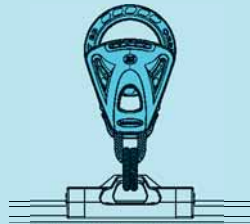
- ✓ Mainsheet systems on boats to 7m (23ft).
- ✓ Genoa sheet systems on boats to 10m (33ft).
- ✓ Alloy track, car bodies and end caps.
- ✓ Torlon® ball bearings.
- ✓ Acetal slide rods.
- ✓ Acetal primary sheaves (genoa cars), alloy control sheaves.
- ✓ Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
RC00410	Control end sheave addition kit	39	30	165	675	33	1 9/16	1 3/16	360	1490	1.2
RC00420	Control end cleat addition kit	-	-	-	-	94	-	-	-	-	3.3
RC1190-1.0*	Track, black	996	19	-	-	310	39 1/4	3/4	-	-	10.9
RC1190-1.5*	Track, black	1496	19	-	-	465	59	3/4	-	-	16.4
RC1190-2.0*	Track, black	1996	19	-	-	620	78 5/8	3/4	-	-	21.9
RC1190-3.0*	Track, black	2996	19	-	-	930	118	3/4	-	-	32.8
RC1190-6.0*	Track, black	5996	19	-	-	1860	236 1/4	3/4	-	-	65.6
RC1191J	Track joiner	60	-	-	-	3	2 3/8	-	-	-	0.1
RC1194-2.0	High profile track, black	1996	19	-	-	1000	78 5/8	3/4	-	-	35.3
RC11980	End cap, plastic	30	26	-	-	6	1 3/16	1	-	-	0.2
RC11983	Adjustable stop	57	47	-	-	65	2 1/4	1 7/8	-	-	2.3
RC11984	Control end, single sheave	65	39	165	675	82	2 9/16	1 9/16	360	1490	2.9
RC11985	Control end, single sheave & becket	78	39	245	675	102	3 1/16	1 9/16	540	1490	3.6

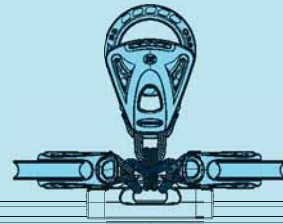
* Silver track available - Order as RCxxxxxS

Series 22

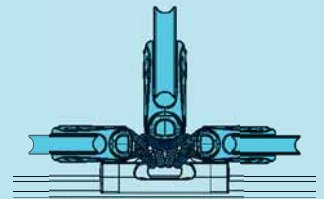
ORBIT



Orbit block in line with car using additional Dyneema® link.



Orbit block in line with car using additional Dyneema® link. Control blocks linked to each other through additional Dyneema® link.



Orbit block 90° to car using supplied Dyneema® link. Control blocks attached using additional Dyneema® link.



RC12205



RF1053

6mm (1/4")



RF1051

6mm (1/4")



2 x M6 screw

RC12203



RC12220



RC12210



RC12211

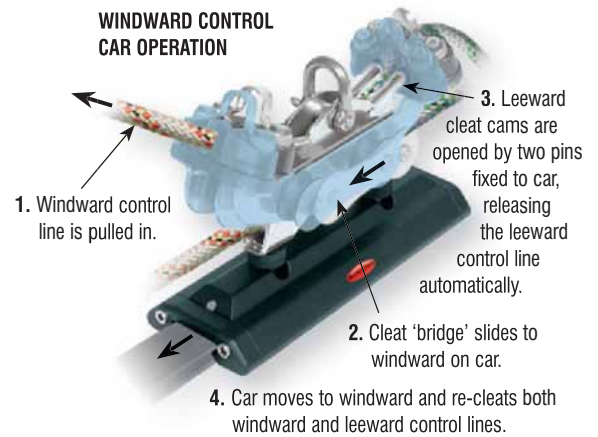


RC12221

- ✓ Low profile, lightweight alloy cars and end caps.
- ✓ Loop and fork style fittings are easily added for becket and control line block attachment.

- ✓ Compact sheave arrangements for neat, low profile control line purchase systems. Control sheaves are 30mm (1 3/16 inch) diameter and suit up to 6mm (1/4 inch) rope.
- ✓ Twin rows of recirculating Torlon® ball bearings provide smooth, low friction performance for easy adjustment under load.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC12203	Car, pivoting shackle top, 2 mounting screws	75	58	500	1490	145	3	2 5/16	1100	3280	5.1
RC12205	Orbit Car, integrated link/lashing eye	75	58	500	1490	110	3	2 5/16	1100	3280	3.9
RC12210	Car, saddle top, single control sheaves	125	58	880	2180	250	5	2 5/16	1940	4810	8.8
RC12211	Car, saddle top, double control sheaves	125	58	880	2180	300	5	2 5/16	1940	4810	10.6
RC12220	Car, saddle top, single control sheaves, cleats	125	58	880	2000	635	5	2 5/16	1940	4410	22.4
RC12221	Car, saddle top, double control sheaves, cleats	125	58	880	2000	655	5	2 5/16	1940	4410	23.1
Accessories											
RF1051	Control becket, 8mm (5/16 inch) eye, suits RC12203 & RC12204	-	-	-	-	6	-	-	-	-	0.2
RF1053	Control becket fork, 5mm (3/16 inch) pin, suits RC12203 & RC12204	-	14	-	-	9	-	9/16	-	-	0.3

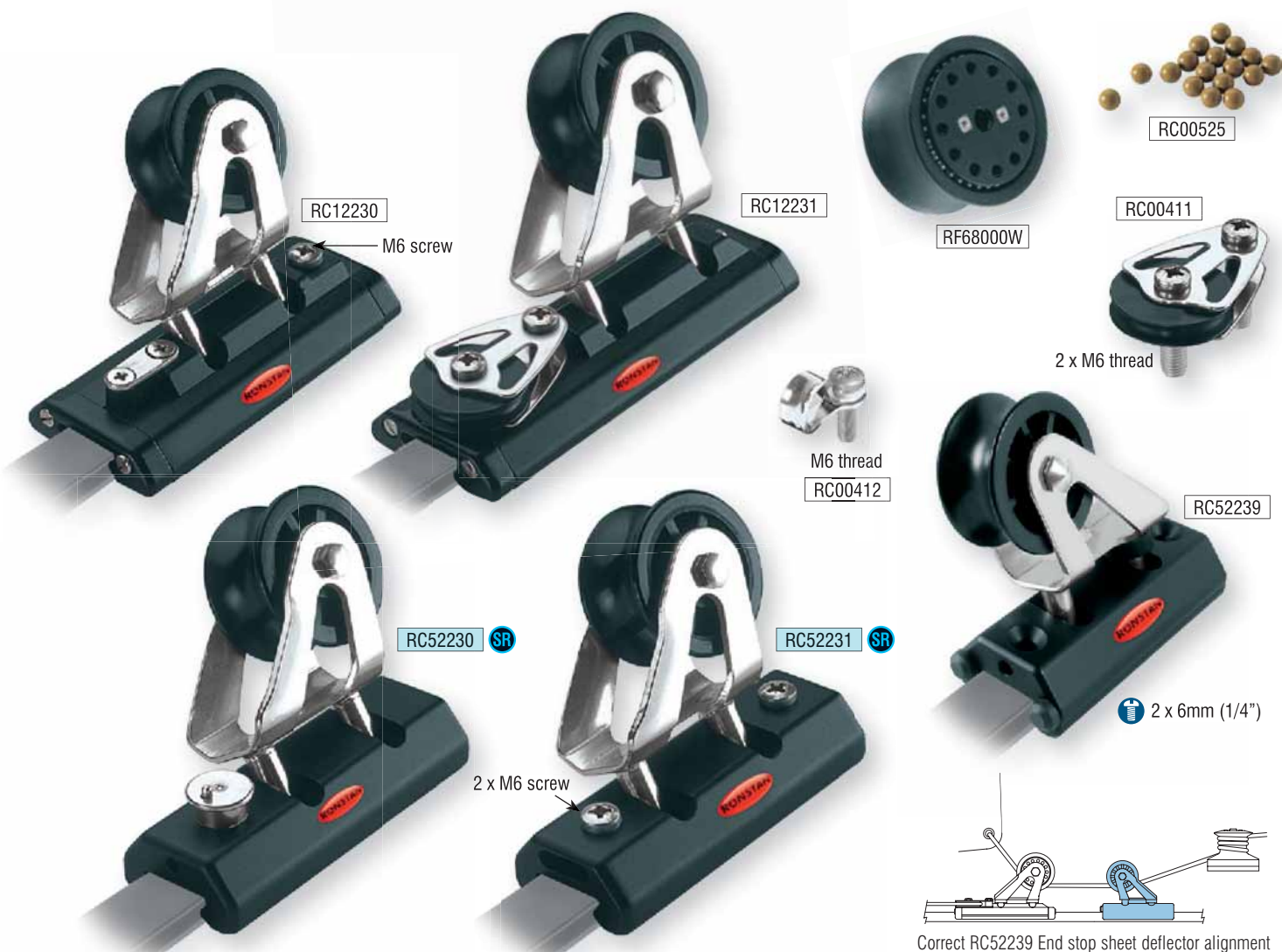


- Individual cleat supports can be adjusted to optimum cleating angle.
- RC12227 windward control car automatically releases leeward traveller control line when pulling car to windward, then re-cleats for easy control through tacks. Control line sheaves suit 4:1 or 5:1 purchase system.
- Stand-up spring kit RF324-1 is available to suit mainsheet cars RC12213, RC12223. Combine with a mainsheet system RF72700 or RF72900 for ultimate mainsheet control.

- Ball bearing upgrade sheave RF44000 available, see page 96 for details.
- Mainsheet systems on boats to 10m (33ft).
- Alloy track, car bodies and end caps.
- Torlon® ball bearings in cars.
- Acetal control sheaves.
- Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC12204	Car, pivoting shackle top, 2 mounting screws	125	58	880	2640	230	5	2 5/16	1940	5820	8.1
RC12213	Car, pivoting shackle top, double control sheaves	180	58	880	2180	520	7 1/16	2 5/16	1940	4810	18.3
RC12223	Car, pivoting shackle top, double control sheaves, adjustable cleats	180	58	880	2180	930	7 1/16	2 5/16	1940	4810	32.8
RC12227	Windward control car, pivoting top, triple control sheaves & cleats	175	58	880	2180	1056	6 7/8	2 5/16	1940	4810	37.2
Accessories											
RF324-1	Stand up spring kit, suits RC12213, RC12223	-	-	-	-	60	-	-	-	-	2.1

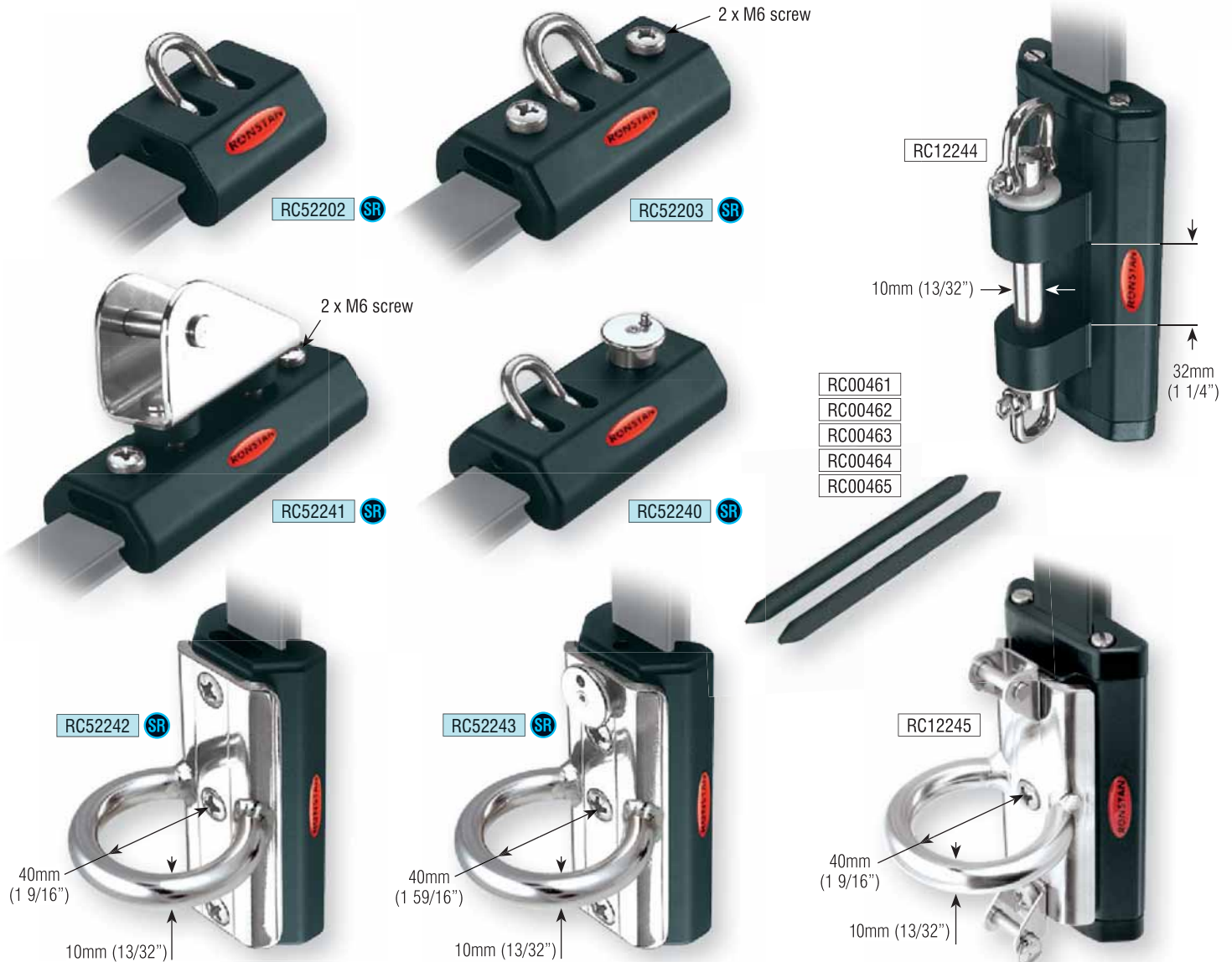
Series 22



- ✓ Ball bearing cars have twin rows of recirculating Torlon® ball bearings for smooth adjustment under load.
- ✓ Sliderod cars are a simple option for a sheet lead that does not require adjustment under load. Plunger stop can be locked in the "up" position.
- ✓ Genoa car sheaves are of either 50mm (2") or 60mm (2 3/8") diameter. They are wide enough to accept two sheets for easy headsail changes.
- ✓ Roller ball bearing sheave upgrade suits both ball bearing and Sliderod cars with 60mm (2 3/8") sheaves.
- ✓ Extra purchase for lead adjustment systems can easily be added by fitting becket or block addition kits (supplied with mounting screws).

- ✓ RC52239 sheet deflector pivots to 45° from vertical, and is bolted to aft end of track to lead sheet to a winch mounted on a cockpit coaming or above the track level.
- ✓ Genoa sheet systems on boats to 11m (36ft).
- ✓ Alloy track, car bodies and end caps.
- ✓ Torlon® ball bearings in cars.
- ✓ Acetal primary sheaves (genoa cars) and control sheaves.
- ✓ Alloy primary sheave upgrade available.
- ✓ Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC12230	Genoa car, control becket	130	58	880	2410	389	5 1/8	2 5/16	1940	5310	13.7
RC12231	Genoa car, single control sheave	165	58	990	2300	570	6 1/2	2 5/16	2180	5070	20.1
SR Sliderod											
RC52230	Genoa car, sliderods, plunger stop	125	45	1205	2410	520	5	1 3/4	2660	5310	18.3
RC52231	Genoa car, sliderods, internal control becket & becket return	125	45	1205	2410	499	5	1 3/4	2660	5310	17.6
Accessories											
RC00411	Control sheave addition kit, suits RC12231	65	40	240	900	47	2 9/16	1 9/16	530	1980	1.7
RC00412	Control becket, 8mm (5/16") eye, 2 x M6 screws, suits RC12203 & RC12204	-	-	-	-	6	-	-	-	-	0.2
RC00525	Ball bearing, Torlon®, 6.35mm (1/4") diam.	-	-	-	-	1	-	-	-	-	0.1
RC52239	End stop sheet deflector	95	45	860	2000	330	3 3/4	1 3/4	1900	4410	11.6
RF68000W	Sheave RB, aluminium, dia. 60mm (2 3/8"), suits RC12231, RC52230, RC52231	-	32	1150	-	128	-	1 1/4	2540	-	4.5



- ✓ Sliderod cars with pivoting shackles suit a variety of applications where a secure, adjustable take-off point for a block or control line is required. Plunger stops can be locked in the "up" position.
- ✓ Sliderod spinnaker pole cars suit poles set up for end-for-end jibes. Adjustment is by plunger stop, or by control line secured within the milled slot at the end of the car (RC52242).

- ✓ Ball bearing spinnaker pole car suits piston style inboard end fittings with 32mm toggle.
- ✓ Spinnaker pole systems on boats to 10m (33ft).
- ✓ Outhaul car for boats to 8m (26ft).

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC12244	Spinnaker pole car, suits 32mm (1 1/4") toggle	130	58.0	1350	2700	308	5 1/8	2 5/16	2980	5950	10.9
RC12245	Spinnaker pole car, ball bearing, ring	118	58.0	800	1600	405	4 5/8	4 5/8	1760	3530	14.3
SR Sliderod											
RC00461	Sliderods, suits 48mm car (pair)	37	6.4	-	-	4	1 7/16	1/4	-	-	0.1
RC00462	Sliderods, suits 85mm car (pair)	74	6.4	-	-	8	2 15/16	1/4	-	-	0.3
RC00463	Sliderods, suits 115mm car (pair)	104	6.4	-	-	11	4 1/8	1/4	-	-	0.4
RC00464	Sliderods, suits 105mm car (pair)	94	6.4	-	-	10	3 11/16	1/4	-	-	0.4
RC00465	Sliderods, suits 125mm car (pair)	114	6.4	-	-	12	4 1/2	1/4	-	-	0.4
RC52202	Car, sliderods, pivoting shackle top	48	45.0	600	1490	95	1 7/8	1 3/4	1320	3280	3.4
RC52203	Car, sliderods, pivoting shackle top, internal control becketts	85	45.0	1000	2690	166	3 3/8	1 3/4	2200	5930	5.9
RC52240	Car, sliderods, pivoting shackle top & plunger stop	85	45.0	975	1940	177	3 3/8	1 3/4	2150	4280	6.2
RC52241	Outhaul car, sliderods, 8mm (5/16") pin, internal control becketts	115	45.0	1205	2410	347	4 1/2	1 3/4	2660	5310	12.2
RC52242	Spinnaker pole car, sliderods, ring, internal control becketts	105	45.0	1300	2800	385	4 1/8	1 3/4	2870	6170	13.6
RC52243	Spinnaker pole car, sliderods, ring, plunger stop	105	45.0	1300	2500	410	4 1/8	1 3/4	2870	5510	14.5

Series 22



TRACK FASTENINGS – 6mm (1/4") countersunk fasteners at 100mm (3 15/16") centres

- ✓ Adjustable stops can be fitted on track aft of genoa cars and used to relieve load on adjustment tackle.
- ✓ Control ends have high load, low maintenance Acetal sheaves and are used with mainsheet traveller and genoa sheeting systems to create purchase systems for easy adjustment of car position under load.
- ✓ Cleat kits include mounting screws and are easily fitted to control ends – supports can be adjusted to optimum cleating angle.

STOP HOLES – 50mm (1 31/32") centres

- ✓ High profile and beam track can be used for unsupported spans to bridge cockpits and companionway hatches.
- ✓ 40mm (1 9/16") diameter control end sheaves suit up to 8mm (5/16") rope.
- ✓ Standard low profile track has stop holes for cars fitted with plunger stops.
- ✓ Mainsheet systems on boats to 10m (33ft).
- ✓ Genoa sheet systems on boats to 11m (36ft).

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
RC00411	Control sheave addition kit, suits RC12284, RC12285	65	40	240	900	47	2 9/16	1 9/16	530	1980	1.7
RC00421	Control end cleat addition kit, suits RC12284, RC12285	-	-	-	-	207	-	-	-	-	7.3
RC1220-1.0*	Track, black	996	22	-	-	460	39 1/4	7/8	-	-	16.2
RC1220-2.0*	Track, black	1996	22	-	-	920	78 5/8	7/8	-	-	32.5
RC1220-3.0*	Track, black	2996	22	-	-	1380	118	7/8	-	-	48.7
RC1220-6.0*	Track, black	5996	22	-	-	2760	236 1/4	7/8	-	-	97.4
RC1221J	Track joiner	60	-	-	-	4	2 3/8	-	-	-	0.1
RC1224-2.0	High profile track, black	1996	22	-	-	1360	78 5/8	7/8	-	-	48.0
RC1225-3.0	Beam track, black	2996	85	-	-	6240	118	3 3/8	-	-	220.1
RC12280	End cap, plastic	30	26	-	-	6	1 3/16	1	-	-	0.2
RC12283	Adjustable stop	60	45	-	-	104	2 3/8	1 3/4	-	-	3.7
RC12284	Control end, single sheave	83	45	240	900	140	3 9/32	1 3/4	530	1980	4.9
RC12285	Control end, single sheave & becket	103	45	320	900	168	4 1/16	1 3/4	710	1980	5.9
RF44000	Ball bearing upgrade sheave, suits S22 & S26 cars and control ends, 40mm dia.										

* Silver track available - Order as RCxxxxxS



Series 26



RF324-2



RF68000W


RF1051
6mm (1/4")

RF1053
6mm (1/4")


RC12603



RC12631



RC12613

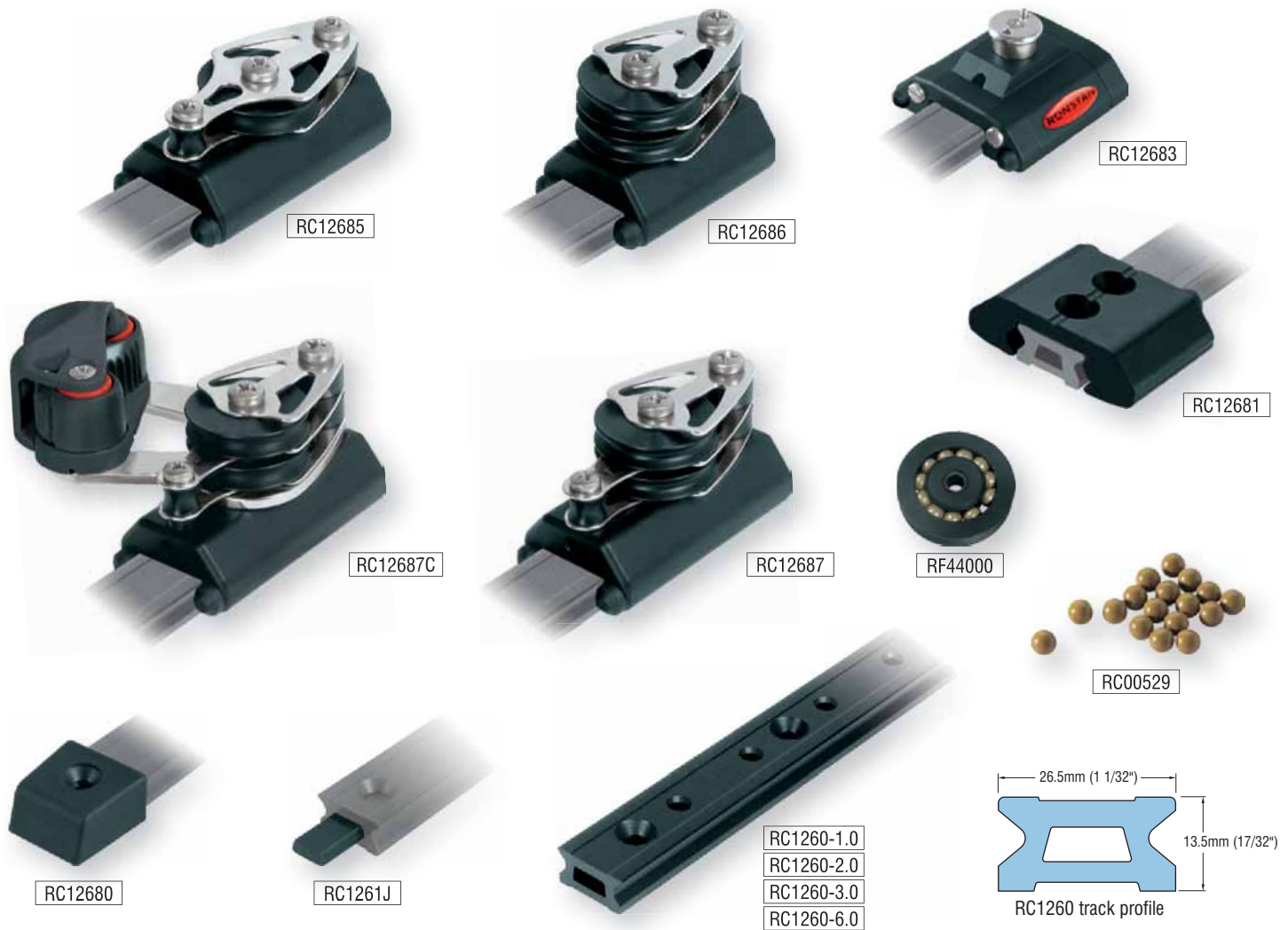


RC12623

- Ball bearing cars have twin rows of recirculating Torlon® ball bearings for smooth, precise adjustment under load.
- 40mm (1 9/16") diameter control end sheaves suit up to 8mm (5/16") rope.
- Genoa car sheave for RC12631 is 60mm (2 3/8") diameter and can accept two sheets for easy headsail changes.
- Individual cleat supports on mainsheet car can be adjusted to optimum cleating angle.
- Roller ball bearing sheave upgrade suits genoa car and floating block, ensuring minimum friction at high sheet loads.
- Stand-up spring kit RF324-2 is available to suit mainsheet cars RC12603, RC12613, RC12623.

- Mainsheet systems on boats to 12m (40ft).
- Genoa sheet systems on boats to 13m (43ft).
- Self tacking jib sheet systems on boats to 10m (33ft).
- Alloy track, car bodies and end caps.
- Torlon® ball bearings in cars.
- Acetal primary sheaves (genoa cars) and control sheaves.
- Alloy primary sheave upgrade available.
- Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC12603	Car, pivoting shackle top, 2 mounting screws	120	69	690	1380	331	4 3/4	2 3/4	1520	3040	11.7
RC12613	Car, pivoting shackle top, double control sheaves	200	69	1700	3400	740	7 7/8	2 3/4	3750	7500	26.1
RC12623	Car, pivoting shackle top, double control sheaves, adjustable cleats	205	69	1700	3400	1042	8 1/16	2 3/4	3750	7500	36.8
RC12631	Genoa car, single control sheave	180	69	1400	2800	582	7 1/16	2 3/4	3090	6170	20.5
Accessories											
RF1051	Control becket, 8mm (5/16") eye, suits RC12203 & RC12204	-	-	-	-	6	-	-	-	-	0.2
RF1053	Control becket fork, 5mm (3/16") pin, suits RC12603 & RC12631	-	14	-	-	9	-	9/16	-	-	0.3
RF68000W	Sheave RB, aluminium, diameter 60mm (2 3/8"), suits RC12631, RC61101S	-	32	1150	-	128	-	1 1/4	2540	-	4.5
RF324-2	Stand up spring kit, suits RC12603, RC12613, RC12623	-	-	-	-	60	-	-	-	-	2.1



TRACK FASTENINGS – 6mm (1/4") countersunk fasteners at 100mm (3 15/16") centres

STOP HOLES – 50mm (1 31/32") centres

- ✓ Control ends have high load, low maintenance Acetal sheaves and are used with mainsheet traveller and genoa sheeting systems to create purchase systems for easy adjustment of car position under load.
- ✓ Standard low profile track has stop holes for cars fitted with plunger stops.
- ✓ Alloy track, car bodies and end caps.

- Torlon® ball bearings in cars.
- Acetal primary sheaves (genoa cars) and control sheaves.
- Alloy primary sheave upgrade available.
- Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
RC1260-1.0*	Track, black	996	26	-	-	600	39 1/4	1 1/16	-	-	21.2
RC1260-2.0*	Track, black	1996	26	-	-	1200	78 5/8	1 1/16	-	-	42.3
RC1260-3.0*	Track, black	2996	26	-	-	1800	118	1 1/16	-	-	63.5
RC1260-6.0*	Track, black	5996	26	-	-	3600	236 1/4	1 1/16	-	-	127.0
RC1261J	Track joiner	60	-	-	-	5	2 3/8	-	-	-	0.2
RC12680	End cap, plastic	34	32	-	-	7	1 5/16	1 1/4	-	-	0.2
RC12681	End stop, aluminium	55	45	-	-	73	2 5/32	1 25/32	-	-	2.6
RC12683	Adjustable stop	55	64	-	-	120	2 5/32	2 3/4	-	-	4.2
RC12685	Control end, single sheave & becket	95	45	320	900	211	3 3/4	1 25/32	710	1980	7.4
RC12686	Control end, double sheave	75	45	450	900	198	3	1 25/32	990	1980	7.0
RC12687	Control end, double sheave & becket	95	45	450	900	258	3 3/4	1 25/32	990	1980	9.1
RC12687C	Control end, double sheave & becket, cleat	95	45	450	900	405	3 3/4	1 25/32	990	1980	14.3
RF44000	Ball bearing upgrade sheave, suits S22 & S26 cars and control ends, 40mm dia.										
* Silver track available - Order as RCxxxxxS											
Accessories											
RC00529	Ball bearing, Torlon®, 8.00mm (0.315") diam.	-	-	-	-	1	-	-	-	-	0.1

Series 30



- ✓ Low profile, lightweight alloy cars and end caps.
- ✓ Twin rows of recirculating Torlon® ball bearings provide smooth, low friction performance for easy adjustment under load.
- ✓ Individual cleat supports can be adjusted to optimum cleating angle.
- ✓ Loop and fork style fittings suit becket or control line blocks to add extra purchase to control line systems.

- ✓ Control line sheaves are 50mm (2") diameter and suit up to 8mm (5/16") rope.
- ✓ Stand-up spring kit RF324-2 is available to suit mainsheet cars RC13004, RC13012, RC13013, RC13023. Combine with an Orbit Block™ from Series 60, 75 or 100 to complete the mainsheet system.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC13003	Car, pivoting shackle top, 2 mounting screws	100	77	860	2800	350	3 15/16	3 1/16	1900	6170	12.3
RC13004	Car, pivoting shackle top, 2 mounting screws	150	77	1650	3300	525	5 7/8	3 1/16	3640	7280	18.5
RC13012	Car, pivoting shackle top, single control sheaves	225	77	2450	4400	915	8 7/8	3 1/16	5400	9700	32.3
RC13013	Car, pivoting shackle top, double control sheaves	225	77	2450	4400	1070	8 7/8	3 1/16	5400	9700	37.7
RC13023	Car, pivoting shackle top, double control sheaves, adjustable cleats	225	77	2450	4400	1500	8 7/8	3 1/16	5400	9700	52.9
Accessories											
RC00530	Ball bearing, Torlon®, 7.92mm (5/16") diam.	-	-	-	-	1	-	-	-	-	0.1
RF1051	Control becket, 8mm (5/16") eye, suits RC13003 & RC13004	-	-	-	-	6	-	-	-	-	0.2
RF1053	Control becket fork, 5mm (3/16") pin, suits RC13003 & RC13004	-	14	-	-	9	-	9/16	-	-	0.3
RF324-2	Stand-up spring kit, suits RC13004, RC13012, RC13013, RC13023	-	-	-	-	60	-	-	-	-	2.1



- ✓ RC13027 car automatically releases leeward traveller control line when pulling car to windward, then re-cleats for easy control through tacks. Control line sheaves suit 4:1 or 5:1 purchase system.
- ✓ RC13018 and RC13019 with integral pivoting mainsheet sheave units are a compact and low profile solution for 2:1 mainsheet systems.
- ✓ 60mm (2 3/8") diameter control line sheaves suit up to 14mm (9/16") rope.

- Mainsheet systems on boats to 17m (56ft).
- Self tacking jib sheet systems on boats to 11m (36ft).
- Alloy track, car bodies and end caps.
- Torton® ball bearings in cars.
- Alloy mainsheet sheaves.
- Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC13018	Car, 2 x 75mm (3") main sheaves, single control sheaves	300	77	2900	5800	2950	11 13/16	3 1/16	6390	12790	104.2
RC13019	Car, 2 x 100mm (4") main sheaves, single control sheaves	375	77	4000	8000	4300	14 3/4	3 1/16	8820	17640	151.7

Series 30



RC13030



RC13031



RC13032



RC13033

- ✓ Ball bearing cars have twin rows of recirculating Torlon® ball bearings for smooth adjustment under load.
- ✓ Genoa cars pivot to 45° from vertical for optimum alignment with sheet load.
- ✓ Genoa car sheaves are 75mm (3") diameter and accept two sheets for easy headsail changes.

- ✓ Roller ball bearing sheave upgrade suits both ball bearing and Sliderod cars.
- ✓ Cars with control sheaves can be matched with track control ends to create compact, low friction purchase systems for adjustment under load.
- ✓ Control line sheaves are 50mm (2") diameter and suit up to 8mm (5/16") rope.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC13030	Genoa car, control becket	165	77.0	1320	2400	885	6 1/2	3 1/16	2910	5290	31.2
RC13031	Genoa car, single control sheave	200	77.0	1800	3200	1130	7 7/8	3 1/16	3970	7050	39.9
RC13032	Genoa car, single control sheave & becket	225	77.0	1800	3200	1192	8 7/8	3 1/16	3970	7050	42.0
RC13033	Genoa car, double control sheaves	200	77.0	1800	3200	1227	7 7/8	3 1/16	3970	7050	43.3
Accessories											
RF78000W	Sheave RB, aluminium, diameter 75mm (3"), suits RC13030, RC13031, RC13032, RC13033	-	41.5	2400	-	280	-	1 5/8	5290	-	9.9



- ✓ RC13034A ball bearing high load genoa car has alloy roller ball bearing primary and control sheaves.
- ✓ Sliderod cars are a simple option for a sheet lead that does not require adjustment under load. Plunger stop can be locked in the "up" position (RC53030), or a control line can be secured in the milled slot (RC53031).
- ✓ RC53039 sheet deflector pivots to 45° from vertical, and is bolted to aft end of track to lead sheet to a winch mounted on a cockpit coaming or above the track level.
- ✓ Genoa sheet systems on boats to 17m (56ft).

- Alloy track, car bodies and end caps.
- Torlon® ball bearings in cars.
- Acetal slide rods.
- Acetal primary sheaves (genoa cars) and control sheaves.
- Alloy primary sheave upgrade available.
- Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC13034A	Genoa car, aluminium 75mm (3") RB sheave, single control sheave	215	77.0	2750	5100	1450	8 1/2	3 1/16	6060	11240	51.1
SR Sliderod											
RC53030	Genoa car, sliderods, plunger stop	160	55.0	1700	3400	848	6 5/16	2 3/16	3750	7500	29.9
RC53031	Genoa car, sliderods, internal control becket & becket return	140	55.0	1500	3000	805	5 1/2	2 3/16	3310	6610	28.4
Accessories											
RC53039	End stop sheet deflector	135	55.0	1400	2800	780	5 5/16	2 3/16	3090	6170	27.5
RF78000W	Sheave RB, aluminium, diameter 75mm (3"), suits RC53030, RC53031, RC53039	-	41.5	2400	-	280	-	1 5/8	5290	-	9.9

Series 30



RC53002 SR



RC53003 SR



RC53041 SR



RC53040 SR


RC00481
RC00482
RC00483
RC00484
RC00485

- ✓ Sliderod cars with pivoting shackles suit a variety of applications where a secure, adjustable take-off point for a block or control line is required.
- ✓ Plunger stops can be locked in the "up" position.

- ✓ Outhaul car suitable for boats to 17m (56ft) with conventional reefing or in-mast furling systems.

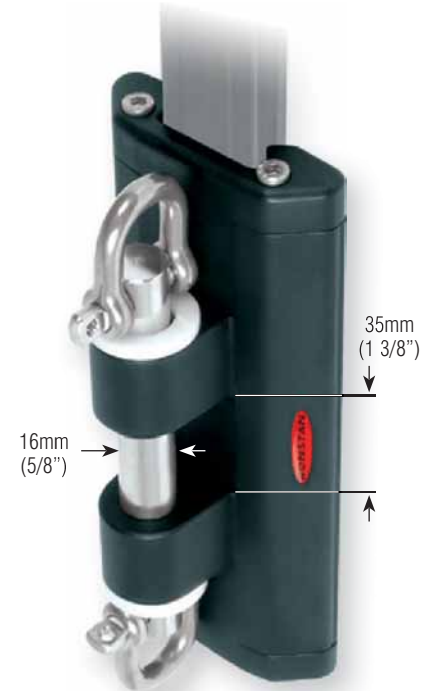
PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
SR Sliderod											
RC00481	Sliderods, suits RC13083 (pair)	53	8	-	-	8	2 1/16	5/16	-	-	0.3
RC00482	Sliderods, suits 50mm car (pair)	40	8	-	-	6	1 9/16	5/16	-	-	0.2
RC00483	Sliderods, suits 110mm car (pair)	98	8	-	-	16	3 7/8	5/16	-	-	0.6
RC00484	Sliderods, suits 140mm car (pair)	129	8	-	-	21	5 1/16	5/16	-	-	0.7
RC00485	Sliderods, suits 160mm car (pair)	149	8	-	-	24	5 7/8	5/16	-	-	0.8
RC53002	Car, sliderods, pivoting shackle top	50	55	750	2650	136	2	2 3/16	1650	5840	4.8
RC53003	Car, sliderods, pivoting shackle top, internal control becket	110	55	1325	2650	310	4 5/16	2 3/16	2920	5840	10.9
RC53040	Car, sliderods, pivoting shackle top & plunger stop	110	55	1325	2650	355	4 5/16	2 3/16	2920	5840	12.5
RC53041	Outhaul car, sliderods, 10mm (13/32") pin, internal control becket	140	55	1880	3760	560	5 1/2	2 3/16	4140	8290	19.8



RC13046



RC13044



RC13045

- Ball bearing spinnaker pole cars for boats to 15m (50ft) suit a variety of inboard end fittings.

- Alloy track, car bodies and end caps.
- Torlon® ball bearings.
- Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC13044	Spinnaker pole car, suits toggle	175	77	1800	3600	720	6 7/8	3 1/16	3970	7940	25.4
RC13045	Spinnaker pole car, suits toggle	185	77	1900	3800	860	7 5/16	3 1/16	4190	8380	30.3
RC13046	Spinnaker pole car, suits toggle	175	77	1800	3600	695	6 7/8	3 1/16	3970	7940	24.5

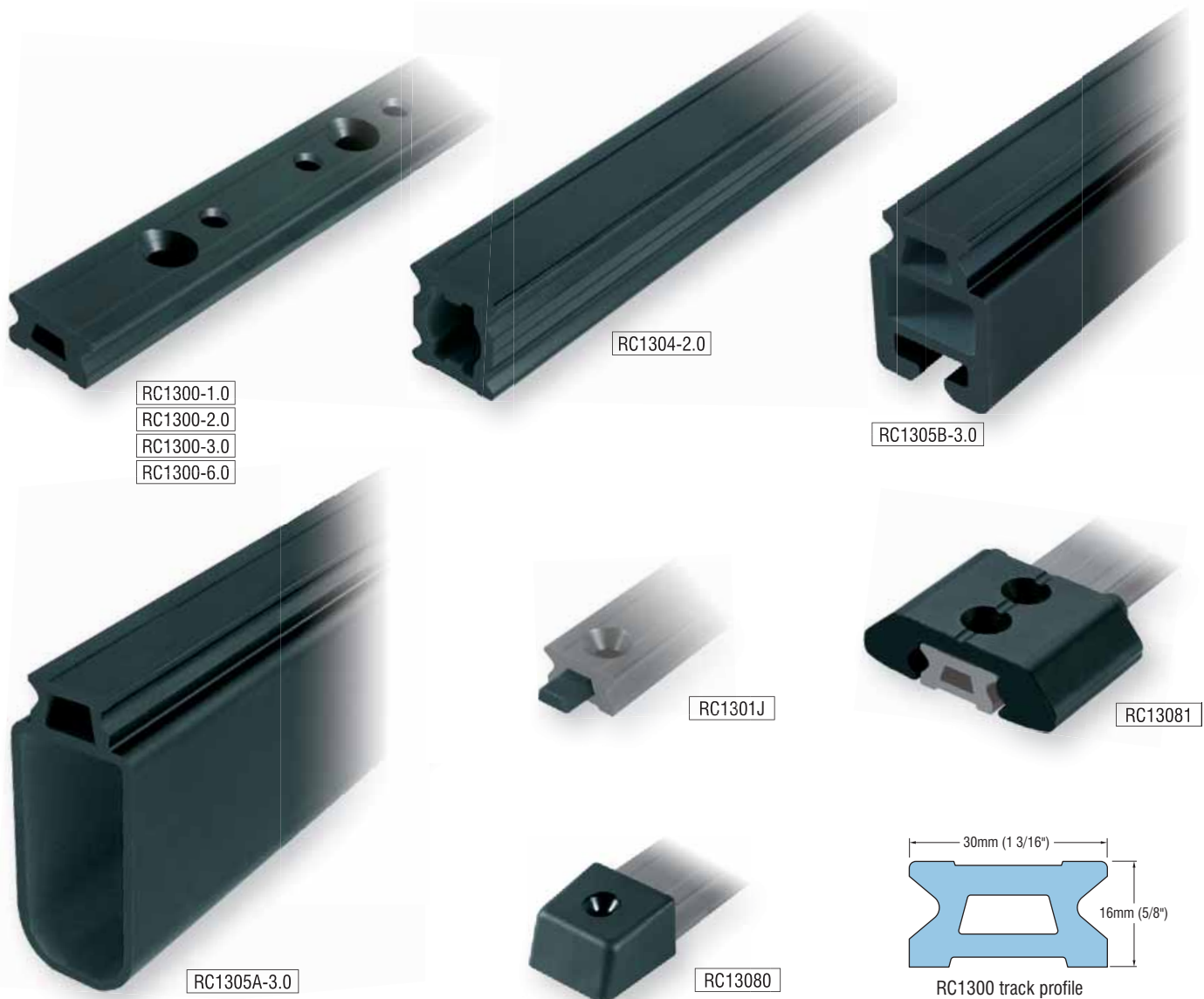
Series 30



- Traveller control ends have high load, low maintenance Acetal sheaves, and are suited for mainsheet systems on boats to 17m (56ft).
- Control line sheaves are 50mm (2") diameter and suit up to 8mm (5/16") rope.
- Cleat supports can be adjusted to the optimum cleating angle.

- Control ends can also be used to create purchase systems for genoa lead adjustment under load.
- Adjustable stops can be fitted on track aft of genoa cars and used to relieve load on adjustment tackle.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
RC13083	Adjustable stop	77	55	-	-	190	3	2 3/16	-	-	6.7
RC13084	Control end, single sheave	95	55	450	1350	250	3 3/4	2 3/16	990	2980	8.8
RC13084C	Control end, single sheave, cleat	95	55	270	1350	465	3 3/4	2 3/16	600	2980	16.4
RC13085	Control end, single sheave & becket	115	55	675	1350	315	4 1/2	2 3/16	1490	2980	11.1
RC13085C	Control end, single sheave & becket, cleat	115	55	450	1350	555	4 1/2	2 3/16	990	2980	19.6
RC13086	Control end, double sheave	95	55	675	1350	315	3 3/4	2 3/16	1490	2980	11.1
RC13086C	Control end, double sheave, cleat	95	55	630	1350	525	3 3/4	2 3/16	1390	2980	18.5
RC13087	Control end, double sheave & becket	115	55	675	1350	580	4 1/2	2 3/16	1490	2980	20.5
RC13087C	Control end, double sheave & becket, cleat	115	55	675	1350	625	4 1/2	2 3/16	1490	2980	22.0
RF54000	Ball bearing upgrade sheave, suits S30 cars and control ends, 50mm dia.										



TRACK FASTENINGS – 8mm (5/16") countersunk fasteners at 100mm (3 15/16") centres

STOP HOLES – 50mm (1 31/32") centres

- ✓ Standard low profile track has stop holes for cars fitted with plunger stops.
- ✓ High profile and beam track can be used for unsupported spans to bridge cockpits and companionway hatches.

- ✪ Mainsheet and genoa sheet systems on boats to 17m (56ft).

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	WEIGHT g	LENGTH in.	WIDTH in.	WEIGHT oz
RC1300-1.0*	Track, black	996	30	810	39 1/4	1 3/16	28.6
RC1300-2.0*	Track, black	1996	30	1620	78 5/8	1 3/16	57.1
RC1300-3.0*	Track, black	2996	30	2430	118	1 3/16	85.7
RC1300-6.0*	Track, black	5996	30	4860	236 1/4	1 3/16	171.4
RC1301J	Track joiner	60	-	7	2 3/8	-	0.2
RC1304-2.0*	High profile track, black	1996	30	2520	78 5/8	1 3/16	88.9
RC1305A-3.0*	Beam track, black	2996	45	8550	118	1 3/4	301.6
RC1305B-3.0*	Beam track, black	2996	42	8490	118	1 5/8	299.4
RC13080	End cap, plastic	37	37	27	1 7/16	1 7/16	1.0
RC13081*	End stop, aluminium	65	76	150	2 1/2	3	5.3

* Silver track available - Order as RCxxxxxS

Series 42



RC14218



RC14217

- ✓ Low profile, lightweight alloy cars and end caps.
- ✓ Twin rows of recirculating Torlon® ball bearings provide smooth, low friction performance for easy adjustment under load.
- ✓ Low friction roller ball bearing control sheaves suit up to 14mm (9/16") rope.
- ✓ RC14218 twin car with mainsheet and control line blocks can run on track curved in a horizontal plane.
- ✓ RC14217 has Series 100 Orbit mainsheet block and 60mm (2 3/8") control sheaves, typically used with 2:1 mainsheet system.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC14217	Car, single 100mm (4") Orbit block™, single control sheaves	335	96	3000	6000	2620	13 3/16	3 13/16	6610	13230	92.4
RC14218	Car, 2 x single 125mm (5") Orbit blocks™, single control sheaves	535	96	5000	10000	4900	21 1/16	3 13/16	11020	22490	172.8

STT65 "Rosebud"
Photo: Malcolm Park



- ✓ RC14219 with integral pivoting mainsheet sheave unit is a compact and low profile solution for a 2:1 mainsheet system.
- ✓ Mainsheet systems on boats to 24m (78ft).
- ✓ Self tacking jib systems on boats to 20m (65ft).
- ✓ Multihull mainsheet systems on boats to 19m (62ft).
- ✓ Alloy car bodies and end caps.

- ✓ Torlon® ball bearings (cars).
- ✓ Torlon® rollers (sheaves).
- ✓ Carbon Black Acetal ball bearings (sheaves).
- ✓ Alloy cheeks and sheaves on control and mainsheet blocks.
- ✓ Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC14212	Car, pivoting shackle top, single control sheaves	355	96	4200	8400	2700	14	3 13/16	9260	18520	95.2
RC14219	Car, 2 x 125mm (5") main sheaves, single control sheaves	465	96	5000	10200	5550	18 5/16	3 13/16	11020	22050	172.8

Series 42



RC14234

M8 screw



RC14232

2 x M8 screw



RC14231

2 x M8 screw



RC00535

- ✓ Low profile, lightweight alloy cars and end caps.
- ✓ Twin rows of recirculating Torlon® ball bearings for easy adjustment under load.
- ✓ Cars have milled slot for control line attachment.
- ✓ High performance roller ball bearing sheaves for low friction performance can accept two sheets for easy headsail changes.
- ✓ Highly polished stainless steel stirrups pivot 45° from vertical for optimum alignment with sheet loads.

PRODUCT No.	DESCRIPTION	SHEAVE mm	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE in.	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing													
RC14231	Genoa car, internal control becket & becket return	125	275	96	4500	10000	3200	5	10 13/16	3 13/16	9920	22050	112.9
RC14232	Genoa car, internal control becket & becket return	150	300	96	5000	10000	4300	6	11 7/8	3 13/16	11020	22050	151.7
RC14234	Genoa car, single control sheave	125	315	96	5000	10000	4400	5	12 7/16	3 13/16	11020	22050	155.0
Accessories													
RC00535	Ball bearing, Torlon®, 9.53mm (3/8") diam.	-	-	-	-	-	1	-	-	-	-	-	0.1



- ✓ Sliderod cars are a simple option for sheet leads that do not require adjustment under load – they are easily fitted to and removed from tracks. Plunger stop can be locked in the “up” position.
- ✓ The RC14234 ball bearing genoa car has control sheave for lead adjustment that suits up to 14mm (9/16”) rope.
- ✓ Genoa sheet systems on boats to 25m (82ft).
- ✓ Alloy car bodies, end caps and sheaves.
- ✓ Torlon® ball bearings (cars).
- ✓ Torlon® rollers (sheaves).
- ✓ Carbon Black Acetal ball bearings (sheaves).
- ✓ Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	SHEAVE mm	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE in.	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
SR Sliderod													
RC54230	Genoa car, sliderods, plunger stop	100	230	75	3500	7000	2300	4	9	2 15/16	7700	15400	81.3
RC54231	Genoa car, sliderods, plunger stop	125	230	75	5000	10000	2790	5	9	2 15/16	11000	22000	98.6
RC54232	Genoa car, sliderods, plunger stop	150	290	75	6000	12000	4000	6	11 7/16	2 15/16	13200	26400	141.3

Series 42



- ✓ Adjustable stops can be fitted on track aft of genoa cars and used to relieve load on adjustment tackle.
- ✓ Sliderod cars with pivoting shackles suit a variety of applications where a secure, adjustable take-off point for a block or control line is required.
- ✓ Plunger stops can be locked in the "up" position.
- ✓ Outhaul car suitable for boats to 24m (78ft) with conventional reefing or in-mast furling systems.

- ✓ Ball bearing spinnaker pole car for boats to 24m (78ft) suits inboard end fittings with 35mm (1 3/8") toggle.
- ✓ Alloy car bodies and end caps.
- ✓ Torlon® ball bearings.
- ✓ Acetal slide rods.
- ✓ Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC14240	Spinnaker pole car, suits toggle	229	96.0	3700	7400	1370	9	3 13/16	8160	16310	48.3
SR Sliderod											
RC00491	Sliderods, suits 210mm car (pair)	180	9.4	-	-	39	7 1/16	3/8	-	-	1.4
RC00492	Sliderods, suits 230mm car (pair)	196	9.4	-	-	43	7 3/4	3/8	-	-	1.5
RC00493	Sliderods, suits RC14283 (pair)	53	9.4	-	-	12	2 1/16	3/8	-	-	0.4
RC00494	Sliderods, suits 290mm car (pair)	260	9.4	-	-	57	10 1/4	3/8	-	-	2.0
RC00495	Sliderods, suits 205mm Car (pair)	173	9.4	-	-	38	6 13/16	3/8	-	-	1.3
RC14283	Adjustable stop	85	75.0	-	-	390	3 3/8	2 15/16	-	-	13.8
RC54240	Car, sliderods, pivoting shackle top & plunger stop	210	75.0	3500	7000	1150	8 1/4	2 15/16	7720	15430	40.6
RC54241	Outhaul car, sliderods, 18mm (11/16") pin	205	75.0	3500	7000	2050	8 1/16	2 15/16	7720	15430	72.3

4 x 10mm (15/32")



RF2429-10



RC14284



RC14285



RC1420-1.0
RC1420-2.0
RC1420-3.0
RC1420-4.0
RC1420-5.0
RC1420-6.0



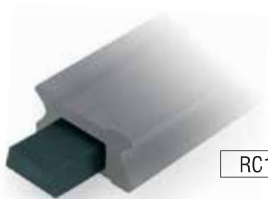
RC14281



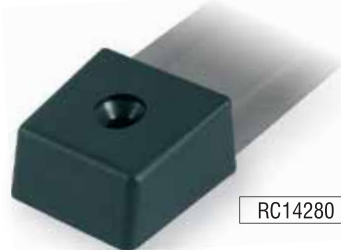
RC1425-P



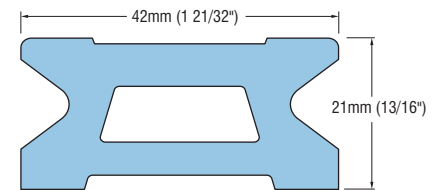
RC1425-3.0



RC1421J



RC14280



RC1420 track profile

TRACK FASTENINGS – 10mm (3/8") countersunk fasteners at 100mm (3 15/16") centres

STOP HOLES – 50mm (1 31/32") centres

- Traveller control ends have high performance roller ball bearing sheaves.
- Control end sheaves are 75mm (3") diameter and suit up to 14mm (9/16") rope.
- Padeyes are typically used for termination of 2:1 mainsheet systems on deck near one end of the track.
- Standard low profile track has stop holes for cars fitted with plunger stops.
- Beam track can be used for unsupported spans to bridge cockpits and companionway hatches.

- Mainsheet systems on boats to 24m (78ft).
- Genoa sheet systems on boats to 25m (82ft).
- Self tacking jib systems on boats to 20m (65ft).
- Multihull mainsheet systems on boats to 19m (62ft).

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
RC1420-1.0*	Track, black	996	42	-	-	1430	39 1/4	1 5/8	-	-	50.4
RC1420-2.0*	Track, black	1996	42	-	-	2860	78 5/8	1 5/8	-	-	100.9
RC1420-3.0*	Track, black	2996	42	-	-	4290	118	1 5/8	-	-	151.3
RC1420-4.0*	Track, black	3996	42	-	-	5720	157 5/16	1 5/8	-	-	202.1
RC1420-5.0*	Track, black	4996	42	-	-	7150	196 11/16	1 5/8	-	-	252.7
RC1420-6.0*	Track, black	5996	42	-	-	8580	236 1/4	1 5/8	-	-	302.6
RC1421J	Track joiner	60	-	-	-	17	2 3/8	-	-	-	0.6
RC1425-3.0*	Beam track, black	2996	56	-	-	13810	118	2 3/16	-	-	488.0
RC1425-P	Beam track end plug, Acetal	-	-	-	-	100	-	-	-	-	3.5
RF2429-10	Control line padeye (see page 206 for further details)	-	72	-	9000	240	-	2 3/4	-	19800	8.5
RC14280	End cap, plastic	50	49	-	-	20	2	2	-	-	0.7
RC14281	End stop, aluminium	100	75	-	-	345	4	2 15/16	-	-	12.2
RC14284	Control end, single sheave	135	75	1990	3980	865	5 5/16	2 15/16	4390	8770	30.5
RC14285	Control end, single sheave & becket	170	75	1990	3980	1075	6 3/4	2 15/16	4390	8770	37.9

* Silver track available - Order as RCxxxxxxS

Series 55



- Series 55 traveller systems are generally specified for main and mizzen sheet systems on monohulls to 36m (120ft) or multihulls to 23m (75ft). They are also used for self tacking jib systems on boats 23m (75ft) and above.
- Precision machined bodies and Torlon® ball bearings ensure free running performance even under extreme loads.

- Custom solutions can be developed to suit individual requirements.
- The RC15518 mainsheet car shown distributes the load of the 2:1 mainsheet evenly across the tandem cars.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC15518	Car, 2 x single 150mm (6") Orbit blocks™, single control sheaves	740	125	10000	20000	13727	29 1/8	4 15/16	22050	44090	484.2
Accessories											
RC00540	Ball bearing, Torlon®, 12.7mm (1/2") diam.	-	-	-	-	1	-	-	-	-	0.1



Photo: Rick Tomlinson / www.sws-yachts.com



- ✓ Series 55 ball bearing genoa cars are used on boats 28m (92ft) and above. Cars run on Torlon® ball bearings, and have control sheaves for lead adjustment.
- ✓ Control sheaves are 100mm (4") diameter and suit up to 14mm (9/16") rope.
- ✓ The RC15534 genoa car pivots 45° from vertical for optimum alignment with sheet load.
- ✓ Fixed stirrup cars like RC15535 ensure that sheet leads are as close to the deck as possible, and have roller ball bearing sheaves and shaped side rollers for minimum friction under high loads.
- ✓ Custom solutions can be developed to suit individual requirements.
- ⚙ Alloy track, car bodies and end caps.
- ⚙ Torlon® ball bearings (cars).
- ⚙ Torlon® rollers (sheaves).
- ⚙ Carbon Black Acetal ball bearings (sheaves).
- ⚙ Highly polished grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	SHEAVE mm	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE in.	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing													
RC15534	Genoa car, single control sheave	180	480	125	9650	19300	10220	7	18 15/16	4 15/16	21270	42550	360.5
RC15535	Genoa car, fixed stirrup, single control sheave	150	500	125	8000	16000	12600	6	19 11/16	4 15/16	17640	35270	444.4

Series 55

Photo: www.royaldenship.com



- Series 55 sliderod outhaul cars are used on boats to 36m with conventional reefing and in-mast furling systems. They can also be used on multihulls 23m (75ft) and above.
- Adjustable stops can be used as a backup to lock a car into position – plunger stop can be locked in the “up” position.

- Alloy car bodies and end caps.
- Acetal sliderods.
- Highly polished grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
SR Sliderod											
RC15583	End stop, adjustable	185	125	-	-	2050	7 5/16	4 15/16	-	-	72.3
RC55541	Outhaul car, sliderods, 30mm (1 1/8") and 20mm (3/4") pins	420	125	8000	16000	10580	16 9/16	4 15/16	17640	35270	373.2



RC1550-1.0
RC1550-2.0
RC1550-3.0
RC1550-4.0
RC1550-5.0
RC1550-6.0



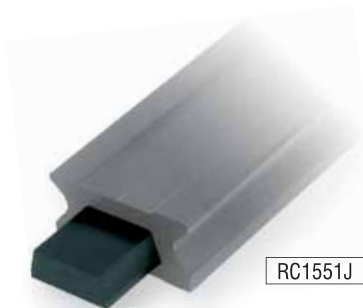
RC15584



RC15580



RC15581

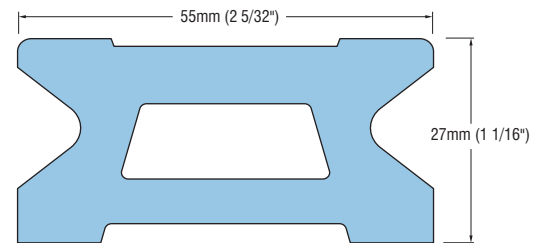


RC1551J



RF2429-10

4 x 8mm (5/16")



RC1550 track profile

TRACK FASTENINGS – 12mm (1/2") countersunk fasteners at 100mm (3 15/16") centres

STOP HOLES – 50mm (1 31/32") centres

- ✓ Traveller control ends have high performance roller ball bearing sheaves. Custom end controls can be developed to suit individual requirements.
- ✓ Standard low profile track has stop holes to accept cars with plunger stops.
- ✓ Padeyes are typically used for termination of 2:1 mainsheet systems on deck near one end of the track.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in.	WIDTH in.	M.W.L. lb	B.L. lb	WEIGHT oz
RC1550-1.0*	Track, black	996	55	-	-	2400	39 1/4	2 3/16	-	-	84.7
RC1550-2.0*	Track, black	1996	55	-	-	4800	78 5/8	2 3/16	-	-	169.3
RC1550-3.0*	Track, black	2996	55	-	-	7200	118	2 3/16	-	-	254.0
RC1550-4.0*	Track, black	3996	55	-	-	9600	157 5/16	2 3/16	-	-	339.2
RC1550-5.0*	Track, black	4996	55	-	-	12000	196 11/16	2 3/16	-	-	424.0
RC1550-6.0*	Track, black	5996	55	-	-	14400	236 1/4	2 3/16	-	-	507.9
RC1551J	Track joiner	60	-	-	-	30	2 3/8	-	-	-	1.1
RC15580	End cap, plastic	85	75	-	-	155	3 3/8	2 15/16	-	-	5.5
RC15581	End stop, aluminium	110	76	-	-	477	4 5/16	2 31/32	-	-	16.8
RC15584	Control end, single sheave	160	125	3850	7890	2140	6 5/16	4 15/16	8490	17390	75.5
RF2429-10	Control line padeye (see page 206 for further details)	-	72	-	9000	240	-	2 3/4	-	19800	8.5

* Silver track available - Order as RCxxxxxxS

Track Data

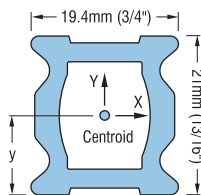
TRAVELLER SYSTEM – TRACK DATA

- Beam tracks are typically used to span cockpits, companionways and unsupported deck sections, where fastening options are restricted or to avoid the need for building additional support structure into the boat.
- Sectional and mechanical data, including moments of inertia (I_{xx} & I_{yy}) and cross sectional area (CSA) are shown below for the various beam sections. Designer or builder should be consulted to determine the appropriate section for a specific application.

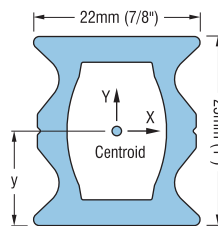
Typical Material Properties

$\sigma_{\text{yield}} = 90 \text{ MPa (13.05 ksi)}$

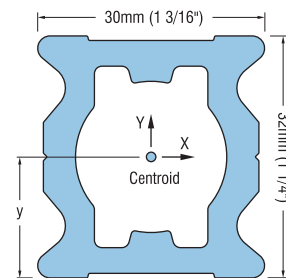
$\sigma_{\text{ult}} = 150 \text{ MPa (21.76 ksi)}$

**RC1194-2.0**

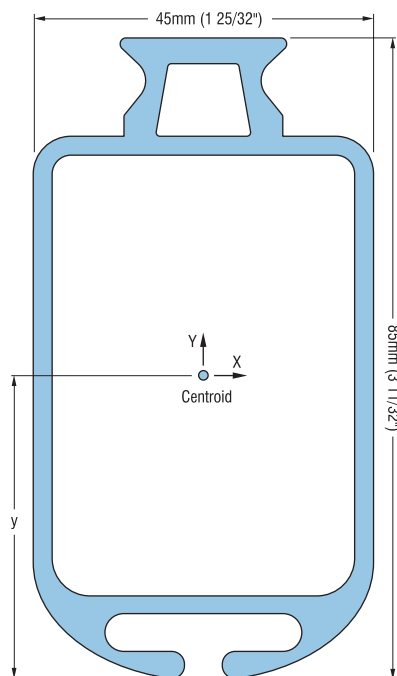
$I_{xx} = 9009\text{mm}^4 (0.0216\text{in}^4)$
 $I_{yy} = 7001\text{mm}^4 (0.0168\text{in}^4)$
 $y = 10.5\text{mm (13/32")}$
 $\text{CSA} = 179\text{mm}^2 (0.277\text{in}^2)$

**RC1224-2.0**

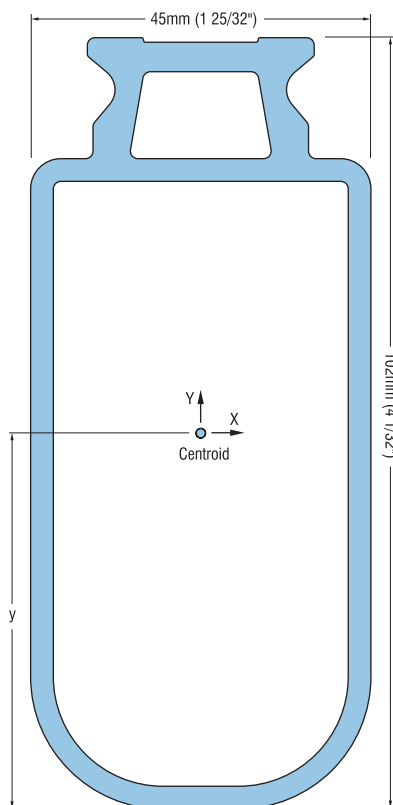
$I_{xx} = 18212\text{mm}^4 (0.0438\text{in}^4)$
 $I_{yy} = 11441\text{mm}^4 (0.0275\text{in}^4)$
 $y = 12.5\text{mm (1/2")}$
 $\text{CSA} = 240\text{mm}^2 (0.372\text{in}^2)$

**RC1304-2.0**

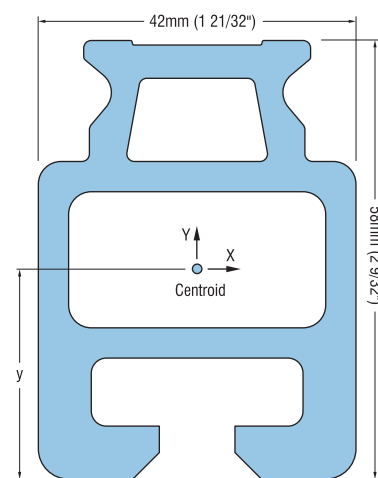
$I_{xx} = 54234\text{mm}^4 (0.1303\text{in}^4)$
 $I_{yy} = 41776\text{mm}^4 (0.1004\text{in}^4)$
 $y = 16\text{mm (5/8")}$
 $\text{CSA} = 455\text{mm}^2 (0.705\text{in}^2)$

**RC1225-3.0**

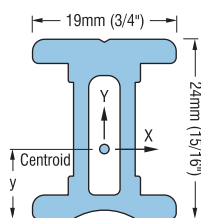
$I_{xx} = 664730\text{mm}^4 (1.5970\text{in}^4)$
 $I_{yy} = 184248\text{mm}^4 (0.4427\text{in}^4)$
 $y = 42.3\text{mm (1 21/32")}$
 $\text{CSA} = 768\text{mm}^2 (1.190\text{in}^2)$

**RC1305A-3.0**

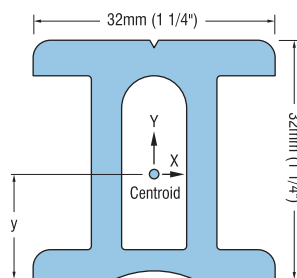
$I_{xx} = 1066744\text{mm}^4 (2.5629\text{in}^4)$
 $I_{yy} = 253580\text{mm}^4 (0.6092\text{in}^4)$
 $y = 57.5\text{mm (2 1/4")}$
 $\text{CSA} = 928\text{mm}^2 (1.438\text{in}^2)$

**RC1305B-3.0**

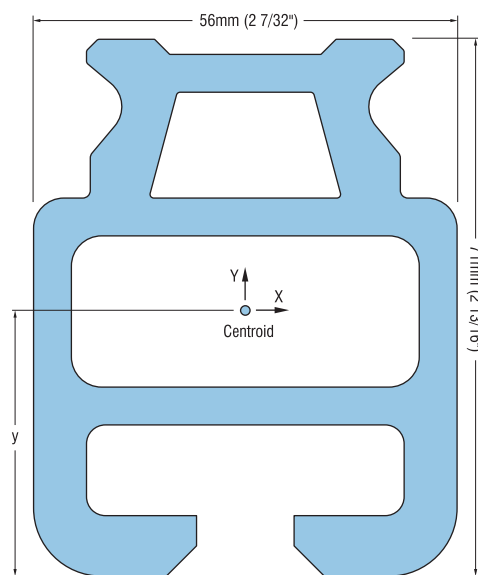
$I_{xx} = 338641\text{mm}^4 (0.8136\text{in}^4)$
 $I_{yy} = 202808\text{mm}^4 (0.4872\text{in}^4)$
 $y = 26.9\text{mm (1 1/16")}$
 $\text{CSA} = 1051\text{mm}^2 (1.629\text{in}^2)$

**RC6190**

$I_{xx} = 14294\text{mm}^4 (0.0343\text{in}^4)$
 $I_{yy} = 4219\text{mm}^4 (0.0101\text{in}^4)$
 $y = 12.56\text{mm (1/2")}$
 $\text{CSA} = 196\text{mm}^2 (0.304\text{in}^2)$

**RC6320**

$I_{xx} = 59000\text{mm}^4 (0.142\text{in}^4)$
 $I_{yy} = 30360\text{mm}^4 (0.073\text{in}^4)$
 $y = 14.75\text{mm (0.58in)}$
 $\text{CSA} = 471\text{mm}^2 (0.73\text{in}^2)$

**RC1425-3.0**

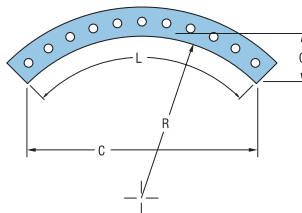
$I_{xx} = 797749\text{mm}^4 (1.9166\text{in}^4)$
 $I_{yy} = 558530\text{mm}^4 (1.3419\text{in}^4)$
 $y = 34.7\text{mm (1 3/8")}$
 $\text{CSA} = 1687\text{mm}^2 (2.614\text{in}^2)$

Curved Track Data

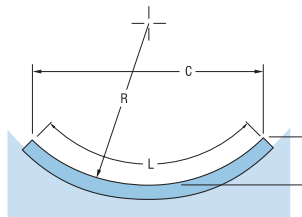
- ✓ In certain applications it is advantageous to curve tracks either horizontally ('A' bend) or vertically ('B' bend).
- ✓ Curved track may be needed to give a traveller car a required path of movement or to match the mounting surface to which it is fixed. It can also ensure maximum performance is obtained from a traveller car by ensuring load and connection remain vertical. Or that tension in an attached purchase system or linkage remains constant.

