
RONSTAN
SAILBOAT HARDWARE
A L I V E
HOBART
DSS

WELCOME

Welcome to Ronstan's new 2025 Sailboat Hardware Catalogue. 284 pages of the world's finest gear designed for every type of sailing. These pages are filled with the Ronstan and Andersen equipment that you know and trust as well as several new products released since our last catalogue was produced. Featured new products include:

- Our range of **Ronstan Orbit Winches™**. These award winning winches are offered in five sizes, from 20 through 50. The patented **QuickTrim™** functionality, available in sizes 30 - 50, allows sailors to easily and safely ease line tension to make minor sail trim adjustments without having to remove the winch handle or take the line out of the self-tailer.
- **Triggersnaps™** provide unique functional advantages such as single-handed operation and the ability to be opened while under load. They typically boast higher working loads for a similar size snap shackle.
- **Soft attachment snatch blocks** come in three sizes and achieve the highest ratings for dynamic load vs sheave diameter in our keelboat block range.
- A full range of class-legal **ILCA® hardware**, a sleek and modern upgrade that improves performance with high load capacity and lower friction than traditional systems.

This has been a time of transition at Ronstan as we entered a new chapter of our corporate ownership. In November, Ronstan joined forces with Groupe Wichard; owners of legendary marine brands including Wichard, Profurl, Facnor, Sparcraft, Lorima, Axxon, and more. This new group offers the most complete range of product for every sailboat hardware need. As we work together, you can be sure we will continue to innovate and develop product to improve your sailing experience.

Scot West
Managing Director
Ronstan International Pty. Ltd.

COVER IMAGE
© ROLEX/Kurt Arrigo
Reichel Pugh 66 'Alive', Rolex Sydney to Hobart, 2023

BLOCKS

CLEATS

RUDDER & TILLER HARDWARE

TRACK & TRAVELLER SYSTEMS

FURLERS

BATTEN CAR SYSTEMS

MISCELLANEOUS HARDWARE & ACCESSORIES

SAILING GEAR & ACCESSORIES

SAILING WATCHES & TIMER

STAINLESS STEEL HARDWARE

RIGGING HARDWARE

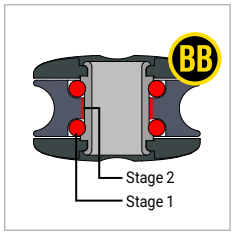
SOFT SHACKLES & BAILERS

INDUSTRIAL PRODUCTS

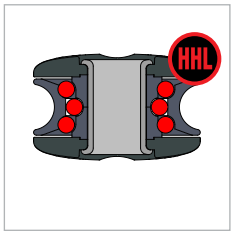
ORBIT WINCHES™

ANDERSEN STAINLESS STEEL WINCHES®

ALPHABETICAL INDEX



2-stage bearing system



Triple bearing race (S40)


Adjustable cleat arms

Ratchet block auto/manual models

Ratchet block auto engagement


Lashing or soft shackle option

Ratchet block holding power

ORBIT BLOCKS™

Ultimate Performance

Ball Bearing Orbit Blocks™ have been engineered to achieve the highest possible strength-to-weight ratio, using composite reinforced polymer materials and sophisticated bearing systems.

The new Series 40 Orbit Blocks™ are strong enough for applications that historically required a larger block and light enough to compete on any racecourse. The 2-stage ball bearing system remains highly efficient under heavy static or dynamic loads, with a clever design that effectively eliminates the friction-inducing skidding or deformation of ball bearings which commonly impact blocks in this size range.

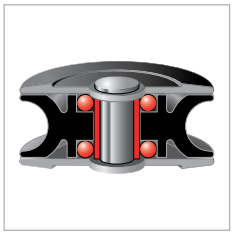
Orbit Blocks™ are available with swivel heads, Dyneema® link heads, or as lashing blocks. The SK78 Dyneema® link provided with link head blocks is easily fitted and retained securely by a moulded retainer clip. The flexible link allows limited articulation in a 0° or 90° orientation, while swivel head models with stainless steel shackles provide full rotation and maximum durability.

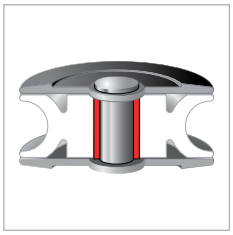
Orbit Blocks™ are fitted with our carbon-fibre reinforced C-Cleat™ for secure rope holding with low entry and exit efforts, and fairleads for fast action from any angle. Cleat arms have a wide range of adjustment and calibration marks for setting your preferred cleating angle.

Awesome Holding Power

Multiple gripping faces machined into our ratchet block sheaves work in conjunction with our unique cross-hole geometry, delivering up to 20:1 holding power to resist slipping of the loaded line while minimising rope wear. Ball bearings ensure minimum friction under load and a free running sheave when the ratchet is disengaged.

Control switches are located on both sides of the block to remain accessible wherever the block is fitted. In auto mode, the ratchet mechanism engages when load is applied but disengages when released to let the sheet run out freely – ideal for gybing asymmetric spinnakers. In manual mode, the switch is used to set up the block with ratchet either on or off as required.


Ball Bearing sheave


All Purpose & Special Purpose sheave


RopeGlide™ fairleads


RopeGlide™ rings

Versatile Shocks™

A BLOCK FOR EVERY PURPOSE

All-around solutions

Utility Blocks are an ideal match for the needs of everyday recreational sailing. They are designed for low-maintenance reliability and offer a choice of sheave/bearing configurations depending on their intended use.

Ultimate simplicity

For applications involving high static loads where only simple deflection and minor trim adjustment is required, our low friction RopeGlide™ rings and fairleads are a lightweight and robust alternative to blocks. For control line applications our Shocks™ offer high strength and versatility in a compact form.

- **All Purpose** versions are a great choice for durability and a long service life. They feature self-lubricating acetal polymer sheaves running on polished stainless steel races and perform equally well with dynamic loads and static loads.
- **Ball Bearing** versions incorporate our 2-stage bearing system using ball bearings to minimise friction and a secondary full-contact bearing to maintain low friction across the full working load range.
- **Special Purpose** versions are suitable for use with wire rope or where high static load capability is required.
- **High Load** versions are designed specifically for any application where high dynamic or static loads are expected. They feature high strength grade 2205 stainless steel ball races and sheaves for low friction at high loads.

SERIES 15 & 20 UTILITY

©Toby Bromwich

SERIES 15


RF13101 AP


RF13101G AP


RF13101R AP

SERIES 20

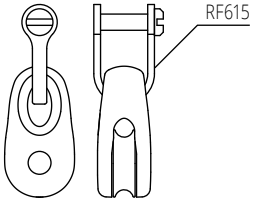

RF666 AP

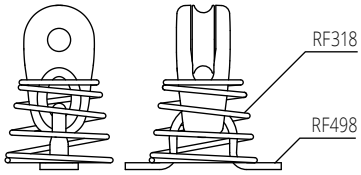

RF663 AP

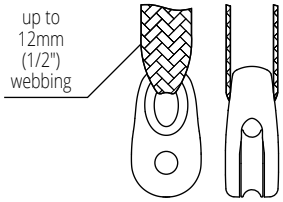

RF661 AP


RF662 AP


RF664 AP


RF615





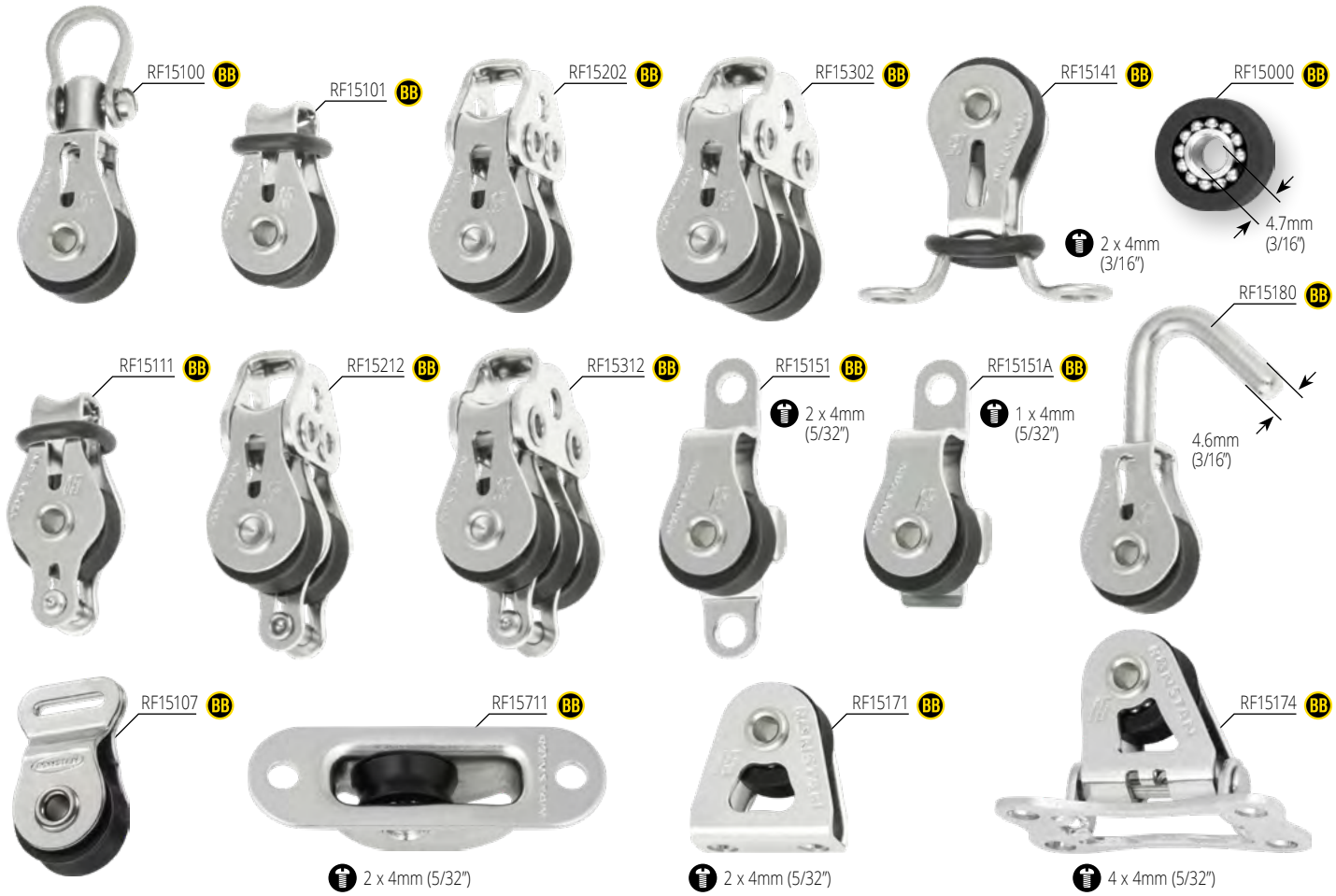
SERIES 15 AP ATTACHMENT OPTIONS


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

- Control lines.
- Leech lines.
- Shock cord tensioning systems.

- Sheaves: UV stabilised acetal.
- Cheeks & rivets (Series 20): Grade 316 stainless steel.
- Frame/cheeks (RF13101): Impact resistant 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
Series 15 - AP All Purpose											
RF13101	Single block, loop head, black	15	4	150	300	5	5/8	5/32	330	660	0.2
RF13101G	Single block, loop head, grey	15	4	150	300	5	5/8	5/32	330	660	0.2
RF13101R	Single block, loop head, red	15	4	150	300	5	5/8	5/32	330	660	0.2
Series 20 - AP All Purpose											
RF661	Single block, tube rivet head	20	5	150	450	10	3/4	3/16	330	990	0.4
RF662	Double block, tube rivet head	20	5	300	600	20	3/4	3/16	660	1320	0.7
RF663	Single block, ferrule eye head	20	5	150	450	10	3/4	3/16	330	990	0.4
RF664	Linked blocks, S20 + S20	20	3	150	450	20	3/4	1/8	330	990	0.7
RF666	Single block, loop head	20	5	150	400	10	3/4	3/16	330	880	0.4



RF133
Suits loop head single blocks

- Smallest and lightest ball bearing block available.
- Precision moulded acetal sheave running on stainless steel ball bearings provides high performance and low friction.
- Single loop head blocks include an O-ring to separate running line from head lashing or fixing.
- RF15151 & RF15151A cheek blocks feature lateral supports for improved mounting stability.

RF613S - Suits RF15100
RF633S - Suits double and triple blocks

- RF15174 pivoting lead block has 4-point fastening for load distribution and low profile. Can be mounted without disassembly.
- RF15711 exit block has a formed single piece housing for maximum strength and minimal rope wear.
- RF15711 exit block has a flush rivet to minimise cutout dimensions and facilitate installation.

RF1851
Suits loop head single blocks

- Dinghy control lines.
- Vangs, cunninghams and tweakers.
- Shock cord tensioning systems.
- Sheaves: UV stabilised acetal.
- Ball bearings: Stainless steel.
- Cheeks & head fittings: Grade 316 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
BB Ball Bearing															
RF15000	Sheave, captive BB, 7mm (9/32") width	15	5	-	-	120	-	2	5/8	3/16	-	-	260	-	0.1
RF15100	Single block, swivel shackle head	15	5	-	3	120	400	11	5/8	3/16	-	1/8	260	880	0.7
RF15101	Single block, loop head	15	5	-	-	120	550	7	5/8	3/16	-	-	260	1210	0.3
RF15107	Single block, suits 10mm (3/8") webbing	15	4	-	-	120	450	9.5	5/8	5/32	-	-	260	990	0.3
RF15111	Single block, becket, loop head	15	5	-	-	120	550	9	5/8	3/16	-	-	260	1210	0.3
RF15141	Stand-up block	15	5	-	-	120	550	10	5/8	3/16	-	-	260	1210	0.4
RF15151	Cheek block	15	5	-	-	120	550	9	5/8	3/16	-	-	260	1210	0.3
RF15151A	Cheek block, single mounting	15	5	-	-	120	360	9	5/8	3/16	-	-	260	790	0.3
RF15171	Upright lead block	15	5	-	-	120	550	9	5/8	3/16	-	-	260	1210	0.3
RF15174	Pivoting lead block	15	5	-	-	120	350	16	5/8	3/16	-	-	260	770	0.6
RF15180	Single block, swivel hook head	15	5	-	-	100	200	13	5/8	3/16	-	-	220	440	0.4
RF15202	Double block, loop head	15	5	-	-	240	700	23	5/8	3/16	-	-	530	1540	0.8
RF15212	Double block, becket, loop head	15	5	-	-	240	700	24	5/8	3/16	-	-	530	1540	0.9
RF15302	Triple block, loop head	15	5	-	-	360	850	28	5/8	3/16	-	-	790	1870	1.0
RF15312	Triple block, becket, loop head	15	5	-	-	360	850	30	5/8	3/16	-	-	790	1870	1.0
RF15711	Exit block	15	5	-	-	120	550	14	5/8	3/16	-	-	260	1210	0.5
RF133	Saddle, 9mm (3/8") internal clearance, suits 2 x 4mm (3/16") fasteners at 27mm (1 1/16") centres	-	-	-	-	-	-	2	-	-	-	-	-	-	0.1
RF613S	Shackle, slotted pin, suits RF15100	-	-	-	3	-	-	3	-	-	-	1/8	-	-	0.1
RF633S	Shackle, slotted pin, suits double & triple blocks	-	-	-	4	-	-	5	-	-	-	5/32	-	-	0.2
RF1851	Shackle, coined pin head, suits loop head single blocks	-	-	-	3	-	-	2	-	-	-	1/8	-	-	0.1

© Beau Outteridge


RF25109 BB


RF25209 BB


RF25309 BB

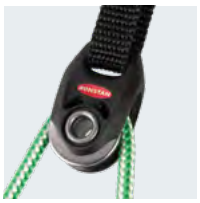

RF21107 BB

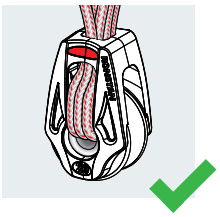

RF25109HL HHL

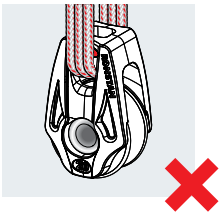

RF25209HL HHL

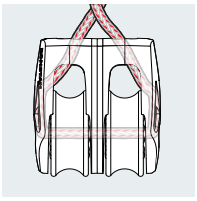

RF25151 BB

1 x 5mm (3/16″)
1 x 3mm (1/8″)


RF21107 with webbing attachment






Lashing line must pass through the hub with a tight splice in the head or cross over before lashing to a fixing point.


RF9003-07


RF21107 with Dyneema® link attachment

- Ball bearing blocks have a 2-stage ball bearing system.
- Hollow hub for becket take-off.
- Suit up to 4mm (5/32″) lashing.
- RF25109HL & RF25209HL ideal for higher load applications.
- Dyneema® lashing line supplied with singles RF25109 & RF25109HL.

- RF21107 suits up to 10mm (3/8″) webbing or RF9003-07 Dyneema® link.
- Control lines.
- Leech lines & cunninghams.
- Cascading vangs.
- Kite bridles.

- BB Sheave: High compression strength acetal.
- HHL sheave and bearing race: Grade 2205 stainless steel, ball bearings: Grade 304 stainless steel.
- Frame/cheeks: Toughened nylon.
- Load straps (RF21107): Grade 316 stainless steel.
- Frame/cheeks (RF21107): 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											
RF21107	Single block, becket hub, suits 10mm (3/8″) webbing	20	5	200	400	14	3/4	3/16	440	880	0.5
RF25109	Single block, becket hub, incl. 750mm (30″) x 1.7mm (1/16″) diameter, Dyneema® lashing line	20	6	250*1	550	9	3/4	1/4	550*1	1210	0.3
RF25209	Double block, becket hub	20	6	300*3	800	14	3/4	1/4	660*3	1760	0.5
RF25309	Triple block, becket hub	20	6	300*3	800	21	3/4	1/4	660*3	1760	0.7
RF25151	Cheek block	20	6	250	550	8	3/4	1/4	550	1210	0.3
HHL High Grade Stainless Steel Sheave											
RF25109HL	Single block, becket hub, incl. 750mm (30″) x 2.0mm (3/32″) diameter, Dyneema® lashing line	20	6	300*2	900	14	3/4	1/4	660*2	1980	0.5
RF25209HL	Double block, becket hub, HHL	20	6	450*3	900	26	3/4	1/4	990*3	1980	0.9
Accessories											
RF9003-07	Dyneema® link to suit RF21107										

*1 Block must be lashed through hub. The supplied lashing line must have three passes through head and hub to achieve rated load.
*2 Block must be lashed through hub. The supplied lashing line must have two passes through head and hub to achieve rated load.
*3 Both the MWL and BL are dependent on the strength of the line used to lash the block through the central hub. Refer to the SUPPORT page at ***www.ronstan.com*** for lashing instructions.

SERIES 20 UTILITY

RF498

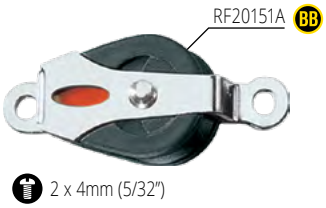
RF318
Suits RF20101 & RF20111

RF1850S
3mm (1/8") slotted pin, suits loop top single blocks
BL reduced to 500kg (1100lb)

- Precision moulded acetal sheaves running on stainless steel ball bearings provide high performance & low friction.
- SP 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.
- Linked blocks are used for dinghy barber haulers, cunninghams 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
SP Special Purpose - Nylatron® Sheave															
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).



RF613S
3mm (1/8") pin, suits RF20100

RF615
4mm (5/32") pin, suits double & triple blocks

- Cheek blocks RF20151 and RF25151 have through-hub mounting for maximum strength.
- Cheek block RF20151A suits pop rivet mounting.
- RF20180 features a low profile swivelling hook for quick and easy attachment. Suits rope, stainless steel and webbing attachment points.
- RF25711 & RF25711HL exit blocks have a formed single piece housing for maximum strength and minimal rope wear.
- Dinghy control lines and vangs.
- Cunninghams.
- Traveller controls.
- Exit blocks minimise friction in lines passing through the deck or exiting masts and booms.
- BB Sheave: UV stabilised acetal, ball bearings: Grade 304 stainless steel.
- SP sheave: Self-lubricating Nylatron®.
- HHL sheave and bearing race: Grade 2205 stainless steel, ball bearings: Grade 304 stainless steel.
- Housing, load straps, head fittings & hook (RF20180): Grade 316 stainless steel

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													
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*1	300	79	3/4	1/4	-	330*1	660	2.8
RF20180	Single block, swivel hook head	20	6	-	100	200	21	3/4	1/4	-	220	440	0.7
RF20184	Single block, loop mount	20	6	-	250	550	22	3/4	1/4	-	550	1210	0.8
RF25151	Cheek block	20	6	-	250	550	8	3/4	1/4	-	550	1210	0.3
RF25711*2	Exit block	20	6	-	250	1000	18	3/4	1/4	-	550	2200	0.6
HHL High Grade Stainless Steel Sheave													
RF25711HL*2	Exit block HHL	20	6	-	300	1100	22	3/4	1/4	-	660	2430	0.8
SP Nylatron®													
RF20000HL	Sheave, Nylatron®	20.0	6	3	-	-	2	3/4	1/4	1/8	-	-	0.1

*1 Line load through cleat not to exceed 125kg (275lb).
*2 Refer to the SUPPORT page at ***www.ronstan.com*** for mounting template.

SERIES 25 & 30 UTILITY

SERIES 25


RF571 AP


RF572 AP


RF2332 AP


RF573 AP

SERIES 30


RF280 AP


RF681 AP

SERIES 30


RF469 AP


RF469A AP


RF470 AP


RF443 AP


RF467 AP


RF567 AP


RF469A Cheek plates rotate to open block


SP RF667


SP RF560


SP RF418


SP RF418C


SP RF468


SP RF104


SP RF103

- Simple, versatile and economical blocks that have many uses.
- Lightweight, durable construction and acetal or Nylatron® sheaves.
- Stainless steel cheeks and acetal sheaves ensure long service life with virtually no maintenance required.
- Vang, cunningham and trapeze retriever systems on dinghies.
- Leech line tackles and bunk adjusters on larger yachts.
- AP Sheaves: UV stabilised acetal. SP Sheaves: Self-lubricating Nylatron®
- Cheeks & head fittings: Grade 316 stainless steel.

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
Series 25 - AP All Purpose													
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	4	150	300	20	1	1/4	5/32	330	660	0.7
RF2332	Single block, swivel ring head	25	6	10	150	300	20	1	1/4	3/8	330	660	0.7
Series 30 - AP All Purpose													
RF280	Single block, loop head	30	8	-	300	600	20	1 1/8	5/16	-	660	1320	0.7
RF443	Single block, swivel ring head	30	10	13	250	500	44	1 1/8	3/8	1/2	550	1100	1.6
RF467	Single block, swivel shackle head	30	10	5	250	500	50	1 1/8	3/8	3/16	550	1100	1.8
RF469	Single block, ferrule eye head	30	10	10	300	600	40	1 1/8	3/8	3/8	660	1320	1.4
RF469A	Single block, snatch	30	10	10	300	600	40	1 1/8	3/8	3/8	660	1320	1.4
RF470	Single block, becket, ferrule eye head	30	10	10	300	600	45	1 1/8	3/8	3/8	660	1320	1.6
RF567	Single block, becket, swivel shackle head	30	10	5	250	500	55	1 1/8	3/8	3/16	550	1100	1.9
RF681	Single block, becket, loop head	30	8	-	300	600	25	1 1/8	5/16	-	660	1320	0.9
Wire Blocks - SP Special Purpose, Nylatron® Sheave													
RF103	Single block, tubular rivet head, removable sheave	45	6	6	850	1700	88	1 3/4	1/4	1/4	1870	3740	3.1
RF104	Single block, ferrule top, removable sheave	45	6	6	850	1700	80	1 3/4	1/4	1/4	1870	3740	2.8
RF418	Single block, tubular rivet head	25	3	3	450	900	40	1	1/8	1/8	990	1980	1.4
RF418C	Single block, removable clevis pin head	25	3	3	450	900	39	1	1/8	1/8	990	1980	1.4
RF468	Single block, ferrule top, removable sheave	25	3	3	450	900	33	1	1/8	1/8	990	1980	1.2
RF560	Single block, ferrule eye	20	3	3	250	500	20	3/4	1/8	1/8	550	1100	0.7
RF667	Single block, loop top	20	2	2	200	400	20	3/4	3/32	3/32	440	880	0.7

SERIES 25

SERIES 30

2 x 4mm (5/32")

SERIES 30

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

- Simple, versatile and economical blocks that have many uses.
- Lightweight, durable construction.
- Stainless steel cheeks and acetal sheaves ensure long service life with virtually no maintenance required.
- 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 and bunk adjusters on larger yachts.
- Sheaves: UV stabilised acetal.
- Cheeks: 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
Series 25 - AP All Purpose											
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
RF2335	Single block, narrow, tube rivet head	25	5	175	350	65	1	3/16	390	770	2.3
Series 30 - AP All Purpose											
RF81	Double block, loop head	30	8	300	600	40	1 1/8	5/16	660	1320	1.4
RF82	Triple block, loop head	30	8	550	1100	60	1 1/8	5/16	1210	2420	2.1
RF83	Double block, becket, loop head	30	8	300	600	50	1 1/8	5/16	660	1320	1.8
RF185	Single block, tube rivet head	30	8	300	900	20	1 1/8	5/16	660	1980	0.7
RF186	Fiddle block, tube rivet head	30 + 40	8	300	600	50	1 1/8 + 1 9/16	5/16	660	1320	1.8
RF187	Fiddle block, v-jam cleat, tube rivet head	30 + 40	8	300	600	60	1 1/8 + 1 9/16	5/16	660	1320	2.1
RF188	Single block, becket, tube rivet head	30	8	300	600	35	1 1/8	5/16	660	1320	1.2
RF285	Cheek block, curved base	30	8	300	600	42	1 1/8	5/16	660	1320	1.5
RF417	Double block, tube rivet head	30	8	450	1300	40	1 1/8	5/16	990	2860	1.4

SERIES 30 ORBIT

RF35109HL

Ideal for high load applications such as halyards, cascading vangs, backstays, outhauls and cunningham systems

Block must be lashed through central hub. MWL and BL is dependent on the strength of the lashing.

RF35100 BB
RF35100D SP

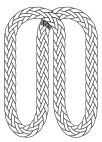
RF35202 BB

RF35302 BB

RF35101 BB
RF35101D SP

RF35212 BB

RF35312 BB



RF9004-11
Suits single blocks as a lashing strop.
BL reduced to 1300kg (2860lb) for RF35109HL

RF614
Use with RF9004-09 for attachment option for RF35109HL. BL reduced to 1300kg (2860lb)

RF134
RF134A (countersunk holes)

RF323
Suits RF35100, RF35100D

RF1850S
Suits RF35101 in either direction BL reduced to 500kg (1100lb)

- RF35101 and RF35100 - Ultra-low profile through-sheave becket.
- Ball bearing blocks have a 2-stage ball bearing system.
- RF35101 accepts RF1850S shackle in both orientations to create a conventional loop top block.
- SP versions feature a Nylatron® sheave suitable for both rope and wire.
- HHL versions features class-leading dynamic and static load ratings for a 30mm block. Refer ***www.ronstan.com*** for lashing instructions.
- 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.
- BB sheaves and balls: High compression strength acetal.
- SP sheaves: Self-lubricating Nylatron®.
- HHL sheave and bearing race: Grade 2205 stainless steel with Grade 304 stainless steel ball bearings
- Frame/cheeks: Glass fibre reinforced nylon.
- Soft link: UV stabilised, multi-strand SK78 Dyneema®.

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
BB Ball Bearing													
RF35100	Single block, becket hub, swivel shackle head	30	8	4	300	600	32	1 3/16	5/16	5/32	660	1320	1.1
RF35101	Single block, becket hub, lashing head	30	8	-	300	600	22	1 3/16	5/16	-	660	1320	0.8
RF35202	Double block, non-swivel shackle head	30	8	-	450	900	56	1 3/16	5/16	-	990	1980	2.0
RF35212	Double block, becket*1, non-swivel shackle head	30	8	-	450*2	900	57	1 3/16	5/16	-	990*2	1980	2.0
RF35302	Triple block, non-swivel shackle head	30	8	-	550	1100	79	1 3/16	5/16	-	1210	2430	2.8
RF35312	Triple block, becket*1, non-swivel shackle head	30	8	-	550*3	1100	81	1 3/16	5/16	-	1210*3	2430	2.9
HHL High Grade Stainless Steel Sheave													
RF35109HL	Single block HHL, lashing hub and becket option	30	8	-	550*4	1650*4	42	1 3/16	5/16	-	1210*4	3630*4	1.5
SP Special Purpose - Nylatron® Sheave													
RF35100D	Single block, becket hub, swivel shackle head	30	8	4	300	600	31	1 3/16	5/16	5/32	660	1320	1.1
RF35101D	Single block, becket hub, lashing head	30	8	-	300	600	21	1 3/16	5/16	-	660	1320	0.7

*1 Becket suits up to 6mm (1/4") line. For lines above 6mm (1/4") use an additional Dyneema® link (sold separately)
*2 Total block load. Load on becket not to exceed 25% of block load. i.e. MWL 140kg (310lb), BL 280kg (610lb). Suitable for 4:1 system at rated block load.
*3 Total block load. Load on becket not to exceed 25% of block load. i.e. MWL 140kg (310lb), BL 280kg (610lb). Suitable for 6:1 system at rated block load.
*4 Both the MWL and BL are dependent on the strength of the line used to lash the block through the central hub.


RF35322 BB


RF35332 BB


RF35151 BB

2 x 4mm (5/32")


RF9003-07

Double and triple blocks can be converted to soft attachment with RF9003-07


RF35000 BB

10mm (3/8")


RF35284 BB


RF35286 BB


RF35100A BB


RF35140 BB

2 x 4mm (5/32")


RF35141 BB

2 x 5mm (3/16")

- RF35322 & RF35332 - Composite C-Cleat™ and fairlead.
- RF35151 - Base suits curved mounting surface.
- RF35286 - Stainless steel ring, 35mm (1 3/8") OD, 5mm (3/16") diameter material.

- 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.

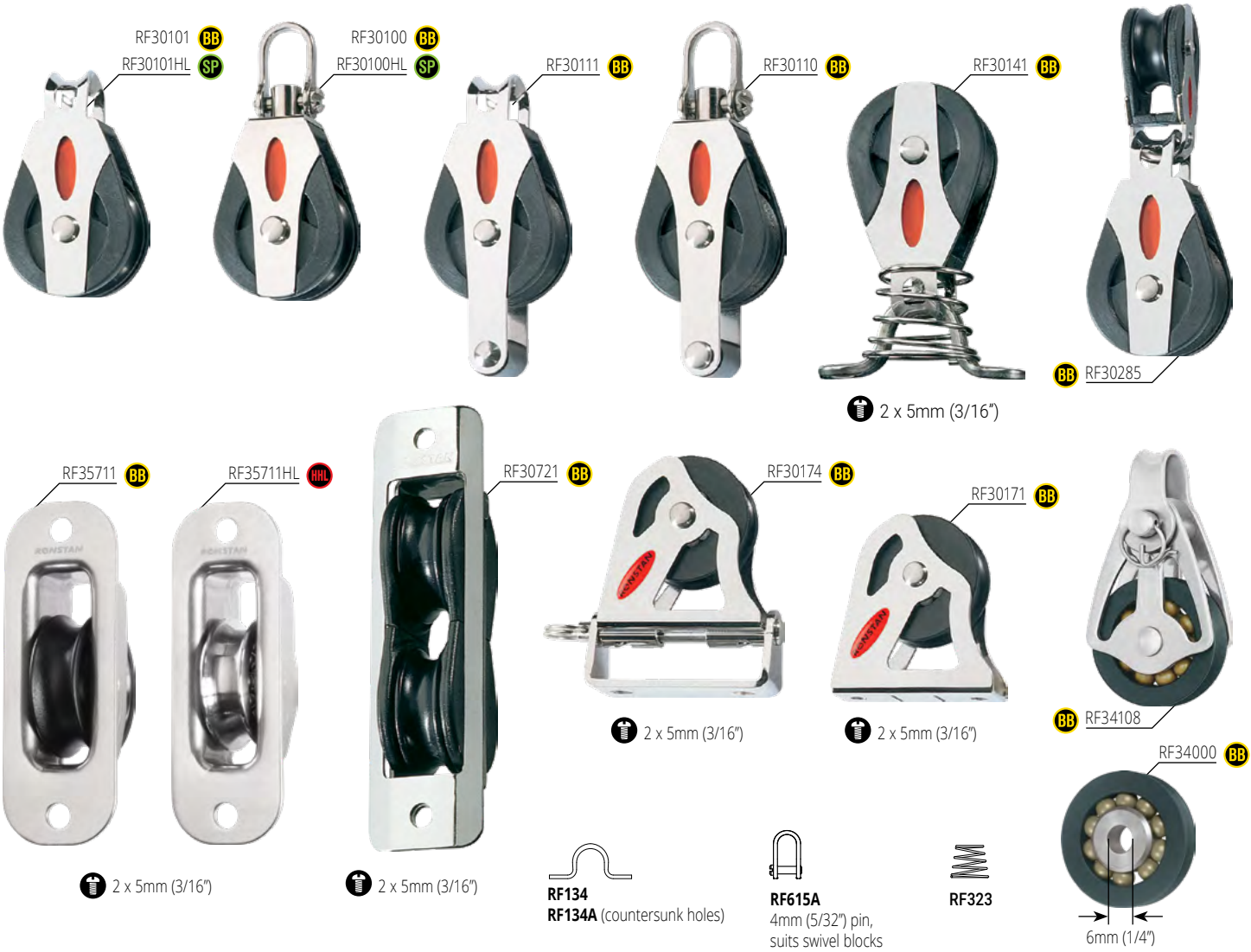
- Sheaves: High compression strength acetal.
- Ball bearings: High compression strength acetal.
- Frame/cheeks: Toughened, glass fibre reinforced nylon.
- Head fittings & hubs: Grade 316 stainless steel.

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
BB Ball Bearing													
RF35000	Sheave, captive BB, 11mm (7/16") width	30	8	-	300	-	6	1 3/16	5/16	-	660	-	0.2
RF35100A	Single block, becket hub, slotted head post, swivel shackle head	30	8	4	300	600	31	1 3/16	5/16	5/32	660	1320	1.1
RF35140	Stand-up block, swivel head	30	8	-	300	600	33	1 3/16	5/16	-	660	1320	1.2
RF35141	Stand-up block, non-swivel head	30	8	-	250	500	36	1 3/16	5/16	-	550	1100	1.3
RF35151	Cheek block	30	8	-	300	600	21	1 3/16	5/16	-	660	1320	0.7
RF35284	Linked blocks, S30 & S30	30+30	8	-	300	600	46	1 3/16+1 3/16	5/16	-	660	1320	1.6
RF35286	Clew ring blocks	30	8	-	300	600	63	1 3/16	5/16	-	660	1320	2.2
RF35322	Triple block, cleat, non-swivel shackle head	30	8	-	550*3	1100	130	1 3/16	5/16	-	1210*3	2430	4.6
RF35332	Triple block, becket*1, cleat, non-swivel shackle head	30	8	-	550*2&3	1100	132	1 3/16	5/16	-	1210*2&3	2430	4.7

Spare Parts & Conversion Accessories		Blocks suited:
RF9003-07	Dyneema® link to suit S30 double & triple Orbit Blocks™	Suits RF35202, RF35212, RF35302, RF35312, RF35322, RF35332

*1 Becket suits up to 6mm (1/4") line. For lines above 6mm (1/4") use an additional Dyneema® link (sold separately).
*2 Total block load. Load on becket not to exceed 25% of block load. i.e. MWL 140kg (310lb), BL 280kg (610lb). Suitable for 6:1 system at rated block load.
*3 Line load through cleat not to exceed 125kg (280lb).

SERIES 30 UTILITY



- 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.
- Exit blocks minimise friction in lines passing through the deck or exiting masts and booms.
- 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.
- BB sheaves: UV stabilised acetal.
- SP sheaves: Self-lubricating Nylatron®.
- Ball bearings: Acetal (RF34000 & RF34108 use Torlon® ball bearings).
- Cheeks: Impact modified, fibre reinforced and UV stabilised nylon.
- Load straps & head fittings: Grade 316 stainless steel.
- Frame/cheeks (RF34108): Grade 316 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
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
RF30174	Pivoting lead block	30	8	-	-	300	650	50	1 3/16	5/16	-	-	660	1430	1.8
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
RF34000	Sheave, alloy, Torlon® balls	30	5	-	-	165	330	10	1 3/16	3/16	-	-	360	730	0.4
RF34108	Single, removable loop head, alloy sheave, Torlon® balls	30	5	-	6	165	675	36	1 3/16	3/16	-	1/4	360	1490	1.3
RF35711*	Single exit block	30	8	-	-	300	1100	34	1 3/16	5/16	-	-	660	2430	1.2
RF30721	Double exit block	30	8	-	-	300	750	60	1 3/16	5/16	-	-	660	1650	2.1
SP Special Purpose - Nylatron® Sheave															
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
HHL High Grade Stainless Steel Sheave															
RF35711HL*	Single exit block	30	8	-	-	550	1100	56	1 3/16	5/16	-	-	1210	2430	2.0

*Refer to the SUPPORT page at ***www.ronstan.com*** for mounting template.

RF48109 BB

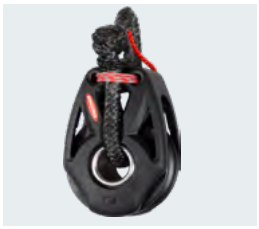
RF48209 BB

RF48109HL HHL

RF48100 BB

RF48140 BB

2 x 5mm (3/16")

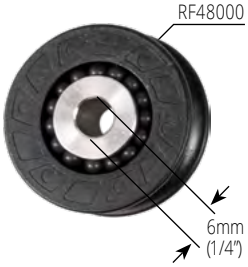


RF48109 and RF48109HL
Cheek plates rotate to
open block

RF48151 BB

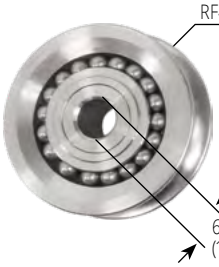
2 x 6mm (1/4")

RF48000 BB



6mm
(1/4")

RF48000HL HHL



6mm
(1/4")

DSH-4GRY

Suits RF48109

DSH-6GRY

Suits RF48109HL,
RF48209

RF615A
4mm (5/32") pin,
suits swivel blocks

DSH-4GRY
4mm (5/32") soft shackle,
suits RF48109

DSH-6GRY
6mm (1/4") soft shackle,
suits RF48109HL and RF48209

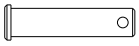
- 2-stage ball bearing system.
- RF48100, RF48109, RF48209 & RF48109HL - integrated becket.
- RF48109 & RF48109HL can be opened and used as a snatch block.
- RF48100 stainless steel shackle head for unlimited block rotation, and compatibility with sharp fixing points.

- Mainsheet systems and spinnaker sheets on dinghies, off-the-beach catamarans and sportsboats to 8m (26ft).
- Halyard, vang and backstay applications on boats to 9m (30ft).
- Control line applications on larger yachts.

- BB Sheave and balls: High compression strength acetal.
- HHL sheave and bearing race: Grade 2205 stainless steel with Grade 304 stainless steel ball bearings.
- Frame/cheeks: Toughened, glass fibre reinforced nylon.

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
BB Ball Bearing													
RF48000	Sheave, captive BB, 15.5mm (5/8") width	40	10	-	400	-	30	1 9/16	3/8	-	880	-	1.1
RF48100	Single block, becket hub, swivel shackle head	40	10	4	400	800	60	1 9/16	3/8	5/32	880	1760	2.1
RF48109	Single block, becket hub, lashing head	40	10	-	400	800	47	1 9/16	3/8	-	880	1760	1.7
RF48140	Stand-up block, swivel head	40	10	-	400	800	70	1 9/16	3/8	-	880	1760	2.5
RF48151	Cheek block	40	10	-	400	800	33	1 9/16	3/8	-	880	1760	1.2
RF48209	Double block, becket hub, lashing head	40	10	-	600	1200	86	1 9/16	3/8	-	1320	2650	3.0
HHL High Load Stainless Steel Sheave													
RF48000HL	Sheave, captive HHL, 15.5mm (5/8") width	40	10	-	1000	-	77	1 9/16	3/8	-	2200	-	2.7
RF48109HL	Single block HHL, lashing hub and becket option	40	10	-	1000	3000	96	1 9/16	3/8	-	2200	6610	3.4

SERIES 40 ORBIT



BECKET
RF261 Clevis Pin

BECKET
RF113 Split Ring

2 x 6mm (1/4")

2 x 6mm (1/4")

2 x 6mm (1/4")

- Headposts freely swivel or can be locked in 0°or 90°.
- Composite C-Cleat™ and fairlead.
- Removable becket pins allow lines to be spliced prior to fitting and are secured using a split ring.
- RF46330 & RF46530 replaceable ratchet sheave, RF46000.
- Exit Blocks minimise friction in lines passing through the deck or exiting masts and booms.

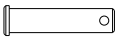
- Mainsheet systems and spinnaker sheets on dinghies, off-the-beach catamarans and sportsboats to 8m (26ft).
- Halyard, vang and backstay applications on boats to 8m (26ft).
- Control line applications on larger yachts.

- BB Sheave and balls: High compression strength acetal.
- HHL sheave and bearing race: Grade 2205 stainless steel with Grade 304 stainless steel ball bearings
- Frame/cheeks: Toughened, glass fibre reinforced nylon.
- Exit block housing: Anodised aluminium.
- Head fittings, hubs and fixtures: Grade 316 stainless steel.

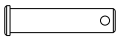
PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing													
RF48120	Single block, adjustable cleat, swivel shackle head	40	10	4	175*1	800	176	1 9/16	3/8	5/32	385*1	1760	6.2
RF48330	Triple block, becket. adjustable cleat, swivel shackle head	40	10	5	600*1&2	1200	227	1 9/16	3/8	3/16	1320*1&2	2650	8.0
RF46330	Triple block, becket, adjustable cleat, ratchet, swivel shackle head	40	9	5	600*1&2	1200	270	1 9/16	5/16	3/16	1320*1&2	2650	9.5
RF46530	Quin block, becket, adjustable cleat, ratchet, swivel shackle head	40	9	5	600*1&2	1200	368	1 9/16	5/16	3/16	1320*1&2	2650	13.0
RF46000	Ratchet sheave	40	9	-	-	-	20	1 9/16	5/16	-	-	-	0.7
Exit Blocks													
RF45711N	Exit Block, AP, Narrow	40	8	-	400/800*3	1600	65	1 9/16	5/16	-	880/1760*3	3530	9.5
RF45711	Exit Block, BB	40	10	-	400/800*3	2000	77	1 9/16	3/8	-	880/1760*3	4410	9.5
RF45711HL	Exit Block, HHL	40	10	-	1000	2000	123	1 9/16	3/8	-	2200	4410	9.5

*1 MWL based on maximum allowable line load through cleat of 175kg (385lb), 1:1 purchase.
*2 Total block load. Becket MWL 400kg (880lb), BL 800kg (1760lb).
*3 MWL = 400kg dynamic load, 800kg static load.

12:1 MAINSHEET SYSTEM



RF261
suits RF48310, RF48510



RF262
suits RF48410

RF113
suits RF48310, RF48410, RF48510

RF614
suits RF48210

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

- 2-stage ball bearing system.
- Headposts freely swivel or can be locked in 0° or 90°.
- Removable becket pins allow lines to be spliced prior to fitting and are secured using a split ring.

- Mainsheet systems and spinnaker sheets on dinghies, off-the-beach catamarans and sportsboats to 8m (26ft).
- Halyard, vang and backstay applications on boats to 8m (26ft).
- Control line applications on larger yachts.

- BB Sheave and balls: High compression strength acetal.
- Frame/cheeks: Toughened, glass fibre reinforced nylon.
- Head fittings and hubs: Grade 316 stainless steel.

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
BB Ball Bearing													
RF48200	Double block, swivel shackle head	40	10	5	600	1200	118	1 9/16	3/8	3/16	1320	2650	4.2
RF48210	Double block, becket, swivel shackle head	40	10	5	600*1	1200	130	1 9/16	3/8	3/16	1320*2	2650	4.6
RF48300	Triple block, swivel shackle head	40	10	5	600	1200	167	1 9/16	3/8	3/16	1320	2650	5.9
RF48310	Triple block, becket, swivel shackle head	40	10	5	600*1	1200	172	1 9/16	3/8	3/16	1320*1	2650	6.1
RF48400	Quad block, swivel shackle head	40	10	5	600	1200	192	1 9/16	3/8	3/16	1320	2650	6.8
RF48410	Quad block, becket, swivel shackle head	40	10	5	600*1	1200	200	1 9/16	3/8	3/16	1320*1	2650	7.1
RF48500	Quin block, swivel shackle head	40	10	5	600	1200	241	1 9/16	3/8	3/16	1320	2650	8.5
RF48510	Quin block, becket, swivel shackle head	40	10	5	600*1	1200	246	1 9/16	3/8	3/16	1320*1	2650	8.7

*1 Total block load. Becket MWL 400kg (880lb), BL 800kg (1760lb).

SPORTS BLOCKS

SERIES 40 ORBIT

© Shirley Wodson

RF615
4mm (5/32") pin

Becket link

- 2-stage ball bearing system.
- RF45521 Composite C-Cleat™ and fairlead.
- Use RF9003-07 Dyneema® as becket link.
- 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.
- Sheave: Carbon fibre reinforced nylon.
- Ball bearings: High compression strength acetal.
- Stage 2 bearing: Glass fibre reinforced, MoS_2 impregnated nylon.
- Frame/cheeks: Toughened, glass fibre reinforced nylon.
- Soft link: UV stabilised, multi-strand SK78 Dyneema®.

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
BB Ball Bearing													
RF45101	Single block, Dyneema® link head	40	9	-	325	700	33	1 9/16	5/16	-	715	1540	1.2
RF45501	Fiddle block*3, Dyneema® link head	40 + 22	9	-	325*1&2	700	47	1 9/16 + 7/8	5/16	-	715*1&2	1540	1.7
RF45521	Fiddle block*3, adjustable cleat, Dyneema® link head	40 + 22	9	-	325*1&2	700	108	1 9/16 + 7/8	5/16	-	715*1&2	1540	3.8
Accessories													
RF9003-07	S40 single & fiddle Orbit Blocks™, head and becket link	RF45101, RF45501, RF45521											

*1 Total block load. Becket MWL 125kg (275lb), BL 250kg (550lb). Suitable for 3:1 system at rated block load.
*2 Line load through cleat not to exceed 125kg (275lb).
*3 Small fiddle block sheave has a high load full contact bearing (i.e. not ball bearing). Main sheave has 2-stage ball bearing.


RF46100 BB


RF46100M BB


RF46101 BB


RF46102 BB


Stainless steel swivel shackle head

Superior holding power


RF46151 BB

2 x 4mm (5/32")


RF46151A BB

2 x 4mm (5/32")


RF40001


RF9003-07


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


RF4

2 x 5mm (3/16")


RF2454
RF2454B

2 x 5mm (3/16")

0° or 90° stand-up

- RF46100 & RF46100M - Stainless steel swivel shackle head for unlimited block rotation, and compatibility with sharp fixing points.
- Dinghy mainsheet systems.
- Spinnaker and jib sheets on dinghies.
- Mainsheet fine tune systems on sportsboats & small keelboats using RF6 or RF7 mainsheet swivel cleat unit.
- Control line applications on larger yachts.
- Shackle & head fitting (RF46100 & RF46100M): Grade 316 stainless steel.
- Sheave: Anodised aluminium.
- Ball bearings: High compression strength acetal.
- Frame/cheeks: Toughened, glass fibre reinforced nylon.
- Soft link: UV stabilised, multi-strand SK78 Dyneema®.

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
BB Ball Bearing													
RF46100	Single block, auto, swivel shackle head	40	9	4	175	500	38	1 9/16	5/16	5/32	385	1100	1.3
RF46100M	Single block, manual, swivel shackle head	40	9	4	175	500	38	1 9/16	5/16	5/32	385	1100	1.3
RF46101	Single block, auto, Dyneema® link head	40	9	-	175	500	35	1 9/16	5/16	-	385	1100	1.2
RF46102	Single block, manual, Dyneema® link head	40	9	-	175	500	35	1 9/16	5/16	-	385	1100	1.2
RF46151	Cheek block, clockwise, auto	40	9	-	175	500	36	1 9/16	5/16	-	385	1100	1.3
RF46151A	Cheek block, anti-clockwise, auto	40	9	-	175	500	36	1 9/16	5/16	-	385	1100	1.3

PRODUCT No.	DESCRIPTION	M.W.L. kg	B.L. kg	WEIGHT g	M.W.L. lb	B.L. lb	WEIGHT oz
Accessories							
RF4	Swivel shackle base. Suits Series 40 & 55 Orbit Block™ Dyneema® links. 4.8mm (3/16") diameter pin	250	500	30	550	1100	1.1
RF2454	Stand-up base, suits S40 Orbit Blocks™ - boot & saddle	325	700	11	715	1540	0.4
RF2454B	Stand-up boot, suits S40 Orbit Blocks™ - boot only	-	-	6	-	-	0.2
Spare Parts - Dyneema® Links							
RF9003-07	S40 single & fiddle Orbit Blocks™	RF45101, RF45501, RF45521, RF46101, RF46102					
Spare Parts - Link Retainer Clips							
RF40001	S40 single & fiddle Orbit Blocks™ (2 pack)	RF45101, RF45501, RF45521, RF46101, RF46102					

SERIES 40 UTILITY


RF40101 BB


RF40100 BB
RF40100HL SP


RF40200 BB


RF40300 BB


RF40111 BB


RF40110 BB


RF40210 BB

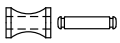

RF40310 BB


RF150
4.8mm (3/16") pin


RF134
RF134A (countersunk holes)


RF321
Suits shackle head blocks


RF2454
Suits loop head blocks


RF41010
Snap-in keyhole becket pin

- 2-stage ball bearing system.
- Light weight.
- Removable becket pins allow lines to be spliced prior to fitting and are locked into position without the use of split rings or tools.
- Cheek cut-outs for easy bearing maintenance.
- SP versions 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 on single blocks.
- Double & triple blocks have a swivel shackle head for full 360° rotation.

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
RF40200	Double block, swivel shackle head (non-locking)	40	10	-	5	500	1200	134	1 9/16	3/8	-	3/16	1100	2650	4.7
RF40210	Double block, becket, swivel shackle head (non-locking)	40	10	-	5	500	1200	142	1 9/16	3/8	-	3/16	1100	2650	5.0
RF40300	Triple block, swivel shackle head (non-locking)	40	10	-	5	600	1400	194	1 9/16	3/8	-	3/16	1320	3090	6.9
RF40310	Triple block, becket, swivel shackle head (non-locking)	40	10	-	5	600	1400	209	1 9/16	3/8	-	3/16	1320	3090	7.4
SP Special Purpose - Nylatron® Sheave															
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


RF40500 BB


RF40510 BB


RF40520 BB


RF40530 BB


RF40140 BB

2 x 5mm (3/16")


RF40171 BB

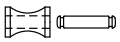

RF44108 BB


RF44000 BB

6mm (7/32")


RF6170


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


RF41010
snap-in keyhole becket pin

- Snap shackle adapters suit single & fiddle blocks.
- Low profile stand-up block has swivel head post to allow full articulation and rotation.
- Mainsheet, halyard, vang and spinnaker control lines on off-the-beach catamarans, one design classes and sportsboats up to 8m (26ft).
- Ball bearings: Acetal.
- BB sheaves: UV stabilised acetal (RF44000 & RF44108 Torlon® ball bearings).
- SP sheaves: Self-lubricating Nylatron®.
- Cheeks: Impact modified, fibre reinforced and UV stabilised nylon.
- Load straps & head fittings: Grade 316 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
BB Ball Bearing															
RF40140	Stand-up block, swivel shackle 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, removable loop head, alloy sheave, Torlon® balls	40	6	-	6	240	1100	60	1 9/16	1/4	-	7/32	530	2430	2.1
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
RF40510	Fiddle block, becket, universal head	40 + 24	8	-	5	350	1000	97	1 9/16 + 15/16	5/16	-	3/16	770	2200	3.4
RF40520	Fiddle block, adjustable cleat, universal head	40 + 24	8	-	5	350*	1000	156	1 9/16 + 15/16	5/16	-	3/16	770	2200	5.5
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
Accessories															
RF6170	Snap shackle head adapter	-	-	-	5	500	1000	49	-	-	-	3/16	1100	2200	1.7

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

SERIES 40 UTILITY

RF150 4.8mm (3/16") pin

RF41010 Snap-in keyhole becket pin

RF134 **RF134A** (countersunk holes)

RF321 Suits shackle head blocks

RF2454 Suits loop head blocks

- 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 on single blocks.
- Double & triple blocks have a swivel shackle head for full 360° rotation (non-locking).
- Removable becket pins allow lines to be spliced prior to fitting and are locked into position without the use of split rings or tools.
- 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
RF41200	Double block, swivel shackle head (non-locking)	40	10	5	600	1200	135	1 9/16	7/16	3/16	1320	2650	4.8
RF41210	Double block, becket, swivel shackle head (non-locking)	40	10	5	600	1200	143	1 9/16	7/16	3/16	1320	2650	5.0
RF41300	Triple block, swivel shackle head (non-locking)	40	10	5	700	1400	195	1 9/16	7/16	3/16	1540	3090	6.9
RF41310	Triple block, becket, swivel shackle head (non-locking)	40	10	5	700	1400	209	1 9/16	7/16	3/16	1540	3090	7.4


RF41500 AP


RF41510 AP


RF41520 AP


RF41530 AP


RF41171 AP

2 x 5mm (3/16")


RF41151 AP

3 x 5mm (3/16")


RF41153

3 x 5mm (3/16")


RF41811 AP

3 x 6mm (1/4")


RF6170

- Curved base adapter for cheek block facilitates mounting on masts or booms.
- Fiddle blocks are ideal for fine-tune mainsheet tackles, cunninghams, boom vangs, backstays and other control line purchase systems.
- Captive Lock™ universal head can be fixed at 0° or 90°, or left free to swivel on single blocks.
- Quick adjusting cleat arms require no tools to adjust and fix in desired position.
- Snap shackle adapter suits single and fiddle blocks.
- Mainsheet and halyard applications, vang and spinnaker control lines on off-the-beach boats and small keelboats up to 8m (26ft).
- Sheaves: UV stabilised acetal.
- Cheeks: Impact modified, fibre reinforced and UV stabilised nylon.
- Load straps & head fittings: Grade 316 stainless steel.

RODUCT 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													
RF41151	Cheek block, stainless steel cheeks	40	10	-	400	1000	66	1 9/16	3/8	-	880	2200	2.3
RF41171	Upright lead block	40	10	4	400	1000	59	1 9/16	3/8	5/32	800	2200	2.1
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	375*1	1000	157	1 9/16 + 15/16	5/16	3/16	825*1	2200	5.5
RF41530	Fiddle block, becket, adjustable cleat, universal head	40 + 24	8	5	400*2	1000	164	1 9/16 + 15/16	5/16	3/16	880*2	2200	5.8
RF41811	Cheek block, aluminium cheeks	40	12	-	400	1000	65	1 9/16	1/2	-	880	2200	2.3
Accessories													
RF6170	Snap shackle head adapter	-	-	5	500	1000	49	-	-	3/16	1100	2200	1.7
RF41153	Curved surface adapter for RF41151 cheek block	-	-	-	-	-	9	-	-	-	-	-	0.3

*1 MWL based on maximum allowable line load through cleat of 125kg (275lb), 3:1 purchase.
*2 Line load through cleat not to exceed 125kg (275lb).

SERIES 50 UTILITY


RF50101 BB


RF50100 BB
RF50100HL SP


RF50110 BB


RF50200 BB


RF50500 BB


RF50530 BB


RF6170


RF50171 BB

2 x 6mm (1/4")

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

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

RF1055
Suits shackle head blocks

RF321
Suits single & fiddle swivel shackle head blocks

RF51010
Snap-in keyhole becket pin

- 2-stage ball bearing system.
- High static and dynamic load capacity.
- Removable becket pins allow lines to be spliced prior to fitting and are locked into position without the use of split rings or tools.
- Cheek cut-outs for easy bearing maintenance.
- Snap shackle adapter adds functionality to single and fiddle blocks.
- Ball bearings: Acetal.
- BB sheaves: UV stabilised acetal.
- SP sheave: Self-lubricating Nylatron®.
- Cheeks: Impact modified, fibre reinforced and UV stabilised nylon.
- Load straps & head fittings: Grade 316 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
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
RF50171	Upright lead block	50	12	-	-	500	1500	116	2	1/2	-	-	1100	3310	4.1
RF50200	Double block, swivel shackle head (non-locking)	50	12	-	6	800	2000	254	2	1/2	-	1/4	1760	4410	9.0
RF50500	Fiddle block, universal head	54 + 34	10	-	5	500	1500	166	2 1/8 + 1 5/16	3/8	-	3/16	1110	3310	5.9
RF50530	Fiddle block, becket, adjustable cleat, universal head	54 + 34	10	-	5	500*	1500	371	2 1/8 + 1 5/16	3/8	-	3/16	1110*	3310	11.2
SP Special Purpose - Nylatron® Sheave															
RF50100HL	Single block, universal head	50	12	5	5	750	1500	117	2	1/2	3/16	3/16	1650	3310	4.1
Accessories															
RF6170	Snap shackle head adapter	-	-	-	5	500	1000	49	-	-	-	3/16	1100	2200	1.7

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

SERIES 50 & 60 UTILITY


RF51101 AP


RF51100 AP


RF51200 AP


RF51300 AP


RF51111 AP


RF51110 AP


RF51210 AP

SERIES 60


RF66100 AP

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

RF151
6mm (1/4") pin, suits S50 double and triple blocks & S60 single block

RF1055
Suits shackle head blocks

RF321
Suits swivel shackle head blocks

RF51010
Snap-in keyhole becket pin

- 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 on S50 single and fiddle blocks.
- Double & triple blocks have a swivel shackle head for full 360° rotation (non-locking).
- 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
Series 50 - 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, swivel shackle head (non-locking)	50	12	6	1000	2000	255	2	1/2	1/4	2200	4410	9.0
RF51210	Double block, becket, swivel shackle head (non-locking)	50	12	6	1000	2000	271	2	1/2	1/4	2200	4410	9.6
RF51300	Triple block, swivel shackle head (non-locking)	50	12	6	1200	2400	369	2	1/2	1/4	2650	5290	13.0
Series 60 - AP All Purpose													
RF66100	Single block, swivel shackle head (non-locking)	60	14	6	1100	2200	248	2 3/8	9/16	1/4	2430	4850	8.7


RF51500 AP


RF51510 AP


RF51530 AP


RF6170


RF51140 AP

2 x 5mm (3/16")


RF51171 AP

2 x 6mm (1/4")


RF51151 AP

3 x 6mm (1/4")

- Fiddle blocks are ideal for fine-tune mainsheet tackles, cunninghams, boom vangs, backstays and other control line purchase systems.
- Snap shackle adapter adds 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).
- Sheaves: UV stabilised acetal.
- Cheeks: Impact modified, fibre reinforced and UV stabilised nylon.
- Load straps & head fittings: Grade 316 stainless steel bearing race.

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													
RF51140	Stand-up block, swivel head	50	12	-	500	1000	118	2	1/2	-	1100	2200	4.2
RF51151	Cheek block, aluminium cheeks	50	12	-	500	1000	85	2	1/2	-	1100	2200	3.0
RF51171	Upright lead block	50	12	-	750	1500	115	2	1/2	-	1650	3310	4.1
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	700*	1500	318	2 1/8 + 1 5/16	3/8	3/16	1540*	3310	11.2
Accessories													
RF6170	Snap shackle head adapter	-	-	5	500	1000	49	-	-	3/16	1100	2200	1.7

* MWL based on maximum allowable line load through cleat of 175kg (385lb), 4:1 purchase.

SERIES 55 ORBIT


Integrated becket

9:1 MAINSHEET SYSTEM

RF150
4.8mm (3/16") pin.

- 2-stage ball bearing system.
- Swivel shackle head for unlimited block rotation.
- Single inner cheeks on multi-sheave blocks for reduced weight and bulk.
- Ultra-low profile integrated becket.

- Mainsheet systems on dinghies, catamarans, sportsboats and small keelboats to 9m (30ft).
- RF55410 when paired with a RF56330B and a RF45209 lashed to the becket with a RF9004-09 or DSH-6GRY, 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	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
BB Ball Bearing													
RF55110	Single block, becket, swivel shackle head	55	10	5	500*1	1000	88	2 5/32	3/8	3/16	1100*1	2200	3.1
RF55210	Double block, becket, swivel shackle head	55	10	5	750*2	1500	172	2 5/32	3/8	3/16	1650*2	3300	6.1
RF55310	Triple block, becket, swivel shackle head	55	10	5	750*2	1500	244	2 5/32	3/8	3/16	1650*2	3300	8.6
RF55410	Quad block, becket, swivel shackle head	55	10	5	750*2	1500	316	2 5/32	3/8	3/16	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).

2 x 6mm (1/4")

3 x 5mm (3/16")

Integrated becket

Low profile head

- Single inner cheeks on doubles and triples for reduced weight and bulk.
- RF55111 - Ultra-low profile integrated becket.
- RF55151 - Recessed underside suits flat or curved mounting surface.

- Mainsheet systems and spinnaker sheets on dinghies, sportsboats and small keelboats 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	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
BB Ball Bearing													
RF55101	Single block, Dyneema® link head	55	10	-	500	1000	68	2 5/32	3/8	-	1100	2200	2.4
RF55111	Single block, becket, Dyneema® link head	55	10	-	500*	1000	75	2 5/32	3/8	-	1100*	2200	2.6
RF55151	Cheek block	55	10	-	500	1000	70	2 5/32	3/8	-	1100	2200	2.5
RF55171	Upright lead block	55	10	-	500	1000	91	2 5/32	3/8	-	1100	2200	3.2
RF55201	Double block, Dyneema® link head	55	10	-	800	1600	134	2 5/32	3/8	-	1765	3520	4.7
RF55301	Triple block, Dyneema® link head	55	10	-	1000	2000	205	2 5/32	3/8	-	2200	4410	7.2

* 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.

SPORTS BLOCKS

SERIES 55 ORBIT

RF55501 BB

RF55521 BB

RF9004-09

Removable Dyneema® link & retainer clip

Adjustable cleat arms

Becket link

- RF55521 - Composite C-Cleat™ and fairlead.
- Sheave: Carbon fibre reinforced nylon.
- Ball bearings: High compression strength acetal.
- Stage 2 bearing: Carbon fibre reinforced nylon.
- Frame/cheeks: Toughened, glass fibre reinforced nylon.
- Soft link: UV stabilised, multi-strand SK78 Dyneema®.

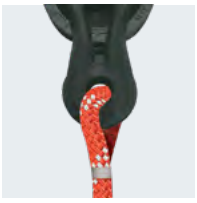
PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	PIN DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	PIN DIAM. in.	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing													
RF55501	Fiddle block*1, Dyneema® link head	55 + 35	10	-	500	1000	95	2 5/32 + 1 3/8	3/8	-	1100	2200	3.4
RF55521	Fiddle block*1, adjustable cleat, Dyneema® link head	55 + 35	10	-	500*2	1000	232	2 5/32 + 1 3/8	3/8	-	1100*2	2200	8.1

Accessories		Blocks Suited
RF9003-09	Use as head and becket link	RF55501, RF55521

*1 Small fiddle block sheave has a high load full contact bearing (i.e. not ball bearing). Main sheave has 2-stage, ball bearing.
*2 Line load through cleat not to exceed 175kg (385lb).


Adjustable cleat arms

0° or 90° stand-up


Integrated low profile becket

2 x 6mm (1/4")

RF150
4.8mm (3/16") pin.

- RF55530 - Composite C-Cleat™ and fairlead.
- Ultra-low profile integrated hollow hub becket.
- Swivel shackle head for unlimited block rotation.
- Mainsheet and vang systems on dinghies, sportsboats and small keelboats to 9m (30ft).
- Control line applications on larger yachts.
- Sheave: Carbon fibre reinforced nylon.
- Ball bearings: High compression strength acetal.
- Stage 2 bearing: Carbon fibre reinforced nylon.
- Frame/cheeks: Toughened, glass fibre reinforced nylon.
- Swivel shackle head fitting: Grade 316 stainless steel.
- Soft link: UV stabilised, multi-strand SK78 Dyneema®.

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
BB Ball Bearing													
RF55510	Fiddle block*1, becket, swivel shackle head	55 + 35	10	5	500*2	1000	101	2 5/32 + 1 3/8	3/8	3/16	1100*2	2200	3.6
RF55530	Fiddle block*1, becket, adjustable cleat, swivel shackle head	55 + 35	10	5	500*2	1000	237	2 5/32 + 1 3/8	3/8	3/16	1100*2	2200	8.4
Accessories													
RF2455	Stand-up base, suits S55 Orbit Blocks™ - boot & saddle	-	-	-	500	1000	26	-	-	-	1100	2200	0.9
RF2455B	Stand-up boot, suits S55 Orbit Blocks™ - boot only	-	-	-	-	-	11	-	-	-	-	-	0.4

Dyneema® Links		Blocks Suited
RF9004-08	Link to suit S55 single & fiddle Orbit Blocks™	RF55101, RF55111, RF55501, RF55511, RF55521, RF55531, RF56101
RF9004-09	Link to suit S55 9:1 mainsheet system (see page 30)	Connecting RF45209 to RF56330B
RF9005-10	Link to suit S55 double & triple Orbit Blocks™	RF55201, RF55301

Link Retainers Clips (2 pack)		Blocks Suited
RF50001	Clip to suit S55 single & fiddle Orbit Blocks™	RF55101, RF55111, RF55501, RF55511, RF55521, RF55531, RF56101
RF50002	Clip to suit S55 double Orbit Blocks™	RF55201
RF50003	Clip to suit S55 triple Orbit Blocks™	RF55301

*1 Small fiddle block sheave has a high load full contact bearing (i.e. not ball bearing). Main sheave has 2-stage, ball bearing.
*2 Line load through cleat not to exceed 175kg (385lb).

ORBIT BLOCK™ RATCHET HOLDING POWER 20:1

Auto & manual ratchet modes

Load sensing auto ratchet

RF150
4.8mm (3/16") pin

- RF56100 & RF56110 - swivel shackle head for unlimited block rotation.
- Dinghy mainsheet systems.
- Mainsheet systems on sportsboats using RF6 or RF7 mainsheet swivel cleat unit.
- Spinnaker sheets on dinghies.
- Spinnaker sheets on sportsboats and small keelboats (lateral lead blocks).
- Control line applications on larger yachts.
- Sheave: Anodised aluminium.
- Swivel shackle head fitting: Grade 316 stainless steel.
- Ball bearings: High compression strength acetal.
- Frame/cheeks: Toughened, glass fibre reinforced nylon.
- Soft link: UV stabilised, multi-strand SK78 Dyneema®.

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
BB Ball Bearing													
RF56100	Single block, auto and manual, swivel shackle head	55	10	5	250	750	82	2 5/32	3/8	3/16	550	1650	2.9
RF56101	Single block, auto and manual, Dyneema® link head	55	10	-	250	750	78	2 5/32	3/8	-	550	1650	2.8
RF56110	Single block, becket, auto and manual, swivel shackle head	55	10	5	250*	750	86	2 5/32	3/8	3/16	550*	1650	3.0

* 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.

© Paul Wyeth

Adjustable cleat arms

Load sensing auto ratchet

RF150
4.8mm (3/16") pin

- Swivel shackle head for unlimited block rotation.
- RF56120 & RF56130 - Composite C-Cleat™ and fairlead.
- Dinghy mainsheet systems.
- Spinnaker sheets on dinghies – especially modern asymmetric classes.
- Spinnaker sheets on sportsboats and small keelboats (lateral lead blocks).
- Control line applications on larger yachts.
- Sheave: Anodised aluminium.
- Ball bearings: High compression strength acetal.
- Frame/cheeks: Toughened, glass fibre reinforced nylon.

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
BB Ball Bearing													
RF56120	Single block, adjustable cleat, auto, swivel shackle head	55	10	5	175*2	750	204	2 5/32	3/8	3/16	385*2	1650	7.2
RF56130	Single block, becket, adjustable cleat, auto, swivel shackle head	55	10	5	250*1&2	750	209	2 5/32	3/8	3/16	550*1&2	1650	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 MWL based on maximum allowable line load through cleat of 175kg (385lb).

SERIES 55 ORBIT

Auto and manual ratchet modes (select models)

Integrated low profile becket

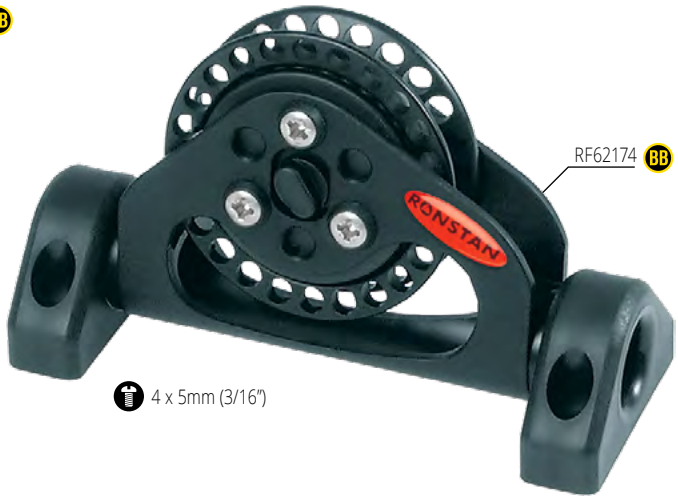
9:1 MAINSHEET SYSTEM

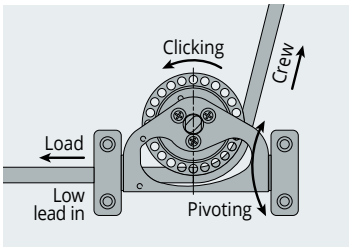
RF150
4.8mm (3/16") pin

- RF56330B - Underhung becket is suitable for terminating the sheet, or attachment of a 'piggyback' block for greater purchase*2.
- Ultra-low profile integrated hollow hub becket on fiddle blocks.
- Swivel shackle head for unlimited block rotation.
- RF56330B when paired with a RF55410 and a RF45209 lashed to the becket with a DSH-6GRY or 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	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
BB Ball Bearing													
RF56151	Cheek block, clockwise, auto and manual, swivel shackle head	55	10	-	250	700	76	2 5/32	3/8	-	550	1540	2.7
RF56151A	Cheek block, anti-clockwise, auto and manual, swivel shackle head	55	10	-	250	700	76	2 5/32	3/8	-	550	1540	2.7
RF56330B	Triple block, underhung becket, adjustable cleat, auto, swivel shackle head	55	10	5	750*2&3	1500	392	2 5/32	3/8	3/16	1650*2&3	3300	13.8
RF56510	Fiddle block*1, becket, auto and manual, swivel shackle head	55 + 35	10	5	250	750	112	2 5/32 + 1 3/8	3/8	3/16	550	1650	3.9
RF56530	Fiddle block*1, becket, adjustable cleat, auto, swivel shackle head	55 + 35	10	5	250*3	750	235	2 5/32 + 1 3/8	3/8	3/16	550*3	1650	8.3

*1 Fiddle sheave has a high load full contact bearing (i.e. not ball bearing). Main sheave has 2-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).





- Effective extruded hole design provides up to 20:1 holding power.
- On/Off switch is fitted to both sides of block so it can be used on port or starboard side. Switch can be removed from one side if required.
- Unique On/Off switch mechanism can be operated under load.
- Low friction ball bearing system.
- Pivoting Lead blocks maintain alignment and keep lines close to the deck.

- Dinghy mainsheet systems - when maximum holding power is required.
- RF62100 mainsheet systems on sportsboats using RF7 mainsheet swivel cleat unit.
- Control line applications on larger yachts.
- Spinnaker sheets on sportsboats and small keelboats (lateral lead blocks).

- Sheave & cheek plates: Anodised aluminium.
- Ball bearings: High compression strength acetal.
- Ratchet pawl: High strength Torlon®.
- Swivel shackle head fitting: Grade 316 stainless steel.

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
BB Ball Bearing													
RF62000	Sheave	60	10	-	-	-	44	2 3/8	3/8	-	-	-	1.6
RF62100	Single block, manual, swivel shackle head	60	10	5	250	1370	135	2 3/8	3/8	3/16	550	3020	5.3
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

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

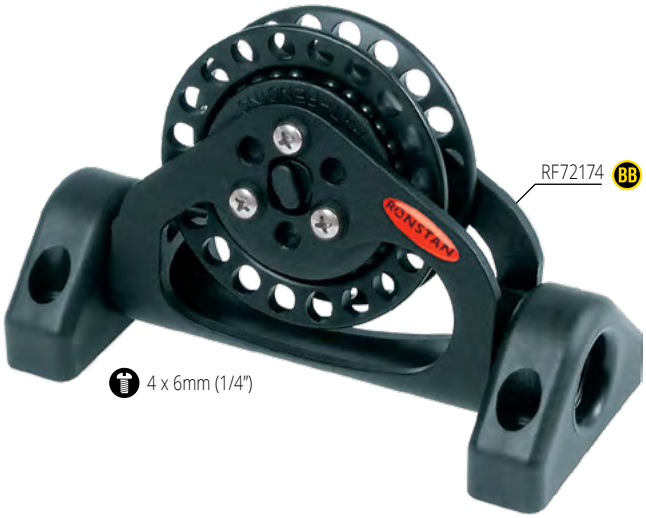
SERIES 75 ULTIMATE RATCHET BLOCK™

RF72100 BB

RF72175 BB

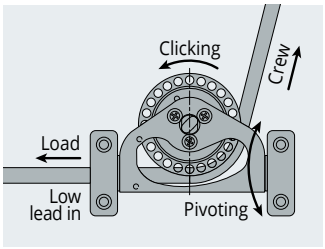
4 x 6mm (1/4")

RF72000 BB



RF72174 BB

4 x 6mm (1/4")

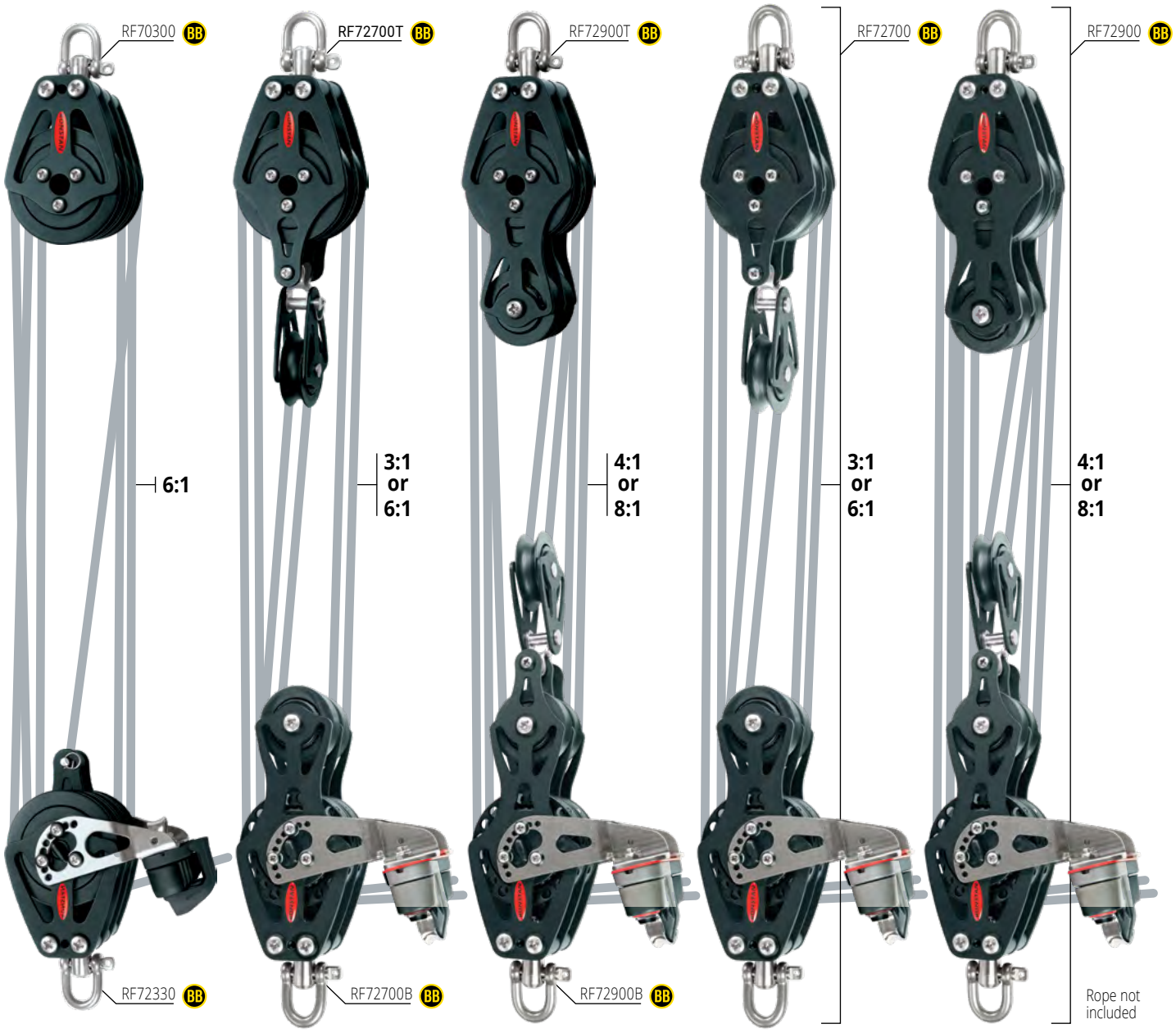


- Effective extruded hole design provides up to 20:1 holding power.
- On/Off switch is fitted to both sides of block so it can be used on port or starboard side. Switch can be removed from one side if required.
- Unique On/Off switch mechanism can be operated under load.
- Low friction ball bearing system.
- High quality forged stainless steel shackle and durable alloy cheek plates.
- Dinghy mainsheet systems - when maximum holding power is required.
- Control line applications on larger yachts.
- Spinnaker sheets on sportsboats and small keelboats (lateral lead blocks).
- Sheave & cheek plates: Anodised aluminium.
- Ball bearings: High compression strength acetal.
- Ratchet pawl: High strength Torlon®.
- Swivel shackle head fitting: Grade 316 stainless steel.

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
BB Ball Bearing													
RF72000	Sheave	75	12	-	-	-	90	3	1/2	-	-	-	3.2
RF72100	Single block, manual, swivel shackle head	75	12	7	420	2000	290	3	1/2	9/32	930	4410	5.7
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

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

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 RF324-2. (Refer to traveller section pages 107 & 111 for more information).

- Two-speed systems: Mainsheets on sportsboats and keelboats to 12m (40ft).

MAXIMUM MAINSAIL AREA

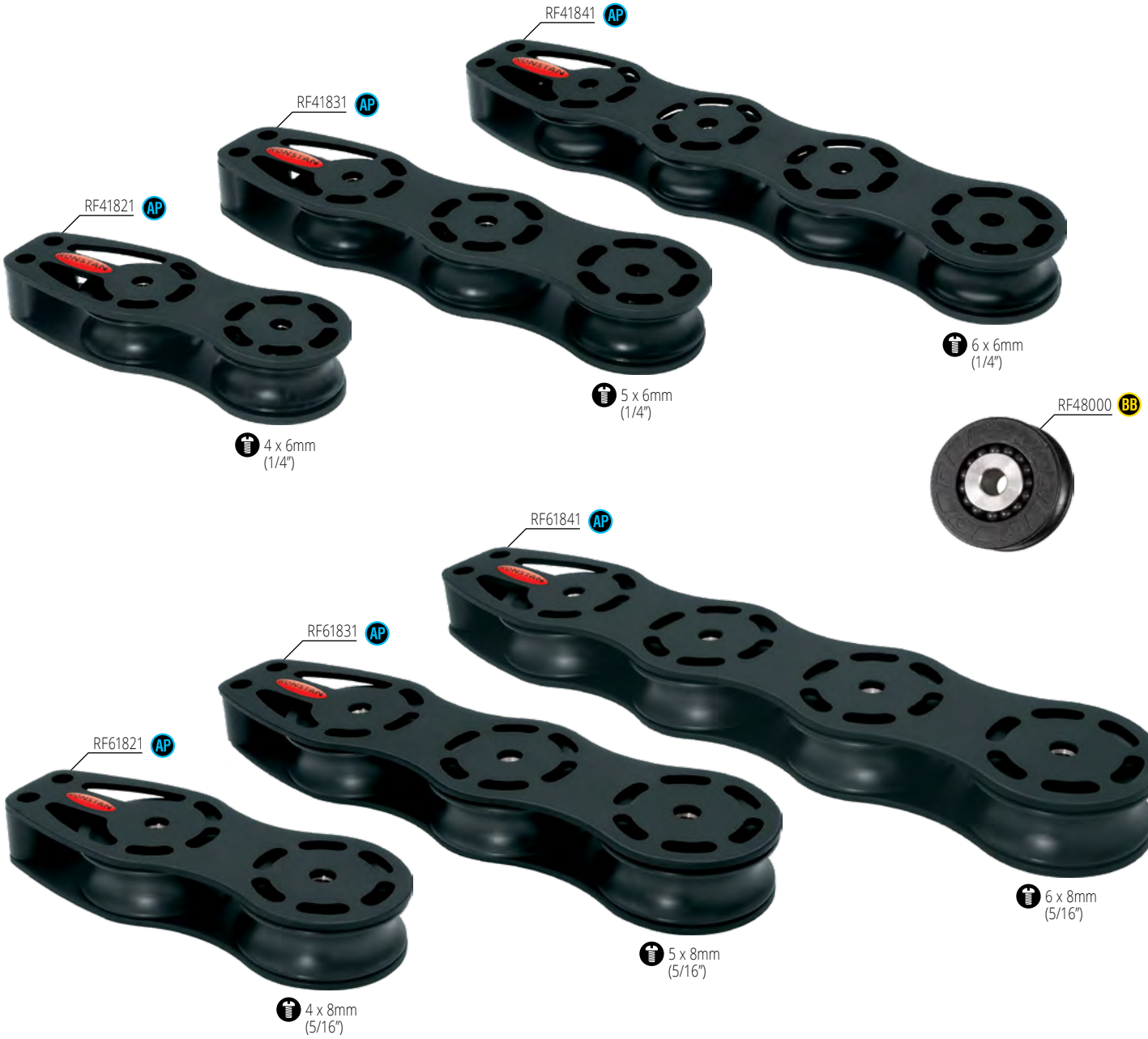
RF72700: End boom = 38m² (409ft²), Mid-boom = 23m² (248ft²)

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

- Ball bearings: acetal.
- Sheaves: UV stabilised acetal (BB), alloy (ratchet).
- Cheeks & ratchet sheaves: Anodised aluminium.
- Ratchet pawl: Torlon®.

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
BB Ball Bearing													
RF70300	BB triple block, universal head	75	10	7	1250	2500	632	3	3/8	9/32	2760	5510	22.3
RF72330	Ratchet triple block, becket, cleat, universal head	75	10	7	685*	2000	790	3	3/8	9/32	1510*	4410	27.9
RF72700	Complete system, BB & ratchet 3:1 coarse, 6:1 fine	75 + 50	10	7	800	1700	1490	3 + 2	3/8	9/32	1760	3750	52.5
RF72700B	Ratchet bottom block for RF72700 two-speed system	75 + 50	10	7	800	1700	950	3 + 2	3/8	9/32	1760	3750	33.5
RF72700T	BB top blocks for RF72700 two-speed system	75 + 50	10	7	800	1700	560	3 + 2	3/8	9/32	1760	3750	19.8
RF72900	Complete system, BB & ratchet 4:1 coarse, 8:1 fine	75 + 50	10	7	1100	2300	1610	3 + 2	3/8	9/32	2430	5070	56.8
RF72900B	Ratchet bottom block for RF72900 two-speed system	75 + 50	10	7	1100	2300	1035	3 + 2	3/8	9/32	2430	5070	36.5
RF72900T	BB top block for RF72900 two-speed system	75 + 50	10	7	1100	2300	575	3 + 2	3/8	9/32	2430	5070	20.3

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



- 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.
- Lightweight design with cheek cut-outs for easy bearing maintenance.
- All sizes can be stacked to create double versions - MWL 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).
- Cheek plates: Anodised aluminium.
- Sheaves: UV stabilised acetal.
- Hubs: Grade 316 stainless steel.

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
Series 40 - AP All Purpose															
RF41821	Double sheave organiser	40	12	116	48.5	500	1000	101	1 9/16	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 9/16	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 9/16	1/2	8 13/32	1 29/32	1100	2200	6.5
RF48000	Sheave BB, 15.5mm (5/8") width	40	10	-	-	400	-	30	1 9/16	3/8	-	-	880	-	1.1
Series 60 - AP All Purpose															
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

WIRE BLOCKS, SHEAVE BOXES & EXIT BLOCKS

RF15711 BB

2 x 4mm (5/32")

RF25711 BB RF25711HL HHL

2 x 4mm (5/32")

RF35711 BB RF35711HL HHL

2 x 5mm (3/16")

RF30721 BB

2 x 5mm (3/16")

RF51712 SP

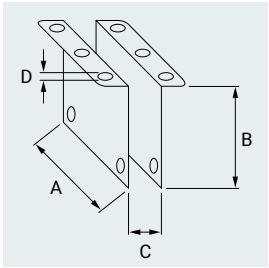
6 x 5mm (3/16")

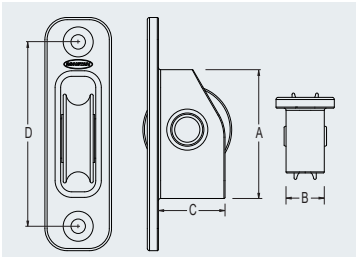
RF41712 SP

6 x 5mm (3/16")

RF31712 SP

6 x 5mm (3/16")





RF45711 BB RF45711HL HHL RF45711N AP

2 x 6mm (1/4")

2 x 6mm (1/4")

2 x 6mm (1/4")

Exit and sheave boxes are ideal for applications where lines need to be led through decks, bulkheads or spars minimising friction and chafing.

- BB & AP sheaves: UV stabilised acetal.
- SP sheaves: Self-lubricating Nylatron®.
- HHL sheaves: Grade 2205 stainless steel.
- Housings: Grade 316 stainless steel.
- Housings: Aluminium alloy, anodised black RF45711, RF45711HL, RF45711N.

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 - SP Special Purpose, Nylatron® Sheave																				
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	750	1500	145	2	1/2	3/16	2 7/16	1 5/8	13/16	3/16	1650	3300	5.1
Exit Blocks - BB Ball Bearing																				
RF15711	15	5	-	27.0	10	13.0	40	120	550	14	9/16	3/16	-	1 1/16	3/8	1/2	1 9/16	260	1210	0.5
RF25711	20	6	-	34.0	12	13.0	48	250	1000	18	3/4	1/4	-	1 5/16	1/2	1/2	1 7/8	550	2200	0.6
RF35711	30	8	-	42.0	14	19.0	58	300	1100	34	1 3/16	5/16	-	1 5/8	9/16	3/4	2 1/4	660	2430	1.2
RF30721	30	8	-	68.0	18	23.0	82	300	750	60	1 3/16	5/16	-	2 11/16	11/16	15/16	3 1/4	660	1650	2.1
RF45711	40	10	-	58.0	22	30.0	83	400/800*	2000	77	1 9/16	3/8	-	2 1/4	7/8	1 3/16	3 1/4	880/1760*	4410	2.7
Exit Blocks - HHL High Grade Stainless Steel Sheave																				
RF25711HL	20	6	-	34.0	12	13.0	48	300	1100	22	3/4	1/4	-	1 5/16	1/2	1/2	1 7/8	660	2430	0.8
RF35711HL	30	8	-	42.0	14	19.0	58	550	1100	56	1 3/16	5/16	-	1 5/8	9/16	3/4	2 1/4	1210	2430	2.0
RF45711HL	40	10	-	58.0	22	30.0	83	1000	2000	123	1 9/16	3/8	-	2 1/4	7/8	1 3/16	3 1/4	2200	4410	4.3
Exit Blocks - AP All Purpose																				
RF45711N	40	8	-	58.0	16	30.0	75	400/800*	1600	65	1 9/16	5/16	-	2 1/4	5/8	1 3/16	2 15/16	880/1760*	3530	2.3

*MWL = 400kg dynamic load, 800kg static load.

UPRIGHT LEAD BLOCKS


RF2416 AP
2 x 6mm (1/4")


AP RF919
2 x 5mm (3/16")


SP RF453
4 x 5mm (3/16")

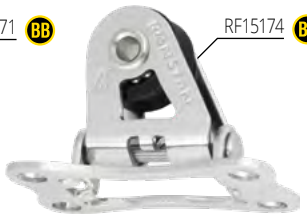

AP RF568
2 x 5mm (3/16")


AP RF569
2 x 5mm (3/16")


AP RF917
2 x 5mm (3/16")


AP RF2379
2 x 4mm (5/32")


RF15171 BB
2 x 4mm (5/32")


RF15174 BB
4 x 4mm (5/32")


RF20171 BB
2 x 4mm (5/32")


RF20174 BB
2 x 4mm (5/32")


RF30171 BB
2 x 5mm (3/16")


RF30174 BB
2 x 5mm (3/16")


RF40171 BB
2 x 5mm (3/16")


RF50171 BB
2 x 6mm (1/4")

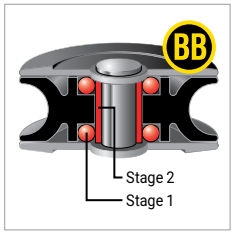

RF55171 BB
2 x 6mm (1/4")


RF41171 AP
2 x 5mm (3/16")


RF51171 AP
2 x 6mm (1/4")

- Upright lead blocks are a low profile solution for leading lines to cleats or jammers.
- BB & AP sheaves: UV stabilised acetal.
- SP sheave: Self-lubricating Nylatron®.
- Cheeks: Grade 316 stainless steel.

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													
RF15171	Upright lead block	15	5	-	120	550	9	5/8	3/16	-	260	1210	0.3
RF15174	Pivoting lead block	15	5	-	120	350	16	5/8	3/16	-	260	770	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
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 block	55	10		500	1000	91	2 5/32	3/8	-	1100	2200	3.2
SP Special Purpose - Nylatron® sheave													
RF453	Upright lead block	22	3	3	160	320	30	7/8	1/8	1/8	350	700	1.1
AP All Purpose													
RF568	Upright lead block, removable sheave	19	5	-	250	500	20	3/4	3/16	-	550	1100	0.7
RF569	Upright lead block	19	8	-	250	500	20	3/4	5/16	-	550	1100	0.7
RF917	Upright lead block	19	8	-	250	500	20	3/4	5/16	-	550	1100	0.7
RF919	Upright lead block	29	6	-	600	1200	50	1 3/32	1/4	-	1320	2640	1.8
RF2379	Upright lead block	13	5	-	250	500	20	19/32	3/16	-	550	1100	0.7
RF2416	Upright lead block, removable sheave	32	5	-	300	800	40	1 1/4	3/16	-	660	1760	1.4
RF41171	Upright lead block	40	10	-	400	1000	59	1 9/16	3/8	-	880	2200	2.1
RF51171	Upright lead block	50	12	-	750	1500	115	2	1/2	-	1650	3310	4.1



2-stage bearing system

Low friction, high load

ILCA® HARDWARE

MAINSHEET BLOCKS

Ronstan's ILCA® mainsheet blocks provide the perfect balance of strength, performance, and reliability. They feature a 2-stage bearing system which minimises friction and gives sailors ultimate control while trimming. The cheeks and housings are lightweight yet strong and made from toughened glass fibre reinforced nylon. All stainless steel fixings and rivets are grade 316 stainless steel. The linked traveller block uses the same 2-stage bearing for the mainsheet sheave while the smaller traveller sheave has a simple AP bearing to maintain enough friction to help keep the block close in the leeward corner when sailing upwind under load. Several concepts of the articulation point of the linked traveller block were tried and tested by ILCA® sailors to ensure the best design was achieved for optimum articulation.

BB **Ball Bearing** versions incorporate our 2-stage bearing system using ball bearings to minimise friction and a secondary full-contact bearing to maintain low friction across the full working load range.

AP **All Purpose** versions are a great choice for durability and a long service life. They feature self-lubricating acetal polymer sheaves running on polished stainless steel races and perform equally well with dynamic loads and static loads.

VANG UNITS

Ronstan's ILCA® lower vang unit is the new benchmark in design and performance. Thoroughly tested on the water by leading ILCA® sailors, the vang unit features a geometry that minimises line chafe and friction and provides a purchase advantage, with easy cleating and releasing to stay in full control when playing the vang from any angle while inboard or hiking. The primary purchase sheave features our high load, low friction, stainless steel HHL sheave. The cleat arm pivot point is close to the clevis pin attachment to minimise stress on the mast attachment point.

RF34118HLK and RF34108HLK are purpose designed ILCA® top vang blocks.

Both the lower vang unit and top vang block cheeks are made of grade 316 stainless steel with a hard wearing black coating.

HHL **High Load** versions are designed specifically for any application where high dynamic or static loads are expected. They feature a high strength grade 2205 stainless steel sheave, hub and bearing race to maintain low friction at very high loads.

Photo © Down Under Sail

- Mainsheet blocks have a 2-stage bearing system with stainless steel hub.
- Fast rolling speed with little friction.
- Traveller block: Main sheave features 2-stage bearing sheave. Small sheave is simple AP bearing.

- BB sheave and balls: High compression strength acetal.
- Rivets: Grade 316 stainless steel.
- Frame/cheeks: Toughened, glass fibre reinforced nylon.
- Hubs: Grade 316 stainless steel.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	WEIGHT oz
BB ILCA® Mainsheet Blocks							
ILCA-SGL	ILCA® mainsheet centre boom block, single	40	8	48	1 9/16	5/16	1.7
ILCA-BKT	ILCA® mainsheet boom block, single becket	40	8	56	1 9/16	5/16	2.0
ILCA-TRV	ILCA® mainsheet traveller block	40 + 25	8	82	1 9/16 + 1	5/16	2.9

VANG


RF34108HLK


RF1062


RF34108HL


RF34118HLK


RF34118HL


ILCA-VNG

Top Vang Block

- Low friction top vang block.
- Narrow and compact design.
- RF34108HLK & RF34118HLK include vang key.

ILCA® Lower Vang Unit

- Low friction ILCA® vang unit.
- HHL sheave for the high load primary sheave.
- Easy cleating and releasing from any angle.
- Pivot point close to clevis pin attachment to minimise stresses on mast fitting.
- Optimised geometry to eliminate line chafe and friction.
- Composite C-Cleat™ and fairlead.

- BB Sheaves: UV stabilised acetal.
- HHL sheave and bearing race: Grade 2205 stainless steel. Ball bearings: Grade 304 stainless steel.
- Cheeks/Frame: Grade 316 stainless steel, hard wearing black coating.
- Vang Key (RF1062): Grade 316 stainless steel.

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
Top Vang Block													
RF34108HL	Top vang block	30	6	5	400	800	42	1 1/8	1/4	3/16	880	1760	1.5
RF34108HLK	Top vang block with vang key	30	6	5	400	800	51	1 1/8	1/4	3/16	880	1760	1.8
RF34118HL	Top vang block with becket	30	6	5	400	800	50	1 1/8	1/4	3/16	880	1760	1.8
RF34118HLK	Top vang block with becket and vang key	30	6	5	400	800	59	1 1/8	1/4	3/16	880	1760	2.0
ILCA® Lower Vang Unit													
ILCA-VNG	ILCA® lower vang unit	20 + 15	5	6.4	-	-	177	3/4 + 5/8	3/16	1/4	-	-	6.2
Accessories													
RF1062	Vang key, 6.4mm (1/4") diam.	-	-	-	-	-	9	-	-	-	-	-	0.3


RF8080BLU


RF8080GRY


RF8080R

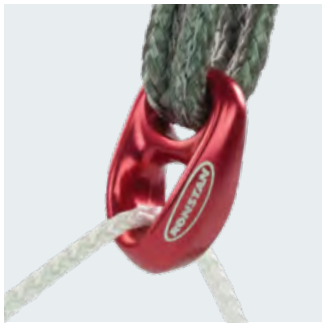

RF8081BLU


RF8081R


Webbing


Pigtail


Lashing


Dyneema® Link

ATTACHMENT OPTIONS

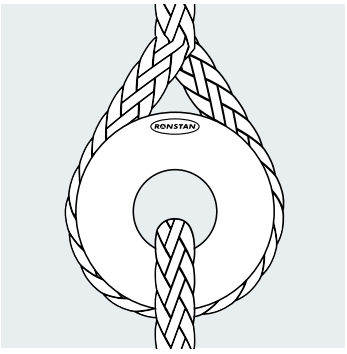
- Ultra-lightweight.
- Ultra-compact.
- Durable.
- Colour coded.
- High load capacity.
- Suits webbing or lashing.
- Versatile.
- Vangs.
- Tweakers.
- Barberhaulers.
- Sail cover zipper lines.
- Lazy jacks.
- Cunninghams.
- Kite bridles.
- Leech lines.
- Trapeze elastics.
- Various control lines.
- Anodised aluminium.

For further technical details see the SUPPORT tab at ***www.ronstan.com.***

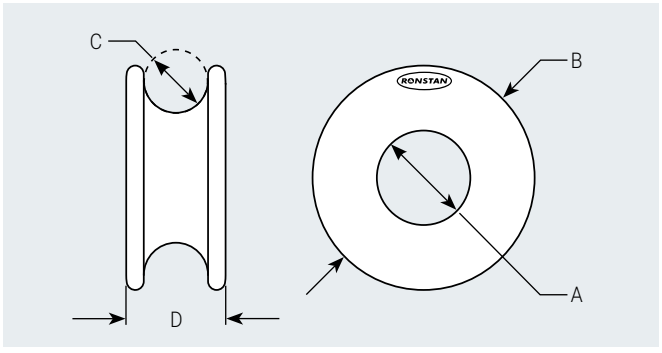
PRODUCT No.	COLOUR	ROPE SIZE mm	LENGTH mm	WIDTH mm	THICKNESS mm	MAX. ATTACHMENT mm	M.W.L.* kg	B.L.* kg	WEIGHT g	ROPE SIZE in.	LENGTH in.	WIDTH in.	THICKNESS in.	MAX. ATTACHMENT in.	M.W.L.* lb	B.L.* lb	WEIGHT oz
Shocks™																	
RF8080BLU RF8080GRY RF8080R	Blue Grey Red	1.5 - 5.0	22.9	14.9	8.5	8mm wide. 5mm diam.	175	350	2.5	1/16 - 3/16	7/8	9/16	5/16	5/16 wide. 3/16 diam.	385	770	0.1
Shocks™ XL																	
RF8081BLU RF8081R	Blue Red	3.0 - 10.0	36	24.8	14.5	10mm wide. 10mm diam.	500	1000	12	1/8 - 3/8	1 7/16	1	9/16	3/8 wide. 3/8 diam.	1100	2200	0.4

* Both the M.W.L. and B.L. are dependent on the strength of the attachment used.

RINGS



TYPICAL SETUP



- Compact, lightweight and low friction.
- Large secure shoulder for rope lashing.
- Simple and reliable - no moving parts.
- Low maintenance.
- Deflecting lead lines.
- Static load applications.
- Barber haulers, lazyjacks, backstays, cascading vangs.
- Hard anodised aluminium.

PRODUCT No.	A mm	B mm	C mm	D mm	M.W.L. kg	WEIGHT g	A in	B in	C in	D in	M.W.L. lb	WEIGHT oz
Rings												
RF8090-05	5.0	15.0	4.5	7.5	500	2	3/16	19/32	3/16	9/32	1100	0.1
RF8090-08	8.0	22.0	7.0	11.0	1000	4	5/16	7/8	9/32	7/16	2200	0.1
RF8090-11	11.0	29.0	8.0	13.0	2000	8	7/16	1 5/32	5/16	1/2	4410	0.3
RF8090-16	16.0	38.0	11.0	17.0	3500	17	5/8	1 1/2	7/16	21/32	7720	0.6
RF8090-21	21.0	47.0	14.5	22.0	5000	33	13/16	1 27/32	9/16	7/8	11020	1.2
RF8090-26	26.0	57.0	16.0	25.0	7000	57	1 1/32	2 1/4	5/8	1	15430	2.0

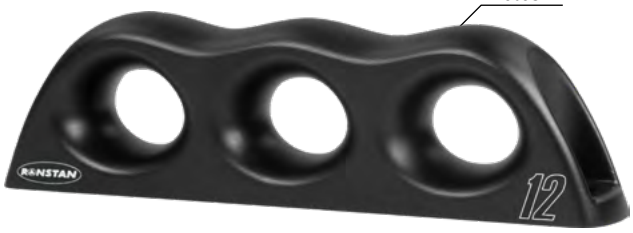
RF8091-12

2 x 6mm (1/4")

RF8092-12

2 x 6mm (1/4")

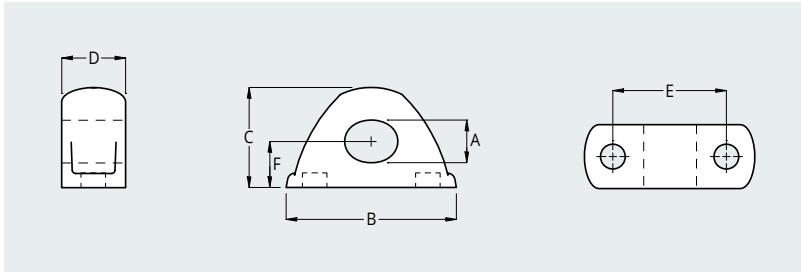
RF8093-12



2 x 6mm (1/4")

RF8091-16

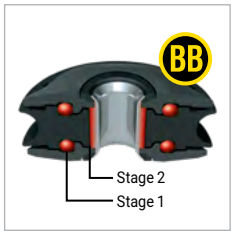
2 x 8mm (5/16")



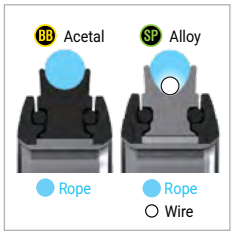
- Compact, lightweight and low friction.
- Elliptical hole design tolerates alignment variations, makes threading lines easy.
- Simple and reliable design.
- Low maintenance.
- Deflection of sheets, halyards and control lines.
- Hard anodised aluminium.