Horizontal Plane – 'A' Bend

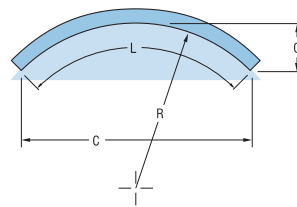
In situations where cars and fittings are required to rotate around a central pivot point, horizontal 'A' bending of the track will ensure the load applied to the car remains vertical. This results in maximum strength and free rolling ability being maintained by the car. Maintaining this vertical alignment also ensures tension in an attached purchase system remains constant, a feature often sought after in sailboat mainsheet and boom vang traveller systems.



'A' Bend
(Plan View)



'B' Bend
(Concave Side View)



'B' Bend
(Convex Side View)

CURVED TRACK SPECIFICATION REQUIREMENTS

Specifications are required for each type of bend, including two critical dimensions (three if possible), and clear drawings where possible.

Critical Dimension Required

Radius	R	and	O	Offset
			OR	
Radius	R	and	O	Length of Track
			OR	
Radius	R	and	O	Chord Length
			OR	
Offset	O	and	O	Chord Length

In many 'B' bend situations, the radius R is not known and it is easiest to specify the curve by C (chord length) and O (offset) values. In these cases, the radius the track is to follow MUST be constant.

Vertical Plane – 'B' Bend

Traveller tracks can be bent vertically to fulfil certain requirements. They can be top mounted or underhung mounted with either concave or convex track bends.

'B' Bends are often required to match the mounting surface to which a track is to be fixed; as when matching deck camber on a sailboat.

'B' bending can also be used to maintain constant tension in a rotating purchase system mounted on a traveller car. This application is very popular on sailboat mainsheet and self-tacking jib systems where the increased load applied to the car during tacking or gybing may affect sail trim or cause the car to stick.

Minimum Bend Radius

TRAVELLER SERIES	CAR LENGTH	MINIMUM HORIZONTAL "A" BEND RADIUS	MINIMUM VERTICAL "B" BEND RADIUS	CAR LENGTH	MINIMUM HORIZONTAL "A" BEND RADIUS	MINIMUM VERTICAL "B" BEND RADIUS
	mm	mm	mm	in.	in.	in.
GB SERIES 14	47	1300	800	1 27/32	51 7/32	31 17/32
	68	2000	2000	2 11/16	78 13/16	78 13/16
	78	3500	4500	3 1/16	137 29/32	177 5/16
GB SERIES 19	50	1500	1500	1 31/32	59 3/32	59 3/32
	57	1500	1500	2 1/4	59 3/32	59 3/32
	70	2500	3000	2 3/4	98 1/2	118 3/16
	85	3500	4500	3 11/32	137 29/32	177 5/16
	100	5000	5500	3 15/16	197	216 11/16
	148	11000	15000	5 27/32	433 13/32	591
GB SERIES 22	60	1500	1500	2 3/8	59 3/32	59 3/32
	75	1500	2000	2 31/32	59 3/32	78 13/16
	125	5000	5000	4 15/16	197	197
	130	5000	5000	5 1/8	197	197
	165	7000	7500	6 1/2	275 13/16	295 1/2
	175	9000	13000	6 29/32	354 19/32	512 3/16
GB SERIES 26	180	9000	13000	7 3/32	354 19/32	512 3/16
	120	4000	4000	4 23/32	157 19/32	157 19/32
	180	8000	8000	7 3/32	315 3/16	315 3/16
	200	8000	8000	7 7/8	315 3/16	315 3/16
	205	9000	9000	2 1/16	354 19/32	354 19/32
	77	2500	2500	3 1/16	98 1/2	98 1/2
GB SERIES 30	100	2500	2500	3 15/16	98 1/2	98 1/2
	150	8000	8000	5 29/32	315 3/16	315 3/16
	165	8500	8500	6 1/2	334 29/32	334 29/32
	175	9000	9000	6 29/32	354 19/32	354 19/32
	185	9300	9300	7 9/32	366 13/32	366 13/32
	200	10000	10000	7 7/8	394	394
I-TRACK 19	215	11000	11000	8 15/32	433 13/32	433 13/32
	225	16000	16000	8 7/8	630 13/32	630 13/32
	230	16500	16500	9 1/16	650 3/32	650 3/32
	300	15000	15000	11 13/16	591	591
	375	18000	18000	14 25/32	709 3/16	709 3/16
	51	400	400	2	15 3/4	15 3/4
I-TRACK 32	86	1200	Not suitable	3 3/8	47 1/4	Not suitable
	106	400	Not suitable	4 3/16	15 3/4	Not suitable
	157	350	Not suitable	6 3/16	14	Not suitable

Please contact our sales team for minimum bend radius requirements for Series 42 and 55 traveller cars.

It should be noted that:

- Although track bends may appear desirable to provide ideal alignment and avoid angular loads being applied to the car, in a ball bearing system this same bend will actually reduce the load capacity of the system by loading the balls unevenly throughout the length of the car.
- Not all track types are suited to both types of bends, and some tracks cannot be curved at all.

- A minimum track radius is specified for each length of traveller car. This is the tightest curve a car will run around freely. Refer to the recommendation table above for each track type regarding suitability and minimum radius values.
- Light bends can be 'sprung in' sometimes when mounting track, however considerable care must be taken to ensure that the curves are even with no tight spots and that the track is not over bent (permanently deformed) during installation.

For the best results, track should be ordered pre-bent from Ronstan.

Ordering

1. Specify the type of track profile (by product no.)
2. The type of bend required 'A' Bend (horizontal) or 'B' Bend (vertical) Concave or Convex.
3. Provide the appropriate dimensional specifications as described above.

Custom

Series 42 QuadRace Traveller Car

Product Type:	Traveller Systems
Part Number:	T042-1130
MWL:	3900 kg (8595 lb)
BL:	7800 kg (17190 lb)
Weight:	1.9kg (4.19 lb)

This Series 42 car uses the high load carrying QuadRace bearing system which is particularly efficient at carrying loads at an offset angle due to the extra support/bearing area provided by the extra ball bearing race. The car body is fitted with a pivoting stainless steel 316 stirrup with attachment slots for mainsheet and control line Orbit Lashing Blocks. The pivoting stirrup serves two functions: transferring the mainsheet load evenly into the car body and directs loads as close to the centre of the car bearing system as possible, thus avoiding torque loads. Two blocks can be lashed to the side slots/holes in the stirrup to provide a 2:1 purchase athwartships system. Alternatively the car can be used in a German mainsheet system with a single lashing block being attached to the central hole in the stirrup. Rubber buffers are fitted over the stirrup legs to prevent damage to the stirrup/car body. As much material as possible has been machined away from the car body to reduce weight, thus exposing the QuadRace bearing system.



Double Series 60 Strop Block

Product Type:	Blocks
Part Number:	B060-0636
MWL:	2450 kg (5400 lb)
BL:	4900 kg (10800 lb)
Weight:	0.276 kg (0.608 lb)

This Series 60 double block uses the standard Series 60 Orbit sheave but the block body is designed for use as a strop block rather than the more typical shackle and swivel head attachment. This block is designed for use as the boom end block on a 11m (35ft) monohull with a German mainsheet system, but there are many other applications for such a block. Dagger board hoist, canting keel purchase system, foreguy block, general deflection, halyard or rig tension blocks.



Series 200R Top Down Furler Attachment

Product Type:	Furlers
Part Number:	M200-1963
MWL:	4000 kg (8820 lb)
BL:	8000 kg (17640 lb)
Weight:	1139g (40.2oz)

Top Down Furlers are revolutionising the way asymmetric spinnakers are handled. They are much easier to set and douse than a spinnaker sock, and can be unfurled and furled from the cockpit – improving safety and handling, especially important for short handed sailing.

This Top Down system uses unique thrust rollers to achieve a very high load rating. It was developed for the 72ft 'Bella Mente' racing sloop which has a high gennaker tack load requirement. Machined from high grade aluminium alloy, utilising a bearing system of Torlon® thrust and axial rollers, the assembly is designed with light weight and high strength in mind. Multi-point lashing attachments are used to evenly distribute load and keep weight to a minimum.

The M200-1963 suits the standard RS020700R Ronstan furler. A full range of accessories such as thimbles, anti-torque line, and furler attachments such as 2:1 fairleads and shackles are also available.



M200-1963

M200-1963
with RS20700

Series 30 Lightweight Batten Car

Product Type: Batten Car Systems
 Part Number: M030-1156
 Weight: 0.442 kg (0.97 lb)

This car was designed for Alex Thomson's Open 60 monohull "Hugo Boss" which uses a fixed wing mast. The objective was to make the car as light as possible, which required significant machining to remove as much material as the load requirements would allow. The car is fitted with the standard Series 30 quick release barrel to accept standard batten receptacle links.



Fixed Fairleads

Product Type: Accessories
 Part Number: M060-1140, M075-1059, M100-1060
 MWL: 1100/1900/2625 kg (2420/4190/5780 lb)
 BL: 2200/3800/5250 kg (4840/8380/11560 lb)
 Weight: 0.047/0.090/0.144 kg (0.104/0.198/0.317 lb)

These fixed fairleads are machined from high grade aluminium alloy and are supplied to boats like the X-35, A35, TP52 and larger racing yachts. A typical application is afterguy deflection, however they are suitable for various applications requiring deflection of Dyneema® lines through angles up to 30 degrees. Maximum rope diameter is 14mm for the smaller two sizes, 18mm for the largest.



Magic Wheel

Product Type: Accessories
 Part Number: M774-1115

Faster, more precise and intuitive than hydraulics for backstay control on modern high performance rigs, our Magic Wheels are standard equipment on X-Yachts X-35. Mounted below deck, the Magic Wheel has a highly efficient ball bearing hub for spooling the primary control line, which leads in from an external 3:1 or 4:1 block cascade.

The hub unit is coupled to a large diameter composite wheel supplied by the builder, which spools the secondary control line. Trimming the secondary control line (usually led through to a cockpit console) turns the large wheel, in turn driving the Magic Wheel to trim the backstay at power ratios of around 80:1 depending on the diameter of the composite wheel.



Custom

Series 30 Lashing Car

Product Type:	Traveller Systems
Part Number:	M030-1412
MWL:	1000 kg (2205 lb)
BL:	2000 kg (4410 lb)
Weight:	0.293 kg (0.65 lb)

This versatile Series 30 car has been designed for a variety of applications on racing yachts. The car has a central attachment point that can be used to attach lashing or strop blocks, as well as the securing of control lines. If a higher working load is required multiple cars can be lashed together to make a linked mainsheet traveller car. Alternatively the single car can be used as genoa car. The simple elegant machining of this car makes for a very strong, light and attractive solution with a multitude of uses.



Series 125 Opening Mainsheet Block

Product Type:	Blocks
Part Number:	B125-0844
MWL:	3750 kg (8265 lb)
BL:	7000 kg (15430 lb)
Weight:	1.19 kg (2.623 lb)

This Series 125 mainsheet block has been designed as the end-boom mainsheet block on the Contest 57CS. The sheave has Torlon® needle bearings and Acetal side thrust bearings. The primary design feature of this block is that one of its cheek plates can rotate open to allow the mainsheet to be removed from the block, or the block to be removed from the boom attachment strop. The rotating cheek plate is secured in its sailing position by a spring loaded plunger. The block/mainsheet can be removed when at anchor or in the marina to give a clear cockpit area. The Contest 57CS has a mainsail of 101 sqm (1100 sq ft).



Series 55 Mainsheet Traveller Car

Product Type:	Traveller Systems
Part Number:	T055-1120
MWL:	9500 kg (20940 lb)
BL:	19000 kg (41880 lb)
Weight:	11.454 kg (25.25 lb)

This Series 55 mainsheet traveller car has been designed for use on the SWS 110. The car is made up of two ball bearing cars joined together by an aluminium alloy stirrup, the movement of the stirrup is restricted to 25 degrees to avoid the stirrup making contact with the boat structure as the traveller track is recessed into the cockpit floor. An RF159109A Series 150 Orbit Lashing Block is lashed to the primary take-off of the traveller car. Two dead end points are provided at each side of the car for control lines. All stainless steel components have a contemporary glass blasted matt finish.



Series 42 Halyard Stop Car

Product Type:	Traveller Systems
Part Number:	M300-0974
MWL:	4000 kg (8820 lb)
BL:	8000 kg (17640 lb)

This Series 42 sliderod car is used to lock off the tail of a primary halyard once the sail is fully hoisted with a winch. The halyard is secured on the car, and plunger stops are then locked into position. The long tail of the halyard can then be removed and stowed until required for lowering the sail, and the winch is free for other applications. This car runs on a special Series 42 track (M300-0975) that is 1.5m (8 ft.) long and fitted with a heavy duty end stop at the top (M042-1030), and an end cap (RC14280) at the bottom. Typically this car is used on yachts up to 21m (68 ft.) but can be used on larger yachts fitted with a 2:1 halyard. A smaller version of this car has also been developed for Series 30 track.

**Alloy Thimble**

Product Type:	Blocks
Part Number:	B070-0592, B100-0860
MWL:	2200/6500 kg (4850/14330 lb)
BL:	4400/13000 kg (9700/28660 lb)
Weight:	0.076/0.339 kg (0.167/0.736 lb)

B070-0592, simple 70mm (2 3/4") thimble is machined from solid aluminium alloy. It is used for applications with high static loads that require only occasional, minor adjustment. The friction of the rope on the plain surface is high compared to a conventional block with bearings, but it is a light, simple solution for infrequent adjustment of a high-load line. Typical applications include vang purchase and inhaulers for jib sheets. Also developed in a 55mm version (B055-0666) and an 80mm version (B080-0615).

B100-0860, this thimble has been machined from solid high grade aluminium alloy for use as the gennaker tack block on the SWS 94 Kiboko to provide a 2:1 purchase. The block had to be as small as possible to allow the tack of the gennaker to locate as close to the end of the bow sprit as possible.

**Series 42 QuadRace Articulated Mainsheet Traveller**

Product Type:	Traveller Systems
Part Number:	T042-0964
MWL:	1700 kg (3740 lb)
BL:	3400 kg (7480 lb)
Weight:	0.522 kg (1.15 lb)

This Series 42 QuadRace ball bearing car has been designed for the Estrella Damm Open 60 monohull for use as a combined mainsheet/vang car. Three of these cars are linked together with rope stops on a curved track, carrying a total combined mainsheet load of 5100 kg (11220 lb.). Important features of this car are its high load captive bearing system with 4 recirculating ball bearing races, and its extraordinary light weight achieved by removal of material in all non-structural areas of the body.



FLYING SAIL FURLERS

Proven Design, Performance & Reliability

Ronstan's Flying Sail Furlers have been developed over recent years for use by some of the world's top racing syndicates. Encouraged by their feedback, a number of design enhancements have been incorporated, resulting in our standard range of furlers that now puts great performance and reliability within the reach of cruising and racing sailors.

Advanced drum technology

The drum incorporates a sophisticated furling line groove profile and cross hole geometry to grip the furling line securely when furling. This is the same technology developed first by Ronstan for use in our world leading ratchet blocks to grip line gently but securely.

When deploying the flying sail the continuous furling line self-ejects from the grip zone, remaining stationary for smoother, safer operation with minimum rope wear.

Guide rollers minimise friction and rope wear on the furling line, and a floating PTFE perimeter strip ensures the unloaded furling line can't fall from the drum or become snagged. The range matches drum diameters to load ratings for optimum performance. Smaller drum diameters allow faster furling and weight savings, while larger drum diameter options provide a greater mechanical advantage and easier furling.

Secure, snag free connections

Furlers and top swivels have retained quick release clevis pins and fairleads have a snag free, flush finish captive pin.

Maintenance free bearing system

Furlers and top swivels feature a factory sealed, maintenance free bearing. Roller bearing sets run on hardened races for smooth high load performance.

Material selection for strength and durability

Hard anodised grade 6061 T6 aluminium construction provides durability and corrosion protection. Grade 2205 stainless steel is utilised for the load bearing shaft for optimum strength to weight ratio.

Multiple attachment options

Attachment options include a high resistance shackle, trigger release snap shackle and fairlead, as well as a hard anodised aluminium thimble designed specifically to suit anti-torsion luff line.

The furler drum can be adjusted to suit either 0° or 90° attachment, as required to match the take-off alignment and deck layout.

Top-Down Furling Systems for Downwind Sails

Furling of 'soft luff' downwind sails such as asymmetric spinnakers and gennakers is possible utilising a Top-Down Adapter with the standard Furler & Top Swivel Set.

Top-Down furling is simpler, faster and safer than using traditional snuffer/socks. It also allows quick, simple furling and redeployment in variable conditions or when gybing.



Furler System Information

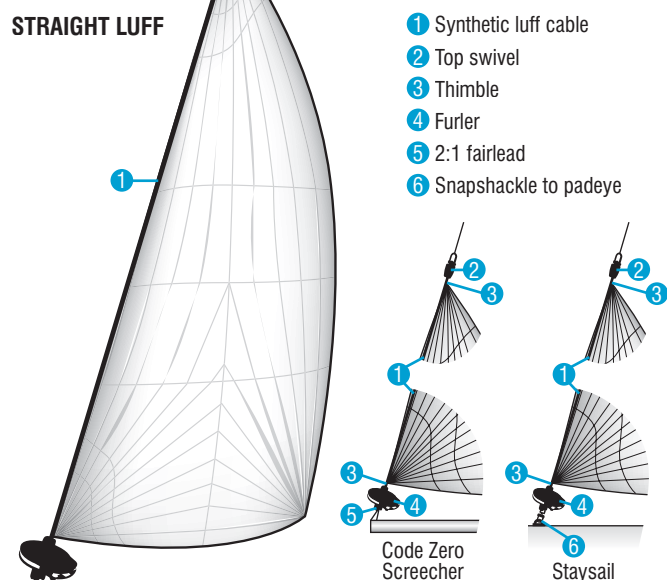
Standard Flying Sail Furling Systems

Applications: Sails with a “straight” luff.

For upwind sailing, true wind angles less than 90°.

- Code Zero
- Screecher
- Staysail

STRAIGHT LUFF



How it works:



1. Furling drum rotated. Winds sail around luff wire along full length.
2. Sail continues to furl along full length of luff wire.

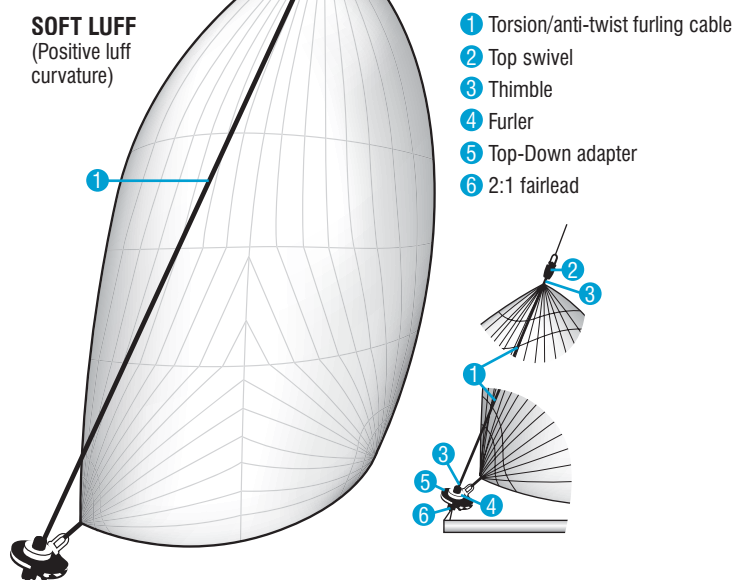
Top-Down Furling Systems

Applications: Sails with a “soft” luff, and full mid-section.

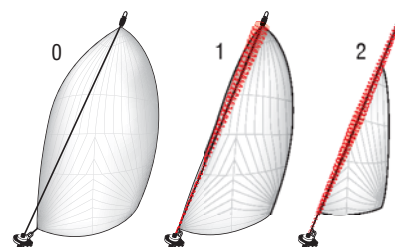
For downwind sailing, true wind angle greater than 90°.

- Code 1-6
- Reacher
- Runner
- Gennaker

SOFT LUFF (Positive luff curvature)



How it works:



1. Furling drum rotated. Tack remains stationary on ‘floating’ adapter collar while anti-twist line rotates top swivel, commencing to wind sail around anti-twist line from top & full mid-section.
2. Sail continues to furl from top down.

Selection Guide



TYPICAL MAX. BOAT SIZE			SERIES	Furler & Top Swivel Set	HR Shackle	Snapshackle	2:1 Fairlead	Thimble	Top-Down Adapter
Staysail Monohull	Code Zero, Screecher, Spinnaker Monohull	Multihull							
14m (46')	7m (23')	6m (19')	Series 60	RS006400R	-	RF6170, RF6171	-	-	-
17m (56')	9m (30')	8m (26')	Series 85	RS008700	RS008050	RS008020	-	RS008040	-
18m (60')	11m (36')	9m (30')	Series 100	RS010700	RS013050	RS010020T	-	RS013040	RS113060
21m (68')	12m (40')	11m (36')	Series 130	RS013700	RS013050	RS013020T	RS013030	RS013040	RS113060
24m (78')	14m (46')	12m (40')	Series 170	RS017700	RS017050	RS017020T	RS017030	RS017040	RS117060
27m (88')	18m (60')	15m (50')	Series 170R	RS017700R	RS020050	RS017020RT	RS020030	RS020040	-
27m (88')	18m (60')	15m (50')	Series 200	RS020700	RS020050	RS017020RT	RS020030	RS020040	-
33m (110')	21m (68')	18m (60')	Series 200R	RS020700R	RS020050R	-	RS020030R	RS020040R	-
-	30m (100')	21m (70')	Series 280	RS028700*	-	-	-	-	-

*Does not include shackle

Furler & Top Swivel Sets



- Grade 17-4 forged stainless steel shackles & trigger release snap shackles.
- Grade 316 stainless steel standard snap shackles & fasteners.
- Grade 2205 stainless steel shaft & pins.

- Alloy drum plates, swivel jaws, fairlead bodies & thimbles.
- PTFE floating perimeter strip.
- Full dimensioned technical drawings and user instructions can be found under the SUPPORT tab on the Ronstan website.

PRODUCT No.		DRUM mm	LINE mm	M.W.L. kg	B.L. kg	WEIGHT g	DRUM in.	LINE in.	M.W.L. lb	B.L. lb	WEIGHT oz
Furler & Top Swivel Sets											
RS008700	Set: Furler & top swivel, Series 85* ¹	85	8	1100	2200	475	3 3/8	5/16	2420	4840	16.8
RS010700	Set: Furler & top swivel, Series 100* ¹	100	6	1600	3200	857	3 15/16	1/4	3520	7040	30.3
RS013700	Set: Furler & top swivel, Series 130* ¹	130	8	2200	4400	1000	5 1/8	5/16	4850	9700	35.3
RS017700	Set: Furler & top swivel, Series 170* ¹	170	10	3200	6400	2110	6 11/32	7/16	7050	14100	74.5
RS017700R	Set: Furler & top swivel, Series 170R* ¹	170	10	5000	10000	2540	6 11/32	7/16	11020	22040	89.7
RS020700	Set: Furler & top swivel, Series 200* ¹	200	10	5000	10000	2895	7 7/8	7/16	11020	22040	102.2
RS020700R	Set: Furler & top swivel, Series 200R* ¹	200	10	8100	16200	4505	7 7/8	7/16	17850	35700	159.1
RS028700	Set: Furler & top swivel, Series 280* ²	280	10	12000	24000	6565	11 1/32	7/16	26400	52800	231.55

*¹ Top swivel includes HR shackle, furler unit does not include shackle. *² Does not include shackle on top swivel or furler unit

Furler Accessories



- ✓ Top-Down Adapter (TDA): Furl starts at the head of the sail, as the anti-torsion stay rotates the sail wraps from top down.
- ✓ TDA: Can be retrofitted to standard Ronstan furler drums.
- ✓ TDA: Spinnakers, code zero and gennaker can be used on the same drum.

- ✓ TDA: Suits cruising chutes and asymmetric spinnakers.
- ✓ TDA: Torlon ball bearings for smooth furling/unfurling.

PRODUCT No.		LINE mm	M.W.L. kg	B.L. kg	WEIGHT g	LINE in.	M.W.L. lb	B.L. lb	WEIGHT oz
HR Shackles									
RS008050	HR shackle, 6mm (1/4") pin diam.	-	-	2700	24	-	-	5940	0.9
RS013050	HR shackle, 8mm (5/16") pin diam.	-	-	4400	53	-	-	9680	1.9
RS017050	HR shackle, 10mm (25/64") pin diam.	-	-	7500	97	-	-	16500	3.4
RS020050	HR shackle, 12mm (15/52") pin diam.	-	-	10000	237	-	-	22000	8.4
RS020050R	HR shackle, 16mm (5/8") pin diam.	-	-	19000	470	-	-	41800	16.6
Snap Shackles									
RS008020	Snap shackle, standard type, 16mm (5/8") eye clearance	-	1100	2200	118	-	2420	4840	4.2
RS010020T	Snap shackle, trigger type, 16mm (5/8") eye clearance	-	1600	3200	110	-	3520	7040	3.9
RS013020T	Snap shackle, trigger type, 19mm (3/4") eye clearance	-	2200	4400	152	-	4980	9680	5.4
RS017020T	Snap shackle, trigger type, 19mm (3/4") eye clearance	-	2700	5400	165	-	5940	11880	5.8
RS017020RT	Snap shackle, trigger type, 23mm (15/16") eye clearance	-	4500	9000	380	-	9900	19800	13.4
2:1 Fairleads									
RS013030	2:1 fairlead	11	2200	4400	98	7/16	4980	9680	3.5
RS017030	2:1 fairlead	14	3200	6400	205	9/16	7050	14100	7.3
RS020030	2:1 fairlead	16	5000	10000	298	5/8	11020	22040	10.5
RS020030R	2:1 fairlead	20	8100	16200	750	3/4	17850	35700	26.5
Luff Line Thimbles									
RS008040	Luff line thimble, suits RS008700	6	-	-	10	1/4	-	-	0.4
RS013040	Luff line thimble, suits RS010700, RS013700	10	-	-	56	3/8	-	-	2.0
RS017040	Luff line thimble, suits RS017700	10	-	-	59	3/8	-	-	2.1
RS020040	Luff line thimble, suits RS017700R, RS020700	12	-	-	86	1/2	-	-	3.0
RS020040R	Luff line thimble, suits RS020700R	16	-	-	238	5/8	-	-	8.4
Top-Down Adapters*									
RS113060	Top Down Furler Adapter, suits Series 100 & 130	-	1000	2000	267	-	2200	4400	9.4
RS117060	Top Down Furler Adapter, suits Series 170	-	1600	3200	490	-	3520	7040	17.3

*Furler not included

Small Boat Gennaker Furler Set

Small Boat Sail Handling Made Easy

The Series 60 Gennaker Furler provides easy headsail and gennaker furling with the simplicity and compact size of a continuous line system – no bulky line storage drum, minimum weight and the convenience and security of stowing the furler with the sail. Advanced drum technology and low friction, maintenance free ball bearings ensure the speedy deployment and furling of sails. Our all inclusive sets even include a pre-spliced continuous furling line so all you need to do is fit the system to your sail and boat and you're ready to go. The Series 60 is suitable for use on off-the-beach dinghies, catamarans and sportsboats to 7m (23ft).

Advanced Drum Technology

- Die cast, ribbed groove profile for maximum grip.
- Low friction PTFE retainer strip prevents line snagging or fouling.
- Optimised drum diameter for power and furling efficiency, combined with minimum weight.
- Low profile design allows maximum luff length/sail area.

Maintenance Free Bearing System

Factory sealed and lubricated, high performance ball bearing races minimise friction through full working load range.

Strong & Durable

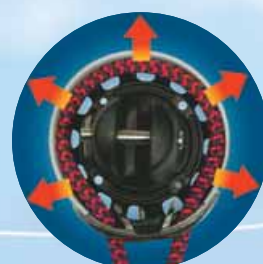
- Hardcoat anodised aluminium drum for durability.
- Glass filled, thermoplastic body for optimised weight.
- Highly polished stainless steel guide for reduced furling line friction and wear.

Automatic Furling Line Ejection

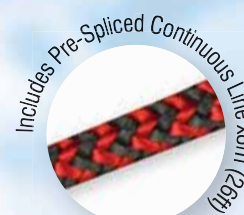
Unique drum groove ejects the furling line, which remains stationary, when the sail is deployed providing fast, free running and snag free operation.

Ronstan's Big Boat Furlers

Ronstan also has a complete range of high performance full alloy furlers for boats up to 30m (100ft).



Includes Splicing Needle



Includes Pre-Spliced Continuous Line x8m (26ft)



Small Boat Gennaker Furler Set



RS006400R



RFSPLICE-1



RS000001



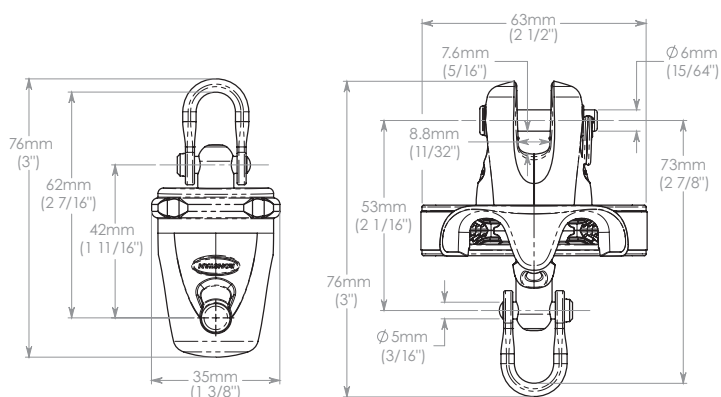
RF815



RF6171



RF6170



- ✓ Unique drum groove ejects the furling line when the sail is deployed providing fast, free running and snag free operation.
- ✓ Factory sealed and lubricated, high performance ball bearing races minimise friction through full working load range.
- ✓ Die cast, ribbed groove profile for maximum grip.
- ✓ Optimised drum diameter for power and furling efficiency, combined with minimum weight.
- ✓ Low profile design allows maximum luff length/sail area.
- ✓ The pre-spliced furling line can be shortened if required and respliced using the included splicing needle. See the SUPPORT tab on the Ronstan website for details.

- ✓ Headsail & Gennaker furling on off-the-beach dinghies, multihulls and sportsboats to 7m (23ft).
- ✓ Low friction PTFE retainer strip prevents line snagging or fouling.
- ✓ Hardcoat anodised aluminium drum for durability.
- ✓ Glass filled, thermoplastic body for optimised weight.
- ✓ Highly polished stainless steel guide for reduced furling line friction and wear.

If furling line length adjustment is necessary, see splicing instructions under the SUPPORT tab at www.ronstan.com

Smart phone scan



QR App

Splicing instructions

PRODUCT No.	Description	DRUM DIAM. mm	SWIVEL DIAM. mm	LINE mm	M.W.L. kg	B.L. kg	WEIGHT g	DRUM DIAM. in	SWIVEL DIAM. in	LINE in	M.W.L. lb	B.L. lb	WEIGHT oz
RS006400R	Furler set, including furler, top swivel, 8m (26ft) pre-spliced continuous furling line, splicing needle	63	35	5	650	1300	367*	2 1/2	1 3/8	3/16	1430	2860	13.3* ¹
Replacement Parts & Accessories													
RS000001	Pre-spliced continuous furling line, 5mm (3/16") diameter x 8m (26ft)						135						5.1
RS006010	Fork-shackle swivel, 5mm (3/16") dia. shackle and 6mm (1/4") clevis pin in fork						84						3.0
RF815	Two-way link, 5mm (3/16") pin					1100* ²	14					2425* ²	0.5
RF6170	Snap shackle adapter, swivelling, 16mm (5/8") eye clearance				500	1135	49				1100	2500	1.7
RF6171	Snap shackle adapter, swivelling & trunnion movement, 16mm (5/8") eye clearance				500	1000	62				1100	2200	2.2
RFSPLICE-1	Splicing needle						10						0.4

*1 Furler weight 138g (4.9oz) *2 Uniformly distributed

Small Boat Drum Furlers



Team Ronstan - Nathan Outteridge / Iain Jensen
Photo: Jeff Crow / Sport the Library



RF76



RF1246



RF1247



RF78B



RS006010

PRODUCT No.	DESCRIPTION	B.L. kg	WEIGHT g	B.L. lb	WEIGHT oz
RF76	65mm (2 1/2") dia. above deck jib furler. Enclosed Acetal drum with stainless steel ball bearing swivel unit which locates on bow chain plate. Overall height 80mm (3 1/8")	1700	155	3740	5.5
RF78B	Fork-eye swivel, 6.4mm (1/4") dia. pin and 8.2mm (5/16") dia. hole	1700	60	3740	2.1
RF1246	114mm (4 1/2") dia. above deck jib furler. Open glass-reinforced nylon drum with stainless steel ball bearing swivel unit and furling line lead-arm. Overall height 114mm (4 1/2")	2600	500	5720	17.6
RF1247	Fork-fork swivel, incorporating forestay guard, 7.9mm (5/16") dia. pins	2600	240	5720	8.5
RS006010	Fork-shackle swivel, 5mm (3/16") dia. shackle and 6mm (1/4") clevis pin in fork.	1300	85	2860	3.0

Quick, Easy and Reliable

The patented Ronstan Ballslide™ system uses the existing luff groove of the mast, so that no track needs to be installed. Ballslide™ cars have captive ball bearings for free-running performance, and can easily be loaded and unloaded from the mast when fitting or removing the mainsail.

- Ballslide™ cars are compatible with most popular mast profiles for boats up to 18m (60ft).
- Recirculating, captive ball bearings make raising and lowering the sail quick and easy.
- No track installation required - Ballslide™ cars run in the existing luff groove.
- The range includes all elements for a complete system, including headboard plates and batten receptacles.

Compatibility

The complete range of car profiles and adapters provides the right Ballslide™ solution for the most widely available mast profiles and luff groove shapes. Selection tables and luff groove gauges simplify specification.

Performance

Free-running performance while raising and lowering the mainsail is provided by cars that run on twin races of recirculating ball bearings specifically designed and oriented for compression loads. Minimum distance from mast to mainsail luff enhances mainsail efficiency, and when used with Ronstan batten receptacles the luff is always on the centre line.

Ball Joint Articulation

A stainless steel ball joint link between the car and the batten receptacle provides movement in all directions and up to 112° either side of centre. Ball joint links are available to suit Ronstan batten receptacles and most other types (SDA, Rutgerson, Battslide®, etc.)

Convenience

Balls remain captive when loading or removing the cars from the mast track. In the Series 8 there is also a version with Quick-Release receptacle links for removal of the mainsail from the cars – a convenient option on larger yachts.

Total Control

To suit Series 8, RC00160 and RC00170 batten receptacles feature a threaded adjustment mechanism that allows batten tension and sail shape to be precisely controlled.

Flexible Solutions

Individual cars can be used in conjunction with a bolt rope on “soft luff” sails which have only a top full-length batten, or simply as low friction sail slides on larger yachts.



Series 6



RC26160
RC26360
RC26460
RC26560



RC00010



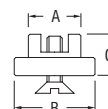
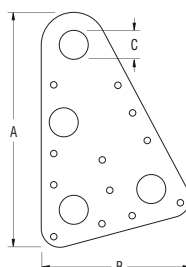
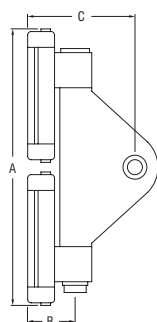
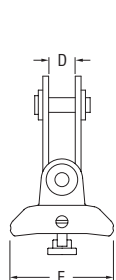
RC20111
RC20112
RC20113
RC20114
RC20115
RC20116
RC20117
RC20118



RC20101
RC20102
RC20103



RC00625



PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
RC00010	Headboard plates (pair)	188.0	119	23.0	-	-	173	7 13/32	4 11/16	29/32	-	-	6.1
RC20101	Replacement Ballslide™ feet/membranes (pair), suits RC261xx & RC262xx cars	-	-	-	-	-	1	-	-	-	-	-	0.1
RC20102	Replacement Ballslide™ feet/membranes (pair), suits RC263xx cars	-	-	-	-	-	1	-	-	-	-	-	0.1
RC20103	Replacement Ballslide™ feet/membranes (pair), suits RC265xx cars	-	-	-	-	-	1	-	-	-	-	-	0.1
RC20111	Ballslide™ feet/membranes (pair), with s/steel screws & washers, suits RC264xx cars	13.0	20	10.3	-	-	14	1/2	25/32	13/32	-	-	0.5
RC20112	Ballslide™ feet/membranes (pair), with s/steel screws & washers, suits RC264xx cars	13.7	20	11.4	-	-	14	17/32	25/32	7/16	-	-	0.5
RC20113	Ballslide™ feet/membranes (pair), with s/steel screws & washers, suits RC264xx cars	13.7	20	11.0	-	-	14	17/32	25/32	7/16	-	-	0.5
RC20114	Ballslide™ feet/membranes (pair), with s/steel screws & washers, suits RC264xx cars	13.7	20	11.5	-	-	14	17/32	25/32	7/16	-	-	0.5
RC20115	Ballslide™ feet/membranes (pair), with s/steel screws & washers, suits RC264xx cars	12.8	20	10.5	-	-	14	1/2	25/32	13/32	-	-	0.5
RC20116	Ballslide™ feet/membranes (pair), with s/steel screws & washers, suits RC264xx cars	8.8	16	6.6	-	-	6	11/32	5/8	1/4	-	-	0.2
RC20117	Ballslide™ feet/membranes (pair), with s/steel screws & washers, suits RC264xx cars	11.6	20	10.0	-	-	12	15/32	25/32	13/32	-	-	0.4
RC20118	Ballslide™ feet/membranes (pair), with s/steel screws & washers, suits RC264xx cars	8.8	16	7.6	-	-	6	11/32	5/8	5/16	-	-	0.2
RC26160	Headboard car	160.0	23	62.0	12	41	280	6 5/16	29/32	2 7/16	15/32	1 5/8	9.9
RC26360	Headboard car	160.0	23	62.0	12	41	280	6 5/16	29/32	2 7/16	15/32	1 5/8	9.9
RC26460	Headboard car	160.0	23	62.0	12	41	280	6 5/16	29/32	2 7/16	15/32	1 5/8	9.9
RC26560	Headboard car	160.0	23	62.0	12	41	280	6 5/16	29/32	2 7/16	15/32	1 5/8	9.9
Accessories													
RC00625	Ball bearing, Acetal, 6.35mm (1/4") diam.	-	-	-	-	-	1	-	-	-	-	-	0.1



X-Yachts Xc 45
Photo: X-Yachts / www.x-yachts.dk



RC26166
RC26366
RC26466
RC26566



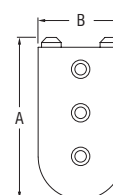
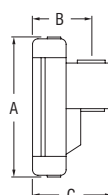
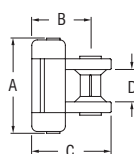
RC26163
RC26363
RC26463
RC26563



RC00021



RC26181



- Monohulls to 12m (40ft) or sail area 38m² (409ft²).
- Multihulls to 9m (30ft) or sail area 30m² (323ft²).

- Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.
- Suits standard batten receptacles and links, see pages 164-165.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
RC00021	Bush, suits 13mm (1/2") webbing	-	-	-	-	-	1	-	-	-	-	-	0.1
RC26163	Intermediate car	55	23	31	18	41	50	2 5/32	29/32	1 7/32	23/32	1 5/8	1.8
RC26166	Batten car	68	23	31	-	41	65	2 11/16	29/32	1 7/32	-	1 5/8	2.3
RC26181	End stop, plastic	68	33	-	-	-	11	2 11/16	1 5/16	-	-	-	0.4
RC26363	Intermediate car	55	23	31	18	41	50	2 5/32	29/32	1 7/32	23/32	1 5/8	1.8
RC26366	Batten car	68	23	31	-	41	65	2 11/16	29/32	1 7/32	-	1 5/8	2.3
RC26463	Intermediate car	55	23	31	18	41	50	2 5/32	29/32	1 7/32	23/32	1 5/8	1.8
RC26466	Batten car	68	23	31	-	41	65	2 11/16	29/32	1 7/32	-	1 5/8	2.3
RC26563	Intermediate car	55	23	31	18	41	50	2 5/32	29/32	1 7/32	23/32	1 5/8	1.8
RC26566	Batten car	68	23	31	-	41	65	2 11/16	29/32	1 7/32	-	1 5/8	2.3

Series 8



PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
RC00010	Headboard plates (pair)	188	119	23	-	-	173	7 13/32	4 11/16	29/32	-	-	6.1
RC28160	Headboard car	214	30	75	16.5	51	520	8 7/16	1 3/16	2 15/16	21/32	2	18.3
RC28161	Headboard car	290	30	75	16.5	51	750	11 7/16	1 3/16	2 15/16	21/32	2	26.5
RC28460	Headboard car	214	30	75	16.5	51	520	8 7/16	1 3/16	2 15/16	21/32	2	18.3
RC28461	Headboard car	290	30	75	16.5	51	750	11 7/16	1 3/16	2 15/16	21/32	2	26.5
Accessories													
RC00629	Ball bearing, Acetal, 8.00mm (0.315") diam.	-	-	-	-	-	1	-	-	-	-	-	0.1


RC28163
RC28463


RC00021

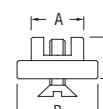
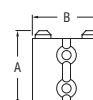
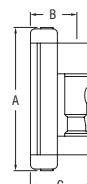
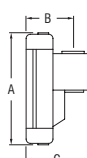
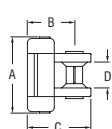
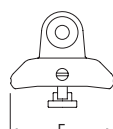

RC28166
RC28466

RC28169
RC28469


RC28181


RC20130
RC20131
RC20132
RC20133
RC20134


RC20101



- Long Cars: Monohulls to 18m (60ft) or sail area 60m² (646ft²).
- Long Cars: Multihulls to 13m (43ft) or sail area 48m² (517ft²).
- Short Cars: Monohulls to 16m (53ft) or sail area 53m² (570ft²).
- Short Cars: Multihulls to 11m (36ft) or sail area 42m² (452ft²).

- Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.
- Suits standard batten receptacles and links, see pages 164-165.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
RC00021	Bush, suits 13mm (1/2") webbing	-	-	-	-	-	1	-	-	-	-	-	0.1
RC20101	Ballslide™ feet/membranes (pair), suits RC281xx cars	-	-	-	-	-	1	-	-	-	-	-	0.1
RC20130	Ballslide™ feet/membranes (pair), suits RC284xx cars	13.3	24.0	11.4	-	-	22	17/32	15/16	7/16	-	-	0.8
RC20131	Ballslide™ feet/membranes (pair), suits RC284xx cars	11.6	23.0	11.8	-	-	20	15/32	29/32	15/32	-	-	0.7
RC20132	Ballslide™ feet/membranes (pair), suits RC284xx cars	14.0	24.0	11.4	-	-	20	9/16	15/16	7/16	-	-	0.7
RC20133	Ballslide™ feet/membranes (pair), suits RC284xx cars	14.0	24.0	11.4	-	-	22	9/16	15/16	7/16	-	-	0.8
RC20134	Ballslide™ feet/membranes (pair), suits RC284xx cars	14.0	24.0	11.1	-	-	22	9/16	15/16	7/16	-	-	0.8
RC28163	Intermediate car	76.0	30.0	37.0	18	51	115	3	1 3/16	1 15/32	23/32	2	4.1
RC28166	Batten car	92.0	30.0	37.0	-	51	140	3 5/8	1 3/16	1 15/32	-	2	4.9
RC28169	Quick release batten car	105.0	30.0	37.0	-	51	220	4 1/8	1 3/16	1 15/32	-	2	7.8
RC28181	End stop	54.0	45.0	-	-	-	35	2 1/8	1 25/32	-	-	-	1.2
RC28463	Intermediate car	76.0	30.0	37.0	18	51	115	3	1 3/16	1 15/32	23/32	2	4.1
RC28466	Batten car	92.0	30.0	37.0	-	51	140	3 5/8	1 3/16	1 15/32	-	2	4.9
RC28469	Quick release batten car	105.0	30.0	37.0	-	51	220	4 1/8	1 3/16	1 15/32	-	2	7.8

Strength & Simplicity

Sailing professionals around the world choose Ronstan Batten Systems for superior and innovative features combined with race-proven performance and reliability.

- With 6 track sizes available in the standard product range, there is a system with the right specifications for every boat and sail plan.
- The range includes all elements for a complete system, including headboard plates and batten receptacles.
- Easy track installation using patented slug connectors.
- Minimum distance from mast to mainsail luff enhances mainsail efficiency.
- Traditional Ball Bearing systems offer incredible performance and reliability, even when reefing while sailing off the wind.
- Captive Ball systems have slide rods in addition to their captive ball bearings, combining low friction, high static load resistance and the convenience of easy loading & unloading from the track.

Rugged Durability

- BB** Ball Bearing cars run on twin races of high compression strength ball bearings and have precision machined alloy end caps. In traditional Ball Bearing cars, the balls running in the lateral grooves of the track provide good all-around efficiency.
- CB** Captive Ball cars use low-friction slide rods to provide extra strength for high static loads in conjunction with captive ball bearings running on the face of the track taking compression loads. Lightweight and tough, in a compact size.

Proven

Ronstan batten systems have been the popular choice of boats in the round-the-world Volvo Ocean Race. Many opted for Captive Ball systems, which have also proved popular on big offshore multihulls like "Banque Populaire".

Ball Joint Articulation

A stainless steel ball joint link between the car and the batten receptacle provides movement in all directions with a minimum of 105° (112° for Ball Bearing cars) either side of centre. Ball joint links are available to suit Ronstan batten receptacles and most other types (SDA, Rutgerson, Battslide®, etc.)

Flexible Solutions

Ronstan batten systems also suit our Luff Groove tracks, which allow racer/cruisers to easily switch between their "soft luff" racing mainsail and their full batten cruising mainsail. These tracks are usually bonded to carbon masts with special adhesives or mechanically fastened to alloy masts.

Quick Release Convenience

Quick-Release batten receptacle links make the job easier when the sail needs to be removed for changeover, repair or stowage.

Total Control

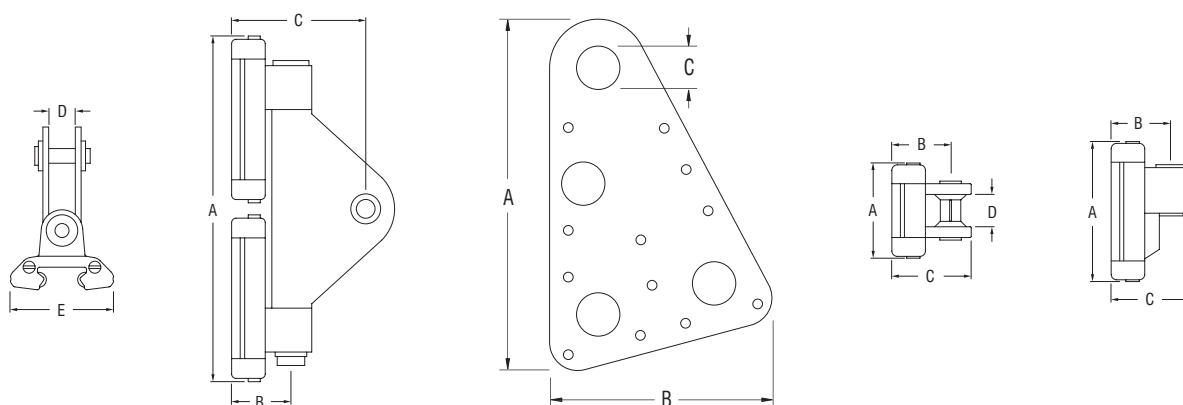
RC00160 and RC00170 batten receptacles feature a threaded adjustment mechanism that allows batten tension and sail shape to be precisely controlled.

Installation Options

A patented connector slug system, compatible with a wide range of mast profiles, is available for Series 19 to 30 track sizes. The system enables installation of the track over an existing luff groove without lowering the mast, drilling and tapping for fasteners, or other complications. The slugs are self-locating, for simple, reliable installation.



Series 14 BB



- Monohulls to 12m (40ft) or sail area 38m² (409ft²).
- Multihulls to 9m (30ft) or sail area 30m² (323ft²).

- Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.
- Suits standard batten receptacles and links, see pages 164-165.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
RC00010	Headboard plates (pair)	188	119	23	-	-	173	7 13/32	4 11/16	29/32	-	-	6.1
RC00020	Bush, suits 13mm (1/2") webbing	-	-	-	-	-	1	-	-	-	-	-	0.1
RC11460	Headboard car	155	22	60	12.5	41	243	6 3/32	7/8	2 3/8	1/2	1 5/8	8.6
RC11463	Intermediate car	54	22	30	18.0	41	47	2 1/8	7/8	1 3/16	23/32	1 5/8	1.7
RC11466	Batten car	66	22	30	-	41	60	2 19/32	7/8	1 3/16	-	1 5/8	2.1
Accessories													
RC00520	Ball bearing, Torlon®, 5.00mm (0.197") diam.	-	-	-	-	-	1	-	-	-	-	-	0.1

Series 14 Track



RC1141-2.0
RC1141-3.0
RC1141-6.0
RC1149-0.2



RC1141J



RC11481



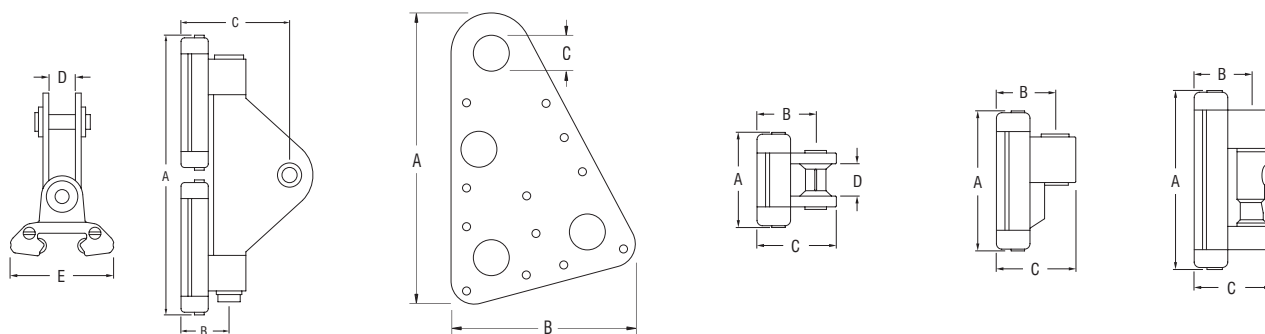
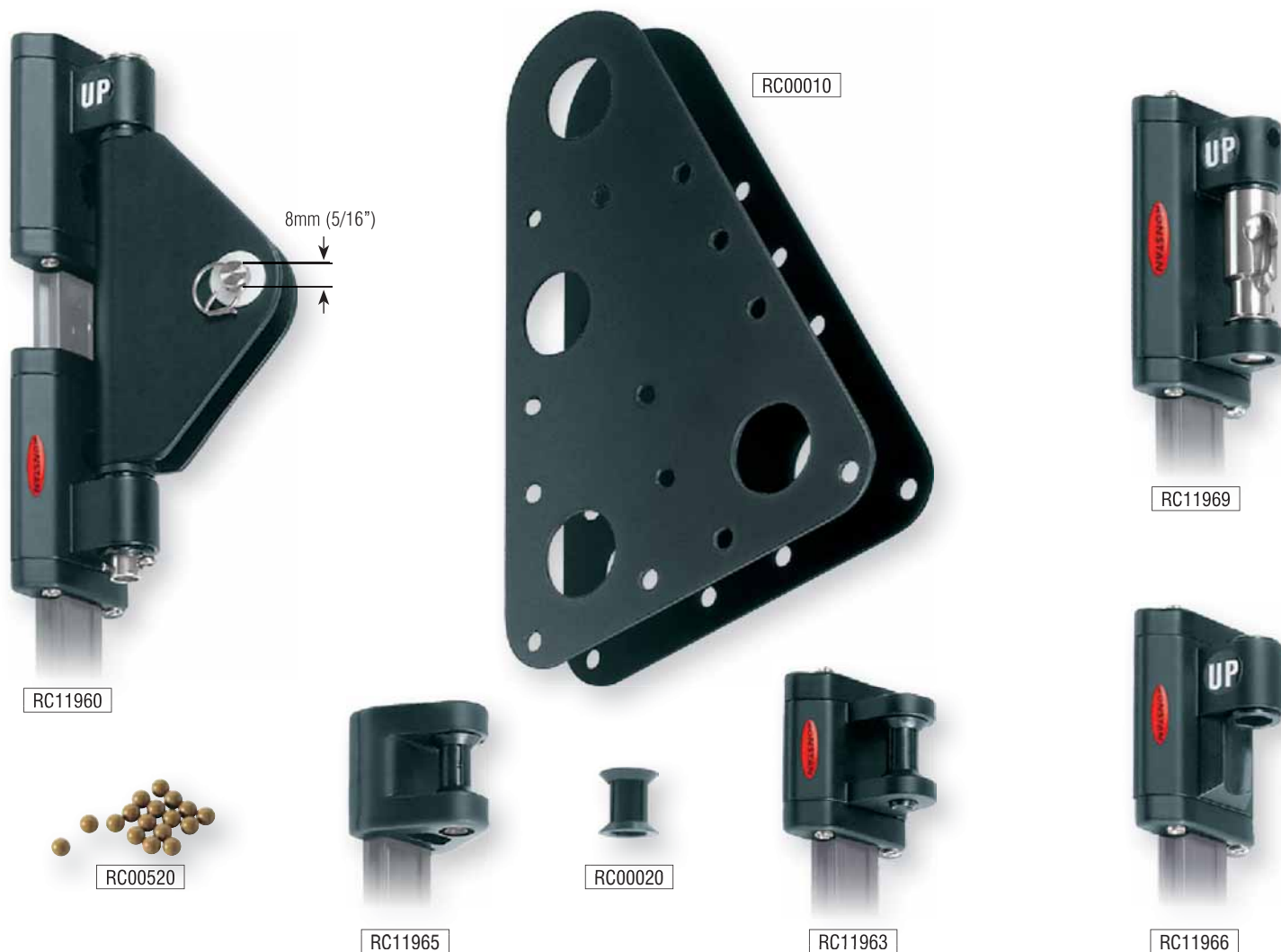
RC11480

TRACK FASTENINGS – M4 (5/32") cylinder head fasteners at 37.5mm (1 1/2") centres

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	WEIGHT g	A in.	B in.	C in.	WEIGHT oz
RC1141-2.0*	Track, 1975mm (77 13/16") long, black	14	9.4	-	421	9/16	3/8	-	14.9
RC1141-3.0*	Track, 3025mm (119 3/16") long, black	14	9.4	-	625	9/16	3/8	-	22.0
RC1141-6.0*	Track, 6025mm (237 3/8") long, black	14	9.4	-	1261	9/16	3/8	-	44.5
RC1141J	Track joiner, Acetal	-	-	-	1	-	-	-	0.1
RC11480	End cap, plastic	28	20.0	-	6	3/32	25/32	-	0.2
RC11481	End stop, plastic	68	33.0	-	11	2 11/16	1 5/16	-	0.4
RC1149-0.2*	Gate track, 250mm (9 27/32") long, black	14	9.4	-	52	9/16	3/8	-	1.8

* Silver track available - Order as RCxxxxxxS

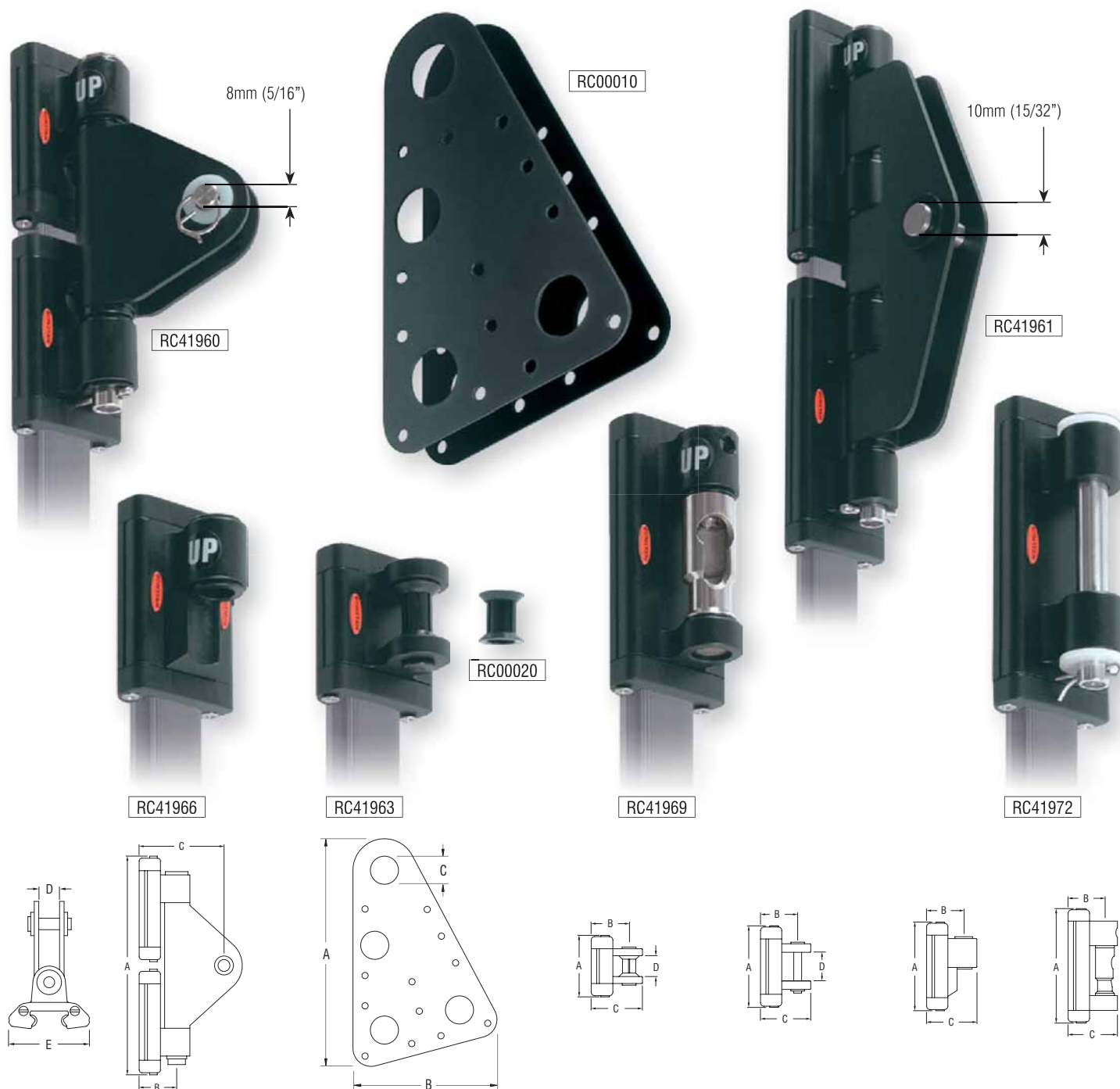
Series 19 BB



- Monohulls to 14m (46ft) or sail area 44m² (474ft²).
- Multihulls to 11m (36ft) or sail area 37m² (398ft²).

- Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.
- Suits standard batten receptacles and links, see pages 164-165.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
RC00010	Headboard plates (pair)	188	119	23	-	-	173	7 13/32	4 11/16	29/32	-	-	6.1
RC00020	Bush, suits 13mm (1/2") webbing	-	-	-	-	-	1	-	-	-	-	-	0.1
RC11960	Headboard car	171	26	65	11.5	47	315	6 3/4	1 1/32	2 9/16	7/16	27/32	11.1
RC11963	Intermediate car	48	26	36	18.0	47	59	29/32	1 1/32	13/32	23/32	27/32	2.1
RC11965	Track slide, Acetal	37	26	36	17.5	38	30	15/32	1 1/32	13/32	11/16	1 1/2	1.1
RC11966	Batten car	66	26	36	-	47	80	19/32	1 1/32	13/32	-	27/32	2.8
RC11969	Quick release batten car	88	26	36	-	47	150	15/32	1 1/32	13/32	-	27/32	5.3
Accessories													
RC00520	Ball bearing, Torlon®, 5.00mm (0.197") diam.	-	-	-	-	-	1	-	-	-	-	-	0.1



- Long Cars: Monohulls to 15m (50ft) or sail area 53m² (570ft²).
- Long Cars: Multihulls to 12m (40ft) or sail area 46m² (495ft²).
- Short Cars: Monohulls to 14m (46ft) or sail area 48m² (517ft²).
- Short Cars: Multihulls to 11m (36ft) or sail area 41m² (441ft²).

- Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.
- Suits standard batten receptacles and links, see pages 164-165.