PRODUCT No.	A mm	B mm	C mm	D mm	E mm	F mm	M.W.L. kg	WEIGHT g	A in	B in	C in	D in	E in	F in	M.W.L. lb	WEIGHT oz
Fairleads																
RF8091-12	12	48	28	18	32	12	1000*1	26	1/2	1 7/8	1 1/8	23/32	1 1/4	1/2	2200*1	0.9
RF8091-16	16	60	32	22	39	12	1750*2	38	5/8	2 3/8	1 1/4	7/8	1 17/32	1/2	3850*2	1.3
RF8092-12	12	76	28	18	60	12	1000*1	49	1/2	3	1 1/8	23/32	2 3/8	1/2	2200*1	1.7
RF8093-12	12	104	28	18	88	12	1000*1	75	1/2	4 3/32	1 1/8	23/32	3 15/32	1/2	2200*1	2.7

*1 MWL assumes evenly distributed upward pull on 2 x M6 fasteners.
*2 MWL assumes evenly distributed upward pull on 2 x M8 fasteners.

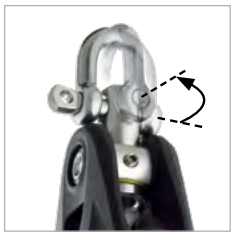


2-stage bearing system



Sheave options


Aluminium alloy cheek plates


Universal head


Removable becket pins


Fully articulated stand-up

CORE BLOCKS™

USE THEM ANYWHERE

A balanced design approach incorporating functionality, performance and style makes our Core Blocks™ the right choice for performance cruising or racing applications. 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.

BB Dynamic and high static load performance

Core Blocks™ incorporate 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.

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.

Universal head

The head assembly incorporates a brass bearing washer to provide smooth 360° rotation of the post and shackle. A grub screw arrangement allows the head to be locked at 0° or 90°. Shackles are high quality forged grade 316 stainless steel.

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. The hollow hub can be used as a becket take-off or tie-up point.

Aluminium sheave option

SP models feature an aluminium sheave which has a deep groove profile ideal for use with rope or wire.

Suit 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.

Bearing system


Lashing Orbit Block™


Universal head


Stand-up block

ORBIT BLOCKS™

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:

- High 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.

BB 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 cheeks, sculptured from solid high grade alloy, and the one-piece sheave with its captive ball bearings. The Orbit sheave has captive acetal or Torlon® ball bearings for side thrust loads, maximising the available bearing surface for its Torlon® needle rollers to achieve a high strength-to-weight ratio.

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.

Halyard blocks

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

Strop and lashing blocks

These lightweight alternatives to traditional blocks are used where a rope lashing attachment is passed through the hub of the sheave to provide a failsafe feature. Lashing blocks have incredibly high breaking loads – up to 40,000kg. Their versatility makes them suitable for many applications, with four lashing guide holes to allow for multiple attachment options including single, parallel and split lashings. The central hole can also be used for a becket in 3:1 purchase systems. Every detail has been carefully executed to achieve the best optimisation of performance, size, weight and ultimate strength.

Foot blocks

The bottom plate incorporating the 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.

Stand-up blocks

A number of stand-up solutions are available for Orbit Blocks™. These include assemblies incorporating padeye and rubber boot and stand-up spring kits.


RF44100 BB


RF44188 BB

13mm (1/2")
inside width


RF44140 BB

2 x 6mm (1/4")


RF6170


RF2429-02

2 x 6mm (1/4")*

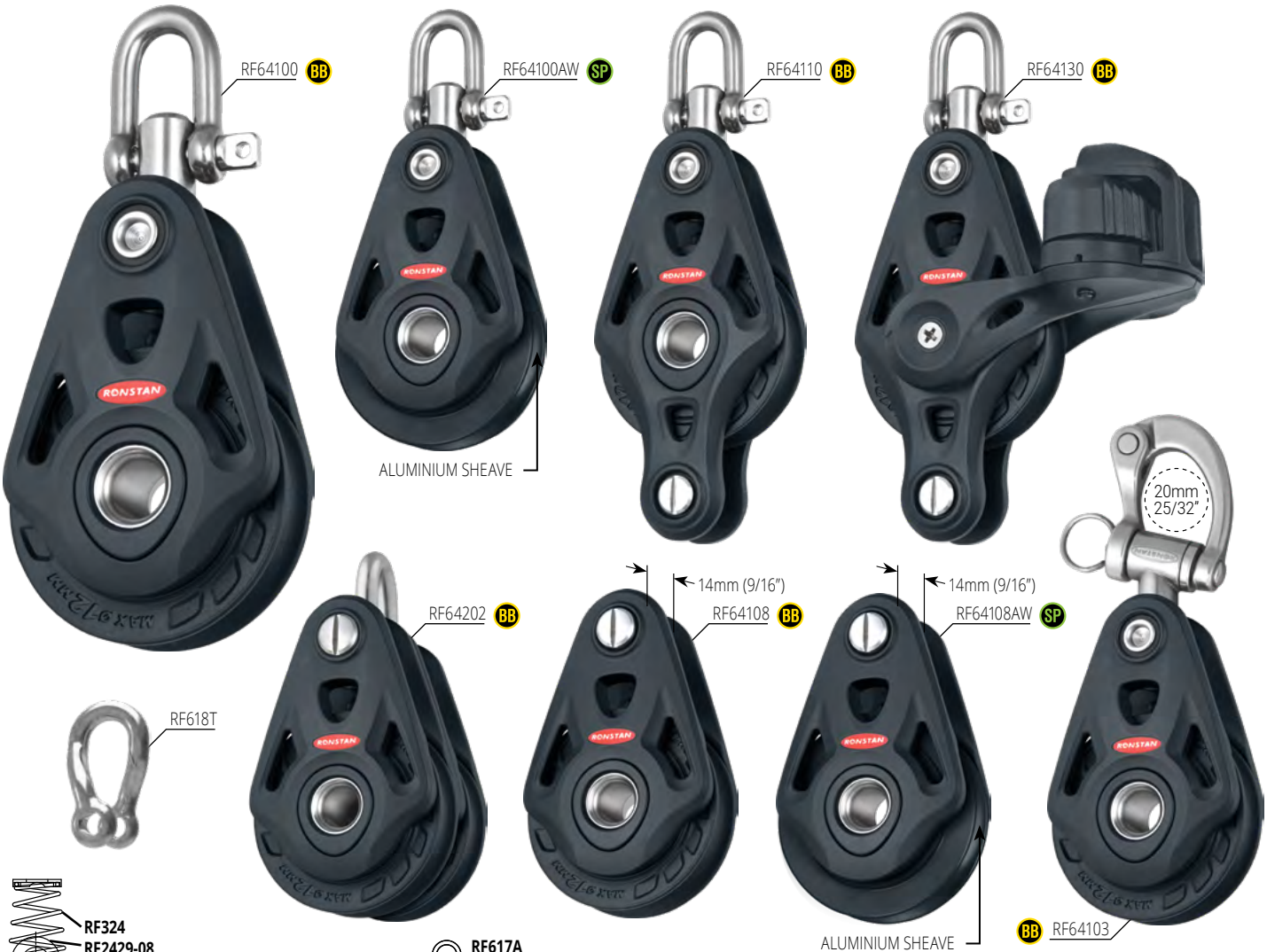
RF150
4.8mm (3/16") pin

- 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") diameter 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: UV stabilised acetal.
- Cheek body: Aluminium alloy.
- Ball bearings: High compression strength acetal.
- Shackle, head post & hub: Grade 316 stainless steel.
- Padeye: Grade 15-5PH stainless steel.
- Fork pin: Grade 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
BB Ball Bearing													
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	5	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													
RF2429-02	Padeye, 34mm (1 5/16") diameter (see page 207)	-	-	-	750	1500*	26	-	-	-	1650	3300*	0.9
RF6170	Snap shackle head adapter	-	-	5	500	1000	49	-	-	3/16	1100	2200	1.7

* A4-80 DIN7991 grade fasteners recommended to achieve BL

SERIES 60 CORE



RF324
RF2429-08
Suits single & fiddle shackle head blocks

RF617A
6mm (1/4") pin suits single & fiddle shackle head blocks

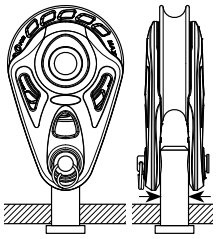
- RF64140 stand-up block features a strong precision cast padeye base, and has a swivel head post to allow full articulation and rotation.
- RF64110 & RF64130 removable M8 (5/16") becket pin suits pre-spliced lines.
- RF64130 cleating angle is adjustable and is fitted with a high performance C-Cleat™ and fairlead for secure and easy cleating.
- 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 11m (36ft).
- Various control line applications on larger yachts.
- BB sheaves: UV stabilised acetal.
- SP sheaves: Anodised aluminium.
- Cheek plates & cleat arms: Aluminium alloy.
- Ball bearings: High compression strength acetal.

- Shackle, post & hub: Grade 316 stainless steel.
- Padeye & snap shackle: Grade 15-5PH stainless steel.
- Pins: Grade 2205 stainless steel (RF64108, RF64108A, RF64202).
- 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
BB Ball Bearing															
RF618T	Twist shackle body, suits RF64202 & RF74202, for 90° attachment	-	-	-	-	-	-	40	-	-	-	-	-	-	1.4
RF64100	Single block, universal head	60	12	-	6	1000	2000	235	2 3/8	1/2	-	1/4	2200	4410	8.3
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*1	2000*1	186	2 3/8	1/2	-	5/16	2200*1	4410*1	6.6
RF64110	Single block, becket, universal head	60	12	-	6	1000	2000	275	2 3/8	1/2	-	1/4	2200	4410	9.7
RF64130	Single block, becket, cleat, universal head	60	12	-	6	350*2	2000	450	2 3/8	1/2	-	1/4	770*2	4410	15.9
RF64202	Double block, non-swivel shackle head	60	12	-	-	1000	2000	390	2 3/8	1/2	-	-	2200	4410	13.8
SP Special Purpose - Aluminium Sheave															
RF64100AW	Single block, rope/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
RF64108AW	Halyard block, rope/wire sheave, screw pin, roller head	60	12	5	8	1000*1	2000*1	212	2 3/8	1/2	3/16	5/16	2200*1	4410*1	7.5

*1 Full block rated load can only be achieved with uniformly distributed load across full length of screw pin. i.e. 14mm (9/16") diameter mast collar post or 14mm (9/16") wide mast collar plate/tang.
*2 MWL based on maximum allowable line load through cleat of 175kg (385lb), 2:1 purchase.



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

2 x 8mm (5/16")

2 x 8mm (5/16")

4 x 6mm (1/4")

RF617A
6mm (1/4") pin suits single & fiddle shackle head blocks

- 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 with rotation and side-to-side articulation.
- RF64108A mast base block has a removable 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 key.
- BB sheaves: UV stabilised acetal.
- Cheek plates: Aluminium alloy.
- Ball bearings: High compression strength acetal.
- Shackle, post & hub: Grade 316 stainless steel.
- Pins: Grade 2205 stainless steel (RF64108, RF64108A, RF64202).
- Snap shackle & pad eye: Grade 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
BB Ball Bearing															
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, universal head	60 + 30	12	-	6	1000	2000	355	2 3/8+ 1 3/16	1/2	-	1/4	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, universal head	60 + 30	12	-	6	525*3	2000	490	2 3/8+ 1 3/16	1/2	-	1/4	1160*3	4410	17.3
RF64523	Fiddle block, cleat, snap shackle head	60 + 30	12	-	-	525*3	2000	540	2 3/8+ 1 3/16	1/2	-	-	1160*3	4410	19.0
RF64140	Stand-up block, swivelling	60	12	-	-	1000	2000	372	2 3/8	1/2	-	-	2200	4410	13.2
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

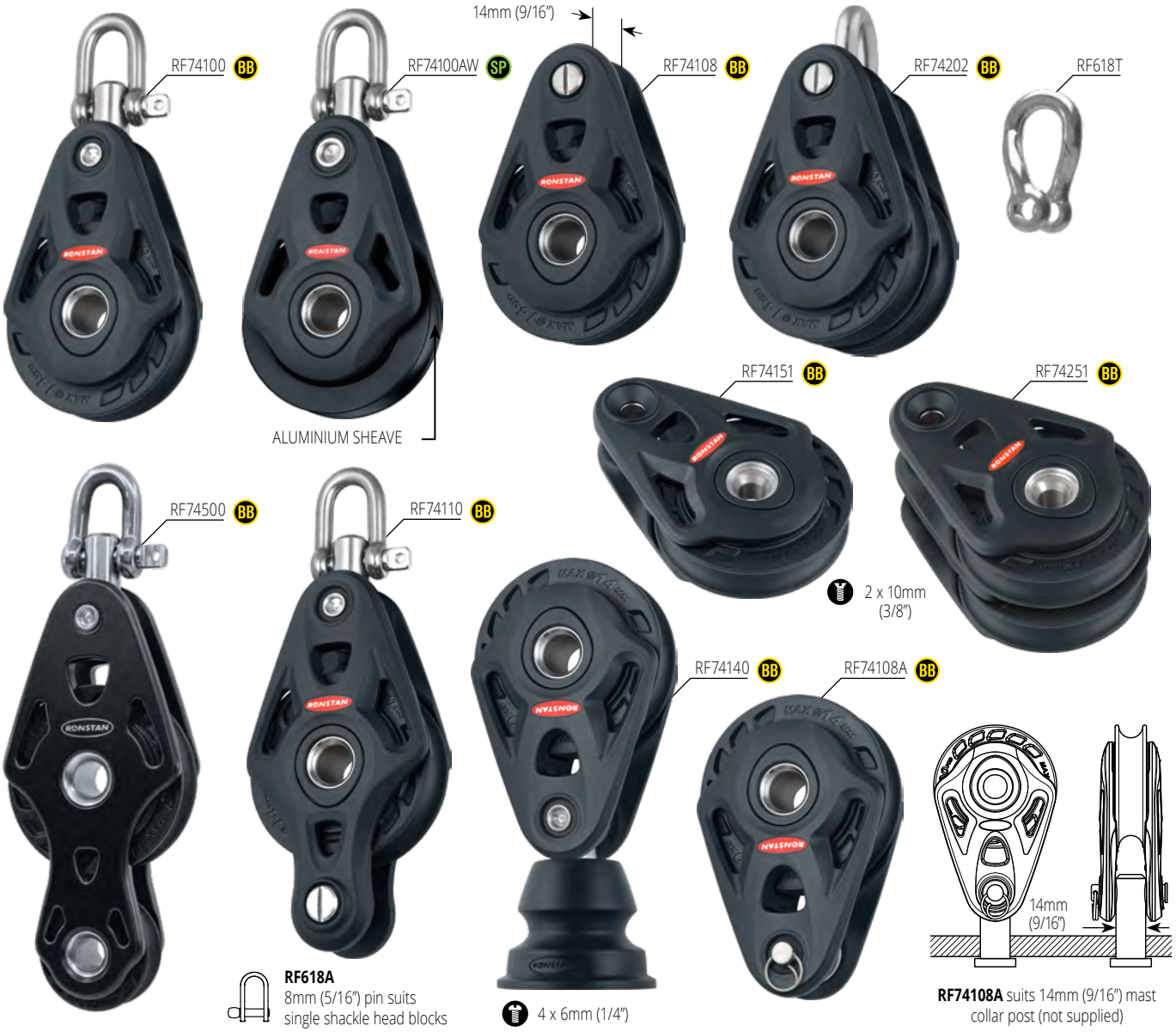
*1 Full block rated load can only be achieved with uniformly distributed load across full length of clevis pin. i.e. 14mm (9/16") diameter mast collar post or 14mm (9/16") wide mast collar plate/tang.
*2 Total block load. Maximum load on top sheave not to exceed 50% of total block load.
*3 MWL based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

- RF69110 removable becket pin allows lines to be spliced prior to fitting.
- Primary mainsheet, halyard and spinnaker systems on boats to 12m (40ft).
- Secondary mainsheet and 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.
- Cheek plates: Fully machined aluminium alloy.
- Sheave: Aluminium alloy.
- Needle rollers: Torlon®.
- Ball bearings: High compression strength acetal (RF69109A: Torlon®).
- Forged shackle: Grade 17-4PH stainless steel.
- Head post: Grade 316 stainless steel.

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
BB Ball Bearing													
RF69000	Sheave with balls & rollers	60	12	-	-	-	65	2 3/8	1/2	-	-	-	2.3
RF69100	Single block, universal head	60	12	8	1800	4000	260	2 3/8	1/2	5/16	3970	8820	9.2
RF69108	Halyard block, screw pin head	60	12	9*2	1800	4000	160	2 3/8	1/2	3/8*2	3970	8820	5.6
RF69109	Strop block	60	12	-	1800	4000	148	2 3/8	1/2	-	3970	8820	5.2
RF69109A	Lashing block	60	12*1	-	2400	6000	160	2 3/8	1/2*1	-	5290	13220	5.7
RF69110	Single block, becket, universal head	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	4000*3	398	2 3/8	1/2	-	3970	8820*3	14.0
RF69151	Foot block, single	60	12	-	1800	4000	190	2 3/8	1/2	-	3970	8820	6.7
RF69200	Double block, universal head	60	12	8	2250	4500	436	2 3/8	1/2	5/16	4960	9920	15.4
RF69209	Strop block, double	60	12	-	2250	4500	281	2 3/8	1/2	-	4960	9920	9.9

*1 10mm (3/8") is the maximum rope size if the hollow hub is to be used as a becket take-off.
*2 Bushed to 12mm (1/2") diameter.
*3 A4-80 DIN7991 grade fasteners recommended to achieve BL

SERIES 75 CORE



- Universal head can be fixed at 0° or 90° or left free to swivel, by using a 2.5mm hex key.
- RF74108 Halyard block has a removable 8mm (5/16") screw 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.

- Mainsheet, spinnaker sheet, vang, halyard and backstay applications on boats to 14m (46ft).
- General applications on larger yachts.
- Cheek plates: Aluminium alloy.
- Sheave: UV stabilised acetal, or anodised aluminium (SP models).

- Ball bearings: High compression strength acetal.
- Shackle, post & hub: Grade 316 stainless steel.
- Pins: Grade 2205 stainless steel (RF74108, RF74108A, RF74202).
- 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
BB Ball Bearing															
RF618T	Twist shackle body, suits RF64202 & RF74202, for 90° attachment	-	-	-	-	-	-	40	-	-	-	-	-	-	1.4
RF74100	Single block, universal head	75	14	-	8	1500	3000	354	3	9/16	-	5/16	3300	6600	12.5
RF74108	Halyard block, screw pin with 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
RF74110	Single block, becket, universal 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
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
RF74500	Fiddle block, universal head	75+45	14	-	8	1500	3000	478	3+1 3/4	9/16	-	5/16	3300	6600	16.9
SP Special Purpose - Aluminium Sheave															
RF74100AW	Single block, rope/wire sheave, universal head	75	14	8	8	1500	3000	432	3	9/16	5/16	5/16	3300	6600	15.3

*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.

- RF79110 removable becket pin allows lines to be spliced prior to fitting.
- 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.
- Cheek plates: Fully machined aluminium alloy.
- Sheave: Aluminium alloy.
- Needle rollers: Torlon®.
- Ball bearings: High compression strength acetal. (RF79109A: Torlon®)
- Forged shackle & head post: Grade 17-4PH stainless steel.

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
BB Ball Bearing													
RF79000	Sheave with balls & rollers	75	14	-	-	-	95	3	9/16	-	-	-	3.4
RF79100	Single block, universal head	75	14	8	2200	4500	340	3	9/16	5/16	4850	9920	12.0
RF79108	Halyard block, screw pin head	75	14	10*1	2200	4500	251	3	9/16	3/8*1	4850	9920	8.9
RF79109	Strop block	75	14	-	2200	4500	226	3	9/16	-	4850	9920	8.0
RF79109A	Lashing block	80	14	-	3100	7750	310	3 1/8	9/16	-	6830	17080	10.9
RF79110	Single block, becket , universal head	75	14	8	2200	4500	354	3	9/16	5/16	4850	9920	12.5
RF79140	Stand-up block, 90 degree	75	14	-	2000	4000*2	480	3	9/16	-	4400	8820*2	16.9
RF79151	Foot block, single	75	14	-	2200	4500	269	3	9/16	-	4850	9920	9.5
RF79200	Double block, universal head	75	14	8	3250	6500	575	3	9/16	5/16	7170	14330	20.3
RF79209	Strop block, double	75	14	-	3250	6500	414	3	9/16	-	7170	14330	14.6

*1 Bushed to 14mm (9/16") diameter.
*2 A4-80 DIN7991 grade fasteners recommended to achieve BL

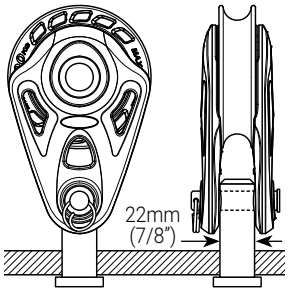
RF104100 BB

RF104200 BB

RF104110 BB

RF104151 BB

2 x 12mm (7/16")



RF104108A suits 22mm (7/8") mast collar post (not supplied)

RF104108A BB

22mm (7/8")

RF104140 BB

4 x 8mm (5/16")*2

- Universal head can be fixed at 0° or 90° or left free to swivel, by using a 2.5mm hex key.
- RF104108A halyard block has removable 12mm (1/2") clevis pin to suit a 22mm (7/8") wide mast collar post.
- Mainsheet, spinnaker sheet, vang, halyard and backstay applications on boats to 16m (53ft).
- General applications on larger yachts.
- Cheek plates: Aluminium alloy.
- Sheaves: Glass fibre reinforced nylon.
- Bearings: High compression strength, self-lubricating acetal.
- Head post: Grade 2205 stainless steel.
- Shackles: Grade 17-4PH stainless steel.
- Padeye: Grade 15-5PH stainless steel.
- Other fixtures: Grade 316 stainless steel.

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
BB Ball Bearing													
RF104100	Single block, universal head	100	18	10	3250	7500	900	4	3/4	3/8	7150	16500	31.8
RF104108A	Halyard block, clevis pin head	100	18	12	3250*1	7500*1	614	4	3/4	1/2	7150*1	16500*1	21.7
RF104110	Single block, becket, universal head	100	18	10	3250	7500	1098	4	3/4	3/8	7150	16500	38.8
RF104140	Stand-up block, swivelling	100	18	-	3000	6000*2	1138	4	3/4	-	6600	13200*2	40.2
RF104151	Foot block, single	100	18	-	3250	7500	700	4	3/4	-	7150	16500	24.7
RF104200	Double block, universal head	100	18	10	3250	7500	1400	4	3/4	3/8	7150	16500	49.5

*1 Full block rated load can only be achieved with uniformly distributed load across full length of clevis pin. i.e. 22mm (7/8") diameter mast collar post or 22mm (7/8") wide mast collar plate/tang.
*2 A4-80 DIN7991 grade fasteners recommended to achieve BL

SERIES 100 ORBIT

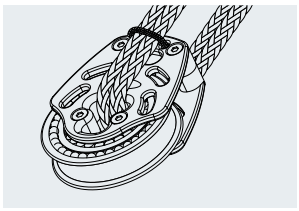

RF109100 BB


RF109110 BB


RF109200 BB

RF109108 BB


RF109000 BB




RF109151 BB

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

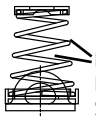

RF109140 BB

4 x 6mm (1/4")*2


RF109109 BB


RF109209 BB

Suit use with RF2437-12 removable lashing padeye. See page 209 for details.


RF328
RF2429-10*2
Suits RF109100 & RF109110

- RF109110 removable becket pin allows lines to be spliced prior to fitting.
- 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.
- Cheek plates: Fully machined aluminium alloy.
- Sheave: Aluminium alloy.
- Needle rollers: Torlon®.
- Ball bearings: High compression strength acetal.
- Forged shackle & head post: Grade 17-4PH stainless steel.

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
BB Ball Bearing													
RF109000	Sheave with balls & rollers	100	14	-	-	-	180	4	9/16	-	-	-	6.3
RF109100	Single block, universal head	100	14	8	3000	6500	492	4	9/16	5/16	6610	14330	17.4
RF109108	Halyard block, screw pin head	100	14	12*1	3000	6500	391	4	9/16	1/2*1	6610	14330	13.8
RF109109	Strop block	100	14	-	3000	6500	361	4	9/16	-	6610	14330	12.8
RF109110	Single block, becket , universal head	100	14	8	3000	6500	530	4	9/16	5/16	6610	14330	18.7
RF109140	Stand-up block, 90 degree	100	14	-	2000	4000*2	600	4	9/16	-	4410	8820*2	21.2
RF109151	Foot block, single	100	14	-	3000	6500	447	4	9/16	-	6610	14330	15.8
RF109200	Double block, universal head	100	14	10	4250	8500	1030	4	9/16	13/32	9370	18740	36.3
RF109209	Strop block, double	100	14	-	4250	8500	732	4	9/16	-	9370	18740	25.9

*1 Bushed to 16mm (5/8") diameter.
*2 A4-80 DIN7991 grade fasteners recommended to achieve BL

SERIES 100A ORBIT

© Contest Yachts

Suits use with RF2437-16 removable lashing padeye. See page 209 for details.

- Exceptionally high strength-to-weight ratio.
- Captive ball bearings for side thrust loads.
- Head posts of swivel blocks can be locked at 0° or 90°.
- RF109110A removable becket pin allows lines to be spliced prior to fitting.

- Primary mainsheet, halyard and spinnaker systems on boats to 18m (60ft).
- Secondary mainsheet, vang blocks, spinnaker systems and halyards on boats to 22m (72ft).
- Running backstay systems on boats to 16m (53ft).
- General control line and lead block applications on larger yachts.

- Cheek plates: Fully machined aluminium alloy.
- Sheave: Aluminium alloy.
- Needle rollers: Torlon®.
- Ball bearings: High compression strength acetal. (RF109109A: Torlon®)
- Forged shackle and head post: Grade 17-4PH stainless steel.

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
BB Ball Bearing													
RF109100A	Single block, universal head	100	16	10.0	4250	8500	720	4	5/8	3/8	9350	18700	25.4
RF109109A	Lashing block	100	16	-	5500	13750	450	4	5/8	-	12120	30310	15.9
RF109110A	Single block, becket, universal head	100	16	10.0	4250	8500	790	4	5/8	3/8	9350	18700	27.9

SERIES 125 ORBIT

© Contest Yachts

RF129100A BB

RF129110A BB

RF129109A BB

Suits use with RF2437-16 removable lashing padeye. See page 209 for details.

RF129151A BB

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

- Exceptionally high strength-to-weight ratio.
- Foot block cover plate can be removed for service access without removing fixing bolts.
- Head posts of swivel blocks can be locked at 0° or 90°.
- RF129110A removable becket pin allows lines to be spliced prior to fitting.

- Primary mainsheet blocks on boats to 21m (69ft).
- Secondary mainsheet blocks, spinnaker systems and halyards on boats to 25m (82ft).
- Running backstay systems on boats to 18m (60ft).

- Cheek plates: Fully machined aluminium alloy.
- Sheave: Aluminium alloy.
- Needle rollers: Torlon®.
- Ball bearings: High compression strength acetal. (RF129109A: Torlon®)
- Forged shackle and head post: Grade 17-4PH stainless steel.

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
BB Ball Bearing													
RF129100A	Single block, universal head	125	18	12.7	6000	12000	1240	5	3/4	1/2	13200	26400	43.7
RF129109A	Lashing block	125	18	-	6500	19500	930	5	3/4	-	14330	42990	32.8
RF129110A	Single block, becket, universal head	125	18	12.7	6000	12000	1330	5	3/4	1/2	13200	26400	46.9
RF129151A	Foot block, single	125	18	-	5000	10000	750	5	3/4	-	11020	22050	26.5

SERIES 150 ORBIT

RF159100A BB

RF159110A BB

RF159109A BB

Suits use with RF2437-16 removable lashing padeye. See page 209 for details.

RF159151 BB

1 x 10mm (5/16")
2 x 12mm (7/16")

- Exceptionally high strength-to-weight ratio.
- Foot block cover plate can be removed for service access without removing fixing bolts.
- Head posts of swivel blocks can be locked at 0° or 90°.
- RF159110A removable becket pin allows lines to be spliced prior to fitting.

- Mainsheet and genoa sheet systems on boats to 28m (92ft).
- Spinnaker systems and halyards on boats to 31m (102ft).
- Running backstay systems on boats to 28m (92ft).

- Cheek plates: Fully machined aluminium alloy.
- Sheave: Aluminium alloy.
- Needle rollers: Torlon®.
- Ball bearings: High compression strength acetal. (RF159109A: Torlon®)
- Forged shackle and head post: Grade 17-4PH stainless steel.

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
BB Ball Bearing													
RF159100A	Single block, universal head	150	24	16.0	9000	18000	2310	6	1	5/8	19840	39600	81.5
RF159109A	Lashing block	150	24	-	9000	27000	1570	6	1	-	19840	59520	55.4
RF159110A	Single block, becket, universal head	150	24	16.0	9000	18000	2530	6	1	5/8	19840	39600	89.2
RF159151	Foot block, single	150	20	-	6500	14200	1285	6	3/4	-	14330	31310	45.3

KEELBOAT BLOCKS

SERIES 180 ORBIT

RF189109A BB

RF189151 BB

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

RF189251 BB

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

- Exceptionally high strength-to-weight ratio.
- Captive ball bearings for side thrust loads.
- 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.
- Foot block cover plate can be removed for service access without removing fixing bolts.
- Mainsheet and genoa sheet systems on boats to 31m (102ft).
- Spinnaker systems, halyards on boats to 33m (108ft).
- Running backstay systems on boats to 32m (105ft).
- Cheek plates: Fully machined aluminium alloy.
- Sheave: Aluminium alloy.
- Needle rollers: Torlon®.
- Ball bearings: Torlon®.

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
BB Ball Bearing													
RF189109A	Lashing block, single	180	26	-	12000	30000	2450	7	1	-	26400	66000	89.9
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 200 ORBIT

- Exceptionally high strength-to-weight ratio.
- Captive ball bearings for side thrust loads.
- 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.
- Central hole can be used as a becket take-off/dead end in a 3:1 purchase system.
- Mainsheet and genoa sheet systems on boats larger than 34m (111ft).
- Spinnaker systems and halyards on boats larger than 33m (108ft).
- Running backstay systems on boats larger than 34m (111ft).
- Cheek plates: Fully machined aluminium alloy.
- Sheave: Aluminium alloy.
- Needle rollers: Torlon®.
- Ball bearings: Torlon®.

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
BB Ball Bearing													
RF209109A	Lashing block, single	200	28	-	15000	40000	3430	7 7/8	1 1/8	-	33000	88000	123.0

UPRIGHT & PIVOTING LOW LEAD BLOCKS

RF68171 BB

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

RF61171 AP

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

RF61176 AP

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

RF68174 BB

4 x 6mm (1/4")

RF78171 BB

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

RF71171 AP

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

RF78174 BB

4 x 6mm (1/4")

RF108171 BB

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

RF128171 BB

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

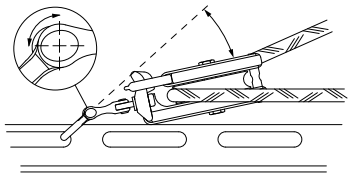
RF158171 BB

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

- High static and dynamic load capacity - BB models have Torlon® needle rollers for axial loads, and acetal ball bearings for side thrust loads.
- Upright lead blocks keep lines close to the deck.
- Cheek cut-outs for easy bearing cleaning and maintenance.
- 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
BB 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

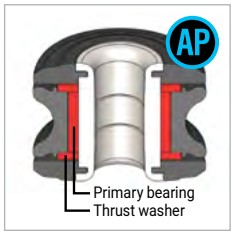
SNATCH BLOCKS



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

- Convenient solution for temporary leads and line deflection.
- Easily operated secure latch mechanism.
- Soft resilient cheeks reduce clatter and protect gelcoat and painted surfaces.
- Snap shackle head allows block to swivel through 360°.
- Blocks with trunnion snap shackles allow additional articulation from side-to-side.
- Attachment point provided for a shock cord suspension line.
- Temporary leads for sheets and reefing on boats up to 12m (40ft).
- Spare or replacement block for general use on larger boats depending on line angle and load.
- Temporary outboard sheet lead for headsail trimming.
- Snap shackles: Investment cast grade 15-5PH stainless steel.
- RF6730, RF6741: Grade 316 stainless steel frame, load strap and needle roller bearings; hard coat 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; UV stabilised acetal sheaves; soft thermoplastic rubber 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											
RF6710	Snatch block, swivel snap shackle head	51	12	425	850	250	2	1/2	935	1870	8.8
RF6711	Snatch block, trunnion snap shackle head	51	12	425	850	260	2	1/2	935	1870	9.2
RF6720	Snatch block, swivel snap shackle head	64	12	850	1700	480	2 1/2	1/2	1870	3750	16.9
RF6721	Snatch block, trunnion snap shackle head	64	12	850	1700	510	2 1/2	1/2	1870	3750	18.0
SP Special Purpose - Roller Bearings											
RF6730	Snatch block, aluminium sheave, roller bearings, swivel snap shackle head	45	16	1350	2700	550	1 3/4	5/8	2970	5940	19.4
RF6741	Snatch block, aluminium sheave, roller bearings, trunnion snap shackle head	45	16	1275	2550	610	1 3/4	5/8	2805	5610	21.5
RF6751	Snatch block, stainless steel sheave, roller bearings, trunnion snap shackle head	80	19	2500	5000	1480	3 1/8	3/4	5500	11000	52.2



SA block sheave


Cheek plates rotate to open block


Self-lubricating composite journal bearing


Soft shackle & aluminium dog bone


Watch Video

SA SNATCH BLOCKS

SOFT ATTACHMENT BLOCKS

Designed from the outset to deliver outstanding performance, these blocks achieve the highest ratings for dynamic load vs sheave diameter in our keelboat block range. They are built to perform and built to last. Every SA Snatch Block features fully machined, anodised aluminium cheek plates. Sheaves run on duplex stainless steel hubs and incorporate precision composite journal bearings and thrust washers. The soft attachment is a purpose designed Dyneema® SK99 cord shackle with aluminium dog bone.

Ultimate dynamic and static load performance

SA Snatch Blocks incorporate a full contact, self-lubricating composite journal bearing running on a polished duplex stainless steel hub, to maintain low friction performance under heavy dynamic and static loads.
Thrust washers in the same composite material are positioned between the sheave and the cheek plates to handle the high side loads that can be generated when line entry and exit alignment is not ideal. Testing has shown reduced friction and greater durability than ball bearings in this application.

Attach, detach and open

The soft shackle provides a simple means of attachment, secured with the aluminium dog bone but easily opened when necessary to detach the block.
With the shackle open a gentle rotation of the cheek plates opens the head of the block so it can be fitted to a standing line. To close the block, rotate the cheeks back to the closed position until the spring loaded ball lock secures them in place. No additional external straps or bands required.

Soft shackle with aluminium dog bone

Drawing on the expertise of Nodus Factory, many design iterations were tested before finalising specifications of the Dyneema® SK99 cord shackle and aluminium dog bone. Proprietary Nodus Factory splicing techniques and fibre surface coating ensure secure load transfer from the block and maximum durability.

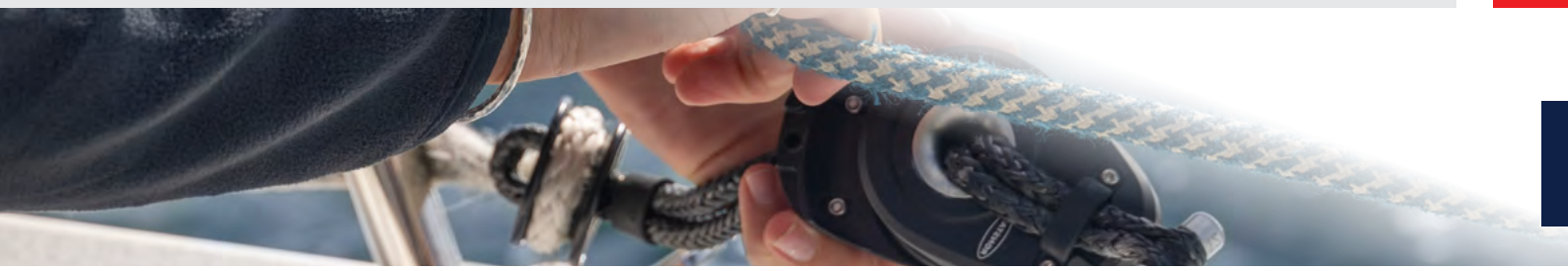
Aluminium alloy cheek plates & sheaves

Block cheeks and sheaves are precision machined from high strength aluminium alloy, anodised for durability and corrosion resistance. The soft attachment through the hub provides a protective buffer between the block and boat surfaces. Retaining guides in soft elastomer ensure that the block remains aligned within the soft shackle.

A multitude of applications

Suited to temporary or permanent line deflection, load carrying and snatch block applications including: 2:1 main halyards, headsail and spinnaker sheets, mast base halyard deflection, and running backstays.

SOFT ATTACHMENT BLOCKS



- Soft shackle retained by elastomer guides, aluminium dog bone allows for easy attachment and removal of the block.
- Cheek plates rotate to open the block, close with spring loaded ball lock securing in place.
- Self-lubricating bearing and thrust washers for optimum dynamic and static performance.
- Lead or floating blocks for headsail sheet trimming.
- Mast base blocks.
- Temporary lead blocks for sheet deflection, barber haulers and tack lines.
- 2:1 main halyards.
- Spare or replacement block for general use.
- Cheek plates and sheaves: Aluminium alloy, anodised.
- Bearings and thrust washers: Proprietary self-lubricating composite.
- Hubs: Grade 2205 stainless steel.
- Soft shackle: Dyneema® SK99 cord with proprietary coating, aluminium dog bone, TPV collar.

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											
RF47109	Soft Attachment Block, Single, Snatch	42	12	2000	4000	165	1 5/8	1/2	4410	8820	5.8
RF67109	Soft Attachment Block, Single, Snatch	60	16	4000	8000	365	2 3/8	5/8	8820	17640	12.9
RF77109	Soft Attachment Block, Single, Snatch	75	19	7000	14000	753	2 15/16	3/4	15430	30860	26.6
RF47109NS	Soft Attachment Block, Single, Snatch - does not include soft shackle	42	12	2000*	4000	151	1 5/8	1/2	4410*	8820	5.3
RF67109NS	Soft Attachment Block, Single, Snatch - does not include soft shackle	60	16	4000*	8000	335	2 3/8	5/8	8820*	17640	11.8
RF77109NS	Soft Attachment Block, Single, Snatch - does not include soft shackle	75	19	7000*	14000	676	2 15/16	3/4	15430*	30860	23.8
RF7008-09	Soft Shackle, 6mm x 95mm, Suits RF47109	-	-	2000	4000	14	-	-	4410	8820	0.5
RF7010-13	Soft Shackle, 8mm x 135mm, Suits RF67109	-	-	4000	8000	30	-	-	8820	17640	1.1
RF7014-16	Soft Shackle, 10mm x 165mm, Suits RF77109	-	-	7000	14000	77	-	-	15430	30860	2.7

Dyneema® is a registered trademark of DSM IP Assets B.V.
* MWL. and BL are for the block only and does not include the soft attachment. Consideration must be given when selecting your attachment option as it may not be equivalent to the block MWL and BL.

SHEAVES

BB ACETAL SHEAVE - ACETAL BALL BEARINGS

BB ALUMINIUM SHEAVE - TORLON® BALL BEARINGS

BB ALUMINIUM RATCHET SHEAVE - ACETAL BALL BEARINGS

AP ACETAL SHEAVE

AP GLASS REINFORCED NYLON SHEAVE

SP NYLATRON® SHEAVE

SP ALUMINIUM SHEAVE - COMPOSITE BEARING

BB BALL BEARING SHEAVES

- Ball bearings provide minimum friction under moderate loads.

AP ALL PURPOSE SHEAVES

- Acetal sheave models have high strength and utilise the self-lubricating properties of acetal.
- Glass reinforced nylon models have greater strength and abrasion resistance.

SP SPECIAL PURPOSE SHEAVES

- Nylatron® models utilise a cast partially cross-linked polyamide compound, modified with a MoS_2 filler for lubrication and to minimise wear. They are suitable for use with wire or rope.
- Aluminium models have a proprietary self-lubricating composite bearing and thrust washers. They are suitable for use with wire or rope.

PRODUCT No.	BLOCK SUITED	DIAM. mm	BORE mm	WIDTH mm	MAX. ROPE mm	MAX. WIRE mm	WEIGHT g	DIAM. in	BORE in	WIDTH in	MAX. ROPE in	MAX. WIRE in	WEIGHT oz
BB Acetal - Ball Bearing													
RF15000		15.0	4.7	7.1	5	-	3	5/8	3/16	9/32	3/16	-	0.1
RF1020		28.0	5.0	11.1	6	-	6	1 1/8	3/16	7/16	1/4	-	0.2
RF35000		30.0	10.4	10.2	8	-	7	1 3/16	3/8	7/16	5/16	-	0.2
RF1766		38.0	8.0	15.0	10	-	15	1 1/2	5/16	19/32	3/8	-	0.5
RF1767		50.4	8.0	17.5	10	-	33	2	5/16	11/16	3/8	-	1.2
RF48000		40.0	6.0	15.5	10	-	30	1 9/16	1/4	5/8	3/8	-	1.1
RF60000		60.0	3 x 6.2	16.6	10	-	50	2 3/8	3 x 7/32	21/32	3/8	-	1.8
RF70000		75.0	3 x 6.2	20.8	12	-	104	3	3 x 7/32	13/16	1/2	-	3.7
BB Aluminium - Ball Bearing													
RF34000		30.0	6.0	7.7	5	-	10	1 3/16	7/32	5/16	3/16	-	0.4
RF44000		40.0	6.0	10.1	6	-	15	1 9/16	7/32	13/32	1/4	-	0.5
RF62000	Series 60 Ultimate Ratchet	60.0	3 x 6.1	16.6	10	-	45	2 3/8	3 x 7/32	21/32	3/8	-	1.6
RF72000	Series 75 Ultimate Ratchet	75.0	3 x 6.1	20.8	12	-	95	3	3 x 7/32	13/16	1/2	-	3.4
AP Acetal													
RF1741		19.0	6.6	6.4	6	-	1	3/4	1/4	1/4	1/4	-	0.1
RF1743		19.0	8.2	9.5	6	-	2	3/4	5/16	3/8	1/4	-	0.1
RF578		25.0	6.5	9.5	6	-	4	1	1/4	3/8	1/4	-	0.1
RF1746		26.0	9.8	12.0	8	-	5	1	3/8	15/32	5/16	-	0.2
RF128		28.0	8.1	15.2	12	-	7	1 1/8	5/16	19/32	1/2	-	0.2
RF129		28.0	6.6	9.9	8	-	6	1 1/8	1/4	3/8	5/16	-	0.2
RF41000		40.0	8.1	14.4	10	-	15	1 9/16	5/16	9/16	13/32	-	0.5
RF1006	Series 40 Deck Organisers	38.0	12.7	15.5	12	-	21	1 1/2	1/2	19/32	1/2	-	0.7
RF1751		38.0	8.2	10.2	6	-	10	1 1/2	11/32	13/32	1/4	-	0.4
RF1759		50.0	8.1	15.6	14	-	22	1 15/16	11/32	19/32	9/16	-	0.8
RF437		59.0	11.0	19.0	16	-	43	2 5/16	7/16	3/4	5/8	-	1.5
RF1765		66.0	8.2	15.1	5	-	35	2 5/8	11/32	15/32	3/16	-	1.2
RF431*		73.0	13.0	22.0	14	-	97	2 7/8	15/32	7/8	9/16	-	3.4
RZ1000	Series 75 Industrial	75.0	21.7	20.5	14	-	70	2 15/16	7/8	13/16	9/16	-	2.5
AP Glass Reinforced Nylon													
PNP98JR		75.0	13.0	15.8	10	-	59	2 15/16	15/32	19/32	3/8	-	2.1
PNP98KR		100.0	13.0	19.0	12	-	80	3 15/16	15/32	3/4	1/2	-	2.8
SP Nylatron®													
RF20000HL		20.0	8.1	8.8	6	3	2	3/4	5/16	3/8	1/4	1/8	0.1
RF430	RF468	25.0	6.5	7.0	5	5	10	1	1/4	9/32	3/16	3/16	0.4
RF30000HL		30.0	8.1	11.4	8	3	6	1 3/16	5/16	7/16	5/16	1/8	0.2
RF40000HL		40.0	8.1	13.4	10	4	15	1 1/2	5/16	17/32	3/8	5/32	0.5
RF132	RF103, RF104	45.0	8.0	9.5	-	6	33	1 3/4	5/16	3/8	-	1/4	1.2
RF50000HL		50.0	10.2	18.0	12	5	28	1 31/32	13/32	23/32	1/2	3/16	1.0
SP Aluminium - Composite Bearing													
RZ1000AW	Series 75 Industrial	75.0	21.7	20.2	-	8	190	-	7/8	13/16	-	5/16	6.7

* Acetal sheave with bronze bearing


RF68000 BB
8mm (5/16")


RF78000 BB
10mm (3/8")


RF108000 BB
3 x 8mm (5/16")


RF128000 BB
6 x 6mm (1/4")


RF158000 BB
6 x 10mm (3/8")


RF68000W BB
8mm (5/16")


RF78000W BB
10mm (3/8")


RF108000W BB
3 x 8mm (5/16")


RF128000W BB
6 x 6mm (1/4")


RF158000W BB
6 x 10mm (3/8")


RF61000 AP
8mm (5/16")


RF71000 AP
10mm (3/8")

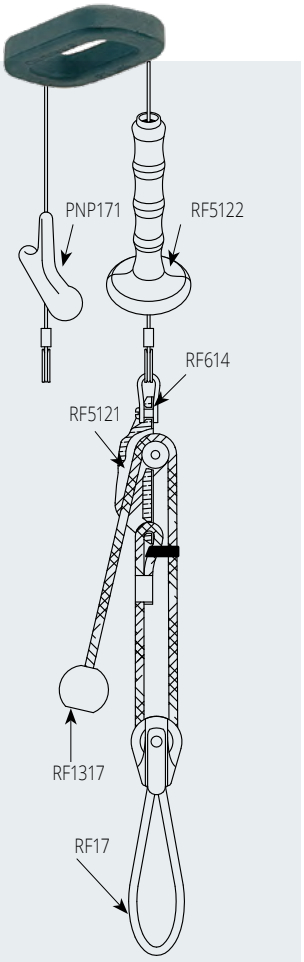
AP ALL PURPOSE SHEAVES

- Sheave: UV stabilised acetal.
- Hub bush: Grade 316 stainless steel.

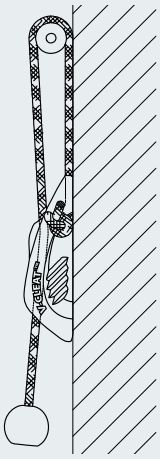
BB BALL BEARING SHEAVES

- Sheave: Aluminium alloy.
- Needle rollers: Torlon® (RF68000: PEEK, RF68000W: acetal).
- Ball bearings: High compression strength acetal.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	WIDTH mm	MAX. ROPE mm	M.W.L. kg	WEIGHT g	SHEAVE DIAM. in	WIDTH in	MAX. ROPE in	M.W.L. lb	WEIGHT oz
BB 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



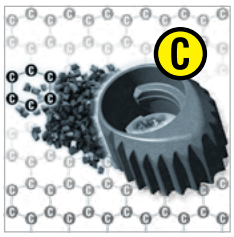
2:1 ADJUSTABLE
TRAPEZE SYSTEM

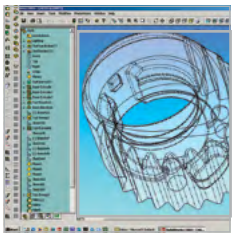


RF5101, RF5106
BECKET TAKE-OFF
FOR SIMPLE 2:1
PURCHASE SYSTEM

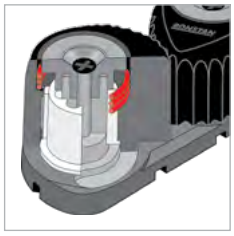
- Lightweight.
- Low, snag-free profile.
- Base profile suits mounting on flat and curved surfaces.
- Cut-away in base of RF5101 and RF5106 fairlead cleats can be used as a becket for a 2:1 purchase system (refer diagram above).
- RF5121 trapeze Clamcleat® is made from hard anodised alloy and incorporates a roller for easy 2:1 adjustment under load (refer diagram above).
- Control lines on dinghies and catamarans.
- Abrasion resistant glass and carbon fibre composite cleats.
- Hard anodised alloy RF5121.

PRODUCT No.	DESCRIPTION	FASTENER SIZE mm	HOLE SPACING mm	ROPE SIZE mm	WEIGHT g	FASTENER SIZE in	HOLE SPACING in	ROPE SIZE in	WEIGHT oz
Cleats									
RF5100	V-Cleat™, small, open	4	36	3-6	9	5/32	1 7/16	1/8-1/4	0.3
RF5101	V-Cleat™, small, fairlead	4	48	3-6	11	5/32	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

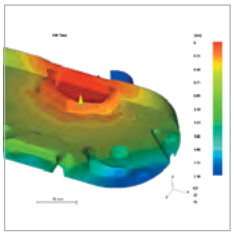

Carbon fibre cam C-Cleat™


Design optimisation


Effective slotted bearings


Multi-coil spring


Low line entry effort


Advanced composite base


Swivel cleat base

C-CLEATS™ & T-CLEATS™

ENGINEERED FOR PERFORMANCE

Intensive development efforts have produced this high performance range of cam cleats that provides unbeatable holding power while allowing easy cleating and releasing of control lines and sheets.

Ⓒ Carbon cam C-Cleats™

C-Cleats™ feature lightweight, ultra-rigid, carbon fibre composite cams that are corrosion free, wear resistant and non-abrasive.

Ⓣ T-Cleats™

T-Cleats™ have hard wearing glass fibre reinforced cams for reliable cleating. They offer a great value solution for moderately demanding applications.

Advanced composite base

Cleat bases are produced from long fibre reinforced polymer to save weight while providing essential stiffness.

Slotted bearings

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

Multi-coil spring

The multi-coil spring recessed in the upper part of the cam generates near constant torque. This consistency ensures secure cleating of even the smallest diameter lines with minimal abrasion or rope wear.

Unique teeth and entry profiles

Low effort line entry and exit due to unique teeth and entry geometry.

Customisation

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

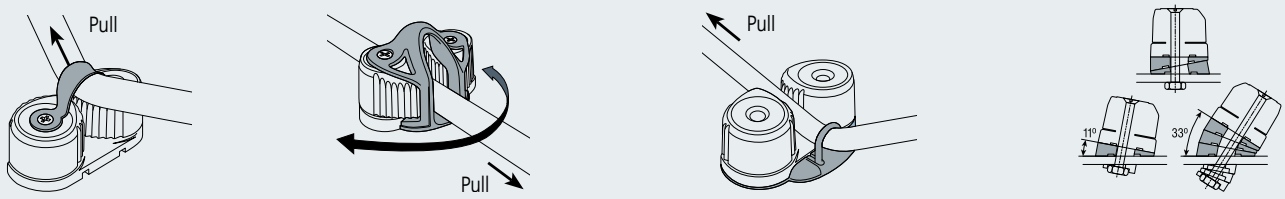
Total control

Swivel cleat bases further enhance the function of cleats by providing articulation. Some models provide adjustable cleating angles for even further functionality and accessibility.

SMALL CAM CLEATS

ACCESSORIES

SADDLE | FAIRLEADS | ROPE GUIDE | WEDGE KIT



SADDLE
Retains line near cleat

FAIRLEAD
Assists cleating from different positions

ROPE GUIDE
Corrects lead of line into cleat from loaded side.

WEDGE KITS
Are stackable for greater angles or to act as a riser.