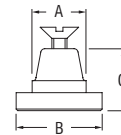
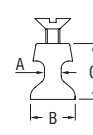
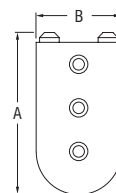
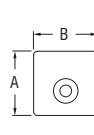
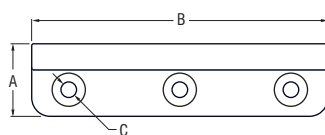
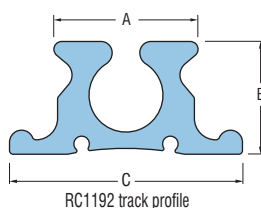
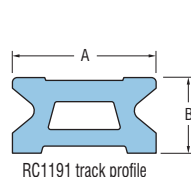
PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
RC00010	Headboard plates (pair)	188	119	23	-	-	173	7 13/32	4 11/16	29/32	-	-	6.1
RC00020	Bush, suits 13mm (1/2") webbing	-	-	-	-	-	1	-	-	-	-	-	0.1
RC41960	Headboard car (short)	126	29	66	12.2	39	243	4 15/16	1 1/8	2 5/8	15/32	1 9/16	8.6
RC41961	Headboard car (long)	209	29	64	12.2	39	420	8 3/16	1 1/8	2 1/2	15/32	1 9/16	14.8
RC41963	Intermediate car	44	29	38	18.0	39	57	1 5/8	1 1/8	1 7/16	11/16	1 9/16	2.0
RC41966	Batten car	61	29	38	-	39	76	2 3/8	1 1/8	1 7/16	-	1 9/16	2.7
RC41969	Quick release batten car	84	29	38	-	39	144	3 1/4	1 1/8	1 7/16	-	1 9/16	5.1
RC41972	Reef car	98	29	38	37.0	39	151	3 3/4	1 1/8	1 7/16	1 7/16	1 9/16	5.3

Series 19 Track



RC1191-2.0
RC1191-3.0
RC1191-6.0
RC1199-0.2

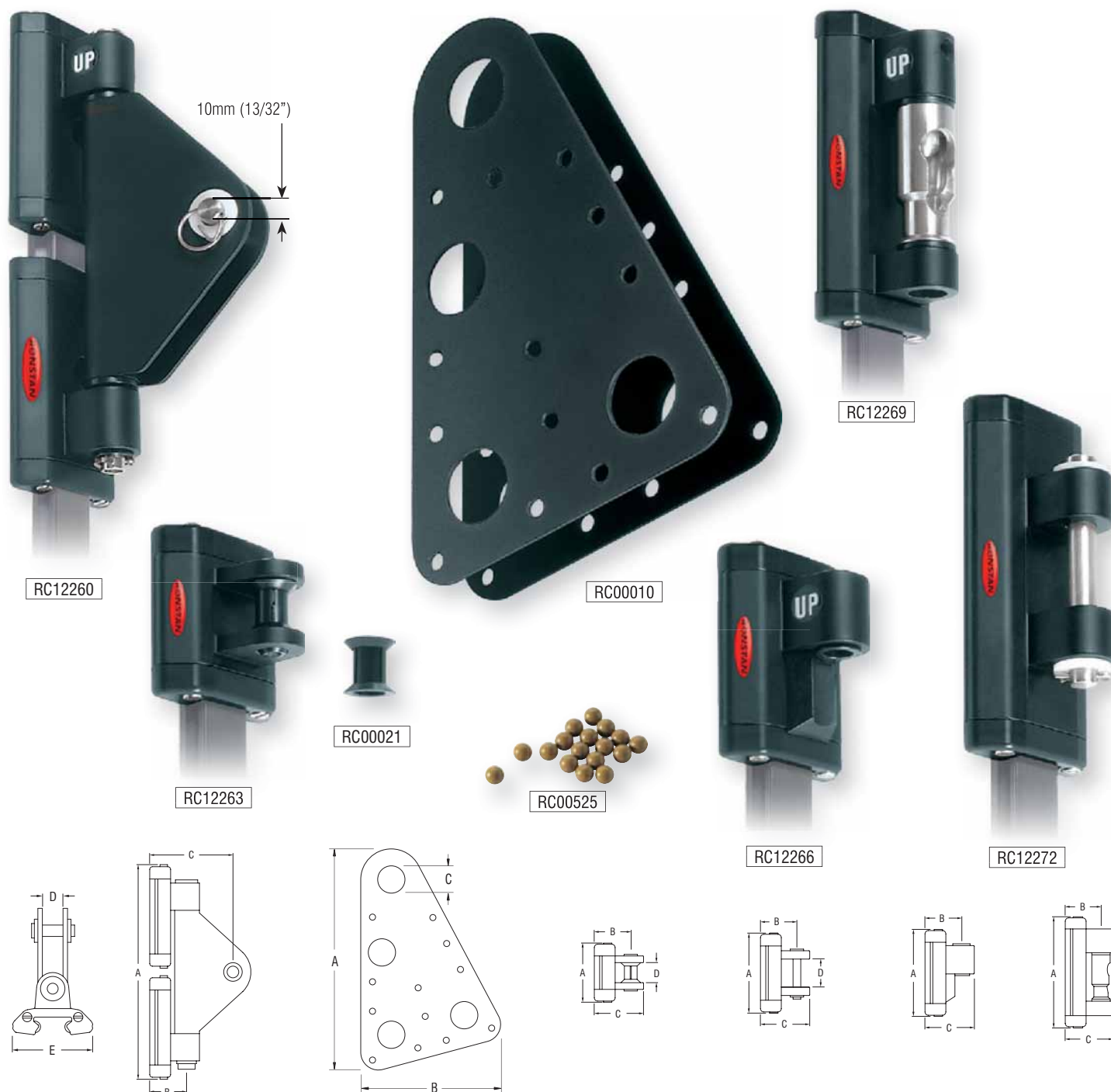
RC1192-2.0
RC1192-3.0
RC1192-6.0
RC1199-0.3L



TRACK FASTENINGS – M5 (3/16") countersunk head fasteners at 75mm (2 15/16") centres

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	WEIGHT g	A in.	B in.	C in.	WEIGHT oz
RC00310	Track mounting slug, including fasteners	3.7	9.4	13.5	4	5/32	3/8	17/32	0.1
RC00312	Track mounting slug, including fasteners	2.8	7.6	12.6	3	1/8	5/16	1/2	0.1
RC00314	Track mounting slug, including fasteners	4.0	12.0	16.1	5	5/32	15/32	5/8	0.2
RC00315	Track mounting slug, including fasteners	4.6	12.8	16.0	5	3/16	1/2	5/8	0.2
RC00316	Track mounting slug, including fasteners	3.6	11.5	15.0	5	5/32	7/16	19/32	0.2
RC00320	Track mounting slug, including fasteners	10.0	18.0	12.6	7	13/32	23/32	1/2	0.2
RC00321	Track mounting slug, including fasteners	11.8	19.9	13.0	8	15/32	25/32	1/2	0.3
RC00322	Track mounting slug, including fasteners	13.5	21.5	13.0	9	15/32	25/32	1/2	0.3
RC00323	Track mounting slug, including fasteners	8.1	15.0	13.5	6	5/16	19/32	17/32	0.2
RC00328	Track mounting slug, including fasteners	8.0	15.0	12.0	5	5/16	19/32	15/32	0.2
RC1191-2.0*	Track, 1975mm (77 13/16") long, black. Requires 27 track mounting slugs	19.4	10.4	-	614	25/32	13/32	-	21.7
RC1191-3.0*	Track, 3025mm (119 3/16") long, black. Requires 41 track mounting slugs	19.4	10.4	-	932	25/32	13/32	-	32.9
RC1191-6.0*	Track, 6025mm (237 3/8") long, black. Requires 81 track mounting slugs	19.4	10.4	-	1862	25/32	13/32	-	65.7
RC1192-2.0	Luff groove track, 1975mm (77 13/16") long, black	19.5	15.3	31.5	1090	25/32	19/32	1 1/4	38.4
RC1192-3.0	Luff groove track, 3025mm (119 3/16") long, black	19.5	15.3	31.5	1630	25/32	19/32	1 1/4	57.5
RC1192-6.0	Luff groove track, 6025mm (237 3/8") long, black	19.5	15.3	31.5	3250	25/32	19/32	1 1/4	114.6
RC1192FP	Luff groove track, fastener plates, black (pair)	19.6	80.0	M4	11	25/32	3 5/32	5/32	0.4
RC1191J	Track joiner, Acetal	-	-	-	3	-	-	-	0.1
RC1192J	Luff groove track joiners	-	-	-	1	-	-	-	0.1
RC11980	End cap, plastic	30.0	26.0	-	6	1 3/16	1 1/32	-	0.2
RC11981	End stop, plastic	70.0	38.0	-	15	2 3/4	1 1/2	-	0.5
RC1199-0.2*	Gate track, 250mm (9 27/32") long, black	19.0	10.4	-	81	3/4	13/32	-	2.9
RC1199-0.3L*	Luff groove gate track, 325mm (12 13/16") long, black	19.5	15.3	31.5	175	25/32	19/32	1 1/4	6.2

* Silver track available - Order as RCxxxxxxS

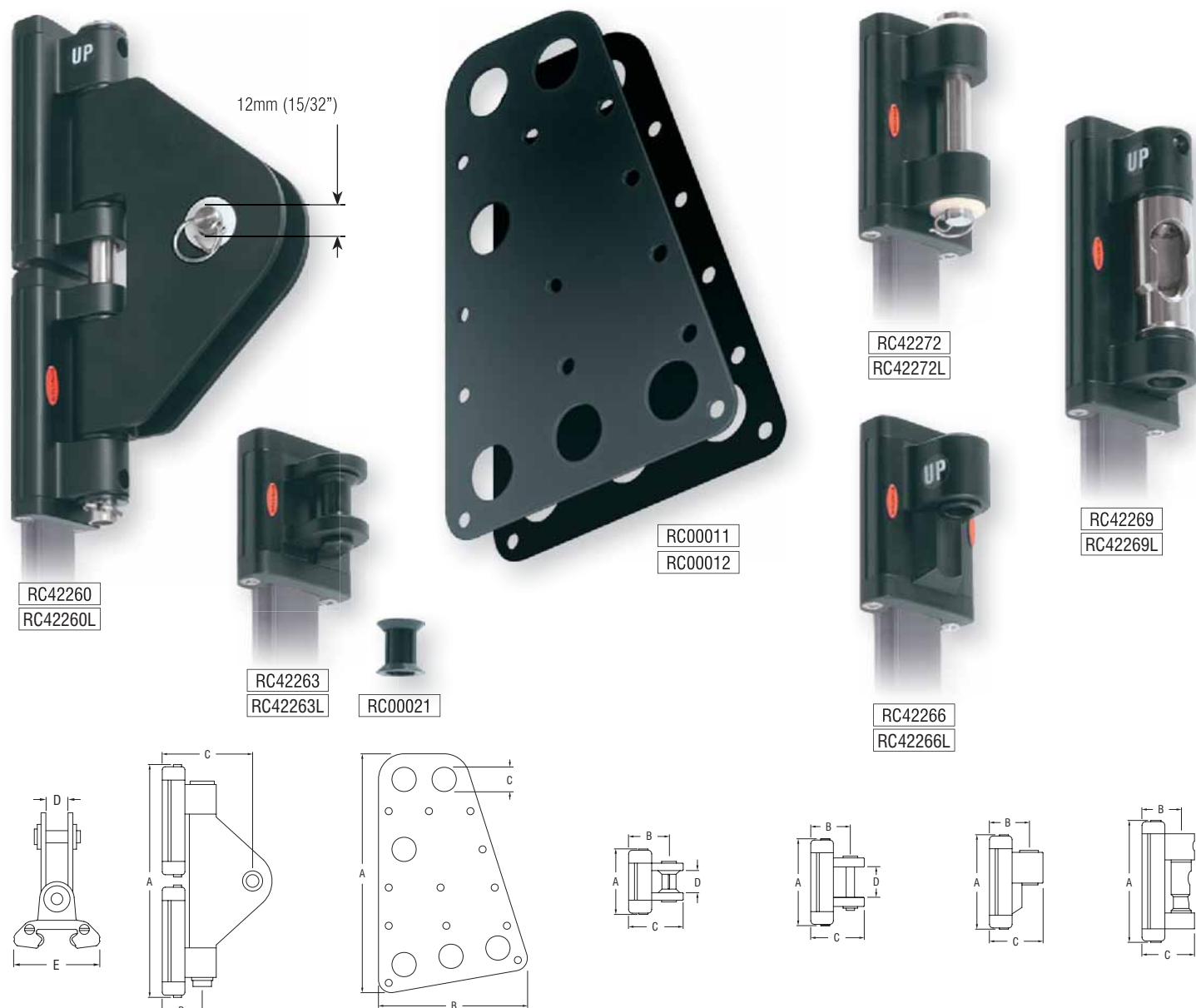


- Monohulls to 18m (60ft) or sail area 58m² (624ft²).
- Multihulls to 12m (40ft) or sail area 46m² (495ft²).

- Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.
- Suits standard batten receptacles and links, see pages 164-165.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
RC00010	Headboard plates (pair)	188	119	23	-	-	173	7 13/32	4 11/16	29/32	-	-	6.1
RC00021	Bush, suits 13mm (1/2") webbing	-	-	-	-	-	1	-	-	-	-	-	0.1
RC12260	Headboard car	206	33	78	17	57.5	584	8 1/8	1 5/16	3 1/16	21/32	2 1/4	20.6
RC12263	Intermediate car	64	33	45	18	57.5	110	2 17/32	1 5/16	1 25/32	23/32	2 1/4	3.9
RC12266	Batten car	77	33	45	-	57.5	155	3 1/32	1 5/16	1 25/32	-	2 1/4	5.5
RC12269	Quick release batten car	120	33	45	-	57.5	360	4 23/32	1 5/16	1 25/32	-	2 1/4	12.7
RC12272	Reef car	130	33	45	32	57.5	350	5 1/8	1 5/16	1 25/32	1 1/4	2 1/4	12.3
Accessories													
RC00525	Ball bearing, Teflon®, 6.35mm (1/4") diam.	-	-	-	-	-	1	-	-	-	-	-	0.1

Series 22 CB

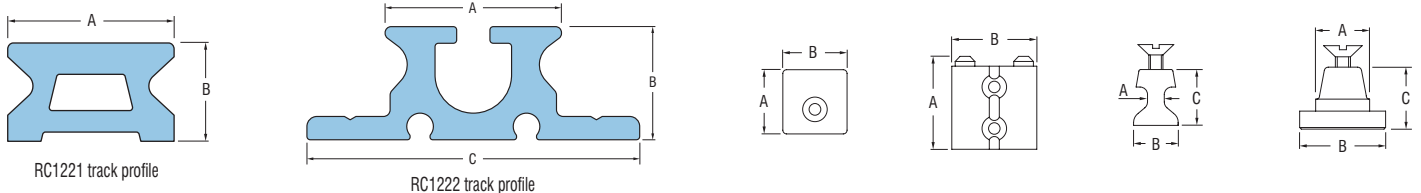


- Monohulls to 18m (60ft) or sail area 70m² (753ft²).
- Multihulls to 13m (43ft) or sail area 57m² (614ft²).

- Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.
- Suits standard batten receptacles and links, see pages 164-165.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
RC00011	Headboard plates (pair)	280	175	28	-	-	540	11 1/32	6 29/32	1 3/32	-	-	19.0
RC00012	Headboard plates (pair)	280	175	23	-	-	540	11 1/32	6 29/32	29/32	-	-	-
RC00021	Bush, suits 13mm (1/2") webbing	-	-	-	-	-	1	-	-	-	-	-	0.1
Cars for Standard Track Only													
RC42260	Headboard car	235	34	95	17	47	814	9 1/4	1 11/32	3 3/4	21/32	1 7/8	28.7
RC42263	Intermediate car	54	34	46	18	47	102	2 1/8	1 11/32	1 25/32	23/32	1 7/8	3.6
RC42266	Batten car	72	34	46	-	47	142	2 27/32	1 11/32	1 25/32	-	1 7/8	5.0
RC42269	Quick release batten car	116	34	46	-	47	336	4 9/16	1 11/32	1 25/32	-	1 7/8	11.8
RC42272	Reef car	86	34	46	32	47	224	3 13/32	1 11/32	1 25/32	1 1/4	1 7/8	7.9
Cars for Luff Groove Track Only													
RC42260L	Headboard car	235	34	95	17	47	814	9 1/4	1 11/32	3 3/4	21/32	1 7/8	28.7
RC42263L	Intermediate car	54	34	46	18	47	102	2 1/8	1 11/32	1 25/32	23/32	1 7/8	3.6
RC42266L	Batten car	72	34	46	-	47	142	2 27/32	1 11/32	1 25/32	-	1 7/8	5.0
RC42269L	Quick release batten car	116	34	46	-	47	334	4 9/16	1 11/32	1 25/32	-	1 7/8	11.8
RC42272L	Reef car	86	34	46	32	47	224	3 13/32	1 11/32	1 25/32	1 1/4	1 7/8	7.9

Series 22 Track

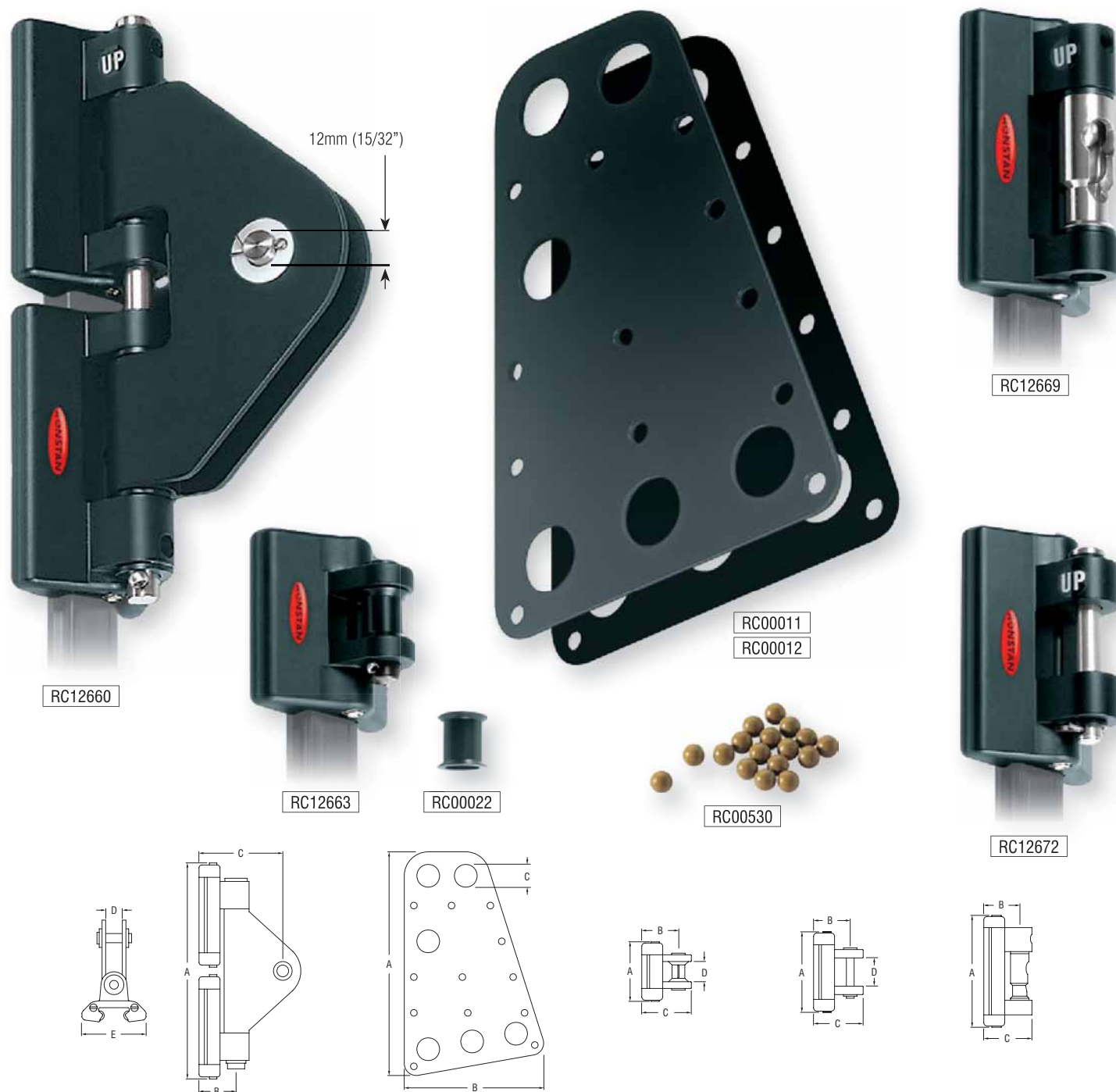


TRACK FASTENINGS – M6 (1/4") countersunk head fasteners at 100mm (3 15/16") centres

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	WEIGHT g	A in.	B in.	C in.	WEIGHT oz
RC00332	Track mounting slug, including fasteners	3.5	8.3	16.1	5	1/8	5/16	5/8	0.2
RC00333	Track mounting slug, including fasteners	4.6	13.0	18.0	6	3/16	1/2	23/32	0.2
RC00334	Track mounting slug, including fasteners	4.5	11.9	16.6	6	3/16	15/32	21/32	0.2
RC00335	Track mounting slug, including fasteners	4.5	11.9	16.6	6	3/16	15/32	21/32	0.2
RC00340	Track mounting slug, including fasteners	10.0	18.0	15.0	8	13/32	23/32	19/32	0.3
RC00341	Track mounting slug, including fasteners	13.6	21.5	15.5	11	17/32	27/32	5/8	0.4
RC00343	Track mounting slug, including fasteners	11.8	19.8	15.5	10	15/32	25/32	5/8	0.4
RC1221-2.0*	Track, 2025mm (79 25/32") long, black. Requires 21 track mounting slugs	22.0	13.0	-	956	7/8	1/2	-	33.7
RC1221-3.0*	Track, 3025mm (119 3/16") long, black. Requires 31 track mounting slugs	22.0	13.0	-	1453	7/8	1/2	-	51.2
RC1221-6.0*	Track, 6025mm (237 3/8") long, black. Requires 61 track mounting slugs	22.0	13.0	-	2880	7/8	1/2	-	101.6
RC1221J	Track joiner, Acetal	-	-	-	4	-	-	-	0.1
RC1222-2.0*	Luff groove track, 2025mm (79 25/32") long, black	22.0	15.0	44.0	1185	7/8	19/32	1 23/32	41.8
RC1222-3.0*	Luff groove track, 3025mm (119 3/16") long, black	22.0	15.0	44.0	1770	7/8	19/32	1 23/32	62.4
RC1222-6.0*	Luff groove track, 6025mm (237 3/8") long, black	22.0	15.0	44.0	3525	7/8	19/32	1 23/32	124.3
RC1222J	Luff groove track joiner	-	-	-	2	-	-	-	0.1
RC12280	End cap, plastic	30.0	27.0	-	7	1 3/16	1 1/16	-	0.2
RC12281*	End stop, alloy	48.0	47.0	-	53	1 29/32	1 27/32	-	1.9
RC1229-0.3*	Gate track, 325mm (12 13/16") long, black	22.0	13.0	-	156	7/8	1/2	-	5.5
RC1229-0.3L*	Luff groove gate track, 325mm (12 13/16") long, black	22.0	15.0	44.0	190	7/8	19/32	1 23/32	6.7

* Silver track available - Order as RCxxxxxxS

Series 26 BB

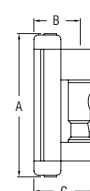
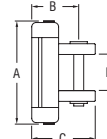
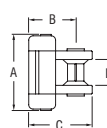
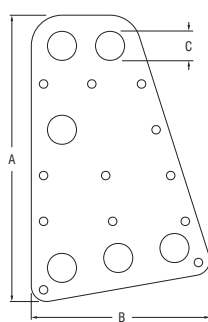
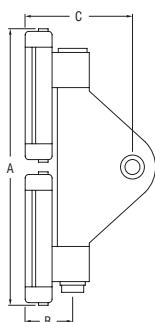
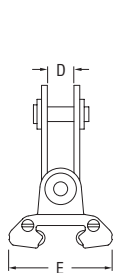
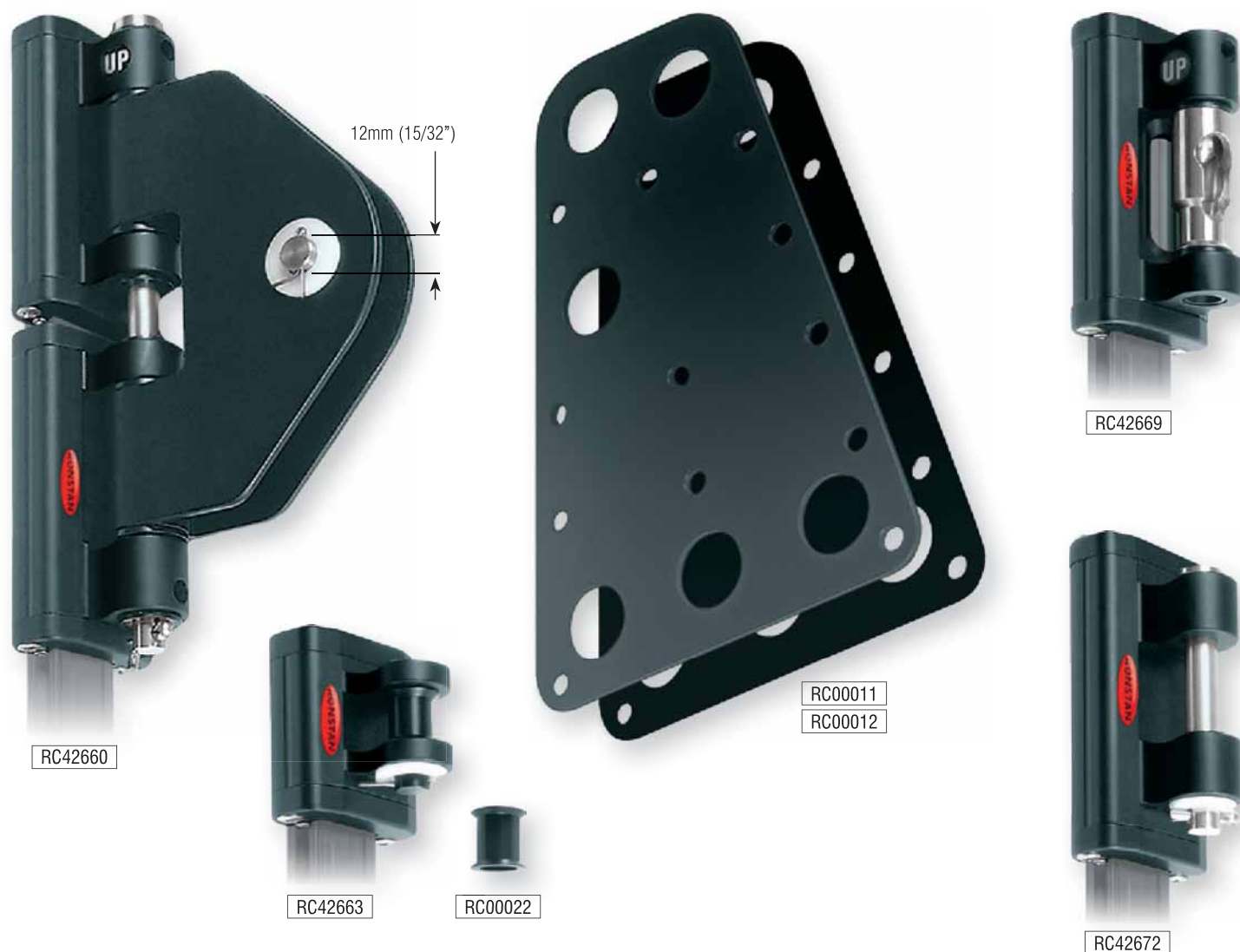


- Monohulls to 20m (65ft) or sail area 85m² (915ft²).
- Multihulls to 14m (46ft) or sail area 65m² (700ft²).

- Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.
- Suits standard batten receptacles and links, see pages 164-165.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
RC00011	Headboard plates (pair)	280	175	28	-	-	540	11 1/32	6 29/32	1 3/32	-	-	19.0
RC00012	Headboard plates (pair)	280	175	23	-	-	540	11 1/32	6 29/32	29/32	-	-	-
RC00022	Bush, suits 13mm (1/2") webbing	-	-	-	-	-	1	-	-	-	-	-	0.1
RC12660	Headboard car	225	36	99	16	69	977	8 7/8	1 13/32	3 29/32	5/8	2 23/32	34.5
RC12663	Intermediate car	70	36	48	18	69	167	2 3/4	1 13/32	1 29/32	23/32	2 23/32	5.9
RC12669	Quick release batten car	100	36	48	-	69	385	3 15/16	1 13/32	1 29/32	-	2 23/32	13.6
RC12672	Reef car	90	36	48	28	69	285	3 17/32	1 13/32	1 29/32	1 3/32	2 23/32	10.1
Accessories													
RC00530	Ball bearing, Torlon®, 7.92mm (5/16") diam.	-	-	-	-	-	1	-	-	-	-	-	0.1

Series 26 CB

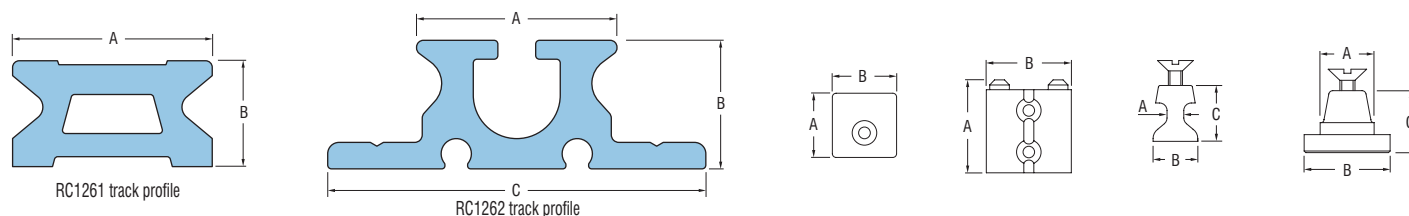
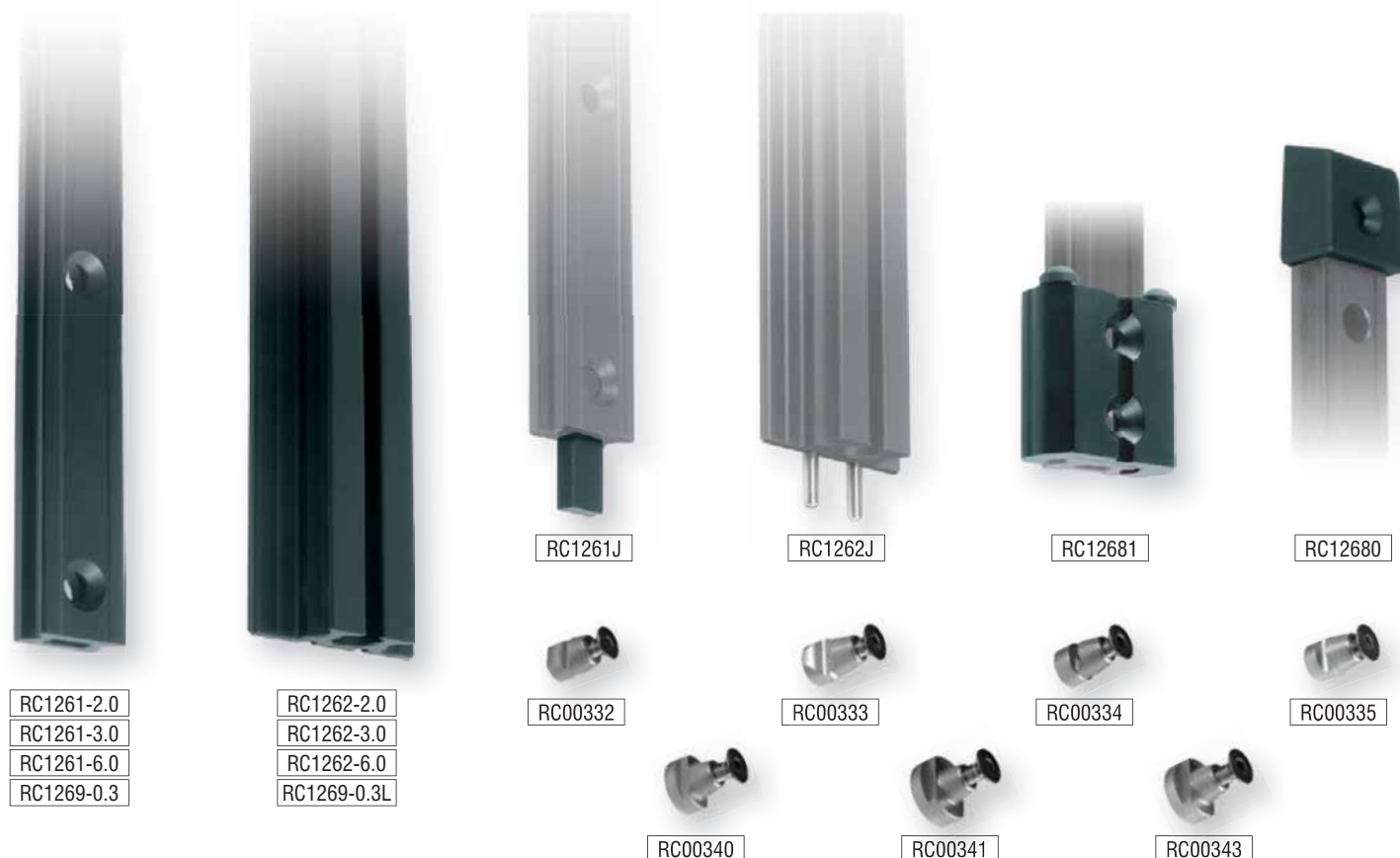


- Monohulls to 22m (72ft) or sail area 105m² (1130ft²).
- Multihulls to 16m (53ft) or sail area 83m² (893ft²).
- Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.

- Suits standard batten receptacles and links, see pages 164-165.
- Suits series 26 track (standard and luff groove types).

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
RC00011	Headboard plates (pair)	280	175	28	-	-	540	11 1/32	6 29/32	1 3/32	-	-	19.0
RC00012	Headboard plates (pair)	280	175	23	-	-	540	11 1/32	6 29/32	29/32	-	-	-
RC00022	Bush, suits 13mm (1/2") webbing	-	-	-	-	-	1	-	-	-	-	-	0.1
RC42660	Headboard car	236	37	96	17	52	971	9 5/16	1 7/16	3 25/32	11/16	2 1/16	34.3
RC42663	Intermediate car	64	37	49	19	52	132	2 1/2	1 7/16	1 15/16	3/4	2 1/16	4.7
RC42669	Quick release batten car	115	37	49	-	52	352	4 11/16	1 7/16	1 15/16	-	2 1/16	12.4
RC42672	Reef car	90	37	49	28	52	270	3 9/16	1 7/16	1 15/16	1 1/8	2 1/16	9.5

Series 26 Track



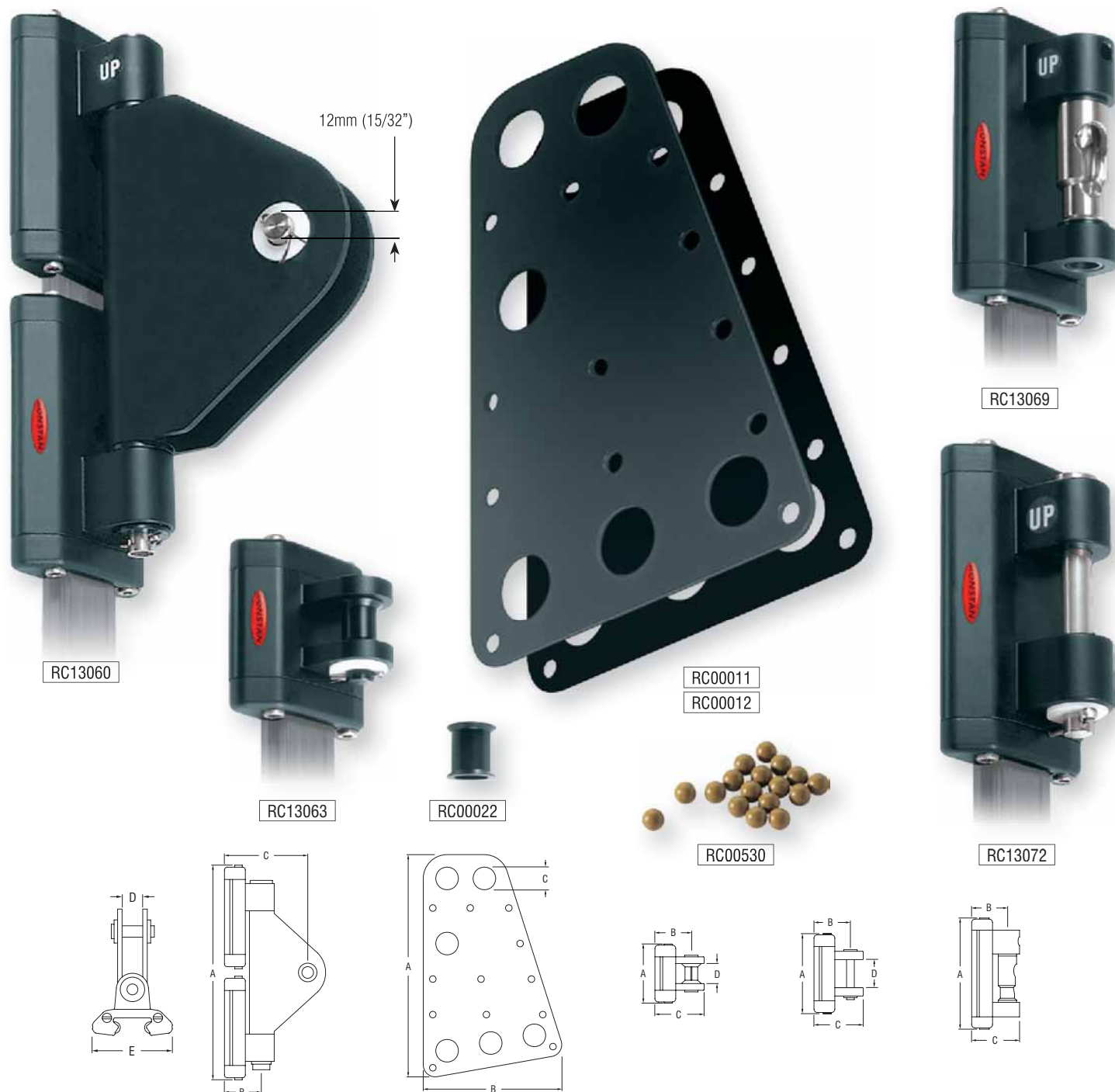
TRACK FASTENINGS – M6 (1/4") countersunk head fasteners at 75mm (2 15/16") centres

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	WEIGHT g	A in.	B in.	C in.	WEIGHT oz
RC00332	Track mounting slug, including fasteners	3.5	8.3	16.1	5	1/8	5/16	5/8	0.2
RC00333	Track mounting slug, including fasteners	4.6	13.0	18.0	6	3/16	1/2	23/32	0.2
RC00334	Track mounting slug, including fasteners	4.5	11.9	16.6	6	3/16	15/32	21/32	0.2
RC00335	Track mounting slug, including fasteners	4.5	11.9	16.6	6	3/16	15/32	21/32	0.2
RC00340	Track mounting slug, including fasteners	10.0	18.0	15.0	8	13/32	23/32	19/32	0.3
RC00341	Track mounting slug, including fasteners	13.6	21.5	15.5	11	17/32	27/32	5/8	0.4
RC00343	Track mounting slug, including fasteners	11.8	19.8	15.5	10	15/32	25/32	5/8	0.4
RC1261-2.0*	Track, 1975 mm (77 13/16") long, black. Requires 27 track mounting slugs	26.4	13.5	-	1190	1 1/32	17/32	-	42.0
RC1261-3.0*	Track, 3025 mm (119 3/16") long, black. Requires 41 track mounting slugs	26.4	13.5	-	1780	1 1/32	17/32	-	62.8
RC1261-6.0*	Track, 6025 mm (237 3/8") long, black. Requires 81 track mounting slugs	26.4	13.5	-	3550	1 1/32	17/32	-	125.2
RC1261J	Track joiner, Acetal	-	-	-	5	-	-	-	0.2
RC1262-2.0*	Luff groove track, 2025 mm (79 25/32") long, black	26.4	17.0	50.0	1825	1 1/32	21/32	1 31/32	64.4
RC1262-3.0*	Luff groove track, 3025 mm (119 3/16") long, black	26.4	17.0	50.0	2725	1 1/32	21/32	1 31/32	96.1
RC1262-6.0*	Luff groove track, 6025 mm (237 3/8") long, black	26.4	17.0	50.0	5430	1 1/32	21/32	1 31/32	191.5
RC1262J	Luff groove track joiner	-	-	-	4	-	-	-	0.1
RC12680	End cap, plastic	34.0	32.0	-	7	1 5/16	1 1/4	-	0.2
RC12681	End stop, alloy	55.0	45.0	-	73	2 5/32	1 25/32	-	2.6
RC1269-0.3*	Gate track, 325mm (12 13/16") long, black	26.4	13.5	-	196	1 1/32	17/32	-	6.9
RC1269-0.3L*	Luff track groove gate, 325mm (12 13/16") long, black	26.4	17.0	50.0	290	1 1/32	21/32	1 31/32	10.2

* Silver track available - Order as RCxxxxxxS



Series 30 BB

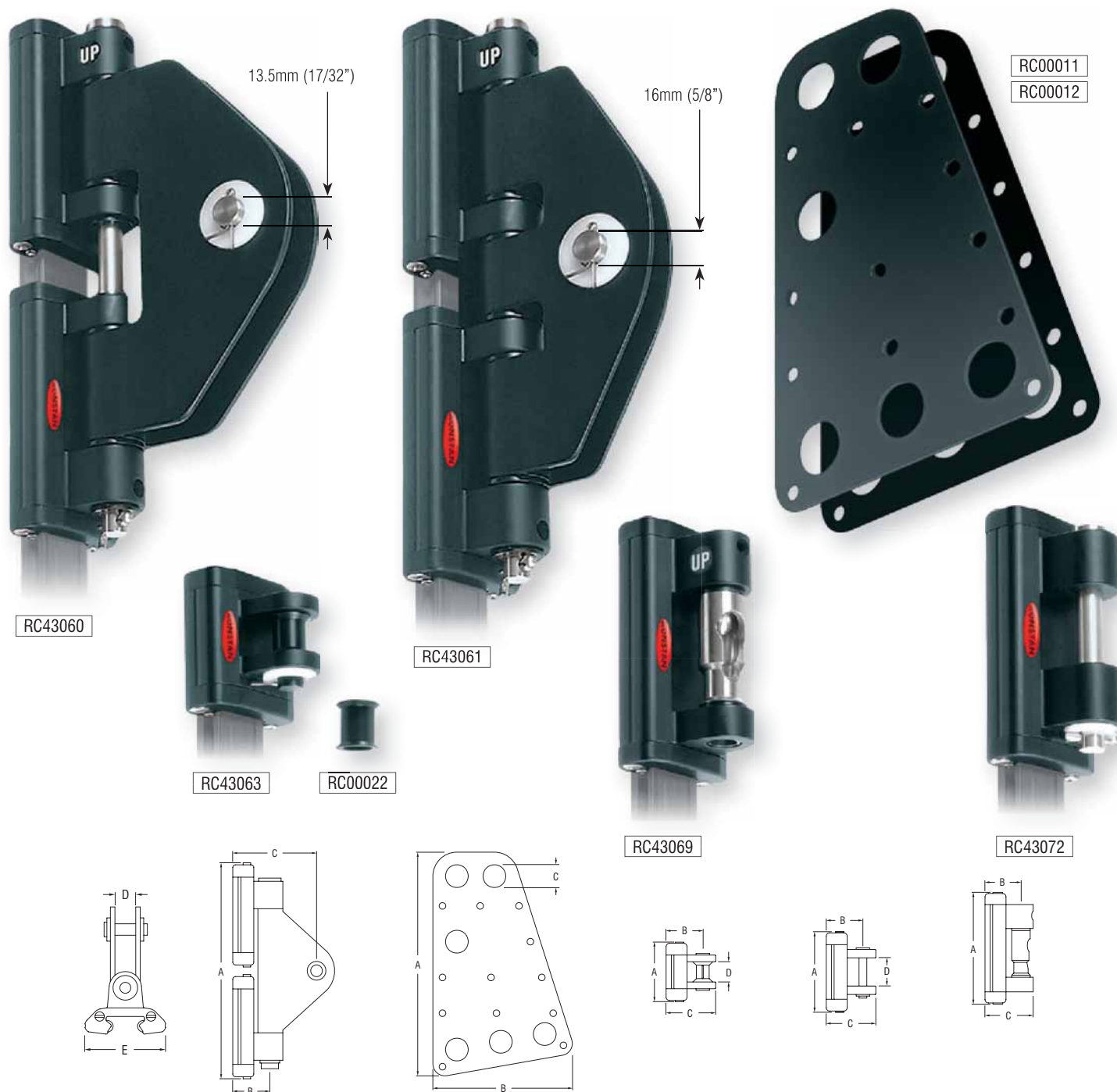


- Monohulls to 23m (75ft) or sail area 120m² (1292ft²).
- Multihulls to 17m (56ft) or sail area 93m² (1001ft²).

- Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.
- Suits standard batten receptacles and links, see pages 164-165.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
RC00011	Headboard plates (pair)	280	175	28	-	-	540	11 1/32	6 29/32	1 3/32	-	-	19.0
RC00012	Headboard plates (pair)	280	175	23	-	-	540	11 1/32	6 29/32	29/32	-	-	-
RC00022	Bush, suits 13mm (1/2") webbing	-	-	-	-	-	1	-	-	-	-	-	0.1
RC13060	Headboard car	255	43	120	20	76.4	1245	10 1/16	1 11/16	4 23/32	25/32	3	43.9
RC13063	Intermediate car	78	43	56	19	76.4	230	3 1/16	1 11/16	2 7/32	3/4	3	8.1
RC13069	Quick release batten car	129	43	56	-	76.4	555	5 3/32	1 11/16	2 7/32	-	3	19.6
RC13072	Reef car	130	43	56	37	76.4	534	5 1/8	1 11/16	2 7/32	15/32	3	18.8
Accessories													
RC00530	Ball bearing, Torlon®, 7.92mm (5/16") diam.	-	-	-	-	-	1	-	-	-	-	-	0.1

Series 30 CB



- Long cars Monohulls to 25m (82ft) or sail area 140m² (1507ft²).
- Long cars Multihulls to 18m (60ft) or sail area 105m² (1130ft²).
- Short cars Monohulls to 23m (75ft) or sail area 120m² (1292ft²).
- Short cars Multihulls to 17m (56ft) or sail area 93m² (1001ft²).

- Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.
- Suits standard batten receptacles and links, see pages 164-165.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
RC00011	Headboard plates (pair)	280	175	28	-	-	540	11 1/32	6 29/32	1 3/32	-	-	19.0
RC00012	Headboard plates (pair)	280	175	23	-	-	540	11 1/32	6 29/32	29/32	-	-	-
RC00022	Bush, suits 13mm (1/2") webbing	-	-	-	-	-	1	-	-	-	-	-	0.1
RC43060	Headboard car	255	43	120	20	58	1405	10 1/16	1 11/16	4 23/32	25/32	2 9/32	49.6
RC43061	Headboard car	337	43	120	20	58	1900	13 9/32	1 11/16	4 23/32	25/32	2 9/32	67.0
RC43063	Intermediate car	69	43	56	19	58	255	2 23/32	1 11/16	2 7/32	3/4	2 9/32	9.0
RC43069	Quick release batten car	119	43	56	-	58	525	4 11/16	1 11/16	2 7/32	-	2 9/32	18.5
RC43072	Reef car	119	43	56	37	58	545	4 11/16	1 11/16	2 7/32	1 15/32	2 9/32	19.2

Series 30 Track



RC1301-2.0
RC1301-3.0
RC1301-6.0
RC1309-0.4

RC1302-2.0
RC1302-3.0
RC1302-6.0
RC1309-0.4L



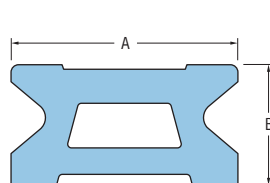
RC00354



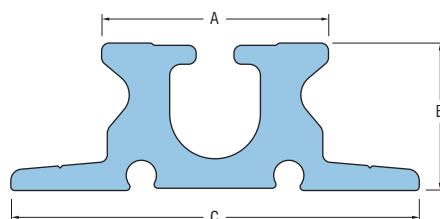
RC00360



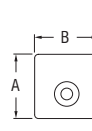
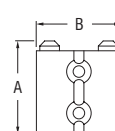
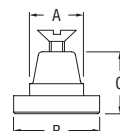
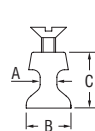
RC00361



RC1301 track profile



RC1302 track profile



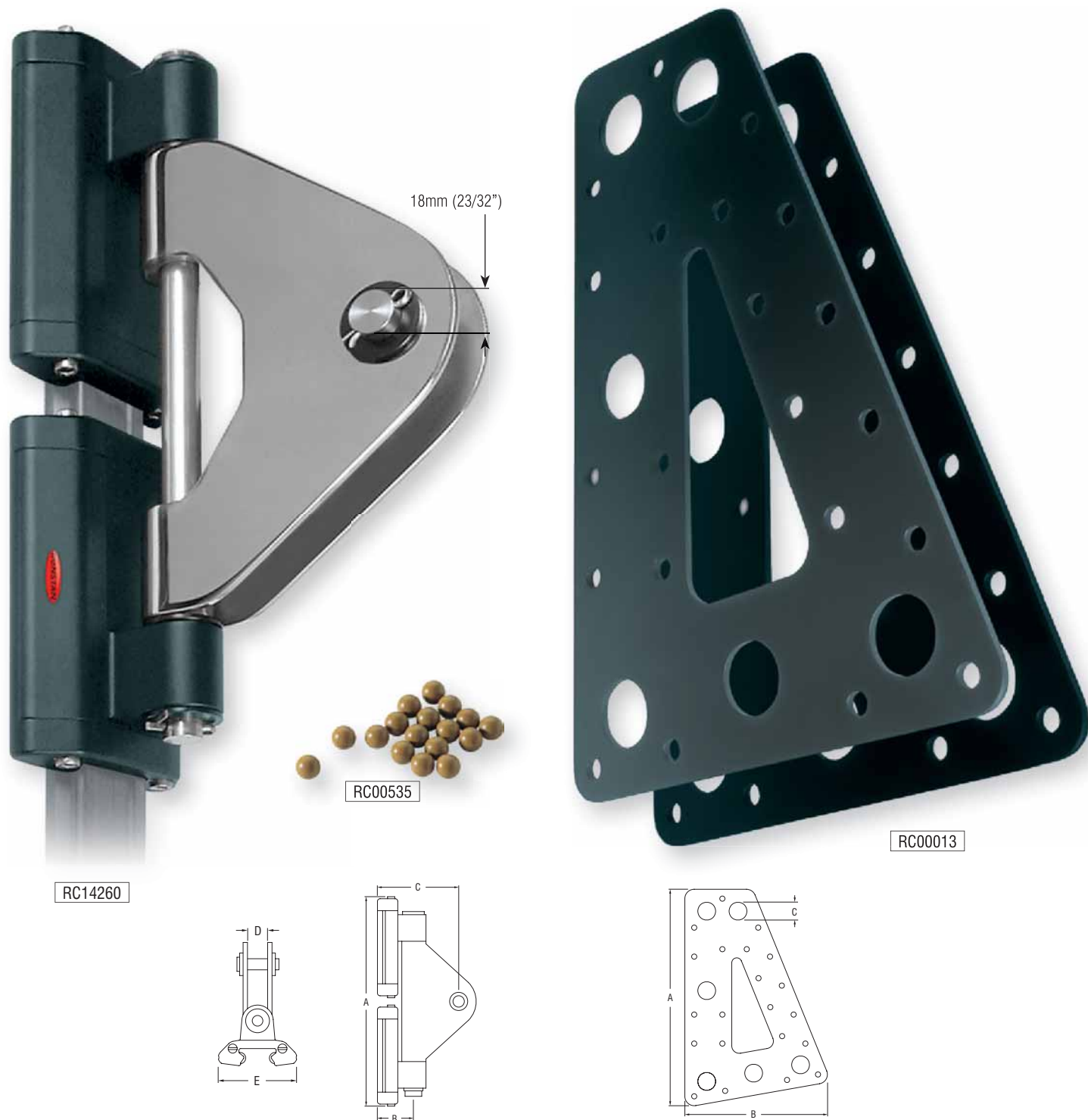
TRACK FASTENINGS – M8 (5/16") countersunk head fasteners at 100mm (3 15/16") centres

Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	WEIGHT g	A in.	B in.	C in.	WEIGHT oz
RC00354	Track mounting slug, including fasteners	4.4	12.0	20	10	3/16	15/32	25/32	0.4
RC00360	Track mounting slug, including fasteners	12.6	22.9	18	17	1/2	29/32	23/32	0.6
RC00361	Track mounting slug, including fasteners	18.5	29.7	20	26	23/32	1 5/32	25/32	0.9
RC1301-2.0*	Track, 2025mm (79 25/32") long, black. Requires 21 track mounting slugs	30.0	16.0	-	1689	1 3/16	5/8	-	59.6
RC1301-3.0*	Track, 3025mm (119 3/16") long, black. Requires 31 track mounting slugs	30.0	16.0	-	2530	1 3/16	5/8	-	89.2
RC1301-6.0*	Track, 6025mm (237 3/8") long, black. Requires 61 track mounting slugs	30.0	16.0	-	5020	1 3/16	5/8	-	177.1
RC1301J	Track joiner, Acetal	-	-	-	7	-	-	-	0.2
RC1302-2.0*	Luff groove track, 2025mm (79 25/32") long, black	30.0	19.5	54	2534	1 3/16	25/32	2 1/8	89.4
RC1302-3.0*	Luff groove track, 3025mm (119 3/16") long, black	30.0	19.5	54	3795	1 3/16	25/32	2 1/8	133.9
RC1302-6.0*	Luff groove track, 6025mm (237 3/8") long, black	30.0	19.5	54	7530	1 3/16	25/32	2 1/8	265.6
RC1302J	Luff groove track joiner	-	-	-	5	-	-	-	0.2
RC13080	End cap, plastic	37.0	37.0	-	27	1 7/16	1 7/16	-	1.0
RC13081	End stop, alloy	65.0	76.0	-	150	2 9/16	3	-	5.3
RC1309-0.4*	Gate track, 400mm (15 3/4") long, black	30.0	16.0	-	341	1 3/16	5/8	-	12.1
RC1309-0.4L*	Luff groove gate track, 400mm (15 3/4") long, black	30.0	19.5	54	512	1 3/16	25/32	2 1/8	18.1

* Silver track available - Order as RCxxxxxxS

Series 42 BB



- ✓ Custom headboard cars, headboards and batten cars can be designed and manufactured to suit more demanding applications or individual requirements.
- ✓ Monohulls to 29m (95ft) or sail area 168m² (1808ft²).
- ✓ Multihulls to 22m (72ft) or sail area 125m² (1345ft²).

- ✓ Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.
- ✓ Suits standard batten receptacles and links, see pages 164-165.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
RC00013	Headboard plates (pair)	346	227	28	-	-	971	13 5/8	8 15/16	1 3/32	-	-	34.2
RC14260	Headboard car	335	56	152	27	96	3100	13 3/16	2 7/32	6	1 1/16	3 25/32	109.3
Accessories													
RC00535	Ball bearing, Teflon®, 9.53mm (3/8") diam.	-	-	-	-	-	1	-	-	-	-	-	0.1

Series 42 BB



Brossard 60' Trimaran
Photo: www.team-ocean.com



RC14263



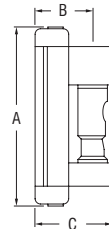
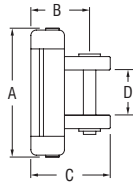
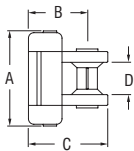
RC00023



RC14272



RC14269



- Monohulls to 29m (95ft) or sail area 168m² (1808ft²).
- Multihulls to 22m (72ft) or sail area 125m² (1345ft²).

- Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.
- Suits standard batten receptacles and links, see pages 164-165.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	WEIGHT g	A in.	B in.	C in.	D in.	WEIGHT oz
RC00023	Bush, suits 19mm (3/4") webbing	-	-	-	-	3	-	-	-	-	0.1
RC14263	Intermediate car	85	56	71	25	420	3 11/32	2 7/32	2 13/16	1	14.8
RC14269	Quick release batten car	165	56	71	-	1035	6 1/2	2 7/32	2 13/16	-	36.5
RC14272	Reef car	170	56	71	52	1135	6 11/32	2 7/32	2 13/16	2 1/16	40.0

Series 42 Track



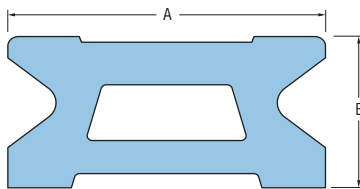
RC14280



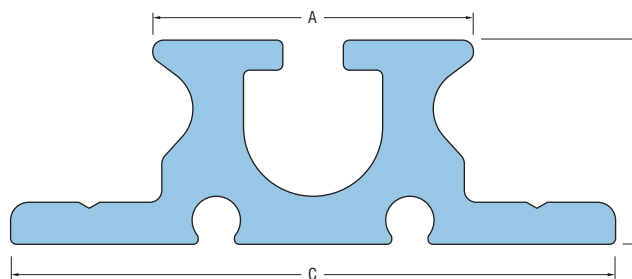
RC14281

RC1420-1.0
RC1420-2.0
RC1420-3.0
RC1420-4.0
RC1420-5.0
RC1420-6.0
RC1429-0.6

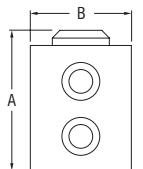
RC1422-2.0
RC1422-3.0
RC1422-6.0
RC1429-0.6L



RC1420 track profile



RC1422 track profile



TRACK FASTENINGS – M10 (3/8") countersunk head fasteners at 100mm (3 15/16") centres

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	WEIGHT g	A in.	B in.	C in.	WEIGHT oz
RC1420-1.0*	Track, 996mm (39 1/4") long, black	42	21	-	1430	1 21/32	13/16	-	50.5
RC1420-2.0*	Track, 1996mm (78 5/8") long, black	42	21	-	2860	1 21/32	13/16	-	100.9
RC1420-3.0*	Track, 2996mm (118") long, black	42	21	-	4290	1 21/32	13/16	-	151.3
RC1420-4.0*	Track, 3996mm (157 5/16") long, black	42	21	-	5720	1 21/32	13/16	-	202.1
RC1420-5.0*	Track, 4996mm (196 11/16") long, black	42	21	-	7150	1 21/32	13/16	-	252.7
RC1420-6.0*	Track, 5996mm (236 1/4") long, black	42	21	-	8580	1 21/32	13/16	-	302.6
RC1421J	Track joiner, Acetal	-	-	-	17	-	-	-	0.6
RC1422-2.0*	Luff groove track, 2025mm (79 25/32") long, black	42	27	80	4758	1 21/32	1 1/16	3 5/32	167.8
RC1422-3.0*	Luff groove track, 3025mm (119 3/16") long, black	42	27	80	7108	1 21/32	1 1/16	3 5/32	250.7
RC1422-6.0*	Luff groove track, 6025mm (237 3/8") long, black	42	27	80	14157	1 21/32	1 1/16	3 5/32	499.3
RC1422J	Luff groove track joiner	-	-	-	10	-	-	-	0.4
RC14280	End cap, plastic	50	49	-	20	2	2	-	0.7
RC14281	End stop, alloy	100	75	-	345	4	2 15/16	-	12.2
RC1429-0.6*	Gate track, 650mm (25 5/8") long, black	42	21	-	905	1 21/32	13/16	-	31.9
RC1429-0.6L*	Luff groove gate track, 650mm (25 5/8") long, black	42	27	80	1525	1 21/32	1 1/16	3 5/32	53.8

* Silver track available - Order as RCxxxxxxS

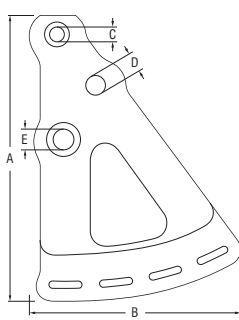
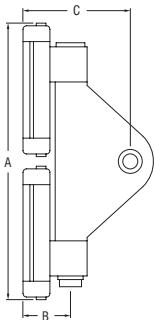
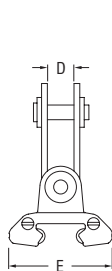
Series 55 BB



RC15560

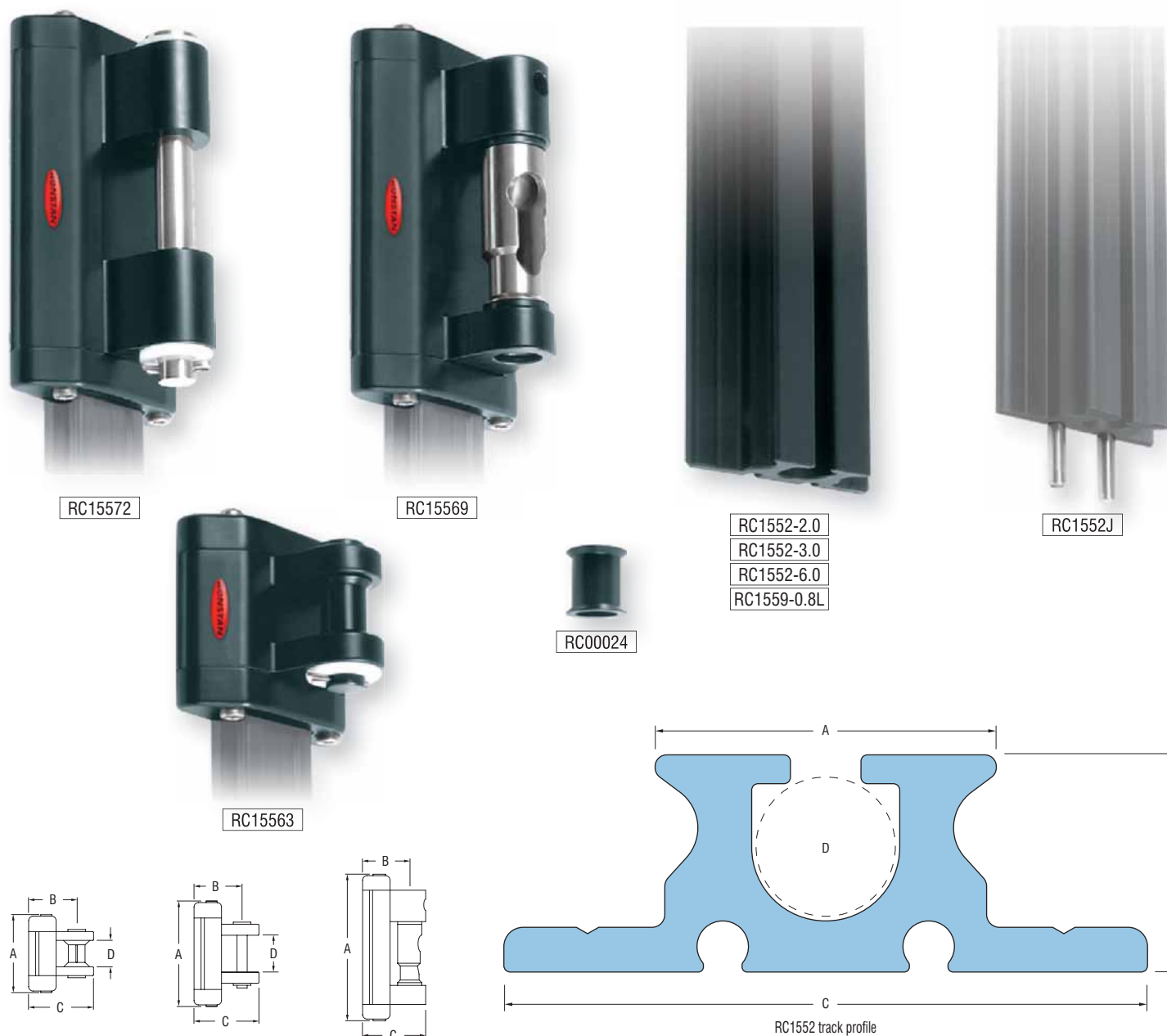
RC00014

RC00540



- Custom headboard cars, headboards and batten cars can be designed and manufactured to suit more demanding applications or individual requirements.
- Monohulls to 45m (148ft) or sail area 400m² (4306ft²).
- Multihulls to 33m (108ft) or sail area 300m² (3229ft²).
- Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
RC00014	Headboard plate	490	315	25.4	30.0	34.4	6880	19 5/16	12 7/16	1	1 5/32	1 5/16	242.7
RC15560	Headboard car	605	74	200	34	126	15160	23 13/16	2 15/16	7 7/8	1 5/16	5	534.8
Accessories													
RC00540	Ball bearing, Torlon®, 12.7mm (1/2") diam.	-	-	-	-	-	2	-	-	-	-	-	0.2



- Monohulls to 45m (148ft) or sail area 400m² (4306ft²).
- Multihulls to 33m (108ft) or sail area 300m² (3229ft²).
- Series 55 cars also compatible with standard Series 55 track. See page 123 for details.

- Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.
- Suits standard batten receptacles and links, see pages 164-165.

TRACK FASTENINGS – M10 (3/8") countersunk head fasteners at 100mm (3 15/16") centres

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	WEIGHT g	A in.	B in.	C in.	D in.	WEIGHT oz
RC00024	Bush, suits 25mm (1") webbing, suits RC15563	-	-	-	-	130	-	-	-	-	4.6
RC15563	Intermediate car	128	74	94	37	1151	5 1/6	2 15/16	3 11/16	1 7/16	40.6
RC15569	Quick release batten car	206	74	94	-	2342	8 1/8	2 15/16	3 11/16	-	82.6
RC15572	Reef car	216	74	94	60	3000	8 1/2	2 15/16	3 11/16	2 3/8	105.8
RC1552-2.0*	Luff groove track, 2000mm (78 3/4") long, black	55	37.5	108	24	8856	2 5/32	1 15/32	4 1/4	15/16	312.4
RC1552-3.0*	Luff groove track, 3000mm (118 1/8") long, black	55	37.5	108	24	13284	2 5/32	1 15/32	4 1/4	15/16	468.6
RC1552-6.0*	Luff groove track, 6000mm (236 3/16") long, black	55	37.5	108	24	26568	2 5/32	1 15/32	4 1/4	15/16	937.2
RC1552J	Luff groove track joiners, 60mm (2 3/8"), pair	-	-	-	-	49	-	-	-	-	1.7
RC1559-0.8L*	Luff groove gate track, 800mm (31 1/2") long, black	55	37.5	108	24	3542	2 5/32	1 15/32	4 1/4	15/16	124.9

* Silver track available - Order as RCxxxxxxS

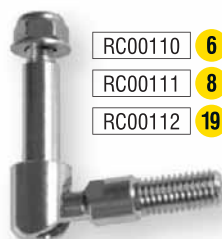
Links & Receptacles



RC00140 6 14 19 19 22 22
RC00150 6 8 14 19 19 22 22 26

RC00141 6 14
RC00142 19 19
RC00143 22 22
RC00151 6 14
RC00152 8 22 22
RC00153 19 19

RC00241 19 19
RC00251 19 19
RC00252 8
RC00253 22 22 26 26

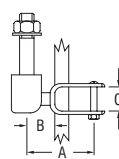
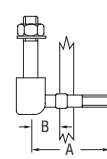
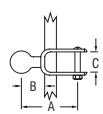
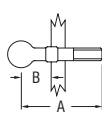
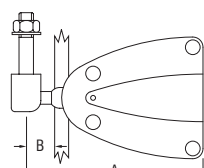
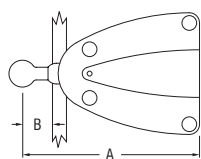


RC00210 19 19
RC00211 8
RC00212 22 22 26 26
RC00213 26 26 30 30
RC00214 42
RC00215 55

RC002R1 8
RC002R2 19 19

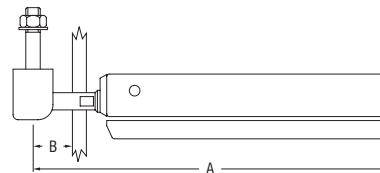
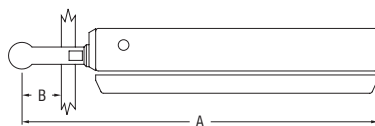
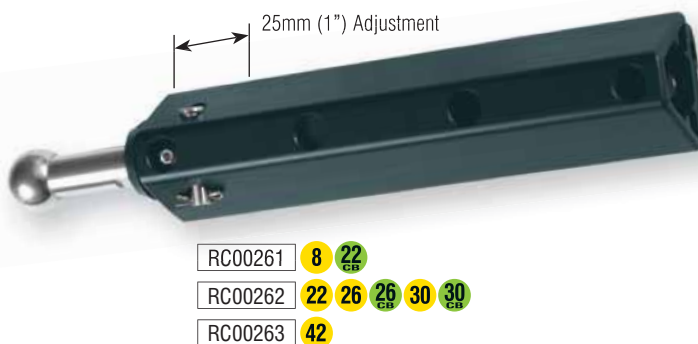
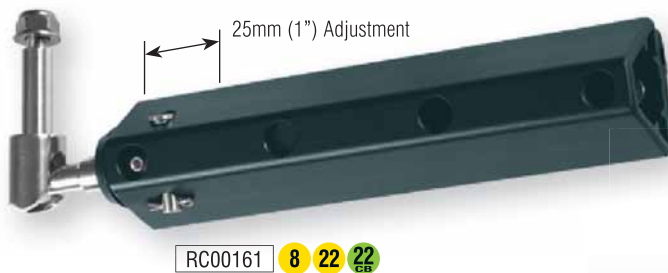
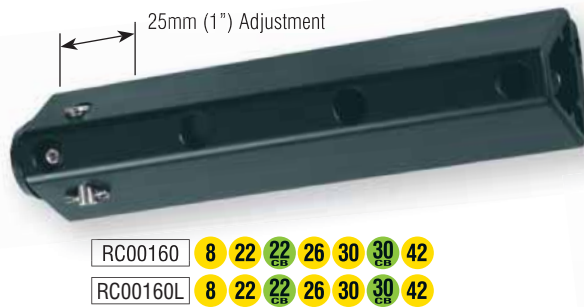
RC00110 6 14
RC00111 8 22 22
RC00112 19 19

RC001R1 6 14
RC001R2 8
RC001R3 19 19



PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	WEIGHT g	A in.	B in.	C in.	WEIGHT oz
RC00110	Batten receptacle link with M10 thread	48	19	-	55	1 29/32	3/4	-	1.9
RC00111	Batten receptacle link with M10 thread	45	19	-	75	1 25/32	3/4	-	2.6
RC00112	Batten receptacle link with M10 thread	48	19	-	71	1 29/32	3/4	-	2.5
RC00140	Batten receptacle, Nylon, suits 40mm (1 9/16") flat & 14mm (9/16") round battens	-	-	-	61	-	-	-	2.2
RC00141	Batten receptacle link with RC00140 receptacle	92	15	-	105	3 5/8	19/32	-	3.7
RC00142	Batten receptacle link with RC00140 receptacle	94	17	-	122	3 23/32	21/32	-	4.3
RC00143	Batten receptacle link with RC00140 receptacle	96	19	-	116	3 25/32	3/4	-	4.1
RC00150	Batten receptacle, Nylon, suits 50mm (1 31/32") flat & 18mm (23/32") round battens	-	-	-	115	-	-	-	4.1
RC00151	Batten receptacle link with RC00150 receptacle	110	15	-	170	4 11/32	19/32	-	6.0
RC00152	Batten receptacle link with RC00150 receptacle	116	19	-	190	4 9/16	3/4	-	6.7
RC00153	Batten receptacle link with RC00150 receptacle	114	17	-	188	4 1/2	21/32	-	6.6
RC001R1	Batten receptacle link to suit Rutgerson receptacle	34	15	15	50	1 11/32	19/32	19/32	1.8
RC001R2	Batten receptacle link to suit Rutgerson receptacle	37	19	15	69	1 15/32	3/4	19/32	2.4
RC001R3	Batten receptacle link to suit Rutgerson receptacle	34	15	15	66	1 11/32	19/32	19/32	2.3
RC00210	Quick release batten receptacle link with M10 thread. Ball 11.5mm (7/16") diameter	48	19	-	31	1 29/32	3/4	-	1.1
RC00211	Quick release batten receptacle link with M10 thread. Ball 13.0mm (1/2") diameter	45	19	-	36	1 25/32	3/4	-	1.3
RC00212	Quick release batten receptacle link with M10 thread. Ball 15.4mm (5/8") diameter	62	19	-	49	2 7/16	3/4	-	1.7
RC00213	Quick release batten receptacle link with M12 thread. Ball 15.4mm (5/8") diameter	62	19	-	59	2 7/16	3/4	-	2.1
RC00214	Quick release batten receptacle link with M14 thread. Ball 19.8mm (25/32") diameter	100	26	-	118	3 15/16	1 1/32	-	4.2
RC00215	Quick release batten receptacle link with M16 thread. Ball 22.8mm (29/32") diameter	101	33	-	180	4	1 5/16	-	6.3
RC00241	Quick release batten receptacle link with RC00140 receptacle. Ball 11.5mm (7/16") diameter	94	17	-	82	3 23/32	21/32	-	2.9
RC00251	Quick release batten receptacle link with RC00150 receptacle. Ball 11.5mm (7/16") diameter	114	17	-	147	4 1/2	21/32	-	5.2
RC00252	Quick release batten receptacle link with RC00150 receptacle. Ball 13.0mm (1/2") diameter	116	19	-	152	4 9/16	3/4	-	5.4
RC00253	Quick release batten receptacle link with RC00150 receptacle. Ball 15.4mm (5/8") diameter	116	19	-	165	4 9/16	3/4	-	5.8
RC002R1	Quick release batten receptacle link to suit Rutgerson receptacle. Ball 13.0mm (1/2") diameter	45	19	15	30	1 25/32	3/4	19/32	1.1
RC002R2	Quick release batten receptacle link to suit Rutgerson receptacle. Ball 11.5mm (7/16") diameter	34	15	15	25	1 11/32	19/32	19/32	0.9

Links & Receptacles



PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	WEIGHT g	A in.	B in.	C in.	WEIGHT oz
RC00160	Batten receptacle, alloy, adjustable, suits 20mm (25/32") round battens	-	-	-	261	-	-	-	9.2
RC00160L	Batten leech receptacle, alloy, adjustable, suits 20mm (25/32") round battens	-	-	-	285	-	-	-	10.1
RC00161	Batten receptacle link with RC00160 receptacle	206	19	-	375	8 1/8	3/4	-	13.2
RC00170	Batten receptacle, alloy, suits 26mm (1 1/32") round battens	-	-	-	543	-	-	-	19.2
RC00170L	Batten leech receptacle, alloy, adjustable, suits 26mm (1 1/32") round battens	-	-	-	589	-	-	-	20.8
RC00261	Quick release batten receptacle link with RC00160 receptacle. Ball 13.0mm (1/2") diameter	206	19	-	320	8 1/8	3/4	-	11.3
RC00262	Quick release batten receptacle link with RC00160 receptacle. Ball 15.4mm (5/8") diameter	206	19	-	332	8 1/8	3/4	-	11.7
RC00263	Quick release batten receptacle link with RC00160 receptacle. Ball 19.8mm (25/32") diameter	209	26	-	358	8 1/4	1 1/32	-	12.6
RC00271	Quick release batten receptacle link with RC00170 receptacle. Ball 15.4mm (5/8") diameter	252	19	-	638	9 15/16	3/4	-	22.5
RC00272	Quick release batten receptacle link with RC00170 receptacle. Ball 19.8mm (25/32") diameter	259	26	-	667	10 7/32	1 1/32	-	23.5

Sailmaker Hardware



- ✓ Batten pocket protectors and vernier batten adjusters include screws where shown.
- ✓ Larger batten pocket protectors and adjusters are slotted at luff end to allow webbing attachment to slides, slugs or cars.

- ✓ Vernier batten adjusters allow fine tuning of batten compression. Low gearing of the vernier screw permits fingertip adjustment, and precise settings are easily repeated with the aid of the graduated window.

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
PNP25A	Leech line cleat, glass reinforced Nylon, suits up to 4mm (5/32") diameter line, 70mm (2 3/4") long, including backing plate	10	0.4
PNP83	Batten pocket protector, suits battens up to 50mm (1 31/32") x 6mm (1/4")	17	0.6
PNP87	Batten pocket protector, suits battens up to 16mm (5/8") x 4mm (5/32")	9	0.3
PNP105	Batten pocket protector, suits batten ends up to 40mm (1 9/16") x 5mm (3/16")	17	0.6
PNP125	Clew ring, Code 0, 16mm (5/8")	11	0.4
PNP143	Batten pocket protector, heavy duty glass reinforced Nylon, accepts battens up to 34mm (1 5/16") x 7mm (9/32")	44	1.5
PNP145	Batten pocket protector, accepts battens up to 46mm (1 13/16") x 8mm (5/16")	34	1.2
PNP146	Batten pocket protector, suits battens up to 48mm (1 7/8") x 7.5mm (9/32")	28	1.0
PNP147	Batten pocket protector, suits battens up to 50mm (1 31/32") x 5mm (3/16")	56	2.0
PNP148	Batten pocket protector, heavy duty glass reinforced Nylon, accepts battens up to 50mm (1 31/32") x 8mm (5/16")	90	3.2
PNP155	Vernier batten adjuster, suits battens up to 22mm (7/8") x 10mm (13/32"), or 13mm (1/2") diameter	148	5.2
PNP162	Vernier batten adjuster to suit battens up to 30mm (1 1/8") x 10mm (3/8"), suits M10 thread batten car link	182	6.4
PNP163	Batten luff box, non adjustable, suits batten up to 43mm (1 11/16") x 10mm (3/8"), suits M10 thread batten car link	132	4.6
PNP177	Leech line cleat, suits up to 3.5mm (1/8") diameter line, 2 holes	6	0.2
PNP178	Leech line cleat, suits up to 5mm (3/16") diameter line, 3 holes	14	0.5
PNP276	Heavy duty batten adjuster, suits batten up to 30mm (1 1/8") x 13mm (1/2"), suits M10 thread batten car link	254	8.9
PNP286	Leech batten adjuster, suits batten up to 10.5mm (3/8") x 7mm (1/4")	14	0.5
PNP287	Leech batten adjuster, suits batten up 16mm (5/8") x 7mm (1/4")	24	0.8
PNP288	Leech batten adjuster, suits batten up 16mm (5/8") x 8mm (5/16")	32	1.1
PNP289	Leech batten adjuster, suits batten up 20mm (3/4") x 10mm (3/8")	68	2.4
PNP306	Batten pocket end, suits 8-10mm (5/16"-3/8") rod	66	2.3
PNP307	Batten pocket end, suits 12-14mm (1/2"-9/16") rod	104	3.7
PNP343	Batten pocket protector, accepts battens up to 46mm (1 13/16") x 8mm (5/16")	64	2.2
PNP375	Head board plates, Nylon, 90mm x 75mm (3 1/2" x 3"), 5.4mm (3/16") & 16.4mm (5/8") holes	10	0.4
PNP376	Head board plates, Nylon, 120mm x 100mm (4 3/4" x 4"), 5.4mm (3/16") & 16.4mm (5/8") holes	26	0.9
PNP377	Head board plates, Nylon, 115mm x 115mm (4 1/2" x 4 1/2"), & 19.0mm (3/4") holes	26	0.9



✓ PNP149 and PNP150 incorporate compression bearings for improved performance when used in conjunction with full battens.

⚙️ Impact resistant, UV stabilised Nylon.

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Sail Slides			
PNP17T	Sail slide, 12mm (15/32") diameter x 38mm (1 1/2") long	4	0.1
PNP18T	Sail slide, 10mm (13/32") diameter x 38mm (1 1/2") long	4	0.1
PNP27T	Sail slide, internal track, 16mm (5/8") wide x 32mm (1 1/4") long	4	0.1
PNP28T	Sail slide, internal track, 22mm (7/8") wide x 42mm (1 21/32") long	8	0.3
PNP29T	Sail slide, 9mm (11/32") diameter x 32mm (1 1/4") long	2	0.1
PNP102	Compression sail slide, stainless steel attachment loop, 8.4mm (11/32") diameter x 45mm (1 25/32") long	8	0.3
PNP103	Compression sail slide, stainless steel attachment loop, 9.8mm (3/8") diameter x 46mm (1 13/16") long	10	0.4
PNP104	Compression sail slide, stainless steel attachment loop, 11.6mm (15/32") diameter x 49mm (1 15/16") long	11	0.4
PNP149	Sail slide, heavy duty glass filled Nylon, 22mm (7/8") wide x 63mm (2 15/32") long	25	0.9
PNP150	Sail slide, heavy duty glass filled Nylon, 11mm (7/16") diameter x 70mm (2 3/4") long	21	0.7
PNP203	Sail slide, internal track, heavy duty with stainless steel insert, 22mm (7/8") wide x 60mm (2 3/8") long	28	1.0
PNP204	Compression sail slide, heavy duty with stainless steel insert, 9mm (11/32") diameter x 60mm (2 3/8") long	43	1.5
PNP272	Sail slide, 11mm (7/16") diameter x 31mm (1 1/4") long	6	0.2
PNP273	Sail slide, 13mm (1/2") diameter x 31mm (1 1/4") long	8	0.3
PNP274	Sail slide, 15mm (19/32") diameter x 40mm (1 1/2") long	12	0.4
PNP275	Sail slide, 19mm (3/4") diameter x 30mm (1 3/16") long	10	0.4
PNP280	Sail slide, internal track 22mm (7/8") wide, M10 stud	98	3.5
PNP280A	Sail slide, internal track 22mm (7/8") wide, stainless steel pin	42	1.5
PNP290	Lubricated sail slide, 7.5mm (9/32") diameter x 45mm (1 3/4") long	12	0.4
PNP291	Lubricated sail slide, 9.2mm (3/8") diameter x 45mm (1 3/4") long	12	0.4
PNP292	Lubricated sail slide, 12mm (9/32") diameter x 45mm (1 3/4") long	16	0.5
PNP293	Lubricated sail slide, internal track 16 mm (5/8") wide	12	0.4
PNP294	Lubricated sail slide, internal track 19 mm (3/4") wide	14	0.5
PNP295	Lubricated sail slide, internal track 22 mm (7/8") wide	14	0.5
PNP296	Lubricated sail slide, 15mm (19/32") diameter x 40mm (1 9/16") long	14	0.5
PNP297	Sail slide, 7.5mm (9/32") diameter x 27mm (1 1/16") long	4	0.1
PNP298	Sail slide, 9mm (11/32") diameter x 27mm (1 1/16") long	6	0.2
PNP299	Sail slide, 11.5mm (7/16") diameter x 27mm (1 1/16") long	6	0.2
PNP302	Sail slide, 8mm (5/16") diameter x 45mm (1 3/4") long, stainless steel / nylon	13	0.5

Sailmaker Hardware



PNP14



PNP14B



PNP88A

PNP88B

PNP88C



PNP63



PNP81A

PNP81B

PNP65



PNP107

PNP108



PNP106

PNP64

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Hanks			
PNP14	Twist on hank, suits 3mm (1/8") diameter wire, 31mm (1 1/4") long	5	0.2
PNP14B	Twist on hank, suits 5.5mm (3/16") diameter wire, 37mm (1 1/2") long	7	0.2
PNP88A	Piston hank, suits 6.4mm (1/4") diameter wire, 50mm (1 31/32") long	8	0.3
PNP88B	Piston hank, suits 8.0mm (5/16") diameter wire, 72mm (2 27/32") long	15	0.5
PNP88C	Piston hank, suits 11.2mm (7/16") diameter wire, 75mm (2 31/32") long	22	0.8
Sail Shackles			
PNP63	Sail shackle, screw-on, 12mm (1/2") deep x 8mm (5/16") internal clearance, suits PNP18, PNP27 & PNP29	2	0.1
PNP64	Sail shackle, snap-on, 16mm (5/8") deep x 11mm (7/16") internal clearance	4	0.1
PNP65	Sail shackle, snap-on, 29mm (1 1/8") deep x 9mm (3/8") internal clearance	6	0.2
PNP81A	Sail shackle, snap-on, 11mm (7/16") deep x 8mm (5/16") internal clearance, suits PNP18, PNP27 & PNP29	2	0.1
PNP81B	Sail shackle, snap-on, 12.7mm (1/2") deep x 8mm (5/16") internal clearance, suits PNP17, PNP18 & PNP28	4	0.1
PNP106	Sail shackle, screw-on, 16mm (5/8") deep x 10mm (3/8") internal clearance	8	0.3
PNP107	Sail shackle, screw-on, 28mm (1 1/8") deep x 9mm (3/8") internal clearance	6	0.2
PNP108	Sail shackle, screw-on, 29mm (1 1/8") deep x 13mm (1/2") internal clearance	8	0.3



Q-Cat 9GT
Photo: Marco Collette / www.q-cat.nl

Hooks & Tube Clips



PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Tube Clips			
PNP43A	Suits 44mm (1 3/4") dia. Tube. Requires 2 x 4mm (5/35") fasteners	15	0.6
PNP43B	Suits 38mm (1 1/2") dia. Tube. Requires 2 x 4mm (5/35") fasteners	10	0.4
PNP43C	Suits 32mm (1 1/4") dia. tube. Requires 2 x 4mm (5/32") fasteners	7	0.3
PNP43D	Suits 25mm (1") dia. tube. Requires 2 x 4mm (5/32") fasteners	4	0.1
PNP43E	Suits 16mm (5/8") dia. tube. In line fastening. Requires 2 x 3mm (1/8") fasteners	4	0.1
PNP43F	Suits 19mm (3/4") dia. tube. In line fastening. Requires 2 x 3mm (1/8") fasteners	4	0.1
Snap Hooks			
PNP13A	Snap hook, narrow. 10mm (3/8") eye clearance. 8mm (5/16") hook clearance	5	0.2
PNP13B	Snap hook, narrow. 8mm (5/16") eye clearance. 5mm (3/16") hook clearance	3	0.1
PNP13C	Back to back snap hook. 10mm (3/8") hook clearance	8	0.3
PNP16	Flag/sister clip. 13mm (1/2") eye clearance	5	0.2
PNP16A	Flag/sister clip. 8mm (5/16") eye clearance	6	0.2
PNP16B	Flag/sister clip. 4.7mm (3/16") eye clearance	2	0.1
PNP22	Shock cord hook. Suits 6mm (1/4") diam. shock cord. 7mm (9/32") hook clearance	8	0.3
PNP22A	Shock cord hook. Suits 5mm (3/16") diam. shock cord. 5mm (3/16") hook clearance	4	0.1
PNP56	Shock cord hook. Suits 7mm (1/4") diam. shock cord. 8mm (5/16") hook clearance	12	0.4
PNP56B	Shock cord hook. Suits 5mm (3/16") diam. shock cord. 10mm (3/8") hook clearance	6	0.2
PNP387	Shock cord hook. Suits 3-5mm (1/8"- 3/16") diam. shock cord. 6mm (1/4") hook clearance	3	0.1
PNP388	Shock cord hook. Suits 4-6mm (5/32"-1/4") diam. shock cord. 9mm (11/32") hook clearance	8	0.3
PNP389	Shock cord hook. Suits 6-8mm (1/4"- 5/16") diam. shock cord. 10mm (3/8") hook clearance	10	0.3
Fixed Hooks			
PNP3	5mm (3/16") hook clearance. 52mm (2") long. Requires 2 x 4mm (5/32") fasteners	3	0.1
PNP5	8mm (5/16") hook clearance. 75mm (3") long. Requires 2 x 4mm (5/32") fasteners	8	0.3
PNP20	Tubular jam cleat. Suits up to 4mm (5/32") diam. line. Suits 2 x 5mm (3/16") fasteners	4	0.1
PNP45	11mm (7/16") hook clearance. Requires 2 x 4mm (5/32") fasteners	3	0.1
PNP84	5mm (3/16") hook clearance. Requires 2 x 5mm (3/16") fasteners	5	0.2
PNP38	Shock cord hook. Suits 5mm (3/16") diam. shock cord. Knots are concealed. Requires 2 x 4mm (5/32") fasteners	8	0.3
RF6010	Utility line hangers (2 pack). Suits 5mm (3/16") diam. shock cord. Requires 2 x 5mm (3/16") fasteners	7	0.2

Rings, Thimbles & Fairleads



PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Rings			
PNP11	Nylon ring, 32mm (1 1/4") ID x 6.4mm (1/4") material diam.	4	0.1
PNP52C	Nylon ring, 19mm (3/4") ID x 4.8mm (3/16") material diam.	2	0.1
PNP53E	Nylon ring, 44mm (1 3/4") ID x 9.5mm (3/8") material diam.	13	0.5
PNP265	Nylon ring, 22mm (7/8") ID x 7.6mm (5/16") material diam.	5	0.2
PNP266	Nylon ring, 28mm (1 1/8") ID x 9.1mm (23/64") material diam.	10	0.3
Thimbles			
PNP78	Suits 8mm (5/16") diam. rope. 13mm (1/2") internal clearance	6	0.2
PNP78A	Suits 10mm (3/8") diam. rope. 15mm (5/8") internal clearance	5	0.2
PNP78B	Suits 12mm (1/2") diam. rope. 22mm (7/8") internal clearance	10	0.4
PNP78C	Suits 16mm (5/8") diam. rope. 30mm (1 3/16") internal clearance	13	0.5
Fairleads			
PNP1	19mm (3/4") ID, white. Requires 2 x 3mm (1/8") fasteners	27	1.0
PNP33	11mm (7/16") ID, white. Requires 2 x 4mm (5/32") fasteners	4	0.1
PNP33BLK	11mm (7/16") ID, black. Requires 2 x 4mm (5/32") fasteners	4	0.1
PNP48	5mm (3/16") clearance under strap, black. Requires 2 x 3mm (1/8") fasteners	4	0.1
PNP49	10mm (3/8") clearance under strap, white. Requires 2 x 3mm (1/8") fasteners	16	0.6
PNP120	6.5mm (1/4") ID, stainless steel lined, black. Requires 2 x 3mm (1/8") fasteners	8	0.3
PNP120A	6mm (3/16") ID, white. Requires 2 x 3mm (1/8") fasteners	2	0.1
PNP121	8mm (5/16") ID, stainless steel lined, black. Requires 2 x 4mm (5/32") fasteners	8	0.3
PNP121A	8mm (5/16") ID, white. Requires 2 x 4mm (5/32") fasteners	4	0.1
PNP122	11.5mm (7/16") ID, stainless steel lined, black. Requires 2 x 5mm (3/16") fasteners	10	0.4
PNP122A	10mm (3/8") ID, white. Requires 2 x 5mm (3/16") fasteners	6	0.2
PNP123	13.5mm (1/2") ID, stainless steel lined, black. Requires 2 x 5mm (3/16") fasteners	16	0.5
PNP123A	11.5mm (7/16") ID, white. Requires 2 x 5mm (3/16") fasteners	9	0.3
PNP124	16mm (5/8") ID, stainless steel lined, black. Requires 2 x 5mm (3/16") fasteners	24	0.8
PNP124A	15mm (9/16") ID, white. Requires 2 x 5mm (3/16") fasteners	12	0.4
RF9	7mm (9/32") ID, black. Requires 2 x 4mm (5/32") fasteners	5	0.2
RF59	14mm (9/16") ID, stainless steel lined, black. Requires 2 x 5mm (3/16") fasteners	17	0.6
RF374	12mm x 40mm (1/2" x 1 1/2") ID, black. Requires 1 x 5mm (3/16") & 1 x 6mm (1/4") fasteners	20	0.7
RF2358	16mm (5/8") ID, stainless steel lined, black. Requires 2 x 5mm (3/16") fasteners	26	0.9



- ✓ Fairleads are a simple and economical means of containing, deflecting or correcting the lead angle of control lines.
- ✓ Manufactured from Nylon, styles and sizes to suit different rope diameters.
- ✓ Fairleads with stainless steel liners provide greater abrasion resistance.

- ✓ Nylon bushes provide chafe protection where lines pass through decks, bulkheads or spars. They are available to suit various line diameters and deck thicknesses.
- ✓ Low profile versions without mounting screws may be glued or pressed into place.
- ✓ Impact resistant, UV stabilised Nylon.

PRODUCT No.		A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
Bushes													
PNP181	Plastic bush, glue-in, stainless steel lined	4.0	14.0	18.0	13.0	-	5	5/32	9/16	11/16	1/2	-	0.2
PNP186	Plastic bush, screw mount, stainless steel lined	7.0	5.0	28.0	16.0	3.0	5	9/32	3/16	1 3/32	5/8	1/8	0.2
PNP187	Plastic bush, screw mount, stainless steel lined	7.0	14.0	28.0	16.0	3.0	8	9/32	9/16	1 3/32	5/8	1/8	0.3
PNP182	Plastic bush, glue-in, stainless steel lined	7.0	5.0	22.0	16.0	-	4	9/32	3/16	7/8	5/8	-	0.1
PNP183	Plastic bush, glue-in, stainless steel lined	7.0	14.0	22.0	16.0	-	7	9/32	9/16	7/8	5/8	-	0.2
PNP39A	Plastic bush, glue-in	10.0	13.0	22.0	16.0	-	3	3/8	1/2	7/8	5/8	-	0.1
PNP188	Plastic bush, screw mount, stainless steel lined	11.0	5.0	31.0	19.0	3.0	5	7/16	3/16	1 7/32	3/4	1/8	0.2
PNP189	Plastic bush, screw mount, stainless steel lined	11.0	14.0	31.0	19.0	3.0	10	7/16	9/16	1 7/32	3/4	1/8	0.4
PNP255	Plastic bush, glue-in, stainless steel lined	11.0	5.0	25.0	20.0	-	3	7/16	3/16	1	25/32	-	0.1
PNP256	Plastic bush, glue-in, stainless steel lined	11.0	14.0	25.0	20.0	-	7	7/16	9/16	1	25/32	-	0.2
PNP39B	Plastic bush, glue-in	12.5	13.0	31.0	25.0	-	4	1/2	1/2	1 1/4	1	-	0.1
PNP257	Plastic bush, screw mount, stainless steel lined	13.0	14.0	36.0	26.0	4.0	16	1/2	9/16	1 13/32	1	5/32	0.6
PNP258	Plastic bush, screw mount, stainless steel lined	13.0	5.0	36.0	26.0	4.0	10	1/2	3/16	1 13/32	1	5/32	0.4
PNP259	Plastic bush, glue-in, stainless steel lined	13.0	5.0	28.0	23.0	-	7	1/2	3/16	1 3/32	25/32	-	0.2
PNP260	Plastic bush, glue-in, stainless steel lined	13.0	14.0	28.0	23.0	-	13	1/2	9/16	1 3/32	25/32	-	0.5
PNP261	Plastic bush, screw mount, stainless steel lined	15.0	5.0	39.0	28.0	4.0	11	9/16	3/16	1 17/32	1 3/32	5/32	0.4
PNP262	Plastic bush, screw mount, stainless steel lined	15.0	14.0	39.0	28.0	4.0	20	9/16	9/16	1 17/32	1 3/32	5/32	0.7

Inspection Hatches & Drain Plugs



- ✓ Nylon drain plug assemblies and inspection hatches are available in a range of sizes and types for different applications.
- ✓ Drain plugs are fitted with watertight seals and some models have retaining legs to prevent accidental loss. Plugs are available separately as spares.
- ✓ Inspection ports provide access to areas under decks or behind bulkheads. Watertight integrity is assured by threaded closure and an O-ring seal.

- ✓ The housing flange on PNP245, PNP245BLK, PNP246, PNP246BLK is reduced on the underside to allow the plug to be fitted as low in the hull as possible.
- ✓ The PNP390 features an overlapping, threaded lid for a smooth, modern style.
- ✓ PNP96, PNP97 and PNP390 are manufactured with dissimilar materials for the lid and deck ring to eliminate binding.
- ✓ Impact resistant, UV stabilised Nylon.

PRODUCT No.	DESCRIPTION	REPLACEMENT PLUG	HOLE DIAM. mm	WEIGHT g	HOLE DIAM. in.	WEIGHT oz
Drain Plugs						
PNP241	Drain plug & housing, Nylon, white	PNP241A	19	10	3/4	0.4
PNP241BLK	Drain plug & housing, Nylon, black	PNP241ABLK	19	10	3/4	0.4
PNP242	Drain plug & housing, Nylon, white	PNP242A	25	10	1	0.3
PNP242BLK	Drain plug & housing, Nylon, black	PNP242ABLK	25	10	1	0.3
PNP243	Drain plug & housing, Nylon, white	PNP243A	30	16	1 3/16	0.6
PNP243BLK	Drain plug & housing, Nylon, black	PNP243ABLK	30	16	1 3/16	0.6
PNP245	Drain plug & housing, Nylon, white	PNP245A	40	27	1 7/16	0.9
PNP245BLK	Drain plug & housing, Nylon, black	PNP245ABLK	40	27	1 7/16	0.9
PNP246	Drain plug & housing, Nylon, white	PNP246A	50	38	2	1.3
PNP246BLK	Drain plug & housing, Nylon, black	PNP246ABLK	50	38	2	1.3
RF294	Drain plug & housing, coarse thread, Nylon, black	RF294A	24	10	15/16	0.4
RF734	Drain plug & housing, low profile, chromed brass	RF738	24	70	15/16	2.5
RF737	Drain plug & housing, chromed brass body, Nylon plug	RF738	24	45	15/16	1.6

PRODUCT No.	DESCRIPTION	REPLACEMENT O-RING	OPENING DIAM. mm	OUTSIDE DIAM. mm	CUTOUT SIZE mm	WEIGHT g	OPENING DIAM. in.	OUTSIDE DIAM. in.	CUTOUT SIZE in.	WEIGHT oz
Inspection Hatches										
PNP35	Inspection hatch, white	-	100	130	112	66	4	5 1/8	4 1/2	2.3
PNP35BLK	Inspection hatch, black	-	100	130	112	66	4	5 1/8	4 1/2	2.3
PNP96	Inspection hatch	PNP96B	102	144	112	94	4	5 5/8	4 1/2	3.3
PNP97	Inspection hatch	PNP97B	129	170	139	115	5 1/8	6 11/16	5 1/2	4.1
PNP390	Inspection hatch	-	150	192	163	166	5 7/8	7 9/16	6 7/16	5.8
PNP390C	Storage bag, to suit PNP390	-	-	-	-	64	-	-	-	2.2
PNP393	Inspection hatch, black	-	200	258	218	350	8	10 5/32	8 9/16	12.3
PNP393C	Storage bag, to suit PNP393	-	-	-	-	54	-	-	-	1.9
RF530	Inspection hatch	RF531	106	148	122	110	4 3/16	5 3/16	4 13/16	3.9



PNP315



PNP310



PNP310G



PNP133C



PNP131



PNP132B



PNP132A



PNP132C



PNP132E

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
PNP131	Non-return valve. Suits 12mm (1/2"), 20mm (3/4") & 25mm (1") ID tube	41	1.4
PNP132A	Skin fitting. Suits 16mm (5/8") ID tube. 20mm (3/4") max. hull thickness	20	0.7
PNP132B	Skin fitting. Suits 20mm (3/4") ID tube. 38mm (1 1/2") max. hull thickness	40	1.4
PNP132C	Skin fitting. Suits 25mm (1") ID tube. 38mm (1 1/2") max. hull thickness	55	1.9
PNP132E	Skin fitting. Suits 38mm (1 1/2") ID tube. 38mm (1 1/2") max. hull thickness	138	4.8
PNP133C	Skin fitting, 90 degree. Suits 25mm (1") ID tube	54	1.9
PNP310	Sink waste. Suits 25mm (1") ID tube, white	25	0.9
PNP310G	Sink waste. Suits 25mm (1") ID tube, grey	25	0.9
PNP315	Sink waste, 90 degree. Suits 25mm (1") ID tube	50	1.7

Handles & Cupboard Hardware

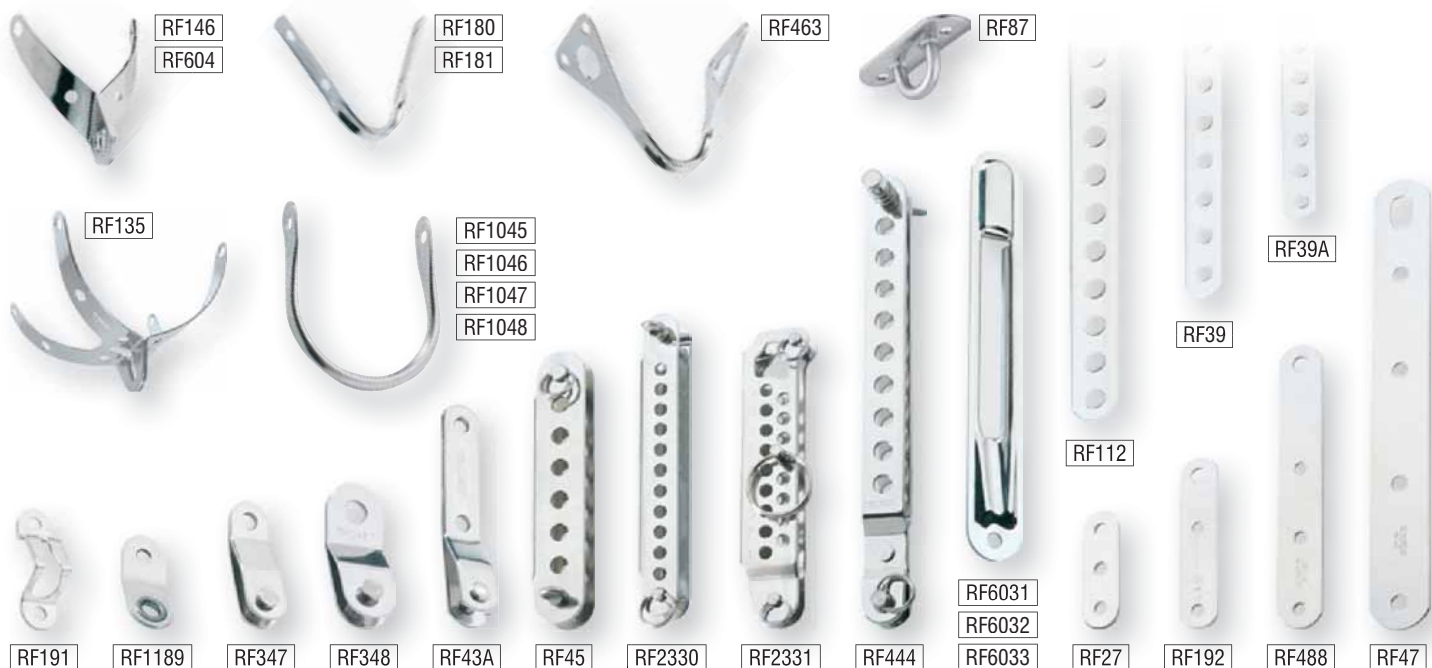


Photo: Myriam Thyès / www.thyes.com



PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Handles			
PNP206	Transom step/handle. Glass reinforced Nylon. 125mm (5") wide tread. Requires 4 x 5mm (3/16") fasteners	140	4.8
PNP172	Handle, pivoting. 87mm (3 1/2") wide internal grip. 71mm x 81mm (2 3/4" x 3 3/16") base. Fastener cover caps included. Requires 5 x 5mm (3/16") fasteners	70	2.5
PNP207	Handle. 150mm (6") wide. Requires 2 x 6mm (1/4") fasteners	52	1.8
Hinges & Latches			
PNP89	Cupboard latch. Requires 3 x 4mm (5/32") fasteners	8	0.3
PNP68C	Hinge 100mm x 53mm (4" x 2 1/8"). Stainless steel pin . Requires 6 x 4mm (3/16") fasteners	37	1.3

Stay Adjusters, Hounds & Tangs



PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Mast Tangs & Hounds			
RF43A	Tang. 5mm (3/16") diam. clevis pin. 76mm (3") long. 2 x 5mm (3/16") diameter fixing holes	15	0.5
RF146	Mast hound to suit mast diameters between 76mm-115mm (3"-4 1/2")	110	3.9
RF347	Tang. 6.4mm (1/4") diam. clevis pin. 51mm (2") long. 1 x 6.4mm (1/4") diameter fixing hole	20	0.7
RF348	Tang. 8mm (5/16") diam. clevis pin. 64mm (2 1/2") long. 1 x 9.5mm (3/8") diameter fixing hole	40	1.4
RF604	Mast hound to suit mast diameters between 51mm-64mm (2"-2 1/2")	30	1.1
RF1189	Tang. 6.4mm (1/4") ferrule eye. 38mm (1 1/2") long. 1 x 5mm (3/16") diameter fixing hole	10	0.4
Boom Hangers			
RF87	Boom hanger. 10mm (3/8") internal clearance. 5mm (3/16") diam. loop. 2 x 5mm (3/16") diam. fixing holes	15	0.5
RF135	Four point hanger. Slotted attachment hole allows shackle body to be passed through. 8 x 5mm (3/16") diam. fixing holes	35	1.2
RF180	Strip hanger. 64mm (2 1/2") long. 4 x 5mm (3/16") diam. fixing holes	20	0.7
RF181	Strip hanger. 55mm (2 1/4") long. 4 x 5mm (3/16") diam. fixing holes	20	0.7
RF463	Boom hanger 64mm (2 1/2") long. 4 x 5mm (3/16") diam. fixing holes	25	0.9
RF1045	Boom hanger. 80mm (3 1/8") long. 65mm (2 1/2") wide. Material diam. 6.4mm (1/4"). 2 x 6.6mm (1/4") diam. fixing holes	45	1.6
RF1046	Boom hanger. 100mm (4") long. 80mm (3 1/8") wide. Material diam. 6.4mm (1/4"). 2 x 6.6mm (1/4") diam. fixing holes	54	1.9
RF1047	Boom hanger. 125mm (5") long. 80mm (3 1/8") wide. Material diam. 7.9mm (5/16"). 2 x 8.1mm (5/16") diam. fixing holes	107	3.8
RF1048	Boom hanger. 150mm (6") long. 115mm (4 1/2") wide. Material diam. 9.5mm (3/8"). 2 x 10mm (3/8") diam. fixing holes	190	6.7
Exit Plates & Halyard Lock			
RF191	Halyard lock for locking halyards off on a Talurit / Nico press swage	5	0.2
RF6031	Formed Stainless Steel, slot width 10mm (3/8"), 159 x 21mm (6 1/4" x 13/16") overall	45	1.6
RF6032	Formed Stainless Steel, slot width 12mm (1/2"), 203 x 26mm (8" x 1") overall	70	2.5
RF6033	Formed Stainless Steel, slot width 17mm (11/16"), 210 x 28mm (8 1/4" x 1 1/8") overall	73	2.5

PRODUCT No.	LENGTH OVERALL mm	RANGE OF ADJUSTMENT mm	PIN DIAM. mm	INCREMENTS mm	WEIGHT g	LENGTH OVERALL in.	RANGE OF ADJUSTMENT in.	PIN DIAM. in.	INCREMENTS in.	WEIGHT oz	NO. OF ADJUSTMENTS settings
Stay Adjusters											
RF45	108	75	6.4	12.5	60	4 1/4	3	1/4	1/2	2.1	7
RF444	174	115	6.4	12.5	90	6 7/8	4 1/2	1/4	1/2	3.2	10
RF2330	117	87	4.8	8.0	40	4 5/8	3 7/16	3/16	5/16	1.4	12
RF2331	115	64	4.8	4.0	65	4 1/2	2 1/2	3/16	5/32	2.3	17

PRODUCT No.	LENGTH OVERALL mm	WIDTH OVER- ALL mm	MOUNTING HOLE DIAM. mm	WEIGHT g	LENGTH OVERALL in.	WIDTH OVER- ALL in.	MOUNTING HOLE DIAM. in.	WEIGHT oz
Chain Plates & Perforated Strip								
RF39	923	15.9	6.6	144	36 6/16	5/8	1/4	5.1
RF39A	915	12.7	5.0	127	36 1/16	1/2	3/16	4.5
RF47	203	25.0	6.4	60	8	1	1/4	2.1
RF112	896	19.0	8.1	222	35 1/4	3/4	5/16	7.8
RF192	76	16.0	5.0	10	3	5/8	3/16	0.4
RF488	127	19.0	5.0	53	5	3/4	3/16	1.9
RF27	48.6	16.0	5.0	5	2	5/8	3/16	0.2

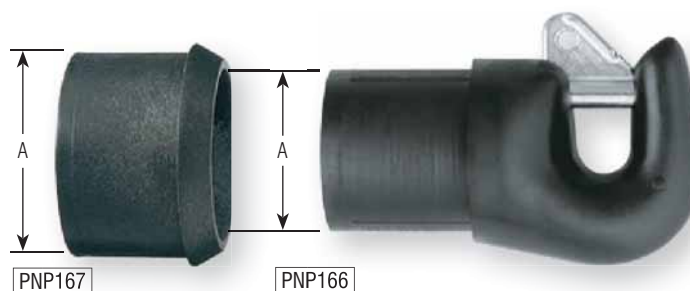
Trapeze Hardware



PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
PNP171BLU	Trapeze handle, Nylon, blue	25	0.9
PNP171R	Trapeze handle, Nylon, red	25	0.9
RF9	Fairlead, Nylon, ID 7mm (1/4")	5	0.2
RF17	Trapeze ring, extra large loop, incorporating Series 20 Ball Bearing sheave	55	1.9
RF27	Toe strap plate, stainless steel, 50mm x 16mm (2" x 5/8")	5	0.2
RF48B	Trapeze ring, twin loop, stainless steel, 166mm (6 1/2") long	48	1.7
RF341	Single V-jam block, becket, removable pin top	30	1.1
RF5121	Trapeze cleat, aluminium, suits 4-8mm (5/32"-5/16") diam. rope	46	1.6
RF5122R-2	Trapeze handle, vertical grip, red, hole diam. 7mm (9/32")	85	3.0

	PRODUCT No.	PRODUCT No.	PRODUCT No.	PRODUCT No.	MAX. ROPE mm	DIAM. mm	WEIGHT g	MAX. ROPE in.	DIAM. in.	WEIGHT oz
Tie Balls	RED	BLUE	BLACK	GREEN						
	RF1318R	RF1318BLU	RF1318BLK	RF1318GRN	4	16	2	5/32	5/8	0.1
	RF1317R	RF1317BLU	RF1317BLK	RF1317GRN	5	20	3	3/16	3/4	0.1
	RF1316R	RF1316BLU	RF1316BLK	RF1316GRN	5	25	7	3/16	1	0.3
	RF1315R	RF1315BLU	RF1315BLK	RF1315GRN	6	32	14	1/4	1 1/4	0.5

Spinnaker Pole Ends



- ✓ Small boat pole ends have snap-on or push-on beak designs that allow attachment to the pole ring without manually opening the pin.
- ✓ All pole ends have attachment points for pin release lines.
- ✓ PNP164 and PNP165 small boat pole ends are manufactured from tough, abrasion resistant Nylon for minimum weight and corrosion resistance.

- ✓ RF600, RF601 and RF677 suit external mounting on solid or tubular sections.
- ✓ Big boat pole ends suit standard tube sizes and have rugged, external-pull construction for reliability and easy servicing.

PRODUCT No.	DESCRIPTION	A mm	WEIGHT g	A in.	WEIGHT oz
Spinnaker Pole Ends – Small Boat					
PNP164	Moulded Nylon body, Stainless Steel snap-on plunger pin, accepts up to 10mm (3/8") diam. ring or line	21	33	13/16	1.2
PNP165	Moulded Nylon body, Stainless Steel snap-on plunger pin, accepts up to 9mm (5/16") diam. ring or line	28	46	1 1/8	1.6
PNP166	Moulded Nylon body, Stainless Steel snap-on plunger pin, accepts up to 12mm (1/2") diam. ring or line	46	125	1 13/16	4.4
PNP167	Bush, glass filled Nylon, to suit PNP166	56	46	2 3/16	1.6
RF600	Cast Stainless Steel body, Stainless Steel snap-on plunger pin and straps, accepts up to 9.5mm (3/8") diam. ring or line	26	175	1	6.2
RF601	As per RF600	36	180	1 7/16	6.3
RF677	As per RF600	32	175	1 1/4	6.2
RF2338	Bush, Nylon, to suit RF2569	28	15	1 1/8	0.5
RF2569	Full cast Aluminium construction, three way opening, snap-on operation, accepts up to 10mm (3/8") diam. ring or line.	22	124	7/8	4.4
Spinnaker Pole Ends – Big Boat					
RF1661	Cast marine grade anodised Aluminium body, Stainless Steel plunger pin, accepts up to 20mm (3/4") diam. ring or line.	46	483	1 13/16	17.0
RF1662	As per RF1661	56	670	2 3/16	23.7
RF1663	As per RF1661	74	900	2 15/16	31.8

Spinnaker & Spar Hardware



- ✓ Grade 316 spinnaker pole rings suit most common mast profiles.
- ✓ Spinnaker pole cars are also available. Refer to pages 86, 87, 101, 111 & 118.
- ✓ Brace hooks are used instead of barber haulers, to hook in the windward spinnaker sheet after gybing.
- ✓ Tough, moulded Nylon spinnaker brace “donuts” prevent snap shackles from jamming in spinnaker pole ends.
- ✓ Moulded Nylon dinghy mast chocks are a ready-to-go solution for quick, repeatable positioning of the mast.
- ✓ Tough, moulded Nylon halyard stoppers are ideal for protecting halyard eye splices and whipping where they meet sheaves and exit plates.

PRODUCT No.	DESCRIPTION	DOUGHNUT DIAM. mm	ROPE DIAM. mm	WEIGHT g	DOUGHNUT DIAM. in.	ROPE DIAM. in.	WEIGHT oz
Spinnaker Brace ‘Donut’							
PNP197R	Red	40	10	7	1 9/16	3/8	0.2
PNP197GRN	Green	40	10	7	1 9/16	3/8	0.2
PNP198R	Red	60	12	22	2 3/8	7/16	0.8
PNP198GRN	Green	60	12	22	2 3/8	7/16	0.8
PNP199R	Red	70	18	34	2 3/4	5/8	1.2

PRODUCT No.	DESCRIPTION	RING I.D. mm	MATERIAL DIAM. mm	MAST DIAM. mm	WEIGHT g	RING I.D. in.	MATERIAL DIAM. in.	MAST DIAM. in.	WEIGHT oz
Spinnaker Pole Rings									
RF30	Curved base	30	6.4	60	45	1 3/16	1/4	2 3/8	1.6
RF41	Curved base	44	11.0	80	260	1 3/4	7/16	3 1/8	9.2
RF602	Curved base	35	8.0	60	80	1 3/8	5/16	2 3/8	2.8
Spinnaker Hardware									
RF91	Spinnaker brace hook, 1/4" diameter bolt-through attachment, Neoprene pad and line retainer	-	-	-	40	-	-	-	1.4
RF92	Spinnaker brace hook, screw attachment, (includes two self-tapping screws), Neoprene pad and line retainer	-	-	-	20	-	-	-	0.7
PNP94	Spinnaker pole deck bracket, suits poles to 70mm (2 3/4") diam.	-	-	-	75	-	-	-	2.7
Mast Chocks									
PNP200	Mast chock set, 8 piece	-	-	-	134	-	-	-	4.7
Halyard Stoppers									
PNP272A	Halyard stopper, OD 32mm (1 1/4"), ID 15.5mm (19/32")	-	-	-	11	-	-	-	0.4
PNP272D	Halyard stopper, OD 20mm (3/4"), ID 10.5mm (3/8")	-	-	-	3	-	-	-	0.1

Staunchion & Life Line Hardware



- ✓ Staunchions are made from grade 316 stainless steel. They are tapered, have closed tops and ferrule-lined life line holes.
- ✓ Staunchion bases are available in right-angle or 5° off right angle to match hull angle, provide more efficient crew positioning and assist skirting of headsails.
- ✓ PNP209 suits use on life lines, above spreaders and on back stays to assist tacking and prevent sail chafe. It has a snap-together design that allows fitting to existing rigging.

- ✓ Pelican hooks are manufactured from stainless steel and have threaded adjustment, a long lever arm to facilitate tensioning and a sliding sleeve retainer for quick opening and closing.
- ✓ RF3 staunchion block suits leading furling lines back to the cockpit and has a ball bearing sheave that accepts up to 12mm (1/2") diam. rope.

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
RF3	Staunchion block. Designed for leading headsail furling lines back to the cockpit	30	1.1
RF98	Pelican hook. Swage end to suit 4mm or 5/32" diam. wire. BL 450kg (990lb)	112	4.0
RF99	Pelican hook. 6.4mm (1/4") diam. eye end. BL 450kg (990lb)	115	4.1
RF1695-45	Tapered staunchion. Life line holes at 225mm (9") & 450mm (18") from base	390	13.8
RF1695-61	Tapered staunchion. Life line holes at 305mm (12") & 610mm (24") from base	530	18.7
RF1695-75	Tapered staunchion. Life line holes at 250mm (9 7/8"), 500mm (19 3/4") & 750mm (29 9/16") from base	650	22.9
RF1696-05	Staunchion base, 95 degrees	250	8.8
RF1696-90	Staunchion base, 90 degrees	250	8.8
PNP54	Staunchion cap. Suits 22.2mm (7/8") ID tube	12	0.4
PNP209	Spreader / backstay / life line roller	38	1.3

Rudder Hardware



- ✓ Pintle pins are cross-drilled to accept the RF413 retaining clip.
- ✓ PNP55 retaining clip for transom mounting provides simple rudder retention security.
- ✓ Alloy gudgeons have insert moulded Nylon bushes to provide a firm fit with pintles and to avoid corrosion and fatigue.

- ✓ 9.5mm (3/8") transom fittings have alloy bases for greater strength.
- ✓ Off-the-beach dinghies and catamarans.

PRODUCT No.		PIN/HOLE DIAM. mm	INTERNAL WIDTH mm	STRAP LENGTH mm	WEIGHT g	PIN/HOLE DIAM. in.	INTERNAL WIDTH in.	STRAP LENGTH in.	WEIGHT oz
6.4mm (1/4") Pin/Hole									
RF239	Rudder gudgeon, stainless steel	6.4	38	51	40	1/4	1 1/2	2	1.4
RF243	Rudder gudgeon, stainless steel	6.4	25	56	35	1/4	1	2 3/16	1.2
RF254	Transom gudgeon, stainless steel	6.4	-	-	-	1/4	-	-	1.1
RF255	Transom pintle, stainless steel	6.4	-	-	-	1/4	-	-	1.6
7.9mm (5/16") Pin/Hole									
RF2500	Rudder gudgeon, alloy with Nylon bearing	7.9	20	79	42	5/16	25/32	3 1/8	1.5
RF2501	Rudder gudgeon, alloy with Nylon bearing	7.9	32	96	85	5/16	1 1/4	3 3/4	3.0
RF2503	Rudder gudgeon, alloy with Nylon bearing	7.9	40	96	85	5/16	1 9/16	3 3/4	3.0
RF2510	Transom gudgeon, Nylon	7.9	-	-	19	5/16	-	-	0.7
RF2510A	Transom gudgeon, alloy	7.9	-	-	35	5/16	-	-	1.2
RF2515	Transom pintle, Nylon with stainless steel pin	7.9	-	-	47	5/16	-	-	1.7
RF2515A	Transom pintle, alloy with stainless steel pin	7.9	-	-	60	5/16	-	-	2.1
9.5mm (3/8") Pin/Hole									
RF2502	Rudder gudgeon, alloy with Nylon bearing	9.5	32	96	85	3/8	1 1/4	3 3/4	3.0
RF2504	Rudder gudgeon, alloy with Nylon bearing	9.5	40	96	85	3/8	1 9/16	3 3/4	3.0
RF2511A	Transom gudgeon, alloy with Nylon bearing	9.5	-	-	35	3/8	-	-	1.2
RF2516A	Transom pintle, alloy with stainless steel pin	9.5	-	-	69	3/8	-	-	2.4
Accessories									
PNP55	Retaining clip, transom mount, Nylon	-	-	-	5	-	-	-	0.2
RF413	Retaining clip, 2.7mm(3/32") dia. wire, 16mm(5/8") dia. ID, stainless steel	-	-	-	3	-	-	-	0.1

Rope Jammers, Cleats & Wind Vanes



RF1387



RF1390



RF1398



PNP301



RF494


 RF520
 RF521
 RF522
 RF523
 RF524

- ✓ Rope jammers and stoppers have a stainless steel frame and ribbed aluminium base plates for maximum durability. Narrow profiles facilitate efficient installation in banks of two or more.
- ✓ RF1398 cam and locking mechanism provides automatic line control, allowing the line to be drawn through when in the locked down position.

- ✓ Wind vanes are balanced for accuracy and moulded in U.V. stabilised Nylon. The aluminium shaft can be removed from the mast bracket for convenience and security.

PRODUCT No.	DESCRIPTION	ROPE DIAM. mm	M.W.L. kg	WEIGHT g	ROPE DIAM. in.	M.W.L. lb	WEIGHT oz
Rope Cleats and Jammers							
RF494	V-jammer, stainless steel	6	-	20	1/4	-	0.7
RF520	Horn cleat, Nylon. 75mm (3") long	4	-	10	5/32	-	0.4
RF521	Horn cleat, Nylon. 100mm (4") long	5	-	15	3/16	-	0.5
RF522	Horn cleat, Nylon. 125mm (5") long	6	-	30	1/4	-	1.1
RF523	Horn cleat, Nylon. 165mm (6 1/2") long	8	-	50	5/16	-	1.8
RF524	Horn cleat, Nylon. 200mm (8") long	10	-	85	3/8	-	3.0
RF1387	Rope jammer, compact style. 60mm long. Base plates for use with 4-6mm (5/32"-1/4") diameter rope and 6-8mm (1/4"-5/16") diameter rope	4-8	410	165	5/32-5/16	902	5.8
RF1398	Rope stopper. 115mm (4 1/2") long. Self closing jaw allows rope pull-through, but not drag-back when locked down	8-10	400	420	5/16-3/8	880	14.8
RF1390	Rope jammer, long arm style. 95mm (3 3/4") long. 180° pivoting arm	8-12	1020	300	5/16-1/2	2244	10.6
Wind Vanes							
PNP301	Arrow style wind vane. 220mm (8 5/8") long vane. Adjustable tacking angle arms. Mounting bracket and screws included	-	-	18	-	-	0.6



All Windex® wind indicator models feature:

- ✓ Apparent wind angle indication.
- ✓ Adjustable tacking angle arms.
- ✓ Lightweight plastic and alloy construction.
- ✓ Sapphire jewel bearing for extreme sensitivity.
- ✓ WXD Dinghy Windex® is specifically designed for dinghies.
- ✓ WX10 Medium Windex® is specifically designed for trailerables and small keelboats.
- ✓ WX15 Large Windex® is specifically designed for keelboats.
- ✓ WX20 Extra Large Windex® is specifically designed for large keelboats.
- ✓ WXD Dinghy Windex® features a spring loaded, quick release mount.
- ✓ WX10, WX15 and WX23 feature a secure screw-on mount.
- ✓ WX10, WX15 and WX23 feature a vane and arm underside reflectors for night sailing.

WXL Light

- ✓ Illuminates vane and arms for night sailing.
- ✓ Non-dazzling lens.
- ✓ 12 volts, 3 watt globe.
- ✓ Sealed waterproof housing.
- ✓ Easy mount - fits directly to WX10, WX15 and WX23 mounts.

PRODUCT No.	DESCRIPTION	VANE LENGTH mm	WEIGHT g	VANE LENGTH in.	WEIGHT oz
WXD	Dinghy Windex®	250	72	10	2.5
WX10	Medium Windex®	250	76	10	2.6
WX15	Large Windex®	380	215	15	7.6
WX23	Extra Large Windex®	580	615	23	21.7
WXL	Windex® light	-	21	-	0.7

PRODUCT No.	DESCRIPTION	PRODUCT No. to suit WXD	PRODUCT No. to suit WX10	PRODUCT No. to suit WX15	PRODUCT No. to suit WX23	PRODUCT No. to suit WXL
ARMS	Index arms	WXD-A	WX10-A	WX15-A	WX23-A	-
RODS	Supporting rod	WXD-R	WX10-R	WX15-R	WX23-R	-
SOCKETS	Mast socket	WXD-S	WX10-S	WX15-S	WX23-S	-
VANES	Vane unit	WXD-V	WX10-V	WX15-V	WX23-V	-
GLOBES	Spare globe	-	-	-	-	WXL-G



Cable Steering Hardware & Buoys



RF2422



RF144



RF154



RF155



RF2419



RF2420



RF2421



RF2417



RF111



RF2415



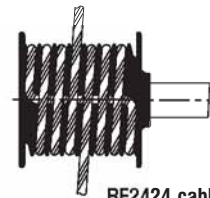
RF2416



RF149



RF2424



RF2424 cable winding guide

- ✓ Steering cable pulleys have durable Acetal sheaves with a deep groove to cradle 5mm (3/16") diam. wire
- ✓ Buoy is made from durable, U.V. stabilised high density polyethylene.
- ✓ Pulley housings are made of stainless steel (except RF2417 which is chrome plated bronze.)
- ✓ RF111 has 2-way rope grooves and an eye at each end for maximum versatility.

PRODUCT No.	DESCRIPTION	M.W.L. kg	B.L. kg	WEIGHT g	M.W.L. lb	B.L. lb	WEIGHT oz
Steering Cable Pulleys							
RF144	Single 65mm (2 1/2") diameter pulley. 4.8mm (3/16") diameter swivel shackle top	350	750	75	770	1650	2.7
RF154	Single 65mm (2 1/2") diameter pulley. 13mm (1/2") I.D. ring brass swivel ring top	300	600	80	660	1320	2.8
RF155	Double 65mm (2 1/2") diameter pulley. 13mm (1/2") I.D. ring brass swivel ring top	150	600	135	330	1320	4.8
RF2416	Single 32mm (1 1/4") diameter pulley. Upright mount	300	800	40	660	1760	1.4
RF2417	Single 55mm (2 1/8") diameter exit pulley. Chrome plated bronze body	700	1800	18	1540	3960	6.4
RF2419	Single 55mm (2 1/8") diameter pulley. Flat mount	500	1500	80	1100	3300	2.8
RF2420	Single 55mm (2 1/8") diameter pulley. Upright mount	900	1800	70	1980	3960	2.5
RF2421	Single 55mm (2 1/8") diameter pulley with becket. Upright mount	350	1300	75	770	2860	2.7
RF2422	Single 65mm (2 1/2") diameter pulley. Loop top	700	1800	60	1540	3960	2.1
Steering Accessories							
RF149	Steering cable tension spring. Stainless steel	-	-	75	-	-	2.7
RF2415	Cable clamp. Suits 5mm (3/16") diameter wire	-	-	30	-	-	1.1
RF2424	Steering drum. Suits RF2414. Suits 5mm (3/16") diameter wire	-	-	110	-	-	3.9
Buoys							
RF111	Marker buoy, U.V. stabilised high density polyethylene, supports 9kg. Orange. Overall length: 483mm (19"), Maximum diameter: 184mm (7 1/4")	-	-	680	-	-	24.0

Boat Care Products



RF2632



RF3000



RF3003



RF3001



RF3002



RF3005



RF3005x5.0

Gelcoat Polish RF2632

- ✓ Ideal for restoring chalked and deteriorating surfaces.
- ✓ Ideal for preparing fibreglass surfaces and detailing fibreglass moulds.
- ✓ Waxless, silicone-free formula - can be overpainted.
- ✓ Designed for power buffing.
- ✓ Liquid formulation.

Super Fine Paste Polish RF3001

- ✓ Ideal for enhancing and protecting surfaces in good condition.
- ✓ Suitable for use on fibreglass or enamel surfaces.
- ✓ Contains waxes to promote high lustre and depth of colour.
- ✓ Contains silicone to ensure long lasting shine.
- ✓ Contains mild abrasive.
- ✓ No-run paste formulation.
- ✓ Ideal for cleaning and protecting stainless steel and chrome plated fittings.

Stainless Steel Polish and Restorer RF3003

- ✓ Liquid formulation for easier application.
- ✓ Ideal for stainless steel products, ie: rigging, balustrades, cables etc.
- ✓ Removes rust, stains, discolouration and oxidation.
- ✓ Long lasting resultant shine.

Extra Cut Paste Polish RF3002

- ✓ Ideal for restoring weathered or rough surfaces.
- ✓ Suitable for use on fibreglass or enamel surfaces.
- ✓ Contains waxes to promote high lustre and depth of colour.
- ✓ Contains silicone to ensure long lasting shine.
- ✓ Contains effective abrasives to remove marks, scuffing and surface oxidation.
- ✓ No-run paste formulation.

Sailfast™ Silicone Lubricant Spray RF3000

- ✓ Silicone based for ultimate anti-friction performance.
- ✓ Forms a protective anti-corrosive film against the elements.
- ✓ Displaces moisture.
- ✓ Penetrates and loosens seized mechanical parts.
- ✓ Ideal for use on blocks, travellers, cam cleats, winches, steering gear, spinnaker pole ends, rope clutches, snap shackles, head foils, track slides, furlers, swivels, rigging screws, backstay adjusters, halyard sheaves, bow rollers and boat trailers.

Gelcoat Restorer RF3005, RF3005x5.0

- ✓ Ideal for restoring fibreglass to its original colour.
- ✓ Removes difficult stains - rust, brown waterline discolouration etc.
- ✓ Fast acting - 5 minute reaction time.
- ✓ Easy sponge-on, hose-off application.

BOATSMART products are only available in Australia.

PRODUCT No.	DESCRIPTION	VOLUME	WEIGHT
		g	oz
RF2632	Gelcoat polish	1 litre	1270 44.8
RF3000	Sailfast™ silicone lubricant spray	-	100 3.5
RF3001	Super fine paste polish	-	500 17.7
RF3002	Extra cut paste polish	-	500 17.7

PRODUCT No.	DESCRIPTION	VOLUME	WEIGHT
		g	oz
RF3003	Stainless steel polish and restorer	100 ml	550 19.4
RF3005	Gelcoat restorer	500 ml	590 20.8
RF3005x5.0	Gelcoat restorer	5 litre	5700 201

Rope Bags, Winch Handle Pockets & Drink Holders



RF3700

- ✓ Easy to mount - no drilling holes.
- ✓ Hook & loop fixing.
- ✓ Mesh bottom for drainage & ventilation.
- ✓ Silver U.V. & water resistant reflective cover.
- ✓ Durable, water repellent and U.V. resistant acrylic.

RF37xx

- ✓ Easy to mount - no drilling holes.
- ✓ Hook & loop fixing, with sticky back.
- ✓ Mesh bottom for drainage & ventilation.
- ✓ Drink holder pocket.
- ✓ Durable, water repellent and U.V. resistant acrylic.

RF38xx

- ✓ Carbon entry edge rods for easy opening (rope bags).
- ✓ Mounting options: screw (not provided) or hook and loop fixing.
- ✓ Mesh for drainage & ventilation.

PRODUCT No.	DESCRIPTION	WIDTH mm	HEIGHT mm	DEPTH mm	VOLUME Litres	WEIGHT g	WIDTH in.	HEIGHT in.	DEPTH in.	VOLUME Gallons	WEIGHT oz
RF3700	Rope bag, lifeline mount, navy, U.V. resistant	450	320	195	28	900	17 3/4	12 5/8	7 11/16	7 1/2	31.8
RF3710	Rope bag, navy, U.V. resistant	360	290	130	14	560	14 3/16	11 7/16	5 1/8	3 1/2	19.8
RF3711	Rope bag, navy, U.V. resistant	400	300	170	20	660	15 3/4	11 13/16	6 11/16	5 1/2	23.3
RF3712	Rope bag, navy, U.V. resistant	450	320	195	28	730	17 3/4	12 5/8	7 11/16	7 1/2	25.8
RF3821	Rope bag, white PVC with mesh, high	300	500	220	30	1000	11 13/16	16 11/16	8 11/16	8	35.3
RF3810	Rope bag, white PVC with mesh, wide	300	200	180	11	400	11 13/16	7 7/8	7 3/32	2 3/4	14.1
RF3811	Rope bag, white PVC with mesh, wide	400	250	200	20	460	15 3/4	9 7/8	7 7/8	5 1/4	16.3
RF3812	Rope bag, white PVC with mesh, wide	500	300	220	33	550	19 11/16	11 13/16	8 11/16	8 3/4	19.4
RF3741	Winch handle pocket, navy, single	140	280	90	-	140	5 1/2	11 1/16	3 9/16	-	4.9
RF3742	Winch handle pocket, navy, double	180	300	90	-	280	7 3/32	11 13/16	3 9/16	-	9.9
RF3841	Winch handle pocket, white PVC with mesh, single	130	130	90	-	130	5 1/8	5 1/8	3 9/16	-	4.6
RF3751	Drink holder, navy	130	130	90	-	120	5 1/8	5 1/8	3 9/16	-	4.2
RF3851	Drink holder, white PVC with mesh	140	280	90	-	235	5 1/2	11 1/16	3 9/16	-	8.3

Protection, Performance and Comfort

Ronstan's next generation of sailing gear is designed for sailors by sailors. Each item in the range has been developed in conjunction with our pro team sailors and has undergone rigorous testing at the most extreme level so that you know you'll be covered regardless of the sort of sailing you're into – recreational through to international competition. The latest material and production technologies are integrated within the designs and an intelligent layering system delivers the flexibility to kit-out for all conditions.

Lightweight, warm and comfortable in any weather

Ronstan's range of wetsuits is more flexible, lighter and more comfortable than the previous generation.

New Laminates for Warmth

The new range uses a combination of high-performance materials for their unique properties such as water repellence, wind-proofing, drying speed and thermal qualities. These materials are then combined to form specifically functional laminates and are used strategically in the panel layout for optimum results.

Ultimate Flexibility

We have selected high-stretch fabrics to increase the wearer's comfort and flexibility. They feel soft and have the ability to hold and retain the wetsuit's desired shape. There is no compromise on quality and durability in the range. In another design innovation, Ronstan wetsuits use a combination of thicknesses, placing thinner material in the areas requiring the most flexibility.

Lightweight

All sailors know that thinner usually means lighter. However there is a trade-off, as thinner materials are generally less durable and not as warm as thicker materials. Our approach puts the focus on efficiency. The high performance CL25 Pants use Superlite neoprene foam which is 20% lighter than conventional neoprene. The result is a lighter-weight wetsuit just 2mm thick, with no compromise on warmth. While the reduced weight and flexibility are key features, the wetsuit design also provides good abrasion resistance and extra padding where needed.

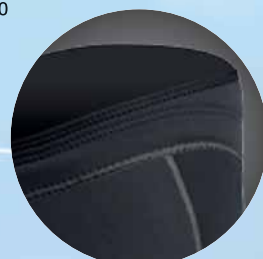
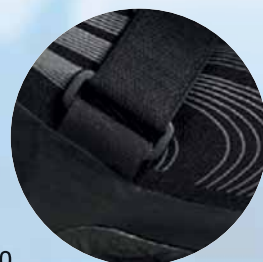
Layering Options

Integral to the new range is a choice of layering options to suit any weather conditions. Whether it's a sun protection rash vest, a hydrophobic fleece-lined thermal or a neoprene top, you can mix and match to form the best combination for the conditions.

Junior Range

CL21J Thermal top, CL26J Shorts and small size CL62

Junior sizing has been revamped with the real shape of children bodies in mind. They are sold as a separate Junior range and are available in sizes 8 to 12. Juniors will benefit from the same features as the adult range but have a garment that really fits.





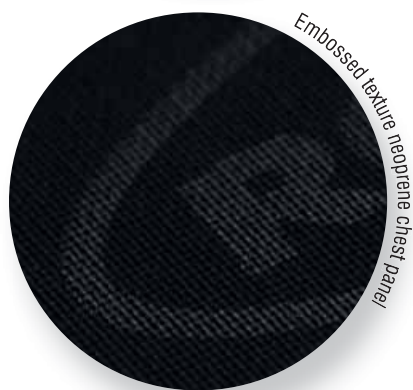
CL27



Superstretch shoulder panels



Bulletproof para-Aramid knees with padded inserts



Embossed texture neoprene chest panel



Supratex seat

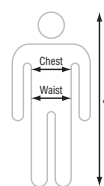
CL27 - Skiffsuit™

- ✓ 3mm/2mm thickness.
- ✓ Superstretch Neospan shoulder panels for easy step-in entry.
- ✓ Mesh skin embossed surface chest panel eliminates surface wind chill effect and maximises strength and durability.
- ✓ Abrasion resistant Supratex seat.
- ✓ Padded hiking panels at back of thighs.
- ✓ Bulletproof para-Aramid knee reinforcements with padded inserts - the Ronstan Skiffsuit™ trademark.
- ✓ Water repellent soft brushed lining keeps skin drier and warmer.
- ✓ Sizes XXS - XXL

Adult Range		XXS	XS	S	M
Height*	cm	163 - 168	167 - 172	171-176	175 - 180
	ft./in.	5' 4" - 5' 6"	5' 6" - 5' 8"	5' 7" - 5' 9"	5' 9" - 5' 11"
Chest*	cm	86 - 91	90 - 95	94 - 99	98 - 103
	in.	33 - 35	35 - 37	37 - 39	39 - 41
Waist*	cm	63 - 69	67 - 73	71 - 77	75 - 81
	in.	25 - 27	26 - 29	28 - 30	30 - 32

		L	XL	XXL
Height*	cm	179 - 184	183 - 188	187 - 192
	ft./in.	5' 10" - 6' 0"	6' 0" - 6' 2"	6' 2" - 6' 4"
Chest*	cm	102 - 107	106 - 111	110 - 115
	in.	40 - 42	42 - 44	43 - 45
Waist*	cm	79 - 86	83 - 90	87 - 94
	in.	31 - 34	33 - 35	34 - 37

* Sizes are based on person not garment.