- Design, materials selection and advanced manufacturing methods combine to deliver superior strength and holding power, light weight and corrosion resistance.
- C-Cleat™ carbon fibre composite cam material provides high 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.

C-Cleats™
- Carbon fibre composite cams.
- Long strand glass fibre reinforced polymer base.

T-Cleat™
- Glass fibre composite cams.
- Long strand glass fibre reinforced polymer base.

PRODUCT No.	CAP	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 C-Cleats™															
RF5000	Grey	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
RF5400	Black	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
RF5400B	Blue	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
RF5400G	Green	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
RF5400R	Red	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
RF5400Y	Yellow	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
T T-Cleat™															
RF5001	Red	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 CAM CLEATS


RF5010 (C)


RF5410 (C)


RF5410B (C)


RF5011 (T)


RF5410R (C)


RF5410Y (C)


RF5410G (C)

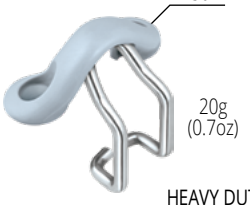
ACCESSORIES


RF5013
8g (0.3oz)


RF5013A
8g (0.3oz)

SADDLES


RF5413A
8g (0.3oz)


RF5017
20g (0.7oz)


RF5517
20g (0.7oz)

HEAVY DUTY FAIRLEADS


RF5414
10g (0.4oz)

ROPE GUIDE


RF5412
11g (0.4oz)

WEDGE KIT


RF5416
30g (1.1oz)

RISER


RF5015
14g (0.5oz)


RF5415
14g (0.5oz)

FAIRLEADS

- Design, materials selection and advanced manufacturing methods combine to deliver superior strength and holding power, light weight and corrosion resistance.
- C-Cleat™ carbon fibre composite cam material provides high 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.
- C-Cleats™
  - Carbon fibre composite cams.
  - Long strand glass fibre reinforced polymer base.
- T-Cleat™
  - Glass fibre composite cams.
  - Long strand glass fibre reinforced polymer base.

PRODUCT No.	CAP	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) C-Cleats™															
RF5010	Grey	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
RF5410	Black	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
RF5410B	Blue	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
RF5410G	Green	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
RF5410R	Red	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
RF5410Y	Yellow	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
(T) T-Cleat™															
RF5011	Red	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 CAM CLEATS

RF5020 Ⓒ

RF5420 Ⓒ

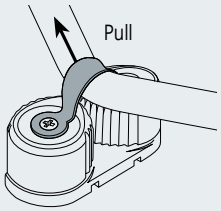
RF5420B Ⓒ

RF5023

RF5420G Ⓒ

RF5420Y Ⓒ

RF5420R Ⓒ



SADDLE
Retains line near cleat

- 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 high 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.
- Long strand glass fibre reinforced polymer base.

PRODUCT No.	CAP	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™															
RF5020	Grey	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
RF5420	Black	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
RF5420B	Blue	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
RF5420G	Green	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
RF5420R	Red	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
RF5420Y	Yellow	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

SWIVEL CLEAT BASES

RF70

3 x 4mm (5/32")

RF67

3 x 5mm (3/16")

RF58

3 x 5mm (3/16")

RF60

4 x 5mm (3/16")

RF20175

2 x 4mm (5/32")

RF5

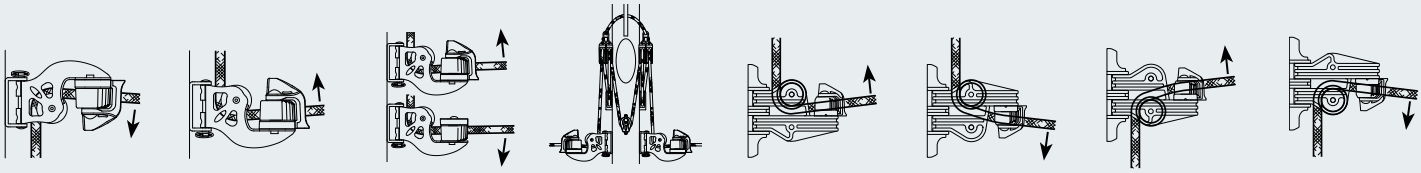
2 x 5mm (3/16")

RF1455

4 x 5mm (3/16")

RF4

2 x 5mm (3/16")



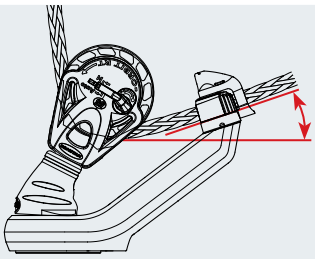
RF20175 LEAD AND CLEATING OPTIONS

RF5 LEAD AND CLEATING OPTIONS

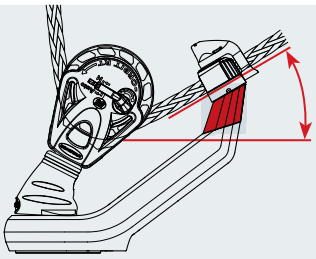
- Swivel cleat bases provide easy cleating and releasing from any angle.
- The RF60 features adjustable stops to limit rotation, which can be removed to allow full 360° rotation.
- Cleating plates are heavy gauge alloy for stiffness and minimum distortion under load.
- Deadeyes have flared stainless steel liners for minimum rope wear and long service life.
- The RF5 is manufactured in lightweight fibre reinforced composite materials – the position of the sheave can be changed for control line led from below.
- Sheet leads and control lines on dinghies and catamarans.
- Cunningham, vang, foreguy, pole topping lift and other control lines on larger yachts.
- Alloy cleat arms.
- Fibre reinforced nylon body (RF5).
- Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	SUITS ROPE mm	WEIGHT g	SUITS ROPE in	WEIGHT oz
Swivel Cleat Bases					
RF4	Swivel shackle base. Suits Series 40 & 55 Orbit Block™ Dyneema® links. 4.8mm (3/16") diameter pin. MWL 250kg (550lb), BL 500kg (1100lb)	-	30	-	1.1
RF5	Swivelling cleat unit. 28mm (1 1/8") diameter ball bearing sheave, small C-Cleat™ & fairlead. Maximum line load 125kg (275lb)	2 – 8	100	3/32 – 5/16	3.5
RF58	Swivelling deadeye & cleat unit. Aluminium arm, 360° rotation, medium C-Cleat™ & fairlead. Maximum line load 175kg (385lb)	3 – 12	171	1/8 – 1/2	6.0
RF60	Swivelling deadeye & cleat unit. Aluminium arm, adjustable rotation stops, medium C-Cleat™ & fairlead. Maximum line load 175kg (385lb)	3 – 12	257	1/8 – 1/2	9.1
RF67	Swivelling deadeye & cleat unit. Aluminium arm, 360° rotation, small C-Cleat™ & fairlead. Maximum line load 125kg (275lb)	2 – 8	121	3/32 – 5/16	4.3
RF70	Swivelling cleat unit, 15mm sheaves. Stainless steel arm, 360° rotation, small C-Cleat™ & fairlead. Maximum line load 125kg (275lb)	2 – 5	146	3/32 – 3/16	5.1
RF1455	Swivel base with block post socket. 4.8mm (3/16") diameter pin. Suits shackle head Series 40 & 50 Utility blocks and Series 55 Orbit Blocks™. MWL 200kg (440lb); BL 1000kg, (2200lb)	-	65	-	2.3
RF20175	Swivelling cleat unit. 20mm (3/4") sheave with stainless steel ball bearings, small C-Cleat™ & fairlead. Maximum line load 125kg (275lb)	2 – 6	79	3/32 – 1/4	2.8

SWIVEL CLEAT BASES

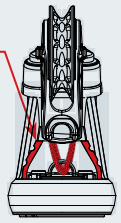


Lower cleating angle

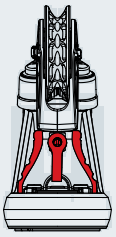


Higher cleating angle with cleat riser fitted to arm

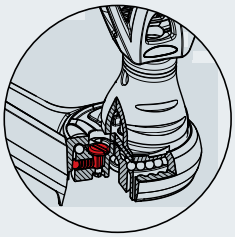
Stand-up boot cut down to suit. See instructions in SUPPORT section of ***www.ronstan.com*** for full details



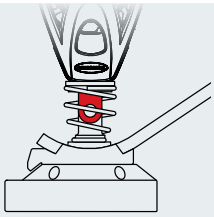
Soft attachment (Dyneema® link) block attachment



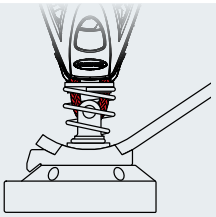
Shackle head block attachment



Ball bearing race minimises friction. Switchable ratchet system prevents the arm from swinging to leeward.

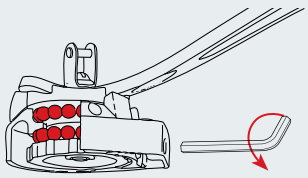


Conventional shackle head block - discard shackle and plastic roller

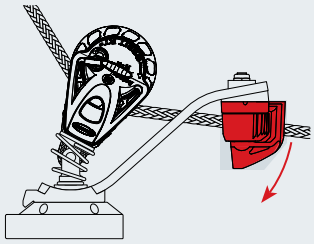


Dyneema® link head Orbit Block™ - use supplied plastic roller when attaching Dyneema® link.

Height adjustable arm for optimum cleating angle.



Twin ball bearing races minimise friction. Adjustable ratchet system prevents the arm from falling to leeward.



Cleat and wedge kit can be mounted on underside of arm for downward uncleating if preferred.

- Adjustable height and angle of cleating arm for optimum control.
- Twin rows of ball bearings support the cleating arm. Stops are provided to limit rotation.
- A ratchet in the base allows the cleating arm to remain in its most recently used position. The ratchet can be turned off for free swivelling.
- Suits traditional post/shackle head blocks and Dyneema® link head Orbit Blocks™*2.
- RF6 is suitable for mainsheet systems on dinghies to 4.5m (15ft).
- RF7 is suitable for mainsheet systems on dinghies and sports boats to 8m (26ft).
- RF6: glass fibre reinforced base and cleat arm.
- RF7: glass fibre reinforced base and alloy cleating arm.
- Grade 316 stainless steel fixings and block attachment points.

PRODUCT No.	DESCRIPTION	M.W.L.*1 kg	B.L.*1 kg	WEIGHT g	M.W.L.*1 lb	B.L.*1 lb	WEIGHT oz
Swivel Cleat Base							
RF6	Small ball bearing swivelling cleat base, small C-Cleat™, loop take-off	125	250	210	275	550	7.4
RF7	Ball bearing swivelling cleat base, medium C-Cleat™, 5mm (3/16") pin	215	430	342	473	946	12.1

*1 Load rating are for the cleat base assembly, and are based on a 120° change in line direction. Line loads should be limited to: RF6 M.W.L. 125kg (275lb), RF7 M.W.L. 175kg (385lb).
*2 RF7 swivel fork has a 5mm (3/16") pin and 11.8mm (7/16") gap to permit direct, low profile attachment to the head post of a block.

Team Ronstan sailors Mike Martin & Adam Lowry © Abner Kingman


RONSTAN

ROPE JAMMERS & CLEATS

© X-Yachts

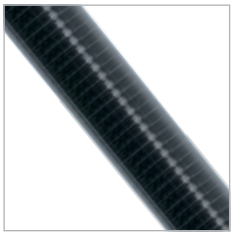
RF494

RF520
RF521
RF522
RF523
RF524

RF1387

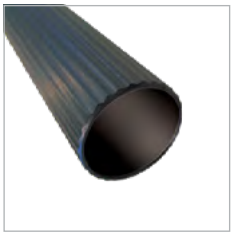
PRODUCT No.	DESCRIPTION	ROPE DIAM. mm	HOLE SPACING mm	FASTENER SIZE mm	M.W.L. kg	WEIGHT g	ROPE DIAM. in	HOLE SPACING in	FASTENER SIZE in	M.W.L. lb	WEIGHT oz
Rope Cleats and Jammers											
RF494	V-jammer, stainless steel, 69mm (2 3/4") long	6	56	2 x 4	-	14	1/4	2 7/32	2 x 3/16	-	0.5
RF520	Horn cleat, nylon. 75mm (3") long	4	25	2 x 5	-	10	5/32	1	2 x 3/16	-	0.4
RF521	Horn cleat, nylon. 100mm (4") long	5	28	2 x 5	-	15	3/16	1 3/32	2 x 3/16	-	0.5
RF522	Horn cleat, nylon. 125mm (5") long	6	38	2 x 6	-	30	1/4	1 1/2	2 x 1/4	-	1.1
RF523	Horn cleat, nylon. 165mm (6 1/2") long	8	41	2 x 6	-	50	5/16	1 5/8	2 x 1/4	-	1.8
RF524	Horn cleat, nylon. 200mm (8") long	10	48	2 x 6	-	85	3/8	1 29/32	2 x 1/4	-	3.0
RF1387	Rope jammer, compact style. 60mm (2 3/8") long. Supplied with two base plates, for use with 4-6mm (5/32"-1/4") diameter rope and 6-8mm (1/4"-5/16") diameter rope	4 - 8	45	2 x 6	410	165	5/32 - 5/16	1 25/32	2 x 1/4	900	5.8

Lightweight carbon extension grip



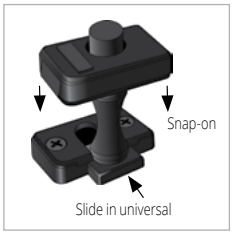
Tapered carbon tube optimises weight

Lightweight EVA grip & end knob



Lightweight & rigid aluminium tube

Full-articulation universal joint



Removable urethane universal joint

BATTLESTICK™ TILLER EXTENSIONS

ULTIMATE PERFORMANCE AND CONTROL

Ronstan Battlestick™ tiller extensions in lightweight carbon composite and aluminium alloy provide 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 and 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 balance 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™ ergonomic EVA grip

This firm non-slip grip material does not absorb water and the large grip diameter contrasts ergonomically with mainsheet diameter to relieve fatigue. The end knob ensures safety and positive hand positioning.

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.

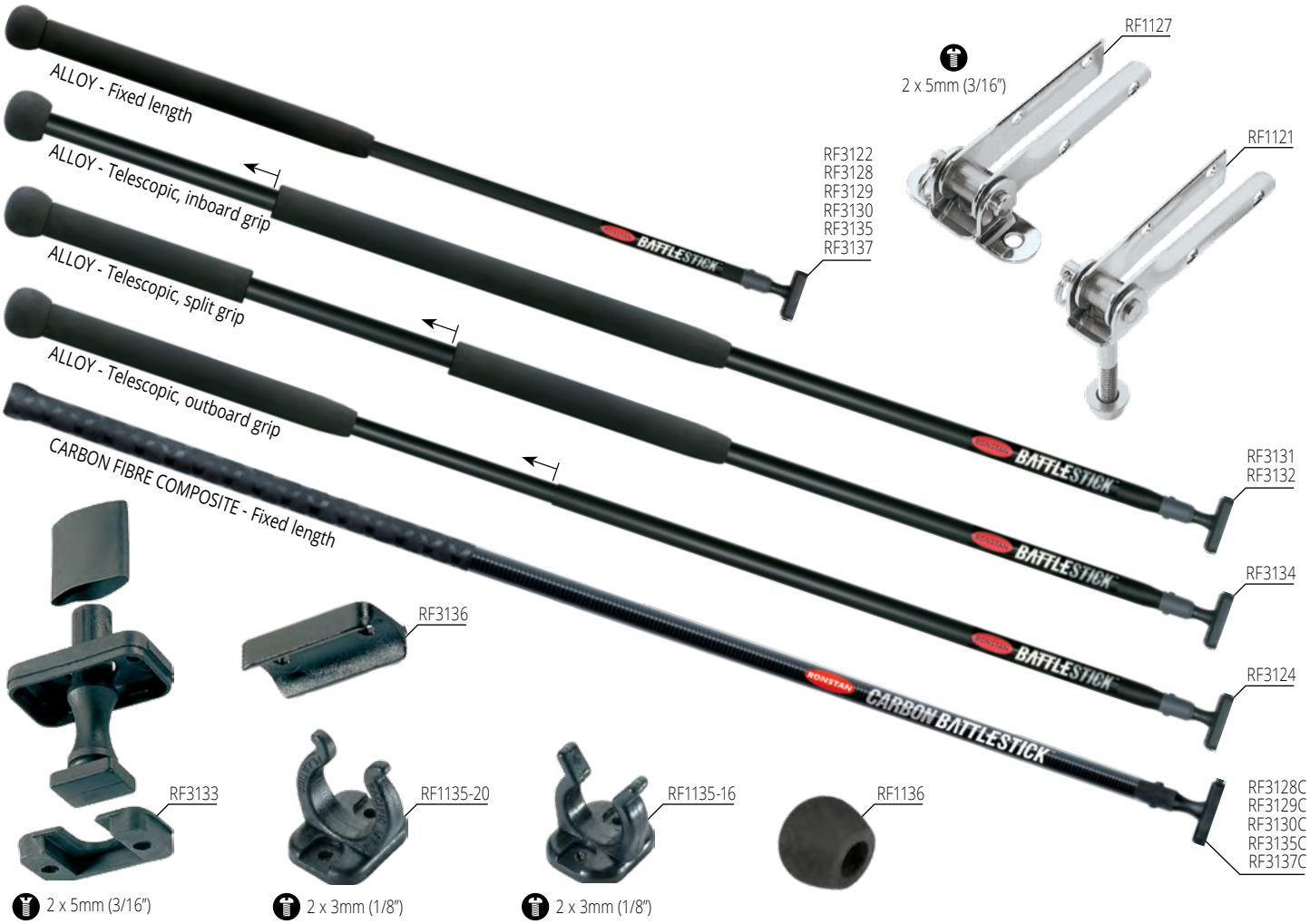
The right length

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, UV resistant urethane provides smooth, uniform articulation and flexibility in all directions for a quick and firm response to steering.

BATTLESTICK™ TILLER EXTENSIONS



PRODUCT No.	DESCRIPTION	LENGTH mm	TUBE DIAM. mm	GRIP DIAM. mm	WEIGHT g	LENGTH in	TUBE DIAM. in	GRIP DIAM. in	WEIGHT oz
Carbon Fibre Tiller Extensions									
RF3128C	Carbon fibre, tapered, fixed length	610	16 > 20	22	108	24	5/8 > 3/4	7/8	3.8
RF3129C	Carbon fibre, tapered, fixed length	840	16 > 22	24	137	33	5/8 > 7/8	1	4.8
RF3130C	Carbon fibre, tapered, fixed length	1030	16 > 23	25	155	41	5/8 > 7/8	1	5.5
RF3135C	Carbon fibre, tapered, fixed length	1250	16 > 24	26	179	49	5/8 > 1	1	6.3
RF3137C*	Carbon fibre, tapered, fixed length	2500	16 > 25	-	310	98	5/8 > 1	-	10.9
Alloy Tiller Extensions									
RF3128	Alloy, fixed length	610	16	25	150	24	5/8	1	5.3
RF3129	Alloy, fixed length	840	16	25	180	33	5/8	1	6.4
RF3130	Alloy, fixed length	1030	16	25	215	41	5/8	1	7.6
RF3135	Alloy, fixed length	1250	16	25	260	49	5/8	1	9.2
RF3122	Alloy, fixed length	2030	16	25	415	80	5/8	1	14.7
RF3137	Alloy, fixed length	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") outside diam. tube. Incorporating 1/4" UNCx1 3/4" (45mm) long bolt	-			64	-	-	-	2.3
RF1127	Stainless steel screw down universal joint. Suits 16mm (5/8") outside diam. tube	-			56	-	-	-	2.0
RF1135-16	Nylon tiller extension retaining clip. Suits 16mm (5/8") diam. tube	-			7	-	-	-	0.2
RF1135-20	Nylon tiller extension retaining clip. Suits 20mm (3/4") diam. tube	-			4	-	-	-	0.1
RF1136	Tiller extension end knob, EVA foam, suits 16mm (5/8") outside diam. tube	-			35	-	-	-	1.2
RF3133	Urethane universal joint. Suits 13.5mm (17/32") inside diam. tube	-			35	-	-	-	1.2
RF3136	Round tiller adapter for RF3133. Suits 25-32mm (1-1 1/4") tiller	-			7	-	-	-	0.2

* Grip and end cap not included.

4 x 5mm (3/16")

4 x 5mm (3/16")

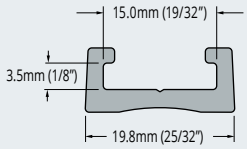
4 x 5mm (3/16")

4 x 5mm (3/16")

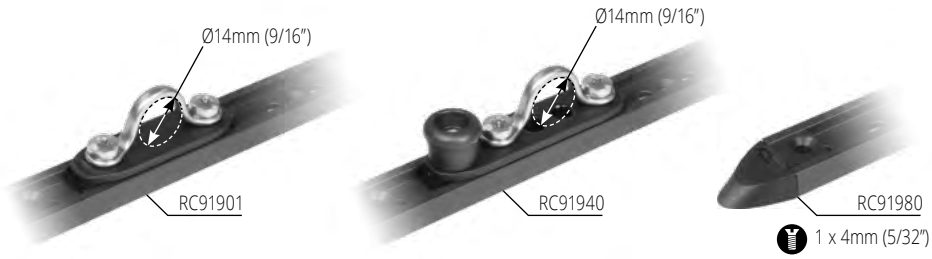
- Pintle pins are cross-drilled to accept the RF413 retaining clip.
- PNP55 retaining clip for transom mounting provides simple rudder retention security.
- Off-the-beach dinghies and catamarans.

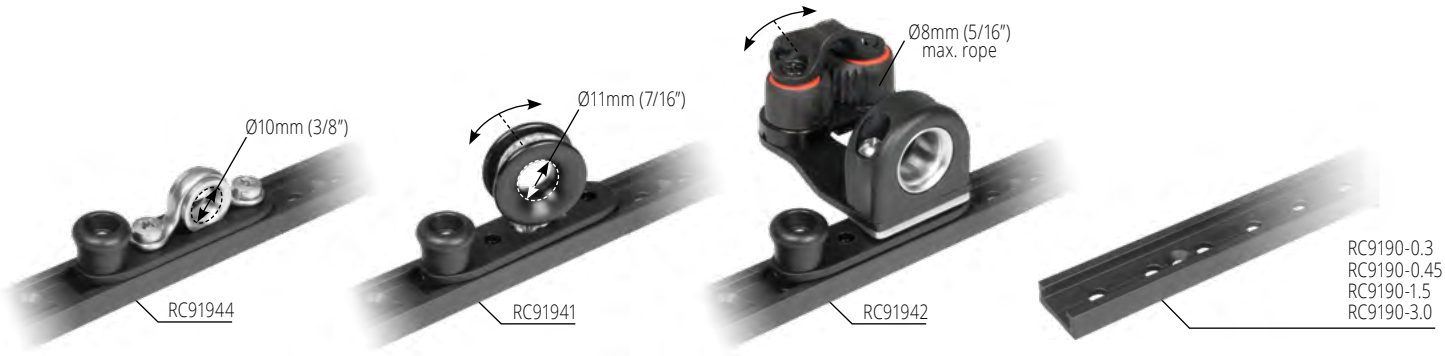
PRODUCT No.	DESCRIPTION	PIN/HOLE DIAM. mm	INTERNAL WIDTH mm	STRAP LENGTH mm	WEIGHT g	PIN/HOLE DIAM. in	INTERNAL WIDTH in	STRAP LENGTH in	WEIGHT oz
6.4mm (1/4") Pin/Hole									
RF239	Rudder gudgeon, stainless steel	6.4	38	51	40	1/4	1 1/2	2	1.4
RF243	Rudder gudgeon, stainless steel	6.4	25	56	35	1/4	1	2 3/16	1.2
RF254	Transom gudgeon, stainless steel	6.4	-	-	31	1/4	-	-	1.1
RF255	Transom pintle, stainless steel	6.4	-	-	45	1/4	-	-	1.6
Accessories									
PNP55	Retaining clip, transom mount, nylon	-	-	-	5	-	-	-	0.2
RF413	Retaining clip, 2.7mm (3/32") diam. wire, 16mm(5/8") inside diam., stainless steel	-	-	-	3	-	-	-	0.1

Dominic & Steve Randall, International Cadet



RC9190 TRACK PROFILE





RF1058
Suits RC91944

- Spring-loaded plunger stops allow fast, positive positioning of track slides.
- Slides are available with swivelling cleat and fairlead to suit different crewing positions.
- RC91942 features a small cam cleat and fairlead and suits line sizes 2-8mm (3/32-5/16").

RF134
Suits RC91901 & RC91940

- RC91941 RopeGlide™ ring has a soft attachment which allows up to 250° rotation.
- Dinghy and small catamaran jib sheet leads.
- Dinghy outhauls.

- Grade AL6061-T6 aluminium alloy track.
- Glass fibre reinforced nylon slides.
- Grade 316 stainless steel fixtures.

SERIES 19 TRACK FASTENINGS – 4mm (5/32") countersunk fasteners at 75mm (2 15/16") centres. **STOP HOLES** – 18.75mm (3/4") 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									
RC9190-0.3	Track	296	-	-	64	11 5/8	-	-	2.3
RC9190-0.45	Track	446	-	-	96	17 9/16	-	-	3.4
RC9190-1.5	Track	1496	-	-	321	58 7/8	-	-	11.3
RC9190-3.0	Track	2996	-	-	643	117 5/16	-	-	22.7
RC91901	Slide, saddle	57	220	440	26	2 1/4	485	970	0.9
RC91940	Slide, saddle, plunger stop	71	220	440	33	2 13/16	485	970	1.2
RC91941	Slide, soft-attached ring, plunger stop	71	100	200	28	2 13/16	220	440	1.0
RC91942	Slide, swivelling fairlead & cleat, plunger stop	71	100*	200*	115	2 13/16	220*	440*	4.1
RC91944	Slide, saddle with ferrule eye, plunger stop	71	220	440	40	2 13/16	485	970	1.4
RC91980	Track end, plastic (2 pack)	19	-	-	2	3/4	-	-	0.1

*Line load through cleat

SERIES 25 T-TRACK

© Seascape

Removable lead block

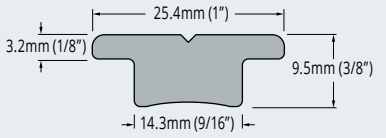
Ergonomic plunger stop operation

INTEGRATED BECKET FOR 2:1 SHEET SYSTEM

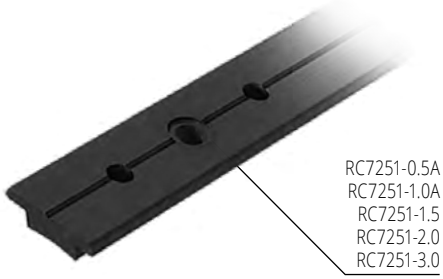
- Low profile and lightweight, T-Track is a simple, reliable system for adjustable sheet leads.
- Composite slides have a removable attachment pin to suit either a Dyneema® link or a shackle.
- Composite slides have an integrated becket for 2:1 headsail sheet systems, popular on modern sport boats.
- Composite slides have a spring-loaded push button plunger stop for fast, positive positioning.
- Stand-up blocks on composite slides provide optimum alignment and low profile lead.
- The main pin recess in the RC72504 composite slide can accept up to 8mm (5/16") line attached directly to the pin.
- A convenient all inclusive racing kit is available for sportsboats (RC72540S).
- RC72537S suitable for headsail sheet leads on boats up to 8m (26ft).
- RC72536S & RC72533S suitable for headsail sheet leads on boats up to 7m (23ft).
- Toughened, glass fibre reinforced nylon slide.
- Grade AL6061-T6 aluminium alloy track.
- Grade 316 stainless steel ring (RC72544).

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									
RC72536S	Composite slide, Series 40 BB Orbit Block™, stand-up, suits up to 10mm (3/8") rope, plunger stop	102	400	800	166	4	880	1760	5.9
RC72537S	Composite slide, Series 55 BB Orbit Block™, stand-up, suits up to 10mm (3/8") rope, plunger stop	102	500	1000	193	4	1100	2200	6.8
RC72540S	Racing Kit, including 2 x 465mm (18 5/16") racing tracks, 2 x composite slides with Series 55 BB Orbit Block™, 4 x track ends, 10 x track bolt insulators	-	500	1000	842	-	1100	2200	29.8



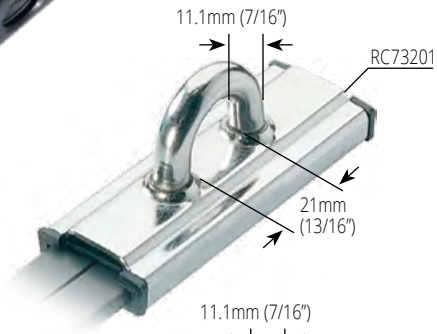
RC7251 TRACK PROFILE

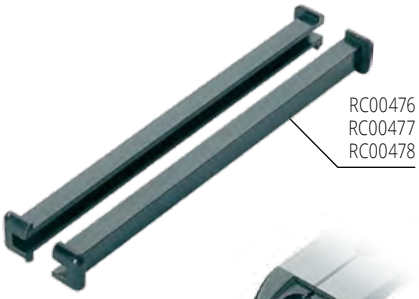


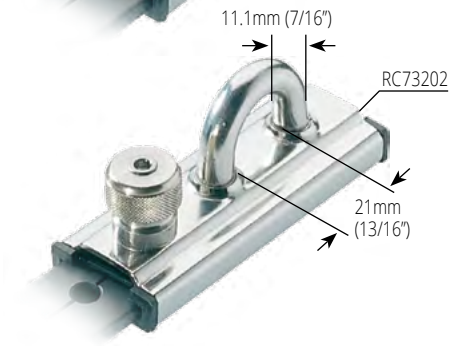
RF134
Suits RC72505, RC72506 & RC72533S

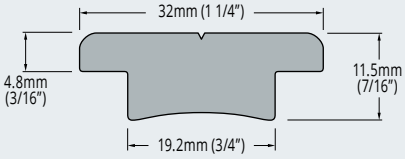
PRODUCT No.	DESCRIPTION	LENGTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in	M.W.L. lb	B.L. lb	WEIGHT oz
Slides									
RC72504	Composite slide, removable M4 pin, plunger stop	102	500	1000	107	4	1100	2200	3.8
RC72505	Composite slide, saddle, plunger stop	80	400	800	72	5 5/32	880	1765	2.5
RC72506	Composite slide, saddle	67	400	800	57	2 5/8	880	1765	2
RC72533S	Composite slide, Series 40 AP block, stand-up, suits up to 10mm (7/16") rope, plunger stop	80	400	800	137	5 5/32	880	1765	4.8
RC72541	Composite slide, RopeGlide™ Ring, 16mm (5/8") internal dia.	102	500	1000	120	4	1100	2200	4.2
RC72544	Composite spinnaker pole slide ring, plunger stop	102	400	800	215	4	880	1760	7.6
Accessories									
RC7250-INS	Track bolt insulator	-	-	-	3	-	-	-	0.1
RC72581	Track end, plastic	-	-	-	5	-	-	-	0.2
RF9004-13	Dyneema® link, 4mm x 130mm (5/32" x 5 1/8")	130	-	-	4	5 1/8	-	-	0.1
Track - Supplied with RC7250-INS nylon track bolt insulators									
RC7251-0.5A	Racing track, black, 25mm (63/64") stop hole centres	465	-	-	188	18 5/16			6.6
RC7251-1.0A	Racing track, black, 25mm (63/64") stop hole centres	996	-	-	405	39 3/16	-	-	14.2
RC7251-1.5	Track, black, 50mm (1 31/32") stop hole centres	1496	-	-	631	58 7/8	-	-	22.2
RC7251-2.0	Track, black, 50mm (1 31/32") stop hole centres	1996	-	-	841	78 9/16	-	-	29.7
RC7251-3.0	Track, black, 50mm (1 31/32") stop hole centres	2996	-	-	1263	117 15/16	-	-	44.5

SERIES 32 T-TRACK









RC7320 TRACK PROFILE

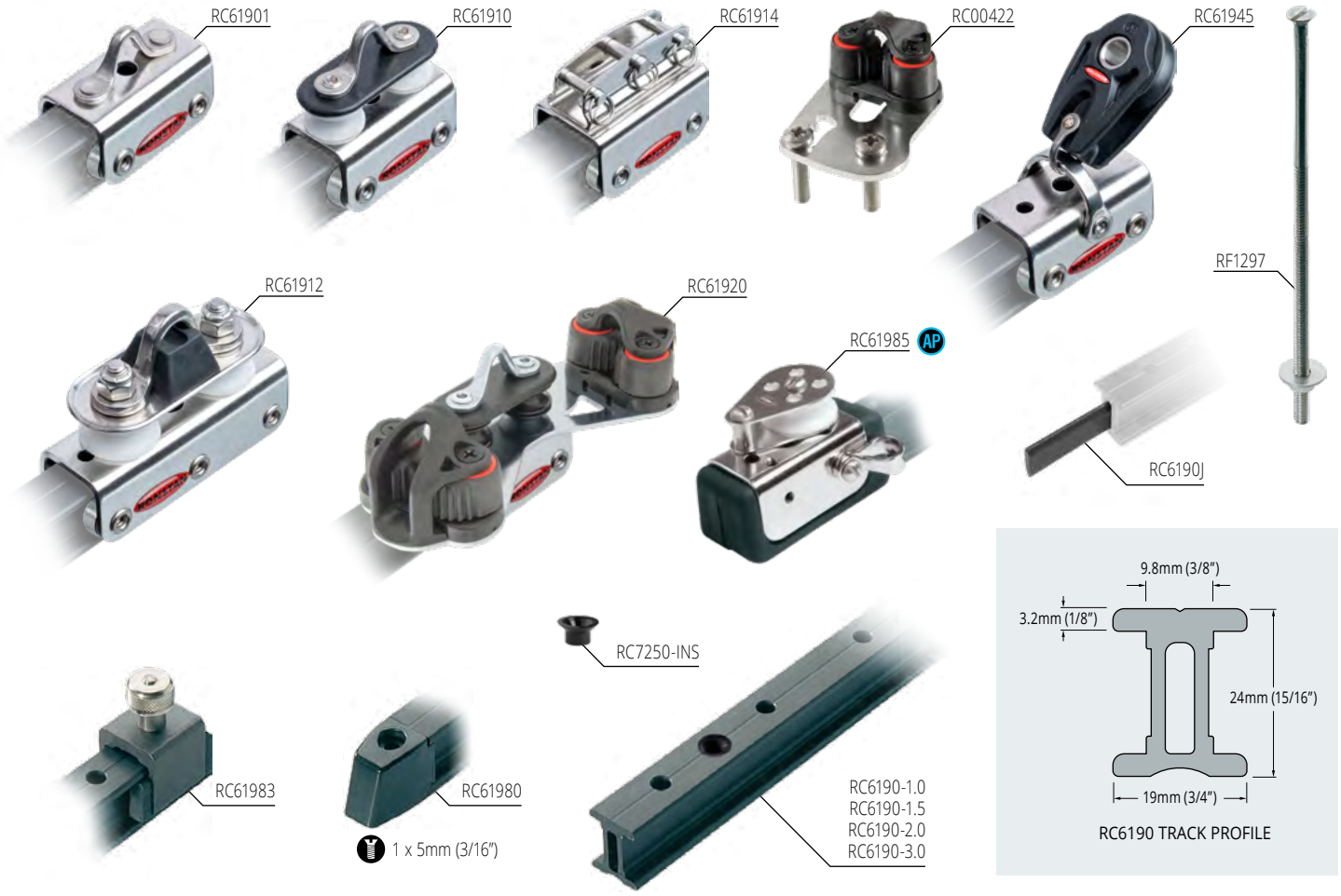
- The lead block on RC73234 and RC73235 articulates for ideal sheet alignment and have an integrated anti-clatter rubber buffer.
- RC73231, RC73234 Jib sheet leads suit boats to 12m (40ft).
- RC73235 Jib sheet leads suit boats to 10m (33ft).
- RC73231 genoa car can accommodate two sheets for easy headsail changes, and has a plunger stop that can be locked in the "up" position.
- Grade AL6061-T6 aluminium alloy track.
- Grade 316 stainless steel slide bodies.
- UV 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
Series 32 T-Track									
RC00476	Slide liners (pair), nylon, suits RC73201, RC73202, RC73243	107	-	-	7	4 7/32	-	-	0.3
RC00477	Slide liners (pair), nylon, suits RC73231	152	-	-	11	6	-	-	0.4
RC00478	Slide liners (pair), nylon, 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, 50mm (2") AP sheave, suits two 16mm (5/8") sheets, lock up/down plunger stop	146	1500	3000	480	5 3/4	3300	6600	17.0
RC73234	Genoa car, S60 BB Core Block™, suits 12mm (1/2") sheet, lock up/down plunger stop	104	1000	2000	400	4 1/8	2200	4400	14.1
RC73235	Genoa car, S45 BB Core Block™, suits 12mm (1/2") sheet, lock up/down plunger stop	104	700	1400	270	4 1/8	1540	3090	9.5
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 track bolt insulators									
RC7320-1.0*1	Track, black	996	-	-	670	39 3/16	-	-	23.6
RC7320-1.5*1	Track, black	1496	-	-	1000	58 7/8	-	-	35.3
RC7320-2.0*1	Track, black	1996	-	-	1330	78 9/16	-	-	46.9
RC7320-3.0*1	Track, black	2996	-	-	2000	117 15/16	-	-	70.5

*1 Silver track available - Order as RCxxxxxS.
*2 Load ratings based on pull perpendicular to track

SERIES 19 I-TRACK

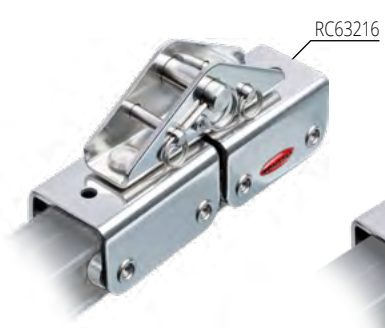


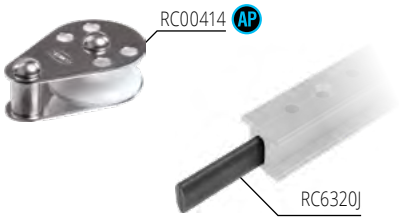
RC6190 TRACK PROFILE

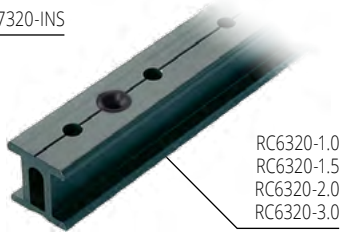
- Strong stainless steel bodies.
- Flared sides and angled ball bearing wheels provide high load capacity and smooth operation.
- Cleat plates can be fitted to control ends to suit vertical or horizontal pull of control line.
- Control sheaves suit up to 6mm (1/4") rope.
- Refer to page 133 for track bending.
- Single cars – Mainsheet and self-tacking jib travellers on dinghies and catamarans.
- Tandem cars – Mainsheet systems on boats up to 9m (30ft).
- Grade 316 stainless steel car bodies and fixtures.
- Grade 2250 stainless steel wheels and bearing races for improved dynamic performance.
- UV stabilised acetal control sheaves.
- Grade AL6061-T6 aluminium alloy track.

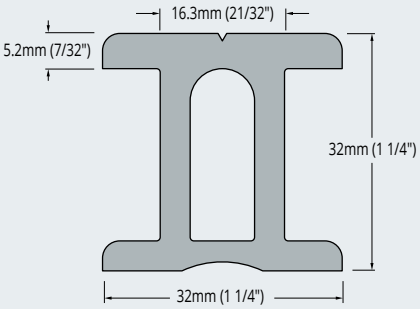
TRACK FASTENINGS – M5 (3/16") countersunk fasteners at 100mm (3 15/16") centres. **STOP HOLES** – 50mm (1 31/32") centres

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
Series 19 I-Track									
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, cleats	51	250	650	210	2	550	1430	7.4
RC61945	Car, Series 30 Nylatron® sheave Orbit Block™	51	250	500	144	2	550	1100	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 AP 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 nylon track bolt insulators									
RC6190-1.0	Track, black	996	-	-	523	39 3/16	-	-	18.4
RC6190-1.5	Track, black	1496	-	-	786	58 7/8	-	-	27.7
RC6190-2.0	Track, black	1996	-	-	1048	78 9/16	-	-	37.0
RC6190-3.0	Track, black	2996	-	-	1573	117 15/16	-	-	55.5
RC6190J	Track joiner	60	-	-	5	2 3/8	-	-	0.2









RC6320 TRACK PROFILE

- Strong stainless steel bodies.
- 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.
- Refer to page 133 for track bending.
- Control sheaves suit up to 8mm (5/16") rope.
- Single cars – Mainsheet and self-tacking jib travellers on boats up to 9m (30ft).
- Tandem cars – Mainsheet systems on boats up to 12m (40ft).
- Grade 316 stainless steel car bodies, wheels and bearing races and fixtures.
- UV stabilised acetal control sheaves.
- Grade AL6061-T6 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
Series 32 I-Track									
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 AP sheave, becket	98	-	-	330	3 7/8	-	-	11.6
Track – Supplied with RC7320-INS nylon track bolt insulators									
RC6320-1.0	Track, black	996	-	-	1210	39 3/16	-	-	42.8
RC6320-1.5	Track, black	1496	-	-	1810	58 7/8	-	-	64.0
RC6320-2.0	Track, black	1996	-	-	2410	78 9/16	-	-	85.2
RC6320-3.0	Track, black	2996	-	-	3620	117 15/16	-	-	127.9
RC6320J	Track joiner	60	-	-	14	2 3/8	-	-	0.5

Ball Bearing cars

Sliderod cars

Plunger stop can be locked up


Track profile options


Control line accessories


Adjustable control end cleats

BALL BEARING TRAVELLER SYSTEMS

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 Round the World Race teams, Vendée Globe challengers, and the professionals on the prestige international circuits who demand the highest performance and dependability, with no room for compromise.

BB Ball Bearing cars

Machined alloy car bodies 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 Sliderod cars

Sliderod cars are suitable for static load applications where adjustment under load is not required and are machined from a dedicated alloy body profile.

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. Spring-loaded plunger stops engage with stop holes in tracks and can be locked in the “up” (disengaged) position.

Control accessories

Cam cleat supports can be adjusted to the optimum cleating angle. Control sheaves provide purchase systems for mainsheet travellers and genoa sheet lead adjustment. Ball Bearing sheave and becket addition kits are available for cars and track control ends to provide extra control line purchase where required.

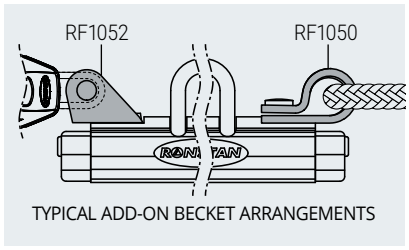
Tracks

7 track sizes are available in the standard product range, to match system specifications to individual requirements. Beam track options are available for unsupported spans (cockpit, companionway, hatch, etc.). Curved track can be supplied with bend in either horizontal or vertical plane. Minimum bend radius depends on car length. See pages 132 & 133 for options and details.

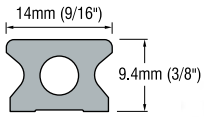
Custom Solutions

Custom solutions are also available - see the custom products section on ***www.ronstan.com*** for ideas and inspiration.

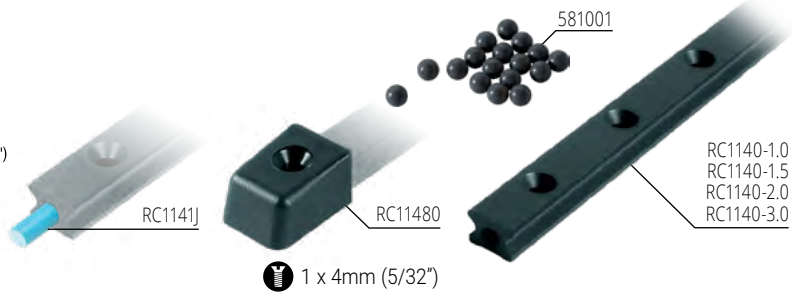
SERIES 14 BALL BEARING



TYPICAL ADD-ON BECKET ARRANGEMENTS



RC1140 track profile



- Low profile, lightweight alloy cars and impact modified, fibre reinforced and UV stabilised nylon end caps.
- Twin rows of recirculating acetal ball bearings provide smooth, low friction performance under load.
- Control sheaves suit up to 6mm (1/4') diam. rope.
- 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.
- Refer to page 133 for track bending.
- Dinghy and catamaran traveller and jib sheet systems.
- Alloy track and cars.
- Acetal ball bearings.
- Grade 316 stainless steel fixtures.

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

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*1	Car, 2 mounting holes, 35mm (1 3/8") hole spacing	68	41	150	400	48	2 11/16	1 5/8	330	880	1.7
RC11402	Car, pivoting shackle top	47	41	125	400	45	1 7/8	1 5/8	280	880	1.6
RC11403	Car, pivoting shackle top, 2 mounting screws	78	41	180	400	88	3 1/16	1 5/8	400	880	3.1
RC11405	Orbit Car, integrated lashing eye	50	41	125	250	30	2	1 5/8	275	550	1.1
RC1140-1.0*2	Track, black	996	14	-	-	230	39 3/16	9/16	-	-	8.1
RC1140-1.5*2	Track, black	1496	14	-	-	345	58 7/8	9/16	-	-	12.2
RC1140-2.0*2	Track, black	1996	14	-	-	460	78 9/16	9/16	-	-	16.2
RC1140-3.0*2&3	Track, black	2996	14	-	-	690	117 15/16	9/16	-	-	24.3
RC11410	Car, saddle top, single AP control sheaves	68	41	150	400	86	2 11/16	1 5/8	330	880	3.0
RC11480	End cap, plastic	28	20	-	-	6	1 1/8	25/32	-	-	0.2
Accessories											
581001	Ball bearing, acetal, 5.00mm (0.197") diameter	-	-	-	-	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 C-Cleat™	-	-	-	-	7	-	-	-	-	0.2
RF20151	20mm (3/4") BB Utility cheek block, for leading control lines	-	-	250	550	14	-	-	550	1210	0.5
RF20151A	20mm (3/4") BB Utility 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 as RCxxxxxxS
*3 Longer tracks available on request.

SERIES 19 BALL BEARING

RC11902 BB

RC11903 BB

2 x M5 screw

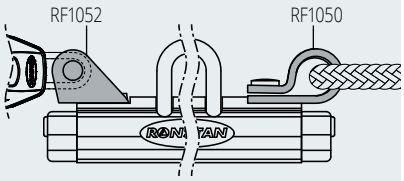
RC11905 BB

RC11910 BB

RC11945 BB

RC11920 BB

RC11921 BB



TYPICAL ADD-ON BECKET ARRANGEMENTS

RF1052

5mm (3/16")

RF1050

5mm (3/16")

501002

- Low profile, lightweight alloy cars and impact modified, fibre reinforced and UV stabilised nylon end caps.
- Twin rows of recirculating Torlon® ball bearings provide smooth, low friction performance under load.
- 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.
- Loop and fork style fittings are easily added for becket and control line block attachment.
- Dinghy and catamaran mainsheet traveller and jib lead sheeting 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
BB Ball Bearing											
RC11902	Car, pivoting shackle top	50	47	300	1050	60	2	1 7/8	660	2310	2.1
RC11903	Car, pivoting shackle top, 2 mounting screws	70	47	400	1490	85	2 3/4	1 7/8	880	3280	3.0
RC11905	Orbit Car, integrated lashing eye	50	47	300	600	38	2	1 7/8	660	1320	1.3
RC11910	Car, saddle top, single AP control sheaves	85	47	500	1240	120	3 11/32	1 7/8	1100	2730	4.2
RC11920	Car, saddle top, single AP control sheaves, C-Cleats™	85	47	500	1240	325	3 11/32	1 7/8	1100	2730	11.5
RC11921	Car, saddle top, double AP control sheaves, C-Cleats™	85	47	500	1240	345	3 11/32	1 7/8	1100	2730	12.2
RC11945	Car, 20mm (3/4") BB Utility block	50	47	250	550	60	2	1 7/8	550	1210	2.1
Accessories											
501002	Ball bearing, Torlon®, 5.00mm (0.197") diameter	-	-	-	-	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

SERIES 19 BALL BEARING

© Beau Outteridge

RC11912 (BB)

RC11922 (BB)

RC00451 (SR)
RC00452 (SR)
RC00453 (SR)

RC11930 (BB)

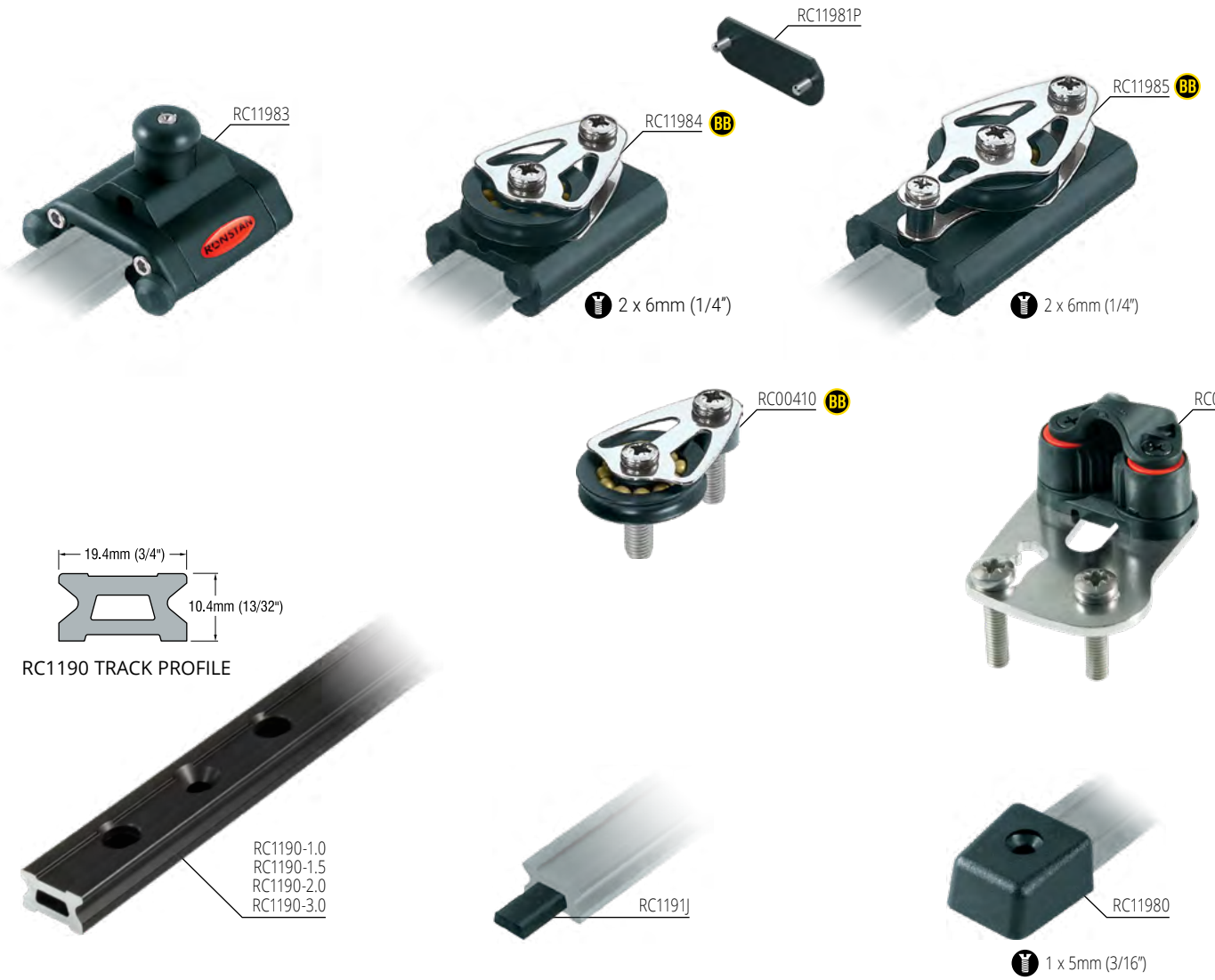
RC51930 (SR)

RC51940 (SR)

- Low profile, lightweight alloy cars and impact modified, fibre reinforced and UV stabilised nylon 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 40mm (1 9/16") diameter, and 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.
- Control sheaves are 31mm (1 1/4") and suit up to 6mm (1/4") rope.
- Adjustable stops can be fitted on track aft of genoa cars and used to relieve load on adjustment tackle.
- Mainsheet traveller and jib lead sheeting systems on sportsboats and keelboats to 7m (23ft).
- Alloy track, cars and control ends.
- Torlon® ball bearings.
- Acetal sliderods.
- Acetal primary sheaves (genoa cars).
- 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	215	3 15/16	1 7/8	1330	3680	7.6
RC11922	Car, pivoting saddle top, single control sheaves & cleat	100	47	605	1670	365	3 15/16	1 7/8	1330	3680	12.9
RC11930	Genoa car, control beckets	100	47	605	1430	245	3 15/16	1 7/8	1330	3150	8.6
(SR) Sliderod											
RC00451	Sliderods, suits RC51930 (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 RC51940 (pair)	37	5	-	-	3	1 7/16	3/16	-	-	0.1
RC51930	Genoa car, sliderods, plunger stop	82	39	660	1430	230	3 1/4	1 9/16	1460	3150	8.1
RC51940	Car, sliderods, pivoting shackle, plunger stop	55	39	310	1050	95	2 3/16	1 9/16	680	2310	3.6

SERIES 19 BALL BEARING



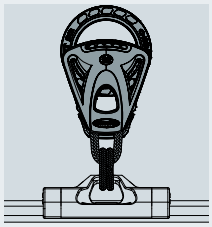
TRACK FASTENINGS – 5mm (3/16") countersunk fasteners at 100mm (3 15/16") centres **STOP HOLES** – 50mm (1 31/32") centres

- 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.
- 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.
- Adjustable stops can be fitted on track aft of genoa cars and used to relieve load on adjustment tackle.
- Refer to page 133 for track bending.
- Mainsheet systems on boats to 7m (23ft).
- Genoa sheet systems on boats to 10m (33ft).
- Alloy track, cars and control ends.
- Grade 316 stainless steel fixtures.