Pants & Shorts

CL26 - Dinghy Shorts

- ✓ 3mm/2mm thickness.
 - ✓ Padded hiking panels at back of thighs.
 - ✓ Abrasion resistant Supratex seat.
 - ✓ Elasticised drawstring waist for reduced bulk and extra comfort.
 - ✓ High waist for lower back coverage and overlap with top.
 - ✓ Glide skin leg openings minimise water ingress.
 - ✓ Superstretch Neospan side panels provide continual comfort and compression during muscle expansion while hiking.
 - ✓ Junior sizes with panels specifically designed to suit younger body geometry.
 - ✓ Adult sizes CL26 XS - XXL
- Also available in Junior sizes. CL26J 08, 10, 12*



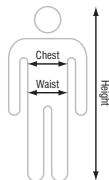
CL25



CL26

CL26J
JUNIOR

Adult Sizing - See page 189



Junior Range		Size 08	Size 10	Size 12
Height*	cm	127 - 134	135 - 144	146 - 155
	ft./in.	4' 2" - 4' 5"	4' 5" - 4' 9"	4' 9" - 5' 1"
Chest*	cm	67 - 71	71 - 75	75 - 79
	in.	26 - 28	28 - 30	30 - 31
Waist*	cm	59 - 64	62 - 67	65 - 70
	in.	23 - 25	24 - 26	25 - 28

* Sizes are based on person not garment.

CL25 - Neoprene Pants

- ✓ 2.5mm/2mm thickness.
- ✓ High waist for lower back coverage and overlap with top.
- ✓ Wide waist belt for comfort and secure fit with freedom of movement.
- ✓ Superlite neoprene - premium insulation, 20% lighter.
- ✓ Hydrophobic soft brushed lining keeps the skin drier and warmer.
- ✓ Abrasion resistant Supratex seat and shin reinforcement.
- ✓ Padded knee insert for additional protection.
- ✓ Customisable leg length system.
- ✓ Superstretch Neospan calves and side panels provide continual comfort and compression during muscle expansion.
- ✓ Seamless back of knee design for maximum comfort.
- ✓ Sizes XS - XXL

Neoprene, Thermal & Rash Tops



CL21

CL21J JUNIOR

CL21 - Thermal Top

- ✓ Low collar maximises comfort when layering.
 - ✓ Seamless underarm panel.
 - ✓ UPF 50+ UV protection.
 - ✓ Hydrophobic outer treatment.
 - ✓ Adult sizes CL21 XS - XXL
- Also available in Junior sizes CL21J 08, 10, 12*



CL24 - Neoprene Skin Top

- ✓ 0.5mm thickness.
- ✓ Athletic cut.
- ✓ High stretch fabrics for freedom of movement.
- ✓ Seamless underarm panel.
- ✓ Non-chafe neoprene collar.
- ✓ Excellent warmth to weight ratio.
- ✓ Lightweight.
- ✓ Soft feel lining.
- ✓ Sizes XS - XXL



CL24



CL20

CL20 - Rash Top, UPF 50+, Long Sleeve

- ✓ Unique Bamboo micro structure for reduced windchill.
- ✓ Natural Bamboo deodorising properties.
- ✓ Silky feel for maximum comfort.
- ✓ Seamless underarm panel.
- ✓ UPF 50+ UV protection.
- ✓ High breathability for warm weather comfort.
- ✓ Sizes XS - XXL

Sizing - See pages 189 - 190

Breathable Smock Top



CL80

CL80 Smock Top

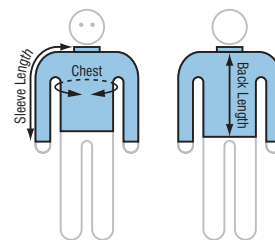
- ✓ R-Tech₅: Highly waterproof, highly breathable shell with fully taped seams for maximum protection and comfort in all conditions.
- ✓ Front opening with internal gusset, water resistant zip and neck closure tab delivers maximum water protection in cold conditions.
- ✓ Side access breast pocket with water resistant zip provides easy access; even when wearing a PFD.
- ✓ Neoprene waist band with dual adjustment tabs and non-slip 'smoothy' finish on inside reduces ride-up and water wicking; fabric coated on outside for maximum durability.
- ✓ Lightweight micro-mesh lining provides a captive air layer for temperature control and eliminates that 'sticky' feel when you're sweating or wet. Fine micro-mesh weave minimises snagging on watch bands etc.
- ✓ Comfortable stretch cuff and neck seals ensure a snug fit and minimum water ingress.

- ✓ Lightest weight without compromising on performance; the result of premium technical fabrics and practical design features to meet the demands of today's competitive sailors.
- ✓ New 'athletic' cut means a closer fit, designed to be worn under a PFD, but still providing full freedom of movement for the most demanding manoeuvres.
- ✓ Adult sizes XXS - XXXL

Also available in Junior Sizes J08, J10, J12

SMOCK TOP		JUNIOR: 08 10 12			ADULT: XXS XS S M L XL XXL XXXL							
Chest*	cm	77	86	94	100	106	111	119	124	129	133	135
	in.	30	34	37	39	42	44	47	49	51	52	53
Back Length*	cm	54	58	63	65	68	70	72	74	76	78	80
	in.	21	23	25	26	27	28	28	29	30	30	31
Sleeve Length*	cm	62	66	71	76	79	82	84	86	88	90	92
	in.	24	26	28	30	31	32	33	34	35	35	36

*Sizes are based on garment not person



SAILING GEAR LAYERING OPTIONS		Cold Wet Windy	Cold Dry Light/No Wind		Warm Wet Windy		Hot Wet Windy	Very Hot
NUMBER OF LAYERS		3	2	2	2	1	2	1
CL21 Thermal Top	Warm when dry	•	•	•				
CL24 Neoprene Skin Top	Warm when wet	•		•		•		
CL20 Rash Top	Maximum sun protection & breathability				•		•	•
CL80 Smock Top	Waterproof and windproof barrier	•	•		•		•	

Trapeze Harnesses



CL10



CL11

CL10 Sailing Trapeze Harness

- ✓ Highly adjustable with excellent back support.
- ✓ Multiple adjustment options for optimum fit.
- ✓ Anatomically shaped shoulder straps with 3D mesh padding and lower back cushion for maximum comfort.
- ✓ Stainless steel tube spreader bar with 6 point fixing.
- ✓ Sizes S - XL

CL11 Racing Trapeze Harness

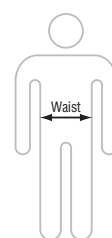
- ✓ Custom fit with full back support.
- ✓ Multiple adjustment options for custom fit.
- ✓ Tough-Tech™ reinforced seat.
- ✓ Articulated 2-segment design provides freedom of movement.
- ✓ Thermoformed battened back shell for maximum back support.
- ✓ Anatomically shaped shoulder straps with 3D mesh padding.
- ✓ Stainless steel tube spreader bar with 8 point fixation.
- ✓ Sizes S - XXL



Trapeze Harnesses

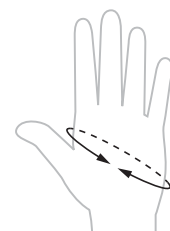
		S	M	L	XL	XXL
Suits Waist*	cm	<76	76-81	81-86	86-92	>92
	in.	<30	30-32	32-34	34-36	>36

*Sizes are based on person not garment



Gloves & Cap

Glove Size		XXXXS	XXXS	XXS	XS	S	M	L	XL	XXL
Fullest Point of Hand	cm	18	19	20	21	22	23	24	25.5	26.5
	in.	7	7 1/2	7 1/8	8 1/4	8 5/8	9	9 1/2	10	10 3/8



Measure all of the way around hand at fullest point as shown



RF4870



RF4871

RF4871 - Race Glove, Three Full Finger**RF4870 - Race Glove, Cut Finger**

- ✓ 'Amara' synthetic leather for maximum durability, minimum stretch and shrinkage.
- ✓ Double Aramid stitched in high wear areas.
- ✓ Double thickness palm and fingers for protection and grip.
- ✓ Low cut wrist band for free movement and ClearStart™ Watch vision.
- ✓ Mesh panels for flexibility and comfort.
- ✓ Sizes XXXXS - XXL.



RF4881



RF4880

RF4881 - 'Sticky' Race Glove, Three Full Finger**RF4880 - 'Sticky' Race Glove, Cut Finger**

- ✓ Sticky gloves reduce fatigue by minimising the physical effort required to hold rope.
- ✓ Double Aramid stitched in high wear areas.
- ✓ 'Amara' synthetic leather for maximum durability, minimum stretch and shrinkage.
- ✓ Double thickness palm and fingers for protection and grip.
- ✓ Low cut wrist band for free movement and ClearStart™ Watch vision.
- ✓ Mesh panels for flexibility and comfort.
- ✓ Sizes XXS - XXL.



RF4666

RF4666 - Sailing Glove

- ✓ 'Amara' synthetic leather for maximum durability, minimum stretch and shrinkage.
- ✓ Double thickness palm and fingers for protection and grip.
- ✓ Mesh panels for flexibility and comfort.
- ✓ Sizes XS - XXL.



RF2602

RF2602 - Ronstan Technical Sailing Cap

- ✓ Breathable
- ✓ Quick Dry
- ✓ Retainer cord and clip
- ✓ Washable
- ✓ One size fits most
- ✓ Polyester microfibre
- ✓ Hydrophobic outer layer
- ✓ Excellent sun protection - High IQ™ intelligent effects fabric
- ✓ Sweat band for increased comfort and grip
- ✓ Black under peak to reduce glare
- ✓ Adjustable back closure (hook & loop) for secure fit

Shoes & Boots



CL67

CL67 - Superflex Sailing Shoes

- ✓ Ultra-lightweight.
- ✓ Superflex web sole for positive grip and greater range of movement.
- ✓ Ideal for trapezing.
- ✓ Internal toe separator for improved stability.
- ✓ Glide skin ankle seal minimises water ingress.
- ✓ Bridge strap for ultimate security.
- ✓ Multi-layer padded heel, ankle and toe protection.
- ✓ Sizes XXXS - XXL



CL63

CL63 - Sailing Boot

- ✓ Traditional razor-cut sole for grip.
- ✓ Side zippers for easy fitting.
- ✓ Reinforced neoprene upper for hiking.
- ✓ Lightweight, comfortable and exceptional value.
- ✓ Sizes XXXS - XXL



CL62

CL62 - Race Boot

- ✓ Hard wearing moulded sole for firm foot support.
- ✓ Side zippers for easy fitting.
- ✓ Fastener tab secures zipper.
- ✓ Extra heel and toe texturing provides reliable grip.
- ✓ Padded neoprene upper with reinforcement for hiking comfort.
- ✓ Comfortable and hard wearing.
- ✓ Sizes XXXS - XXL



CL66

CL66 - Offshore Boot

- ✓ Traditional razor-cut sole for grip.
- ✓ 3/4 length with snug draw-string top.
- ✓ Reinforced heel, ankle and toe areas for added protection.
- ✓ Durable rubber outer with neoprene lining for warmth and comfort.
- ✓ Sizes XXS - XXXL

Footwear		XXXS	XXS	XS	S	M	L	XL	XXL
Foot Length	cm	21 - 22	22.5 - 23.5	23.5 - 24.5	24.5 - 25.5	25.5 - 26.5	26.5 - 27.5	27.5 - 28.5	28.5 - 29.5
	in.	8 1/4 - 8 5/8	8 7/8 - 9 1/4	9 1/4 - 9 5/8	9 5/8 - 10	10 - 10 3/8	10 3/8 - 10 3/4	10 3/4 - 11 1/4	11 1/4 - 11 5/8
Typical Equivalent Country Sizing*									
Europe		33 - 34	35 - 36	36 - 38	38 - 40	40 - 43	43 - 44	44 - 46 1/2	46 1/2 - 48 1/2
U.S. & Canada	M	3	3 1/2 - 4 1/2	4 1/2 - 6	6 - 7 1/2	7 1/2 - 9	9 - 10 1/2	10 1/2 - 12 1/2	12 1/2 - 14
	W	3	5 - 6	6 - 7 1/2	7 1/2 - 9	9 - 10 1/2	10 1/2 - 12	12 - 14	14 - 15 1/2
U.K.	M	2	3 - 4	4 - 5 1/2	5 1/2 - 7	7 - 8 1/2	8 1/2 - 10	10 - 12	12 - 13 1/2
	W	2	2 1/2 - 3 1/2	3 1/2 - 5	5 - 6 1/2	6 1/2 - 8	8 - 9 1/2	9 1/2 - 11 1/2	11 1/2 - 13
Australia	M	2	3 - 4	4 - 5 1/2	5 1/2 - 7	7 - 8 1/2	8 1/2 - 10	10 - 12	12 - 13 1/2
	W	2	3 1/2 - 4 1/2	4 1/2 - 6	6 - 7 1/2	7 1/2 - 9	9 - 10 1/2	10 1/2 - 12 1/2	12 1/2 - 14
Japan	M	21	21 1/2 - 22 1/2	22 1/2 - 24	24 - 25 1/2	25 1/2 - 27 1/2	27 1/2 - 28 1/2	28 1/2 - 30 1/2	30 1/2 - 31 1/2
	W	21	21 - 22	22 - 23 1/2	23 1/2 - 25	25 - 27	27 - 28	28 - 30	30 - 31

* Country sizes are indicative only and subject to variation. Your 'foot length' measurement should be used as the most accurate guide for sizing.

Soft Shell Sailing Jacket

CL180



- ✓ Warm, windproof and showerproof.
- ✓ A versatile medium weight jacket, ideal as a mid layer, developed for mild to cool temperatures and aerobic activity.
- ✓ R-tech advanced 3-layer construction: a windproof membrane sandwiched between a showerproof outer and an insulating inner.
- ✓ Highly breathable to regulate temperature during rigorous activity.
- ✓ Water repellent (hydrophobic) treatment.
- ✓ Anti-pill micro-fleece lining provides warmth in cold weather.
- ✓ Comfortable two-way stretch fabric and semi-fitted style.
- ✓ Two zipped hand warmer pockets, one zipped chest pocket and large inner pocket.
- ✓ Side pockets and main zip water resistant.
- ✓ Adult sizes XS to XXL.



BREATHABLE



HYDROPHOBIC

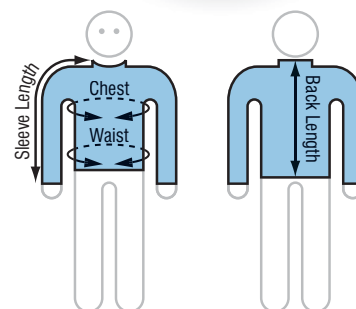


3-LAYER



Adult Range		XS	S	M	L	XL	XXL
Back Length	cm	66	68.5	70.5	73	75	79.5
	in.	26	27	28	29	30	31
Chest*	cm	107	112	117	122	127	132
	in.	42	44	46	48	50	52
Waist*	cm	95	101	107	113	118	122
	in.	37	40	42	44	46	48
Sleeve length	cm	74	76	79	82	85	87
	in.	29	30	31	32	33	34

*Full circumference. Sizes are based on garment not person.



Clear Start™ Watches & Windshift™ Sunglasses

Clear Start™ Sailing Watches

- ✓ Multiple start time sequences including the following pre-programmed countdown sequences; ISAF 5,4,1,0; 5 min periods; 3 min periods; 1 min periods.
- ✓ Handy 'SYNC' function to re-synchronise with starter's time, mid sequence.
- ✓ Optional audible alarms.
- ✓ 12/24 hour time.

RF4030

Clear Start™ Race Timer



- ✓ Water resistant to 50 meters (150 ft).
- ✓ Rotating face.
- ✓ 16mm (5/8") digit readout.
- ✓ Also suits hull and spar mounting.

RF4036

Clear Start™ Regatta Watch



- ✓ Water resistant to 100 meters (300 ft).
- ✓ Daily alarm.

RF4031

Clear Start™ Sailing Watch



- ✓ Water resistant to 50 meters (150 ft).
- ✓ Daily alarm.



RF4040

RF4040 - Windshift™ Sunglasses (White/Blue)

RF4041 - Windshift™ Sunglasses (Black/Grey)

- ✓ High quality polycarbonate lenses deliver durability, safety and protection, along with amazing optical clarity.
- ✓ Polarised lenses with maximum UVA and UVB protection reduce sun glare, alleviating eye fatigue, perfect for all on-water sports.
- ✓ Photochromic lenses adapt to changing light conditions, the brighter the sunlight, the darker the lenses become.
- ✓ Tint boosts the contrasts in hazy or overcast weather, making it easier to pick gusts and obstacles out on the water.
- ✓ Durable, lightweight TR-90 frame with flexible nose & earpiece, means you'll hardly notice you're wearing them!
- ✓ Rugged hard case, retainer strap and cleaning cloth included.



RF4041

CL16 - Sunglasses Strap

- ✓ Neoprene strap fits comfortably and helps keep your sunglasses on your head.



CL16

Dry Bag

RF4003



Padded backpack harness



Strong side carry handle and cinching straps



Mesh drink bottle holder with retaining cord



Large external pocket with water resistant zip



A rugged dry bag; highly water resistant, loaded with practical features and big enough for all your sailing gear.

- ✓ Big 55 litre (52 quarts) capacity (with closure folded down 3 times).
- ✓ Side carry handle, and full back pack harness.
- ✓ Padded shoulder straps and adjustable chest strap for comfort and secure fit.
- ✓ Simple and reliable fold & clip main 'dry' closure.
- ✓ Durable PVC outer.
- ✓ Leak-proof full welded construction.
- ✓ Large opening for easy packing and handling of bulky items.
- ✓ Large external accessory pocket with key clip.
- ✓ Mesh drink bottle holder with retaining cord.
- ✓ External D-rings and adjustable side straps for attaching additional items or cinching when the bag is partially full.
- ✓ Dimensions: Ø350mm x 900mm high (Ø13 ¾" x 35" high).



Closure Instructions for maximum water resistance.

1. Seal hook and loop fastener strip inside closure.
2. Fold closure down 3 times.
3. Clip together.

Note: external pocket zip is only water resistant, not water proof.

Gear Bag & Tuning Aids



RF4002

RF4002 - Ronstan Gear Bag

- ✓ Roomy interior with double zip top flap for easy access.
- ✓ Two end pockets, one with mesh for drainage and ventilation.
- ✓ Adjustable, heavy duty webbing handles with padded grip.
- ✓ Central strap with buckle for securing a jacket or other gear on top.
- ✓ Internal waterproof compartment for wet gear with independent access from end pocket.
- ✓ Dimensions: (H) 35cm x (W) 65cm x (D) 30cm



RF4025



RF4026

RF4025 - Tell Tails (Pack of 6). RF4026 - Leech Tails (Pack of 6)

- ✓ Essential guide for proper sail trim.
- ✓ Adhesive patches to ensure permanent bond with sail.
- ✓ High resolution fabric tails for maximum visibility.
- ✓ Laser cut ripstop nylon.



RF4020

RF4020 - Protest Flag

- ✓ Hook and loop fastener strips secure the flag around any stay.
- ✓ Rolls up to secure with locking tab, ready to deploy.
- ✓ Laser cut ripstop nylon.



RF1706

RF1706 - Number Strip

- ✓ Use as a reference scale for halyard tension, jib lead or main traveller positions.



RFDVD2

RFDVD1

**RFDVD1 - 'Awesome Aussie Skiffs' DVD No. 1
RFDVD2 - 'Awesome Aussie Skiffs' DVD No. 2**

- ✓ Non-stop features of the most outrageous sailing action ever seen. Watch as the 18's destroy the known barriers of performance on the water, and survive some of the most hair-raising crashes imaginable.
- ✓ Duration: Approx 1 hour.

Shackles



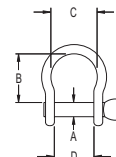
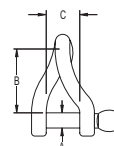
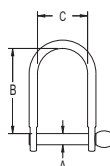
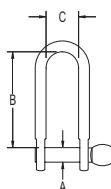
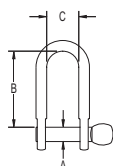
STANDARD DEE

LONG DEE

WIDE DEE

TWISTED

BOW



- ✓ High strength to weight ratio.
- ✓ Many shapes and sizes to suit any application.
- ✓ Coined shackle pin head available with hole for seizing wire.
- ✓ Grade 316 stainless steel bodies and pins.

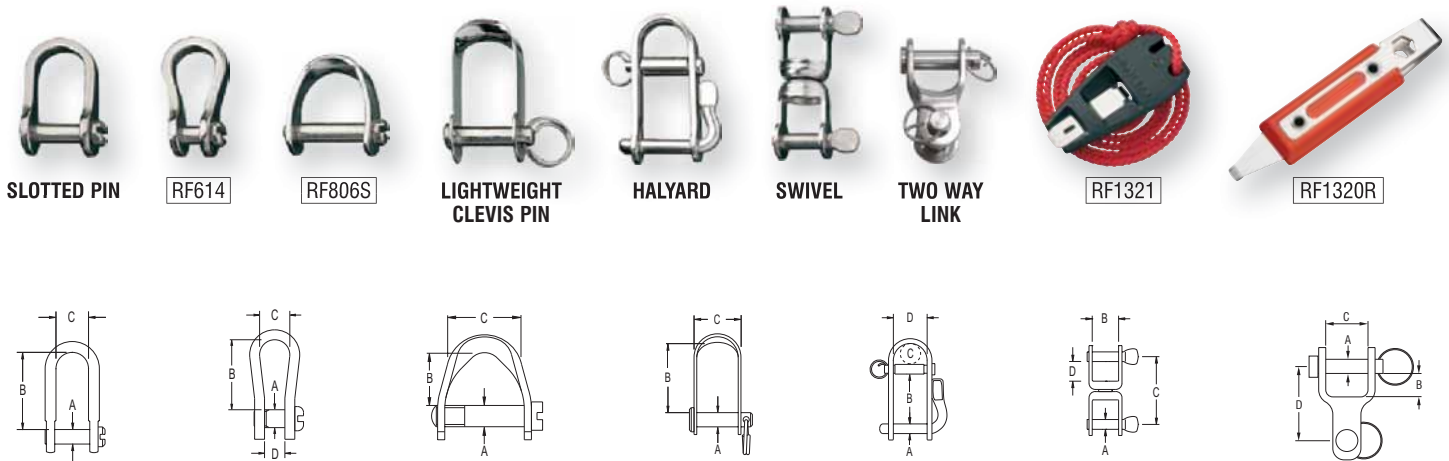
PRODUCT No.	A mm	B mm	C mm	D mm	(U.D.L.)*1 B.L. kg	(P.L.)*1 B.L. kg	WEIGHT g	A in.	B in.	C in.	D in.	(U.D.L.)*1 B.L. lb	(P.L.)*1 B.L. lb	WEIGHT oz
Standard Dee														
RF1851	3.2	12	9	-	375	280	2	1/8	15/32	11/32	-	825	620	0.1
RF1806	4.0	16	10	-	800	600	5	5/32	5/8	13/32	-	1760	1320	0.2
RF616	4.8	18	11	-	1200	800	15	3/16	23/32	7/16	-	2640	1760	0.5
RF617	6.4	22	14	-	2300	1400	25	1/4	7/8	9/16	-	5070	3090	0.9
RF618	7.9	29	16	-	3600	2700	50	5/16	1 5/32	5/8	-	7940	5950	1.8
RF619*2	9.5	38	17	-	5400	3600	80	3/8	1 1/2	21/32	-	11900	7940	2.8
RF620*2	12.7	42	19	-	7700	7500	130	1/2	1 31/32	3/4	-	16980	16530	4.6
RF1035*3	15.9	47	25	-	14000	11000	280	5/8	1 25/32	1	-	30860	24250	9.9
Long Dee														
RF621	4.0	26	10	-	800	600	10	5/32	1 1/32	13/32	-	1760	1320	0.4
RF622	4.8	31	11	-	1200	800	15	3/16	1 7/32	7/16	-	2640	1760	0.5
RF623	6.4	44	15	-	2300	1400	30	1/4	1 21/32	19/32	-	5070	3090	1.1
RF624	7.9	55	17	-	3600	2700	60	5/16	2 5/32	21/32	-	7940	5950	2.1
RF625*2	9.5	60	17	-	5400	3600	90	3/8	2 3/8	21/32	-	11900	7940	3.2
RF626*2	12.7	72	18	-	7700	7500	155	1/2	2 27/32	23/32	-	16980	16530	5.5
Wide Dee														
RF1850S	3.2	11	13	-	550	280	2	1/8	7/16	1/2	-	1210	620	0.1
RF1852	4.8	29	20	-	1200	700	15	3/16	1 5/32	25/32	-	2640	1540	0.5
RF1853	6.4	39	31	-	2300	1100	26	1/4	1 17/32	1 7/32	-	5070	2430	0.9
RF639	7.9	51	28	-	3400	1700	70	5/16	2	1 3/32	-	7480	3740	2.5
RF640	9.5	56	29	-	5400	3600	95	3/8	2 7/32	1 5/32	-	11900	7940	3.4
RF641*2	12.7	68	33	-	7700	5500	170	1/2	2 11/16	1 5/16	-	16980	12130	6.0
Twisted														
RF627	4.0	23	9	-	800	600	5	5/32	29/32	11/32	-	1760	1320	0.2
RF628	4.8	28	10	-	1200	800	15	3/16	1 3/32	13/32	-	2640	1760	0.5
RF629	6.4	39	13	-	2300	1400	30	1/4	1 17/32	1/2	-	5070	3090	1.1
RF630	7.9	48	16	-	3600	2700	65	5/16	1 7/8	5/8	-	7940	5950	2.3
RF631*2	9.5	54	19	-	5400	3600	90	3/8	2 1/8	3/4	-	11900	7940	3.2
RF632*2	12.7	65	19	-	7700	7500	165	1/2	2 9/16	3/4	-	16980	16530	5.8
Bow														
RF613S*4	3.0	12	9	6.4	550	280	3	1/8	15/32	11/32	1/4	1210	620	0.1
RF633	4.0	15	17	11.0	800	600	5	5/32	9/16	9/16	7/16	1760	1320	0.2
RF634	4.8	18	14	13.0	1200	800	10	3/16	23/32	9/16	1/2	2640	1760	0.4
RF635	6.4	21	19	16.0	2300	1400	20	1/4	13/16	3/4	5/8	5070	3090	0.7
RF636	7.9	27	22	16.0	3600	2700	45	5/16	1 1/16	7/8	5/8	7940	5950	1.6
RF638*2	7.9	27	22	16.0	3600	2700	45	5/16	1 1/16	7/8	5/8	7940	5950	1.6
RF637*2	9.5	52	36	21.0	5400	3600	90	3/8	2 1/16	1 13/32	13/16	11900	7940	3.2

*1 (U.D.L.) B.L. – The “Uniformly Distributed Load” breaking load of the shackle; the load is applied across the full span of the shackle pin.

(P.L.) B.L. – The “Point Load” breaking load of the shackle; the load is only applied at the centre or one side of the shackle pin.

*2 Shackle pins drilled for seizing wire. *3 RF1035 features 20.7mm (13/16”) A/F hexagonal pin head. *4 RF613S has a slotted head.

Shackles



- ✓ Halyard shackles have a lever action for easy opening and closing, with a keyed pin for positive locking.
- ✓ Slotted shackle pins are low profile to prevent snagging on ropes etc.
- ✓ Lightweight clevis pin shackles use a split ring for security.
- ✓ Shackle keys suit both coined and slotted pins.
- ✓ Grade 316 stainless steel bodies and pins.

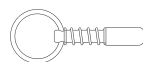
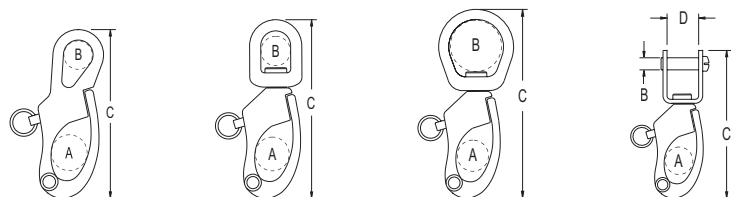
PRODUCT No.	A mm	B mm	C mm	D mm	(U.D.L.)*1 B.L. kg	(P.L.)*1 B.L. kg	WEIGHT g	A in.	B in.	C in.	D in.	(U.D.L.)*1 B.L. lb	(P.L.)*1 B.L. lb	WEIGHT oz
Standard Slotted Pin														
RF615	4.0	16.0	10.0	-	850	650	5	5/32	5/8	13/32	-	1870	1430	0.2
RF615A	4.0	13.0	8.0	-	850	700	7	5/32	1/2	5/16	-	1870	1540	0.2
RF150	4.7	18.0	12.0	-	1500	900	10	3/16	23/32	15/32	-	3300	1980	0.4
RF707S	4.8	17.0	18.0	-	1200	700	10	3/16	21/32	23/32	-	2640	1540	0.4
RF151	6.4	22.0	16.0	-	2300	1400	20	1/4	7/8	5/8	-	5070	3090	0.7
RF152	7.9	29.0	17.0	-	3600	2700	45	5/16	1 5/32	21/32	-	7940	5950	1.6
Special Slotted Pin														
RF614	4.8	19.0	10.0	5.0	1300	1300	5	3/16	13/32	3/8	3/16	2860	2860	0.2
RF806S	4.8	11.5	16.0	-	950	700	10	3/16	7/16	5/8	-	2090	1540	0.4
Lightweight Clevis Pin														
RF801	4.8	7.4	7.0	-	480	320	3	3/16	9/32	9/32	-	1060	710	0.1
RF807	4.8	20.0	14.0	-	700	-	10	3/16	25/32	9/16	-	1540	-	0.4
RF803	5.9	12.2	11.3	-	900	600	10	7/32	15/32	7/16	-	1980	1320	0.4
RF804	5.9	13.3	13.3	-	1480	990	12	7/32	17/32	17/32	-	3260	2180	0.4
RF805	7.9	16.7	17.6	-	1800	1200	25	5/16	21/32	11/16	-	3970	2650	0.9
Halyard														
RF1032	4.8	22.0	10.0	15.0	1200	900	30	3/16	7/8	13/32	19/32	2650	1980	1.1
RF1033	6.4	32.0	13.0	19.0	2100	1500	55	1/4	1 1/4	1/2	3/4	4630	3310	1.9
RF1034	7.9	39.0	18.5	20.0	2700	2200	90	5/16	1 17/32	23/32	25/32	5950	4850	3.2
Swivel														
RF576	4.0	10.0	22.0	6.0	500	350	10	5/32	13/32	7/8	15/64	1100	770	0.4
RF120	4.8	12.0	32.0	8.7	650	650	20	3/16	15/32	1 1/4	11/32	1430	1430	0.7
RF173	6.4	15.0	42.0	11.9	1100	700	40	1/4	19/32	1 21/32	19/32	2420	1540	1.4
RF75*2	7.9	17.0	60.0	15.8	2300	2100	15	5/16	21/32	2 3/8	5/8	5070	4620	0.5
Two Way Link														
RF815	5.0	5.2	10.0	19.0	1100	900	14	3/16	7/32	13/32	3/4	2425	1980	0.5
RF816	6.0	6.7	12.2	22.6	1200	1000	21	1/4	1/4	15/32	7/8	2650	2200	0.7
Shackle Keys														
RF1320R	Heavy duty shackle key and multi purpose tool. Suits coined and slotted head shackle pins. Features sockets for 8/16" & 1/4" Nyloc nuts. Screwdriver blade. Hollow end ideal for tightening train plugs. Red plastic grip handle.						90							
RF1321	Micro shackle key. Suits coined head shackle pins up to 6mm (1/4") diam. Screwdriver. Bottle opener, Lanyard included.						11							

*1 (U.D.L.) B.L. – The "Uniformly Distributed Load" breaking load of the shackle; the load is applied across the full span of the shackle pin.

(P.L.) B.L. – The "Point Load" breaking load of the shackle; the load is only applied at the centre or one side of the shackle pin.

*2 RF75 swivel shackle has Ball Bearings.

Snap Shackles



Replacement Plunger Pin Kits

RF6160	Suits RF6110, RF6120, RF6130, RF6170
RF6161	Suits RF6100
RF6260	Suits RF6200
RF6262	Suits RF6210, RF6220, RF6230, RF6240
RF6360	Suits RF6300, RF6310, RF6320

- ✓ Fixed or swivel heads.
- ✓ Heavy duty plunger springs and precision components ensure dependable service.
- ✓ Body and hasp profiles are designed for easy clearance of lines and fittings when released.
- ✓ Stainless steel is used throughout for excellent corrosion resistance.
- ✓ High strength to weight ratio.

- ✓ Split ring on plunger pin is spot welded for security.
- ✓ A lanyard can be attached to the plunger pin for easy opening.
- ✓ RF6170 is a snap shackle block adapter with a 5mm (3/16") pin.
- ✓ Grade 15-5PH investment cast stainless steel body and hasp.
- ✓ Grade 316 stainless steel plunger pin and spring.

PRODUCT No.	HEAD TYPE	A mm	B mm	C mm	D mm	M.W.L. kg	B.L. kg	WEIGHT g	A in.	B in.	C in.	D in.	M.W.L. lb	B.L. lb	WEIGHT oz
Series 80															
RF6080	Fixed bail	6.2	4.7	32	-	75	150	10	1/4	3/16	1 1/4	-	165	330	0.4
Series 100															
RF6100	Fixed bail	16	15.0	66	-	1000	2000	43	5/8	19/32	2 19/32	-	2200	4410	1.5
RF6110	Small swivel bail	16	10.0	69	-	850	1700	50	5/8	13/32	2 23/32	-	1870	3750	1.8
RF6120	Large swivel bail	16	13.0	73	-	750	1500	57	5/8	1/2	2 7/8	-	1650	3310	2.0
RF6130	Swivel shackle	16	6.4	72	13	750	1500	64	5/8	1/4	2 27/32	1/2	1650	3310	2.3
RF6170	Block head adapter	16	5.0	60	-	500	1135	49	5/8	3/16	2 3/8	-	1100	2500	1.7
Series 200															
RF6200	Fixed bail	20	19.0	85	-	1100	2200	100	13/16	3/4	3 11/32	-	2420	4840	3.5
RF6210	Small swivel bail	16	16.0	92	-	1600	3200	113	5/8	5/8	3 5/8	-	3530	7050	4.0
RF6220	Large swivel bail	16	25.0	101	-	1100	2200	120	5/8	1	3 31/32	-	2430	4850	4.2
RF6230	Swivel shackle	16	7.9	95	19	1100	2200	120	5/8	5/16	3 3/4	3/4	2430	4850	4.2
RF6240	Swivel shackle	16	7.9	100	22	1100	2200	135	5/8	5/16	3 15/16	7/8	2430	4850	4.8
Series 300															
RF6300	Fixed bail	26	19.0	100	-	2000	4000	155	1 1/32	3/4	3 15/16	-	4410	8820	5.5
RF6310	Small swivel bail	26	16.0	110	-	1800	3600	142	1 1/32	5/8	4 11/32	-	3970	7940	5.0
RF6320	Large swivel bail	26	26.0	122	-	1350	2700	170	1 1/32	1 1/32	4 3/4	-	2980	5950	6.0

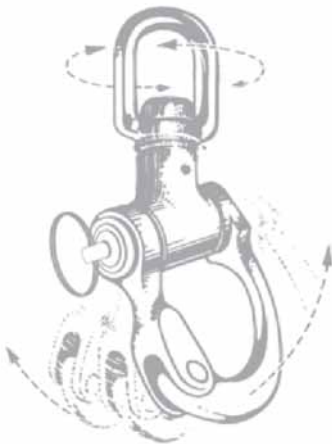
Trunnion Snap Shackles



RF6171



RF6111



TRUNNION
ARTICULATION



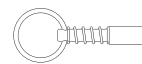
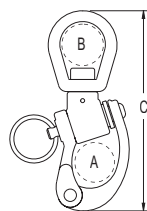
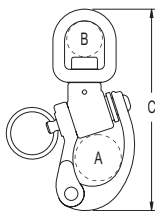
RF6321



RF6411



RF6511



Replacement Plunger Pin Kits

RF6161 Suits RF6111, RF6171

RF6360 Suits RF6321

RF6461 Suits RF6411

RF6561 Suits RF6511

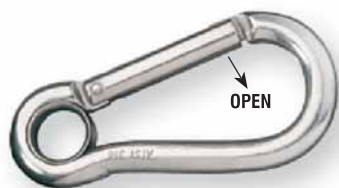
- ✓ Trunnion swivel head allows both 360° rotation and sided to side articulation.
- ✓ Small and large bail versions.
- ✓ RF6171 is a snap shackle block adapter with a 5mm (3/16") pin.

- ✓ Grade 15-5PH investment cast stainless steel body and hasp.
- ✓ Stainless steel plunger pin and spring.

PRODUCT No.	HEAD TYPE	A mm	B mm	C mm	M.W.L. kg	B.L. kg	WEIGHT g	A in.	B in.	C in.	M.W.L. lb	B.L. lb	WEIGHT oz
Series 100													
RF6111	Small swivel bail	16	10	70	750	1500	57	5/8	13/32	2 3/4	1650	3310	2.0
RF6171	Block head adapter	16	-	60	500	1000	62	5/8	-	2 3/8	1100	2200	2.2
Series 300													
RF6321	Large swivel bail	26	26	122	1350	2700	198	1 1/32	1 1/32	4 13/16	2980	5950	7.0
Series 400													
RF6411	Small swivel bail	32	25	137	3000	6000	369	1 1/4	1	5 13/32	6610	13230	13.0
Series 500													
RF6511	Small swivel bail	36	22	150	3750	7500	454	1 13/32	7/8	5 29/32	8270	16530	16.0

Hooks, Quick Links & Welded Rings

CARBINE HOOK NON-LOCKING



QUICKLINKS

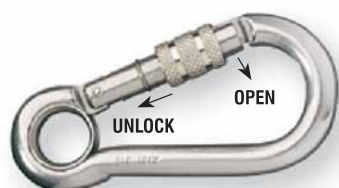


STAINLESS STEEL RINGS

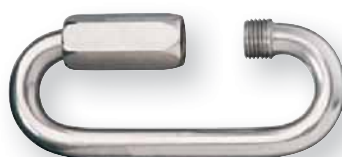


RF533

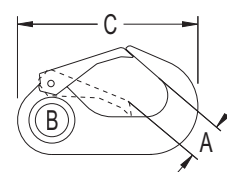
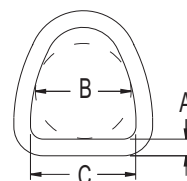
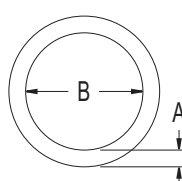
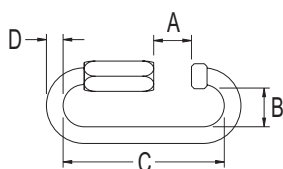
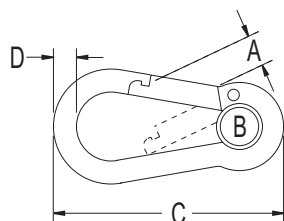
CARBINE HOOK LOCKING



RF650



RF16



- ✓ Carbine hooks have ferrule lined or closed eyes to retain the fixed line.
- ✓ RF648A carbine hook has a spring lever lock for one-handed operation.
- ✓ RF650 carbine hook opens inwards and has a threaded locking sleeve for added security.

- ✓ RF16 'D' ring suits use with 50mm (2") webbing.
- ✓ Quicklinks have large openings and secure threaded locking sleeves. They are available in standard and long ('L' suffix product number) styles.

PRODUCT No.	TYPE	A mm	B mm	C mm	D mm	M.W.L. kg	B.L. kg	WEIGHT g	A in.	B in.	C in.	D in.	M.W.L. lb	B.L. lb	WEIGHT oz
Carbine Hook - Non Locking															
RF2355	-	9.0	9.0	60	6	-	520	28	11/32	11/32	2 3/8	1/4	-	1145	1.0
RF652	-	11.0	11.0	80	8	-	800	68	7/16	7/16	3 1/8	5/16	-	1760	2.4
RF653	-	15.0	15.0	100	10	-	1200	129	19/32	19/32	3 15/16	13/32	-	2640	4.6
Carbine Hook - Threaded Locking Sleeve															
RF650	-	13.0	14.0	100	10	-	1200	134	17/32	17/32	3 15/16	13/32	-	2640	4.7
Quicklinks															
RF711	-	5.5	11.5	32	4	-	1400	12	3/16	7/16	1 1/4	5/32	-	3085	0.4
RF711L	-	11.5	11.5	45	4	-	1250	15	7/16	7/16	1 3/4	5/32	-	2755	0.5
RF712	-	7.5	14.5	45	6	-	3250	35	5/16	9/16	1 3/4	1/4	-	7165	1.2
RF712L	-	14.5	14.5	59	6	-	2900	42	9/16	9/16	2 5/16	1/4	-	6390	1.5
RF713	-	11.0	17.5	58	8	-	5500	79	7/16	11/16	2 5/16	5/16	-	12125	2.7
RF713L	-	16.0	16.5	72	8	-	4900	95	5/8	5/8	2 13/16	5/16	-	10800	3.3
RF714	-	12.0	20.5	69	10	-	9000	140	15/32	13/16	2 11/16	13/32	-	19840	4.9
RF714L	-	20.6	20.5	86	10	-	8000	160	13/16	13/16	3 3/8	13/32	-	17635	5.7
Rings															
RF122	Round	4.0	38.0	-	-	180	1100	12	5/32	1 1/2	-	-	396	2420	0.4
RF123	Round	5.0	25.4	-	-	600	2200	14	3/16	1	-	-	1320	4840	0.5
RF48	Round	6.0	25.4	-	-	900	3000	15	1/4	1	-	-	1980	6600	0.5
RF124	Round	6.0	38.0	-	-	650	3000	40	1/4	1 1/2	-	-	1430	6600	1.4
RF125	Round	8.0	42.5	-	-	700	3500	55	5/16	1 5/8	-	-	1540	7700	1.9
RF16	D-Ring	8.0	45.0	50	-	600	1200	75	5/16	1 3/4	2	-	1320	2640	2.7
Snap Hooks															
RF533	-	10.0	9.0	51	-	180	360	25	13/32	11/32	2	-	395	790	0.9

Swivels, Sister Clips, S-Hooks & Beckets



RF78



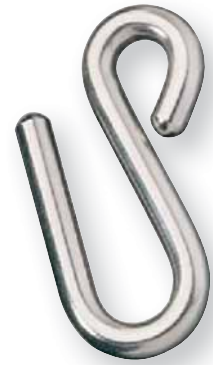
RF78B



RF78A



RF79



RF48A

RF49

RF50

RF51



RF2665



RF89



RF536



RF88



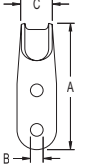
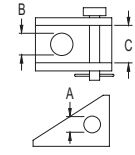
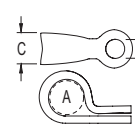
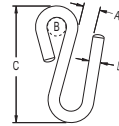
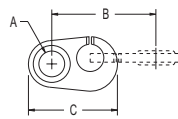
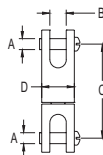
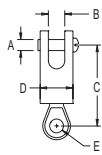
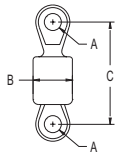
RF1050

RF1051



RF1052

RF1053



- ✓ Swivels are used in conjunction with blocks, and rigging systems to provide articulation and rotation (not suitable for high speed rotating applications).
- ✓ Ball bearing swivels have lower friction and higher working loads than non-ball bearing versions.

- ✓ S-hooks feature a closed eye and long return leg to ensure a positive attachment and avoid accidental release.
- ✓ Sister clips are a simple, effective means of quickly attaching and detaching ropes.
- ✓ Grade 316 stainless steel.

PRODUCT No.	TYPE	A mm	B mm	C mm	D mm	E mm	B.L. kg	WEIGHT g	A in.	B in.	C in.	D in.	E in.	B.L. lb	WEIGHT oz
Swivels - Ball Bearing															
RF78*		8.2	19.0	49.0	-	-	1000	65	5/16	3/4	1 15/16	-	-	2200	2.3
RF78A		6.4	9.5	53.0	19.0	-	1700	80	1/4	3/8	2 3/32	3/4	-	3740	2.8
RF78B*		6.4	9.5	48.0	19.0	8.2	1700	60	1/4	3/8	1 7/8	3/4	5/16	3740	2.1
RF79		7.9	12.0	88.0	25.4	16.0	2600	215	5/16	15/32	3 15/32	1	5/8	5720	7.6
Sister Clips															
RF536		7.0	27.0	24.0	-	-	70	5	9/32	1 1/16	15/16	-	-	150	0.2
RF89		10.0	43.0	37.0	-	-	250	10	13/32	1 11/16	1 7/16	-	-	550	0.4
RF2665		15.0	60.0	58.0	-	-	1800	81	19/32	2 3/8	2 1/4	-	-	3960	2.9
S-Hooks															
RF50		10.0	6.8	44.0	4.8	-	250	14	13/32	1/4	1 3/4	3/16	-	550	0.5
RF48A		10.0	9.0	62.0	6.0	-	400	35	13/32	11/32	2 7/16	1/4	-	880	1.2
RF49		12.0	11.0	76.0	8.0	-	600	65	15/32	7/16	3	5/16	-	1320	2.3
RF51		15.0	16.0	87.0	9.5	-	800	110	19/32	5/8	3 7/16	3/8	-	1760	3.9
Beckets															
RF88	Thumb cleat	50.5	5.0	13.5	-	-	-	13	2	3/16	17/32	-	-	-	0.5
RF1050	Eye becket	8.0	5.0	9.0	-	-	-	6	5/16	3/16	11/32	-	-	-	0.2
RF1051	Eye becket	8.0	6.0	9.0	-	-	-	6	5/16	1/4	11/32	-	-	-	0.2
RF1052	Fork becket	5.0	5.0	11.5	-	-	-	9	3/16	3/16	7/16	-	-	-	0.3
RF1053	Fork becket	5.0	6.0	14.0	-	-	-	9	3/16	1/4	9/16	-	-	-	0.3

*Eye thickness = 6.4mm (1/4")

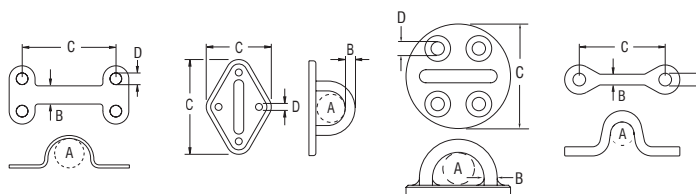
Padeyes & Saddles



- ✓ Removable screw-in padeyes are ideal for attaching blocks which may be removed when not in use or while cruising. A threaded plug remains in the base section when the top plate is removed to prevent dirt and grit from entering the threads.

Grade 316 stainless steel.

RF2429's - Grade 15-5PH high tensile stainless steel.



PRODUCT No.		A mm	B mm	C mm	D mm	B.L. kg	WEIGHT g	A in.	B in.	C in.	D in.	B.L. lb	WEIGHT oz
Padeyes - Cast Grade 15-5PH													
RF2429-02		7.2	5.0	32.5	6.4	1500	26	9/32	3/16	1 1/4	1/4	3310	0.9
RF2429-06		16.0	7.3	50.0	6.4	4000	82	5/8	5/16	2	1/4	8800	2.9
RF2429-08		17.2	10.0	57.7	8.3	6000	127	43/64	25/64	2 1/4	21/64	13200	4.5
RF2429-10		21.1	11.5	72.3	10.2	9000	240	53/64	7/16	2 3/4	13/32	19800	8.5
Padeyes - Screw-In													
RF2433-09	Removable, screw-in	14.0	9.0	55.0	6.0	4000	285	9/16	3/8	2 5/32	1/4	8820	10.1
RF2433-10	Removable, screw-in	19.0	10.0	72.0	8.0	5000	550	3/4	13/32	2 27/32	5/16	11020	19.4
RF2433-12	Removable, screw-in	22.5	12.0	85.0	10.0	8000	1025	7/8	15/32	3 11/32	15/32	17640	36.2
Pad Eyes - Diamond Base													
RF529*	Including nylon mounting pad	18.0	8.0	75 x 51	6.4	2000	100	23/32	5/16	3 x 2	1/4	4400	4.0
RF415	Including nylon mounting pad	21.0	8.0	75 x 51	5.0	1000	75	13/16	5/16	3 x 2	3/16	2200	2.7
RF44	Including nylon mounting pad	22.0	11.0	94 x 60	6.7	2000	130	7/8	7/16	3 11/16 x 2 3/8	1/4	4400	4.6
RF416		25.0	6.4	83 x 35	4.8	800	40	1	1/4	3 1/4 x 1 3/8	3/16	1760	1.4
Saddles - Narrow													
RF134		14.0	4.8	36.5	5.0	-	5	9/16	3/16	1 7/16	3/16	-	0.2
RF134A	Countersunk holes	14.0	4.8	36.5	5.0	-	5	9/16	3/16	1 7/16	3/16	-	0.2
RF498		10.0	3.5	28.0	4.0	-	4	13/32	1/8	1 1/16	5/32	-	0.1
RF528		12.0	7.0	44.0	8.0	-	25	15/32	9/32	1 23/32	5/16	-	0.9
RF1054		18.0	5.5	60.0	8.0	-	35	23/32	7/32	2 3/8	5/16	-	1.2
RF1055		16.0	7.0	45.0	6.0	-	15	5/8	9/32	1 25/32	1/4	-	0.5
Saddles - Flared Top													
RF94		6.0	9.0	27.5	5.0	-	3	1/4	11/32	1 3/32	3/16	-	0.1
RF94A		5.0	6.0	29.0	5.0	-	3	3/16	1/4	1 1/8	3/16	-	0.1
RF148		15.0	12.0	41.0	6.0	-	8	9/32	15/32	1 5/8	1/4	-	0.3
RF291		13.0	9.0	32.0	5.0	-	7	1/2	11/32	1 1/4	3/16	-	0.2
RF4714	4 fixing point	9.0	8.0	32.0 / 19.5	5.0	-	9	11/32	5/16	1 1/4 / 3/4	3/16	-	0.3
RF5013		15.0	12.5	38.0	5.0	-	8	19/32	1/2	1 1/2	3/16	-	0.3
RF5023		18.0	14.0	51.0	6.0	-	11	3/4	9/16	2	1/4	-	0.4
Saddles - Ferrule Eye													
RF499		9.4	4.9	28.3	4.1	-	4	3/8	3/16	1 1/8	5/32	-	0.1
RF1056		17.1	8.8	60.0	8.3	-	40	5/8	5/16	2 3/8	5/16	-	1.4
RF1057		13.9	6.8	44.8	6.2	-	18	1/2	1/4	1 3/4	1/4	-	0.6
RF1058		11.4	6.0	37.3	5.1	-	9	7/16	3/16	1 7/16	3/16	-	0.3

* Turned U-Bolt with a pad eye base. Thread size is 6.4mm (1/4" UNC). Suits maximum deck thickness of 22mm (7/8")

FIXED, NON-TUMBLE



RF2434-16B

2 x M14



RF2434-20B

2 x M18

REMOVABLE, NON-TUMBLE



RF2435-16B

4 x M10

RF2435-20B

6 x M12

FIXED



RF2431-16

2 x M16

REMOVABLE

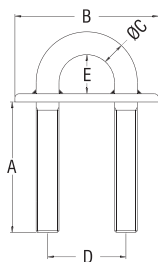


RF2435-14

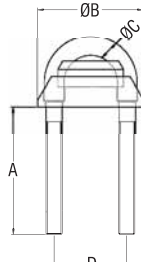
4 x M10

RF2435-20

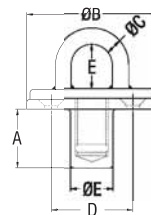
6 x M12



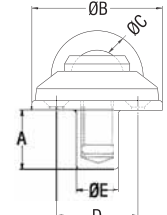
FIXED



FIXED, NON-TUMBLE



REMOVABLE



REMOVABLE, NON-TUMBLE

- ✓ Fixed style padeyes feature an all-in-one U-bolt mount for maximum strength.
- ✓ Screw in, removable padeyes allow the block and padeye to be easily removed when not in use.
- ✓ Included dust cover on removable padeyes prevents grit from entering the threaded socket when the padeye is removed.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	M.W.L. kg	B.L. kg	WEIGHT g	A in.	B in.	C in.	D in.	E in.	M.W.L. lb	B.L. lb	WEIGHT oz
RF2431-16*	Padeye, fixed	80	97 x 40	16.0	57.0	31	10000	20000	600	3 5/32	3 13/16 x 1 9/16	5/8	2 1/4	1 7/32	22050	44090	21.2
RF2434-16B*	Padeye, fixed non-tumble	83	80	16.0	56.5	-	8000	16000	1000	3 9/32	3 5/32	5/8	2 7/32	-	17640	35270	35.2
RF2434-20B*	Padeye, fixed non-tumble	98	110	19.8	74.5	-	13500	27000	2400	3 7/8	4 5/16	25/32	2 15/16	-	29760	59520	84.6
RF2435-14	Padeye, removable	40	100 x 29	14.0	70.0	32	7500	15000	1100	1 9/16	3 15/16 x 1 5/32	9/16	2 3/4	1 1/4	16530	33070	38.8
RF2435-20	Padeye, removable	52	135 x 35	20.0	100.0	42	13500	27000	2700	2 1/16	5 5/16 x 1 3/8	25/32	3 15/16	1 21/32	29760	59520	95.2
RF2435-16B	Padeye, removable non-tumble	40	100	16.0	70.0	32	8000	16000	2200	1 9/16	3 15/16	5/8	2 3/4	1 1/4	17640	35270	77.6
RF2435-20B	Padeye, removable non-tumble	52	135	19.8	74.5	42	13500	27000	3700	2 1/16	5 5/16	25/32	2 15/16	1 21/32	29760	59520	130.4

* Nuts and washers included with fixed padeyes

Eye Bolts & U-Bolts



RING BOLTS



EYE BOLTS



ANCHOR BOLTS



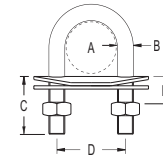
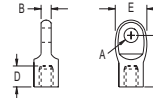
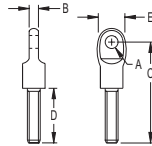
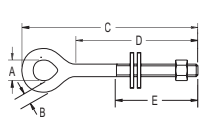
RF5290



U-BOLTS - STEPPED

- ✓ Eye bolts are supplied with washers and a nut.
- ✓ U-bolts are supplied with a top plate, backing plate and nuts.

- ✓ RF5280 is supplied with a washer and nut.



PRODUCT No.	THREAD TYPE	NOMINAL HOLE DEPTH mm	A mm	B mm	C mm	D mm	E mm	WEIGHT g	NOMINAL HOLE DEPTH in.	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
Ring Bolts															
RF26	1/4 BSW	-	25	5.0	63	25	20	35	-	1	3/16	2 1/2	1	3/4	1.2
RF424	1/4 BSW	-	25	5.0	90	51	22	40	-	1	3/16	3 1/2	2	7/8	1.4
Eye Bolts															
RF156	3/16 BSW	-	10	4.0	76	51	38	10	-	13/32	5/32	3	2	1 1/2	0.4
RF157	3/16 BSW	-	10	4.0	100	75	51	15	-	13/32	5/32	4	3	2	0.5
RF159	1/4 BSW	-	12	5.5	81	51	38	25	-	15/32	7/32	3 3/16	2	1 1/2	0.9
RF160	1/4 BSW	-	12	5.5	108	76	51	30	-	15/32	7/32	4 1/4	3	2	1.1
RF161	1/4 BSW	-	12	5.5	132	102	51	35	-	15/32	7/32	5 3/16	4	2	1.2
RF162	1/4 BSW	-	12	5.5	160	127	51	40	-	15/32	7/32	6 5/16	5	2	1.4
RF163	1/4 BSW	-	12	5.5	180	152	51	50	-	15/32	7/32	7	6	2	1.8
RF164	5/16 BSW	-	13	7.0	111	76	51	60	-	1/2	9/32	4 3/8	3	2	2.1
RF165	5/16 BSW	-	13	7.0	139	102	51	65	-	1/2	9/32	5 1/3	4	2	2.3
RF166	5/16 BSW	-	13	7.0	162	127	51	75	-	1/2	9/32	6 3/8	5	2	2.7
RF167	5/16 BSW	-	13	7.0	187	152	51	80	-	1/2	9/32	7 3/8	6	2	2.8
RF168	3/8 BSW	-	17	8.5	116	76	51	80	-	21/32	11/32	4 1/2	3	2	2.8
RF169	3/8 BSW	-	17	8.5	140	102	51	90	-	21/32	11/32	5 1/2	4	2	3.2
RF170	3/8 BSW	-	17	8.5	167	127	51	100	-	21/32	11/32	6 5/8	5	2	3.5
RF171	3/8 BSW	-	17	8.5	193	152	51	110	-	21/32	11/32	7 5/8	6	2	3.9
Anchor Bolts & Nut															
RF5270	1/4 UNF	-	6.4	4.8	50.0	27	14.4	19	-	1/4	3/16	1 31/32	1 1/16	9/16	0.7
RF5271	1/4 UNF	-	6.4	4.8	77.0	54	14.4	27	-	1/4	3/16	3	2 1/8	9/16	1.0
RF5272	M6	-	6.1	4.8	31.0	9	14.4	18	-	1/4	3/16	1 7/32	3/8	9/16	0.6
RF5280	1/4 UNF	-	6.4	4.8	50.0	27	14.4	26	-	1/4	3/16	1 31/32	1 1/16	9/16	0.9
RF5290	1/4 UNF	-	6.4	4.8	22.5	8	14.4	12	-	1/4	3/16	7/8	5/16	9/16	0.4
RF5292	M8	-	6.4	4.8	22.5	8	14.4	12	-	1/4	3/16	7/8	5/16	9/16	0.4
U-Bolt - Stepped															
RF559	1/4 UNC	-	24	8.0	38	25.5	6	70	-	15/16	5/16	1 1/2	3/4	1/4	2.5
RF543	5/16 UNC	-	28	9.5	25	33.5	4	95	-	1 1/8	3/8	1	1	5/32	3.4
RF541	5/16 UNC	-	28	9.5	38	33.5	8	105	-	1 1/8	3/8	1 1/2	1	5/16	3.7
RF544	5/16 UNC	-	28	9.5	51	33.5	6	110	-	1 1/8	3/8	2	1	1/4	3.9
RF547	5/16 UNC	-	28	9.5	77	33.5	32	130	-	1 1/8	3/8	3	1	1 1/4	4.6
RF548	5/16 UNC	-	28	9.5	103	33.5	58	150	-	1 1/8	3/8	4	1	2 9/32	5.3
RF549	5/16 UNC	-	28	9.5	127	33.5	71	170	-	1 1/8	3/8	5	1	2 13/16	6.0

Elegant Design, Exceptional Performance

From the unique design to the high grade materials and quality finish, Ronstan closed body turnbuckles are engineered to deliver performance while enhancing the appearance of any yacht.

Type 2

- Type 2 closed body turnbuckles are traditional closed body turnbuckles with polished Chrome plated, high grade Brass bodies and Grade 316 Stainless Steel end fittings. This combination of materials avoids the risk of excessive thread wear or seizure under load, which can occur in turnbuckles with all Stainless Steel components. After tensioning, internally tapered locking nuts secure the adjustment. Sight holes are provided in the bodies to verify adequate thread engagement.
- For easy thread identification, a machined groove identifies the left-hand thread locking nut and body end. Toggles are designed with full universal movement for easy installation and connection and allow the assembled cable to move where the structure is subject to wind loads or vibration.

Type 1

- Type 1 closed body turnbuckles have a sleek, modern profile with no sharp edges. They are easily adjusted by turning the unique coupling nut, which is free to rotate on the turnbuckle barrel, and are secured with a quick turn on the cone shaped locking nut. A sight hole is provided in the coupling nut to verify adequate thread engagement. With single end adjustment and a fine thread, Type 1 turnbuckles are much easier to adjust than conventional turnbuckles, and the use of dissimilar but compatible metals for the threaded components avoids the risk of thread seizure. Toggles are designed with full universal movement for easy installation and connection and allow the assembled cable to move where the structure is subject to wind loads or vibration.

Fine, Rolled Threads

Ronstan rigging fittings have rolled threads for maximum strength and reliability – unlike cut threads, the stainless steel bar is formed up and down to create a thread with the grain remaining unbroken and flowing up and down the threads. Threads are UNF (Unified National Fine), short pitch threads for fine adjustment and reduced adjustment effort.

Roll Swage Integrity

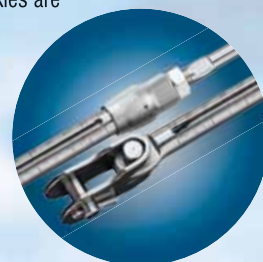
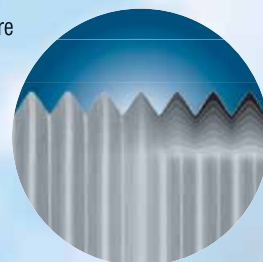
Swage fittings suit 'roll swaging' in Wiretechnik®-type presses and dimensions are derived from the original 'Milspec' for maximum integrity. They are suitable for use with modern and traditional wire constructions, including 1x19, 7x19 and compact strand.

Termination Options

A full range of eye, fork and toggle fittings complements the turnbuckles to permit assembly of finished rigging elements to suit virtually any application.

Calibrated Turnbuckles

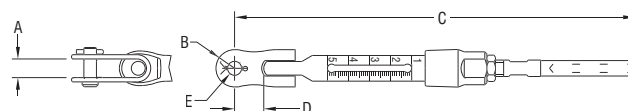
For accurate, repeatable settings of rig tension and precise adjustment, calibrated turnbuckles are available for wire sizes up to 6mm (1/4").



Calibrated Type 1



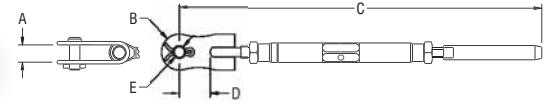
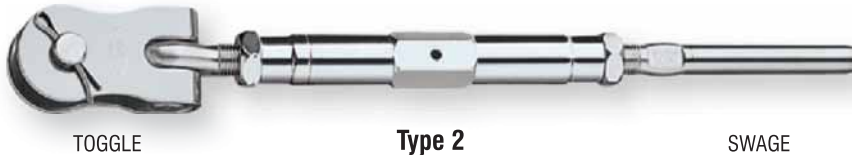
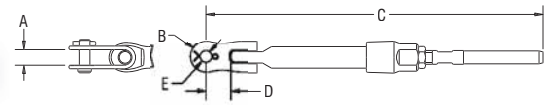
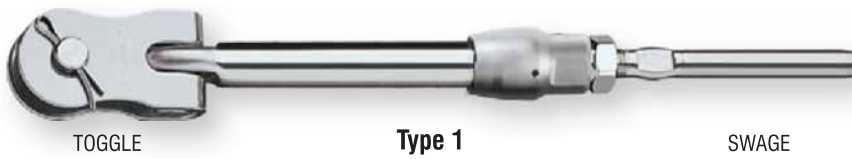
- ✓ Laser etched calibration marks allow accurate, repeatable settings for precise adjustment and tuning of rig tension.
- ✓ Tapered lock nut locks the threaded terminal in position without split pins – nothing to catch on sails, and no tape required.
- ✓ Coupling nut remains free to rotate on the body with no effect on rig tension, reducing wire fatigue. The coupling nut is manufactured in bronze to prevent thread seizure (galling) with stainless body and threaded swage terminal.
- ✓ Handle kit allows rapid adjustment of rig settings without tools.



PRODUCT No.	THREAD TYPE	WIRE DIAM	A mm	B mm	C MIN. mm	C MAX. mm	D mm	E mm	B.L. kg	WEIGHT g	WIRE DIAM	A in.	B in.	C MIN. in.	C MAX. in.	D in.	E in.	B.L. lb	WEIGHT oz
Toggle/Swage Calibrated Turnbuckles- Metric Wire																			
RF1575M0304	1/4" UNF	3mm	8.3	8.0	180	235	15.0	6.4	1630	110	-	5/16	5/16	7 1/16	9 1/4	19/32	1/4	3590	3.9
RF1575M0404	1/4" UNF	4mm	8.3	8.0	188	243	15.0	6.4	1630	115	-	5/16	5/16	7 13/32	9 9/16	19/32	1/4	3590	4.1
RF1575M0405	5/16" UNF	4mm	9.4	11.0	206	271	20.0	7.9	2250	190	-	3/8	7/16	8 1/8	10 11/16	25/32	5/16	4960	6.7
RF1575M0505	5/16" UNF	5mm	9.4	11.0	219	284	20.0	7.9	2250	196	-	3/8	7/16	8 5/8	11 3/16	25/32	5/16	4960	6.9
RF1575M0506	3/8" UNF	5mm	10.5	11.0	239	319	22.0	9.5	3350	301	-	13/32	7/16	9 13/32	12 9/16	7/8	3/8	7390	10.6
RF1575M0608	1/2" UNF	6mm	13.6	17.5	316	426	28.0	12.7	5430	725	-	17/32	11/16	12 7/16	16 25/32	1 3/32	1/2	11950	25.6
Toggle/Swage Calibrated Turnbuckles - Imperial Wire																			
RF1574-0404	1/4" UNF	-	8.3	8.0	180	235	15.0	6.4	1630	110	1/8 in.	5/16	5/16	7 1/16	9 1/4	19/32	1/4	3590	3.9
RF1574-0504*	1/4" UNF	-	8.3	8.0	188	243	15.0	6.4	1630	115	5/32 in.	5/16	5/16	7 13/32	9 9/16	19/32	1/4	3590	4.1
RF1574-0505*	5/16" UNF	-	9.4	11.0	206	271	20.0	7.9	2250	195	5/32 in.	3/8	7/16	8 1/8	10 11/16	25/32	5/16	4960	6.9
RF1574-0605	5/16" UNF	-	9.4	11.0	219	284	20.0	7.9	2250	196	3/16 in.	3/8	7/16	8 5/8	11 3/16	25/32	5/16	4960	6.9
RF1574-0606	3/8" UNF	-	10.5	11.0	239	319	22.0	9.5	3350	301	3/16 in.	13/32	7/16	9 13/32	12 9/16	7/8	3/8	7390	10.6
RF1574-0706	3/8" UNF	-	10.5	14.0	245	325	22.0	9.5	3350	311	7/32 in.	13/32	9/16	9 21/32	12 13/16	7/8	3/8	7690	11.0
RF1574-0808	1/2" UNF	-	13.6	17.5	316	426	28.0	12.7	5430	735	1/4 in.	17/32	11/16	12 7/16	16 25/32	1 3/32	1/2	11950	25.9
Toggle Calibrated Body Assemblies*2																			
RF3140	1/4" UNF	3 - 4mm	8.3	8.0	-	-	15.0	6.4	1630	83	1/8 - 5/32 in.	5/16	5/16	-	-	19/32	1/4	3590	2.9
RF3141	5/16" UNF	4 - 5mm	9.4	11.0	-	-	20.0	7.9	2250	138	5/32 - 3/16 in.	3/8	7/16	-	-	25/32	5/16	4960	4.9
RF3142	3/8" UNF	5mm	10.5	11.0	-	-	22.0	9.5	3350	208	3/16 - 7/32 in.	13/32	7/16	-	-	7/8	3/8	7390	7.3
RF3143	1/2" UNF	6mm	13.6	17.5	-	-	28.0	12.7	5430	493	1/4 in.	17/32	11/16	-	-	1 3/32	1/2	11950	17.4
Handle Kit																			
RF1573-05	Handle kit, suits 5/16" threaded turnbuckle. Features long rotation arm for maximum tensioning leverage, and lift and re-position operation for ease of use or when rotation space is restricted. Rotation arm snaps into snag-free lock down position.									75									2.6

*1 Product will be supplied as metric equivalent, may have metric terminal code stamping. *2 Not supplied with threaded swage terminal or lock nut.