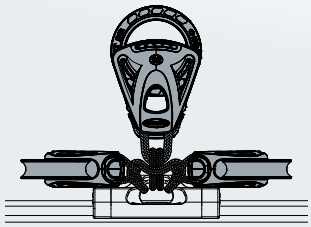
PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in	WIDTH in	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC00410	BB control end sheave addition kit	39	30	165	675	33	1 9/16	1 3/16	360	1490	1.2
RC00420	Control end C-Cleat™ addition kit	-	-	-	-	94	-	-	-	-	3.3
RC1190-1.0*1	Track, black	996	19	-	-	310	39 3/16	3/4	-	-	10.9
RC1190-1.5*1	Track, black	1496	19	-	-	465	58 7/8	3/4	-	-	16.4
RC1190-2.0*1	Track, black	1996	19	-	-	620	78 9/16	3/4	-	-	21.9
RC1190-3.0*1&2	Track, black	2996	19	-	-	930	117 15/16	3/4	-	-	32.8
RC1191J	Track joiner	60	-	-	-	3	2 3/8	-	-	-	0.1
RC11980	End cap, plastic	30	26	-	-	6	1 3/16	1	-	-	0.2
RC11981P	Cover plate for control end, includes screws	-	39	-	-	3	-	1 9/16	-	-	0.1
RC11983	Adjustable stop	57	47	-	-	65	2 1/4	1 7/8	-	-	2.3
RC11984	Control end, single BB sheave	65	39	165	675	82	2 9/16	1 9/16	360	1490	2.9
RC11985	Control end, single BB sheave & becket	78	39	245	675	102	3 1/16	1 9/16	540	1490	3.6

*1 Silver track available - Order as RCxxxxxS
*2 Longer track available on request.

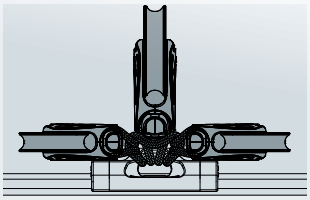
ORBIT



Orbit Block™ in line with car using additional Dyneema® link



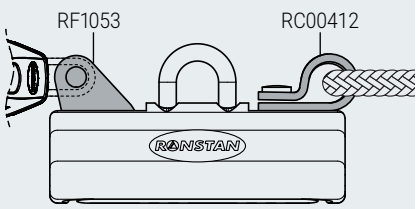
Orbit Block™ in line with car using additional Dyneema® link. Control blocks linked to each other through additional Dyneema® link.



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

2 x M6 screw

6mm (1/4")



TYPICAL ADD-ON BECKET ARRANGEMENTS

- Low profile, lightweight alloy cars.
- 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") diameter and suit up to 6mm (1/4") 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 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
RC12220	Car, saddle top, single AP control sheaves, C-Cleats™	125	58	880	2000	635	5	2 5/16	1940	4410	22.4
RC12221	Car, saddle top, double AP control sheaves, C-Cleats™	125	58	880	2000	655	5	2 5/16	1940	4410	23.1
Accessories											
RC00412	Control becket, 8mm (5/16") eye, M6 screws, suits RC12203, RC12204 & RC12231	-	-	-	-	6	-	-	-	-	0.2
RF1053	Control becket fork, 5mm (3/16") pin, suits RC12203 & RC12204	-	14	-	-	9	-	9/16	-	-	0.3

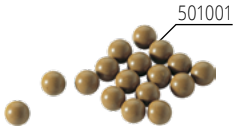
SERIES 22 BALL BEARING

WINDWARD CONTROL CAR OPERATION

1. Windward control line is pulled in.
2. Cleat 'bridge' slides to windward on car.
3. Leeward cleat cams are opened by two pins fixed to car, releasing the leeward control line automatically.
4. Windward control line released, cleat bridge at rest with both control lines recleated.

- RC12223 cleat supports can be adjusted to optimum cleating angle.
- RC12227 windward control car control line sheaves suit 4:1 or 5:1 purchase system.
- RF44000 suits cars RC12213 & RC12223 for upgrade to ball bearing sheave.
- Combine RC12213 or RC12223 with a mainsheet system RF72700 or RF72900 for ultimate mainsheet control.
- Mainsheet systems on boats to 10m (33ft).
- Alloy track, cars and control ends.
- Torlon® ball bearings in cars.
- Acetal control sheaves.
- Grade 316 stainless steel fixtures.

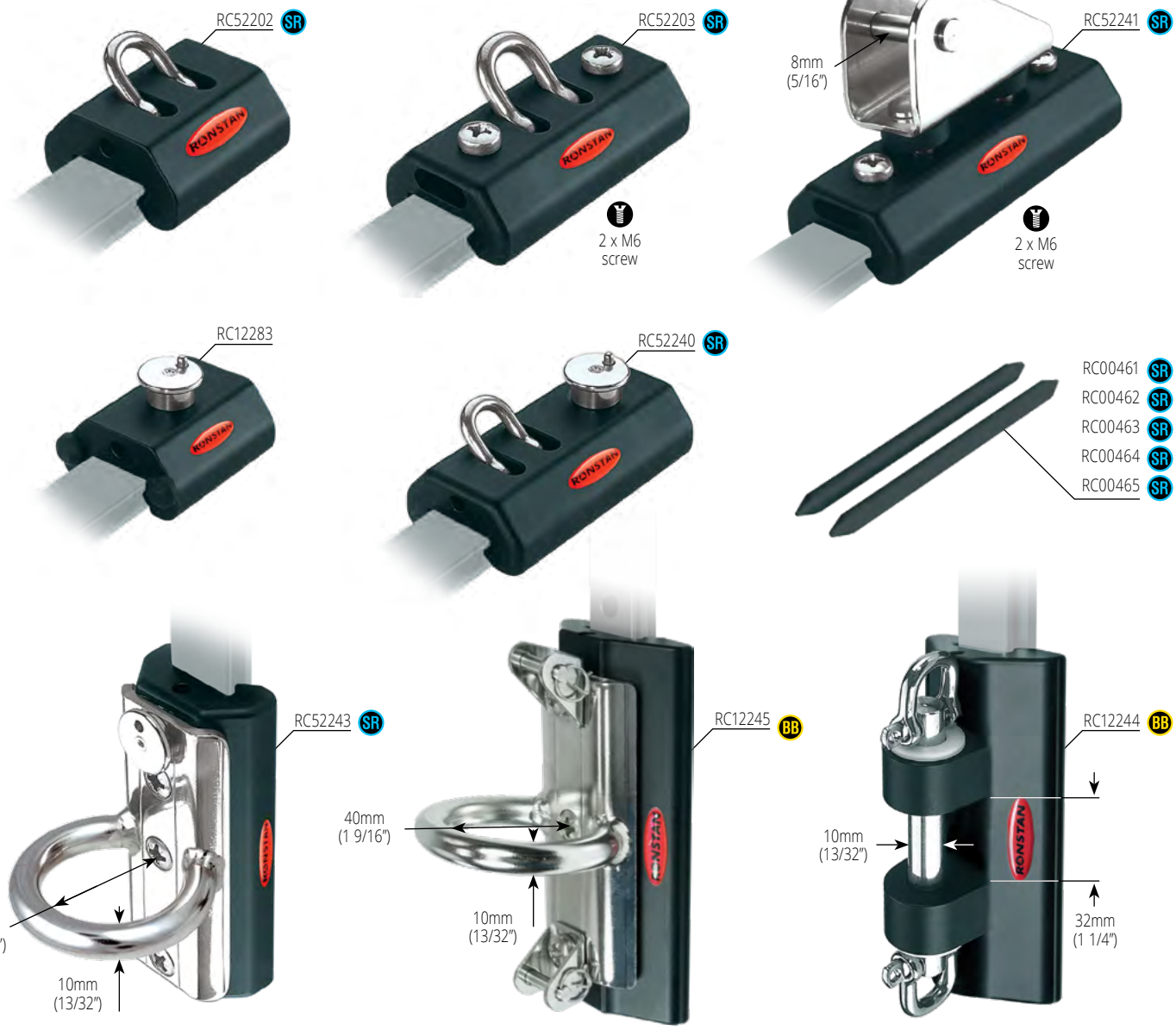
PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in	WIDTH in	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC12204	Car, pivoting shackle top, 2 mounting screws	125	58	880	2640	230	5	2 5/16	1940	5820	8.1
RC12213	Car, pivoting shackle top, double control sheaves	180	58	880	2180	520	7 1/16	2 5/16	1940	4810	18.3
RC12223	Car, pivoting shackle top, double control sheaves, adjustable C-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 & C-Cleats™	175	58	880	2180	1056	6 7/8	2 5/16	1940	4810	37.2
Accessories											
RF44000	Aluminium control sheave, 40mm (1 1/2") diameter	-	-	-	-	16	-	-	-	-	0.6



- Ball bearing cars have twin rows of recirculating Torlon® ball bearings for smooth adjustment under load.
- RC52230 sliderod genoa car is a simple option for a sheet lead that does not require adjustment under load. Plunger stop can be locked in the "up" position.
- Control sheaves are 40mm (1 9/16") diameter and suit up to 6mm (1/4") rope.
- Genoa car sheaves are 60mm (2 3/8") diameter, and wide enough to accept two sheets for easy headsail changes.
- Alloy roller ball bearing sheave upgrade suits genoa 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).
- Genoa sheet systems on boats to 11m (36ft).
- Alloy track, cars and control ends.
- Torlon® ball bearings in cars.
- Acetal primary sheaves (genoa cars) and control sheaves.
- Alloy ball bearing sheave upgrade available.
- Grade 316 stainless steel fixtures.

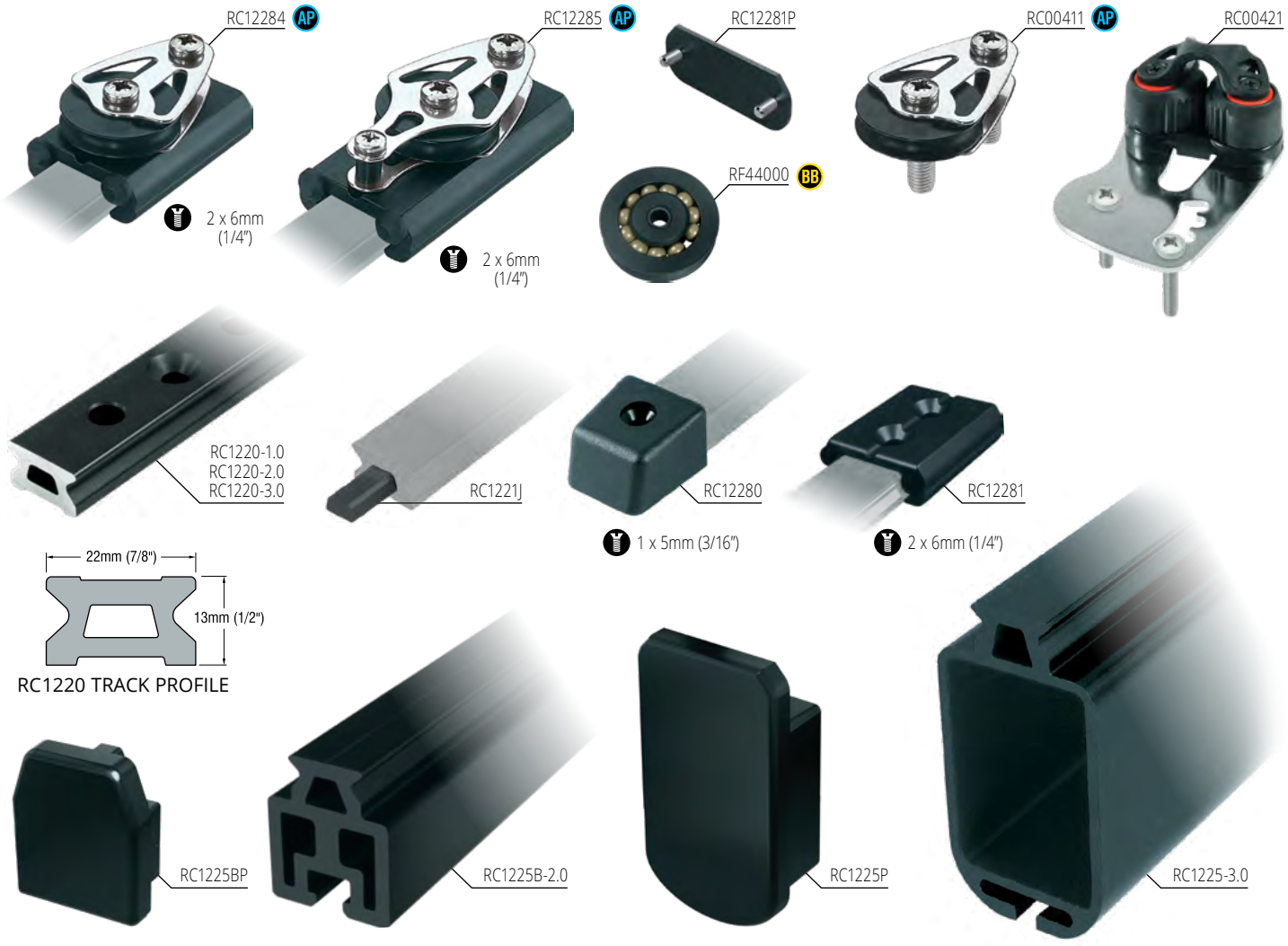
PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in	WIDTH in	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC12231	Genoa car, single control sheave	165	58	990	2300	570	6 1/2	2 5/16	2180	5070	20.1
RF68000W	Aluminium roller bearing upgrade sheave, 60mm (2 3/8") diameter, suits RC12231, RC52230	-	32	1150	-	128	-	1 1/4	2540	-	4.5
SR Sliderod											
RC52230	Genoa car, sliderods, plunger stop	125	45	1205	2410	520	5	1 3/4	2660	5310	18.3
Accessories											
501001	Ball bearing, Torlon®, 6.35mm (1/4") diameter	-	-	-	-	1	-	-	-	-	0.1
RC00411	Control sheave addition kit, includes 2 x M6 screws, suits RC12231	65	40	240	900	47	2 9/16	1 9/16	530	1980	1.7
RC00412	Control becket, 8mm (5/16") eye, M6 screw, suits RC12231	-	-	-	-	6	-	-	-	-	0.2

SERIES 22 BALL BEARING



- 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 car suits poles set up for end-for-end gybes. Adjustment is by plunger stop.
- Adjustable stops can be fitted on track aft of genoa cars and used to relieve load on adjustment tackle.
- RC12244 spinnaker pole car suits piston style inboard end fittings with 32mm (1 1/4") 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, towing eyes	130	58.0	1350	2700	308	5 1/8	2 5/16	2980	5950	10.9
RC12245	Spinnaker pole car, ring, towing forks	118	58.0	800	1600	405	4 5/8	4 5/8	1760	3530	14.3
SR Sliderod											
RC00461	Sliderods, suits RC52202 (pair)	37	6.4	-	-	4	1 7/16	1/4	-	-	0.1
RC00462	Sliderods, suits RC52203, RC52240 (pair)	74	6.4	-	-	8	2 15/16	1/4	-	-	0.3
RC00463	Sliderods, suits RC52241 (pair)	104	6.4	-	-	11	4 1/8	1/4	-	-	0.4
RC00464	Sliderods, suits RC52243 (pair)	94	6.4	-	-	10	3 11/16	1/4	-	-	0.4
RC00465	Sliderods, suits RC52230 (pair)	114	6.4	-	-	12	4 1/2	1/4	-	-	0.4
RC12283	Adjustable stop	60	45	-	-	104	2 3/8	1 3/4	-	-	3.7
RC52202	Car, sliderods, pivoting shackle	48	45.0	600	1490	95	1 7/8	1 3/4	1320	3280	3.4
RC52203	Car, sliderods, pivoting shackle, internal control beckets	85	45.0	1000	2690	166	3 3/8	1 3/4	2200	5930	5.9
RC52240	Car, sliderods, pivoting shackle & 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 beckets	115	45.0	1205	2410	347	4 1/2	1 3/4	2660	5310	12.2
RC52243	Spinnaker pole car, sliderods, ring, plunger stop	105	45.0	1300	2500	410	4 1/8	1 3/4	2870	5510	14.5



TRACK FASTENINGS – 6mm (1/4") countersunk fasteners at 100mm (3 15/16") centres **STOP HOLES** – 50mm (1 31/32") centres (RC1220 only)

- Control ends 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.
- Beam tracks can be used for unsupported spans to bridge cockpits and companionway hatches. They are supplied without fastener or stop holes. See page 132 for mechanical data.
- 40mm (1 9/16") diameter control end sheaves suit up to 6mm (1/4") rope.
- Control ends can be fitted with RC12281P to conceal track end.
- Standard low profile track has stop holes for cars fitted with plunger stops.
- Refer to page 133 for track bending.
- Mainsheet systems on boats to 10m (33ft).
- Genoa sheet systems on boats to 11m (36ft).
- RC1225-3.0: Grade AL6063-T6 aluminium alloy.

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
Accessories											
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 C-Cleat™ addition kit, suits RC12284, RC12285	-	-	-	-	207	-	-	-	-	7.3
RC1220-1.0*[1]	Track, black	996	22	-	-	460	39 3/16	7/8	-	-	16.2
RC1220-2.0*[1]	Track, black	1996	22	-	-	920	78 9/16	7/8	-	-	32.5
RC1220-3.0*[1&2]	Track, black	2996	22	-	-	1380	117 15/16	7/8	-	-	48.7
RC1221J	Track joiner	60	-	-	-	4	2 3/8	-	-	-	0.1
RC1225-3.0*[1]	Beam track, black. 45mmW x 85mmH (1 25/32"W x 3 11/32"H)	2996	85	-	-	6240	117 15/16	3 3/8	-	-	220.1
RC1225P	End plug for RC1225 beam track	-	45	-	-	4	-	1 3/4	-	-	0.1
RC1225B-2.0*[1]	Beam track, black. 37mmW x 44mmH (1 7/16"W x 1 3/4"H)	1996	37	-	-	4530	78 9/16	1 7/16	-	-	160.1
RC1225BP	End plug for RC1225B beam track	-	37	-	-	18	-	1 7/16	-	-	0.6
RC12280	End cap, plastic	30	26	-	-	6	1 3/16	1	-	-	0.2
RC12281*[1]	Track end stop, aluminium alloy	50	45	-	-	50	1 31/32	1 25/32	-	-	1.8
RC12281P	Cover plate for control end	-	45	-	-	5	-	1 3/4	-	-	0.2
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	Aluminium alloy control sheave, 40mm (1 1/2") diameter	-	-	-	-	16	-	-	-	-	0.6

*1 Silver track available - Order as RCxxxxxS
*2 Longer track available on request

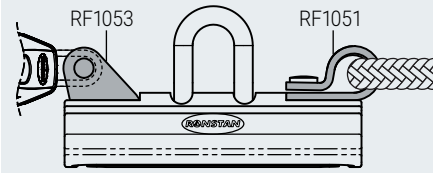
SERIES 26 BALL BEARING

© Italia Yachts

10mm (3/8")

- RC12617 with pivoting sheave unit is a compact and low profile solution for 2:1 mainsheet systems. Suits up to 6:1 control line purchase. Pivoting of the main sheave unit is limited to 4° aft and 45° forward.
- 50mm (2") diameter control line sheaves suit up to 8mm (5/16") rope.
- The fully machined RC12605 Orbit Car provides the ultimate in lightweight and flexibility. Blocks may be attached with a Dyneema® link or lashing. Multiple cars can be linked together for higher working load or to suit curved tracks.
- Mainsheet systems on boats to 12m (40ft).
- Self-tacking jib sheet systems on boats to 10m (33ft).
- Alloy track, cars and control ends.
- Torlon® ball bearings in cars.
- Alloy ball bearing sheave upgrade available (RC12617).
- Grade 316 stainless steel fixtures (RC12617).

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											
RC12605	Orbit Car, integrated lashing eye	108	69	850	1700	290	4 1/4	2 3/4	1870	3740	10.2
RC12617	Car, 1 x 75mm (3") diameter sheave, triple 50mm (2") diameter control sheaves, C-Cleats™	210	70	1700	3400	2280	8 1/4	2 3/4	3750	7500	80.4
Accessories											
501010	Ball bearing, Torlon®, 8.00mm (5/16") diameter	-	-	-	-	1	-	-	-	-	0.1
RF54000	Aluminium ball bearing control sheave, 50mm (2") diameter, suits RC12613, RC12631, RC12623, RC12617	-	-	-	-	32	-	-	-	-	1.1
RF78000W	Aluminium roller ball bearing sheave, 75mm (3") diameter, suits RC12617	-	-	-	-	280	-	-	-	-	9.9



TYPICAL ADD-ON BECKET ARRANGEMENTS

- Ball bearing cars have twin rows of recirculating Torlon® ball bearings for smooth, precise adjustment under load.
- 40mm (1 9/16") diameter control sheaves suit up to 6mm (1/4") rope.
- RC12631 genoa car sheave 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.
- Ball bearing sheaves available for enhanced performance.
- RF324-2 provides support for Series 60 Orbit Block™ on 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, cars and control ends.
- Torlon® ball bearings in cars.
- Acetal 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											
RC12603	Car, pivoting shackle, 2 mounting screws	120	69	690	1380	331	4 3/4	2 3/4	1520	3040	11.7
RC12613	Car, pivoting shackle, double control sheaves	200	69	1700	3400	740	7 7/8	2 3/4	3750	7500	26.1
RC12623	Car, pivoting shackle, double control sheaves, adjustable C-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											
RF324-2	Stand-up spring kit, suits RC12603, RC12613, RC12623	-	-	-	-	60	-	-	-	-	2.1
RF1051	Control becket, 8mm (5/16") eye, suits RC12603 & RC12631	-	-	-	-	6	-	-	-	-	0.2
RF1053	Control becket fork, 5mm (3/16") pin, suits RC12603 & RC12631	-	14	-	-	9	-	9/16	-	-	0.3
RF68000W	Aluminium roller ball bearing sheave, 60mm (2 3/8") diameter, suits RC12631	-	33	1150	-	128	-	1 1/4	2540	-	4.5

SERIES 26 BALL BEARING

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

- Control ends are used with mainsheet traveller and genoa sheeting systems to create purchase systems for easy adjustment of car position under load.
- Control ends can be fitted with RC12681P to conceal track end.
- Refer to page 133 for track bending.
- Alloy track and control ends.
- Torlon® ball bearings in cars.
- Acetal sheaves.
- Alloy ball bearing 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
Accessories											
RC1260-1.0*1	Track, black	996	26	-	-	600	39 3/16	1 1/16	-	-	21.2
RC1260-2.0*1	Track, black	1996	26	-	-	1200	78 9/16	1 1/16	-	-	42.3
RC1260-3.0*1&2	Track, black	2996	26	-	-	1800	117 15/16	1 1/16	-	-	63.5
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
RC12281P	Cover plate for end stop, including screws	-	45	-	-	5	-	1 3/4	-	-	0.2
RC12681P	Cover plate for control end, including screws	-	45	-	-	7	-	1 3/4	-	-	0.2
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 sheaves	95	45	450	900	198	3 3/4	1 25/32	990	1980	7.0
RC12687	Control end, double sheaves & becket	95	45	450	900	258	3 3/4	1 25/32	990	1980	9.1
RC12687C	Control end, double sheaves & becket, C-Cleat™	95	45	450	900	405	3 3/4	1 25/32	990	1980	14.3
RF44000	Aluminium ball bearing control sheave, 40mm (1 1/2") diameter	-	-	-	-	16	-	-	-	-	0.6

*1 Silver track available - Order as RCxxxxxS
*2 Longer track available on request.

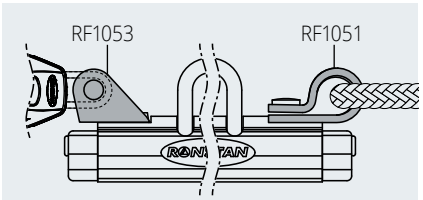

RONSTAN

SERIES 30 BALL BEARING

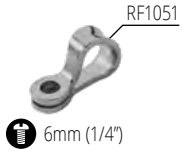
- RC13017 with pivoting sheave unit is a compact and low profile solution for 2:1 mainsheet systems. Pivoting of the main sheave unit is limited to 4° aft and 45° forward.
- 50mm (2") diameter control line sheaves suit up to 8mm (5/16") rope.
- Stand-up spring kit RF324 provides support for a Series 60 or 75 Orbit Block™ on mainsheet car RC13018A.
- Mainsheet systems on boats to 18m (60ft).
- Self-tacking jib sheet systems on boats to 11m (36ft).
- Alloy track, cars and control ends.
- Torlon® ball bearings in cars.
- Alloy ball bearing 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											
RC13005	Orbit Car, integrated lashing eye	120	77	1000	2000	300	4 3/4	3 1/16	2200	4400	10.6
RC13017	Car, 1 x 75mm (3") diameter sheave, triple 50mm (2") diameter control sheaves, C-Cleats™	210	77	1900	3800	2330	8 1/4	3 1/16	4180	8360	82.2
RC13018A	Car, 2 x padeye for main block attachment, double 50mm (2") diameter control sheaves	332	77	2700	5400	1585	13 1/16	3 1/16	5950	11900	55.9
Accessories											
RF324	Stand-up spring suits Series 60 & 75 single Orbit Blocks™ and Core Blocks™	-	-	-	-	80	-	-	-	-	2.8
RF54000	Aluminium ball bearing control sheave, 50mm (2") diameter, suits RC12613, RC12631, RC12623, RC13017	-	-	-	-	32	-	-	-	-	1.1
RF78000W	Aluminium roller ball bearing sheave, 75mm (3") diameter, suits RC13017	-	-	-	-	280	-	-	-	-	9.9

SERIES 30 BALL BEARING



TYPICAL ADD-ON BECKET ARRANGEMENTS



- Low profile, lightweight alloy cars and end caps.
- RC13023 individual cleat supports can be adjusted to optimum cleating angle.
- Control line sheaves are 50mm (2") diameter and suit up to 8mm (5/16") rope.
- Twin rows of recirculating Torlon® ball bearings provide smooth, low friction performance for easy adjustment under load.
- Loop and fork style fittings suit becket or control line blocks to add extra purchase to control line systems.
- Stand-up spring kit RF324-2 provides support for a Series 60 or Series 75 single Orbit Block™ on mainsheet cars RC13003, RC13004, RC13012, RC13013, RC13023.

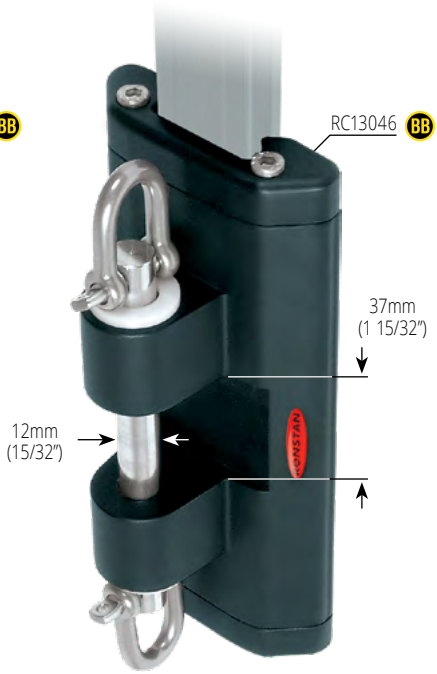
PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in	WIDTH in	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing											
RC13003	Car, pivoting shackle top, 2 mounting screws	100	77	860	2800	350	3 15/16	3 1/16	1900	6170	12.3
RC13004	Car, pivoting shackle top, 2 mounting screws	150	77	1650	3300	525	5 7/8	3 1/16	3640	7280	18.5
RC13012	Car, pivoting shackle top, single control sheaves	225	77	2200	4400	915	8 7/8	3 1/16	4840	9680	32.3
RC13013	Car, pivoting shackle top, double control sheaves	225	77	2200	4400	1070	8 7/8	3 1/16	4840	9680	37.7
RC13023	Car, pivoting shackle top, double control sheaves, adjustable C-Cleats™	225	77	2200	4400	1500	8 7/8	3 1/16	4840	9680	52.9
Accessories											
501003	Ball bearing, Torlon®, 7.95mm (5/16") diameter	-	-	-	-	1	-	-	-	-	0.1
RF324-2	Stand-up spring kit, suits RC13004, RC13012, RC13013, RC13023	-	-	-	-	60	-	-	-	-	2.1
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
RF74142	Series 75 Core Block™ stand-up kit, accepts up to 14mm (9/16") rope. Suits RC13004.	-	-	1500	3000	434	-	-	3300	6600	15.3

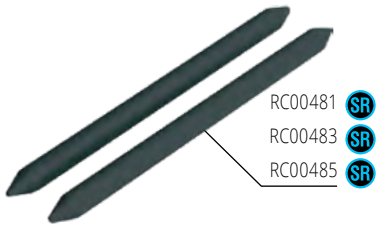
SERIES 30 BALL BEARING

10mm (3/8")

- 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.
- Alloy ball bearing sheaves available for enhanced performance.
- 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.
- RC53030 sliderod car is a simple option for a sheet lead that does not require adjustment under load. Plunger stop can be locked in the "up" position.
- Genoa sheet systems on boats to 17m (56ft).
- Alloy track, cars and control ends.
- Torlon® ball bearings in cars.
- Acetal sliderods.
- Acetal 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											
RC13031	Genoa car, single control sheave	200	77.0	1800	3200	1130	7 7/8	3 1/16	3970	7050	39.9
RC13033	Genoa car, double control sheaves	200	77.0	1800	3200	1227	7 7/8	3 1/16	3970	7050	43.3
SR Sliderod											
RC53030	Genoa car, sliderods, plunger stop	160	55.0	1700	3400	848	6 5/16	2 3/16	3750	7500	29.9
Accessories											
RF54000	Aluminium ball bearing control sheave, 50mm (2") diameter, suits RC13031, RC13033	-	-	-	-	32	-	-	-	-	1.1
RF78000W	Aluminium roller ball bearing sheave, 75mm (3") diameter, suits RC13033	-	-	-	-	280	-	-	-	-	9.9

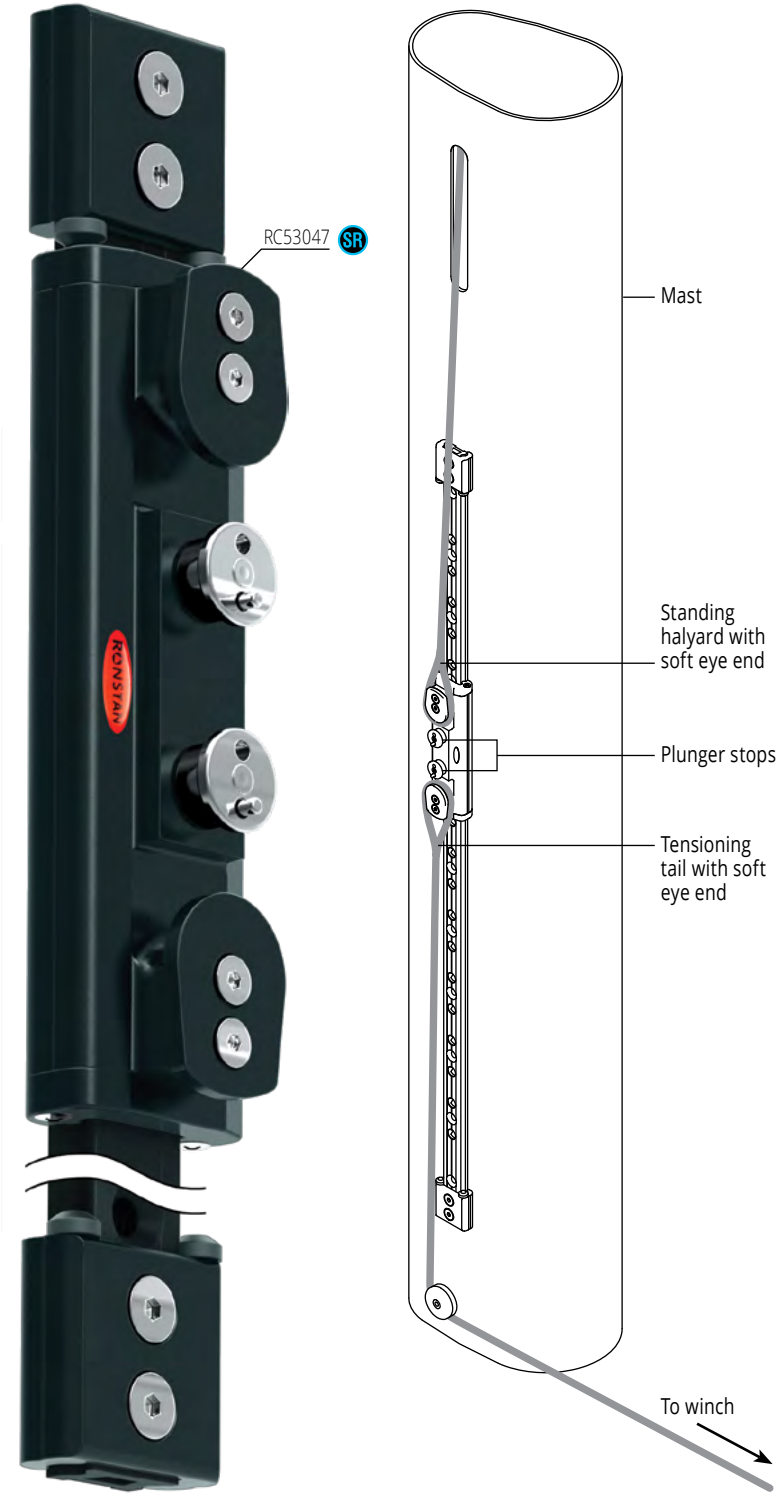




- Sliderod cars with pivoting shackle suit a variety of applications where a secure, adjustable take-off point for a block or control line is required.
- Plunger stop can be locked in the "up" position.
- Ball bearing spinnaker pole cars for boats to 15m (50ft) suit a variety of inboard end fittings.
- Alloy track, cars and control ends.
- 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 32mm (1 1/4") toggle	175	77	1800	3600	720	6 7/8	3 1/16	3970	7940	25.4
RC13046	Spinnaker pole car, suits 37mm (1 15/32") toggle	175	77	1800	3600	695	6 7/8	3 1/16	3970	7940	24.5
SR Sliderod											
RC00481	Sliderods, suits RC13083 (pair)	53	8	-	-	8	2 1/16	5/16	-	-	0.3
RC00483	Sliderods, suits RC53003, RC53040 (pair)	98	8	-	-	16	3 7/8	5/16	-	-	0.6
RC00485	Sliderods, suits RC53030 (pair)	149	8	-	-	24	5 7/8	5/16	-	-	0.8
RC53003	Car, sliderods, pivoting shackle, internal control beckets	110	55	1325	2650	310	4 5/16	2 3/16	2920	5840	10.9
RC53040	Car, sliderods, pivoting shackle & 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 beckets	140	55.0	1880	3760	560	5 1/2	2 3/16	4140	8290	19.8

SERIES 30 BALL BEARING



HALYARD TAIL SYSTEM TYPICAL SETUP

For use with furling sails that are rarely lowered.

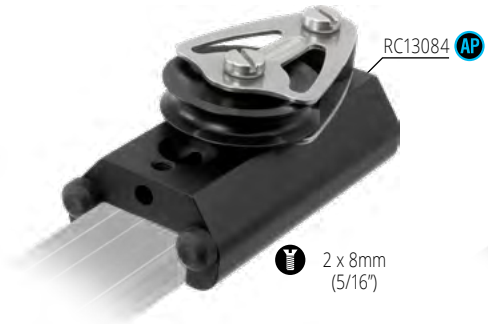
1. Car locked in position near the top of the track.
2. Sail hoisted until soft eye in end of standing halyard exits mast and can be placed over the upper attachment lug on the car.
3. Soft eye of tensioning halyard tail is placed over lower attachment lug on car.
4. When load is taken up by tensioning halyard tail, plunger stops are lifted and locked in the "up" (disengaged position).
5. Once desired halyard tension is achieved, plunger stops are released to engage with stop holes in the track.
6. When load has been transferred to the locked car, the tensioning halyard tail may be removed.

Note: 2:1 halyard may be used to reduce load for use on larger yachts.

TRACK FASTENINGS – 8mm (5/16") countersunk fasteners at 100mm (3 15/16") centres **STOP HOLES** – Oversize at 50mm (1 31/32") centres

- System includes sliderod car, special 1231mm (48 15/32") Series 30 track and two low profile end stops.
- Car has 2 attachment lugs for the soft eye end of the halyard and tensioning tail.
- Car has dual oversize plunger stops that can be locked in the "up" position.
- The special track has oversize plunger stop holes at 50mm (1 31/32") spacing for the associated high loads, and is drilled and tapped to accept the low profile end stops.
- Suitable for boats to 16m (53ft) with 1:1 halyard purchase.
- Alloy track, car and end stops.
- Acetal sliderods.
- 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											
RC53047	Halyard tail system. Sliderod car, includes 2 x plunger stop and 2 x attachment lugs, 1231mm (48 15/32") special track, 2 x low profile end stops	210	575	2300	4600	1940	8 1/4	2 15/16	5060	10120	68.4



- Traveller control ends 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 addition kits are adjustable for 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.
- Control ends can be fitted with RC13081P cover plate to control track end.

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
Accessories											
RC00424	Control end C-Cleat™ addition kit, suits RC13084, RC13085, RC13086, RC13087	-	-	-	-	215	-	-	-	-	7.6
RC13081	End stop, aluminium	58	55	-	-	89	2 9/32	2 3/16	-	-	3.1
RC13081P	Cover plate for end stop, including screws	-	55	-	-	16	-	2 3/16	-	-	0.6
RC13082P	Cover plate for control end, including screws	-	55	-	-	18	-	2 3/16	-	-	0.6
RC13083	Adjustable stop	77	55	-	-	190	3	2 3/16	-	-	6.7
RC13084	Control end, single sheave	115	55	450	1350	250	4 1/2	2 3/16	990	2980	8.8
RC13085	Control end, single sheave & becket	115	55	675	1350	315	4 1/2	2 3/16	1490	2980	11.1
RC13086	Control end, double sheaves	115	55	675	1350	315	4 1/2	2 3/16	1490	2980	11.1
RC13087	Control end, double sheaves & becket	115	55	675	1350	580	4 1/2	2 3/16	1490	2980	20.5
RF54000	Aluminium ball bearing control sheave, 50mm (2") diameter, suits RC13084, RC13085, RC13086, RC13087	-	-	-	-	32	-	-	-	-	1.1

SERIES 30 BALL BEARING

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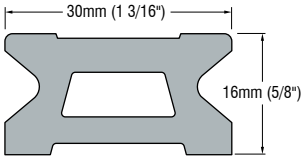
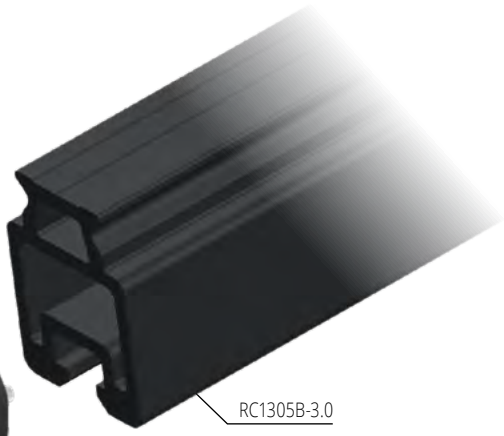
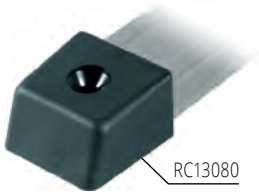


RC1300 TRACK PROFILE





1 x 6mm (1/4")

TRACK FASTENINGS – 8mm (5/16") countersunk fasteners at 100mm (3 15/16") centres **STOP HOLES** – 50mm (1 31/32") centres

- Beam track can be used for unsupported spans to bridge cockpits and companionway hatches. They are supplied without fastener or stop holes. See page 132 for mechanical data.
- Standard low profile track has stop holes for cars fitted with plunger stops.
- Refer to page 133 for track bending.
- Mainsheet and genoa sheet systems on boats to 17m (56ft).
- Alloy track.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	WEIGHT g	LENGTH mm	WIDTH mm	WEIGHT oz
Accessories							
RC1300-1.0*1	Track, black	996	30	810	39 3/16	1 3/16	28.6
RC1300-2.0*1	Track, black	1996	30	1620	78 9/16	1 3/16	57.1
RC1300-3.0*1&2	Track, black	2996	30	2430	117 15/16	1 3/16	85.7
RC1301J	Track joiner	60	-	7	2 3/8	-	0.2
RC1305B-3.0*1	Beam track, black. 42mmW x 58mmH (1 21/32"W x 2 9/32"H)	2996	42	8490	117 15/16	1 21/32	299.4
RC1305BP	Cover plate for control end including screws, suits RC1305B beam track	-	76	42	-	3	1.5
RC13080	End cap, plastic	37	37	27	1 7/16	1 7/16	1.0

*1 Silver track available - Order as RCxxxxxS
*2 Longer track available on request.

SERIES 42 BALL BEARING

© Contest Yachts

- 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.
- RC14205 Orbit Car has an integral attachment point for lashings.
- RC14214 suits use with RF109100 Series 100 Orbit Block™ for a 2:1 mainsheet system 60mm (2 3/8") diameter roller ball bearing control sheaves suit up to 14mm (9/16") rope.
- RC14215 accepts two RF79100 Orbit Blocks™ or similar. 50mm (2") diameter control sheaves suit up to 8mm (5/16") diameter line.
- Stand-up spring kit RF324 provides support for a Series 60 or Series 75 Orbit Block™.
- Mainsheet systems on boats to 25m (82ft).
- Self-tacking jib systems on boats to 20m (65ft).
- Multihull mainsheet systems on boats to 19m (62ft).
- Torlon® ball bearings (cars).
- Torlon® rollers (RC14218A sheaves).
- Alloy (RC14214) or acetal (RC14215) control sheave.
- Acetal ball bearings (RC14214 sheaves).
- Alloy (RC14214) or stainless steel (RC14215) cheeks.
- 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											
RC14205	Orbit Car, integrated lashing eye	145	96	2200	4400	531	5 3/4	3 13/16	4840	9680	18.7
RC14214	Car, single block take-off, single 60mm (2 3/8") roller ball bearing control sheaves	270	96	3000	6000	1820	10 5/8	3 13/16	6610	13230	64.2
RC14215	Car, 2 x block take-offs, double 50mm (2") control sheaves	340	96	4500	9000	2225	13 3/8	3 13/16	9900	19800	78.5
Accessories											
RF324	Stand-up spring, suits Series 60 & 75 single Orbit Blocks™ and Core Blocks™	-	-	-	-	80	-	-	-	-	2.8
RF54000	Aluminium ball bearing control sheave, 50mm (2") diameter, suits RC14215	-	-	-	-	32	-	-	-	-	1.1

SERIES 42 BALL BEARING

- Twin rows of recirculating Torlon® ball bearings provide smooth, low friction performance for easy adjustment under load.
- RC14215A tandem car runs on straight or curved track (in a horizontal plane). It has a pivoting bridge plate assembly with take-off points for lashing of mainsheet blocks and control line blocks.
- RC14218A with pivoting mainsheet sheave unit is a premium compact and low profile solution for a 2:1 mainsheet system. The central roller maintains sheet alignment and low friction when reaching with sheet eased and traveller car to leeward.
- Mainsheet systems on boats to 24m (78ft).
- Self-tacking jib systems on boats to 20m (65ft).
- Multihull mainsheet systems on boats to 19m (62ft).
- Torlon® ball bearings (cars) and rollers (sheaves).
- Alloy cheeks and sheaves.
- Acetal ball bearings (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											
RC14215A	Tandem car, pivoting bridge plate with take-off points for mainsheet and control line blocks	485	96	6700	13400	4800	19 1/8	3 13/16	14740	29480	169.3
RC14218A	Car, stirrup with 2 x 125mm (5") Orbit sheaves, single 75mm (3") Orbit control line sheaves	435	96	5000	10000	7200	17 1/8	3 13/16	11000	22000	253.9
Accessories											
501004	Ball bearing, Torlon®, 9.53mm (3/8") diameter	-	-	-	-	1	-	-	-	-	0.1

SERIES 42 BALL BEARING

- Low profile, lightweight alloy cars and end caps.
- High performance roller ball bearing sheaves can accept two sheets for easy headsail changes.
- Highly polished stainless steel stirrups and lead block connectors pivot 45° from vertical for optimum alignment with sheet loads.
- Plunger stops can be locked in the "up" position.
- RC54230 and RC54230A sliderod, plunger stop cars are a simple solution for applications where adjustment under load is not required. They can be easily fitted and removed from tracks.
- RC14231A and RC14231B genoa cars have a towing lug and twin rows of recirculating Torlon® ball bearings for easy adjustment under load. Custom variants are available with an additional lug aft for towing cars in series.
- Genoa sheet systems on boats to 25m (82ft).
- Alloy car bodies, end caps and sheaves.
- Torlon® ball bearings (cars) and rollers (sheaves).
- Acetal ball bearings (sheaves).
- Grade 316 stainless steel stirrups, cheeks & fixtures.

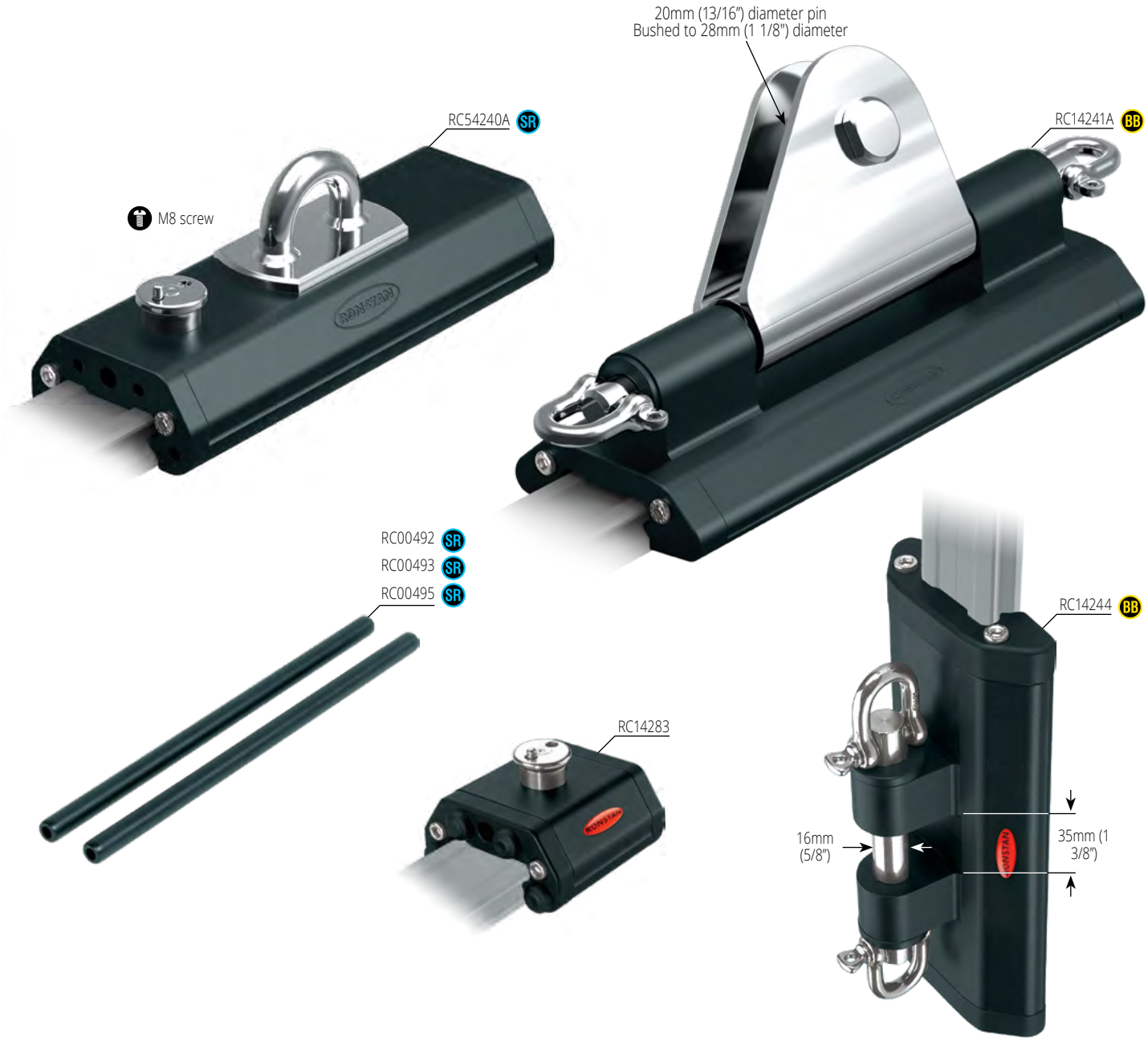
PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in	LENGTH in	WIDTH in	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing													
RC14231A	Genoa car, towing lug	100	300	96	3500	7000	2950	4	11 3/4	3 25/32	7700	15400	104.0
RC14231B	Genoa car, towing lug	125	300	96	5000	10000	3450	5	11 3/4	3 25/32	11000	22000	121.7
SR Sliderod													
RC54230	Genoa car, sliderods, plunger stop	100	230	75	3500	7000	2300	4	9	2 15/16	7700	15400	81.3
RC54230A	Genoa car, sliderods, plunger stop	125	230	75	5000	10000	2790	5	9	2 15/16	11000	22000	98.6

SERIES 42 BALL BEARING

- Low profile, lightweight alloy cars and end caps.
- Highly polished stainless steel block assemblies pivot 45° from vertical for optimum alignment with sheet loads.
- Genoa cars have a towing lug and twin rows of recirculating Torlon® ball bearings for easy adjustment under load. Custom variants are available with an additional lug aft for towing cars in series.
- Genoa sheet systems on boats to 25m (82ft).
- Alloy car bodies, end caps and sheaves.
- Torlon® ball bearings.
- Grade 316 stainless steel stirrups, cheeks & fixtures.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in	LENGTH in	WIDTH in	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing													
RC14236	Genoa car, towing lug, stainless steel block	100	280	96	4000	8000	3680	4	11	3 25/32	8800	17600	129.8
RC14236A	Genoa car, towing lug, stainless steel block	125	280	96	5500	11000	4600	5	11	3 25/32	12100	24200	162.2
Accessories													
501004	Ball bearing, Torlon®, 9.53mm (3/8") diameter	-	-	-	-	-	1	-	-	-	-	-	0.1

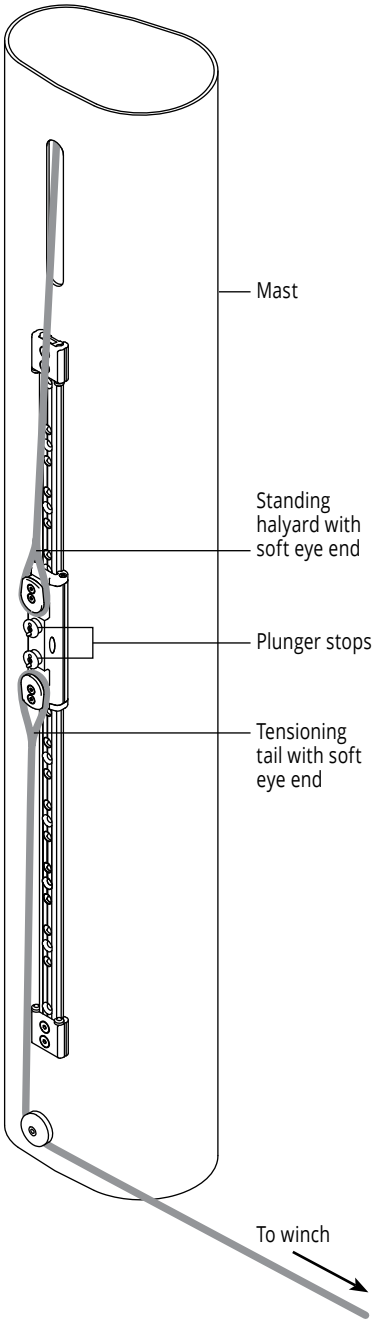
SERIES 42 BALL BEARING



- Adjustable stops can be fitted on track aft of genoa cars and used to relieve load on adjustment tackle.
- Sliderod car with padeye suits 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 sliderods.
- 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											
RC14244	Spinnaker pole car, suits toggle	230	96.0	3700	7400	1370	9	3 13/16	8160	16310	48.3
RC14241A	Outhaul car, 20mm (13/16") clew pin	280	75.0	4500	9000	3250	11	2 15/16	9900	19800	114.6
SR Sliderod											
RC00492	Sliderods, suit RC54230, RC54230A (pair)	196	9.4	-	-	43	7 3/4	3/8	-	-	1.5
RC00493	Sliderods, suit RC14283 (pair)	53	9.4	-	-	12	2 1/16	3/8	-	-	0.4
RC00495	Sliderods, suit RC54240A (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
RC54240A	Car, sliderods, padeye top & plunger stop	205	75.0	3500	7000	1100	8	2 15/16	7720	15430	38.8

SERIES 42 BALL BEARING



HALYARD TAIL SYSTEM TYPICAL SETUP

For use with furling sails that are rarely lowered.

1. Car locked in position near the top of the track.
2. Sail hoisted until soft eye in end of standing halyard exits mast and can be placed over the upper attachment lug on the car.
3. Soft eye of tensioning halyard tail is placed over lower attachment lug on car.
4. When load is taken up by tensioning halyard tail, plunger stops are lifted and locked in the "up" (disengaged position).
5. Once desired halyard tension is achieved, plunger stops are released to engage with stop holes in the track.
6. When load has been transferred to the locked car, the tensioning halyard tail may be removed.

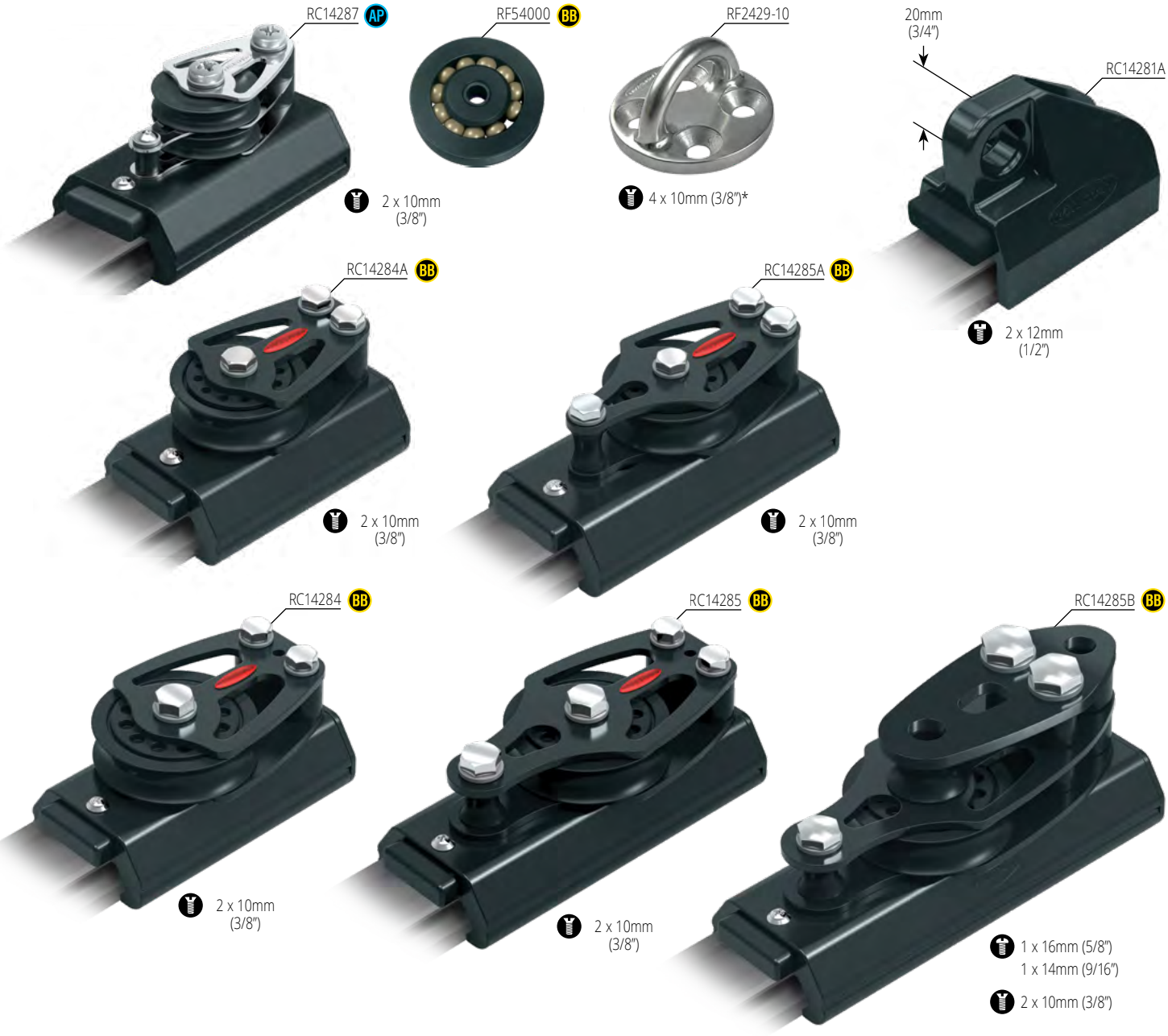
Note: 2:1 halyard may be used to reduce load for use on larger yachts.

TRACK FASTENINGS – 10mm (3/8") countersunk fasteners at 100mm (3 15/16") centres
STOP HOLES – Oversized at 50mm (1 31/32") centres

- System includes sliderod car, special 1560mm (61 13/32") Series 42 track and two low profile end stops.
- The special track has oversize plunger stop holes at 50mm (1 31/32" spacing) for the associated high loads, and is drilled and tapped to accept the low profile end stops.
- Car has 2 attachment lugs for the soft loop end of the halyard and tensioning tail.
- Car has dual oversize plunger stops that can be locked in the "up" position.
- Suitable for boats to 25m (82ft) with 1:1 halyard purchase.
- Alloy track, car and end stops.
- Acetal sliderods.
- 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											
RC54247	Halyard tail system. Sliderod car, includes 2 x plunger stops and 2 x attachment lugs, 1560mm (61 13/32") special track, 2 x low profile end stops	280	75	4000	8000	4300	11	2 15/16	8800	17600	151.7

SERIES 42 BALL BEARING



- Traveller control ends include a cover plate to conceal track end.
- RC14287 has 50mm (2") diameter sheaves which suit up to 8mm (5/16") rope.
- RC14284A and RC14285A have a 60mm (2 3/8") diameter roller ball bearing sheave which suits up to 14mm (9/16") rope.
- RC14284 and RC14285 have a 75mm (3") diameter roller ball bearing sheave which suits up to 14mm (9/16") rope.
- RC14285B has 75mm (3") diameter roller ball bearing sheave which suits up to 14mm (9/16") rope. It also has an upper becket to dead end a mainsheet up to 20mm (3/4") diameter.
- Padeyes are typically used for termination of 2:1 control line systems on deck.
- 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
BB Ball Bearing											
RF2429-10	Control line padeye (see page 209 for further details)	72	72	-	9000*	240	2 3/4	2 3/4	-	19800*	8.5
RF54000	Aluminium ball bearing control sheave, 50mm (2") diameter, suits RC14287	-	-	-	-	32	-	-	-	-	1.1
RC14281A	End stop, aluminium, with mainsheet take-off point, end cover plate	98	55	2000	4000	360	3 7/8	2 3/16	4400	8800	12.7
RC14284	Control end, 75mm (3") diameter sheave, end cover plate	135	75	1750	3500	932	5 5/16	2 15/16	3850	7700	32.9
RC14284A	Control end, 60mm (2 3/8") diameter sheave, end cover plate	126	75	1500	3000	680	5	2 15/16	3300	6600	24.0
RC14285	Control end, 75mm (3") diameter sheave & becket, end cover plate	170	75	1750	3500	1138	6 3/4	2 15/16	3850	7700	40.1
RC14285A	Control end, 60mm (2 3/8") diameter sheave & becket, end cover plate	154	75	1500	3000	910	7 1/4	2 15/16	3300	6600	32.1
RC14285B	Control end, 75mm (3") diameter sheave & becket, mainsheet dead end attachment point, end cover plate	217	75	3000	6000	1400	8 9/16	2 15/16	6600	13200	49.4
RC14287	Control end, 50mm (2") diameter double sheaves & becket, end cover plate	138	75	675	1350	800	5 3/8	2 15/16	1485	2970	28.2

* A4-80 DIN7991 grade fasteners recommended to achieve BL

SERIES 42 BALL BEARING

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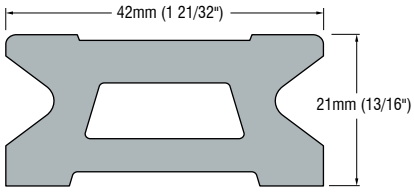
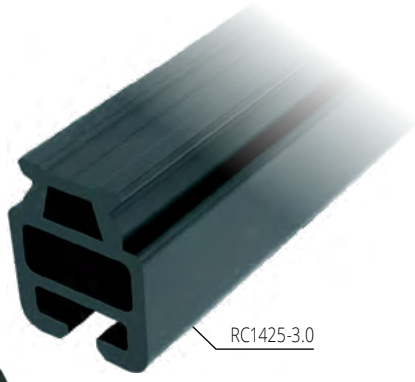
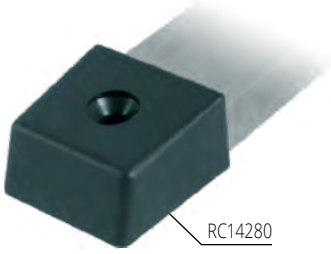


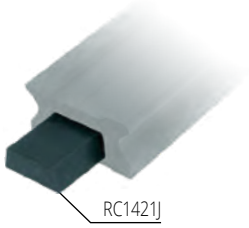
RC1420 TRACK PROFILE



2 x 10mm (3/8")



1 x 8mm (5/16")



TRACK FASTENINGS – 10mm (3/8") 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.
- Beam track can be used for unsupported spans to bridge cockpits and companionway hatches. See page 132 for mechanical data.
- RC14281 end stop includes cover plate to conceal track end.
- RC1421J track joiner aids alignment when joining track sections.
- 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
BB Ball Bearing											
RC1420-1.0*[1]	Track, black	996	42	-	-	1430	39 3/16	1 5/8	-	-	50.4
RC1420-2.0*[1]	Track, black	1996	42	-	-	2860	78 9/16	1 5/8	-	-	100.9
RC1420-3.0*[1&2]	Track, black	2996	42	-	-	4290	117 15/16	1 5/8	-	-	151.3
RC1421J	Track joiner	60	-	-	-	17	2 3/8	-	-	-	0.6
RC1425-3.0*[1]	Beam track, black. 56mmW x 71mmH (2 3/16"W x 2 25/32"H)	2996	56	-	-	13810	117 15/16	2 3/16	-	-	488.0
RC1425P	End plug for RC1425-3.0 beam track	-	-	-	-	135	-	-	-	-	4.8
RC14280	End cap, plastic	50	49	-	-	20	2	2	-	-	0.7
RC14281	End stop, aluminium, including end cover plate	84	75	-	-	345	3 1/4	2 15/16	-	-	12.2

* 1 Silver track available - Order as RCxxxxxS
* 2 Longer track available on request.

SERIES 55 BALL BEARING

- Precision machined bodies and Torlon® ball bearings ensure free running performance even under extreme loads.
- Custom solutions can be developed to suit individual requirements.
- RC15505 Orbit Car has two integrated attachment points for lashings.
- RC15515 mainsheet car runs on straight or curved track (in a horizontal plane). It has a pivoting bridge plate assembly with take-off points for lashing of mainsheet blocks and control line blocks.
- Main and mizzen sheet systems on monohulls to 36m (120ft), or multihulls to 23m (75ft).
- Self-tacking jib systems on boats 23m (75ft) and above.
- Torlon® ball bearings.
- Alloy bridge plates.
- 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											
RC15505	Orbit Car, 2 x integrated link/lashing eye	290	125	5000	10000	2000	11 1/2	4 15/16	11000	22000	70.5
RC15515	Tandem car, pivoting bridge plate with take-off points for mainsheet and control line blocks	575	125	9500	19000	11600	22 5/8	4 15/16	20900	41800	409.1

SERIES 55 BALL BEARING

- RC15518A with pivoting mainsheet sheave unit is a premium compact and low profile solution for a 2:1 mainsheet system. The central roller maintains sheet alignment and low friction when reaching with sheet eased and traveller car to leeward. 75mm (3") diameter control sheaves suit up to 14mm (9/16") rope.
- Precision machined bodies and Torlon® ball bearings ensure free running performance even under extreme loads.
- Custom solutions can be developed to suit individual requirements.
- Main and mizzen sheet systems on monohulls to 36m (120ft), or multihulls to 23m (75ft).
- Self-tacking jib systems on boats 23m (75ft) and above.
- Torlon® ball bearings (cars) and rollers (RC15518A sheaves).
- Alloy cheek/pivot plates and sheaves.
- Acetal ball bearings (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											
RC15518A	Car, pivoting mainsheet sheave stirrup with 2 x 150mm (6") diameter Orbit sheaves, single 75mm (3") diameter Orbit control sheaves	470	125	6000	12000	10500	18 1/2	4 15/16	13200	26500	370.3
Accessories											
501005	Ball bearing, Torlon®, 12.7mm (1/2") diameter	-	-	-	-	1	-	-	-	-	0.1

SERIES 55 BALL BEARING

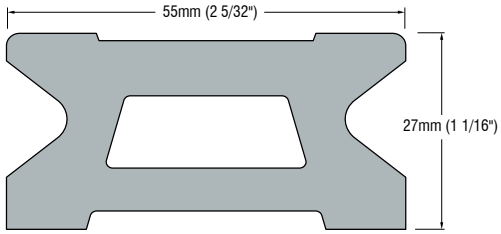
- High performance roller ball bearing sheaves for low friction performance can accept two sheets for easy headsail changes.
- Highly polished stainless steel stirrups pivot 45° from vertical for optimum alignment with sheet loads.
- Custom solutions can be developed to suit individual requirements.
- Adjustable stops can be used as a backup to lock a car into position. The plunger stop can be locked in the "up" position.
- Genoa cars have a towing lug and twin rows of recirculating Torlon® ball bearings for easy adjustment under load. Custom variants are available with an additional lug aft for towing cars in series.
- Genoa sheet systems on boats 28m (92ft) and above.
- Alloy car bodies, end caps and sheaves.
- Torlon® ball bearings (cars) and rollers (sheaves).
- Acetal ball bearings (sheaves).
- Grade 316 stainless steel stirrups, cheeks and fixtures.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in	LENGTH in	WIDTH in	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing													
RC15531	Genoa car, towing lug	150	350	125	6500	13000	6400	6	13 3/4	4 15/16	14300	28600	225.7
RC15531A	Genoa car, towing lug	180	460	125	9650	19300	9300	7	18 1/8	4 15/16	21200	42400	328.0
SR Sliderod													
RC15583	Stop, adjustable	-	185	125	-	-	2050	-	15 3/8	4 15/16	-	-	72.3

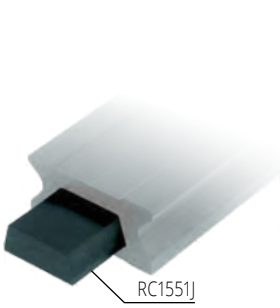
- Genoa cars have a towing lug and twin rows of recirculating Torlon® ball bearings for easy adjustment under load. Custom variants are available with an additional lug aft for towing cars in series.
- Highly polished stainless steel block assemblies pivot 45° from vertical for optimum alignment with sheet loads.
- Custom solutions can be developed to suit individual requirements.
- RC15541 outhaul car is suitable for monohulls to 36m (118ft) or multihulls to 23m (75ft). The M18 threaded rod at the forward end suits connection to a hydraulic ram.
- Genoa cars are suitable for sheet systems on boats 28m (92ft) and above.
- Alloy car bodies, end caps and sheaves.
- Torlon® ball bearings.
- Grade 316 stainless steel stirrups, cheeks and fixtures.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in	LENGTH in	WIDTH in	M.W.L. lb	B.L. lb	WEIGHT oz
BB Ball Bearing													
RC15536	Genoa car, towing lug, stainless steel block	125	345	125	6900	13800	7200	5	3 9/16	4 15/16	15200	30400	253.9
RC15536A	Genoa car, towing lug, stainless steel block	150	345	125	10000	20000	7900	6	3 9/16	4 15/16	22000	44000	278.6
RC15541	Outhaul car, M18 stud	-	390	125	6500	13000	8200	-	15 3/8	4 15/16	14300	28600	289.2
Accessories													
501005	Ball bearing, Torlon®, 12.7mm (1/2") diameter	-	-	-	-	-	1	-	-	-	-	-	0.1

SERIES 55 BALL BEARING



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.
- Traveller control ends include a cover plate to conceal the end track.
- Custom control ends can be developed to suit individual requirements.
- Standard low profile track has stop holes for cars fitted with plunger stops.
- Padeyes are typically used for termination of 2:1 mainsheet systems on deck.
- RC15584, RC15585 and RC15585A have a 100mm (4") diameter sheave which suits up to 14mm (9/16") rope.
- RC15585A has an upper becket to dead end a mainsheet up to 20mm (3/4") diameter.
- RC15581A end stop has an integrated ID 25mm (15/16") mainsheet dead end/attachment point and an ID 19mm (3/4") dead end attachment point for a control line, and/or boom bridle.
- Alloy track and control end bodies.

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											
RC1550-1.0*1	Track, black	996	55	-	-	2400	39 3/16	2 3/16	-	-	84.7
RC1550-2.0*1	Track, black	1996	55	-	-	4800	78 9/16	2 3/16	-	-	169.3
RC1550-3.0*1&2	Track, black	2996	55	-	-	7200	117 15/16	2 3/16	-	-	254.0
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
RC15581A	End stop, aluminium, with mainsheet take-off point, end cover plate	190	85	6000	12000	2250	7 1/2	3 3/8	13200	26400	79.4
RC15584	Control end, 100mm (4") sheave	170	102	2800	5600	2140	6 11/16	4	6150	12300	75.5
RC15585	Control end, 100mm (4") sheave & becket	210	102	2800	5600	2140	8 1/4	4	6150	12300	75.5
RC15585A	Control end, 100mm (4") sheave & becket, mainsheet dead end attachment point	265	102	4100	8200	3380	10 7/16	4	9000	18000	119.2
RF2429-10	Control line padeye (see page 209 for further details)	72	72	-	9000*3	240	2 3/4	2 3/4	-	19800*3	8.5

*1 Silver track available - Order as RCxxxxxxS
*2 Longer track available on request.
*3 A4-80 DIN7991 grade fasteners recommended to achieve BL

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 (Ix & Iy) 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.
- Beam tracks for ball bearing cars are supplied without holes. On request they can be drilled with custom hole arrangements to suit individual requirements. Contact our sales team for further information.

TYPICAL MATERIAL PROPERTIES

All tracks, unless otherwise stated

Aluminium alloy AL6005-T6

σ yield = 225 MPa (32.6 ksi)

σ Ult = 270 MPa (39.2 ksi)

RC1225-3.0

Aluminium alloy AL6063-T6

σ yield = 170 MPa (24.7 ksi)

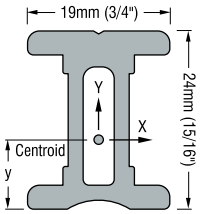
σ Ult = 215 MPa (31.2 ksi)

RC6190, RC6320

Aluminium alloy AL6061-T6

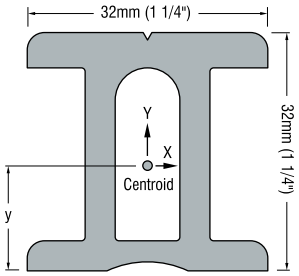
σ yield = 240 MPa (34.1 ksi)

σ Ult = 290 MPa (42.1 ksi)



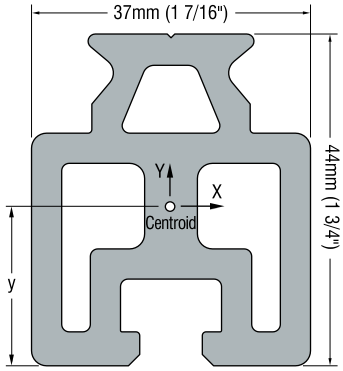
RC6190

Ix = 14294mm⁴ (0.0343in⁴)
Iy = 4219mm⁴ (0.0101in⁴)
y = 12.56mm (0.4945")
CSA = 196mm² (0.3038in²)



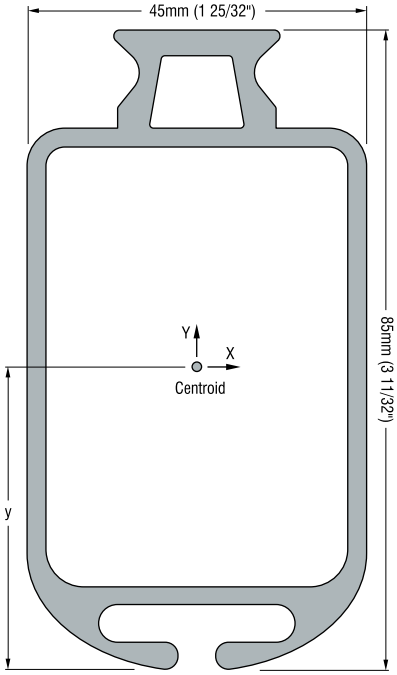
RC6320

Ix = 59000mm⁴ (0.1417in⁴)
Iy = 30360mm⁴ (0.0729in⁴)
y = 16.96mm (0.6677")
CSA = 471mm² (0.7301in²)



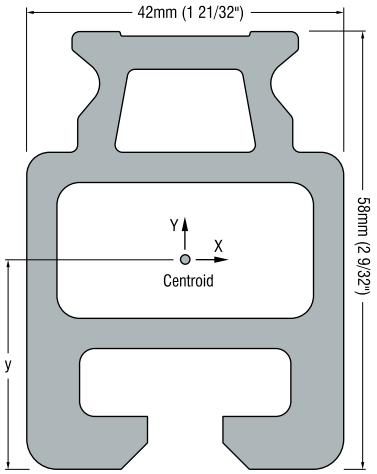
RC1225B-2.0

Ix = 133881mm⁴ (0.3217in⁴)
Iy = 98716mm⁴ (0.2372in⁴)
y = 20.2mm (0.7957")
CSA = 836 mm² (1.2969in²)



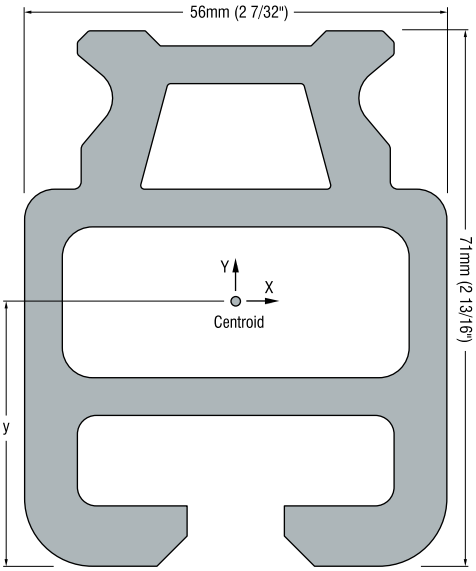
RC1225-3.0

Ix = 664730mm⁴ (1.5970in⁴)
Iy = 184248mm⁴ (0.4427in⁴)
y = 42.3mm (1.6654")
CSA = 768mm² (1.1904in²)



RC1305B-3.0

Ix = 338641mm⁴ (0.8136in⁴)
Iy = 202808mm⁴ (0.4872in⁴)
y = 26.9mm (1.0591")
CSA = 1051mm² (1.6291in²)



RC1425-3.0

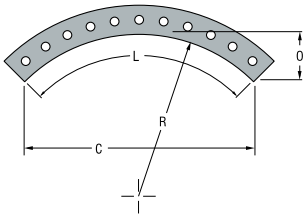
Ix = 797749mm⁴ (1.9166in⁴)
Iy = 558530mm⁴ (1.3419in⁴)
y = 34.7mm (1.3611")
CSA = 1687mm² (2.6149in²)

TRACK BENDING

In certain applications it is advantageous to curve tracks either horizontally ('A' bend) or vertically ('B' bend). Track can be bent to match deck camber, or to ensure that the tension on a purchase system attached to a traveller car remains constant as the car moves along the track.

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.



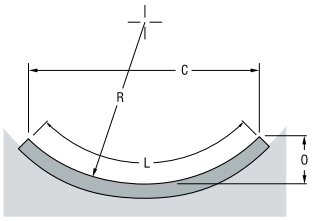
'A' Bend (Plan View)

VERTICAL PLANE – 'B' BEND

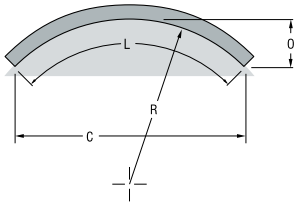
Traveller tracks can be bent vertically to fulfil certain requirements. They can be top mounted or underhung mounted with either concave or convex track bends.

'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 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 increase rolling friction.



'B' Bend (Concave Side View)



'B' Bend (Convex Side View)

MINIMUM BEND RADIUS

TRAVELLER SERIES	CAR LENGTH mm	MINIMUM HORIZONTAL 'A' BEND RADIUS mm	MINIMUM HORIZONTAL 'B' BEND RADIUS mm	CAR LENGTH in	MINIMUM HORIZONTAL 'A' BEND RADIUS in	MINIMUM HORIZONTAL 'B' BEND RADIUS in
Series 14	47	1300	800	1 27/32	51 7/32	31 17/32
	50	1400	970	1 31/32	55 1/8	38 7/32
	68	2000	2000	2 11/16	78 13/16	78 13/16
	78	3500	4500	3 1/16	137 29/32	177 5/16
Series 19	50	1500	1500	1 31/32	60	27 29/32
	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
Series 22	75	1500	2000	2 31/32	59 3/32	78 13/16
	125	5000	5000	4 15/16	197	197
	175	9000	13000	6 29/32	354 19/32	512 3/16
	180	9000	13000	7 3/32	354 19/32	512 3/16
Series 26	108	2500	2500	4 1/8	98 13/32	98 13/32
	120	4000	4000	4 23/32	157 19/32	157 19/32
	200	8000	8000	7 7/8	315 3/16	315 3/16
	205	9000	9000	2 1/16	354 19/32	354 19/32
	210	9400	9400	8 1/4	370 3/32	370 3/32
Series 30	100	2500	2500	3 15/16	98 1/2	98 1/2
	108	2875	2875	4 1/4	113 3/16	113 3/16
	120	4900	4900	4 23/32	192 1/32	192 1/32
	150	8000	8000	5 29/32	315 3/16	315 3/16
	210	12400	12400	8 1/4	488 3/16	488 3/16
	225	16000	16000	8 7/8	630 13/32	630 13/32
	332	22500	22500	13 1/16	885 13/16	885 13/16
I-Track 19	51	400	400*	2	15 3/4	15 3/4
	86	1200	Not suitable	3 3/8	47 1/4	Not suitable
I-Track 32	76	500	500*	3	19 11/16	20
	157	500	Not suitable	6 3/16	19 11/16	Not suitable

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

* Manufacture of B-Bends for I-track 19 & 32 have length & radius limitations, please contact our sales team with your requirements.

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	**L**	Length of Track
		OR		
Radius	**R**	and	**C**	Chord Length
		OR		
Offset	**O**	and	**C**	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.

It should be noted that:

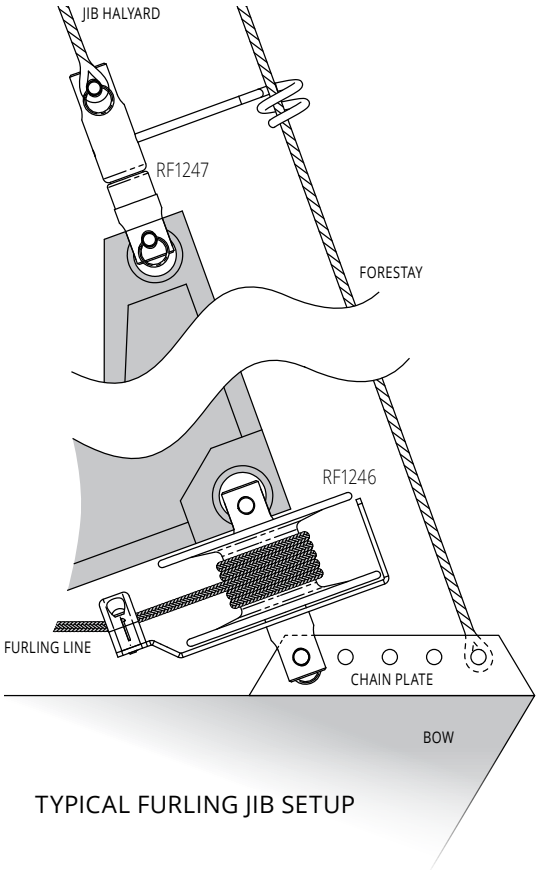
- Although track bends may appear desirable to provide ideal alignment and avoid angular loads being applied to the car, in a ball bearing system the bend may reduce the load capacity of the system by loading the balls unevenly over the length of the car.
- Not all track types are suited to both types of bends, and some types of 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 recommendations on this page for each track type regarding suitability and minimum radius values.
- Light bends can be 'sprung in' during installation, 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 best results, track should be ordered pre-bent from Ronstan.

Ordering

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

JIB FURLERS

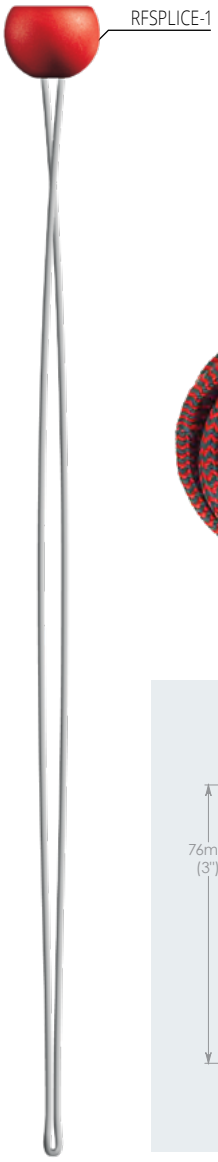


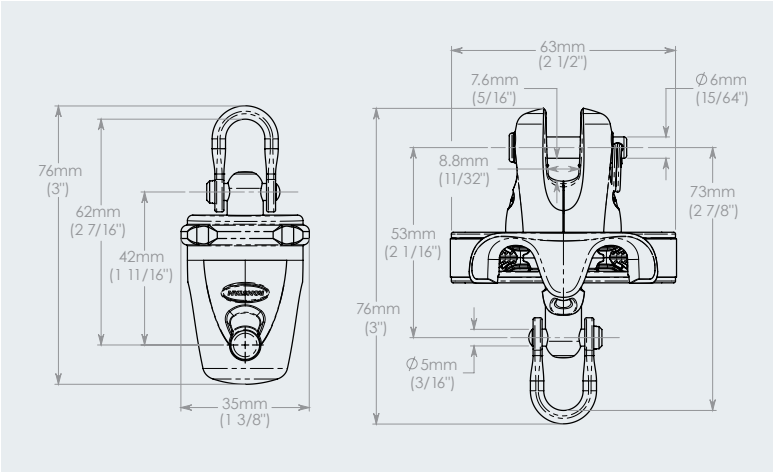
TYPICAL FURLING JIB SETUP

RF76 & RF78B Furling on off-the beach dinghies up to 4.5m (15ft)

RF1246 & RF2147 Furling on trailer sailer to 7.5m (25ft).

PRODUCT No.	DESCRIPTION	B.L. kg	WEIGHT g	B.L. lb	WEIGHT oz
Small Boat Drum Furlers					
RF3	Staunchion block for furling lines 12mm (1/2") maximum rope diameter	-	30	-	1.1
RF76	Jib furler, 65mm (2 1/2") diameter. Enclosed acetal drum with stainless steel ball bearing swivel unit. Overall height 80mm (3 1/8")	1700	155	3740	5.5
RF78B	Fork/Eye swivel, 6.4mm (1/4") diameter pin and 8.2mm (5/16") diameter hole. See page 205 for further details	1700	60	3740	2.1
RF1246	Jib furler, 114mm (4 1/2") diameter. 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 location bar, 7.9mm (5/16") diameter pins.	2600	240	5720	8.5





- Optimised drum diameter for power and furling efficiency, combined with minimum weight.
- Alloy drum with ribbed rope groove profile for maximum grip on furling line.
- Furling line self-ejects from drum grip area as sail unfurls for fast, smooth deployment.
- Free running stainless steel bearings and ball races to minimise friction for high speed furling.
- Low profile design allows maximum luff length/sail area.
- The pre-spliced furling line can be shortened if required and respliced using the RFSPLICE-1 splicing needle. See the SUPPORT tab at ***www.ronstan.com*** for details.
- Furling on off-the-beach dinghies, multihulls and sportsboats to 6m (20ft).
- Low friction perimeter strip prevents furling line snagging or fouling.
- Hard anodised aluminium drum for maximum durability.
- Glass filled, thermoplastic swivel body for minimum weight aloft.
- Highly polished stainless steel rope guide for low friction and minimal rope wear.

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
Furler & Top Swivel													
RS006000A	Gennaker furler	63	-	5	500	1300	138	2 1/2	-	3/16	1100	2860	4.9
RS006010A	Top swivel	-	35	-	500	1300	85	-	1 3/8	-	1100	2860	3.0
Accessories													
RF815	Two-way link, 5mm (3/16") pin, suits RS006000					1100	14					2425	0.5
RF6170	Snap shackle adapter, 16mm (5/8") eye clearance, suits RS006000				500	1000	49				1100	2200	1.7
RFSPLICE-1	Splicing needle						10						0.4
RS000001	Pre-spliced continuous furling line, 5mm (3/16") diameter x 8m (26ft) loop						135						5.1


Lightweight machined drum


Secure, snag-free connections


Rotation stop accessory


Top swivel with optional lashing pin


Retained, quick release clevis pins


Top-down models

CONTINUOUS LINE FURLERS

REFINED DESIGN, PERFORMANCE & RELIABILITY

Our Continuous Line Furlers put great performance and reliability within the reach of cruising and racing sailors alike.

Advanced drum technology

The range matches drum diameters to load ratings providing the optimum balance between speed and ease of furling. Drums incorporate a machined groove profile and cross-hole geometry to grip the furling line securely. When deploying the sail the continuous furling line self-ejects from the grip zone, remaining stationary for smoother, safer operation with minimum rope wear. A low friction plastic perimeter strip ensures the unloaded furling line can't fall from the drum or become snagged.

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.

Easy continuous line installation and removal

The continuous furling line is easily fitted and removed from the furler, so it can be left on deck when the sail and furler are stowed below.

Top-Down models for soft luff sails

Top-down furling provides a new level of simplicity, safety and speed for handling of soft luff sails such as asymmetric spinnakers and gennakers. Cruisers can now store, deploy and retrieve these sails as simply as they would a furling headsail from the safety and convenience of the cockpit. Racers too can benefit from the characteristics of top-down to allow superfast retrieval of code zeros by pre-winding the torsion rope and firing the sheet when ready. Ronstan furlers are available with top-down adapters or in dedicated top-down models with practical accessories such as top swivel lashing pins to provide the perfect solution.

Secure & flexible attachment options

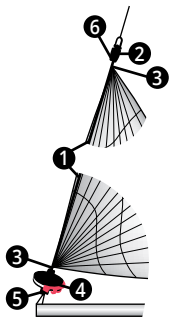
Furlers and top swivels have retained clevis pins and top swivels have a snag-free low profile shackle pin head. Attachment options include quick release pins, high resistance shackles, snap shackles, fairleads and torsion rope thimbles. The furling line guide can be adjusted to suit either 0˚ or 90˚ attachment, as required to match the take-off alignment and deck layout.

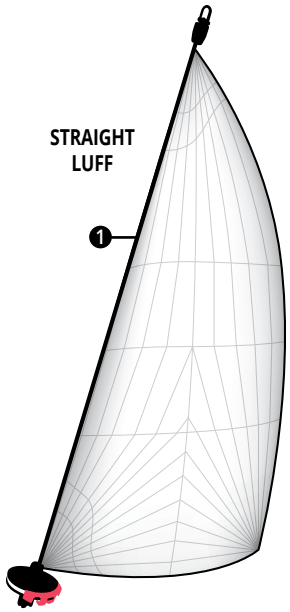
Rotation stop accessory

A compact rotation stop can be added to compatible models of furlers to avoid inadvertent unfurling of the sail. The rotation stop is simply installed on the underside of the furler and can be disengaged when in use, or engaged when the sail is furled or stowed.

STANDARD FURLING SYSTEMS

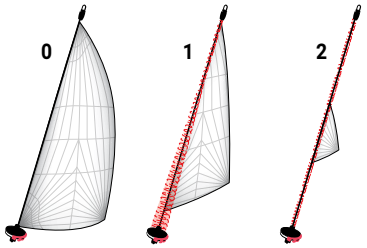
1. Torsion rope
2. Top swivel
3. Thimble
4. Standard furler
5. 2:1 or 3:1 fairlead, shackle or snap shackle to padeye
6. Neoprene top swivel cover





Applications: Sails with a "straight" luff.
For upwind sailing, true wind angles less than 90°.
• Code Zero • Screecher • Staysail

How it works:

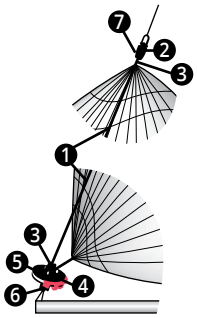


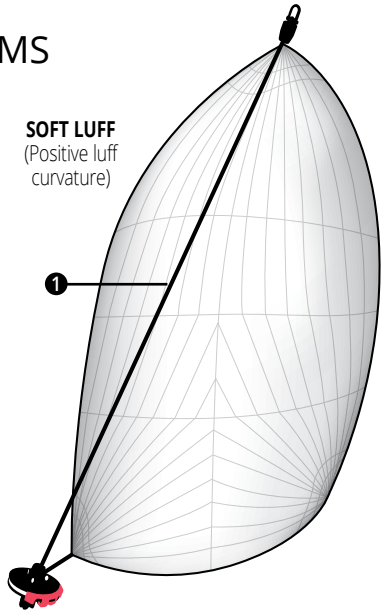
1. Furling drum rotated. Winds sail around torsion rope along full length.

2. Sail continues to furl along full length of torsion rope.

TOP-DOWN FURLING SYSTEMS

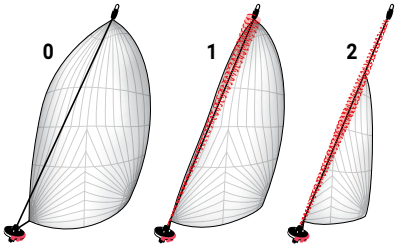
1. Torsion rope
2. Top swivel
3. Thimble
4. Top-down furler or standard furler with top-down adapter (S200 & S280)
5. Integrated swivel ring
6. 2:1 or 3:1 fairlead, shackle or snap shackle to padeye
7. Neoprene top swivel cover





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

How it works:



1. Furling drum rotated. Tack remains stationary on 'floating' swivel ring while torsion rope rotates top swivel, commencing to wind sail around torsion rope from top and full mid-section.

2. Sail continues to furl from top down.

SELECTION GUIDE

FURLERS

SERIES	TYPICAL MAXIMUM BOAT SIZE: Code Zero (Standard Furling) Monohull LOA	Multihull LOA	Sail Area	Spinnaker (Top-Down Furling) Monohull LOA	Multihull LOA	Sail Area
Series 80	9m (30')	8m (26')	40m² (430ft²)	10m (33')	8m (26')	75m² (805ft²)
Series 120	12m (40')	10m (33')	90m² (965ft²)	14m (46')	12m (40')	140m² (1505ft²)
Series 160	14m (46')	12m (40')	130m² (1395ft²)	16m (53')	14m (46')	200m² (2150ft²)
Series 200	18m (60')	15m (50')	270m² (2900ft²)	21m (69')	18m (60')	400m² (4305ft²)
Series 280	21m (69')	18m (60')	350m² (3765ft²)	25m (82')	21m (69')	525m² (5650ft²)

ACCESSORIES

SERIES	Neoprene Top Swivel Cover	Snap Shackle	2:1 or 3:1 Fairlead	3:1 Fairlead	Thimble	Shackle	Plunger Stop	Top Swivel Lashing Pin	Quick Release Pin
Series 80	RS208015	RS208020	RS208030	-	RS208040	RS208050	-	RS208080	-
Series 120	RS212015	RS212020	RS212030	-	RS212040	RS212050	RS212070	RS212080	RS212090
Series 160	RS216015	RS216020	RS216030	-	RS216040	RS216050	RS216070	RS216080	RS216090
Series 200	RS220015	-	-	RS220030	RS220040	RS020050	RS216070	-	-
Series 280	RS228015	-	-	RS228030	RS228040	RS020050R	-	-	-

CONTINUOUS LINE FURLERS

TOP SWIVELS


RS208010


RS212010


RS216010

TOP-DOWN FURLERS


RS208100


RS212100


RS216100

STANDARD FURLERS


RS208000


RS212000


RS216000

- Series 80, 120 & 160 furlers include a shackle on the underside of the furler.
- Top swivels feature snag-free low profile shackle pin heads.
- Quick furling line installation and removal requires no tools.
- Maintenance free, factory sealed main bearing systems.
- Dimensioned technical drawings and user instructions can be found under the SUPPORT tab at ***www.ronstan.com***.
- Grade 17-4PH forged stainless steel shackles.
- Grade 316 stainless steel fasteners.
- Grade 2205 stainless steel shaft and pins.
- Aluminium drum, swivel jaws & line guide.
- HDPE perimeter strip.
- Torlon® ball bearings (top-down swivel ring).

PRODUCT No.	DESCRIPTION	LINE mm	M.W.L. kg	B.L. kg	WEIGHT g	LINE in	M.W.L. lb	B.L. lb	WEIGHT oz
Top Swivels									
RS208010	Series 80, top swivel	-	950	1900	134	-	2090	4190	4.7
RS212010	Series 120, top swivel	-	1800	3600	204	-	3970	7940	7.2
RS216010	Series 160, top swivel	-	3000	6000	382	-	6610	13230	13.5
Top-Down Furlers									
RS208100	Series 80, top-down furler	8	475*1 / 950*2	1900	266	5/16	1045*1 / 2090*2	4190	9.4
RS212100	Series 120, top-down furler	8	900*1 / 1800*2	3600	546	5/16	1980*1 / 3970*2	7940	19.3
RS216100	Series 160, top-down furler	10	1500*1 / 3000*2	6000	916	3/8	3300*1 / 6610*2	13230	32.3
Standard Furlers									
RS208000	Series 80, standard furler	8	950	1900	228	5/16	2090	4190	8.0
RS212000	Series 120, standard furler	8	1800	3600	383	5/16	3970	7940	13.5
RS216000	Series 160, standard furler	10	3000	6000	790	3/8	6610	13230	27.9

*1 MWL on swivel ring (tack load).
*2 MWL on clevis pins (torsion line + tack load).

CONTINUOUS LINE FURLERS

TOP SWIVELS


RS220010


RS228010

TOP-DOWN ADAPTERS


RS220060


RS228060

STANDARD FURLERS


RS220000


RS228000

- Top swivel fork/fork configuration for snag-free operation and direct halyard soft eye attachment.
- Connection post of Series 200 & 280 furlers are compatible with shackle or fairlead attachment.
- Fast pins on furlers and top swivels facilitate easy changeover of sails sharing a common furler set.
- Dimensioned technical drawings and user instructions can be found under the SUPPORT tab at ***www.ronstan.com***.
- Grade 316 stainless steel fasteners.
- Grade 2205 stainless steel shaft and pins.
- Aluminium drum, swivel jaws & line guide.
- Low friction perimeter strip.
- Torlon® ball bearings (top-down adapter swivel ring).

PRODUCT No.	DESCRIPTION	LINE mm	M.W.L. kg	B.L. kg	WEIGHT g	LINE in	M.W.L. lb	B.L. lb	WEIGHT oz
Top Swivels									
RS220010	Series 200, top swivel	-	5000	10000	748	-	11020	22040	26.4
RS228010	Series 280, top swivel	-	8000	16000	1700	-	17630	35270	60.1
Top-Down Adapters									
RS220060	Series 200, top-down adapter	-	3000*1 / 5000*2	10000	966	-	6610*1 / 11020*2	22040	34.0
RS228060	Series 280, top-down adapter	-	5000*1 / 8000*2	16000	1950	-	11020*1 / 17630*2	35270	68.9
Standard Furlers									
RS220000	Series 200, standard furler	10	5000	10000	1730	3/8	11020	22040	61.0
RS228000	Series 280, standard furler	12	8000	16000	3250	1/2	17630	35270	114.6

*1 MWL on swivel ring (tack load).
*2 MWL on clevis pins (torsion line + tack load).

CONTINUOUS LINE FURLERS

ACCESSORIES

NEOPRENE TOP SWIVEL COVER

SNAP SHACKLES

2:1 OR 3:1 FAIRLEADS

3:1 FAIRLEADS

TORSION ROPE THIMBLES

SHACKLES

FURLER ROTATION STOPS

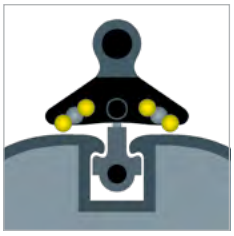
TOP SWIVEL LASHING PINS

- 2:1 fairlead can be used on furler or top swivel.
- 3:1 fairlead incorporates a fast pin for quick and easy removal from furler - where 3:1 tack line remains on bowsprit when sail and furler are removed.
- Furler rotation stop prevents accidental unfurling.
- Top swivel lashing pin allows for closer sail attachment at head, improving furling for top-down systems.
- Grade 6061-T6 aluminium thimbles, and 3:1 fairlead.
- UV resistant neoprene top swivel covers.
- Grade 2205 stainless steel quick release pins.
- Grade 17-4PH stainless steel forged HR shackles.

PRODUCT No.	DESCRIPTION	M.W.L. kg	B.L. kg	WEIGHT g	M.W.L. lb	B.L. lb	WEIGHT oz
Neoprene Top Swivel Covers							
RS208015	Neoprene swivel cover, suits RS208010	-	-	7	-	-	0.2
RS212015	Neoprene swivel cover, suits RS212010	-	-	10	-	-	0.4
RS216015	Neoprene swivel cover, suits RS216010	-	-	15	-	-	0.5
RS220015	Neoprene swivel cover, suits RS220010 (two required per swivel)	-	-	18	-	-	0.6
RS228015	Neoprene swivel cover, suits RS228010 (two required per swivel)	-	-	20	-	-	0.9
Snap Shackles							
RS208020	Snap shackle, suits RS208000 & RS208100	960	2000	54	2120	4410	1.9
RS212020	Snap shackle, suits RS212000 & RS212100	1280	3850	130	2820	8490	4.6
RS216020	Snap shackle, suits RS216000 & RS216100	2800	7000	257	6170	15430	9.1
Fairleads							
RS208030	2:1 or 3:1 fairlead, suits RS208000 & RS208100	1040	2300	44	2290	5070	1.6
RS212030	2:1 or 3:1 fairlead, suits RS212000 & RS212100	1760	4100	96	3880	9040	3.4
RS216030	2:1 or 3:1 fairlead, suits RS216000 & RS216100	2640	6000	186	5820	13230	6.6
RS220030	3:1 fairlead, suits RS220000	5000	10000	350	11020	22040	12.3
RS228030	3:1 fairlead, suits RS228000	8000	16000	800	17630	35270	28.2
Torsion Rope Thimbles							
RS208040	Torsion rope thimble, suits RS208000, RS208100 & RS208010	-	-	8	-	-	0.3
RS212040	Torsion rope thimble, suits RS212000, RS212100 & RS212010	-	-	23	-	-	0.8
RS216040	Torsion rope thimble, suits RS216000, RS216100 & RS216010	-	-	53	-	-	1.9
RS220040	Torsion rope thimble, suits RS220000, RS220010 & RS220060	-	-	65	-	-	2.3
RS228040	Torsion rope thimble, suits RS228000, RS228010 & RS228060	-	-	164	-	-	5.8
Shackles							
RS208050	Shackle, 6mm (1/4") pin diameter, suits RS208000 & RS208100	-	1950	26	-	4300	0.9
RS212050	HR shackle, 8mm (5/16") pin diameter, suits RS212000 & RS212100	-	4400	55	-	9700	1.9
RS216050	HR shackle, 10mm (13/32") pin diameter, suits RS216000 & RS216100	-	7500	97	-	16500	3.4
RS020050*	HR shackle, 12mm (15/32") pin diameter, suits RS220000	-	10000	237	-	22000	8.4
RS020050R*	HR shackle, 16mm (5/8") pin diameter, suits RS228000	-	19000	470	-	41800	16.6
Furler Rotation Stops							
RS212070	Furler rotation stop, suits RS212000 & RS212100	-	-	10	-	-	0.3
RS216070	Furler rotation stop, suits RS216000, RS216100 & RS220000	-	-	18	-	-	0.6
Top Swivel Lashing Pins							
RS208080	Top swivel lashing pin, 7mm (9/32"), suits RS208010	950	1900	29	2090	4190	1.0
RS212080	Top swivel lashing pin, 8mm (5/16"), suits RS212010	1800	3600	48	3970	7940	1.7
RS216080	Top swivel lashing pin, 10mm (13/32"), suits RS216010	3000	6000	90	6610	13230	2.3

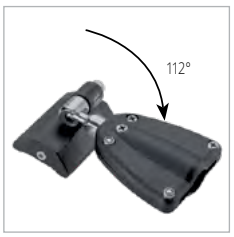
* RS020050 & RS020050R have a coined and drilled head shackle pin

Captive ball bearings


Use existing mast luff groove


Quick release batten car models


Flexible solutions



Ball joint articulation

BALLSLIDE™ BATTEN CAR SYSTEMS

QUICK, EASY AND RELIABLE

Ronstan's Ballslide™ system makes raising and lowering the mainsail quick and easy. Recirculating captive ball bearings ensure free running performance, and since the cars use the existing luff groove of the mast there is no need to install a track.