Toggle/Swage

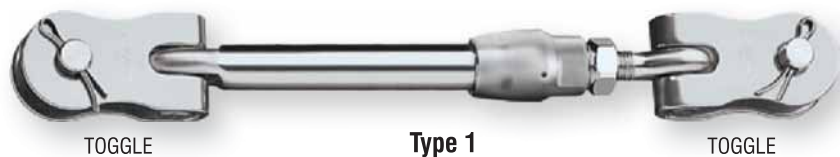


PRODUCT No.	TYPE	THREAD TYPE	WIRE DIAM.	A mm	B mm	C MIN. mm	C MAX. mm	D mm	E mm	B.L. kg	WEIGHT g	A in.	B in.	C MIN. in.	C MAX. in.	D in.	E in.	B.L. lb	WEIGHT oz
Toggle/Swage Turnbuckles - Metric Wire																			
RF1579M2.503*1	Type 2	3/16" UNF	2.5mm	4.9	6.4	135	188	11.6	4.7	890	44	3/16	1/4	3 3/8	7 3/8	15/32	3/16	1960	1.6
RF1578M0304	Type 1	1/4" UNF	3mm	7.8	9.1	180	235	15.5	6.2	1630	116	5/16	11/32	7 1/16	9 1/4	5/8	1/4	3590	4.1
RF1578M0404	Type 1	1/4" UNF	4mm	7.8	9.1	188	243	15.5	6.2	1630	118	5/16	11/32	7 3/16	9 9/16	5/8	1/4	3590	4.1
RF1578M0405	Type 1	5/16" UNF	4mm	9.4	11.2	206	271	20.0	7.9	2250	194	3/8	7/16	8 1/8	10 11/16	13/16	5/16	4950	6.8
RF1578M0504*2	Type 1	1/4" UNF	5mm	7.8	9.1	174	231	15.5	6.2	1630*2	126	5/16	5/16	7 1/4	9 7/16	9/16	1/4	3590*2	4.4
RF1578M0505	Type 1	5/16" UNF	5mm	9.4	11.2	219	284	20.0	7.9	2250	201	3/8	7/16	8 5/8	11 3/16	13/16	5/16	4950	7.1
RF1578M0506	Type 1	3/8" UNF	5mm	10.0	11.2	239	319	20.8	9.4	3350	301	13/32	7/16	9 7/16	12 9/16	13/16	3/8	7370	10.6
RF1578M0607	Type 1	7/16" UNF	6mm	11.7	15.5	291	386	24.0	10.9	4130	526	15/32	5/8	11 7/16	15 3/16	15/16	7/16	9020	18.5
RF1578M0608	Type 1	1/2" UNF	6mm	13.9	17.5	316	426	28.0	12.4	5430	722	17/32	11/16	12 7/16	16 3/4	1 1/8	1/2	11950	25.5
RF1578M0708	Type 1	1/2" UNF	7mm	13.9	17.5	327	437	28.0	12.4	5430	742	17/32	11/16	12 7/8	17 3/16	1 1/8	1/2	11950	26.2
RF1578M0808	Type 1	1/2" UNF	8mm	13.9	17.5	336	446	28.0	12.4	5430	784	17/32	11/16	13 1/4	17 9/16	1 1/8	1/2	11950	27.7
RF1578M0810	Type 1	5/8" UNF	8mm	17.0	20.8	411	551	40.7	15.7	8700	1430	5/8	13/16	16 3/16	21 3/4	1 19/32	5/8	19140	50.4
RF1578M1010	Type 1	5/8" UNF	10mm	17.0	20.8	431	571	40.7	15.7	8700	1525	5/8	13/16	17	22 1/2	1 19/32	5/8	19140	53.8
RF1579M1212	Type 2	3/4" UNF	12mm	20.0	23.8	467	577	46.0	18.9	12650	2118	3/4	15/16	18 3/8	22 3/4	1 13/16	3/4	27830	74.7
RF1579M1414	Type 2	7/8" UNF	14mm	26.6	28.5	539	664	44.2	22.0	17250	3470	1 1/16	1 1/8	21 1/4	26 1/8	1 3/4	7/8	37950	122.4
RF1579M1616	Type 2	1" UNF	16mm	27.0	31.8	622	752	59.2	25.2	22510	5400	1 1/8	1 1/4	24 1/2	29 5/8	2 5/16	1	49520	190.5
RF1579M1920	Type 2	1 1/4" UNF	19mm	36.5	42.5	762	882	74.1	31.7	36330	11180	1 7/16	1 11/16	30	34 3/4	2 15/16	1 1/4	79929	394.4
RF1579M2220	Type 2	1 1/4" UNF	22mm	36.5	42.5	791	911	74.1	31.7	36330	11710	1 3/8	1 11/16	31 1/8	35 7/8	2 15/16	1 1/4	79929	413.1
RF1579M2622*3	Type 2	1 3/8" UNF	26mm	36.5	46.0	977	1267	58.7	34.8	43500	19110	1 3/8	1 13/16	38 1/2	49 7/8	2 5/16	1 3/8	95700	674.1
Toggle/Swage Turnbuckles - Imperial Wire																			
RF1576-0404	Type 1	1/4" UNF	1/8 in.	7.8	9.1	180	235	15.5	6.2	1630	116	5/16	11/32	7 1/16	9 1/4	9/16	1/4	3590	4.1
RF1576-0504	Type 1	1/4" UNF	5/32 in.	7.8	9.1	188	243	15.5	6.2	1630	120	5/16	11/32	7 7/16	9 9/16	9/16	1/4	3590	4.1
RF1576-0505*4	Type 1	5/16" UNF	5/32 in.	9.4	11.4	206	271	20.0	7.9	2250	196	3/8	7/16	8 1/8	10 11/16	13/16	5/16	4950	6.9
RF1576-0604*2	Type 1	1/4" UNF	3/16 in.	8.1	9.1	174	231	15.5	6.2	1630*2	126	5/16	5/16	6 27/32	9 3/32	9/16	1/4	3590*2	4.4
RF1576-0605	Type 1	5/16" UNF	3/16 in.	9.4	11.4	219	284	20.0	7.9	2250	202	3/8	7/16	8 5/8	11 3/16	13/16	5/16	4950	7.1
RF1576-0606	Type 1	3/8" UNF	3/16 in.	10.0	11.4	239	319	20.8	9.4	3350	304	13/32	7/16	9 7/16	12 9/16	7/8	3/8	7370	10.6
RF1576-0706*4	Type 1	3/8" UNF	7/32 in.	10.0	14.4	245	325	20.8	9.4	3350	321	13/32	10/16	9 5/8	12 13/16	7/8	3/8	7370	11.3
RF1576-0808	Type 1	1/2" UNF	1/4 in.	13.9	17.5	316	426	28.0	12.4	5430	718	9/16	11/16	12 7/16	16 3/4	1 1/8	1/2	11950	25.3
RF1576-0908*4	Type 1	1/2" UNF	9/32 in.	13.9	17.5	327	437	28.0	12.4	5430	742	17/32	11/16	12 7/8	17 3/16	1 1/8	1/2	11950	26.2
RF1576-1008*4	Type 1	1/2" UNF	5/16 in.	13.9	17.5	336	446	28.0	12.4	5430	780	17/32	11/16	13 7/32	17 9/16	1 1/8	1/2	11950	27.5
RF1576-1010*4	Type 1	5/8" UNF	5/16 in.	17.0	20.8	411	551	40.7	15.7	8700	1420	21/32	13/16	16 3/16	21 3/4	1 5/8	5/8	19140	50.1
RF1576-1210	Type 1	5/8" UNF	3/8 in.	17.0	20.8	430	570	40.7	15.7	8700	1470	21/32	13/16	16 15/16	22 7/16	1 5/8	5/8	19140	51.8
RF1577-1412	Type 2	3/4" UNF	7/16 in.	20.0	23.8	460	570	46.0	18.9	12650	2026	3/4	15/16	18 1/8	22 7/16	1 13/16	3/4	27830	72.0
RF1577-1614	Type 2	7/8" UNF	1/2 in.	26.6	28.5	530	655	44.2	22.0	17250	3280	1 1/16	1 1/8	20 7/8	25 3/4	1 3/4	7/8	37950	115.7
RF1577-1814	Type 2	7/8" UNF	9/16 in.	26.6	28.5	539	664	44.2	22.0	17250	5240	1 1/8	1 1/8	23 5/8	28 3/4	1 3/4	7/8	49520	184.8
RF1577-2016*4	Type 2	1" UNF	5/8 in.	29.3	31.8	622	752	59.2	25.2	22510	5410	1 5/32	1 1/4	24 1/2	29 19/32	2 5/16	1	49520	190.8
RF1577-2420*4	Type 2	1 1/4" UNF	3/4 in.	36.0	42.5	762	882	74.1	31.7	36330	11230	1 13/32	1 11/16	30	34 23/32	2 15/16	1 1/4	79929	396.1
RF1577-2820*4	Type 2	1 1/4" UNF	7/8 in.	36.0	42.5	791	911	74.1	31.7	36330	11830	1 3/8	1 11/16	31 3/32	35 7/8	2 15/16	1 1/4	79929	417.3
RF1577-3222*3&4	Type 2	1 3/8" UNF	1 in.	33.0	46.0	977	1267	58.7	34.8	43500	19200	1 5/16	1 7/8	38 15/32	50 1/4	2 31/32	1 3/8	95700	677.3

*1 RF1579M2.503 has a Fork end, not Toggle. *2 Recommended for lifeline applications only. B.L. is below the rated B.L. of 3/16" and 5mm wire.

*3 Non-articulating (fixed) jaw plates. *4 Product will be supplied as metric equivalent, may have metric terminal code stamping.

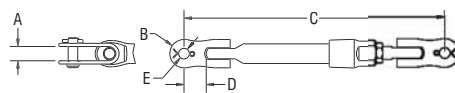
Toggle/Toggle, Toggle/Eye, Bodies



TOGGLE

Type 1

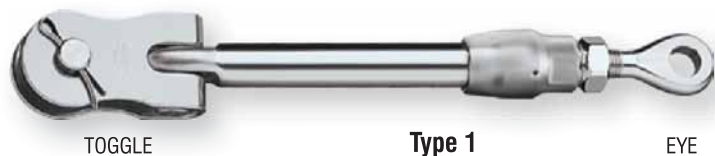
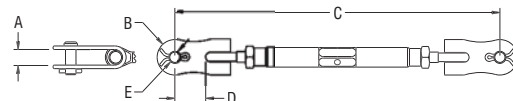
TOGGLE



TOGGLE

Type 2

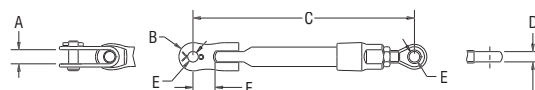
TOGGLE



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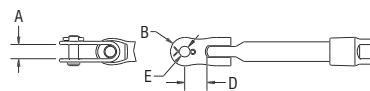
Type 1

EYE



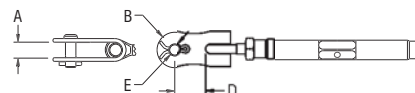
TOGGLE

Type 1



TOGGLE

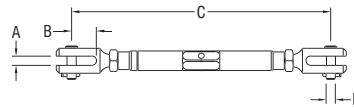
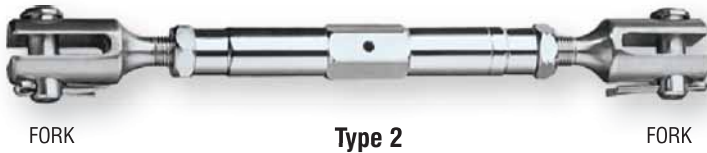
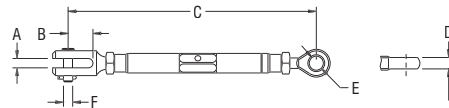
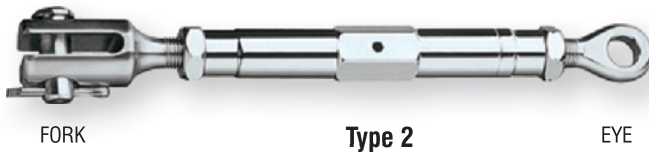
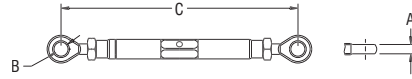
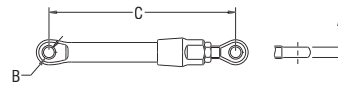
Type 2



PRODUCT No.	TYPE	THREAD TYPE	WIRE DIAM.*3	A mm	B mm	C mm	MIN. C mm	MAX. D mm	E mm	F mm	G mm	B.L. kg	WEIGHT g	WIRE DIAM.*4	A in.	B in.	C MIN. in.	C MAX. in.	D in.	E in.	F in.	G in.	B.L. lb	WEIGHT oz
Toggle/Toggle Turnbuckles																								
RF1582	Type 1	1/4" UNF	3-4	7.8	9.1	155	210	16.8	6.2	-	-	1630	136	1/8	5/16	11/32	6 1/8	8 1/4	21/32	1/4	-	-	3590	4.8
RF1583	Type 1	5/16" UNF	4-5	9.4	11.2	185	250	20.7	7.9	-	-	2250	240	5/32-3/16	3/8	7/16	7 9/32	9 27/32	13/16	5/16	-	-	4950	8.8
RF1584	Type 1	3/8" UNF	5	10.0	14.4	220	300	23.0	9.4	-	-	3350	378	3/16-7/32	13/32	9/16	8 11/16	11 4/5	29/32	3/8	-	-	7370	13.3
RF1586	Type 1	1/2" UNF	6-8	13.9	17.5	285	395	29.4	12.4	-	-	5430	886	1/4-5/16	9/16	11/16	11 1/4	15 9/16	1 5/32	1/2	-	-	11950	31.3
RF1588	Type 1	5/8" UNF	8-10	17.0	20.8	378	508	42.2	15.7	-	-	8700	1640	3/8	21/32	13/16	14 7/8	20	1 21/32	5/8	-	-	19140	57.8
RF1593	Type 2	3/4" UNF	10-12	20.0	23.8	407	507	46.0	18.9	-	-	12650	2394	3/8-7/16	25/32	15/16	16 1/32	19 31/32	1 13/16	3/4	-	-	27830	84.4
RF1594	Type 2	7/8" UNF	13-14	26.6	28.5	470	590	44.4	22.0	-	-	17250	4032	1/2-9/16	1 1/16	1 1/8	18 1/2	23 1/4	1 3/4	7/8	-	-	37950	142.2
RF1595	Type 2	1" UNF	16-18	31.8	31.8	552	672	60.3	25.2	-	-	22510	6610	5/8-3/4	1 1/4	1 3/16	21 3/4	26 1/2	2 3/8	1	-	-	49522	233.2
RF1596	Type 2	1 1/4" UNF	20-22	42.5	42.5	680	800	74.1	31.9	-	-	36330	13510	3/4-7/8	1 11/16	1 11/16	26 13/16	31 1/2	2 15/16	1 1/4	-	-	79926	476.5
RF1597	Type 2	1 3/8" UNF	24-26	46.0	46.0	818	1175	76.0	34.8	-	-	43500	22040	1	1 13/16	1 13/16	32 7/32	46 1/4	3	1 3/8	-	-	95700	777.4
Toggle/Eye Turnbuckles																								
RF1559	Type 1	1/4" UNF	3-4	7.8	9.1	130	185	4.6	6.2	16.8	6.5	1630	110	1/8	5/16	3/8	5 1/8	7 1/4	3/16	1/4	21/32	1/4	3590	3.9
RF1560	Type 1	5/16" UNF	4-5	9.4	11.2	155	220	6.1	7.9	20.7	8.1	2250	190	5/32-3/16	3/8	7/16	6 1/4	8 3/4	1/4	5/16	13/16	5/16	4950	6.7
RF1561	Type 1	3/8" UNF	5	10.0	14.4	185	265	7.7	9.4	23.0	9.7	3350	310	3/16-7/32	13/32	3/8	7 5/16	10 7/16	5/16	3/8	29/32	3/8	7370	10.9
Toggle Body Assemblies																								
RF1580-04*1	Type 1	1/4" UNF	3-4	7.8	9.1	-	-	16.8	6.2	-	-	1630	89	1/8	5/16	3/8	-	-	21/32	1/4	-	-	3590	3.1
RF1580-05*1	Type 1	5/16" UNF	4-5	9.4	11.2	-	-	20.7	7.9	-	-	2250	145	5/32-3/16	3/8	7/16	-	-	13/16	5/16	-	-	4950	5.1
RF1580-06*1	Type 1	3/8" UNF	5	10.0	14.4	-	-	23.0	9.4	-	-	3350	217	3/16-7/32	13/32	3/8	-	-	29/32	3/8	-	-	7370	7.7
RF1580-07*1	Type 1	7/16" UNF	6	11.7	15.5	-	-	24.0	10.9	-	-	4130	357	-	15/32	5/8	-	-	15/16	7/16	-	-	9020	12.6
RF1580-08*1	Type 1	1/2" UNF	6-8	13.9	17.5	-	-	29.4	12.4	-	-	5430	509	1/4-5/16	9/16	11/16	-	-	1 5/32	1/2	-	-	11950	18.0
RF1580-10*1	Type 1	5/8" UNF	8-10	17.0	20.8	-	-	42.2	15.7	-	-	8700	974	3/8	21/32	13/16	-	-	1 21/32	5/8	-	-	19140	34.4
RF1581-12*2	Type 2	3/4" UNF	10-12	20.0	23.8	-	-	48.9	18.9	-	-	12650	1498	3/8-7/16	25/32	15/16	-	-	1 15/16	3/4	-	-	27830	52.9
RF1581-14*2	Type 2	7/8" UNF	13-14	26.6	28.5	-	-	44.4	22.0	-	-	17250	2526	1/2-9/16	1 1/16	1 1/8	-	-	1 3/4	7/8	-	-	37950	89.3
RF1581-16*2	Type 2	1" UNF	16-18	31.8	31.8	-	-	60.3	25.2	-	-	22510	4027	5/8-3/4	1 1/4	1 3/16	-	-	2 3/8	1	-	-	49522	142.3

*1 Not supplied with threaded end or locknut. *2 Supplied with L/H threaded end and locknut only *3 Wire diam. mm *4 Wire diam. in.

Eye/Eye, Fork/Eye, Fork/Fork



PRODUCT No.	TYPE	THREAD TYPE	WIRE DIAM.	A mm	B mm	C MIN. mm	C MAX. mm	D mm	E mm	F mm	B.L. kg	WEIGHT g	WIRE DIAM.	A in.	B in.	C MIN. in.	C MAX. in.	D in.	E in.	F in.	B.L. lb	WEIGHT oz
Eye/Eye Turnbuckles																						
RF217	Type 2	3/16" UNF	2	4.0	5.1	89	127	-	-	-	890	40	3/32	5/32	3/16	3 1/2	5	-	-	-	1960	1.4
RF1539	Type 1	1/4" UNF	3-4	4.6	6.5	110	165	-	-	-	1630	80	1/8	3/16	1/4	5 1/8	6 1/2	-	-	-	3590	2.8
RF1540	Type 1	5/16" UNF	4-5	6.1	8.1	125	190	-	-	-	2250	138	5/32-3/16	15/64	5/16	4 29/32	7 15/32	-	-	-	4950	4.9
RF1541	Type 1	3/8" UNF	5	7.7	9.7	150	230	-	-	-	3350	220	3/16-7/32	5/64	3/8	5 15/16	9 1/16	-	-	-	7370	7.8
Fork/Eye Turnbuckles																						
RF218	Type 2	3/16" UNF	2	5.0	11.6	99	137	4.0	5.1	4.7	890	50	3/32	3/16	15/32	3 7/8	5 3/8	5/32	3/16	3/16	1960	1.8
Fork/Fork Turnbuckles																						
RF219	Type 2	3/16" UNF	2	5.0	11.6	109	147	4.8	-	-	890	60	3/32	3/16	15/32	4 5/16	5 13/16	3/16	-	-	1960	2.1



R/H Lock Nut for Type 1 Turnbuckles



R/H Lock Nuts for Type 2 Turnbuckles



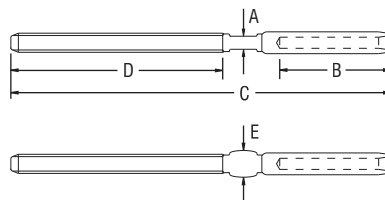
L/H Lock Nuts for Type 2 Turnbuckles

PRODUCT No.	THREAD TYPE	SUITS TURNBUCKLE
Replacement R/H Lock Nuts		
RF1515-04	1/4" UNF in.	Type 1
RF1515-05	5/16" UNF in.	Type 1
RF1515-06	3/8" UNF in.	Type 1
RF1515-07	7/16" UNF in.	Type 1
RF1515-08	1/2" UNF in.	Type 1
RF1515-10	5/8" UNF in.	Type 1

PRODUCT No.	THREAD TYPE	SUITS TURNBUCKLE
Replacement R/H Lock Nuts		
RF1516-03	3/16" UNF in.	Type 2
RF1516-12	3/4" UNF in.	Type 2
RF1516-14	7/8" UNF in.	Type 2
RF1516-16	1" UNF in.	Type 2
RF1516-20	1 1/4" UNF in.	Type 2
RF1516-22	1 3/8" UNF in.	Type 2

PRODUCT No.	THREAD TYPE	SUITS TURNBUCKLE
Replacement L/H Lock Nuts		
RF1517-03	3/16" UNF in.	Type 2
RF1517-12	3/4" UNF in.	Type 2
RF1517-14	7/8" UNF in.	Type 2
RF1517-16	1" UNF in.	Type 2
RF1517-20	1 1/4" UNF in.	Type 2
RF1517-22	1 3/8" UNF in.	Type 2

Threaded Swage Terminals



- ✓ Threaded swage terminals (2.5-26mm, 3/32"-1" wire) have rolled right hand UNF threads for greater strength and are manufactured from Grade 316 Stainless Steel for maximum corrosion resistance.

- ✓ Metric wire: 2.5mm - 26mm
✓ Imperial wire: 3/32" - 1"

PRODUCT No.	THREAD TYPE	SUIT TURNBUCKLE	WIRE DIAM.	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
Threaded Swage Terminals - Metric Wire															
RF1513M2.503	3/16" UNF	RF217,218,219	2.5mm	4.3	32.8	78.0	32.0	5.6	8	5/32	1 3/16	3 1/8	1 1/4	7/32	0.4
RF1512M0304	1/4" UNF	RF1578M0304	3mm	4.9	39.2	132.5	73.5	6.4	24	3/16	1 9/16	5 7/32	2 15/16	1/4	0.9
RF1512M0404	1/4" UNF	RF1578M0404	4mm	6.0	45.5	142.0	74.5	7.6	30	1/4	1 3/4	5 1/2	2 15/16	9/32	1.1
RF1512M0405	5/16" UNF	RF1578M0405	4mm	6.0	45.5	153.0	89.0	7.6	44	1/4	1 3/4	6	3 1/2	9/32	1.8
RF1512M0504*1	1/4" UNF	RF1578M0504	5mm	7.5	32.0	128.5	74.5	9.2	30	9/32	1 1/4	5 1/2	2 15/16	3/8	1.4
RF1512M0505	5/16" UNF	RF1578M0505	5mm	7.5	55.5	166.5	89.0	9.2	52	9/32	2 3/16	6 9/16	3 1/2	3/8	1.8
RF1512M0506	3/8" UNF	RF1578M0506	5mm	7.5	55.5	178.5	105.0	9.2	76	9/32	2 3/16	7 1/16	4 1/8	3/8	2.9
RF1512M0607	7/16" UNF	RF1578M0607	6mm	10.5	70.4	221.0	124.0	12.6	155	3/8	2 3/4	8 11/16	4 7/8	1/2	5.5
RF1512M0608	1/2" UNF	RF1578M0608	6mm	10.5	70.4	240.0	143.0	12.6	194	3/8	2 3/4	9 1/2	5 5/8	1/2	6.8
RF1512M0708	1/2" UNF	RF1578M0708	7mm	12.2	79.0	250.0	143.5	14.3	222	7/16	3 1/8	9 7/8	5 5/8	9/16	7.8
RF1512M0808	1/2" UNF	RF1578M0808	8mm	14.0	88.5	263.0	143.0	16.2	258	17/32	3 1/2	10 1/4	5 5/8	5/8	8.5
RF1512M0809	9/16" UNF	-	8mm	14.0	88.5	279.0	159.0	16.2	324	9/16	3 1/2	11	6 1/4	5/8	11.4
RF1512M0810	5/8" UNF	RF1578M0810	8mm	14.0	88.5	310.0	190.0	16.2	420	17/32	3 1/2	12 3/8	7 1/2	5/8	14.8
RF1512M1010	5/8" UNF	RF1578M1010	10mm	15.8	110.5	330.0	190.0	17.9	446	9/16	4 5/16	13 1/4	7 1/2	23/32	15.7
RF1513M1212	3/4" UNF	RF1579M1212	12mm	12.0	140.4	286.2	105.0	21.0	560	15/32	5 1/2	11 1/4	4 1/8	27/32	19.8
RF1513M1414	7/8" UNF	RF1579M1414	14mm	14.4	157.9	319.9	118.0	23.9	846	9/16	6 1/4	12 11/16	4 5/8	15/16	29.9
RF1513M1616	1" UNF	RF1579M1616	16mm	18.0	176.7	360.0	130.0	27.4	1228	11/16	7	14 1/8	5 1/8	1 3/32	43.3
RF1513M1920	1 1/4" UNF	RF1579M1920	19mm	25.0	210.6	418.6	150.0	32.7	2230	1	8 5/16	16 9/16	5 15/16	1 5/16	78.7
RF1513M2220	1 1/4" UNF	RF1579M2220	22mm	25.0	245.4	460.4	150.0	32.7	2970	1	8 7/8	18 1/8	5 15/16	1 5/16	104.8
RF1513M2622	1 3/8" UNF	RF1579M2622	26mm	28.7	287.0	586.4	236.0	37.5	4630	1 1/8	11 5/16	23 3/32	9 5/16	1 15/32	163.3
Threaded Swage Terminals - Imperial Wire															
RF1511-0303	3/16" UNF	RF217,218,219	3/32 in.	4.3	32.8	78.0	32.0	5.6	8	5/32	1 3/16	3 1/8	1 1/4	7/32	0.4
RF1510-0404	1/4" UNF	RF1576-0404	1/8 in.	4.9	39.2	132.5	73.5	6.4	22	3/16	1 9/16	5 7/32	2 15/16	1/4	0.8
RF1510-0504	1/4" UNF	RF1576-0504	5/32 in.	6.0	45.5	142.0	74.5	7.6	30	1/4	1 3/4	5 1/2	2 15/16	9/32	1.1
RF1510-0505	5/16" UNF	RF1576-0505	5/32 in.	6.0	45.5	153.0	89.0	7.6	44	1/4	1 3/4	6	3 1/2	9/32	1.8
RF1510-0604*1	1/4" UNF	RF1576-0604	3/16 in.	7.5	32.0	128.5	74.5	9.2	32	9/32	1 1/4	5 1/2	2 15/16	3/8	1.4
RF1510-0605	5/16" UNF	RF1576-0605	3/16 in.	7.5	55.5	166.5	89.0	9.2	56	9/32	2 3/16	6 9/16	3 1/2	3/8	2.0
RF1510-0606	3/8" UNF	RF1576-0606	3/16 in.	7.5	55.5	178.5	105.0	9.2	78	9/32	2 3/16	7 1/16	4 1/8	3/8	2.9
RF1510-0706	3/8" UNF	RF1576-0706	7/32 in.	9.0	61.0	185.0	105.0	10.9	90	5/16	2 3/8	7 1/4	4 1/8	7/16	3.2
RF1510-0807	7/16" UNF	-	1/4 in.	10.5	70.4	221.0	124.0	12.6	148	3/8	2 3/4	8 11/16	4 7/8	1/2	5.3
RF1510-0808	1/2" UNF	RF1576-0808	1/4 in.	10.5	70.4	240.0	143.0	12.6	196	3/8	2 3/4	9 1/2	5 5/8	1/2	6.9
RF1510-0908	1/2" UNF	RF1576-0908	9/32 in.	12.2	79.0	250.0	143.5	14.3	222	7/16	3 1/8	9 7/8	5 5/8	9/16	7.8
RF1510-1008	1/2" UNF	RF1576-1008	5/16 in.	14.0	88.5	263.0	143.0	16.2	258	17/32	3 1/2	10 1/4	5 5/8	5/8	8.5
RF1510-1009	9/16" UNF	-	5/16 in.	14.0	88.5	279.0	159.0	16.2	324	9/16	3 1/2	11	6 1/4	5/8	11.4
RF1510-1010	5/8" UNF	RF1576-1010	5/16 in.	14.0	88.5	310.0	190.0	16.2	420	17/32	3 1/2	12 3/8	7 1/2	5/8	14.8
RF1510-1210	5/8" UNF	RF1576-1210	3/8 in.	15.8	110.5	330.0	190.0	17.9	452	9/16	4 5/16	13 1/4	7 1/2	23/32	15.9
RF1511-1412	3/4" UNF	RF1577-1412	7/16 in.	12.0	122.7	259.7	105.0	20.7	468	7/16	4 13/16	10 5/16	4 1/8	27/32	16.5
RF1511-1614	7/8" UNF	RF1577-1614	1/2 in.	14.4	140.4	294.7	118.0	24.0	662	9/16	5 1/2	11 19/32	4 21/32	15/16	23.4
RF1511-1814	7/8" UNF	RF1577-1814	9/16 in.	14.4	157.9	319.9	118.0	24.0	850	9/16	6 7/32	12 19/32	4 21/32	15/16	30.0
RF1511-2016	1" UNF	RF1577-2016	5/8 in.	18.0	176.7	360.0	130.0	27.4	1228	11/16	7	14 1/8	5 1/8	1 3/32	43.3
RF1511-2420	1 1/4" UNF	RF1577-2420	3/4 in.	25.0	210.6	418.6	150.0	32.7	2230	1	8 5/16	16 9/16	5 15/16	1 5/16	78.7
RF1511-2820	1 1/4" UNF	RF1577-2820	7/8 in.	25.0	245.4	460.4	150.0	32.7	2970	1	8 7/8	18 1/8	5 15/16	1 5/16	104.8
RF1511-3222	1 3/8" UNF	RF1577-3222	1 in.	28.7	287.0	586.4	236.0	37.5	4630	1 1/8	11 5/16	23 3/32	9 5/16	1 15/32	163.3

*1 Recommended for lifeline applications only. B.L. is below the rated B.L. of 3/16" and 5mm wire

Ultimate Quality, Superior Adjustment Performance

Ronstan open body turnbuckles are made from polished chrome plated high grade brass bodies with grade 316 stainless steel end fittings. This combination of materials not only avoids the risk of excessive thread wear or seizure under load, but also provides the considerable advantage of easier adjustment.

As shown on the accompanying graph, for a given level of torque, up to 47% more tension can be achieved with the Ronstan brass body turnbuckle than with competitors bronze body turnbuckles, or up to 71% more than an equivalent stainless steel body turnbuckle. Conversely, for a given required rig tension the torque required to adjust a competitors bronze or stainless steel body turnbuckle is up to 40% or 75% more respectively than that of the Ronstan brass body turnbuckle.

After tensioning, cross-drilled ends in the threaded terminals enable the use of split-pins to lock and secure the adjustment. For easy thread identification an etched "R" identifies the right-hand threaded end of the body.

As with all Ronstan turnbuckles, toggles are designed with full universal movement for easy installation and connection and allow the assembled cable to move where the structure is subject to wind loads or vibration.

Fine, Rolled Threads

Ronstan rigging fittings have 'rolled' threads for maximum strength and reliability – unlike cut threads, the stainless steel bar is formed up and down to create a thread with the grain remaining unbroken and flowing up and down the threads. Threads are UNF (Unified National Fine), short pitch threads for fine adjustment and reduced adjustment effort.

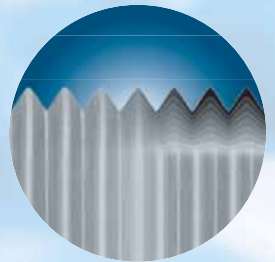
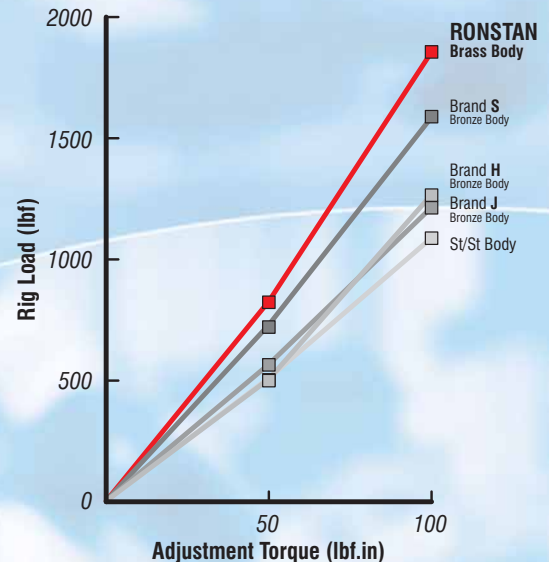
Roll Swage Integrity

Swage fittings suit 'roll swaging' in Wiretechnik® type presses and dimensions are derived from the original 'Milspec' for maximum integrity. They are suitable for use with modern and traditional wire constructions, including 1x19, 7x19 and compact strand.

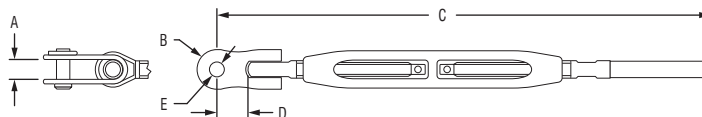
Termination Options

A full range of terminal fittings complements the turnbuckles to permit assembly of finished rigging elements to suit virtually any application.

Torque Comparison for 1/4" Turnbuckles



Toggle/Swage



PRODUCT No.	THREAD TYPE	WIRE DIAM.	A mm	B mm	C MIN. mm	C MAX. mm	D mm	E mm	B.L. kg	WEIGHT g	A in.	B in.	C MIN. in.	C MAX. in.	D in.	E in.	B.L. lb	WEIGHT oz	TERMINAL PRODUCT No.
Toggle/Swage Turnbuckles - Metric Wire																			
RF1532M0304	1/4" UNF	3mm	7.8	9.1	209	282	16.8	6.2	1630	158	5/16	11/32	8 7/32	11 3/32	21/32	1/4	3594	5.6	RF1519M0304
RF1532M0404	1/4" UNF	4mm	7.8	9.1	223	295	16.8	6.2	1630	162	5/16	11/32	8 25/32	11 5/8	21/32	1/4	3594	5.7	RF1519M0404
RF1532M0405	5/16" UNF	4mm	9.4	11.2	235	312	20.7	7.9	2250	263	3/8	7/16	9 1/4	13 1/8	13/16	5/16	4960	9.3	RF1519M0405
RF1532M0504*1	1/4" UNF	5mm	7.8	9.1	234	307	16.8	6.2	1630*1	172	5/16	11/32	8 1/4	12	21/32	1/4	3594*1	6.1	RF1519M0504
RF1532M0505	5/16" UNF	5mm	9.4	11.2	247	324	20.7	7.9	2250	267	3/8	7/16	9 23/32	12 3/4	13/16	5/16	4960	9.4	RF1519M0505
RF1532M0506	3/8" UNF	5mm	10.0	14.4	268	356	23.0	9.4	3350	418	13/32	9/16	10 9/16	14 1/32	29/32	3/8	7385	14.7	RF1519M0506
RF1532M0606	3/8" UNF	6mm	10.0	14.4	285	373	23.0	9.4	3350	453	13/32	9/16	11 7/32	14 11/16	29/32	3/8	7385	16.0	RF1519M0606
RF1532M0608	1/2" UNF	6mm	13.9	17.5	336	431	29.4	12.4	5430	887	17/32	11/16	13 1/8	17	1 5/32	1/2	11971	31.3	RF1519M0608
RF1532M0708	1/2" UNF	7mm	13.9	17.5	354	449	29.4	12.4	5430	918	17/32	11/16	13 15/16	17 11/16	1 5/32	1/2	11971	32.4	RF1519M0708
RF1532M0808	1/2" UNF	8mm	13.9	17.5	359	454	29.4	12.4	5430	948	17/32	11/16	14 1/8	17 7/8	1 5/32	1/2	11971	33.4	RF1519M0808
RF1532M0810	5/8" UNF	8mm	17.0	20.8	415	533	42.2	15.7	8700	1610	21/32	13/16	16 1/4	21	1 21/32	5/8	19180	56.8	RF1519M0810
RF1532M1010	5/8" UNF	10mm	17.0	20.8	433	552	42.2	15.7	8700	1633	21/32	13/16	17	21 23/32	1 21/32	5/8	19180	57.6	RF1519M1010
RF1532M1212	3/4" UNF	12mm	20.0	23.8	540	694	46.0	18.9	12650	2852	25/32	15/16	21 1/4	27 1/4	1 13/16	3/4	27889	100.6	RF1519M1212
RF1532M1414	7/8" UNF	14mm	26.6	28.5	616	795	44.4	22.0	17250	4596	1 1/32	1 1/8	24 1/4	31 5/16	1 3/4	7/8	38030	162.1	RF1519M1414
RF1532M1616	1" UNF	16mm	29.3	31.8	696	890	60.3	25.2	22510	6970	1 5/32	1 1/4	27 3/8	35 1/32	2 3/8	1	49626	245.8	RF1519M1616
Toggle/Swage Turnbuckles - Imperial Wire																			
RF1531-0404	1/4" UNF	1/8"	7.8	9.1	209	282	16.8	6.2	1630	158	5/16	11/32	8 7/32	11 3/32	21/32	1/4	3594	5.6	RF1518-0404
RF1531-0504*2	1/4" UNF	5/32"	7.8	9.1	223	295	16.8	6.2	1630	162	5/16	11/32	8 25/32	11 5/8	21/32	1/4	3594	5.7	RF1518-0504
RF1531-0505*2	5/16" UNF	5/32"	9.4	11.2	235	312	20.7	7.9	2250	263	3/8	7/16	9 1/4	13 1/8	13/16	5/16	4960	9.3	RF1518-0505
RF1531-0604*1	1/4" UNF	3/16"	7.8	9.1	234	307	16.8	6.2	1630*1	172	5/16	11/32	8 1/4	12	21/32	1/4	3594*1	6.1	RF1518-0604
RF1531-0605	5/16" UNF	3/16"	9.4	11.2	247	324	20.7	7.9	2250	267	3/8	7/16	9 23/32	12 3/4	13/16	5/16	4960	9.4	RF1518-0605
RF1531-0606	3/8" UNF	3/16"	10.0	14.4	268	356	23.0	9.4	3350	412	13/32	9/16	10 9/16	14 1/32	29/32	3/8	7385	14.5	RF1518-0606
RF1531-0706	3/8" UNF	7/32"	10.0	14.4	275	363	23.0	9.4	3350	412	13/32	9/16	10 13/16	14 9/32	29/32	3/8	7385	14.5	RF1518-0706
RF1531-0806	3/8" UNF	1/4"	10.0	14.4	285	373	23.0	9.4	3350	455	13/32	9/16	11 7/32	14 11/16	29/32	3/8	7385	16.1	RF1518-0806
RF1531-0808	1/2" UNF	1/4"	13.9	17.5	336	431	29.4	12.4	5430	885	17/32	11/16	13 1/8	17	1 5/32	1/2	11971	31.2	RF1518-0808
RF1531-0908*2	1/2" UNF	9/32"	13.9	17.5	354	449	29.4	12.4	5430	918	17/32	11/16	13 15/16	17 11/16	1 5/32	1/2	11971	32.4	RF1518-0908
RF1531-1008*2	1/2" UNF	5/16"	13.9	17.5	359	454	29.4	12.4	5430	948	17/32	11/16	14 1/8	17 7/8	1 5/32	1/2	11971	33.4	RF1518-1008
RF1531-1010*2	5/8" UNF	5/16"	17.0	20.8	415	533	42.2	15.7	8700	1610	21/32	13/16	16 1/4	21	1 21/32	5/8	19180	56.8	RF1518-1010
RF1531-1210	5/8" UNF	3/8"	17.0	20.8	433	552	42.2	15.7	8700	1643	21/32	13/16	17	21 23/32	1 21/32	5/8	19180	57.9	RF1518-1210
RF1531-1412	3/4" UNF	7/16"	20.0	23.8	513	668	46.0	18.9	12650	2756	25/32	15/16	20 3/16	26 5/16	1 13/16	3/4	27889	97.2	RF1518-1412
RF1531-1614	7/8" UNF	1/2"	26.6	28.5	600	780	44.4	22.0	17250	4437	1 1/32	1 1/8	23 5/8	30 23/32	1 3/4	7/8	38030	156.5	RF1518-1614
RF1531-1814	7/8" UNF	9/16"	26.6	28.5	616	795	44.4	22.0	17250	4585	1 1/32	1 1/8	24 1/4	31 5/16	1 3/4	7/8	38030	161.7	RF1518-1814
RF1531-1816	1" UNF	9/16"	29.3	31.8	675	869	60.3	25.2	22510	6551	1 5/32	1 1/4	26 9/16	34 7/32	2 3/8	1	49626	231.1	RF1518-1816
RF1531-2016*2	1" UNF	5/8"	29.3	31.8	696	890	60.3	25.2	22510	6970	1 5/32	1 1/4	27 3/8	35 1/32	2 3/8	1	49626	245.8	RF1518-2016

*1 Recommended for lifeline applications only. B.L. is below the rated B.L. of 3/16" and 5mm wire. *2 Product will be supplied as metric equivalent, may have metric terminal code stamping.

Toggle/Toggle, Bodies, Lock Nuts



TOGGLE

TOGGLE



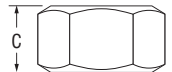
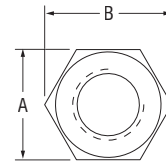
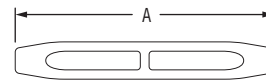
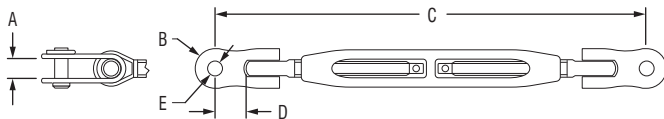
TURNBUCKLE BODY



LOCK NUT - L/H THREAD



LOCK NUT - R/H THREAD

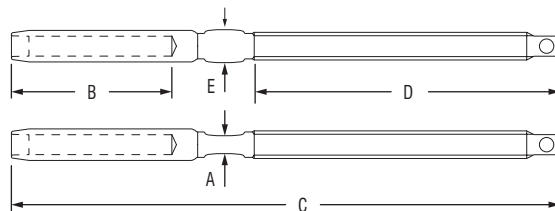


PRODUCT No.	THREAD TYPE	WIRE DIAM. mm	A mm	B mm	C MIN. mm	C MAX. mm	D mm	E mm	B.L. kg	WEIGHT g	WIRE DIAM. in.	A in.	B in.	C MIN. in.	C MAX. in.	D in.	E in.	B.L. lb	WEIGHT oz
Toggle/Toggle Turnbuckles																			
RF1533-04	1/4" UNF	3-4	7.8	9.1	194	267	16.8	6.2	1630	179	1/8-5/32	5/16	11/32	7 5/8	10 1/2	21/32	1/4	3594	6.3
RF1533-05	5/16" UNF	4-5	9.4	11.2	218	296	20.7	7.9	2250	567	5/32-3/16	3/8	7/16	8 19/32	11 21/32	13/16	5/16	4960	20.0
RF1533-06	3/8" UNF	5-6	10.0	14.4	242	331	23.0	9.4	3350	494	3/16-1/4	13/32	9/16	9 17/32	13 1/32	29/32	3/8	7385	17.4
RF1533-08	1/2" UNF	6-8	13.9	17.5	309	404	29.4	12.4	5430	1053	1/4-5/16	17/32	11/16	12 5/32	15 29/32	1 5/32	1/2	11971	37.2
RF1533-10	5/8" UNF	8-10	17.0	20.8	383	501	42.2	15.7	8700	1850	5/16-3/8	21/32	13/16	15 3/32	19 23/32	1 21/32	5/8	19180	65.3
RF1533-12	3/4" UNF	12	20.0	23.8	457	611	46.0	18.9	12650	3130	7/16"	25/32	15/16	18	24 1/32	1 13/16	3/4	27889	110.4
RF1533-14	7/8" UNF	14	26.6	28.5	528	708	44.4	22.0	17250	5150	1/2-9/16	1 1/32	1 1/8	20 25/32	27 7/8	1 3/4	7/8	38030	181.7
RF1533-16	1" UNF	16	29.3	31.8	604	798	60.3	25.2	22510	8181	9/16-5/8	1 5/32	1 5/32	23 25/32	31 13/32	2 3/8	1	49626	288.6
Turnbuckle Bodies																			
RF1530-04	1/4" UNF	-	118.3	-	-	-	-	-	1630	93	-	4 21/32	-	-	-	-	-	3594	3.3
RF1530-05	5/16" UNF	-	126.5	-	-	-	-	-	2250	142	-	4 31/32	-	-	-	-	-	4960	5.0
RF1530-06	3/8" UNF	-	147.0	-	-	-	-	-	3350	219	-	5 25/32	-	-	-	-	-	7385	7.7
RF1530-08	1/2" UNF	-	168.0	-	-	-	-	-	5430	405	-	6 5/8	-	-	-	-	-	11971	14.3
RF1530-10	5/8" UNF	-	205.7	-	-	-	-	-	8700	781	-	8 3/32	-	-	-	-	-	19180	27.5
RF1530-12	3/4" UNF	-	260.0	-	-	-	-	-	12650	1371	-	10 1/4	-	-	-	-	-	27889	48.4
RF1530-14	7/8" UNF	-	299.0	-	-	-	-	-	17250	2194	-	11 3/4	-	-	-	-	-	38030	77.5
RF1530-16	1" UNF	-	328.0	-	-	-	-	-	22510	3097	-	12 29/32	-	-	-	-	-	49626	109.2

PRODUCT No.	THREAD TYPE	TPI	A mm	B mm	C mm	WEIGHT g	A in.	B in.	C in.	WEIGHT oz
Lock Nuts - Plated Brass (Set of 1 x R/H, 1 x L/H Thread)										
NB2-04*1	1/4" UNF	28	11.1	12.7	5.5	4	0.437	0.500	0.217	0.1
NB2-05*1	5/16" UNF	24	12.7	14.4	6.7	6	0.500	0.567	0.264	0.2
NB2-06*1	3/8" UNF	24	14.3	16.3	8.5	8	0.563	0.642	0.335	0.3
NB2-08*2	1/2" UNF	20	19.0	21.6	11.0	18	0.748	0.850	0.433	0.6
NB2-10*2	5/8" UNF	18	23.7	27.2	13.8	34	0.933	1.071	0.543	1.2
NB2-12*2	3/4" UNF	16	28.3	32.3	15.8	56	1.114	1.272	0.622	2.0
NB2-14*2	7/8" UNF	14	33.2	37.9	18.9	94	1.307	1.492	0.744	3.3
NB2-16*2	1" UNF	12	37.8	43.2	22.0	142	1.488	1.701	0.866	5.0

*1 Nickel plated. *2 Chrome plated

Threaded Swage Terminals



- Threaded swage terminals have thread rolled right hand UNF threads for greater strength and are manufactured from Grade 316 stainless steel for maximum corrosion resistance.

- Threaded ends are cross drilled to accept split pins, split rings or seizing wire for added security.

- Metric wire: 3mm - 16mm

- Imperial wire: 1/8" - 5/8"

PRODUCT No.	THREAD TYPE	WIRE DIAM.	A mm	B mm	C mm	D mm	E mm	B.L. kg	WEIGHT g	A in.	B in.	C in.	D in.	E in.	B.L. lb	WEIGHT oz
Threaded Swage Terminals - Metric Wire																
RF1519M0304	1/4" UNF	3mm	4.9	39.2	109.0	56.0	6.4	1630	21	3/16	1 17/32	4 9/32	2 3/16	1/4	3594	0.7
RF1519M0404	1/4" UNF	4mm	6.0	45.5	122.5	56.0	7.6	1630	25	1/4	1 25/32	4 3/4	2 3/16	9/32	3594	0.9
RF1519M0405	5/16" UNF	4mm	6.0	45.5	124.0	60.0	7.6	2250	40	1/4	1 25/32	4 7/8	2 1/4	9/32	4960	1.4
RF1519M0504*1	1/4" UNF	5mm	7.5	55.5	133.5	56.0	9.2	1630*1	35	9/32	2 3/16	5 1/4	2 3/16	3/8	3594*1	1.2
RF1519M0505	5/16" UNF	5mm	7.5	55.5	134.5	60.0	9.2	2250	44	9/32	2 3/16	5 5/16	2 1/4	3/8	4960	1.5
RF1519M0506	3/8" UNF	5mm	7.5	55.5	143.5	70.0	9.2	3350	60	9/32	2 3/16	5 21/32	2 3/4	3/8	7385	2.1
RF1519M0606	3/8" UNF	6mm	10.5	70.4	160.0	70.0	12.6	3350	92	3/8	2 25/32	6 5/16	2 3/4	1/2	7385	3.3
RF1519M0608	1/2" UNF	6mm	10.5	70.4	177.0	80.0	12.6	5430	141	3/8	2 25/32	6 31/32	3 1/8	1/2	11971	5.0
RF1519M0708	1/2" UNF	7mm	12.2	79.0	193.0	80.0	14.3	5430	172	15/32	3 1/8	7 19/32	3 1/8	9/16	11971	6.1
RF1519M0808	1/2" UNF	8mm	14.0	88.5	200.0	80.0	16.2	5430	202	17/32	3 15/32	7 7/8	3 1/8	5/8	11971	7.1
RF1519M0810	5/8" UNF	8mm	14.0	88.5	219.0	98.0	16.2	8700	290	17/32	3 15/32	8 5/8	3 3/4	5/8	19180	10.2
RF1519M1010	5/8" UNF	10mm	15.8	110.5	237.5	98.0	17.9	8700	313	9/16	4 11/32	9 11/32	3 3/4	23/32	19180	11.0
RF1519M1212	3/4" UNF	12mm	12.0	140.4	306.2	125.0	21.0	12650	597	15/32	5 17/32	12 1/16	4 7/8	13/16	27889	21.0
RF1519M1414	7/8" UNF	14mm	14.5	158.0	345.9	144.0	24.0	17250	916	9/16	6 7/32	13 5/8	5 5/8	15/16	38030	32.3
RF1519M1616	1" UNF	16mm	18.0	176.7	388.0	158.0	27.4	22510	1323	23/32	6 31/32	15 9/32	6 1/8	1 3/32	49626	46.7
Threaded Swage Terminals - Imperial Wire																
RF1518-0404	1/4" UNF	1/8"	4.9	39.2	109.0	56.0	6.4	1630	21	3/16	1 17/32	4 9/32	2 3/16	1/4	3594	0.7
RF1518-0504	1/4" UNF	5/32"	6.0	45.5	122.5	56.0	7.6	1630	25	1/4	1 25/32	4 3/4	2 3/16	9/32	3594	0.9
RF1518-0505	5/16" UNF	5/32"	6.0	45.5	124.0	60.0	7.6	2250	40	1/4	1 25/32	4 7/8	2 1/4	9/32	4960	1.4
RF1518-0604*1	1/4" UNF	3/16"	7.5	55.5	133.5	56.0	9.2	1630*1	35	9/32	2 3/16	5 1/4	2 3/16	3/8	3594*1	1.2
RF1518-0605	5/16" UNF	3/16"	7.5	55.5	134.5	60.0	9.2	2250	44	9/32	2 3/16	5 5/16	2 1/4	3/8	4960	1.5
RF1518-0606	3/8" UNF	3/16"	7.5	55.5	143.5	70.0	9.2	3350	60	9/32	2 3/16	5 21/32	2 3/4	3/8	7385	2.1
RF1518-0706	3/8" UNF	7/32"	9.0	61.0	150.0	70.0	10.9	3350	60	5/16	2 3/8	5 29/32	2 3/4	7/16	7385	2.1
RF1518-0806	3/8" UNF	1/4"	10.5	70.4	160.0	70.0	12.6	3350	94	3/8	2 25/32	6 5/16	2 3/4	1/2	7385	3.3
RF1518-0808	1/2" UNF	1/4"	10.5	70.4	177.0	80.0	12.6	5430	139	3/8	2 25/32	6 31/32	3 1/8	1/2	11971	4.9
RF1518-0908	1/2" UNF	9/32"	12.2	79.0	193.0	80.0	14.3	5430	172	15/32	3 1/8	7 19/32	3 1/8	9/16	11971	6.1
RF1518-1008	1/2" UNF	5/16"	14.0	88.5	200.0	80.0	16.2	5430	202	17/32	3 15/32	7 7/8	3 1/8	5/8	11971	7.1
RF1518-1010	5/8" UNF	5/16"	14.0	88.5	219.0	98.0	16.2	8700	290	17/32	3 15/32	8 5/8	3 3/4	5/8	19180	10.2
RF1518-1210	5/8" UNF	3/8"	15.8	110.5	237.5	98.0	17.9	8700	323	9/16	4 11/32	9 11/32	3 3/4	23/32	19180	11.4
RF1518-1412	3/4" UNF	7/16"	12.0	122.7	279.6	125.0	21.0	12650	500	15/32	4 27/32	11	4 7/8	13/16	27889	17.6
RF1518-1614	7/8" UNF	1/2"	14.5	140.4	330.7	144.0	24.0	17250	758	9/16	5 17/32	13 1/32	5 5/8	15/16	38030	26.7
RF1518-1814	7/8" UNF	9/16"	14.5	157.9	345.9	144.0	24.0	17250	905	9/16	6 7/32	13 5/8	5 5/8	15/16	38030	31.9
RF1518-1816	1" UNF	9/16"	18.0	157.9	367.4	158.0	27.4	22510	920	23/32	6 7/32	14 15/32	6 1/8	1 1/16	49626	32.5
RF1518-2016	1" UNF	5/8"	18.0	176.7	388.0	158.0	27.4	22510	1323	23/32	6 31/32	15 9/32	6 1/8	1 3/32	49626	46.7

*1 Recommended for low load applications only. Turnbuckle rated B.L. is below the typical rated B.L. of 5mm wire.

Eye Swage Terminals



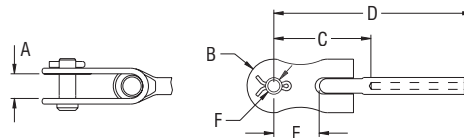
- ✓ Eye swage terminals are a simple and effective wire end termination allowing movement in a single plane.
- ✓ Eye swage terminals are made from Grade 316 Stainless Steel for durability, strength and corrosion resistance.

- ✓ Metric wire: 2.5mm - 26mm
- ✓ Imperial wire: 3/32" - 1"

PRODUCT No.	WIRE DIAM.	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	WEIGHT oz
Eye Swage Terminals - Metric Wire													
RF1501M2.503	2.5mm	3.1	6.3	15.2	48.0	5.1	8	1/8	1/4	19/32	1 7/8	3/16	0.4
RF1501M0304	3mm	4.6	6.2	16.1	55.3	6.5	14	3/16	1/4	21/32	2 3/16	1/4	0.5
RF1501M0405	4mm	6.1	8.5	18.5	64.0	8.1	22	1/4	11/32	5/8	2 1/2	5/16	0.9
RF1501M0505	5mm	6.1	8.5	19.1	74.6	8.1	30	1/4	11/32	5/8	3	5/16	1.1
RF1501M0506	5mm	7.7	10.0	21.1	76.6	9.7	38	9/32	13/32	7/8	3 1/16	3/8	1.6
RF1501M0608	6mm	9.5	12.5	27.1	97.5	13.0	95	3/8	1/2	1 3/16	3 14/16	1/2	3.4
RF1501M0708	7mm	12.5	13.5	30.9	109.9	13.0	138	1/2	17/32	1 3/16	4 5/16	1/2	5.5
RF1501M0808	8mm	12.5	13.5	29.5	118.0	13.0	174	1/2	9/16	1 1/4	4 11/16	1/2	6.5
RF1501M0810	8mm	14.0	15.5	28.0	116.5	16.3	182	9/16	5/8	1 1/4	4 5/8	5/8	7.1
RF1501M1010	10 mm	14.0	15.5	29.0	139.5	16.3	228	5/8	5/8	1 7/16	5 3/4	5/8	9.9
RF1501M1212	12mm	15.5	19.5	42.4	182.8	19.5	420	5/8	11/16	1 5/8	7 1/8	3/4	14.1
RF1501M1414	14mm	20.0	23.2	54.2	212.1	22.5	746	27/32	15/16	2 3/16	8 5/16	7/8	28.1
RF1501M1616	16mm	25.0	27.2	58.1	234.8	25.8	1074	1	11/16	2 3/8	9 1/8	1	41.3
RF1501M1920	19mm	29.5	33.4	70.6	281.2	32.0	1880	1 3/16	1 7/32	2 9/16	11	1 1/4	63.5
RF1501M2220	22mm	29.5	33.4	72.1	317.5	32.0	2550	1 3/16	1 7/32	2 13/16	11 3/4	1 1/4	85.7
RF1501M2622	26mm	33.0	34.0	82.6	369.6	35.3	3520	1 5/16	1 11/32	3 11/32	14 7/16	1 3/8	128.9
Eye Swage Terminals - Imperial Wire													
RF1500-0303*1	3/32 in.	3.1	6.3	15.2	48.0	5.1	8	1/8	1/4	19/32	1 7/8	3/16	0.4
RF1500-0404*1	1/8 in.	4.6	6.2	16.1	55.3	6.5	12	3/16	1/4	21/32	2 3/16	1/4	0.4
RF1500-0505	5/32 in.	6.1	8.5	18.5	64.0	8.1	20	1/4	11/32	5/8	2 1/2	5/16	0.5
RF1500-0605	3/16 in.	6.1	8.5	19.1	74.6	8.1	32	1/4	11/32	5/8	3	5/16	1.1
RF1500-0606	3/16 in.	7.7	10.0	21.1	76.9	9.7	38	5/16	13/32	7/8	3 1/16	3/8	0.7
RF1500-0706	7/32 in.	7.7	10.0	22.4	83.4	9.7	56	3/8	13/32	1	3 5/16	3/8	1.3
RF1500-0808	1/4 in.	9.5	12.5	27.1	97.5	13.0	90	3/8	1/2	1 3/16	3 7/8	1/2	2.3
RF1500-0908*1	9/32 in.	12.5	13.5	30.9	109.9	13.0	138	1/2	17/32	1 5/16	4 5/16	1/2	3.4
RF1500-1008*1	5/16 in.	12.5	13.5	29.5	118.0	13.0	174	1/2	17/32	1 1/4	4 5/8	1/2	5.1
RF1500-1010*1	5/16 in.	14.0	15.5	28.0	116.5	16.3	182	9/16	5/8	1 1/4	4 5/8	5/8	6.5
RF1500-1210	3/8 in.	14.0	15.5	29.0	139.5	16.3	232	9/16	5/8	1 1/2	5 5/8	5/8	7.8
RF1500-1412	7/16 in.	15.5	18.2	35.9	158.6	19.5	324	23/32	23/32	1 1/2	6 1/4	3/4	9.9
RF1500-1614	1/2 in.	20.0	24.0	51.8	192.2	22.5	566	27/32	15/16	2 3/16	7 11/16	7/8	13.1
RF1500-1814	9/16 in.	20.0	23.2	54.2	212.1	22.5	730	27/32	15/16	2 3/16	8 5/16	7/8	21.9
RF1500-2016*1	5/8 in.	25.0	27.2	58.1	234.8	25.8	1070	1	11/16	2 3/8	9 1/4	1	29.6
RF1500-2420*1	3/4 in.	29.5	33.4	70.6	281.2	32.0	1890	1 3/16	1 7/32	2 9/16	11 5/16	1 1/4	45.5
RF1500-2820*1	7/8 in.	29.5	33.4	72.1	317.5	32.0	2624	1 3/16	1 7/32	2 13/16	12 7/16	1 1/4	72.3
RF1500-3222*1	1 in.	33.0	34.0	82.6	369.6	35.3	3482	1 5/16	1 11/32	3 11/32	14 13/16	1 3/8	98.8

*1 Product will be supplied as metric equivalent, may have metric terminal code stamping.

Toggle Swage Terminals



- ✓ Toggle swage terminals are an efficient wire end termination allowing movement in two planes to minimise the fatiguing effects of cyclic wind and wave action.
- ✓ All toggle swage terminals are manufactured from Grade 316 Stainless Steel for durability, strength and corrosion resistance.
- ✓ Toggles match those on Ronstan Type 1 and Type 2 turnbuckles of the same wire diameter.
- ✓ Metric wire: 3mm - 26mm
- ✓ Imperial wire: 1/8" - 1"

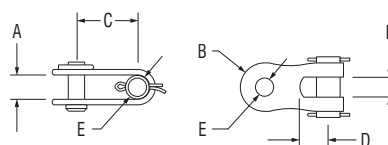
PRODUCT No.	WIRE DIAM.	A mm	B mm	C mm	D mm	E mm	F mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	F in.	WEIGHT oz
Toggle Swage Terminals - Metric Wire															
RF1507M0304	3mm	7.8	9.1	37.9	77.0	16.8	6.2	44	5/16	11/32	1 1/2	3 1/32	21/32	1/4	1.6
RF1507M0404	4mm	7.8	9.1	43.2	87.1	16.8	6.2	44	5/16	11/32	1 11/16	3 7/16	21/32	1/4	1.6
RF1507M0405	4mm	9.4	11.2	48.1	93.6	20.7	7.9	74	3/8	7/16	1 29/32	3 11/16	13/16	5/16	2.6
RF1507M0504*1	5mm	7.8	9.1	38.4	94.8	16.8	6.2	72	5/16	11/32	1 1/2	3 23/32	21/32	1/4	2.5
RF1507M0505	5mm	9.4	11.2	48.2	103.7	20.7	7.9	56	3/8	7/16	1 29/32	4 3/32	13/16	5/16	2.0
RF1507M0506	5mm	10.0	14.4	49.4	104.9	23.0	9.4	130	13/32	9/16	1 15/16	4 1/8	29/32	3/8	4.6
RF1507M0606	6mm	10.0	14.4	58.1	128.5	23.0	9.4	129	13/32	9/16	2 9/32	5 1/16	29/32	3/8	4.6
RF1507M0608	6mm	13.9	17.5	70.9	141.3	29.4	12.4	285	9/16	11/16	2 25/32	5 9/16	1 5/32	1/2	10.1
RF1507M0708	7mm	13.9	17.5	73.2	151.9	29.4	12.4	332	17/32	11/16	2 7/8	5 31/32	1 5/32	1/2	11.7
RF1507M0808	8mm	13.9	17.5	72.1	160.6	29.4	12.4	365	9/16	11/16	2 27/32	6 3/8	1 5/32	1/2	12.9
RF1507M0810	8mm	17.0	20.8	87.5	176.0	42.2	15.7	492	21/32	13/16	3 7/16	6 15/16	1 21/32	5/8	17.4
RF1507M1010	10mm	17.0	20.8	87.7	198.2	42.2	15.7	540	21/32	13/16	3 7/16	7 13/16	1 21/32	5/8	19.1
RF1507M1212	12mm	20.0	23.8	108.2	249.0	46.0	18.9	930	25/32	15/16	4 1/4	9 13/16	1 13/16	3/4	32.8
RF1507M1414	14mm	26.5	28.5	120.4	278.3	44.4	22.0	1125	1 1/32	1 1/8	4 3/4	10 31/32	1 3/4	7/8	39.7
RF1507M1616	16mm	29.3	31.8	147.8	324.5	60.3	25.2	2350	1 5/32	1 1/4	5 13/16	12 25/32	2 3/8	1	82.9
RF1507M1920	19mm	36.5	42.5	178.1	387.8	74.1	31.7	4674	1 3/8	1 7/16	7	15 9/32	2 15/16	1 1/4	164.9
RF1507M2220	22mm	36.5	42.5	179.6	425.0	74.1	31.7	5530	1 3/8	1 11/16	7 1/16	16 23/32	2 15/16	1 1/4	195.1
RF1507M2622*2	26mm	36.5	46.0	192.6	480.0	76.0	34.8	8378	1 3/8	1 13/16	7 19/32	18 29/32	3	1 3/8	295.5
Toggle Swage Terminals - Imperial Wire															
RF1506-0404	1/8"	7.8	9.1	37.9	77.0	16.8	6.2	44	5/16	11/32	1 1/2	3 1/16	21/32	1/4	1.6
RF1506-0504*3	5/32"	7.8	9.1	42.2	87.1	16.8	6.2	44	5/16	11/32	1 21/32	3 7/16	21/32	1/4	1.6
RF1506-0505*3	5/32"	9.4	11.2	48.1	93.6	20.7	7.9	70	3/8	7/16	1 29/32	3 11/16	13/16	5/16	2.5
RF1506-0604*1	3/16"	7.8	9.1	38.7	94.8	16.8	6.2	56	5/16	11/32	1 1/2	3 23/32	21/32	1/4	2.0
RF1506-0605	3/16"	9.4	11.2	42.5	98.0	20.7	7.9	78	3/8	7/16	1 11/16	3 27/32	13/16	5/16	2.8
RF1506-0606	3/16"	10.0	14.4	49.4	104.9	23.0	9.4	130	13/32	9/16	1 15/16	4 1/8	29/32	3/8	4.6
RF1506-0706	7/32"	10.0	14.4	49.9	110.9	23.0	9.4	142	13/32	9/16	1 31/32	4 3/8	29/32	3/8	5.0
RF1506-0806	1/4"	10.0	14.4	58.1	128.5	23.0	9.4	185	13/32	9/16	2 9/32	5 1/16	29/32	3/8	6.5
RF1506-0808	1/4"	13.9	17.5	70.9	141.3	29.4	12.4	276	17/32	11/16	2 25/32	5 9/16	1 5/32	1/2	9.7
RF1506-0908*3	9/32"	13.9	17.5	73.2	151.9	29.4	12.4	322	9/16	11/16	2 7/8	5 31/32	1 5/32	1/2	11.4
RF1506-1008*3	5/16"	13.9	17.5	72.1	160.6	29.4	12.4	356	9/16	11/16	2 27/32	6 11/32	1 5/32	1/2	12.6
RF1506-1010*3	5/16"	17.0	20.8	87.5	176.0	42.2	15.7	494	21/32	13/16	3 7/16	6 15/16	1 21/32	5/8	17.4
RF1506-1210	3/8"	17.0	20.8	87.7	198.2	42.2	15.7	554	21/32	13/16	3 7/16	7 13/16	1 21/32	5/8	19.5
RF1506-1412	7/16"	20.0	23.8	101.9	224.4	48.9	18.9	838	3/4	15/16	4	8 27/32	1 15/16	3/4	29.6
RF1506-1614	1/2"	26.6	28.5	116.5	257.0	44.4	22.0	1368	1 1/16	1 1/8	4 19/32	10 1/8	1 3/4	7/8	48.3
RF1506-1814	9/16"	26.5	28.5	120.4	278.3	44.4	22.0	1536	1 1/16	1 1/8	4 3/4	10 31/32	1 3/4	7/8	54.2
RF1506-1816	9/16"	29.3	31.8	147.8	324.5	60.3	25.2	2350	1 5/32	1 1/4	5 13/16	12 25/32	2 3/8	1	82.9
RF1506-2016*3	5/8"	29.3	31.8	147.8	324.5	60.3	25.2	2632	1 5/32	1 1/4	5 13/16	12 25/32	2 3/8	1	92.8
RF1506-2420*3	3/4"	36.5	42.5	178.1	387.8	74.1	31.7	4736	1 3/8	1 11/16	7	15 9/32	2 15/16	1 1/4	167.1
RF1506-2820*3	7/8"	36.5	42.5	179.6	425.0	74.1	31.7	5374	1 3/8	1 11/16	7 1/16	16 23/32	2 215/16	1 1/4	189.6
RF1506-3222*2&3	1"	36.5	46.0	192.6	480.0	76.0	34.8	8332	1 3/8	1 11/16	7 19/32	16 29/32	2 31/32	1 3/8	293.9

*1 Recommended for lifeline applications only. B.L. is below the rated B.L. of 3/16" and 5mm wire. *2 Non-articulating (fixed) jaw plates. *3 Product will be supplied as metric equivalent, may have metric terminal code stamping.