Compatibility

With a complete range of car profiles and feet there is a Ballslide™ solution for most available mast profiles and luff groove shapes on boats up to 18m (60ft). See page 146 for car and feet details. Selection tables and specification sheets can be downloaded at ***www.ronstan.com***.

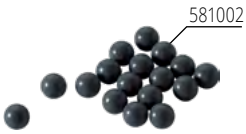
Performance

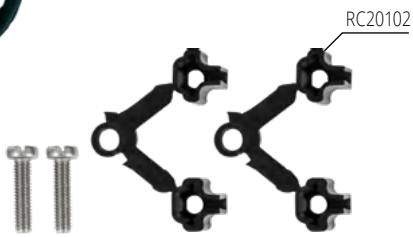
CB **Ballslide™** cars run on twin races of recirculating ball bearings specifically designed and oriented for compression loads. Hoisting and dropping the mainsail has never been easier! Ball joint links for batten receptacles and quick release pins for intermediate cars are configured to minimise the distance from mast to mainsail luff.

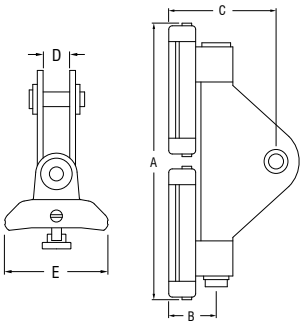
Convenience

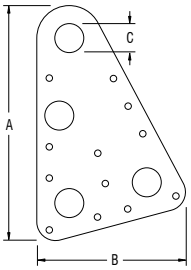
Ballslide™ cars are easily loaded, and just as easily removed from the luff groove of the mast. Larger boats using the Series 8 system may opt for cars with quick release ball joints for the batten receptacles to facilitate initial setup or removal of larger mainsails.

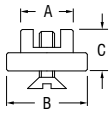
SERIES 6

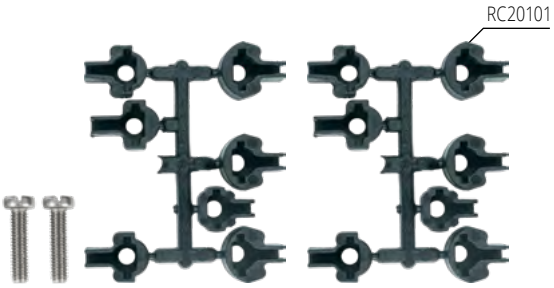












Refer to page 146 and the SUPPORT tab at ***www.ronstan.com*** for additional details regarding cars and feet installation information.

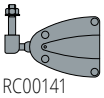
Refer to the SUPPORT tab at ***www.ronstan.com*** for assistance in specifying system requirements and schematic diagrams.

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
Series 6 CB													
RC00010	Headboard plates (pair)	188.0	119	23.0	-	-	173	7 13/32	4 11/16	29/32	-	-	6.1
RC20101	Replacement Ballslide™ feet kit, suits RC261xx cars, includes one pair of each size narrow feet N1-N7	-	-	-	-	-	1	-	-	-	-	-	0.1
RC20102	Replacement Ballslide™ feet kit, suits RC263xx cars, includes one pair of each size narrow feet N8 & N9	-	-	-	-	-	1	-	-	-	-	-	0.1
RC20111	Ballslide™ wide feet (pair), with s/s screws & washers, suits RC264xx cars	13.0	20	10.4	-	-	14	1/2	25/32	13/32	-	-	0.5
RC20112	Ballslide™ wide feet (pair), with s/s screws & washers, suits RC264xx cars	13.7	20	12.5	-	-	14	17/32	25/32	7/16	-	-	0.5
RC20113	Ballslide™ wide feet (pair), with s/s screws & washers, suits RC264xx cars	13.7	20	11.0	-	-	14	17/32	25/32	7/16	-	-	0.5
RC20114	Ballslide™ wide feet (pair), with s/s screws & washers, suits RC264xx cars	13.7	20	11.5	-	-	14	17/32	25/32	7/16	-	-	0.5
RC20115	Ballslide™ wide feet (pair), with s/s screws & washers, suits RC264xx cars	12.8	20	10.5	-	-	14	1/2	25/32	13/32	-	-	0.5
RC20116	Ballslide™ wide feet (pair), with s/s screws & washers, suits RC264xx cars	8.8	16	6.6	-	-	6	11/32	5/8	1/4	-	-	0.2
RC20118	Ballslide™ wide feet (pair), with s/s screws & washers, suits RC264xx cars	8.8	16	7.6	-	-	6	11/32	5/8	5/16	-	-	0.2
RC20119	Ballslide™ feet (pair), with s/s screws & washers, suits RC264xx cars	9.8	20	10.0	-	-	10	3/8	25/32	3/8	-	-	0.3
RC26160	Headboard car, incl. RC20101 narrow feet set	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, incl. RC20102 narrow feet set	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, suits wide feet (not included)	160.0	23	62.0	12	41	280	6 5/16	29/32	2 7/16	15/32	1 5/8	9.9
Spare Parts													
581002	Ball bearing, acetal, 6.35mm (1/4") diameter	-	-	-	-	-	1	-	-	-	-	-	0.1

© X-Yachts

RC26166
RC26366
RC26466

RC00110



RC00141
RC00151

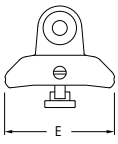
See page 169 for full details of batten links & receptacles

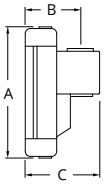
RC26163
RC26363
RC26463

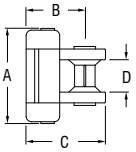
601372

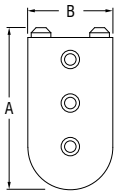
RC00021

RC26181









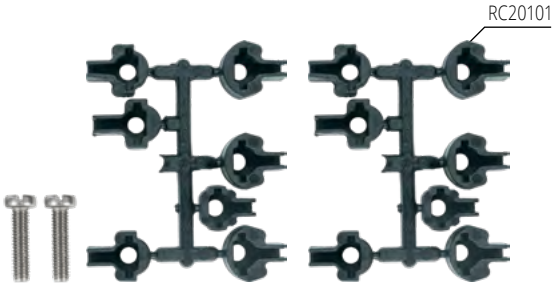
Refer to page 146 and the SUPPORT tab at ***www.ronstan.com*** for additional details regarding cars and feet.

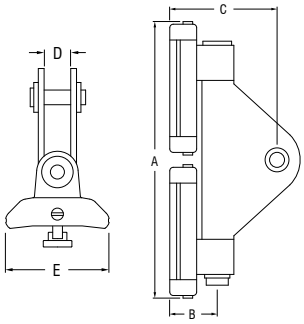
Refer to the SUPPORT tab at ***www.ronstan.com*** for assistance in specifying system requirements and schematic diagrams.

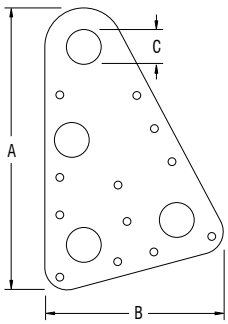
Monohulls to 12m (40ft) or sail area 38m² (409ft²).
Multihulls to 9m (30ft) or sail area 30m² (323ft²).

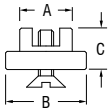
PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
Series 6 CB													
RC26163	Intermediate car, incl. RC20101 narrow feet set	55	23	31	18	41	50	2 5/32	29/32	1 7/32	23/32	1 5/8	1.8
RC26166	Batten car, incl. RC20101 narrow feet set	68	23	31	-	41	65	2 11/16	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, incl. RC20102 narrow feet set	55	23	31	18	41	50	2 5/32	29/32	1 7/32	23/32	1 5/8	1.8
RC26366	Batten car, incl. RC20102 narrow feet set	68	23	31	-	41	65	2 11/16	29/32	1 7/32	-	1 5/8	2.3
RC26463	Intermediate car, suits wide feet (not included)	55	23	31	18	41	50	2 5/32	29/32	1 7/32	23/32	1 5/8	1.8
RC26466	Batten car, suits wide feet (not included)	68	23	31	-	41	65	2 11/16	29/32	1 7/32	-	1 5/8	2.3
Spare Parts													
601372	Replacement pin for RC26163, RC26363, RC26463	-	-	-	-	-	5	-	-	-	-	-	0.2
RC00021	Replacement bush for RC26163, RC26363, RC26463	-	-	-	-	-	1	-	-	-	-	-	0.1

SERIES 8





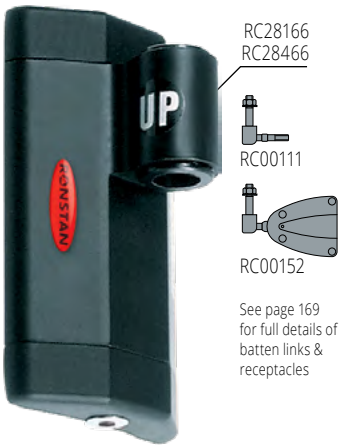


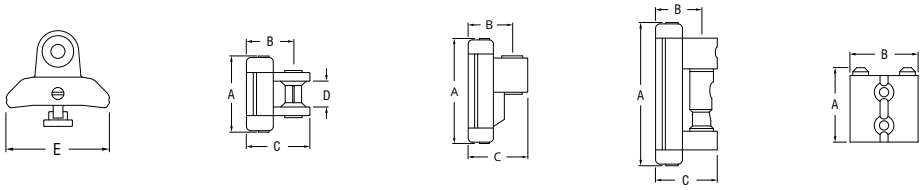


Refer to page 146 and the SUPPORT tab at ***www.ronstan.com*** for additional details regarding cars and feet.

Refer to the SUPPORT tab at ***www.ronstan.com*** 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
Series 8 CB													
RC00010	Headboard plates (pair)	188	119	23	-	-	173	7 13/32	4 11/16	29/32	-	-	6.1
RC20101	Replacement Ballslide™ feet kit, suits RC281xx cars, includes one pair of each size narrow feet N1-N7	-	-	-	-	-	1	-	-	-	-	-	0.1
RC20130	Ballslide™ wide feet (pair), suits RC284xx cars	13.3	24.0	11.4	-	-	22	17/32	15/16	7/16	-	-	0.8
RC20131	Ballslide™ wide feet (pair), suits RC284xx cars	11.6	23.0	11.8	-	-	20	15/32	29/32	15/32	-	-	0.7
RC20135	Ballslide™ wide feet (pair), suits RC284xx cars	12.5	24.0	10.5	-	-	22	1/2	15/16	13/32	-	-	0.8
RC28160	Headboard car, incl. RC20101 narrow feet set	214	30	75	16.5	51	520	8 7/16	1 3/16	2 15/16	21/32	2	18.3
RC28161	Headboard car, incl. RC20101 narrow feet set	290	30	75	16.5	51	750	11 7/16	1 3/16	2 15/16	21/32	2	26.5
RC28460	Headboard car, suits wide feet (not included)	214	30	75	16.5	51	520	8 7/16	1 3/16	2 15/16	21/32	2	18.3
RC28461	Headboard car, suits wide feet (not included)	290	30	75	16.5	51	750	11 7/16	1 3/16	2 15/16	21/32	2	26.5
Spare Parts													
581004	Ball bearing, acetal, 8.00mm (0.315") diameter	-	-	-	-	-	1	-	-	-	-	-	0.1

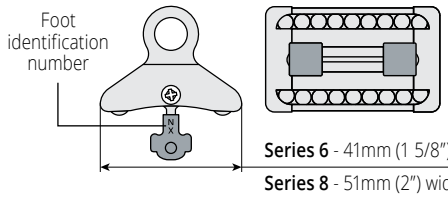
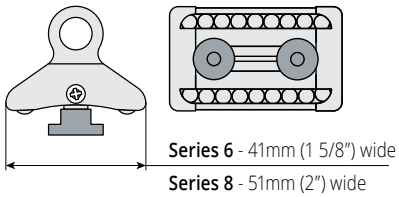
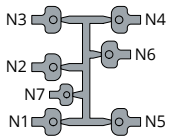
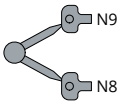
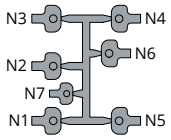




- Refer to page 146 and the SUPPORT tab at ***www.ronstan.com*** for additional details regarding cars and feet.
- Refer to the SUPPORT tab at ***www.ronstan.com*** for assistance in specifying system requirements and schematic diagrams.
- Long cars: Monohulls to 18m (60ft) or sail area 60m² (646ft²).
- 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).

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
Series 8 CB													
RC28163	Intermediate car, incl. RC20101 narrow feet set	76.0	30.0	37.0	18	51	115	3	1 3/16	1 15/32	23/32	2	4.1
RC28166	Batten car, incl. RC20101 narrow feet set	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, incl. RC20101 narrow feet set	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, suits wide feet (not included)	76.0	30.0	37.0	18	51	115	3	1 3/16	1 15/32	23/32	2	4.1
RC28466	Batten car, suits wide feet (not included)	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, suits wide feet (not included)	105.0	30.0	37.0	-	51	220	4 1/8	1 3/16	1 15/32	-	2	7.8
Spare Parts													
601372	Replacement pin for RC28163, RC28463	-	-	-	-	-	5	-	-	-	-	-	0.2
RC00021	Replacement bush for RC28163, RC28463	-	-	-	-	-	1	-	-	-	-	-	0.1

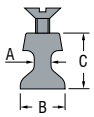
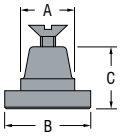
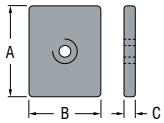
BALLSLIDE™ SYSTEM
CAR/FOOT IDENTIFICATION & REPLACEMENT PARTS

	NARROW FOOT CARS		**WIDE** FOOT CARS
	 **Series 6** - 41mm (1 5/8") wide **Series 8** - 51mm (2") wide		 **Series 6** - 41mm (1 5/8") wide **Series 8** - 51mm (2") wide
SERIES 6 CB **Car PRODUCT No.**	**RC261XX** Includes 2 x foot sets (**N1** to **N7**), and 2 x screws.	**RC263XX** Includes 2 x foot sets (**N8** & **N9**), and 2 x screws.	**RC264XX** Feet not included. Order separately, 1 pair required per car - see below.
REPLACEMENT FOOT SET	 **RC20101** Includes 2 x foot sets, and 2 x screws.	 **RC20102** Includes 2 x foot sets, and 2 x screws.	Order separately. Includes washer & screw. 
REPLACEMENT BALL	**581002** 6.35mm (1/4") diameter	**581002** 6.35mm (0.25in) diameter	**581002** 6.35mm (0.25in) diameter
SERIES 8 CB **Car PRODUCT No.**	**RC281XX** Includes 2 x foot sets (**N1** to **N7**), and 2 x screws.		**RC284XX** Feet not included. Order separately, 1 pair required per car - see below.
REPLACEMENT FOOT SET	 **RC20101** Includes 2 x foot sets, and 2 x screws.		Order separately. Includes washer & screw. 
REPLACEMENT BALL	**581004** 8.00mm (0.315in) diameter		**581004** 8.00mm (0.315in) diameter

Foot PRODUCT No.	A mm	B mm	C mm	A in	B in	C in
RC20111	13.0	20.0	10.4	1/2	25/32	13/32
RC20112	13.7	20.0	12.5	17/32	25/32	15/32
RC20113	13.7	20.0	11.0	17/32	25/32	7/16
RC20114	13.7	20.0	11.5	17/32	25/32	7/16
RC20115	12.8	20.0	10.5	1/2	25/32	13/32
RC20116	8.8	16.0	6.6	11/32	5/8	1/4
RC20118	8.8	16.0	7.6	11/32	5/8	5/16
RC20119	9.8	20.0	10.0	12/32	25/32	13/32

Foot PRODUCT No.	A mm	B mm	C mm	A in	B in	C in
RC20130	13.3	24.0	11.4	17/32	15/16	7/16
RC20131	11.6	23.0	11.8	15/32	29/32	15/32
RC20135	12.5	24.0	10.5	1/2	15/16	13/32

TRACK & CAR SYSTEM
TRACK MOUNTING SLUGS & FIXING PLATES

Narrow style 
Wide style 
Fixing plate 

PRODUCT No.	BATTEN TRACK SUITED	STYLE	FASTENING	A mm	B mm	C mm	A in	B in	C in
RC00310*	Series 19	Narrow	M5 countersunk (included)	3.7	9.4	13.5	5/32	3/8	17/32
RC00312	Series 19	Narrow	M5 countersunk (included)	2.8	7.6	12.6	1/8	5/16	1/2
RC00315*	Series 19	Narrow	M5 countersunk (included)	4.6	12.7	16.0	3/16	1/2	5/8
RC00316	Series 19	Narrow	M5 countersunk (included)	3.6	11.0	15.0	5/32	7/16	19/32
RC00321	Series 19	Wide	M5 countersunk (included)	11.8	19.9	13.0	15/32	25/32	1/2
RC00322	Series 19	Wide	M5 countersunk (included)	13.5	21.0	13.0	15/32	27/32	1/2
RC00323	Series 19	Wide	M5 countersunk (included)	8.1	15.0	13.5	5/16	19/32	17/32
RC00370*	Series 19	Fixing plate	M5 countersunk (not included)	25.0	20.0	5.0	1	25/32	3/16
RC00332	Series 22, 26	Narrow	M6 countersunk (included)	3.5	8.3	16.1	1/8	5/16	5/8
RC00333*	Series 22, 26	Narrow	M6 countersunk (included)	4.6	13.0	18.0	3/16	1/2	23/32
RC00341	Series 22, 26	Wide	M6 countersunk (included)	13.6	21.0	15.5	17/32	27/32	5/8
RC00343	Series 22, 26	Wide	M6 countersunk (included)	11.8	19.8	15.5	15/32	25/32	5/8
RC00380*	Series 22, 26	Fixing plate	M6 countersunk (not included)	25.0	20.0	5.0	1	3/4	3/16
RC00360*	Series 30	Wide	M8 countersunk (included)	12.6	22.9	18.0	1/2	29/32	23/32

* Most commonly used

Ball Bearing systems

Captive Ball systems


Quick release batten car models


Luff groove tracks for sail flexibility


Track mounting slugs

TRACK & CAR BATTEN CAR SYSTEMS

STRENGTH & SIMPLICITY

Sailing professionals around the world choose Ronstan batten systems for superior and innovative features combined with race-proven performance and reliability. With 7 track sizes in the standard product range, there is a system with the right specifications for every boat and sail plan.

Flexible solutions

BB **Ball Bearing** cars run on twin races of recirculating ball bearings that engage with the track profile for excellent all round performance, even when reefing while sailing off the wind.

CB **Captive Ball** cars use a combination of captive recirculating ball bearings running on the face of the track for compression loads, and sliderods to provide extra strength for high static loads. All bearings are captive, allowing for easy installation and removal.

Luff groove tracks are compatible with 'soft luff' and fully battened mainsails, making it easy to change between the two. They may be bonded to carbon masts with special adhesives.

Quick release cars make the job easier when the sail needs to be removed for changeover, repair or stowage.

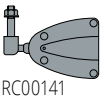
Ball joint articulation

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.

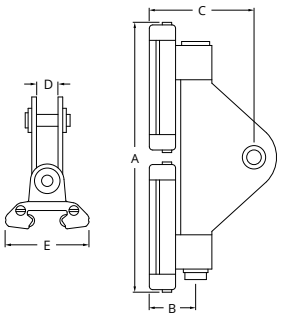
Installation options

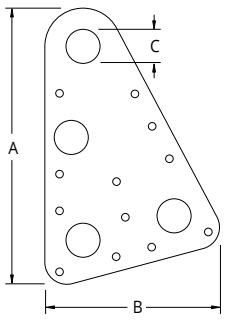
Installation can be greatly simplified for Series 19 through Series 30 by the use of threaded slugs that locate in the existing luff groove of the mast, avoiding the need to drill and tap holes for fasteners and other complications. Slugs are self-locating and allow for track installation without having to remove the mast from the boat. See page 146 for track mounting slug details.

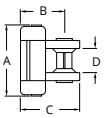
SERIES 14 BB

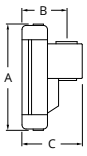


See page 169 for full details of batten links & receptacles







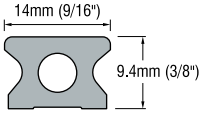


Monohulls to 12m (40ft) or sail area 38m² (409ft²).

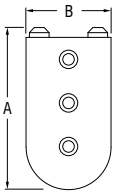
Multihulls to 9m (30ft) or sail area 30m² (323ft²).

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
Series 14 BB													
RC00010	Headboard plates (pair)	188	119	23	-	-	173	7 13/32	4 11/16	29/32	-	-	6.1
RC11460	Headboard car	155	22	60	12.5	41	240	6 3/32	7/8	2 3/8	1/2	1 5/8	8.5
RC11463	Intermediate car	54	22	30	18.0	41	44	2 1/8	7/8	1 3/16	23/32	1 5/8	1.6
RC11466	Batten car	66	22	30	-	41	57	2 19/32	7/8	1 3/16	-	1 5/8	2.0
Spare Parts													
581001	Ball bearing, acetal, 5.00mm (0.197") diameter	-	-	-	-	-	1	-	-	-	-	-	0.1
601417	Replacement pin for RC11463	-	-	-	-	-	4	-	-	-	-	-	0.1
RC00020	Replacement bush for RC11463	-	-	-	-	-	1	-	-	-	-	-	0.1

© Dragonfly



RC1141 TRACK PROFILE



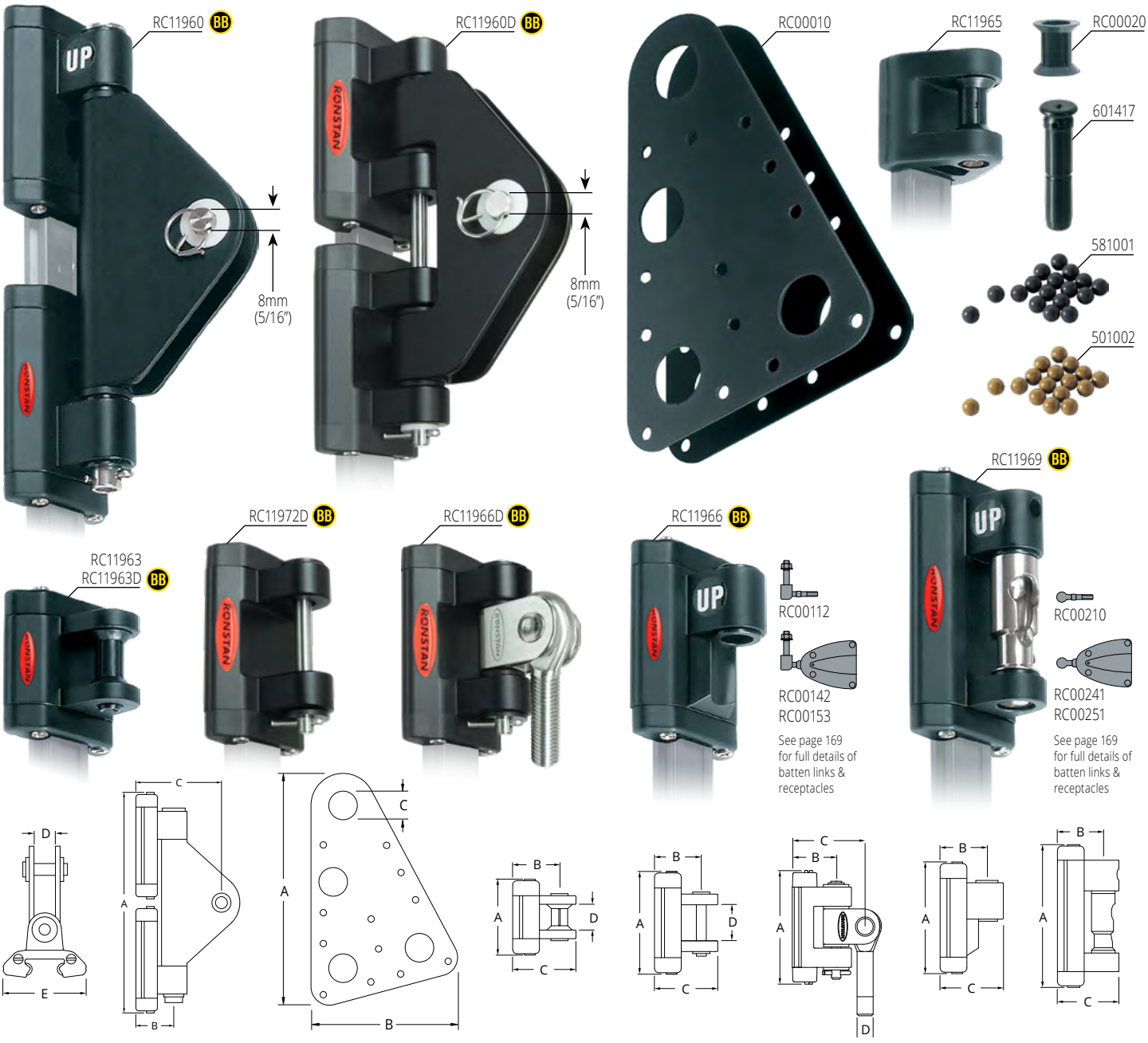
Refer to page 146 and the SUPPORT tab at ***www.ronstan.com*** for system schematics and installation information.

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
Series 14									
RC1141-2.0*1	Track, 1975mm (77 13/16") long, black	14	9.4	-	421	9/16	3/8	-	14.9
RC1141-3.0*1&2	Track, 3025mm (119 3/16") long, black	14	9.4	-	625	9/16	3/8	-	22.0
RC1141J	Track joiner, acetal	-	-	-	1	-	-	-	0.1
RC11480	End cap, plastic, L28mm x W20mm (1 1/8" x 25/32")	-	-	-	6	-	-	-	0.2
RC11481	End stop, plastic	68	33.0	-	11	2 11/16	1 5/16	-	0.4
RC1149-0.2*1	Gate track, 250mm (9 27/32") long, black	14	9.4	-	52	9/16	3/8	-	1.8

*1 Silver track available - Order as RCxxxxxxS
*2 Longer track available on request.

SERIES 19 BB



Multihulls to 11m (36ft) or sail area 37m² (398ft²).

Monohulls to 14m (46ft) or sail area 44m² (474ft²).

RC119xxD - suitable for multihulls to 10m (33ft) or sail area 36m² (388ft²).

RC119xxD - suitable for monohulls to 13m (43ft) or sail area 43m² (463ft²).

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
Series 19 BB													
RC00010	Headboard plates (pair)	188	119	23	-	-	173	7 13/32	4 11/16	29/32	-	-	6.1
RC11960	Headboard car	171	26	65	11.5	47	310	6 3/4	1 1/32	2 9/16	7/16	1 27/32	11.0
RC11960D	Headboard car	146	27	63	12.2	47	270	5 3/4	1 1/16	2 15/32	15/32	1 27/32	9.5
RC11963	Intermediate car	51	27	37	18.0	47	61	2	1 1/16	1 15/32	23/32	1 27/32	2.2
RC11963D	Intermediate car	51	27	37	18.0	47	61	2	1 1/16	1 15/32	23/32	1 27/32	2.2
RC11965	Track slide, acetal	37	26	36	17.5	38	25	1 15/32	1 1/32	1 13/32	11/16	1 1/2	0.9
RC11966	Batten car	66	26	36	-	47	75	2 19/32	1 1/32	1 13/32	-	1 27/32	2.6
RC11966D	Batten car, includes receptacle link M10	71	27	45	M10	47	204	2 13/16	1 1/16	1 25/32	M10	1 27/32	7.2
RC11969	Quick release batten car	88	26	36	-	47	145	3 15/32	1 1/32	1 13/32	-	1 27/32	5.1
RC11972D	Reef car, pin diam. Ø5.9mm (7/32")	71	27	37	26.0	47	100	2 13/16	1 1/16	1 15/32	1 1/32	1 27/32	3.5
Spare Parts													
581001	Ball bearing, acetal, 5.00mm (0.197") diameter (suits cars with "D" part number suffix)	-	-	-	-	-	1	-	-	-	-	-	0.1
501002	Ball bearing, Torlon®, 5.00mm (0.197") diameter	-	-	-	-	-	1	-	-	-	-	-	0.1
601417	Replacement pin for RC11963, RC11963D	-	-	-	-	-	4	-	-	-	-	-	0.1
RC00020	Replacement bush for RC11963, RC11963D	-	-	-	-	-	1	-	-	-	-	-	0.1

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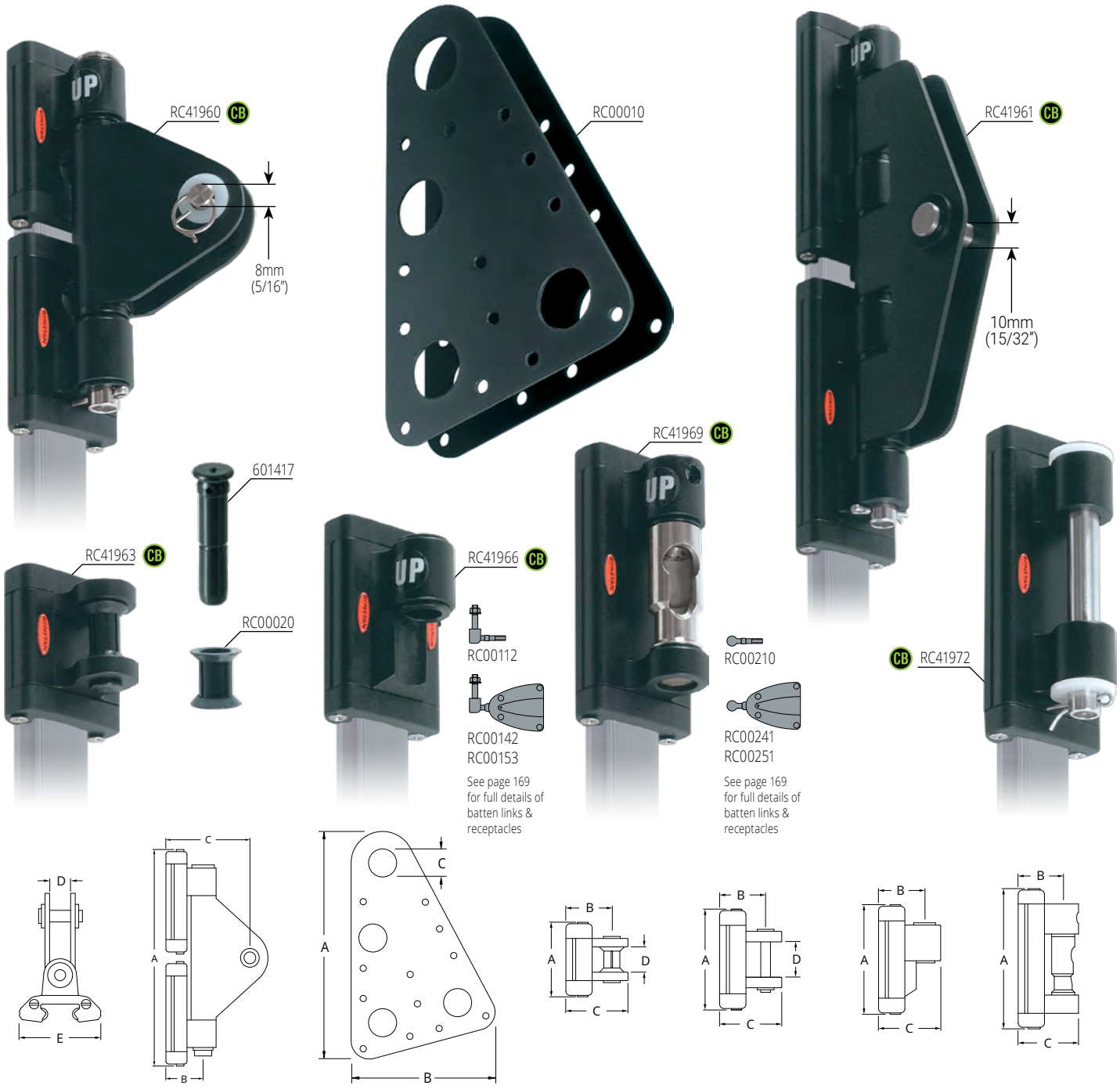
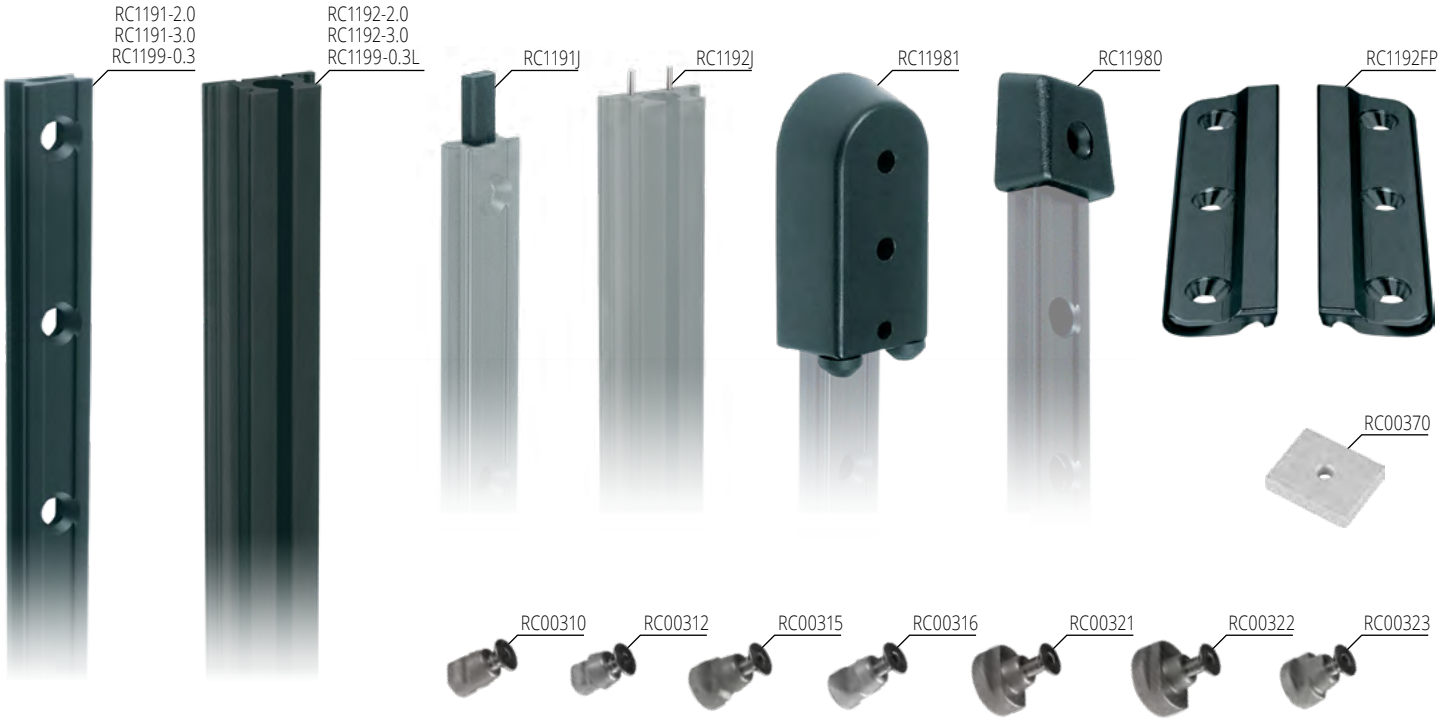
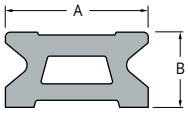


- Long cars: Monohulls to 15m (50ft) or sail area 53m² (570ft²).
- Long cars: Multihulls to 12m (40ft) or sail area 46m² (495ft²).
- Short cars: Monohulls to 14m (46ft) or sail area 48m² (517ft²).
- Short cars: Multihulls to 11m (36ft) or sail area 41m² (441ft²).

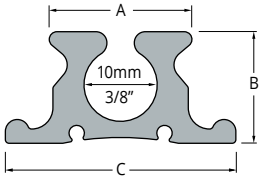
PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
Series 19 CB													
RC00010	Headboard plates (pair)	188	119	23	-	-	173	7 13/32	4 11/16	29/32	-	-	6.1
RC41960	Headboard car (short)	126	29	66	12.2	39	243	4 15/16	1 1/8	2 5/8	15/32	1 9/16	8.6
RC41961	Headboard 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, pin diam. Ø9.9mm (13/32")	98	29	38	37.0	39	151	3 3/4	1 1/8	1 7/16	1 7/16	1 9/16	5.3
Spare Parts													
601417	Replacement pin for RC41963	-	-	-	-	-	4	-	-	-	-	-	0.1
RC00020	Replacement bush for RC41963	-	-	-	-	-	1	-	-	-	-	-	0.1

SERIES 19 TRACK

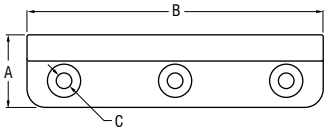




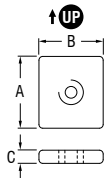
RC1191
TRACK PROFILE



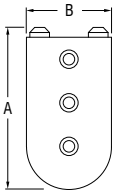
RC1192
TRACK PROFILE



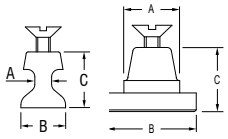
RC1192FP
FASTENER PLATE



RC00370
FIXING PLATE*3



END
STOP



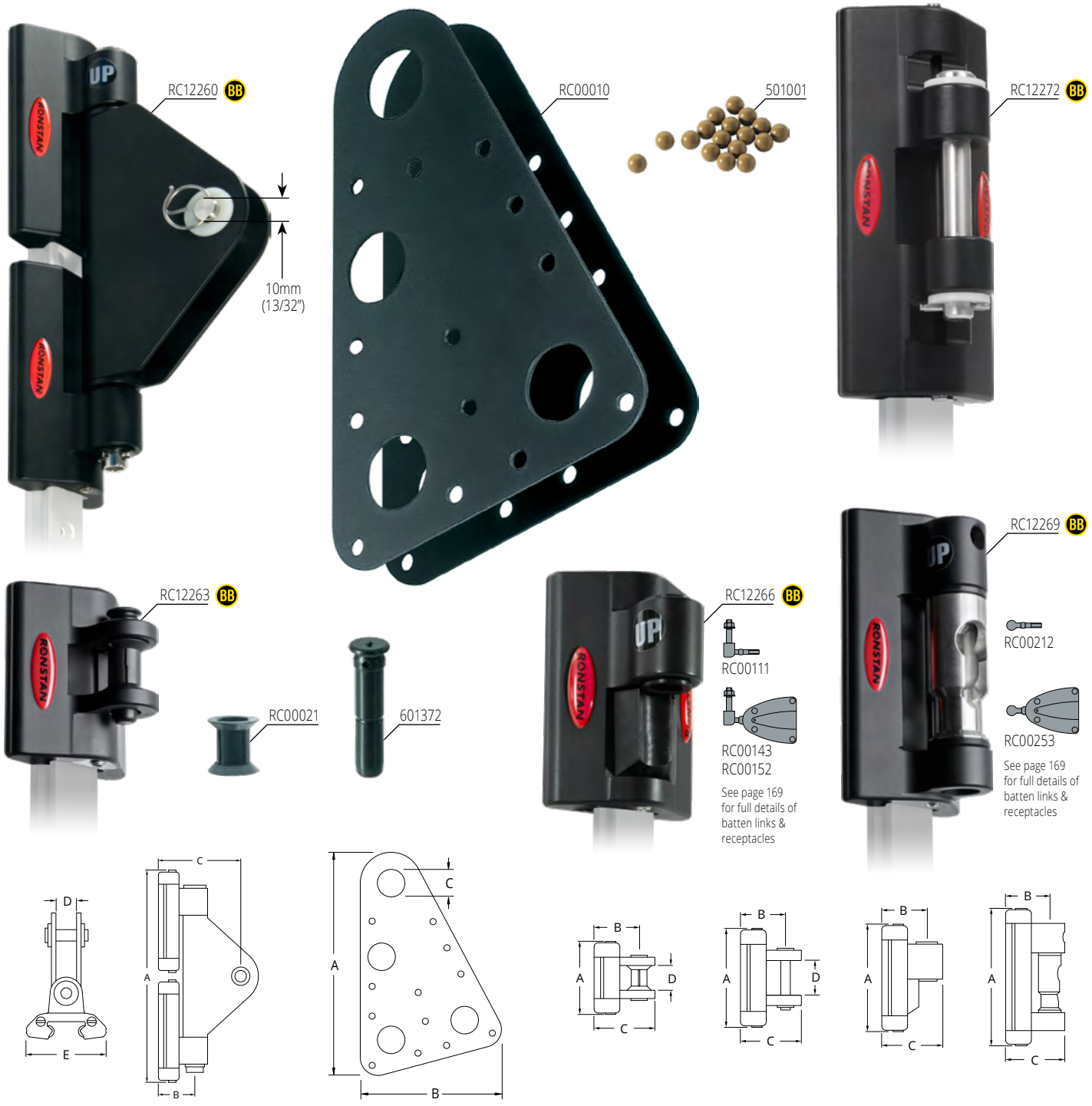
TRACK
MOUNTING SLUGS

Refer to page 146 and the SUPPORT tab at ***www.ronstan.com*** for full track mounting slug details, system schematics and installation information.

TRACK FASTENINGS – M5 (3/16") 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
Series 19									
RC00310	Track mounting slug, including M5 screw	3.7	9.4	13.5	4	5/32	3/8	17/32	0.1
RC00312	Track mounting slug, including M5 screw	2.8	7.6	12.6	3	1/8	5/16	1/2	0.1
RC00315	Track mounting slug, including M5 screw	4.6	12.7	16.0	5	3/16	1/2	5/8	0.2
RC00316	Track mounting slug, including M5 screw	3.6	11.0	15.0	5	5/32	7/16	19/32	0.2
RC00321	Track mounting slug, including M5 screw	11.8	19.9	13.0	8	15/32	25/32	1/2	0.3
RC00322	Track mounting slug, including M5 screw	13.5	21.0	13.0	9	15/32	27/32	1/2	0.3
RC00323	Track mounting slug, including M5 screw	8.1	15.0	13.5	6	5/16	19/32	17/32	0.2
RC00370	Track fixing plate, suits Series 19, M5 thread	25.0	20.0	5.0	6	1	25/32	3/16	0.2
RC1191-2.0*1	Track, 2025mm (79 3/4") long, black. Requires 21 track mounting slugs	19.4	10.4	-	614	25/32	13/32	-	21.7
RC1191-3.0*1&2	Track, 3025mm (119 3/16") long, black. Requires 31 track mounting slugs	19.4	10.4	-	932	25/32	13/32	-	32.9
RC1192-2.0*1	Luff groove track, 2025mm (79 3/4") long, black	19.5	15.3	31.5	1090	25/32	19/32	1 1/4	38.4
RC1192-3.0*1&2	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
RC1192FP	Luff groove track clamping plates, black (pair)	19.6	80.0	4.0	11	25/32	3 5/32	5/32	0.4
RC1191J	Track joiner, acetal	-	-	-	3	-	-	-	0.1
RC1192J	Luff groove track joiners (pair)	-	-	-	1	-	-	-	0.1J
RC1199-0.3*1	Gate track, 325mm (12 13/16") long, black. Requires 4 track mounting slugs	19.0	10.4	-	97	3/4	13/32	-	3.4
RC1199-0.3L*1	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
RC11980	End cap, plastic, L30mm x W26mm (1 3/16" x 1 1/32")	-	-	-	6	-	-	-	0.2
RC11981	End stop, plastic	70.0	38.0	-	15	2 3/4	1 1/2	-	0.5

*1Silver track available - Order as RCxxxxxxS
*2 Longer track available on request.
*3 For correct alignment of fasteners, position track fixing plates with long sides parallel with mast groove

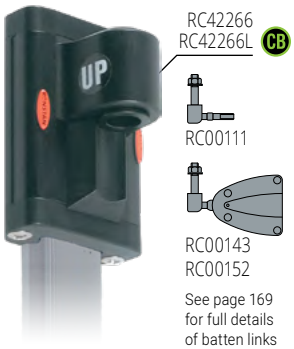


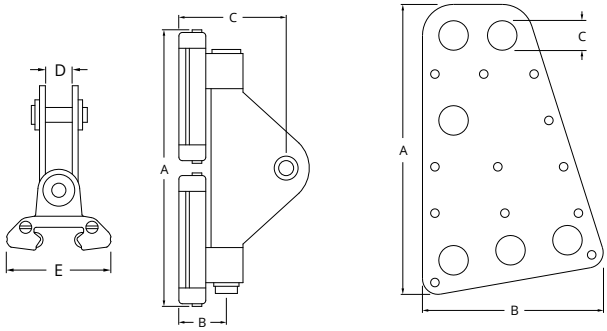
Monohulls to 18m (60ft) or sail area 58m² (624ft²).

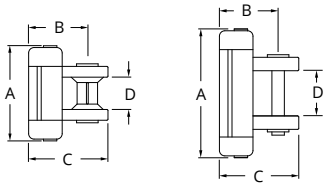
Multihulls to 12m (40ft) or sail area 46m² (495ft²).

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
Series 22 BB													
RC00010	Headboard plates (pair)	188	119	23	-	-	173	7 13/32	4 11/16	29/32	-	-	6.1
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, pin diam. Ø9.9mm (13/32")	130	33	45	32	57.5	350	5 1/8	1 5/16	1 25/32	1 1/4	2 1/4	12.3
Spare Parts													
501001	Ball bearing, Torlon®, 6.35mm (1/4") diameter	-	-	-	-	-	1	-	-	-	-	-	0.1
601372	Replacement pin for RC12263	-	-	-	-	-	5	-	-	-	-	-	0.2
RC00021	Replacement bush for RC12263	-	-	-	-	-	1	-	-	-	-	-	0.1

SERIES 22 CB



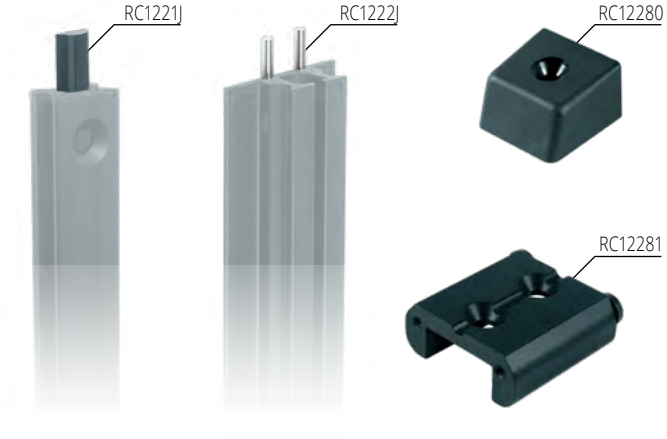


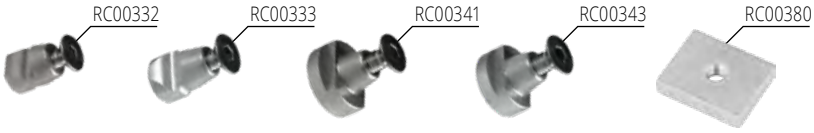


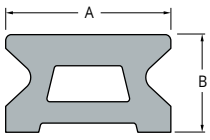
Monohulls to 18m (60ft) or sail area 70m² (753ft²).

Multihulls to 13m (43ft) or sail area 57m² (614ft²).