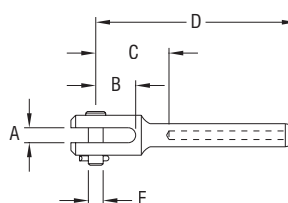
Double Jaw Toggles, Fork Swage Terminals



DOUBLE JAW TOGGLE



FORK SWAGE TERMINAL



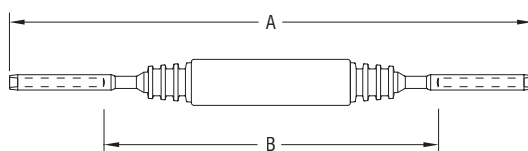
✓ Fork swage terminals are turned from solid Grade 316 Stainless Steel bar for maximum strength and corrosion resistance.

✓ Fork swage terminals provide an aesthetic and sleek wire end termination for use where movement in only one plane is required.

PRODUCT No.	WIRE DIAM.	PIN DIAM mm	A mm	B mm	C mm	D mm	E mm	F mm	WEIGHT g	PIN DIAM in.	A in.	B in.	C in.	D in.	E in.	F in.	WEIGHT oz
Double Jaw Toggles																	
RF1505-04*1	-	6.2	7.8	9.1	22.2	6.7	6.2	5.6	31	1/4	5/16	11/32	7/8	1/4	1/4	7/32	1.1
RF1505-05*1	-	7.9	9.4	11.2	28.5	8.3	7.9	7.1	55	5/16	3/8	7/16	1 1/8	5/16	5/16	9/32	2.0
RF1505-06*1	-	9.4	10.0	14.4	32.5	9.6	9.4	8.9	99	3/8	13/32	9/16	1 9/32	3/8	3/8	11/32	3.5
RF1505-08*1	-	12.4	13.9	17.5	42.0	15.1	12.4	13.4	202	1/2	17/32	11/16	1 21/32	19/32	1/2	17/32	7.1
RF1505-10*1	-	15.7	17.0	20.8	57.6	18.1	15.7	15.5	350	5/8	21/32	13/16	2 9/32	5/8	5/8	5/8	12.4
RF1505-12*1	-	18.9	20.0	23.8	66.2	18.5	18.9	16.2	577	3/4	25/32	15/16	2 19/32	23/32	3/4	5/8	20.3
Fork Swage Terminals - Metric Wire																	
RF1509M2.503	2.5mm	-	4.9	12.5	21.2	54.0	4.8	-	17	-	3/16	1/2	27/32	2 1/8	3/16	-	0.6
RF1509M0304	3mm	-	4.9	15.4	25.1	64.4	6.2	-	22	-	3/16	19/32	1	2 17/32	1/4	-	0.8
RF1509M0405	4mm	-	4.9	16.8	30.0	75.5	7.8	-	34	-	3/16	21/32	1 3/16	2 31/32	5/16	-	1.2
RF1509M0506	5mm	-	6.3	18.2	33.7	89.3	9.4	-	65	-	1/4	23/32	1 5/16	3 17/32	3/8	-	2.3
RF1509M0608	6mm	-	7.9	26.2	44.9	115.3	12.7	-	150	-	5/16	1 1/32	1 25/32	4 17/32	1/2	-	5.3
RF1509M0708	7mm	-	7.9	26.5	48.8	127.8	12.7	-	215	-	5/16	1 1/32	1 15/16	5 1/32	1/2	-	7.6
RF1509M0808	8mm	-	7.9	28.5	47.5	136.0	12.7	-	250	-	5/16	1 1/8	1 7/8	5 11/32	1/2	-	8.8
Fork Swage Terminals - Imperial Wire																	
RF1508-0404	1/8 in.	-	4.9	15.4	25.1	64.4	6.2	-	22	-	3/16	19/32	1	2 17/32	1/4	-	0.8
RF1508-0505*2	5/32 in.	-	4.9	16.8	30.0	75.5	7.8	-	34	-	3/16	21/32	1 3/16	2 31/32	5/16	-	1.2
RF1508-0606	3/16 in.	-	6.3	18.2	33.7	89.3	9.4	-	65	-	1/4	23/32	1 5/16	3 17/32	3/8	-	2.3
RF1508-0706	7/32 in.	-	6.4	23.1	38.4	99.4	9.4	-	99	-	1/4	29/32	1 1/2	3 29/32	3/8	-	3.5
RF1508-0808	1/4 in.	-	7.9	26.2	44.9	115.3	12.7	-	150	-	5/16	1 1/32	1 25/32	4 17/32	1/2	-	5.3
RF1508-0908	9/32 in.	-	7.9	26.5	48.8	127.8	12.7	-	215	-	5/16	1 1/32	1 15/16	5 1/32	1/2	-	7.6
RF1508-1008*2	5/16 in.	-	7.9	28.5	47.5	136.0	12.7	-	250	-	5/16	1 1/8	1 7/8	5 11/32	1/2	-	8.8

*1 Supplied with split pins and washers. *2 Product will be supplied as metric equivalent, may have metric terminal code stamping.

Radio Stay Insulators



✓ For peak radio performance radio stay insulators have stainless steel end terminals that are insulated from the anodised aluminium body with a special Acetal spacer. The large external webs of the spacer help to minimise power leakage, a problem with conventional insulators particularly when wet.

✓ Ronstan's technically advanced, lightweight insulators are used at the top and bottom of the backstay to create an efficient two way radio antenna.

PRODUCT No.	WIRE DIAM.	A mm	B mm	B.L. kg	WEIGHT g	A in.	B in.	B.L. lb	WEIGHT oz
Swage/Swage Radio Stay Insulators - Metric Wire									
RF3629-05M	5mm	309	198	3350	272	12 3/16	7 25/32	7370	9.6
RF3629-06M	6mm	402	261	5430	510	15 13/16	10 1/4	11946	18.0
RF3629-07M	7mm	424	261	5430	570	16 11/16	10 1/2	11946	20.0
RF3629-08M	8mm	500	323	8700	1020	19 11/16	12 23/32	19140	36.0
RF3629-10M	10mm	538	317	8700	1190	21 3/16	12 1/2	19140	42.0
Swage/Swage Radio Stay Insulators - Imperial Wire									
RF3628-06	3/16"	309	198	3350	272	12 3/16	7 25/32	7370	9.6
RF3628-07	7/32"	329	207	3350	302	12 15/16	8 1/8	7370	10.6
RF3628-08	1/4"	402	261	5430	500	15 13/16	10 1/4	11946	17.7
RF3628-09	9/32"	424	266	5430	540	16 11/16	10 1/2	11946	19.0
RF3628-10	5/16"	500	323	8700	1020	19 11/16	12 23/32	19140	36.0
RF3628-12	3/8"	546	325	8700	1210	21 1/2	12 13/16	19140	42.0

Swaging Dimensions

Correct installation of a swage fitting requires that the shank of the fitting be formed down onto the wire with specialised dies and presses in accordance with the following dimensions:

WIRE DIAM. mm	CODE	LENGTH OF WIRE INSIDE SWAGE mm	DIAM. O.D. BEFORE SWAGING mm	DIAM. O.D. AFTER SWAGING mm	TOLERANCE ON O.D. mm	WIRE DIAM. in.	CODE	LENGTH OF WIRE INSIDE SWAGE in.	DIAM. O.D. BEFORE SWAGING in.	DIAM. O.D. AFTER SWAGING in.	TOLERANCE ON O.D. in.
2.5	2.5M	32.3	5.54	4.83	+0, -0.13	3/32	03	1.27	0.218	0.190	+0, -0.005
3.0	03M	38.4	6.35	5.56	+0, -0.13	1/8	04	1.51	0.250	0.219	+0, -0.005
4.0	04M	45.0	7.54	6.35	+0, -0.13	5/32	05	1.77	0.297	0.250	+0, -0.005
5.0	05M	55.0	9.12	7.95	+0, -0.13	3/16	06	2.17	0.359	0.313	+0, -0.005
5.6	-	60.5	10.85	9.53	+0, -0.18	7/32	07	2.38	0.427	0.375	+0, -0.007
6.0	06M	70.0	12.55	11.13	+0, -0.18	1/4	08	2.76	0.494	0.438	+0, -0.007
7.0	07M	78.5	14.30	12.70	+0, -0.20	9/32	09	3.09	0.563	0.500	+0, -0.008
8.0	08M	88.0	16.13	14.30	+0, -0.20	5/16	10	3.46	0.635	0.563	+0, -0.008
10.0	10M	110.0	17.86	15.88	+0, -0.20	3/8	12	4.33	0.703	0.625	+0, -0.008
11.0	-	122.0	19.84	17.48	+0, -0.20	7/16	14	4.80	0.781	0.688	+0, -0.008
12.0	12M	140.0	21.44	19.05	+0, -0.23	1/2	16	5.51	0.844	0.750	+0, -0.009
14.0	14M	157.0	24.99	22.23	+0, -0.23	9/16	18	6.18	0.984	0.875	+0, -0.009
16.0	16M	176.0	28.17	25.40	+0, -0.26	5/8	20	6.93	1.109	1.000	+0, -0.010
19.0	19M	210.0	34.52	31.75	+0, -0.31	3/4	24	8.27	1.359	1.250	+0, -0.012
22.0	22M	245.0	40.46	36.50	+0, -0.31	7/8	28	9.65	1.593	1.437	+0, -0.012
26.0	26M	286.0	46.02	41.28	+0, -0.31	1	32	11.26	1.812	1.625	+0, -0.012

Pins & Rings



SPLIT RING

RF113
RF114

SPLIT RING

RF686
RF687
RF688

RETAINING CLIP

RF413



CLEVIS PIN

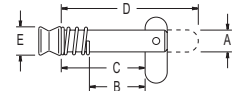
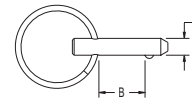
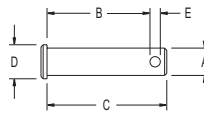
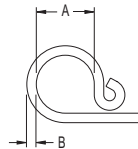
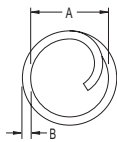


FAST PIN

RF5310



TOGGLE PIN



PRODUCT No.	SUITS CLEVIS PINS	DESCRIPTION	A mm	B mm	WEIGHT g	A in.	B in.	WEIGHT oz
Split Rings and Clips								
RF113	RF258 - RF266	Split ring	9.5	1.0	1	3/8	1/32	0.1
RF114	RF260 - RF266	Split ring	11.1	1.3	2	7/16	1/16	0.1
RF413	RF267 - RF274	Retaining Clip	16.0	2.7	3	5/8	3/32	0.1
RF686	RF260 - RF274	Split ring	14.3	1.3	4	9/16	1/16	0.1
RF687	RF260 - RF274	Split ring	18.8	1.6	5	3/4	1/16	0.2
RF688	RF267 - RF278	Split ring	25.0	2.0	5	1	3/32	0.2

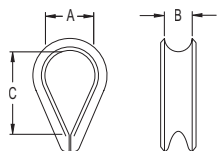
PRODUCT No.	A mm	B* mm	C mm	D mm	E mm	WEIGHT g	A in.	B* in.	C in.	D in.	E in.	WEIGHT oz
Clevis Pins												
RF259	4.6	9.0	12.2	6.4	2.0	2	3/16	11/32	15/32	1/4	5/64	0.1
RF260	4.8	12.7	16.0	6.4	2.2	3	3/16	1/2	5/8	1/4	3/32	0.1
RF261	4.8	19.0	22.0	6.4	2.2	3	3/16	3/4	7/8	1/4	3/32	0.1
RF262	4.8	25.0	28.0	6.4	2.2	5	3/16	1	1 1/8	1/4	3/32	0.2
RF263	6.4	12.7	16.5	7.9	2.4	5	1/4	1/2	21/32	5/16	3/32	0.2
RF264	6.4	19.0	23.0	7.9	2.4	5	1/4	3/4	29/32	5/16	3/32	0.2
RF265	6.4	25.0	30.0	7.9	2.4	10	1/4	1	1 3/16	5/16	3/32	0.4
RF266	6.4	32.0	36.0	7.9	2.4	10	1/4	1 1/4	1 7/16	5/16	3/32	0.4
RF267	7.9	12.7	16.5	9.5	2.7	10	5/16	1/2	21/32	3/8	3/32	0.4
RF268	7.9	19.0	23.0	9.5	2.7	10	5/16	3/4	29/32	3/8	3/32	0.4
RF269	7.9	25.0	30.0	9.5	2.7	10	5/16	1	1 3/16	3/8	3/32	0.4
RF270	7.9	32.0	36.0	9.5	2.7	15	5/16	1 1/4	1 7/16	3/8	3/32	0.5
RF271	9.5	19.0	24.0	12.7	4.0	15	3/8	3/4	15/16	1/2	5/32	0.5
RF272	9.5	25.0	31.0	12.7	3.6	20	3/8	1	1 1/4	1/2	5/32	0.7
RF273	9.5	32.0	37.0	12.7	3.7	20	3/8	1 1/4	1 7/16	1/2	5/32	0.7
RF274	9.5	38.0	43.0	12.7	3.7	25	3/8	1 1/2	1 11/16	1/2	5/32	0.9
RF275	12.7	19.0	25.0	15.9	3.5	30	1/2	3/4	1	5/8	1/8	1.1
RF276	12.7	25.0	31.0	15.9	3.5	35	1/2	1	1 1/4	5/8	1/8	1.2
RF277	12.7	32.0	38.0	15.9	3.5	40	1/2	1 1/4	1 1/2	5/8	1/8	1.4
RF278	12.7	38.0	44.0	15.9	3.5	50	1/2	1 1/2	1 3/4	5/8	1/8	1.8
RF537	15.9	25.0	33.0	19.0	4.0	55	5/8	1	1 5/16	3/4	5/32	1.9
RF538	15.9	32.0	38.0	19.0	4.4	65	5/8	1 1/4	1 1/2	3/4	5/32	2.3
RF539	15.9	38.0	45.0	19.0	4.4	75	5/8	1 1/2	1 3/4	3/4	5/32	2.7
Fast Pin												
RF5310	4.8	12.5	-	-	-	7	3/16	1/2	-	-	-	0.2
Toggle Pins												
RF115x1/2	6.4	7.8	17.4	32.5	7.9	10	1/4	5/16	11/16	1 9/32	5/16	0.4
RF115x5/8	6.4	11.2	20.8	35.9	7.9	10	1/4	7/16	13/16	1 13/32	5/16	0.4
RF115x3/4	6.4	14.2	23.8	38.9	7.9	10	1/4	9/16	15/16	1 17/32	5/16	0.4
RF115x1	6.4	20.5	30.1	45.2	7.9	10	1/4	13/16	1 1/8	1 25/32	5/16	0.4

*Maximum thickness of material the toggle pin can pass through, allowing correct toggle operation.

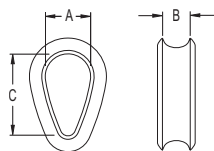
Hand Swage Fittings & Tools



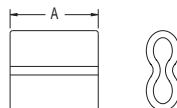
THIMBLE



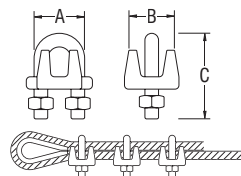
SAILMAKER THIMBLE



COPPER FERRULE

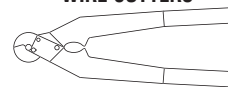


WIRE ROPE GRIP

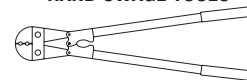


- ✓ Copper ferrules are nickel plated for aesthetic appearance and long-term weather resistance.
- ✓ Stainless steel wire rope grips require no special tools for assembly and can be disassembled and reused.

WIRE CUTTERS



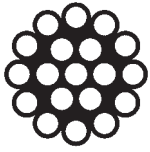
HAND SWAGE TOOLS



PRODUCT No.	RECOMMENDED WIRE DIAM. mm	A mm	B mm	C mm	WEIGHT g	RECOMMENDED WIRE DIAM. in.	A in.	B in.	C in.	WEIGHT oz
Thimbles - Stainless Steel										
RF481	2.5	9.0	3.0	16	2	3/32	11/32	1/8	5/8	0.1
RF482	3.0	10.0	4.0	18	2	1/8	3/8	5/32	23/32	0.1
RF483	4.0	11.0	5.0	19	5	5/32	7/16	3/16	3/4	0.2
RF484	5.0	13.0	6.0	23	5	3/16	1/2	1/4	29/32	0.2
RF485	6.0	15.0	7.5	28	15	1/4	19/32	9/32	1 1/8	0.5
RF486	8.0	21.0	10.5	38	25	5/16	13/16	13/32	1 1/2	0.9
RF487	10.0	27.0	11.5	53	40	3/8	1 1/16	7/16	2 1/16	1.4
RF2488	12.0	29.0	15.5	55	65	1/2	1 1/8	5/8	2 3/16	2.3
RF2490	16.0	40.0	20.0	67	125	5/8	1 9/16	25/32	2 5/8	4.4
RF2492	19.0	51.0	22.0	87	275	3/4	2	7/8	3 7/16	9.7
RF2494	26.0	65.0	29.0	115	615	1	2 1/2	1 1/8	4 1/2	21.7
Sailmaker Thimbles - Stainless Steel										
RF2180	3.0	9.0	4.5	16	3	1/8	11/32	3/16	5/8	0.1
RF2181	4.0	11.0	5.5	20	5	5/32	7/16	7/32	25/32	0.2
RF2182	5.0	17.0	6.3	27	10	3/16	21/32	1/4	1 1/16	0.4
RF2183	6.0	21.0	8.5	33	20	1/4	13/16	11/32	1 5/16	0.7
RF2184	8.0	26.0	11.0	40	40	5/16	1	7/16	1 9/16	1.4
Copper Ferrules										
RF3169	1.5	8.0	-	-	2	1/16	5/16	-	-	0.1
RF3170	2.0	10.0	-	-	2	5/64	3/8	-	-	0.1
RF3171	2.5	11.0	-	-	3	3/32	7/16	-	-	0.1
RF3172	3.0	14.0	-	-	5	1/8	9/16	-	-	0.2
RF3173	4.0	18.5	-	-	10	5/32	23/32	-	-	0.4
RF3174	5.0	19.0	-	-	15	3/16	3/4	-	-	0.5
RF3175	6.0	20.0	-	-	22	1/4	25/32	-	-	0.8
Wire Rope Grips										
RF1685-2	2.0	13.7	14.0	18	10	5/64	9/16	23/32	11/16	0.3
RF1685-4	4.0	18.0	18.0	24	20	5/32	11/16	23/32	15/16	0.7
RF1685-5	5.0	18.2	20.0	28	30	3/16	11/16	13/16	1 1/8	1.0
RF1685-6	6.0	21.3	21.0	33	40	1/4	13/16	27/32	1 9/32	1.4
RF1685-8	8.0	27.2	24.0	43	80	5/16	1 1/16	15/16	1 5/8	2.8
RF1685-10	10.0	31.6	34.0	51	140	3/8	1 7/8	1 5/16	2	4.9
RF1685-12	12.0	37.7	36.0	65	220	1/2	1 1/2	1 7/16	2 9/16	7.7

PRODUCT No.	LENGTH mm	TO SUIT WIRE mm	WEIGHT g	LENGTH in.	TO SUIT WIRE in.	WEIGHT oz
Wire Cutters						
CLA606	200	1-4	310	8	3/64-5/32	10.9
CLA609	330	1-6	720	13	3/64-1/4	25.4
Hand Swage Tools						
CLA731	300	1, 1.5, 2, 2.5	730	12	3/64, 1/16, 5/64, 3/32	25.7
CLA763	600	2, 2.5, 3	2300	24	5/64, 3/32, 1/8	81.1
CLA774	750	3, 4	3980	30	1/8, 5/32	140.6
CLA775	750	4, 5	3960	30	5/32, 3/16	139.7
CLA776	750	6	3930	30	1/4	138.6

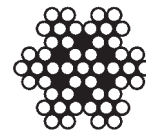
Stainless Steel Wire


1 x 19 Construction
 19 single strands

- ✓ Strongest
- ✓ Lowest Stretch
- ✓ Least flexible
- ✓ Standing rigging
- ✓ Life lines


7 x 19 Construction
 7 strands of 19 wires

- ✓ Most flexible
- ✓ Halyards
- ✓ Steering
- ✓ Running rigging
- ✓ Vang cascades


7 x 7 Construction
 7 strands of 7 wires

- ✓ Semi-flexible
- ✓ PVC coated (optional)
- ✓ Soft luff dinghy forestay (coilable)
- ✓ Removable dinghy stays (coilable)

PRODUCT No.	WIRE DIAM. mm	REEL LENGTH mm	B.L. kg	WEIGHT PER METRE g	WIRE DIAM. in.	REEL LENGTH in.	B.L. lb	WEIGHT PER METRE lb
1 x 19 Grade 316 stainless steel								
WR6119-1.5M	1.5	305	180	0.011	-	1000	397	0.024
WR6119-02M	2.0	305	320	0.019	-	1000	706	0.042
WR6119-2.5M	2.5	305	500	0.031	-	1000	1103	0.068
WR6119-03M	3.0	305	720	0.045	-	1000	1588	0.099
WR6119-04M	4.0	305	1285	0.079	-	1000	2833	0.174
WR6119-05M	5.0	305	2000	0.124	-	1000	4410	0.273
WR6119-06M	6.0	305	2876	0.178	-	1000	6342	0.392
WR6119-07M	7.0	305	3549	0.243	-	1000	7807	0.536
WR6119-08M	8.0	305	4640	0.317	-	1000	10231	0.699
WR6119-12*	9.5	305	6546	0.446	3/8	1000	14434	0.983
WR6119-10M	10.0	305	7250	0.495	-	1000	15986	1.091
WR6119-14*	11.1	305	8770	0.624	7/16	1000	19338	1.376
WR6119-12M	12.0	305	10401	0.713	-	1000	22934	1.572
WR6119-14M	14.0	305	14174	0.971	-	1000	31254	2.141
WR6119-16M	16.0	305	18559	1.270	-	1000	40922	2.800
WR6119-19M	19.0	305	21618	1.780	-	1000	47668	3.925
WR6119-22M	22.0	305	29062	2.360	-	1000	64082	5.204
WR6119-26M	26.0	305	40585	3.300	-	1000	89490	7.277
7 x 19 Grade 316 stainless steel								
WR6719-1.5M	1.5	305	126	0.009	-	1000	278	0.020
WR6719-02M	2.0	305	275	0.017	-	1000	606	0.037
WR6719-2.5M	2.5	305	428	0.027	-	1000	944	0.060
WR6719-03M	3.0	305	612	0.034	-	1000	1349	0.075
WR6719-04M	4.0	305	907	0.061	-	1000	2000	0.135
WR6719-05M	5.0	305	1418	0.095	-	1000	3127	0.209
WR6719-06M	6.0	305	2040	0.138	-	1000	4498	0.304
WR6719-07M	7.0	305	2785	0.199	-	1000	6127	0.439
WR6719-08M	8.0	305	3632	0.243	-	1000	8009	0.536
WR6719-10M	10.0	305	5673	0.381	-	1000	12480	0.840
WR6719-12M	12.0	305	8163	0.548	-	1000	17956	1.208
WR6719-14M	14.0	305	11122	0.746	-	1000	24524	1.645
WR6719-16M	16.0	305	14387	0.974	-	1000	31723	2.148
7 x 7 Grade 316 stainless steel								
WR677-03M	3.0	305	544	0.035	-	1000	1200	0.077
WR677-04M	4.0	305	959	0.063	-	1000	2115	0.139
WR677-03MP†	3.0	305	544	0.072	-	1000	1200	0.159
WR677-04MP†	4.0	305	959	0.082	-	1000	2115	0.181
* Standard imperial diameter wire. Refer imperial diameter fitting tables.								
† PVC coated wire rope.								

STRETCH IN WIRE

Stretch is a characteristic of all wire, initially as permanent stretch when the load is first applied and the individual wires bed down, and then as conventional elastic stretch within the wires. Where stretch is critical to the application, initial stretch can be accounted for with cables pre-tensioned or pre-stressed during swaging and cable manufacturing. Elastic stretch can be calculated by the following formula:

$$\text{Elastic stretch (mm)} = \frac{W \times L}{E \times A}$$

where:

W = Applied load (kN)

L = Cable length (mm)

E = Strand modulus (kN/mm²)

A = Area of wire = $\frac{D^2 \times \pi}{4}$

where **D** = Nominal diameter of wire (mm)

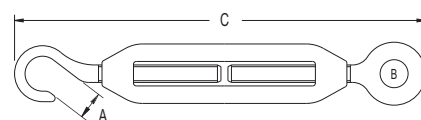
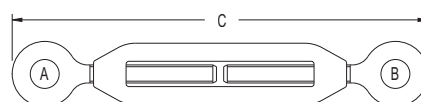
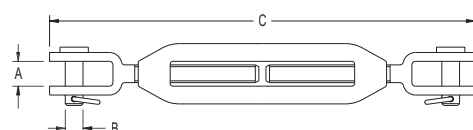
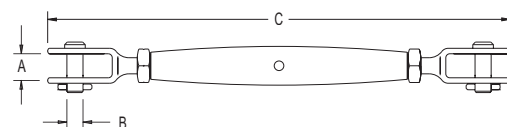
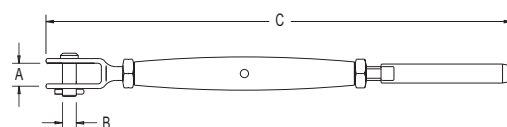
Typical values for E are:

1 x 19 107.5 kN/mm² (15.59 x 10⁶ P.S.I.)

7 x 19 47.5 kN/mm² (6.89 x 10⁶ P.S.I.)

7 x 7 57.3 kN/mm² (8.31 x 10⁶ P.S.I.)

Turnbuckles



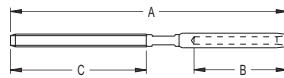
PRODUCT No.	WIRE DIAM.	THREAD mm	A mm	B mm	C MIN. mm	C MAX. mm	WEIGHT g	A in.	B in.	C MIN. in.	C MAX. in.	WEIGHT oz
Closed Body Turnbuckles - Fork / Swage												
CS3121P-04M5	1/8 in.	M5	7	5	160	230	43	9/32	3/16	6 5/16	9 1/16	1.5
CS3121P-04M6	1/8 in.	M6	8	6	175	257	91	5/16	1/4	6 7/8	10 1/8	3.2
CS3121P-05	4mm, 5/32 in.	M8	11	8	206	298	142	7/16	5/16	8 1/8	11 3/4	5.0
CS3121P-M03M5	3mm	M5	7	5	150	215	43	9/32	3/16	5 7/8	8 7/16	1.5
CS3121P-M03M6	3mm	M6	8	6	175	257	91	5/16	1/4	6 7/8	9 7/8	3.1
CS3121P-M04M6	4mm	M6	8	6	191	255	80	5/16	1/4	7 17/32	10 1/32	2.6
Closed Body Turnbuckles - Fork / Fork												
CS312P-5	-	M5	7	5	130	200	43	9/32	3/16	5 1/8	7 7/8	1.5
CS312P-6	-	M6	8	6	152	220	94	5/16	1/4	6	8 5/8	3.3
CS312P-8	-	M8	11	8	182	265	160	7/16	5/16	7 1/8	10 1/2	5.6
Open Body Turnbuckles - Fork / Fork												
CS312-5F	-	M5	7	5	124	179	52	9/32	3/16	4 7/8	7 1/8	1.8
CS312-6F	-	M6	8	6	157	222	97	5/16	1/4	6 1/4	8 3/4	3.4
CS312-8F	-	M8	11	8	194	289	190	7/16	5/16	7 1/2	11 3/8	6.7
CS312-10F	-	M10	12	9	240	362	334	1/2	3/8	9 1/2	14 1/4	11.8
Open Body Turnbuckles - Eye / Eye												
CS311-5E	-	M5	10	10	126	181	46	3/8	3/8	4 7/8	7 1/8	1.6
CS311-6E	-	M6	12	12	153	220	87	7/16	7/16	6	8 5/8	3.1
CS311-8E	-	M8	14	14	206	293	180	9/16	9/16	8 1/8	11 4/8	6.3
CS311-10E	-	M10	18	18	256	377	326	11/16	11/16	10 1/16	14 7/8	11.5
CS311-12E	-	M12	21	21	320	480	549	13/16	13/16	12 5/8	18 7/8	19.3
Open Body Turnbuckles - Eye / Hook												
CS311-5H	-	M5	7	10	127	180	48	9/32	13/32	5	7 3/32	1.7
CS311-6H	-	M6	9	12	161	230	88	3/8	1/2	6 3/8	9	3.1
CS311-8H	-	M8	10	14	210	300	175	3/8	9/16	8 9/32	11 13/16	6.2
CS311-10H	-	M10	13	18	260	382	320	1/2	11/16	10 1/4	15 1/16	11.3

Note - Commodity Stainless product dimensions are indicative and subject to change

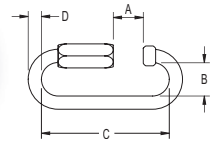
Swage Fittings, Quick Links & Welded Rings



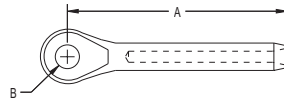
THREADED SWAGE TERMINAL



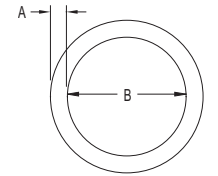
QUICK LINK



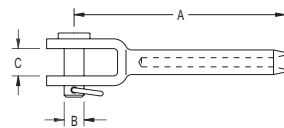
SWAGE EYE



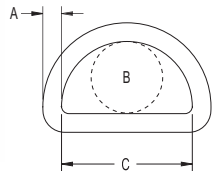
RING - ROUND



SWAGE FORK



RING - DEE



PRODUCT No.	WIRE DIAM.	THREAD mm	A mm	B mm	C mm	D mm	WEIGHT g	A in.	B in.	C in.	D in.	WEIGHT oz
Threaded Swage Terminals												
CS7801-04M6	1/8 in.	M6	98	40	48	-	18	3 7/8	1 5/8	1 7/8	-	0.6
CS7801-05	4mm, 5/32 in.	M8	116	48	57	-	43	4 9/16	1 7/8	2 1/4	-	1.5
CS7801-M03M5	3mm	M5	91	40	41	-	14	3 5/8	1 5/8	1 5/8	-	0.5
CS7801-M03M6	3mm	M6	98	40	48	-	23	3 7/8	1 5/8	1 7/8	-	0.8
CS7801-M04M6	4mm	M6	111	45	48	-	26	4 3/8	1 3/4	1 7/8	-	0.9
CS7801-M05M8	5mm	M8	123	52	52	-	46	4 13/16	2 1/16	2 1/16	-	1.6
CS7801-06M8	3/16 in.	M8	122	54	54	-	45	4 3/4	2 1/8	2 1/8	-	1.6
Swage Eyes												
CS7802-04	1/8 in.	-	55	7.0	-	-	14	2 5/32	9/32	-	-	0.5
CS7802-M03	3mm	-	54	6.5	-	-	14	2 1/8	1/4	-	-	0.5
CS7802-M05	5mm	-	73	10.4	-	-	37	2 7/8	3/8	-	-	1.3
Swage Forks												
CS7803-04M5	1/8 in.	-	74	5.0	7	-	22	2 7/8	3/16	9/32	-	0.7
CS7803-05	4mm, 5/32 in.	-	77	8.0	8	-	44	3	5/16	5/16	-	1.6
CS7803-M03M5	3mm	-	74	5.0	7	-	23	2 7/8	3/16	9/32	-	0.8
CS7803-M03M6	3mm	-	75	6.0	8	-	26	3	1/4	5/16	-	0.9
CS7803-M05	5mm	-	88	9.0	13	-	68	3 4/8	3/8	1/2	-	2.4
Quicklinks												
CS7350-4	-	-	6.0	11	33	4	13	1/4	7/16	1 5/16	5/32	0.4
CS7350-6	-	-	7.0	15	47	6	37	9/32	19/32	1 7/8	1/4	1.3
CS7350-8	-	-	9.5	18	58	8	80	3/8	11/16	2 5/16	5/16	2.8
CS7350-10	-	-	13.0	20	70	10	143	1/2	25/32	2 3/4	3/8	5.0
Rings - Round												
CS317-4	-	-	4.0	25	-	-	10	5/32	1	-	-	0.4
CS317-5	-	-	5.0	31	-	-	16	3/16	1 7/32	-	-	0.6
CS317-54	-	-	5.0	40	-	-	22	3/16	1 9/16	-	-	0.8
CS317-6	-	-	6.0	40	-	-	32	1/4	1 9/16	-	-	1.1
CS317-8	-	-	8.0	51	-	-	74	5/16	2	-	-	2.6
CS317-87	-	-	8.0	66	-	-	92	5/16	2 5/8	-	-	3.2
Rings - Dee												
CS3250-425	-	-	4.0	22	27	-	10	5/32	7/8	1 1/16	-	0.4
CS3250-640	-	-	6.0	34	40	-	33	1/4	1 3/8	1 9/16	-	1.1

Note - Commodity Stainless product dimensions are indicative and subject to change

Carbine, Snap & Pelican Hooks



CARBINE HOOK



ASYMMETRICAL SNAP HOOK



SPRING SNAP HOOK



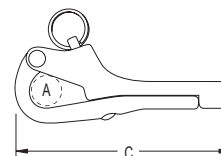
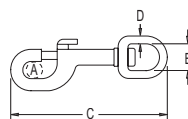
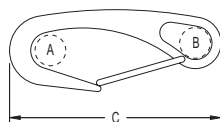
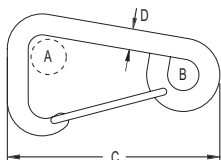
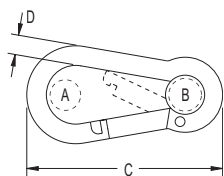
BOLT SNAP



PELICAN HOOK

- ✓ Positive locking 316 stainless steel Pelican hooks for lifeline applications, available in M6 and M8 thread to suit a range of wire sizes (4mm, 5mm and 3/16").

- ✓ Spring loaded pull pin and split ring on Pelican hooks for easy release.
- ✓ Cast 316 stainless steel Pelican hooks.



PRODUCT No.		A mm	B mm	C mm	D mm	WEIGHT g	A in.	B in.	C in.	D in.	WEIGHT oz
Carbine Hook											
CS2450-5		8	6	50	5	17	5/16	1/4	2	3/16	0.6
CS2450-6		9	6	60	6	28	3/8	1/4	2 3/8	1/4	1.0
CS2450-8		11	10	81	8	67	7/16	3/8	3 3/16	5/16	2.3
CS2450-10		13	14	100	10	128	1/2	9/16	3 15/16	13/32	4.5
Asymmetrical Snap Hook											
CS2430-6		17	9	60	6	27	11/16	3/8	2 3/8	1/4	0.9
CS2430-8		25	12	80	7.5	66	1	15/32	3 3/16	5/16	2.3
CS2430-10		27	13	101	10	140	1 1/16	1/2	4	3/8	4.9
CS2430-12		33	16	121	12	220	1 5/16	5/8	4 3/4	15/32	7.7
Spring Snap Hook											
CS2470-50		10	6	50	-	18	3/8	1/4	2	-	0.6
CS2470-70		12	10	70	-	47	15/32	3/8	2 3/4	-	1.6
CS2470-100		18	12	100	-	108	23/32	15/32	3 15/16	-	3.8
Bolt Snap											
CS225-3		8	12	70	3	60	5/16	15/32	2 3/4	1/8	2.1
Pelican Hook											
CS2831-6	M6 thread, suits CS7801-M03M6, CS7801-M04M6	10	-	97	-	70	3/8	-	3 13/16	-	2.4
CS2831-8	M8 thread, suits CS7801-06M8, CS7801-M05M8	15	-	73	-	110	5/8	-	2 7/8	-	3.9

Note - Commodity Stainless product dimensions are indicative and subject to change

Snap Shackles, Swivels & Shackles



SNAP SHACKLE - FIXED EYE



SNAP SHACKLE - SWIVEL EYE



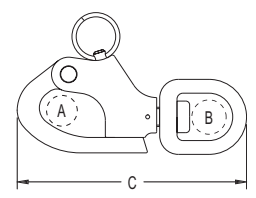
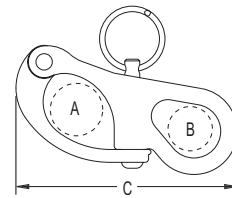
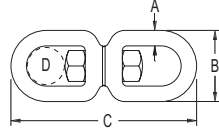
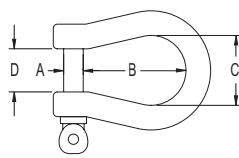
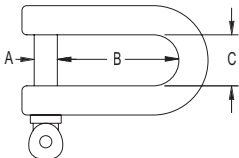
SWIVEL - EYE-EYE



SHACKLE - STANDARD DEE



SHACKLE - BOW



PRODUCT No.	A mm	B mm	C mm	D mm	WEIGHT g	A in.	B in.	C in.	D in.	WEIGHT oz
Shackles - Standard Dee										
CS360-8	8	28	18	—	56	5/16	1 1/8	11/16	—	2.0
CS360-10	10	35	20	—	110	3/8	1 3/8	3/4	—	3.9
CS360-12	12	42	24	—	186	15/32	1 21/32	15/16	—	6.5
Shackles - Bow										
CS370-8	8	38	29	17	70	5/16	1 1/2	1 5/32	11/16	2.4
CS370-10	10	46	36	20	128	3/8	1 13/16	1 7/16	25/32	4.5
CS370-12	12	55	42	25	218	15/32	2 5/32	1 21/32	1	7.7
Swivel - Eye-Eye										
CS018-6E	6	26	65	14	54	1/4	1	2 9/16	7/32	1.9
CS018-8E	8	35	95	21	125	5/16	1 3/8	3 3/4	13/16	4.4
CS018-10E	10	43	120	24	247	3/8	1 11/16	4 3/4	15/16	8.7
Snap Shackle - Fixed Eye										
CS2483-1	11	10	54	—	47	7/16	3/8	2 1/8	—	1.6
CS2483-2	18	14	70	—	95	11/16	9/16	2 3/4	—	3.3
Snap Shackle - Swivel Eye										
CS2482-1	14	12	67	—	58	9/16	15/32	2 5/8	—	2.0
CS2482-2	17	16	88	—	120	5/8	5/8	3 7/16	—	4.2
CS2482-3	23	21	123	—	330	29/32	13/16	4 7/8	—	11.6

Note - Commodity Stainless product dimensions are indicative and subject to change

Pad Eyes, U-Bolts, Eye Bolts & General Fittings



PAD EYE - DIAMOND



EYE - BOLT



EYE COACH SCREW



RF230



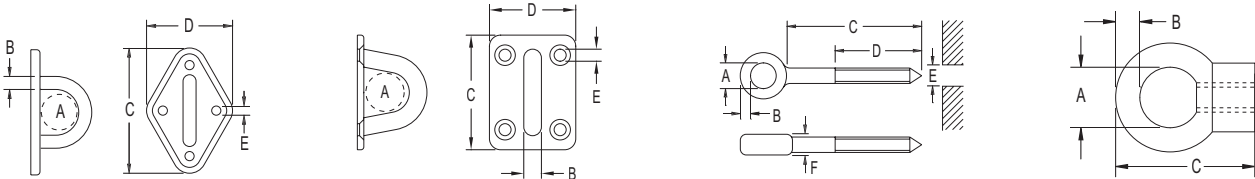
PAD EYE - SQUARE



EYE NUT



RF308



PRODUCT No.	THREAD mm	A mm	B mm	C mm	D mm	E mm	F mm	WEIGHT g	A in.	B in.	C in.	D in.	E in.	F in.	WEIGHT oz
Pad Eyes - Diamond															
CS3213	-	15	8	89	56	9	-	144	5/8	5/16	3 7/16	2 3/16	5/16	-	5.1
Pad Eyes - Square															
CS321-6	-	17	6	40	34	5	-	38	21/32	1/4	1 9/16	1 5/16	3/16	-	1.3
CS321-8	-	21	8	50	39	6	-	64	13/16	5/16	2	1 17/32	1/4	-	2.2
Eye Bolts															
CS3191-66	M6	13	5	63	56	54	-	20	1/2	3/16	2 1/2	2 1/4	2 1/8	-	0.7
CS3191-610	M6	13	5	102	93	93	-	26	1/2	3/16	4	3 11/16	3 11/16	-	0.9
CS3191-813	M8	17	7	130	126	123	-	64	21/32	1/4	5 1/8	5	4 13/16	-	2.3
CS3191-1015	M10	21	9	160	142	139	-	122	13/16	3/8	6 5/16	5 9/16	5 15/32	-	4.3
Eye Nuts															
CS3061-6	M6	16	5.4	31	-	-	-	16	5/8	3/16	1 1/4	-	-	-	0.6
CS3061-8	M8	19	6.6	39	-	-	-	32	3/4	1/4	1 17/32	-	-	-	1.1
CS3061-10	M10	25	8.0	48	-	-	-	54	1	5/16	1 7/8	-	-	-	1.9
Eye Coach Screws															
CS3182-555	-	5	4	60	41	4	5	15	3/16	5/32	2 3/8	1 5/8	5/32	3/16	0.6
CS3182-655	-	6	4	70	39	5	7	16	1/4	5/32	2 3/4	1 17/32	3/16	9/32	0.6
CS3182-860	-	8	5	96	54	6	9	34	5/16	3/16	3 3/4	2 1/8	1/4	3/8	1.2
CS3182-1080	-	10	5	99	55	8	12	52	3/8	3/16	3 7/8	2 1/8	5/16	15/32	1.8

Note - Commodity Stainless product dimensions are indicative and subject to change

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Miscellaneous			
RF230	Fuel tank breather, chromed brass. 7/16" UNF thread. Barb suits 10mm (13/32") diam. plastic tube	45	1.6
RF308	Hinge, pressed stainless steel. 61mm x 32mm (2 3/8" x 1 1/4")	20	0.7

Industrial Grade Construction, Reliability & Performance

Ronstan's Industrial Pulley Blocks offer a high quality, reliable solution for a myriad of applications. Full stainless steel housings and attachment fittings provide ultimate durability, long service life and resistance to harsh environments. Self lubricating Acetal polymer sheaves running on polished stainless steel races perform equally well with dynamic loads and high static loads, and an alloy sheave option provides the capacity for use with wire rope.

Manufactured in Australia, in our quality assured plant. Ronstan Industrial Blocks are load rated and are backed by a full warranty.

Swivelling and pivoting shackle head

Allows correct alignment & easy attachment of pulley block.
Shackle pin drilled for use of security wire.

Clevis pin with retaining ring option available

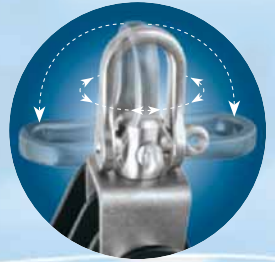
Clevis pin with retaining ring versions are available in Series 75 - order as RZxxxxC.
Provides tool-free attachment and removal.

Removable becket to suit pre-spliced lines

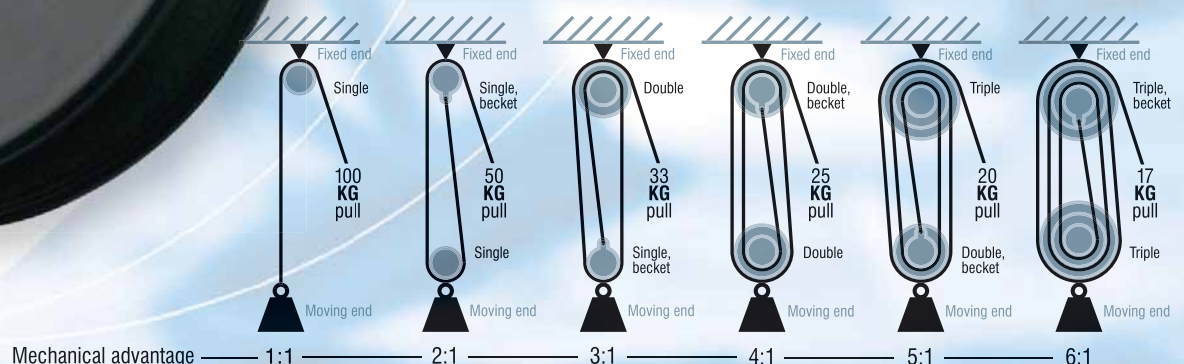
Pre-spliced lines are neat, compact and provide maximum security (over knotted terminations).

Simple and secure rope cleating

Simple, secure holding of rope. Just pull the line through the cleat jaws.
Jaws prevent the line slipping back out.
Flick the rope up out of jaws to release.
Stainless steel eye strap keeps the line ready for re-cleating.



Typical Purchase Systems



Series 60



HEAD BOLT: 5/16" UNC, **BECKET BOLT:** 5/16" UNC

- ✓ Load rated.
- ✓ Choice of fixed or swivel head models.
- ✓ Durable, low friction Acetal polymer sheave.
- ✓ RZ1611 has a cleating angle of 60° from the mounting plain and is ideal for 'remote' operation as in the case of a ground based assistant raising tools or equipment to an overhead linesman.

- ✓ UV stabilised Acetal sheaves.
- ✓ Grade 316 stainless steel side plate/cheeks, powder coated black.
- ✓ Fibre reinforced polymer rope cleats.
- ✓ Grade 316 stainless steel head, shackle & becket.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
Industrial Pulley Blocks													
RF617H	Shackle, screw pin with security wire hole, 6mm (1/4") pin	-	-	6	1000	2000	25	-	-	1/4	2200	4410	0.9
RZ1600	Single block, swivel shackle head	60	12	6	1000	2000	390	2 3/8	1/2	1/4	2200	4410	13.8
RZ1601	Single block, bolt head	60	12	-	1000	2000	330	2 3/8	1/2	-	2200	4410	11.7
RZ1602	Single block, becket, bolt head	60	12	-	1000	2000	400	2 3/8	1/2	-	2200	4410	14.1
RZ1603	Single block, becket, swivel shackle head	60	12	6	1000	2000	460	2 3/8	1/2	1/4	2200	4410	16.3
RZ1607	Single block, becket, 30° cleat, swivel shackle head	60	12	6	1000*	2000	705	2 3/8	1/2	1/4	2200*	4410	24.9
RZ1611	Single block, becket, 60° cleat, swivel shackle head	60	12	6	1000*	2000	795	2 3/8	1/2	1/4	2200*	4410	28.1

* Line load through cleat not to exceed 400kg (880lb)



HEAD BOLT, SINGLE SHEAVE MODELS: 3/8" UNC, HEAD BOLT, MULTI SHEAVE MODELS: 5/16" UNC, SHEAVE BOLT: 3/8" UNC, BECKET BOLT: 3/8" UNC

- ✓ Load rated.
- ✓ Choice of fixed or swivel head models.
- ✓ Easy to service removable sheaves (bolt & Nyloc nut).
- ✓ Durable, low friction Acetal polymer sheave.
- ✓ Heavy duty aluminium sheave models available ('AW' suffix).
- ✓ Swivel head blocks available with either screw shackle pin or clevis pin with retaining ring.
- ✓ UV stabilised Acetal sheaves.
- ✓ Aluminium sheave ('AW') models also available.
- ✓ Grade 316 stainless steel side plate/cheeks, powder coated black.
- ✓ Fibre reinforced polymer rope cleats.
- ✓ Grade 316 stainless steel head & shackle.
- ✓ Grade 2205 stainless steel clevis pin.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
Industrial Pulley Blocks													
RZ1701	Single block, bolt head	75	14	-	1500	3000	500	3	9/16	-	3300	6600	17.6
RZ1702	Single block, becket, bolt head	75	14	-	1500	3000	600	3	9/16	-	3300	6600	21.2
RZ1704	Double block, fixed shackle head	75	14	-	1500	3000	865	3	9/16	-	3300	6600	30.5
RZ1707*1	Single block, becket, cleat, swivel shackle head	75	14	8	1500*2	3000	955	3	9/16	5/16	3300*2	6600	33.7
RZ1710*1	Triple block, becket, cleat, swivel shackle head	75	14	8	1500*2	3000	1565	3	9/16	5/16	3300*2	6600	55.2

*1 Clevis pin shackle version can be ordered as RZxxxC (eg. RZ1707C)

*2 Line load through cleat not to exceed 400kg (880lb)

Series 75



RZ1700



RZ1705



RZ1708



RZ1703



RZ1706



RZ1709

HEAD BOLT, SINGLE SHEAVE MODELS: 3/8" UNC, HEAD BOLT, MULTI SHEAVE MODELS: 5/16" UNC, SHEAVE BOLT: 3/8" UNC, BECKET BOLT: 3/8" UNC

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
Industrial Pulley Blocks													
RZ1700*	Single block, swivel shackle head	75	14	8	1500	3000	630	3	9/16	5/16	3300	6600	22.2
RZ1703*	Single block, swivel shackle head, becket	75	14	8	1500	3000	730	3	9/16	5/16	3300	6600	25.7
RZ1705*	Double block, swivel shackle head	75	14	8	1500	3000	940	3	9/16	5/16	3300	6600	33.2
RZ1706*	Double block, swivel shackle head, becket	75	14	8	1500	3000	1040	3	9/16	5/16	3300	6600	36.7
RZ1708*	Triple block, swivel shackle head	75	14	8	1500	3000	1240	3	9/16	5/16	3300	6600	43.7
RZ1709*	Triple block, swivel shackle head, becket	75	14	8	1500	3000	1325	3	9/16	5/16	3300	6600	46.7

*Clevis pin shackle version can be ordered as RZxxxxC (eg. RZ1709C)



RZ1700AW



RZ1705AW



RZ1000AW



RZ1000



RF618H



RF814

HEAD BOLT, SINGLE SHEAVE MODELS: 3/8" UNC, HEAD BOLT, MULTI SHEAVE MODELS: 5/16" UNC, SHEAVE BOLT: 3/8" UNC

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. WIRE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. WIRE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
Industrial Pulley Blocks - Aluminium Sheave													
RZ1700AW*1	Single block, swivel shackle head, aluminium sheave	75	8	8	1500	3000	740	3	5/16	5/16	3300	6600	26.1
RZ1705AW*1	Double block, swivel shackle head, aluminium sheave	75	8	8	1500	3000	1160	3	5/16	5/16	3300	6600	40.9

*1 Clevis pin shackle version can be ordered as RZxxxxC (eg. RZ1700AWC)

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. WIRE mm	MAX. ROPE mm	(U.D.L.)*2 B.L. kg	(P.L.)*2 B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. WIRE in.	MAX. ROPE in.	(U.D.L.)*2 B.L. lb	(P.L.)*2 B.L. lb	WEIGHT oz
Accessories													
RF618H	Shackle, screw pin with security wire hole, 7.9mm (5/16") pin	-	-	-	1500	3000	50	-	-	-	3300	6600	1.5
RF814	Shackle, clevis pin & retainer ring, 7.9mm (5/16") pin	-	-	-	1500	3000	50	-	-	-	3300	6600	1.5
RZ1000	Sheave, Acetal (POM)	75	-	14	-	-	70	3	-	9/16	-	-	2.5
RZ1000AW	Sheave, aluminium with solid brass bearing	75	8	-	-	-	180	3	9/16	-	-	-	6.4

*2 (U.D.L.) B.L. - Uniformly Distributed breaking load of the shackle; the load is applied across the full span of the shackle pin. (P.L.) B.L. - Point Load breaking load of the shackle; the load is only applied at the centre or one side of the shackle pin.

A Higher Standard of Safety

Track and car systems have long been used to provide a mobile attachment point for crew when cleaning the hull, superstructure and windows of large motor yachts and other vessels. Often standard yachting traveller car products have been used and modified to suit the requirements for these applications, however with today's greater awareness of workplace risks, boat builders and surveyors are seeking to ensure a high standard of safety by specifying systems that are purpose designed, tested and Standards approved.

Ronstan supports this approach, which can only improve the safety and security of the persons using these systems in everyday work, and has developed Safety Rail Systems which have been tested and certified by Lloyd's Register to meet European Standard EN795:1996 Class D.

Ronstan Safety Rail Systems

Ronstan Safety Rail Systems provide a method of attachment for use in conjunction with personal protection equipment to protect against falls from a height, such as when working outside of conventional guardrails for cleaning and maintenance purposes on yachts or other vessels. They should not be used for any other purpose.

Features

- Certified to meet European Standard EN795:1996 Class D
- Marine grade aluminium alloy cars, track rails and end stops, anodised for corrosion protection and long service life.
- Recirculating Torlon® ball bearings for free running, low friction performance and low maintenance.
- Grade 316 forged stainless steel pivoting shackles for lanyard attachment.
- Rubber buffers for reduced vibration and to lift pivoting shackles away from car body for quick access.
- Spring-loaded stainless steel plunger for simple, positive re-positioning at stop locations. Can be locked in the disengaged position to allow free movement along the track rail. The elliptical knob is easy to grip and turn, and indicates clearly whether the plunger is engaged or not.
- The track rail can be mounted in either a vertical or horizontal plane as shown below.



Plunger down, car fixed in position



Plunger up, car ready to move to new position



Plunger up and locked, car free to move along track rail



Track rail mounted in vertical plane



Track rail mounted in horizontal plane

System Description

The complete Safety Rail System consists of the following components:

- One track rail with stop holes at 50mm centres and mounting holes at 100mm (3 15/16") centres.
- One tandem sliding car assembly consisting of two cars joined together with a connecting plate.
 - Each car has a single attachment point for personal protection equipment.
 - One of the cars has a spring-loaded plunger to allow the assembly to be fixed in position at any of the stop holes in the track rail. This plunger can be disengaged to allow the free movement of the car assembly along the rail.
- Two end stops installed at the extremities of the track rail.

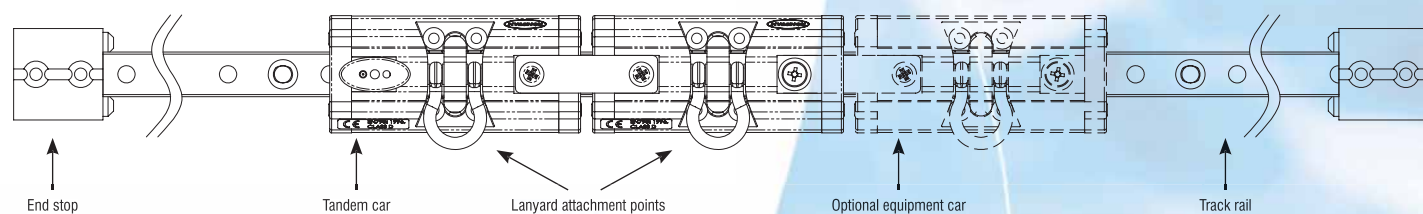
Options

- Longer runs can be achieved by using more than one section of track rail and trimming to length as required, provided that the distance between mounting fasteners never exceeds 100mm (3 15/16"). The joining insert RC1221J is used to aid alignment when fitting multiple sections of track rail.
- Additional sliding cars for supporting tools or equipment can be connected to the main tandem car RCC22-2 with the connector plate RCC22-4.

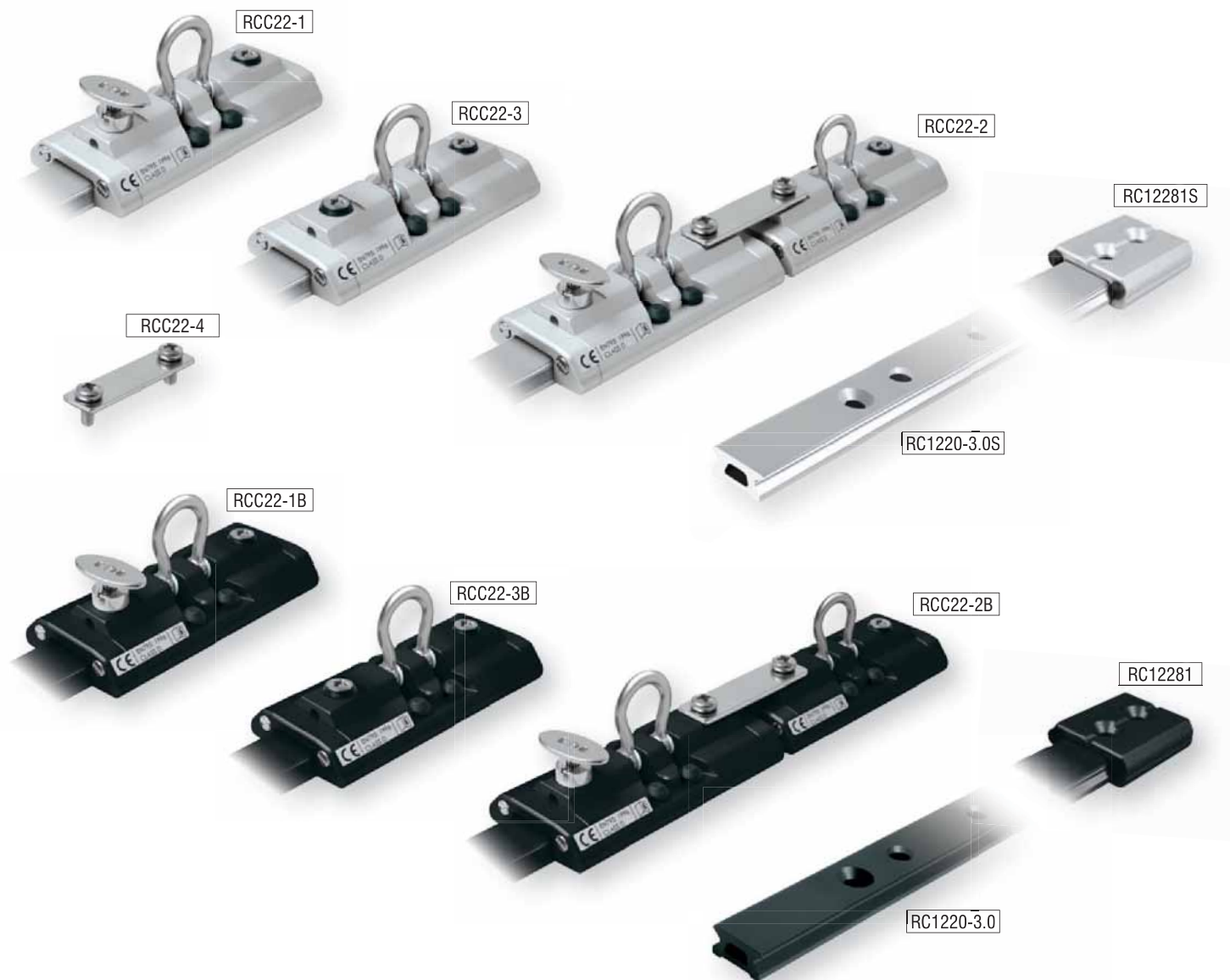
Important Advice

Ronstan Safety Rail Systems are tested and certified to the European Standard EN795:1996 Class D by Lloyd's Register, Copenhagen (Denmark), and are appropriate for single person use with an energy absorber to the EN355 standard. They must only be used with personal protection equipment (harnesses, lanyards, fall arresters and other devices) that are approved to the relevant CE or other standards for such equipment. Each harness or device must be secured to a separate attachment point.

Full Installation, Usage and Maintenance details are available under the SUPPORT tab on the Ronstan web site



Series 22



Full installation, usage and maintenance details available under the SUPPORT tab of the Ronstan website.

-  Certified to European Standard EN795:1996 Class D.
-  Low friction.
-  Anti-clatter rubber buffers.
-  Lock up/down track position plunger stop.
-  Anodised aluminium car bodies and track.
-  Torton® ball bearings.
-  Grade 316 shackle, plunger stop, pivot pin, fasteners and connector plate.

PRODUCT No.		LENGTH mm	WIDTH mm	Certified M.W.L. kg	LENGTH in.	WIDTH in.	Certified M.W.L. lb
Series 22 Safety Rail Systems							
RCC22-1	Single car, 1 attachment point, plunger stop, silver	124	58	100*	4 7/8	2 5/16	220*
RCC22-1B	Single car, 1 attachment point, plunger stop, black	124	58	100*	4 7/8	2 5/16	220*
RCC22-2	Tandem car, 2 attachment points, plunger stop, silver	254	58	100*	10	2 5/16	220*
RCC22-2B	Tandem car, 2 attachment points, plunger stop, black	254	58	100*	10	2 5/16	220*
RCC22-3	Single car, 1 attachment point, silver	124	58	100*	4 7/8	2 5/16	220*
RCC22-3B	Single car, 1 attachment point, black	124	58	100*	4 7/8	2 5/16	220*
RCC22-4	Connector plate, including screws	-	-	-	-	-	-
RC1221J	Track rail joiner	-	-	-	-	-	-
RC12281S	Track rail end stop, silver	48	47	-	1 29/32	1 27/32	-
RC12281	Track rail end stop, black	48	47	-	1 29/32	1 27/32	-
RC1220-3.0S	Track rail, silver	2996	22	-	118	7/8	-
RC1220-3.0	Track rail, black	2996	22	-	118	7/8	-

*100kg is the maximum certifiable load rating for products in conformance with the European Standard EN795:1996 Class D.



Full installation, usage and maintenance details available under the SUPPORT tab of the Ronstan website.

- ✓ Certified to European Standard EN795:1996 Class D.
- ✓ Low friction.
- ✓ Anti-clatter rubber buffers.
- ✓ Lock up/down track position plunger stop.
- ✓ Anodised aluminium car bodies and track.
- ✓ Torlon® ball bearings.
- ✓ Grade 316 shackle, plunger stop, pivot pin, fasteners and connector plate.

PRODUCT No.		LENGTH mm	WIDTH mm	Certified M.W.L. kg	LENGTH in.	WIDTH in.	Certified M.W.L. lb
Series 30 Safety Rail Systems							
RCC30-1	Single car, 1 attachment point, plunger stop, silver	121	77	100*	4 13/16	3	220*
RCC30-1B	Single car, 1 attachment point, plunger stop, black	121	77	100*	4 13/16	3	220*
RCC30-2	Tandem car, 2 attachment points, plunger stop, silver	250	77	100*	10	3	220*
RCC30-2B	Tandem car, 2 attachment points, plunger stop, black	250	77	100*	10	3	220*
RCC30-3	Single car, 1 attachment point, silver	121	77	100*	4 13/16	3	220*
RCC30-3B	Single car, 1 attachment point, black	121	77	100*	4 13/16	3	220*
RCC30-4	Connector plate, including screws	-	-	-	-	-	-
RC1301J	Track rail joiner	-	-	-	-	-	-
RC13081S	Track rail end stop, silver	65	55	-	2 9/16	2 3/16	-
RC13081	Track rail end stop, black	65	55	-	2 9/16	2 3/16	-
RC1300-3.0S	Track rail, silver	2996	30	-	118	1 3/16	-
RC1300-3.0	Track rail, black	2996	30	-	118	1 3/16	-

*100kg is the maximum certifiable load rating for products in conformance with the European Standard EN795:1996 Class D.



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The ANDERSEN Winches™ Factory in Vejle, Denmark is equipped with the latest tooling and manufacturing technology. Our highly trained staff operate CNC-controlled machinery, and our engineers and designers use tomorrow's technologies to develop our future products. Yet, all of this is based on a firm foundation of unparalleled craftsmanship, ingenuity and tradition.

Features & Information



- ① AISI 329 (SIS 2324) high tensile stainless steel drive shaft.*¹
- ② 360 degree adjustable self-tailing arm.*²
- ③ Low friction, curved self-tailing arm – made possible due to the outstanding holding power of the drum and low load transfer to the self tailing head.
- ④ Stainless-steel ball bearings address vertical and horizontal loads from the drum.*³
- ⑤ Upper ball bearing and lower roller bearing races are designed at the maximum possible distance apart, resulting in increased efficiency and support for the drum.
- ⑥ Large-diameter roller bearings counteract drum loads and provide low friction efficiency.*⁴
- ⑦ Ease of servicing with captive pawls and springs.

Features

Get a grip with ANDERSEN Winches™

- ⑧ Unbreakable Pawls made from cold-pressed AISI 316L stainless-steel bar.
- ⑨ Maximum length coil springs for extended service life.
- ⑩ Aluminium bronze base / stem - twice the strength of standard bronze - provides a light, stiff and rugged construction that increases efficiency.
- ⑪ Self-tailing system adjusts automatically to cater to a variety of rope sizes.
- ⑫ Highly polished and lightweight stainless-steel drum, with Power Rib™ ensures a superior grip without line wear.
- ⑬ The combination of horizontal resistance provided by the Power Ribs™ and minimum vertical friction of the highly polished drum surface, allows the line to slide easily up the drum eliminating the chance of dangerous overrides.
- ⑭ Clever design and material selection - from the fabricated stainless-steel drum to aluminium bronze internal components - results in ANDERSEN Winches™ being of similar weight to or lighter than aluminium winches.
- ⑮ Normal servicing is only required every 2 years.

*¹ Sizes 46ST and above

*² Excluding 18ST & 28 ST

*³ Sizes 52ST and above

*⁴ Excluding 18ST

Power Rib™

Major Effect with Minor Effort

Get a Grip

ANDERSEN Winches™ feature the Power Rib™. Unlike other winches with abrasive drum surfaces, ANDERSEN Winch™ drums have vertical ribs running up the surface. This combined with the smooth polished stainless steel gives a maximum grip and minimum wear on ropes, reducing the replacements costs of sheets and halyards. What's more, the Power Rib™ principle simply makes sailing more pleasurable. Fewer turns on the winch make tacking easier. Sheets can be gently eased out without harsh snatching and the risks of overrides and jammed sheets are significantly reduced. The grip provided by the ribs will remain the same year after year, unlike many other winches with an abrasive or sandpaper-like surface. Such surfaces have a tendency to wear down both ropes and themselves.

It's all about protecting your investment. With ANDERSEN Winches™, this protection is guaranteed, as the drum maintains its grip year after year. Keeping wear and tear to a minimum also helps maintain resale value, and our 3-year warranty and instant service in more than 30 countries worldwide amount to a benchmark standard.

Low maintenance is a key — and with ANDERSEN Winches™, you can take it for granted. Our winches require less maintenance, since all

pawls and springs are captive, and the design of the winch allows you to strip it down for service and greasing.

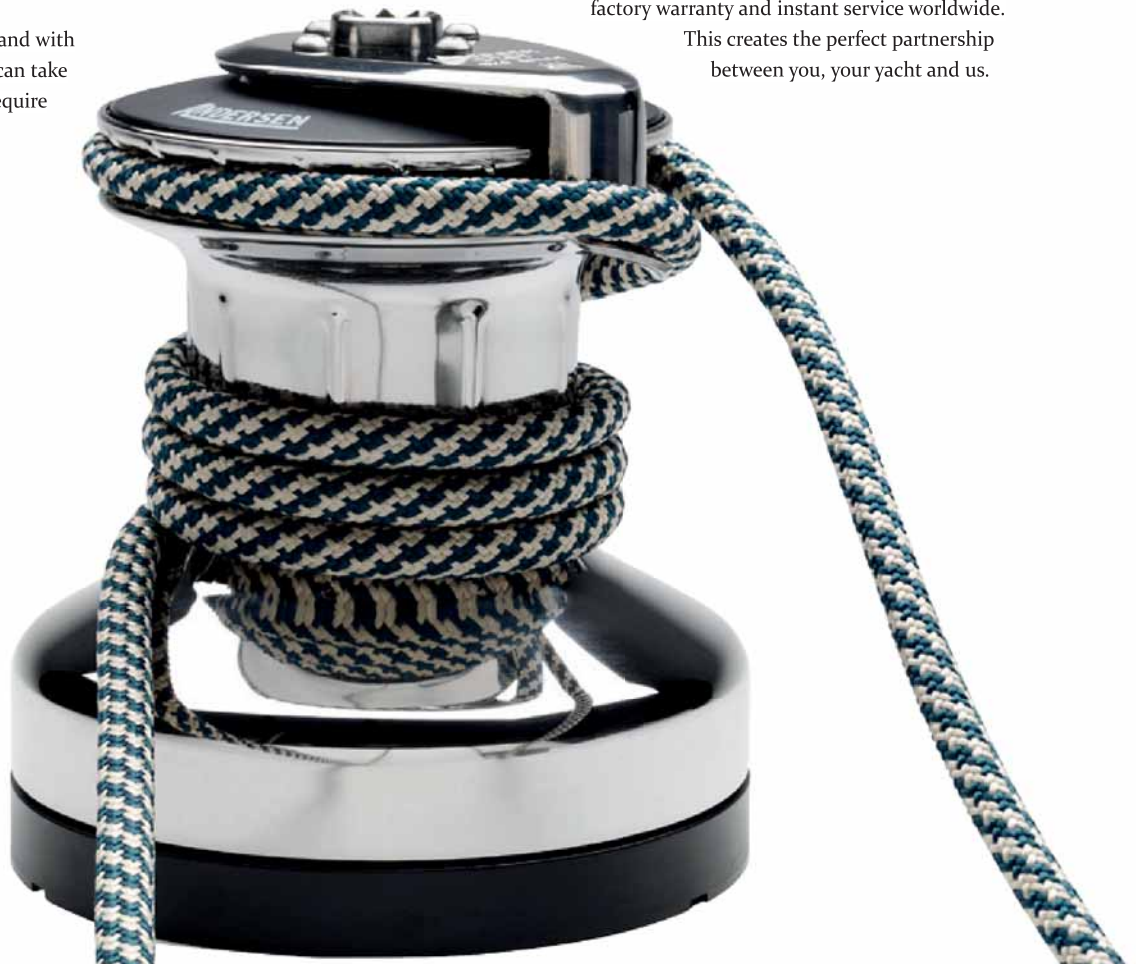
The materials used in winches are crucial — and ANDERSEN Winches™ are made from the best materials available. The aluminium-bronze alloy base plate is approximately 2 1/2 times stronger than traditional bronze. The pawls, made from machined AISI 316 cold-pressed stainless steel, are so strong that the winches never risk backing off.

The Premium Choice - for Many Reasons

ANDERSEN Winches™ has over 50 years of experience, and the company's employees are dedicated to quality manufacturing. Our procedures are based on the toughest demands in the business, and our engineers strive constantly to improve our products even further.

With ANDERSEN Winches™, you can be assured of a firm hold on your equipment — stretching from dedicated manufacturing to a factory warranty and instant service worldwide.

This creates the perfect partnership between you, your yacht and us.



Self Tailing Winches

Self Tailing

Experience Empowerment



The ANDERSEN name is synonymous with precision, reliability and the ability to adapt to any situation. For our customers, this adds up to pure empowerment, allowing you to manage your sails and your boat with the utmost efficiency. Self-tailing winches with the ANDERSEN name are supremely trustworthy, allowing you to focus on sailing. All ANDERSEN Winches™ feature stainless steel Power Rib™ drums that ensure a smooth surface and a corrosion-free winch that is built to last. ANDERSEN Self-Tailing Winches extend the service life of your sheets and halyards and the winch itself, since the Power Rib™ and the smooth surface of the drum require fewer turns compared to other winches. In addition, the self-tailing device is designed to accommodate a number of different of sheet and halyard sizes — enabling the winch to serve many different purposes and providing you with a range of products to choose from, no matter what you sail.

A special option for ANDERSEN Winches™ is a choice of having your own winch titanium-coated whichever matches your boat. This means that the surface of your ANDERSEN Winch™ will never show wear and tear.



Winches



Self Tailing Winches

Full Stainless

Self-Tailing Winches



Full Stainless - Beyond Good Looks

We have developed an entirely stainless winch. This is a prerequisite for the yachtsman who places honour in making his yacht look its best. ANDERSEN Full Stainless is beauty at work, enhancing the unique image of your boat and the sheer pleasure of beholding it. A synthetic cap and base are replaced with stainless steel parts, transforming the winch into an aesthetic statement.

Enigma 34 one design



Self Tailing Winches

Uncompromising quality is our mission, and quality is a key word throughout our organization and in all our products, services and innovations. Quality can be defined technically — but it can also be defined by the values and preferences of our customers. To us, quality is the sum total of design excellence, technical specifications and a lifetime of experience, topped with extensive quality control in manufacturing.



Standard Self-Tailing Winches

Winch Model	Drum "D" [mm]	Base "B" [mm]	Height "H" [mm]	Line Entry "L" [mm]	Line Size [mm]	Weight [kg]	Gear Ratio 1 st speed	Gear Ratio 2 nd speed	Power Ratio 1 st speed	Power Ratio 2 nd speed	Product No.
12 ST	70	115	130	44	8-14	2.5	1.3:1	n/a	9.5:1	n/a	RA2012000000
18 ST	70	120	136	50	8-14	3.3	2.6:1	n/a	18.8:1	n/a	RA2018000000
28 ST	70	125	151	65	8-14	4.0	1.3:1	3.7:1	9.5:1	26.5:1	RA2028000000
40 ST	75	152	174	71	8-14	4.9	1.3:1	6.0:1	8.5:1	39.5:1	RA2040000000
46 ST	89	180	209	90	8-14	7.6	2.8:1	8.4:1	15.5:1	46.6:1	RA2046000000
52 ST	100	200	228	106	8-16	10.3	3.2:1	10.5:1	16.2:1	52.0:1	RA2052000000
58 ST	115	230	257	111	8-18	14.6	3.7:1	13.1:1	16.1:1	57.7:1	RA2058000000
62 ST	115	230	257	111	8-18	14.6	3.7:1	14.4:1	16.1:1	62.6:1	RA2062000000
68 ST	140	280	280	120	10-18	22.5	5.8:1	18.8:1	20.7:1	67.1:1	RA2068000000
72 ST	140	280	280	120	10-18	22.5	5.8:1	20.3:1	20.7:1	72.6:1	RA2072000000

Full Stainless Self-Tailing Winches

Winch Model	Drum "D" [mm]	Base "B" [mm]	Height "H" [mm]	Line Entry "L" [mm]	Line Size [mm]	Weight [kg]	Gear Ratio 1 st speed	Gear Ratio 2 nd speed	Power Ratio 1 st speed	Power Ratio 2 nd speed	Product No.
12 ST FS	70	115	130	44	8-14	2.6	1.3:1	n/a	9.5:1	n/a	RA2012010000
18 ST FS	70	120	136	50	8-14	3.3	2.6:1	n/a	18.8:1	n/a	RA2018010000
28 ST FS	70	125	151	65	8-14	4.1	1.3:1	3.7:1	9.5:1	26.5:1	RA2028010000
40 ST FS	75	152	174	71	8-14	5	1.3:1	6.0:1	8.5:1	39.5:1	RA2040010000
46 ST FS	89	180	209	90	8-14	7.8	2.8:1	8.4:1	15.5:1	46.6:1	RA2046010000
52 ST FS	100	200	228	106	8-16	11.1	3.2:1	10.5:1	16.2:1	52.0:1	RA2052010000
58 ST FS	115	230	257	111	8-18	15.8	3.7:1	13.1:1	16.1:1	57.7:1	RA2058010000
62 ST FS	115	230	257	111	8-18	15.8	3.7:1	14.4:1	16.1:1	62.6:1	RA2062010000
68 ST FS	140	280	280	120	10-18	24.6	5.8:1	18.8:1	20.7:1	67.1:1	RA2068010000
72 ST FS	140	280	280	120	10-18	24.6	5.8:1	20.3:1	20.7:1	72.6:1	RA2072010000
78 ST FS	170	320	375	170	16-22	40.7	7.0:1	26.7:1	20.0:1	78.0:1	RA2078010000
110 ST FS	250	395	426	170	16-25	70.4	10.2:1	56.1:1	19.0:1	106.0:1	RA2110010000

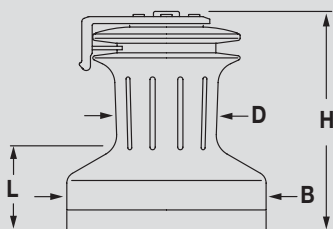
Power Ratio

Power ratio is the mechanical advantage of the winch and is calculated as follows:

$$\frac{\text{length of handle} \times \text{gear ratio}}{\text{radius of drum}}$$

The pull of the winch is based on the power ratio and not just on the physical size of the winch or the diameter of the drum. The power ratio is used to determine the load the winch may handle as follows: pull of handle (kg) x power ratio = pull of winch (kg).

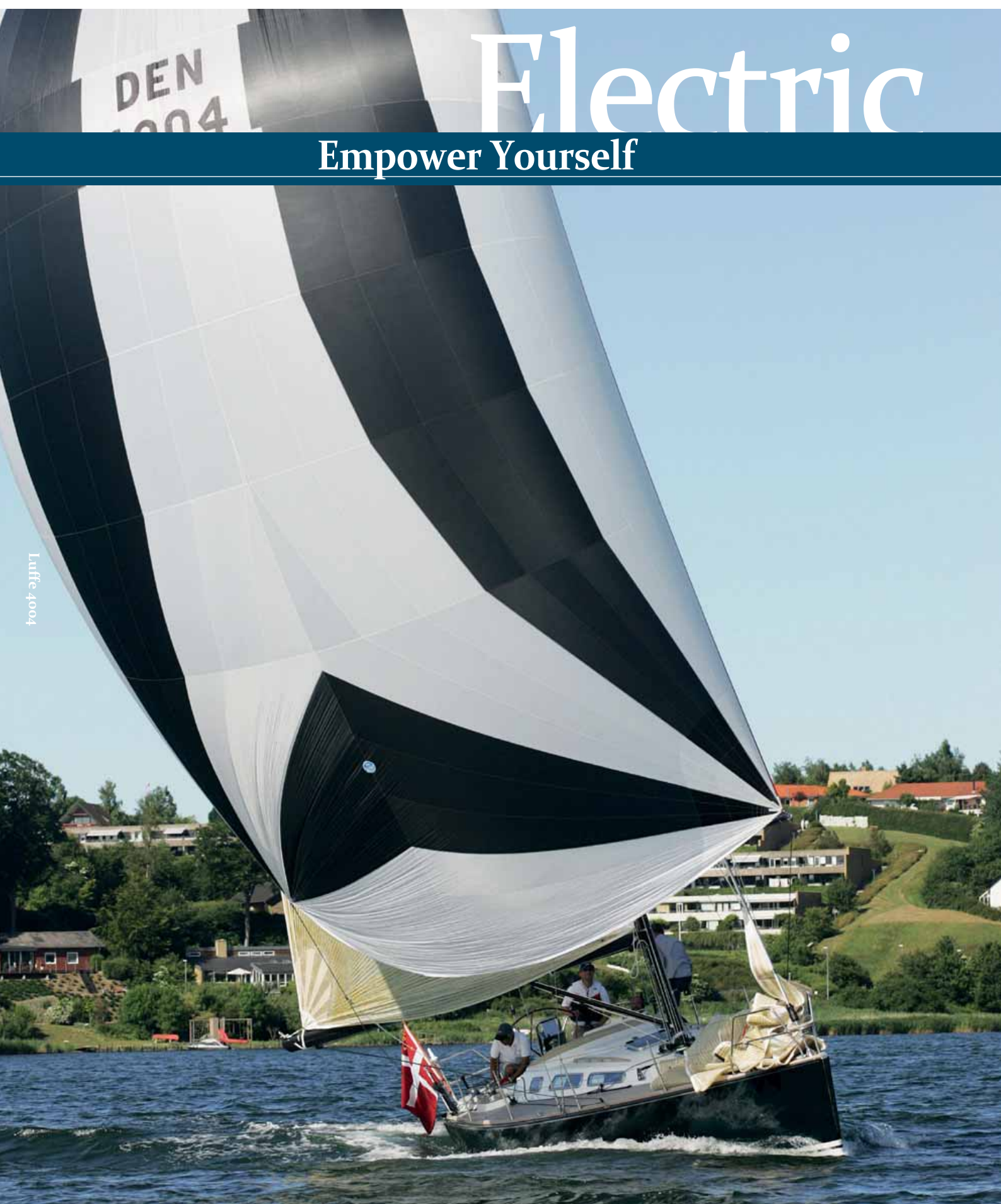
This means that by applying a load of 10 kg, using a 10" standard handle, on a power ratio 40:1 winch, the winch can pull 400 kg, assuming that the winch is 100% efficient. This is not possible in practice as the efficiency is reduced by internal mechanical friction losses.



Electric

Empower Yourself

Luffe 4004



Winches



Managing your boat is a demanding task — sails represent a challenge. The challenge of managing them correctly, managing them yourself, and doing so in time basically amounts to managing the powers of nature. So why not empower yourself with this ability? ANDERSEN Electric Winches are the right tools for the job. Representing a combination of safe sailing and convenient push-button technology, these winches are also designed to allow easy assembly and dismantling for service and maintenance. In addition, the motor is protected from overload by an amperage sensor installed to cut off power at a pre-set load. As a further precaution, all electric motors are fitted with thermal cutouts in case of overheating.



ANDERSEN Electric Winches are supplied complete with an installation manual, electronics box, switches, and cable terminals.

Choosing the right equipment is an important job. It requires more than just adding a motor. Careful consideration should be given to all factors that have an impact on your sailing experience: boat size, sailing conditions, crew and convenience. Often, the choice is more complex than just the size of the motor. The source of power is also important. Hydraulic or electric — or manual for starters, and then growing with the challenge — the choice is yours.

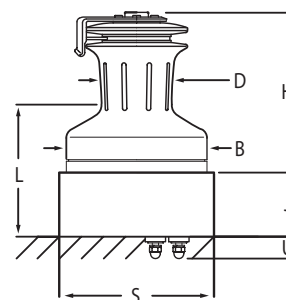


Compact Motor™ Electric Winches



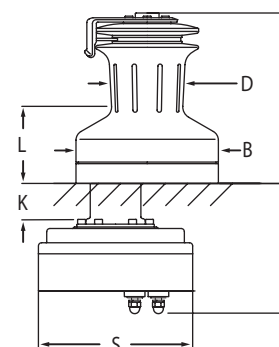
Compact Motor™ Electric Winches - Variable Speed, Above Deck

Winch Model	Drum "D" [mm]	Base "B" [mm]	Height "H" [mm]	Line Entry "L" [mm]	Line Size [mm]	Weight [kg]	Max Deck "K" [mm]	Motor Height "J" [mm]	Motor Diam "S" [mm]	Motor Depth "U" [mm]	Product No. 12V	Product No. 24V
28 STE	70	125	151	151	8-14	16	45	86	200	40-75	RA2028005100	RA2028005200
40 STE	75	152	174	157	8-14	17	45	86	200	40-75	RA2040005100	RA2040005200
46 STE	89	180	209	175	8-14	19	45	85	200	40-75	RA2046005100	RA2046005200
52 STE	100	200	228	191	8-16	29	45	85	255	40-75	RA2052005100	RA2052005200
58 STE	115	230	257	196	8-18	34	45	85	255	40-75	RA2058005100	RA2058005200
62 STE	115	230	257	196	8-18	34	45	85	255	40-75	RA2062005100	RA2062005200
68 STE	140	280	280	208	10-18	51	45	88	282	40-75	RA2068005100	RA2068005200
72 STE	140	280	280	208	10-18	51	45	88	282	40-75	RA2072005100	RA2072005200



Compact Motor™ Electric Winches - Variable Speed, Below Deck

Winch Model	Drum "D" [mm]	Base "B" [mm]	Height "H" [mm]	Line Entry "L" [mm]	Line Size [mm]	Weight [kg]	Max Deck "K" [mm]	Motor Height "J" [mm]	Motor Diam "S" [mm]	Product No. 12V	Product No. 24V
28 STE	70	125	159	73	8-14	17	54	180	195	RA2028004100	RA2028004200
40 STE	75	152	182	79	8-14	18	54	180	195	RA2040004100	RA2040004200
46 STE	89	180	209	90	8-14	21	62	188	195	RA2046004100	RA2046004200
52 STE	100	200	238	116	8-16	30	48	174	250	RA2052004100	RA2052004200
58 STE	115	230	267	121	8-18	36	48	174	250	RA2058004100	RA2058004200
62 STE	115	230	267	121	8-18	36	48	174	250	RA2062004100	RA2062004200
68 STE	140	280	290	130	10-18	45	52	178	250	RA2068004100	RA2068004200
72 STE	140	280	290	130	10-18	45	52	178	250	RA2072004100	RA2072004200



Note! Larger "K" measurements are available as an option

Size Does Matter

Experience Empowerment

Choosing the right equipment is an important job. It requires more than just adding a motor. Careful consideration should be given to all factors that have an impact on your sailing experience: boat size, sailing conditions, crew and convenience. Often, the choice is more complex than just the size of the motor. The source of power is also important. Hydraulic or electric — or manual for starters, and then growing with the challenge — the choice is yours.

The latest addition to our range of uncompromising electrical winches is the ANDERSEN Variable-speed Compact Motor™. ANDERSEN Variable-speed Compact Motor™ is especially developed for use as a winch motor. It is available in two versions; Below Deck, with smaller, built-in dimensions than a standard motor and Above Deck, featuring the winch mounted

directly on the motor for deck or mast installation. This motor is highly efficient, with an impressive line speed and first-rate maximum load. The unit is extremely easy to install and is of course compatible with the ANDERSEN Modular Power System™. This motor demonstrates why ANDERSEN Products are in a class of their own. When we say Compact, we mean Compact – We developed the motor with the size and shape of a winch in mind and then integrated the motor, gears and power control to make one Compact unit. That means no extra control boxes, all cables are connected directly to the unit. The motor is built on an entirely new commutator principle using no carbon brushes, resulting in the virtual elimination of wear and tear. This new approach to motors also provides other advantages; including 30-50% less power consumption compared to a conventional electric motor.

SE 2+1 Standard Electric Winches - 2 Manual + 1 Electric Speeds

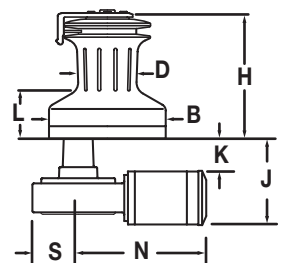
Winch Model	Gear Type	Drum "D" [mm]	Base "B" [mm]	Height "H" [mm]	Line Entry "L" [mm]	Line Size [mm]	Weight [kg]	Max Deck "K" [mm]	Motor Depth "J" [mm]	Gear Length "S" [mm]	Motor Length "N" [mm]	Product No. 12V	Product No. 24V
28 STE	2+1	70	125	159	73	8-14	17	49	180	64	240	RA2028001100	RA2028001200
40 STE	2+1	75	152	182	79	8-14	18	49	180	64	240	RA2040001100	RA2040001200
46 STE	2+1	89	180	209	90	8-14	20	57	188	64	240	RA2046001100	RA2046001200
52 STE	2+1	100	200	238	116	8-16	24	43	174	64	249	RA2052001100	RA2052001200
58 STE	2+1	115	230	267	121	8-18	34	43	201	81	311	RA2058001100	RA2058001200
62 STE	2+1	115	230	267	121	8-18	34	43	201	81	311	RA2062001100	RA2062001200
68 STE	2+1	140	280	290	130	10-18	41	43	201	81	311	RA2068001100	RA2068001200
72 STE	2+1	140	280	290	130	10-18	41	43	201	81	311	RA2072001100	RA2072001200

Note! Larger "K" measurements are available as an option

SE 2+2 Standard Electric Winches - 2 Manual + 2 Electric Speeds

Winch Model	Gear Type	Drum "D" [mm]	Base "B" [mm]	Height "H" [mm]	Line Entry "L" [mm]	Line Size [mm]	Weight [kg]	Max Deck "K" [mm]	Motor Depth "J" [mm]	Gear Length "S" [mm]	Motor Length "N" [mm]	Product No. 12V	Product No. 24V
46 STE	2+2	89	180	209	90	8-14	29	74	200	100	288	RA2046002100	RA2046002200
52 STE	2+2	100	200	238	116	8-16	33	60	186	100	288	RA2052002100	RA2052002200
58 STE	2+2	115	230	267	121	8-18	40	60	193	100	325	RA2058002100	RA2058002200
62 STE	2+2	115	230	267	121	8-18	40	60	193	100	325	RA2062002100	RA2062002200
68 STE	2+2	140	280	290	130	10-18	51	60	193	100	325	RA2068002100	RA2068002200
72 STE	2+2	140	280	290	130	10-18	51	60	193	100	325	RA2072002100	RA2072002200
78 STE FS	2+2	170	320	375	170	16-22	91	95	275	150	490	n/a	RA2078012200
110 STE FS	2+2	250	395	426	170	16-25	136	74	390	125	500	n/a	RA2110012200

Note! Larger "K" measurements are available as an option



Hydraulic Winches

Hydraulic

Experience Empowerment



Based on our unique Modular Power System™, ANDERSEN Hydraulic Winches create a solid foundation for distributing power throughout your boat. Smooth running and reliable performance are not the only advantages provided by ANDERSEN Technology – design and versatility are equally important aspects of our products. Single-speed or 2-speed

Hydraulic winches — it is your choice when using an ANDERSEN Winch™ model 46ST and up. Combining our winches with the Modular Power System™ and our Power Packs provide you with all the power you need. We have developed a full set of data sheets containing all the detailed information you require to run your yacht.

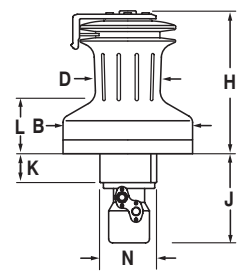
Winches

X-Yachts X-46

2+1 Hydraulic Winches - 2 Manual + 1 Hydraulic Speeds

Winch Model	Gear Type	Drum "D" [mm]	Base "B" [mm]	Height "H" [mm]	Line Entry "L" [mm]	Line Size [mm]	Weight [kg]	Max Deck "K" [mm]	Motor Depth "J" [mm]	Gear Width "N" [mm]	Product No.
46 STH	2+1	89	180	209	90	8-14	19	68	252	130	RA2046003100
52 STH	2+1	100	200	238	116	8-16	23	54	246	130	RA2052003100
58 STH	2+1	115	230	267	121	8-18	30	54	252	130	RA2058003100
62 STH	2+1	115	230	267	121	8-18	30	54	252	130	RA2062003100
68 STH	2+1	140	280	290	130	10-18	41	60	232	130	RA2068003100
72 STH	2+1	140	280	290	130	10-18	41	60	232	130	RA2072003100
78 STH FS	2+1	170	320	375	170	16-22	59	85	233	n/a	RA2078013100
110 STH FS	2+1	250	395	426	170	16-25	96	80	285	n/a	RA2110013100

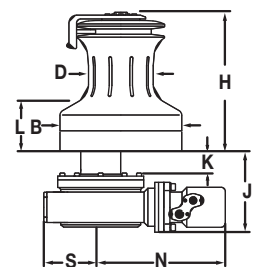
Note! Larger "K" measurements are available as an option



2+2 Hydraulic Winches - 2 Manual + 2 Hydraulic Speeds

Winch Model	Gear Type	Drum "D" [mm]	Base "B" [mm]	Height "H" [mm]	Line Entry "L" [mm]	Line Size [mm]	Weight [kg]	Max Deck "K" [mm]	Max Depth "J" [mm]	Gear Length "S" [mm]	Motor Length "N" [mm]	Product No. 24V
46 STH	2+2	89	180	209	90	8-14	24	74	200	100	226	RA2046003200
52 STH	2+2	100	200	238	116	8-16	28	60	186	100	231	RA2052003200
58 STH	2+2	115	230	267	121	8-18	36	60	193	100	259	RA2058003200
62 STH	2+2	115	230	267	121	8-18	36	60	193	100	259	RA2062003200
68 STH	2+2	140	280	290	130	10-18	46	60	193	100	261	RA2068003200
72 STH	2+2	140	280	290	130	10-18	46	60	193	100	261	RA2072003200
78 STH FS	2+2	170	320	375	170	16-22	87	95	275	150	306	RA2078013200
110 STH FS	2+2	250	395	426	170	16-25	99	80	346	n/a	n/a	RA2110013200

Note! Larger "K" measurements are available as an option



Power Packs

Convenient Power Build-Up

X-Yachts X-50



Dimension your power to your exact needs. ANDERSEN Power Packs are delivered as custom built — or in Midi and Mini 24V (Mini 11 l/min 140 bar, Midi 22 l/min 140 bar) versions. ANDERSEN Power Packs form an integral part of a modular system that can grow with your needs. They are designed to be fully flexible and can fit custom tanks or any suitable available space — with the option of adding engine driven pumps to the system. A full and flexible system open to later additions and services.

Larger yachts over 60 ft. are built to the customer's individual specifications, and careful consideration of design aspects is necessary to satisfy the particular hydraulic needs of individual owners. Our hydraulic team is headed by one of the most experienced super-yacht hydraulic systems design teams. We are pleased to discuss with the owner, designer and builder the full requirements of a particular project, and convert this information into a workable system with all necessary redundancy and technical back-up.

For further details and data sheets see our web www.andersenwinches.com



Midi Power Pack

Capstans

Mooring Handling by Power



ANDERSEN Capstans

A new range of ANDERSEN Capstans has been designed featuring the well recognised and unique ANDERSEN advantages, based on decades of winch production.

The ANDERSEN Capstans are all made in high polished stainless steel and alloy bronze which secure a long and trouble free life with a minimum need of maintenance. The well-known ANDERSEN Power Rib™ grip is just one of many features which make the ANDERSEN Capstans a truly unique product.

The ANDERSEN Capstans comes with electric or hydraulic power and the range starts from medium sized Yachts up to Mega Yachts.

For further information please see www.andersenwinches.com or contact your local ANDERSEN distributor.

Modular

Evolution through Development

All ANDERSEN Winches™ size 28ST to 110ST are factory prepared to work with the Modular Power System™ (MPS). This system allows you to add power to your ANDERSEN Winches™—either electrically or hydraulically.



Power System™



The Modular Power System™ is engineered with a focus on flexibility and simplicity. The flexibility makes it possible to choose and implement a motor-powered unit at a convenient time, since all ANDERSEN Self-Tailing Winches (28ST and above) are factory prepared for future change. Simplicity means very easy installation of your chosen powered unit. *Please note that the 28ST and 40ST models are also available in the Compact and 2+1 SE versions. For further information please contact your local ANDERSEN distributor regarding the MPS for the Compact Above Deck version.

The modular design of this system also shows in the fact that a single-speed electric powered unit can be replaced with a 2-speed electric or hydraulic unit — simply by removing the center nut and mounting a new unit. No new holes are required.

Installing an ANDERSEN Modular Power System™ below deck is easy. Simply remove the bolts holding the existing winch, drill a small hole for the shaft, and bolt the connecting plate onto the deck using the mounting holes from the existing winch. The winch itself is then bolted onto the connecting plate.

This makes service a simple matter of loosening the bolts on the connecting plate and removing the powered unit by loosening the center nut on the conversion unit. The connecting plate always remains fitted on the deck. The same principle applies if the winch needs servicing: simply loosen the bolts and remove the winch.

The new Compact Motor™ in above deck version is mounted directly on the deck, and the winch is mounted directly onto the motor — without the need for a mounting plate. Subsequent dismantling is just as easy.



Owners of ANDERSEN Products are members of a large and growing family. The very first ANDERSEN Winches™ are still out there doing a great job, and many of our customers have either upgraded or supplemented the winches on their yacht. The simple reason for this is that the quality of ANDERSEN Winches™ lasts forever. This is why thousands of winches are sold each year to the complete satisfaction of enthusiastic yachtsmen in more than 35 countries worldwide.

Conversion Kits

Conversion

Quality Time at Sea Requires Quality Equipment Onboard

Converting from manually operated to motor-driven is made easy by ANDERSEN Conversion Kits. Our conversion kits can be fitted to your ANDERSEN Winch™ from size 28ST to 110ST. Installation is made easy by the Modular Power System™. If in doubt, please consult your distributor for more specific information regarding conversion kits for your ANDERSEN Winches™. Even more detailed information and installation guidelines are available via our separate Electric or Hydraulic Data Sheets.

Electric Conversion Kits

Available with a single-speed, 2-speed gearbox or Compact Motor™ in 12V or 24V models for winches size 28ST to 72ST.

Conversion Kits - Compact Motors™, Variable Speed

	Electric 12V Below Deck Product No.	Electric 12V Above Deck Product No.	Electric 24V Below Deck Product No.	Electric 24V Above Deck Product No.
28 ST	RA2028204100	RA2028205100	RA2028204200	RA2028205200
40 ST	RA2040204100	RA2040205100	RA2040204200	RA2040205200
46 ST	RA2046204100	RA2046205100	RA2046204200	RA2046205200
52 ST	RA2052204100	RA2052205100	RA2052204200	RA2052205200
58 ST	RA2058204100	RA2058205100	RA2058204200	RA2058205200
62 ST	RA2062204100	RA2062205100	RA2062204200	RA2062205200
68 ST	RA2068204100	RA2068205100	RA2068204200	RA2068205200
72 ST	RA2072204100	RA2072205100	RA2072204200	RA2072205200

Please contact your local dealer for complete Conversion Kit details.
The above Product No.s are for the latest standard Self-Tailing Winch versions.

Conversion Kits - Standard Electric & Hydraulic

	Electric 12V 2+1 Product No.	Electric 12V 2+2 Product No.	Electric 24V 2+1 Product No.	Electric 24V 2+2 Product No.	Hydraulic 2+1 Product No.	Hydraulic 2+2 Product No.
28 ST	RA2028201100	n/a	RA2028201200	n/a	n/a	n/a
40 ST	RA2040201100	n/a	RA2040201200	n/a	n/a	n/a
46 ST	RA2046201100	RA2046202100	RA2046201200	RA2046202200	RA2046203100	RA2046203200
52 ST	RA2052201100	RA2052202100	RA2052201200	RA2052202200	RA2052203100	RA2052203200
58 ST	RA2058201100	RA2058202100	RA2058201200	RA2058202200	RA2058203100	RA2058203200
62 ST	RA2062201100	RA2062202100	RA2062201200	RA2062202200	RA2062203100	RA2062203200
68 ST	RA2068201100	RA2068202100	RA2068201200	RA2068202200	RA2068203100	RA2068203200
72 ST	RA2072201100	RA2072202100	RA2072201200	RA2072202200	RA2072203100	RA2072203200
78 ST FS	n/a	n/a	n/a	RA2078212200	RA2078213100	RA2078213200
110 ST FS	n/a	n/a	n/a	RA2110212200	RA2110213100	RA2110213200

Please contact your local dealer for complete Conversion Kit details.
The above Product No.s are for the latest standard Self-Tailing Winch versions.

The ANDERSEN 78ST FS and 110ST FS winches are only available as a 2-speed, 24V model. The electric conversion kits are delivered mounted to the stainless steel connection plate – complete with an installation manual, electronic box, switches, and cable terminals.

Hydraulic Conversion Kits

The hydraulic conversion kits can be fitted to ANDERSEN Winches™ size 46ST to 110ST FS. The hydraulic kits are delivered mounted on the connection plate, complete with a hydraulic motor and installation manual.



Standard Electric
2+2



Compact Motor™
Electric Below Deck



Hydraulic
2+1



Hydraulic
2+2



Standard Electric
2+1

Kits

Najad 440 AC – photo by Rick Tomlinson

Standard Winches

Standard

Uncompromising Quality



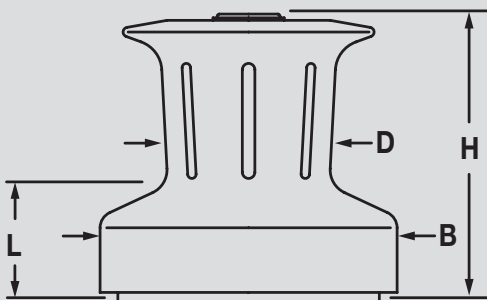
Standard Winches

Winch Model	Drum "D" [mm]	Base "B" [mm]	Height "H" [mm]	Line Entry "L" [mm]	Weight [kg]	Gear Ratio 1 st speed	Gear Ratio 2 nd speed	Power Ratio 1 st speed	Power Ratio 2 nd speed	Product No.
10	57	92	89	28	1.1	1.0:1	n/a	9.5:1	n/a	RA500010
16	60	114	110	45	2.6	1.0:1	2.0:1	8.3:1	16.6:1	RA500016
28	70	124	126	53	3.3	1.0:1	4.0:1	7.1:1	28.6:1	RA500028
40	76	136	140	63	3.9	1.0:1	6.4:1	6.5:1	42.5:1	RA500040
46	78	143	140	63	4.0	1.0:1	6.4:1	6.4:1	45.6:1	RA500046
58	115	230	220	100	14.4	3.7:1	13.1:1	16.1:1	57.7:1	RA500058

Winches

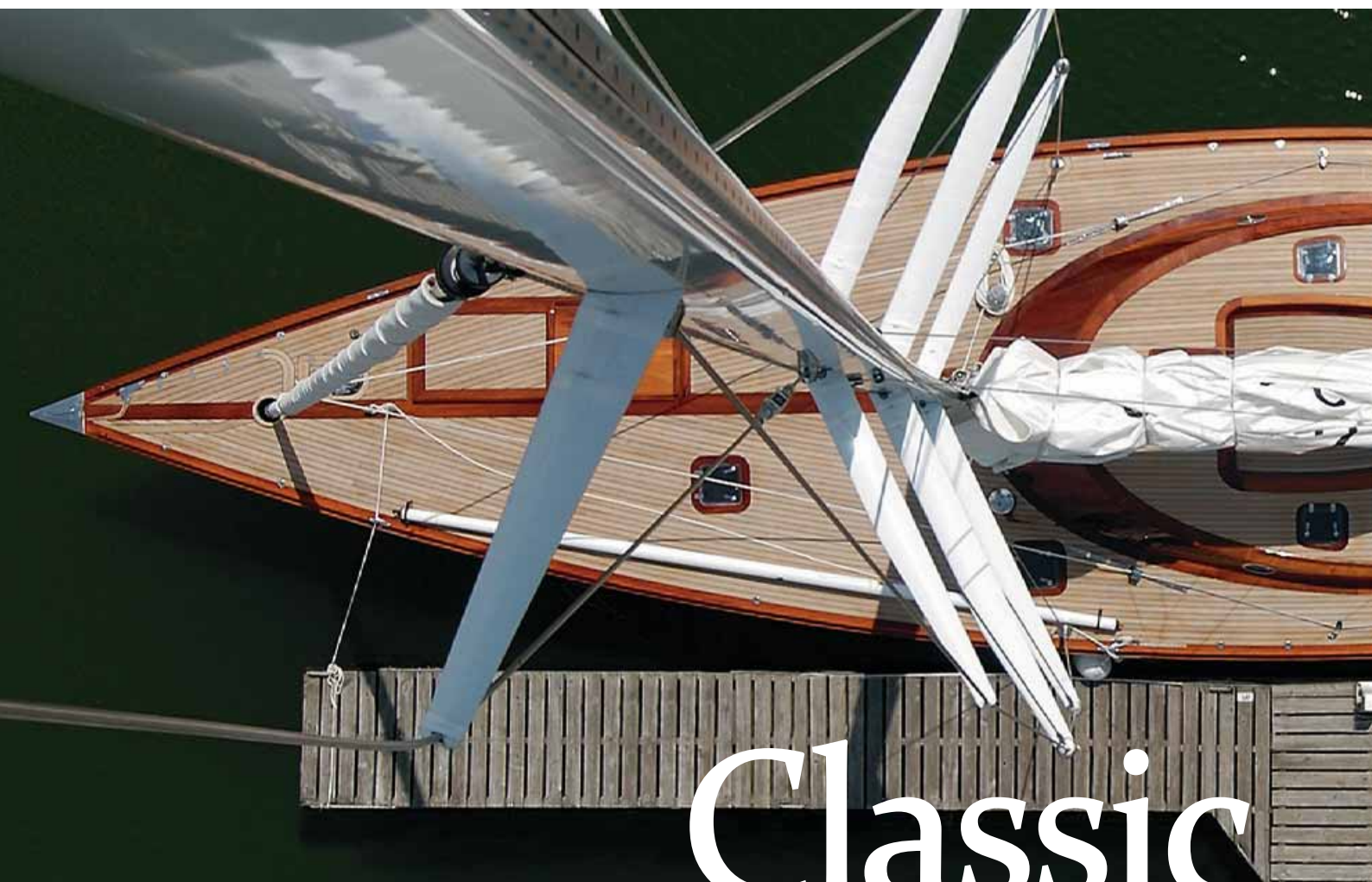


Match 28



Small yachts need quality winches just as much as large yachts. The crews of small yachts also need to economise on manpower, and there is a need for positive sheet adjustment. Uncompromising quality is an ANDERSEN Winches™ hallmark that starts with standard winches. Manufactured in stainless steel, these all feature the Power Rib™ to facilitate winching under all conditions and circumstances.

Classic Winches



Classic

In a Class of Their Own

For Winch 101
RA511011



For Winch 91
RA510911

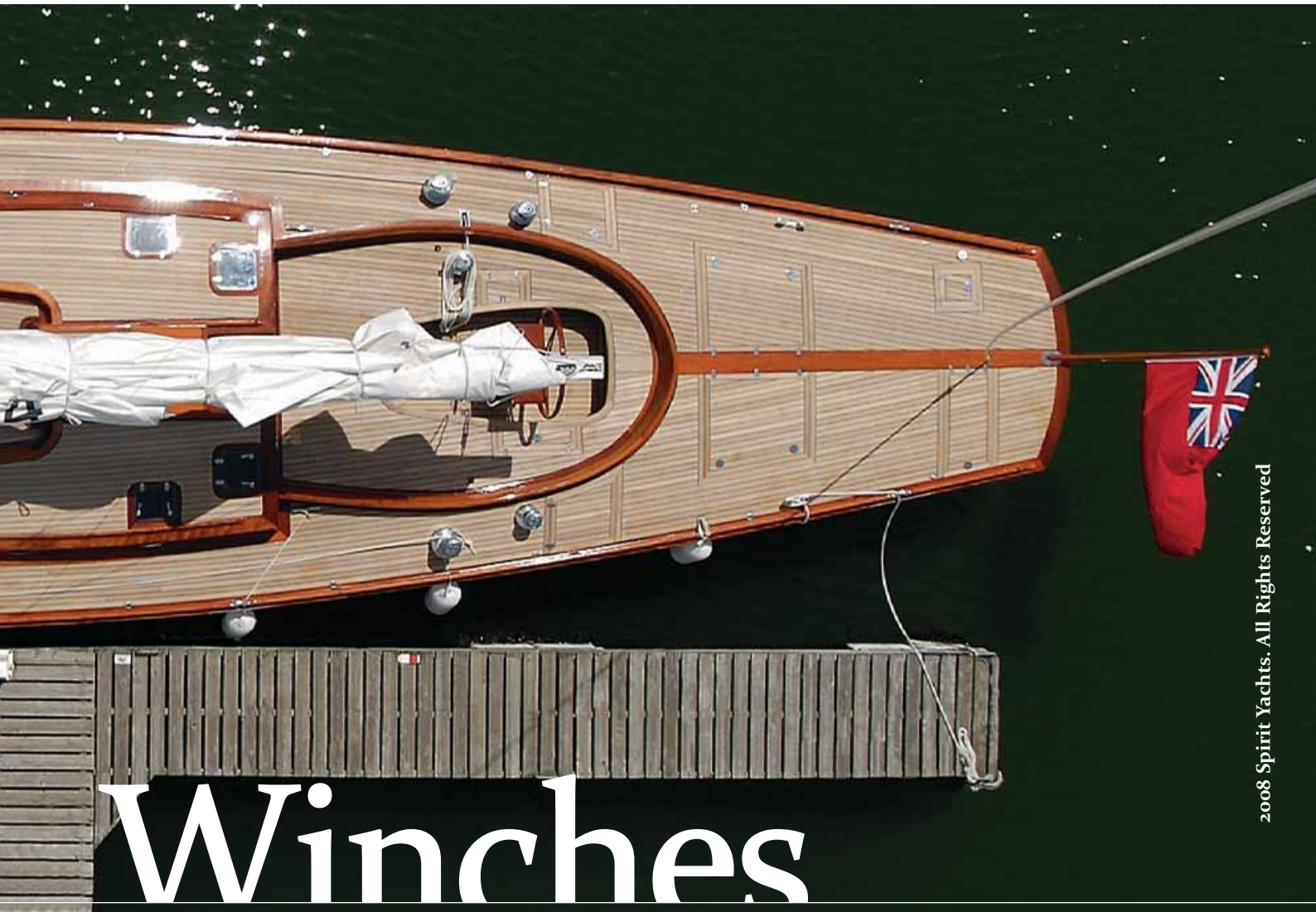


Classic ANDERSEN Winches™ are fitted worldwide as standard on Dragon, H-boats, Folkboats among many others. These winches have become a legend in their class, and can be used on any yacht of up to 2 tons' displacement.

Classic ANDERSEN Winches™ — except for model 28STU — have one gear and can be operated as either a bottom-action winch or an under-deck version with various shaft lengths. Please refer to table to make the correct choice.

A feature of the classic single-speed winch is that the handle can be pumped. On this type of winch, the handle is included in the price — except for an model 28STU. What's more all handles can be purchased separately.

The ANDERSEN Classic Range also offers a choice of under-deck self-tailing winches, particularly suitable for yachts with open cockpits.



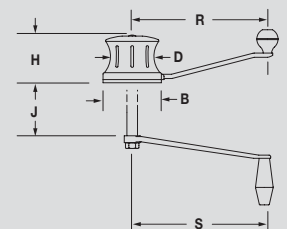
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Classic Winches

Winch Model	Drum "D" [mm]	Base "B" [mm]	Height "H" [mm]	Line Entry "L" [mm]	Line Size [mm]	Weight [kg]	Gear Ratio 1 st speed	Gear Ratio 2 nd speed	Power Ratio 1 st speed	Power Ratio 2 nd speed	Max Depth "J" [mm]	Handle Length "S" [mm]	Handle Length "R" [mm]	Product No.
12 ST U	70	115	132	44	8 - 14	4.2	1.3:1	n/a	9.5:1	n/a	150	254	n/a	RA500215
28 ST U	70	125	159	65	8 - 14	6.1	1.3:1	3.7:1	9.5:1	26.5:1	150	254	n/a	RA500229
91	51	80	94	n/a	n/a	1.0	1.0:1	n/a	8.0:1	n/a	n/a	n/a	203	RA510091
101	83	111	89	n/a	n/a	1.5	1.0:1	n/a	5.5:1	n/a	n/a	n/a	254	RA510101
102	83	111	74	n/a	n/a	2.0	1.0:1	n/a	5.5:1	n/a	150	240	n/a	RA510102
102	83	111	74	n/a	n/a	2.1	1.0:1	n/a	5.5:1	n/a	200	240	n/a	RA510103
102	83	111	74	n/a	n/a	1.9	1.0:1	n/a	5.5:1	n/a	100	240	n/a	RA510105



When investing in quality at sea, you are investing on multiple levels — and with the joy of multi-level returns on your investment. Safety at sea is always a result of sound investments in the right equipment. Therefore, if your equipment grows with your needs and skills — as it can with ANDERSEN Products — you can rest assured that your investment is safe.



Accessories

Experience Empowerment

ANDERSEN Line Tenders have been developed for easy and simple spinnaker up/downhaul, genoa-car and furling-jib systems. By operating a spring-loaded pin, you can select left or right ratcheting. Removing the drum and rotating the pawl housing 90 degrees changes the locked position to a free wheel function. The ANDERSEN Line Tender is available for fixed or track mounting.

Line Tenders

	Length mm (in.)	Width mm (in.)	Height mm (in.)	Line Size mm	Mounting	Gear Ratio	Power Ratio	Product No.
Fixed	140 (5 1/2)	112 (4 3/8)	55 (2 5/32)	10 - 12	4 x M6 mm	1.0:1	6.5:1	RA491401
Track	122 (4 13/16)	112 (4 3/8)	65 (2 9/16)	10 - 12	T-track 32 x 5 mm	1.0:1	6.5:1	RA491400

New ANDERSEN Auto-Lock Handle™ Ergonomically designed for perfect power transfer. Featuring automatically lock-in and easy push button controlled release. Highly polished stainless steel combined with composite makes the handle design strong light and impressive.

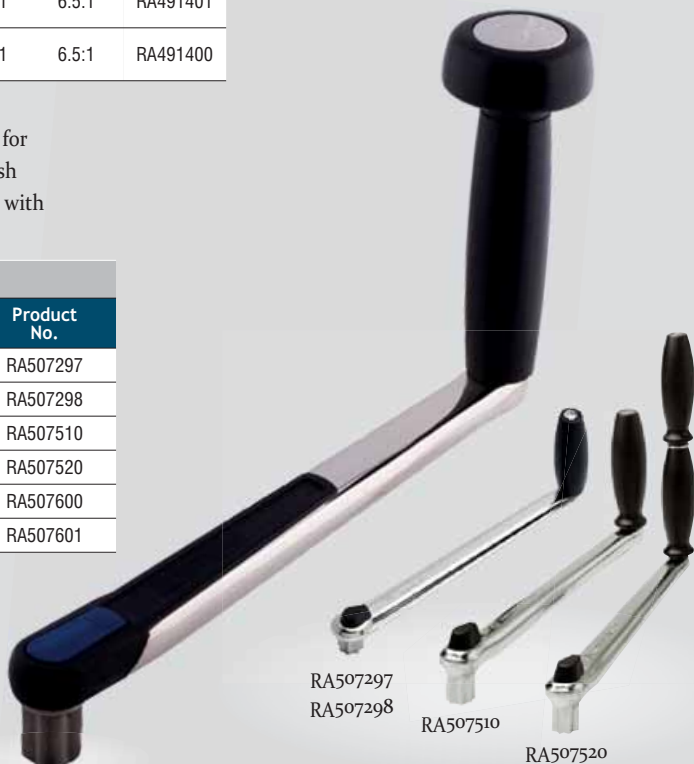
Handles

	Length mm (in.)	Weight kg (oz)	Product No.
8" Lock in	203 (8)	0.40 (14.1)	RA507297
10" Lock in	254 (10)	0.45 (15.9)	RA507298
10" High-End	254 (10)	0.92 (32.5)	RA507510
10" Double High-end	254 (10)	1.11 (39.2)	RA507520
10" Auto-Lock Handle™, blue holder	254 (10)	0.70 (24.7)	RA507600
10" Auto-Lock Handle™, white holder	254 (10)	0.70 (24.7)	RA507601

The Auto-Lock Handle™ comes with its own compact, quick access holder, blue or white.



RA507600
RA507601



RA507297
RA507298

RA507510

RA507520

Turning Blocks

	Length mm (in.)	Width mm (in.)	Height mm (in.)	Weight g (oz)	Max. Line mm (in.)	Mounting	Product No.
Single	133 (5 1/4)	95 (3 3/4)	41 (1 5/8)	800 (28.2)	16 (5/8)	8 mm coach bolt/bail	RA933000
Double	133 (5 1/4)	95 (3 3/4)	75 (2 15/16)	1400 (49.5)	16 (5/8)	8 mm coach bolt/bail	RA933001

ANDERSEN Turning Blocks — made of Stainless Steel with very low friction and high ultimate strength. They are available as either single or double, and can be fitted with a special bail for use with a spinnaker block. Stainless Steel frame & roller bearings.

Thrust ball bearings.

MWL: 2500kg (5500lb), BL: 5000kg (11000lb)

Coach Bolts

Length mm (in.)	Product No.
80 (3 1/8)	RA933900
100 (3 15/16)	RA933905
122 (4 13/16)	RA933902

Bails

Length mm (in.)	Product No.
80 (3 1/8)	RA933701
112 (4 13/16)	RA933702



RA933001



RA933000

ANDERSEN Bailers™ ANDERSEN automatic bailers are available World Wide and recognised by dinghy sailors as the most effective and reliable means of automatic bailing. ANDERSEN Bailers™ are made of Stainless Steel, guaranteeing you many years of trouble free service.



Bailers for inside mounting

Product No.	Fitting Hole	Nominal Hull Thickness	Flange Size	Size of Opening	Weight	Fitting Hole	Nominal Hull Thickness	Flange Size	Size of Opening	Weight
RA435200 Super Mini Special*	40 x 85 mm	8 mm	61 x 106 mm	250 mm²	175 g	1 5/8 x 3 3/8 in.	5/16 in.	2 7/16 x 4 3/16 in.	0.387 in²	6.2 oz
RA554131 Super Mini	40 x 85 mm	8 mm	61 x 106 mm	250 mm²	175 g	1 5/8 x 3 3/8 in.	5/16 in.	2 7/16 x 4 3/16 in.	0.387 in²	6.2 oz
RA554132 Super Medium	43 x 110 mm	8 mm	67 x 135 mm	350 mm²	275 g	1 3/4 x 4 3/8 in.	5/16 in.	2 11/16 x 5 5/16 in.	0.543 in²	9.7 oz
RA554133 Super Max	54 x 110 mm	8 mm	78 x 135 mm	540 mm²	320 g	2 1/8 x 4 3/8 in.	3/8 in.	3 1/8 x 5 5/16 in.	0.837 in²	11.3 oz

*Super Mini Special is designed for racing dinghies where the bailer is operated from a hiking position, this bailer is mounted without a spring lever.

Bailers for outside mounting

Product No.	Fitting Hole	Nominal Hull Thickness	Flange Size	Size of Opening	Weight	Fitting Hole	Nominal Hull Thickness	Flange Size	Size of Opening	Weight
RA554130 Mini	38 x 73 mm	4 mm	56 x 92 mm	255 mm²	100 g	1 1/2 x 2 7/8 in.	5/32 in.	2 1/4 x 3 5/8 in.	0.395 in²	3.5 oz
RA554136 Large	41 x 104 mm	4 mm	80 x 142 mm	435 mm²	275 g	1 5/8 x 4 1/8 in.	5/32 in.	3 3/16 x 5 9/16 in.	0.674 in²	9.7 oz

Service Kits

	Product No.
Kit 1 Winch 12 ST, 28 ST, 40 ST, 40 ST FS	RA710001
Kit 2 Winch 46 ST 1982-1993	RA710002
Kit 3 Winch 56 ST, 66 ST	RA710003
Kit 4 Winch 10, 16, 28, 40, 46	RA710004
Kit 5 Winch 56	RA710005
Kit 6 Basic Kit Standard Winch	RA710006
Kit 7 Winch 78 ST	RA710007
Kit 8 Winch 52 ST	RA710008
Kit 9 Winch 110 ST	RA710009
Kit 10 Pawl Springs 20 pcs	RA710010
Kit 11 Winch 46 ST 1993-1996	RA710011
Kit 12 Winch 58 St and 62 ST	RA710012

Service Kits

	Product No.
Kit 13 Winch 68 ST and 72 ST	RA710013
Kit 14 Winch 90, 91, 92	RA710014
Kit 15 Winch 100, 101, 102	RA710015
Kit 16 Winch 6	RA710016
Kit 17 Winch 46 ST FS 1997-2006	RA710017
Kit 18 Winch 12 ST, 18 ST, 28 ST 2006 ➔ 12 ST FS, 18 ST FS, 28 ST FS	RA710018
Kit 19 Winch 46 ST 1998-2006	RA710019
Winch Grease, 12-pack, including display	RA500001
Winch Grease, single tube	RA500001-1

Service Kits from ANDERSEN Winches™ are a must for optimal maintenance of ANDERSEN Winches™, as they include crucial spare parts. Cleaning and greasing every 2 years is also necessary for extending the lifetime of your gear.



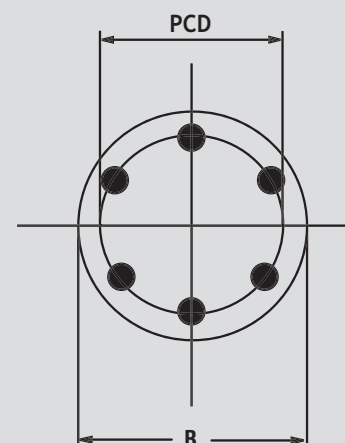
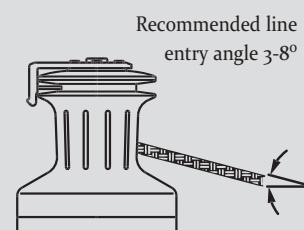
Measurements & Winch Selection Guide

Measurements

Measurements and Winch Selection Guide



Mounting Measurements							
	PCD		B		Mounting		
10	65 mm	2 9/16"	92 mm	3 5/5"	M6 mm	1/4"	
16	90 mm	3 9/16"	114 mm	4 1/2"	M6 mm	1/4"	
28	90 mm	3 9/16"	124 mm	4 15/16"	M6 mm	1/4"	
40	100 mm	3 15/16"	136 mm	5 3/8"	M6 mm	1/4"	
46	100 mm	3 15/16"	143 mm	5 5/8"	M8 mm	5/16"	
91	60 mm	2 3/8"	80 mm	3 1/8"	M6 mm	1/4"	
101/102	90 mm	3 9/16"	111 mm	4 5/16"	M6 mm	1/4"	
12 ST	90 mm	3 9/16"	115 mm	4 1/2"	M6 mm	1/4"	
18 ST	90 mm	3 9/16"	120 mm	4 3/4"	M6 mm	1/4"	
28 ST	90 mm	3 9/16"	125 mm	4 15/16"	M6 mm	1/4"	
40 ST	100 mm	3 15/16"	152 mm	6"	M6 mm	1/4"	
46/48 ST	155 mm	6 1/8"	180 mm	7 1/16"	M8 mm	5/16"	
52 ST	165 mm	6 1/2"	200 mm	7 7/8"	M8 mm	5/16"	
58/62 ST	200 mm	7 7/8"	230 mm	9 1/16"	M10 mm	3/8"	
68/72 ST	240 mm	9 7/16"	280 mm	11 1/16"	M10 mm	3/8"	
78 ST FS	260 mm	10 1/4"	320 mm	12 5/8"	M12 mm	1/2"	
110 ST FS	330 mm	13"	395 mm	15 9/16"	M12 mm	1/2"	



Selection

Winch Selection Guide

Masthead Rigged

Please refer to the chart if your boat is of medium displacement.

Fractional Rigged

We recommend that you refer to the sail area, and not to the length of the yacht.

Heavy Displacement

The displacement must be taken into account. It is advisable to choose a winch larger than that stated in the chart.

Ultra Light Displacement

Should normally be able to select smaller winches but the righting moment must also be taken into account.

Multihulls

Catamarans, trimarans and other boats with increased righting moments should use winches with a higher power ratio.

Choose your ANDERSEN Winches™ to reflect the size of your yacht and your sailing requirements. This chart is intended for masthead-rigged mono-hull yachts of medium displacement. When choosing electric or hydraulic winches, the selection is similar to that of a manually operated winch.

Please note that this chart is based on standards and will not reflect all variables and differences in the large variety of yacht types and sizes on the market.



Use our Web Site to electronically calculate the details of your winch selection, or consult your ANDERSEN distributor, who has the experience and knowledge of our product range to give professional advice in helping you make the right selection.

These are the classifications we have used for our winch selection chart.

LOA		Feet	25-28	29-32	33-35	36-39	40-43	44-48	49-54	55-61	62-71	72-80	80+
		Metres	7.6-8.5	8.8-9.8	10.1-10.7	10.0-11.9	12.2-13.1	13.4-14.6	14.9-16.5	16.8-18.6	18.9-21.6	21.9-24.4	24.4+
Sail Areas	Genoa	ft ² /m ²	300/28	350/33	470/44	560/52	770/72	880/82	1300/120	1800/170	2100/200	2700/250	
	Spinnaker	ft ² /m ²	410/38	600/56	800/74	1200/111	1600/150	2000/185	2800/260	3700/345	4500/420	5400/500	
	Main	ft ² /m ²	150/14	210/20	260/24	320/30	430/40	470/46	750/70	950/88	1100/102	1300/121	
	Genoa Sheet		12/18	28/40	40/46	46/48/52	48/52	58/62/68	68	68/72/78	72/78	78/110	110
	Spinnaker Sheet		12	12/18	18/28	28/40	40	46/48/52	52/58	58/62/68	72/78	78	110
	Main Sheet		12	12	12/18	18/28	40	46	52	52/58	58/62/68	68/72/78	78
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Mega Yacht Winches

Red Dragon-Vitters, NL

Mega Yacht Winches



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RF55171	12,73	RF70002	21	RF129110	34	RZ1707	233
RF55201	11	RF70300	48	RF129110A	34	RZ1708	234
RF55210	10	RF71000	75	RF129151	35	RZ1709	234
RF55301	11	RF71171	46	RF129151A	35	RZ1710	233
RF55310	10	RF72000	74	RF158000	75	T042-0964	129
RF55410	10	RF72130	48	RF158000W	75	T042-1130	126
RF55501	13	RF72174	47	RF158151	45	T055-1120	128
RF55510	12	RF72175	47	RF158171	46	WR677-03M	225
RF55511	13	RF72330	48	RF158251	45	WR677-04M	225
RF55521	13	RF72700	48	RF159000	37	WR6119-1.5M	225
RF55530	12	RF72700B	48	RF159100	36	WR6119-02M	225
RF55531	13	RF72700T	48	RF159106	37	WR6119-2.5M	225
RF56100	16	RF72900	48	RF159109A	43	WR6119-03M	225
RF56101	17	RF72900B	48	RF159110	36	WR6119-04M	225
RF56110	16	RF72900T	48	RF159151	37	WR6119-05M	225
RF56111	17	RF74100	68	RF189000	39	WR6119-06M	225
RF56120	16	RF74100AW	68	RF189100	38	WR6119-07M	225
RF56121	17	RF74108	69	RF189106	40	WR6119-08M	225
RF56130	16	RF74108A	69	RF189108R	40	WR6119-10M	225
RF56151	18	RF74110	68	RF189109A	43	WR6119-12	225
RF56151A	18	RF74140	68	RF189110	38	WR6119-12M	225
RF56330B	18	RF74151	69	RF189118R	40	WR6119-14	225
RF56331	19	RF74202	69	RF189151	39	WR6119-14M	225
RF56510	18	RF74251	69	RF189251	39	WR6119-16M	225
RF56511	19	RF75101	20	RF209109A	43	WR6119-19M	225
RF56530	18	RF75111	20	RF617H	232	WR6119-22M	225
RF56531	19	RF75151	21	RF618H	235	WR6119-26M	225
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RF60151	44	RF76101	22	RFDVD1	199	WR6719-02M	225
RF60251	44	RF76111	22	RFDVD2	199	WR6719-2.5M	225
RF61000	75	RF78000	75	RFSPICE-1	135	WR6719-03M	225
RF61171	46	RF78000W	75,108,109	RS000001	135	WR6719-04M	225
RF61176	46	RF78151	44	RS006400R	135	WR6719-05M	225
RF61821	50	RF78171	46	RS008020	133	WR6719-06M	225
RF61831	50	RF78174	46	RS008040	133	WR6719-07M	225
RF61841	50	RF78251	44	RS008050	133	WR6719-08M	225
RF62000	74	RF79000	31	RS008700	132	WR6719-10M	225
RF62174	47	RF79100	30	RS010020T	133	WR6719-12M	225
RF62175	47	RF79108	30	RS010700	132	WR6719-14M	225
RF64100	66	RF79108R	31	RS013020T	133	WR6719-16M	225
RF64100AW	66	RF79109	31	RS013030	133	WR677-03MP	225
RF64103	66	RF79110	30	RS013040	133	WR677-04MP	225
RF64108	66	RF79118R	31	RS013050	133	WX10	183
RF64108A	67	RF79140	30	RS013700	132	WX10-A	183
RF64108AW	66	RF79151	31	RS017020RT	133	WX10-R	183
RF64110	66	RF79200	30	RS017020T	133	WX10-S	183
RF64130	66	RF79500	31	RS017030	133	WX10-V	183
RF64140	66	RF89109A	43	RS017040	133	WX15	183
RF64151	67	RF1000AW	235	RS017050	133	WX15-A	183
RF64202	66	RF108000	75	RS017700	132	WX15-R	183
RF64251	67	RF108000W	75	RS017700R	132	WX15-S	183
RF64500	67	RF108151	45	RS020030	133	WX15-V	183
RF64503	67	RF108171	46	RS020030R	133	WX23	183
RF64520	67	RF108251	45	RS020040	133	WX23-A	183
RF64523	67	RF109000	33	RS020040R	133	WX23-R	183
RF68000	75	RF109100	32	RS020050	133	WX23-S	183
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RF68151	44	RF109109	32	RS020700	132	WXD	183
RF68171	46	RF109109A	43	RS020700R	132	WXD-A	183
RF68174	46	RF109110	32	RS028700	132	WXD-R	183
RF68251	44	RF109140	33	RS117060	133	WXD-S	183
RF69000	29	RF109151	33	RZ1600	232	WXD-V	183
RF69100	28	RF109200	32	RZ1601	232	WXL	183
RF69100L	28	RF109500	33	RZ1602	232	WXL-G	183
RF69108	28	RF128000	75	RZ1603	232		
RF69108R	29	RF128000W	75	RZ1607	232		

DEFINITIONS

Maximum Working Load (M.W.L.)

Maximum Working Load (M.W.L.) is the maximum static and/or dynamic load at which the product will still function without excessive friction, distortion, wear or permanent deformation of components. Above this load, bearing systems may fail, moving parts may seize and stainless steel or plastic components may begin to bend, stretch or otherwise deform. Maximum working loads should never exceed half of the breaking load, and should never be exceeded in use.

Breaking Load (B.L.)

Breaking Load (B.L.) is the load at, or around which, a major failure can be expected to occur to some part of the product's structure when new. Plastic components may split, rivets may give way, shackles may break, and other metallic components may fracture. No product should be used at more than half of the breaking load, so as to provide a minimum safety factor of two (2).

CUSTOMER CONSIDERATIONS

Product Information Amendments

All catalogue information is subject to specification changes during a product's life-cycle. Any alterations will be posted on the Website: www.ronstan.com which should be considered the most up to date source of product information.

CUSTOMER CONSIDERATIONS

Factor of Safety

An appropriate factor of safety should be applied to Breaking Load figures to suit each application before choosing or specifying a particular product. For many industrial and safety related applications, and for some yachting applications, a factor of safety greater than two (2) should be used or may be required by law or other regulations. It is the customer's responsibility to ensure that an appropriate factor of safety is used, and it should allow for safety implications, service life, fatigue (as may be caused by wave action, wind stresses or repetitive cyclical loading), type of load, exposure to ultraviolet light, corrosion and stress corrosion. Note that Ronstan does not specify a 'safe working load' as this is dependent on the factor of safety, which must be determined by the user relative to each application.

Useful Life

The useful life of any product is determined by the above factors and must be assessed in each application, and thus no guarantee can be provided for product life, load capacity or any other factor due to the variability in usage. In some jurisdictions government regulations require the replacement of rigging components within certain periods of time, usually every three to five years. You must ascertain whether any such regulations affect you. Whilst Ronstan takes every precaution in their product design and manufacturing processes to minimise the effects of corrosion and stress corrosion, there are also preventative as well as corrective treatments that can be carried out after installation.

WARRANTY

Details of Ronstan's Product Warranty can be found under the **SUPPORT** tab on the **Ronstan website**.

DISTRIBUTORS

Ronstan products are available through a great distribution network that extends to more countries than we can list on this page.

Contact details for your nearest distributor can be found at www.ronstan.com

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