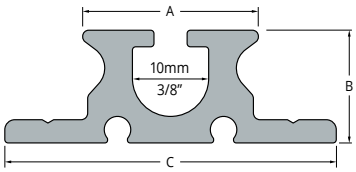
PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
Series 22 CB Cars for Standard Track													
RC42260	Headboard car	235	34	95	17	47	814	9 1/4	1 11/32	3 3/4	21/32	1 7/8	28.7
RC42263	Intermediate car	54	34	46	18	47	102	2 1/8	1 11/32	1 25/32	23/32	1 7/8	3.6
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, pin diam. Ø9.9mm (13/32")	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 CB Cars for Luff Groove Track													
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, pin diam. Ø9.9mm (13/32")	86	34	46	32	47	224	3 13/32	1 11/32	1 25/32	1 1/4	1 7/8	7.9
Spare Parts & Accessories													
601372	Replacement pin for RC42263	-	-	-	-	-	5	-	-	-	-	-	0.2
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	-	-	19.0
RC00021	Replacement bush for RC42263	-	-	-	-	-	1	-	-	-	-	-	0.1



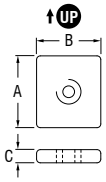




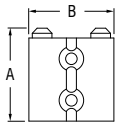
RC1221
TRACK PROFILE



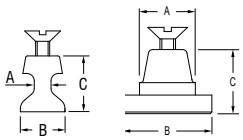
RC1222
TRACK PROFILE



RC00380
FIXING PLATE*3



RC12281
END STOP



TRACK
MOUNTING SLUGS

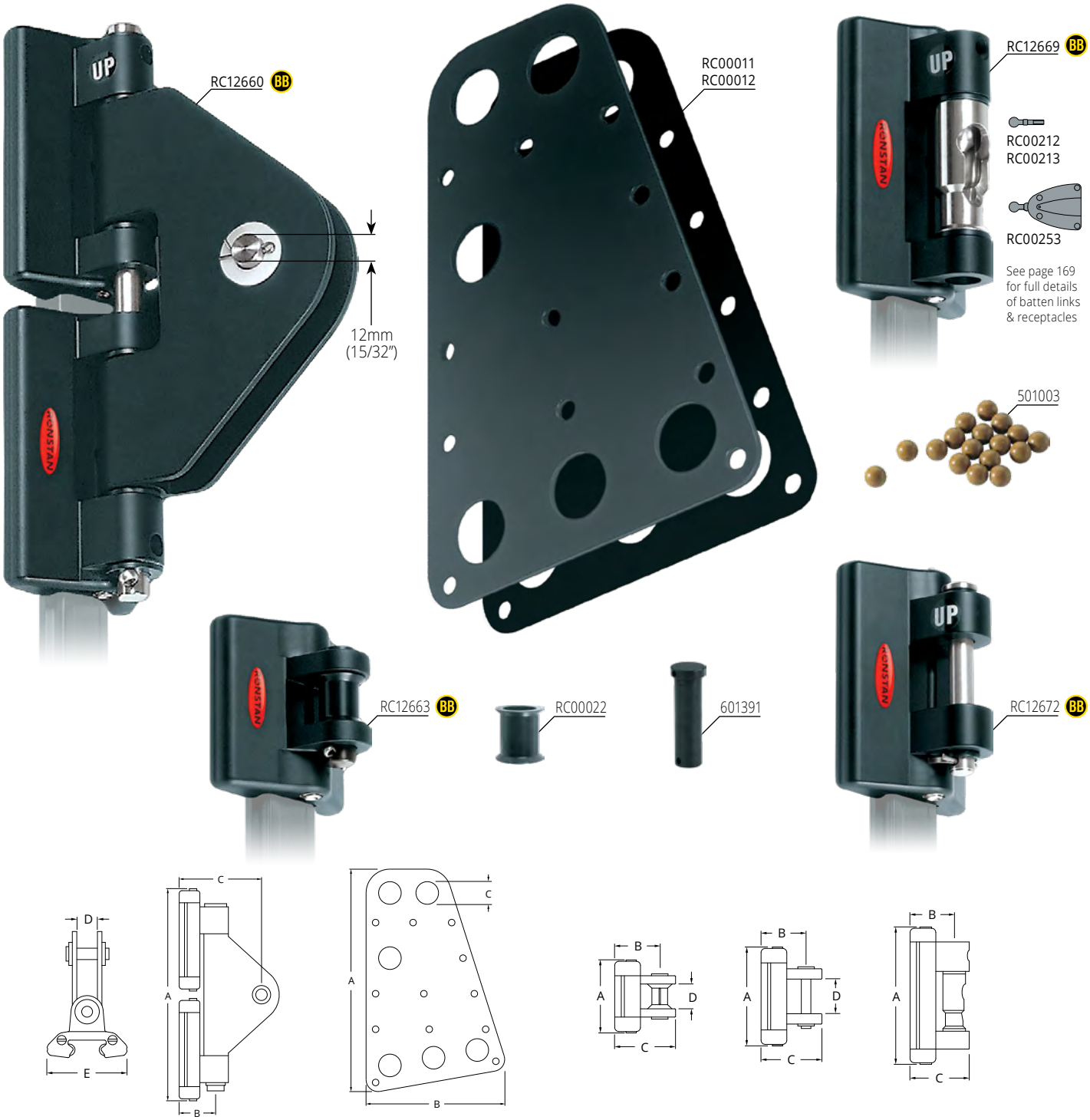
Refer to page 146 and the SUPPORT tab at ***www.ronstan.com*** for full track mounting slug details, system schematics and installation information.

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
Series 22									
RC00332	Track mounting slug, including M6 screw	3.5	8.3	16.1	5	1/8	5/16	5/8	0.2
RC00333	Track mounting slug, including M6 screw	4.6	13.0	18.0	6	3/16	1/2	23/32	0.2
RC00341	Track mounting slug, including M6 screw	13.6	21.0	15.5	11	17/32	27/32	5/8	0.4
RC00343	Track mounting slug, including M6 screw	11.8	19.8	15.5	10	15/32	25/32	5/8	0.4
RC00380	Track fixing plate, suits Series 22 & 26, M6 thread	25.0	20.0	5.0	6	1	3/4	3/16	0.2
RC1221-2.0*1	Track, 2025 mm (79 25/32") long, black. Requires 21 track mounting slugs	22.0	13.0	-	956	7/8	1/2	-	33.7
RC1221-3.0*1&2	Track, 3025mm (119 3/16") long, black. Requires 31 track mounting slugs	22.0	13.0	-	1453	7/8	1/2	-	51.2
RC1221J	Track joiner, acetal	-	-	-	4	-	-	-	0.1
RC1222-2.0*1	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*1&2	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
RC1222J	Luff groove track joiner (pair)	-	-	-	2	-	-	-	0.1
RC1229-0.3*1	Gate track, 325mm (12 13/16") long, black. Requires 4 track mounting slugs	22.0	13.0	-	156	7/8	1/2	-	5.5
RC1229-0.3L*1	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
RC12280	End cap, plastic, L30mm x W26mm (1 3/16" x 1 1/32")	-	-	-	7	-	-	-	0.2
RC12281*1	End stop, alloy	50.0	45.0	-	50	1 31/32	1 25/32	-	1.8

*1 Silver track available - Order as RCxxxxxxS
*2 Longer track available on request.
*3 For correct alignment of fasteners, position track fixing plates with long sides parallel with mast groove

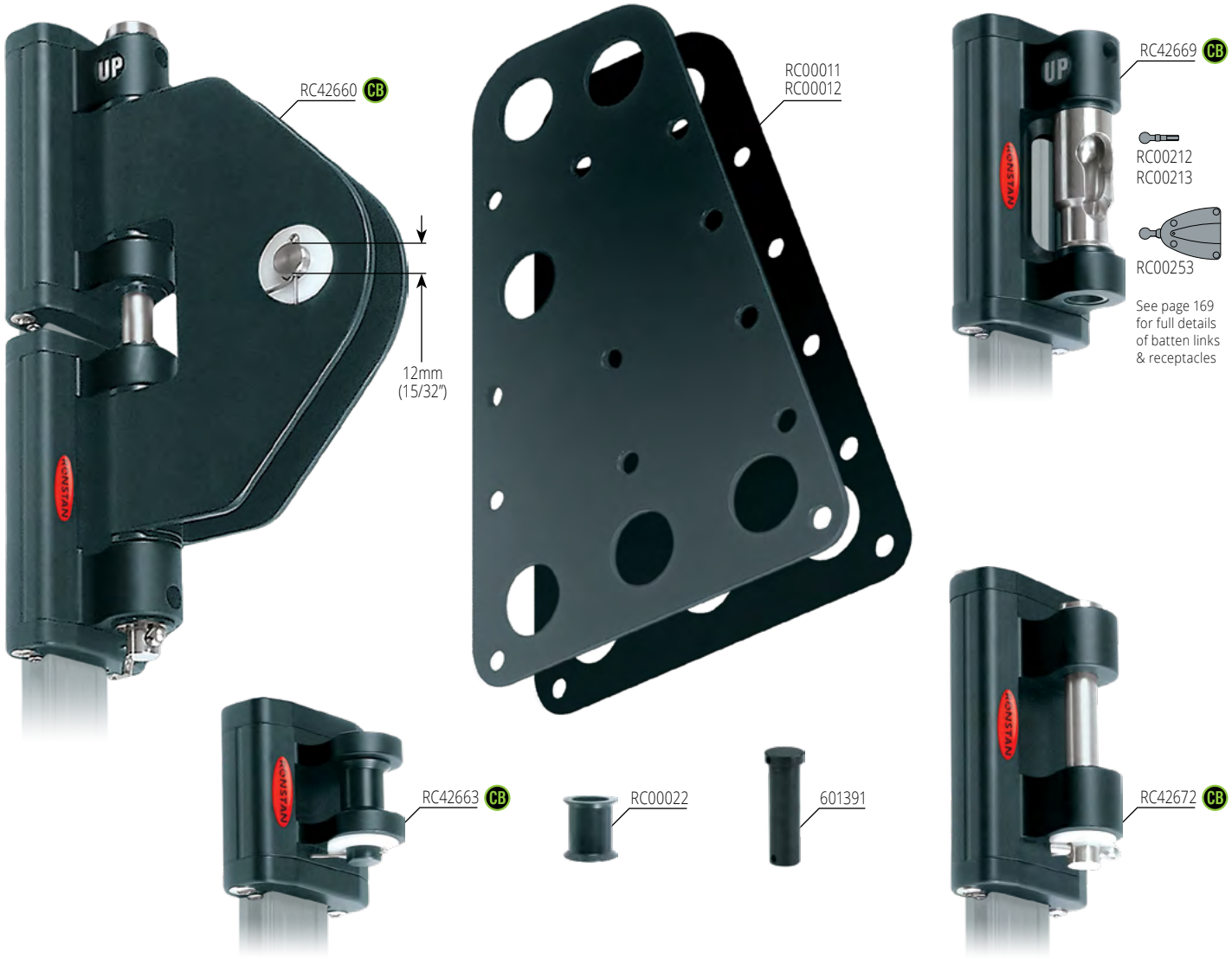
SERIES 26 BB

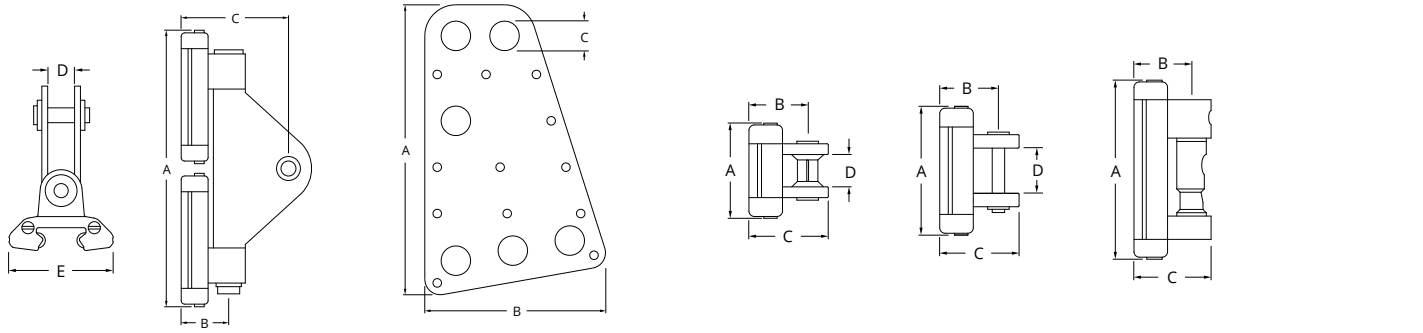


Monohulls to 20m (65ft) or sail area 85m² (915ft²).

Multihulls to 14m (46ft) or sail area 65m² (700ft²).

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
Series 26 BB													
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	-	-	19.0
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	110	36	48	-	69	385	4 5/16	1 13/32	1 29/32	-	2 23/32	13.6
RC12672	Reef car, pin diam. Ø9.9mm (13/32")	90	36	48	28	69	285	3 17/32	1 13/32	1 29/32	1 3/32	2 23/32	10.1
Spare Parts													
501003	Ball bearing, Torlon®, 7.95mm (5/16") diameter	-	-	-	-	-	1	-	-	-	-	-	0.1
601391	Replacement pin for RC12663	-	-	-	-	-	7	-	-	-	-	-	0.2
RC00022	Replacement bush for RC12663	-	-	-	-	-	1	-	-	-	-	-	0.1

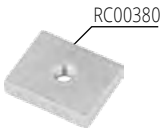


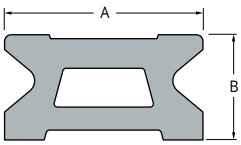


- Monohulls to 22m (72ft) or sail area 105m² (1130ft²).
- Multihulls to 16m (53ft) or sail area 83m² (893ft²).
- Suits series 26 track (standard and luff groove type tracks).

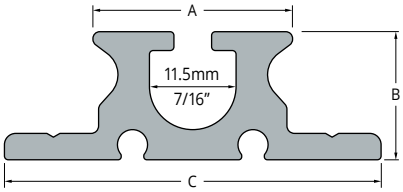
PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
Series 26 CB													
RC00011	Headboard plates (pair)	280	175	28	-	-	540	11 1/32	6 29/32	1 3/32	-	-	19.0
RC00012	Headboard plates (pair)	280	175	23	-	-	540	11 1/32	6 29/32	29/32	-	-	19.0
RC42660	Headboard 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, pin diam. Ø11.8mm (15/32")	90	37	49	28	52	270	3 9/16	1 7/16	1 15/16	1 1/8	2 1/16	9.5
Spare Parts													
601391	Replacement pin for RC42663	-	-	-	-	-	7	-	-	-	-	-	0.2
RC00022	Replacement bush for RC42663	-	-	-	-	-	1	-	-	-	-	-	0.1

SERIES 26 TRACK

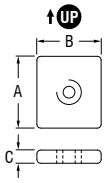




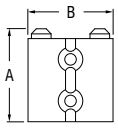
RC 1261
TRACK PROFILE



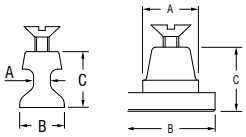
RC 1262
TRACK PROFILE



RC 00380
FIXING PLATE*3



END
STOP



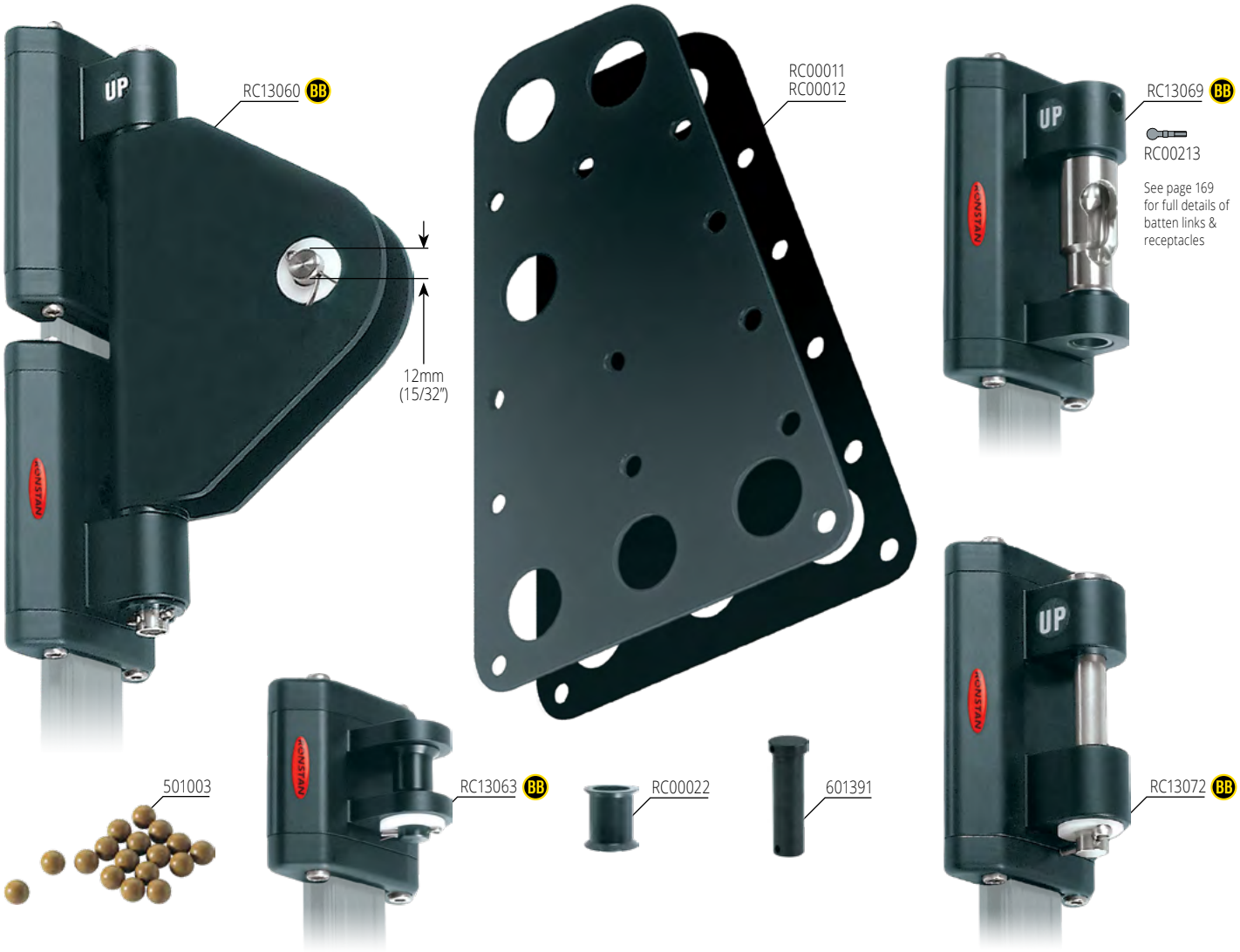
TRACK
MOUNTING SLUGS

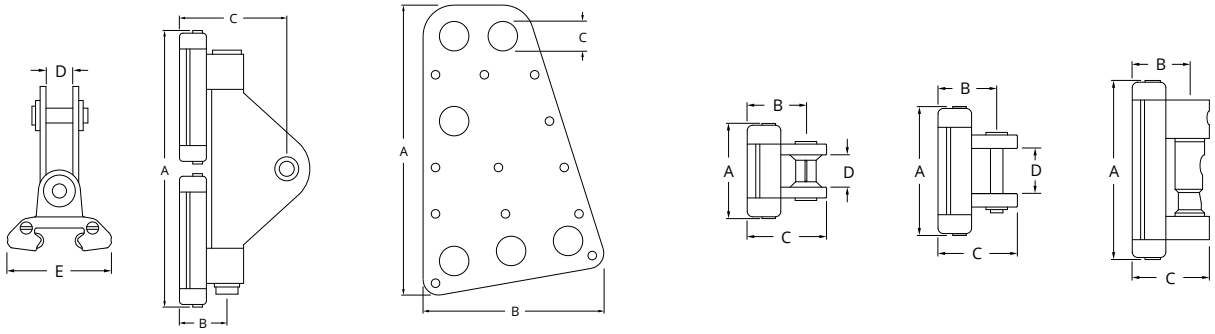
Refer to page 146 and the SUPPORT tab at for full track mounting slug details, system schematics and installation information.

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
Series 26									
RC00332	Track mounting slug, including M6 screw	3.5	8.3	16.1	5	1/8	5/16	5/8	0.2
RC00333	Track mounting slug, including M6 screw	4.6	13.0	18.0	6	3/16	1/2	23/32	0.2
RC00341	Track mounting slug, including M6 screw	13.6	21.0	15.5	11	17/32	27/32	5/8	0.4
RC00343	Track mounting slug, including M6 screw	11.8	19.8	15.5	10	15/32	25/32	5/8	0.4
RC00380	Track fixing plate, suits Series 22 & 26, M6 thread	25.0	20.0	5.0	6	1	3/4	3/16	0.2
RC1261-2.0*1	Track, 2025 mm (79 25/32") long, black. Requires 27 track mounting slugs	26.4	13.5	-	1190	1 1/32	17/32	-	42.0
RC1261-3.0*1&2	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
RC1261J	Track joiner, acetal	-	-	-	5	-	-	-	0.2
RC1262-2.0*1	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*1&2	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
RC1262J	Luff groove track joiner (pair)	-	-	-	4	-	-	-	0.1
RC12680	End cap, plastic, L34mm x W32mm (1 5/16" x 1 1/4")	-	-	-	7	-	-	-	0.2
RC12681	End stop, alloy	55.0	45.0	-	73	2 5/32	1 25/32	-	2.6
RC1269-0.3*1	Gate track, 325mm (12 13/16") long, black. Requires 4 track mounting slugs	26.4	13.5	-	196	1 1/32	17/32	-	6.9
RC1269-0.3L*1	Luff groove gate track, 325mm (12 13/16") long, black	26.4	17.0	50.0	290	1 1/32	21/32	1 31/32	10.2

*1 Silver track available - Order as RCxxxxxxS
*2 Longer track available on request.
*3 For correct alignment of fasteners, position track fixing plates with long sides parallel with mast groove



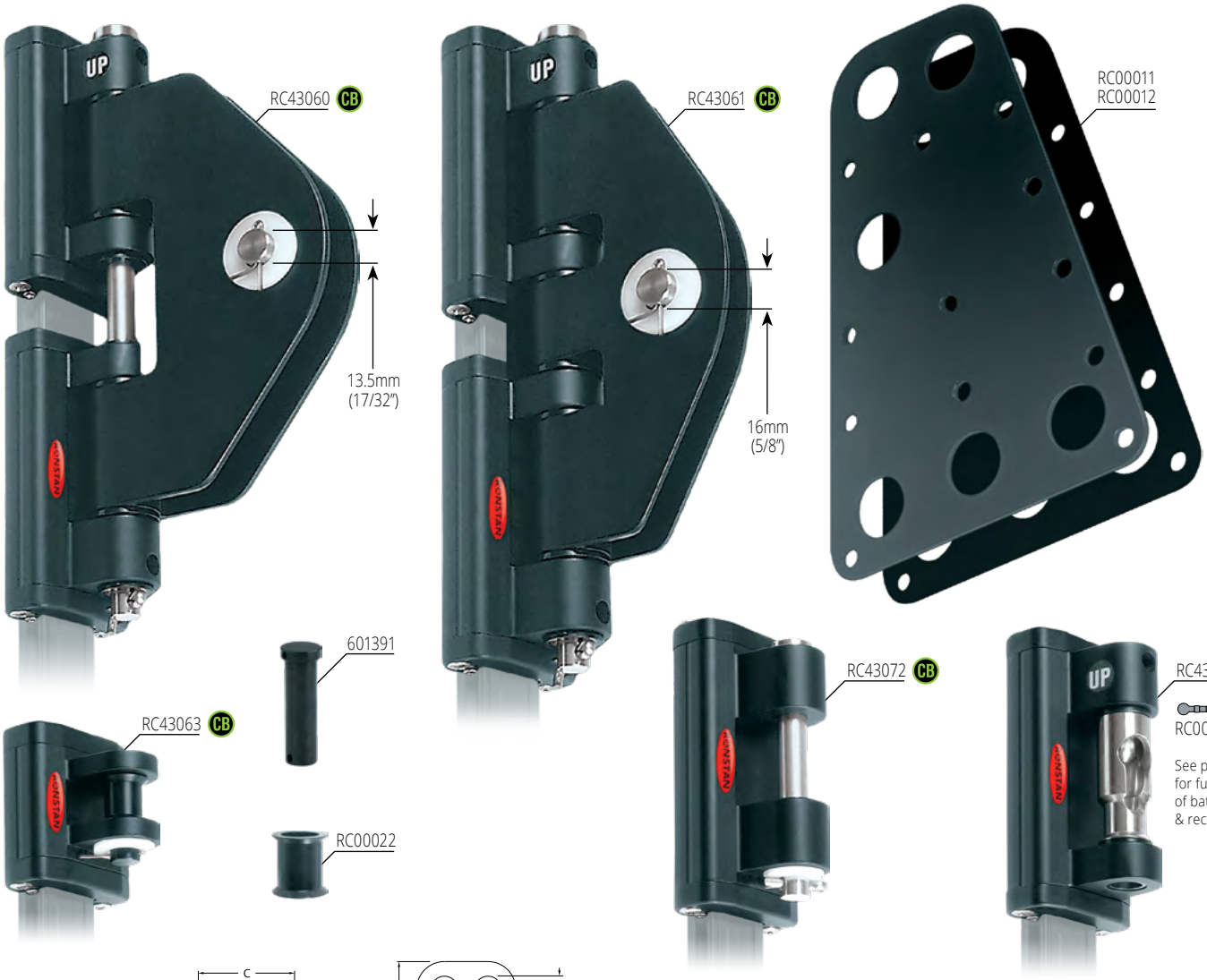


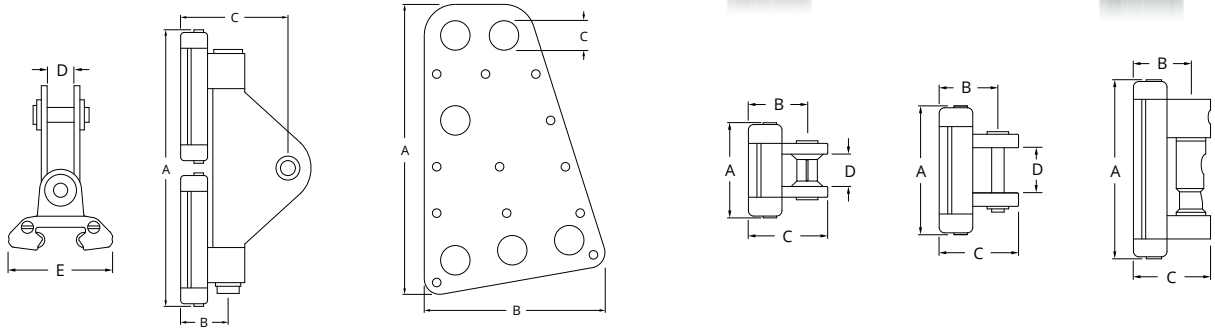
Monohulls to 23m (75ft)
or sail area 120m² (1292ft²).

Multihulls to 17m (56ft)
or sail area 93m² (1001ft²).

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
Series 30 BB													
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	-	-	19.0
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, pin diam. Ø11.8mm (15/32")	130	43	56	37	76.4	534	5 1/8	1 11/16	2 7/32	15/32	3	18.8
Spare Parts													
501003	Ball bearing, Torlon®, 7.95mm (5/16") diameter	-	-	-	-	-	1	-	-	-	-	-	0.1
601391	Replacement pin for RC13063	-	-	-	-	-	7	-	-	-	-	-	0.2
RC00022	Replacement bush for RC13063	-	-	-	-	-	1	-	-	-	-	-	0.1

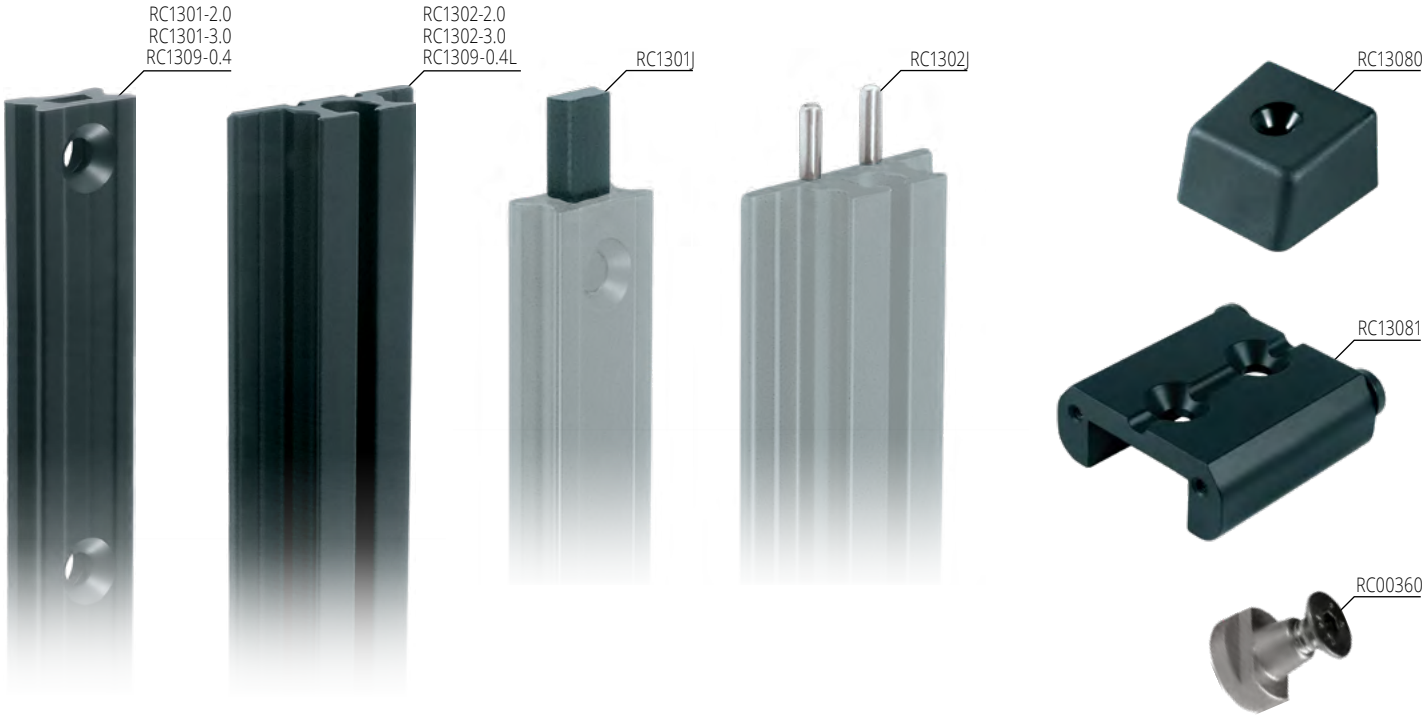
SERIES 30 CB

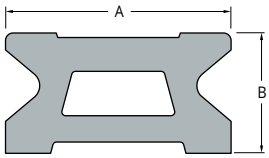




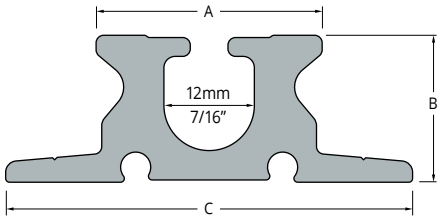
- Long cars: Monohulls to 25m (82ft) or sail area 140m² (1507ft²).
- Long cars: Multihulls to 18m (60ft) or sail area 105m² (1130ft²).
- Short cars: Monohulls to 23m (75ft) or sail area 120m² (1292ft²).
- Short cars: Multihulls to 17m (56ft) or sail area 93m² (1001ft²).

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
Series 30 CB													
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	-	-	19.0
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, pin diam. Ø11.8mm (15/32")	119	43	56	37	58	545	4 11/16	1 11/16	2 7/32	1 15/32	2 9/32	19.2
Spare Parts													
601391	Replacement pin for RC43063	-	-	-	-	-	7	-	-	-	-	-	0.2
RC00022	Replacement bush for RC43063	-	-	-	-	-	1	-	-	-	-	-	0.1

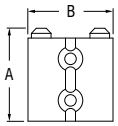




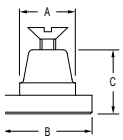
RC 1301
TRACK PROFILE



RC 1302
TRACK PROFILE



END
STOP



TRACK
MOUNTING SLUGS

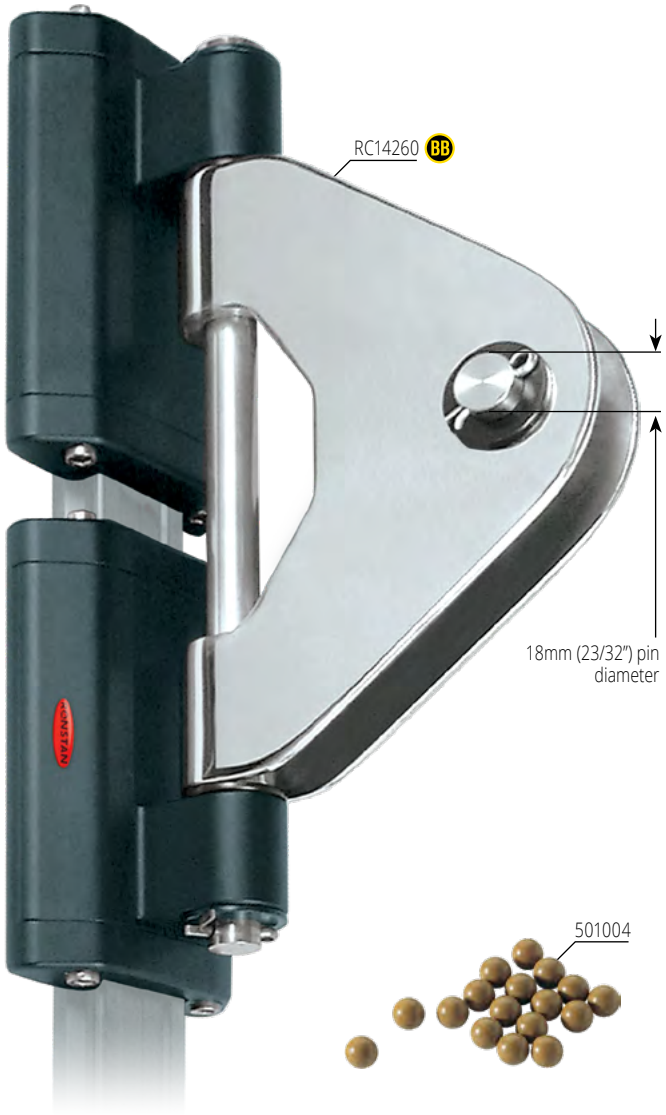
Refer to page 146 and the SUPPORT tab at ***www.ronstan.com*** for full track mounting slug details, system schematics and installation information.

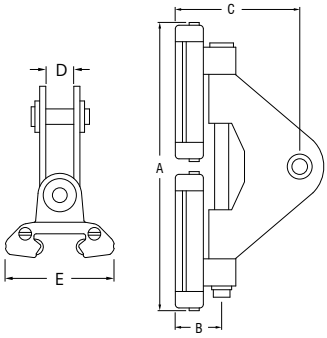
TRACK FASTENINGS – M8 (5/16") countersunk head fasteners at 100mm (3 15/16") centres.

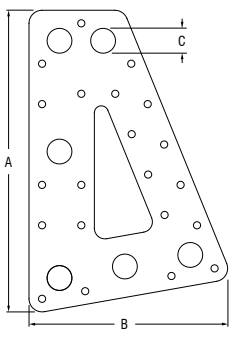
PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	WEIGHT g	A in	B in	C in	WEIGHT oz
Series 30									
RC00360	Track mounting slug, including M8 screw	12.6	22.9	18	17	1/2	29/32	23/32	0.6
RC1301-2.0*[1]	Track, 2025mm (79 25/32") long, black. Requires 21 track mounting slugs	30.0	16.0	-	1689	1 3/16	5/8	-	59.6
RC1301-3.0*[1&2]	Track, 3025mm (119 3/16") long, black. Requires 31 track mounting slugs	30.0	16.0	-	2530	1 3/16	5/8	-	89.2
RC1301J	Track joiner, acetal	-	-	-	7	-	-	-	0.2
RC1302-2.0*[1]	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*[1&2]	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
RC1302J	Luff groove track joiner (pair)	-	-	-	5	-	-	-	0.2
RC13080	End cap, plastic, L37mm x W37mm (1 7/16" x 1 7/16")	-	-	-	27	-	-	-	1.0
RC13081	End stop, alloy	58.0	55.0	-	89	2 9/32	2 3/16	-	3.1
RC1309-0.4*[1]	Gate track, 400mm (15 3/4") long, black. Requires 4 track mounting slugs	30.0	16.0	-	341	1 3/16	5/8	-	12.1
RC1309-0.4L*[1]	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

*1 Silver track available - Order as RCxxxxxxS
*2 Longer track available on request.

SERIES 42 BB





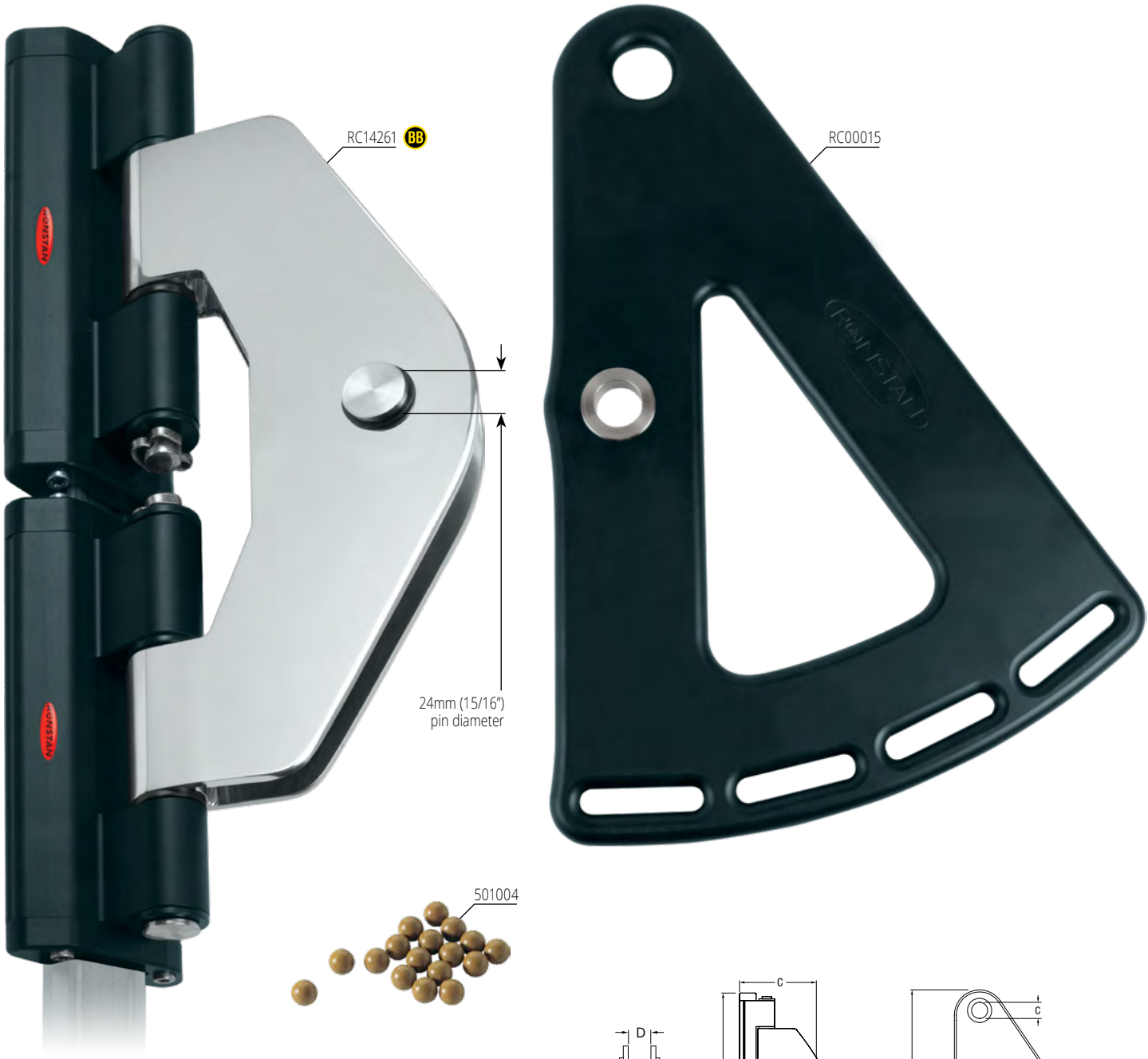


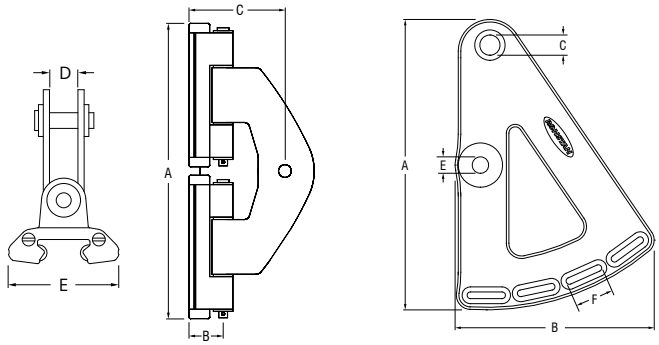
Custom headboard cars, headboards and batten cars can be designed and manufactured to suit more demanding applications or individual requirements.

Monohulls to 29m (95ft) or sail area 168m² (1808ft²).

Multihulls to 22m (72ft) or sail area 125m² (1345ft²).

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
Series 42 BB													
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
Spare Parts													
501004	Ball bearing, Torlon®, 9.53mm (3/8") diameter	-	-	-	-	-	1	-	-	-	-	-	0.1





Custom headboard cars, headboards and batten cars can be designed and manufactured to suit more demanding applications or individual requirements.

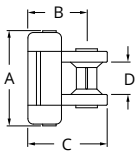
Monohulls to 34m (112ft) or sail area 310m² (3340ft²).

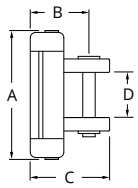
Multihulls to 26m (85ft) or sail area 230m² (2450ft²).

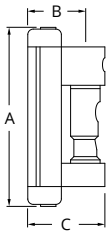
PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	F mm	WEIGHT g	A in	B in	C in	D in	E in	F in	WEIGHT oz
Series 42 BB															
RC00015	Headboard plate	458	313	32	-	24	50	3250	18	12 5/16	1 1/4	-	15/16	2	115
RC14261	Headboard car	438	56	150	23	96	-	5500	17 1/4	2 7/32	6	29/32	3 25/32	-	194
Spare Parts															
501004	Ball bearing, Torlon®, 9.53mm (3/8") diameter	-	-	-	-	-	-	1	-	-	-	-	-	-	0.1

SERIES 42 BB

See page 169 for full details of batten links & receptacles



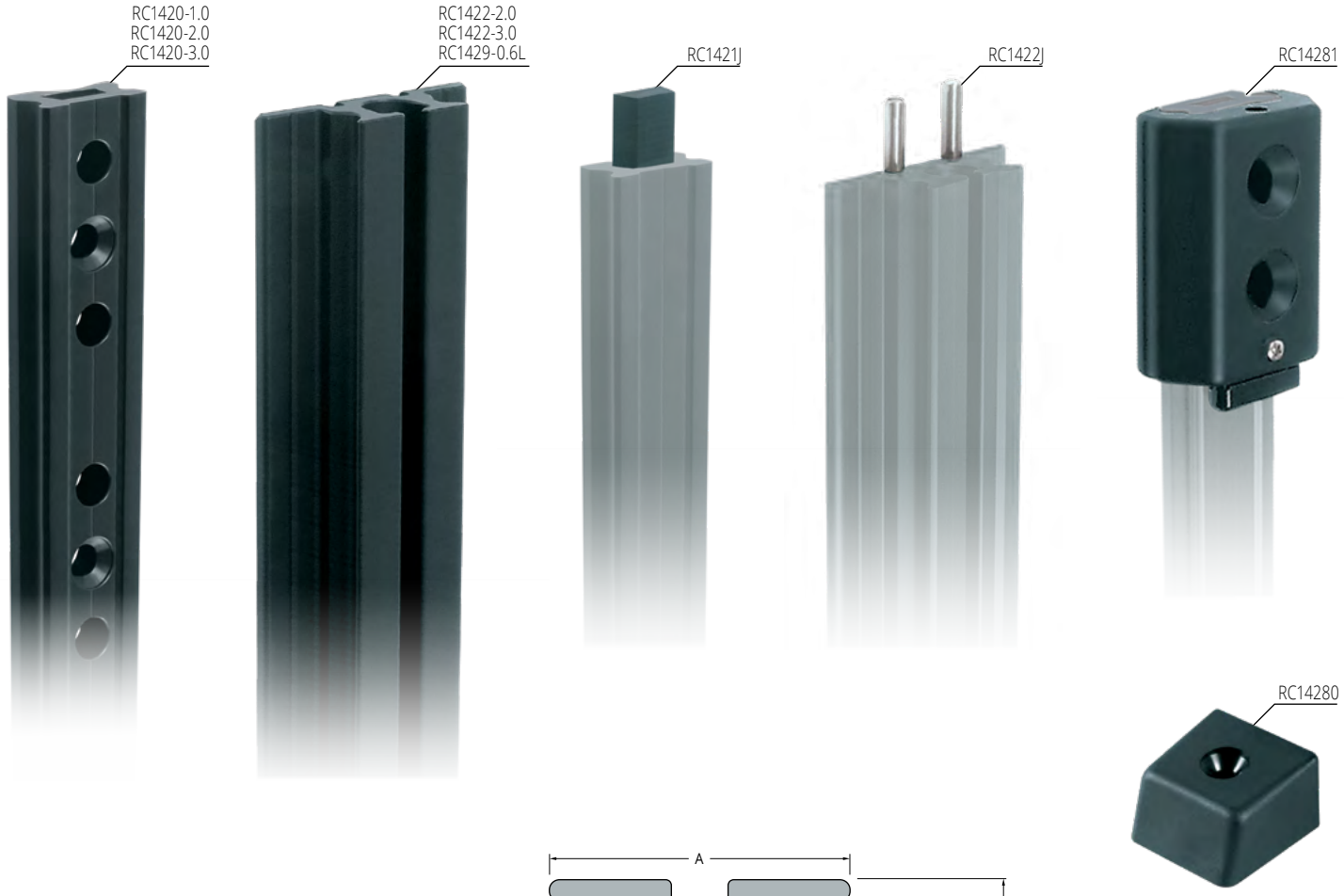


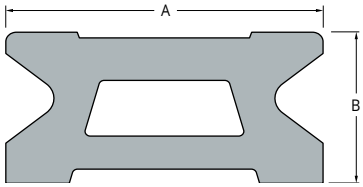


Monohulls to 29m (95ft) or sail area 168m² (1808ft²).

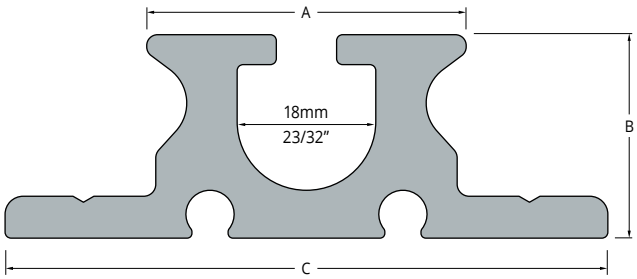
Multihulls to 22m (72ft) or sail area 125m² (1345ft²).

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	WEIGHT g	A in	B in	C in	D in	WEIGHT oz
Series 42 BB											
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
Spare Parts											
601369	Replacement pin for RC14263	-	-	-	-	18	-	-	-	-	0.6
RC00023	Replacement bush for RC14263	-	-	-	-	3	-	-	-	-	0.1

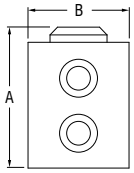




RC 1420
TRACK PROFILE



RC 1422
TRACK PROFILE



RC 14281
END STOP

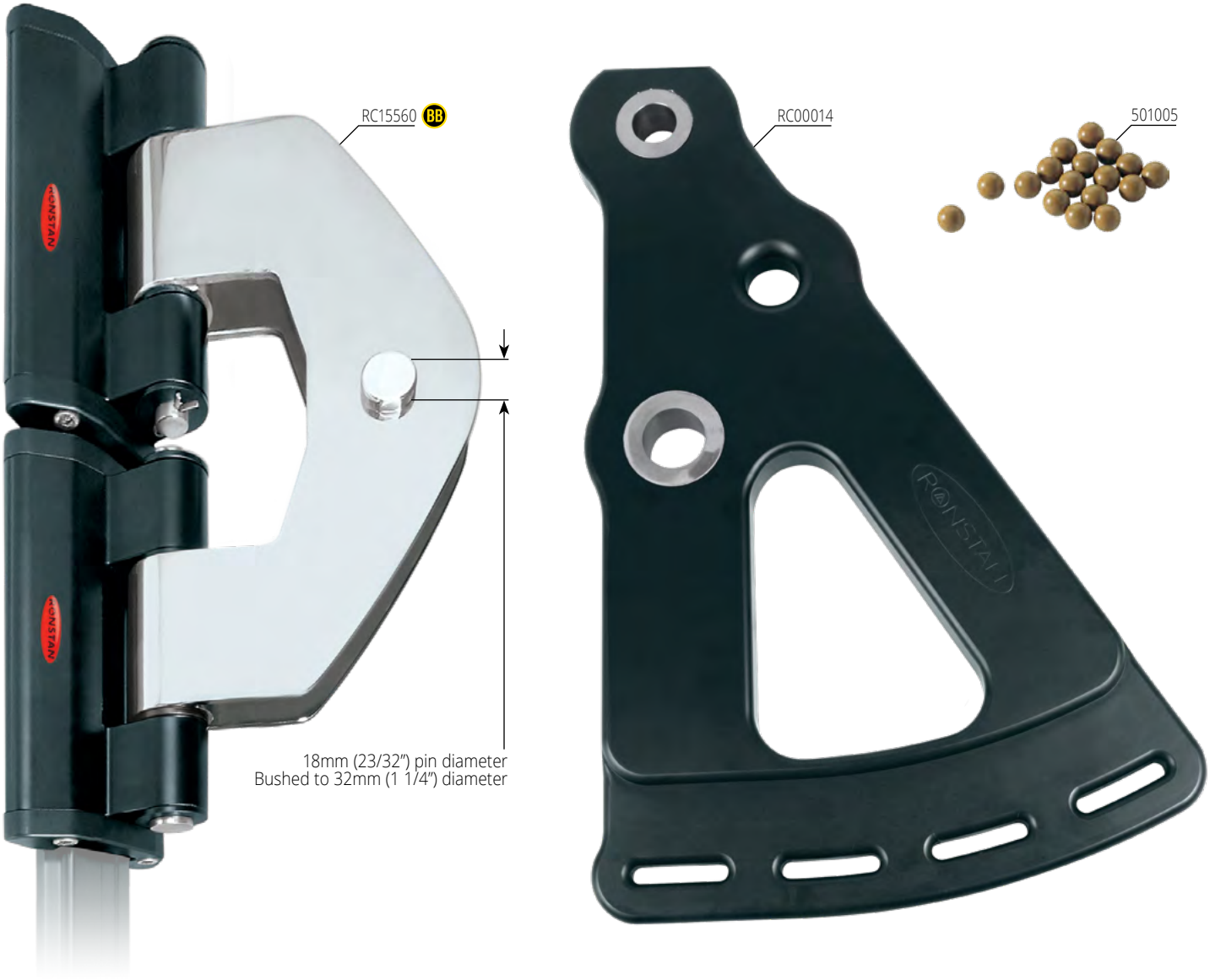
Refer to the SUPPORT tab at ***www.ronstan.com*** for system schematics and installation information.

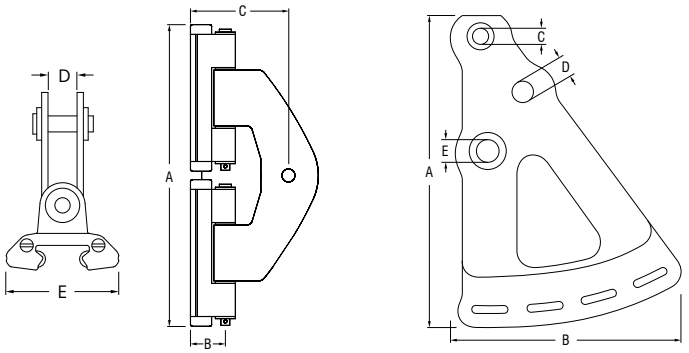
TRACK FASTENINGS – M10 (3/8") countersunk head fasteners at 100mm (3 15/16") centres.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	WEIGHT g	A in	B in	C in	WEIGHT oz
Series 42									
RC1420-1.0*[1]	Track, 996mm (39 3/16") long, black	42	21	-	1430	1 21/32	13/16	-	50.5
RC1420-2.0*[1]	Track, 1996mm (78 9/16") long, black	42	21	-	2860	1 21/32	13/16	-	100.9
RC1420-3.0*[1&2]	Track, 2996mm (117 15/16") long, black	42	21	-	4290	1 21/32	13/16	-	151.3
RC1421J	Track joiner, acetal	-	-	-	17	-	-	-	0.6
RC1422-2.0*[1]	Luff groove track, 2025mm (79 23/32") long, black	42	27	80	4758	1 21/32	1 1/16	3 5/32	167.8
RC1422-3.0*[1&2]	Luff groove track, 3025mm (119 3/32") long, black	42	27	80	7108	1 21/32	1 1/16	3 5/32	250.7
RC1422J	Luff groove track joiner (pair)	-	-	-	10	-	-	-	0.4
RC14280	End cap, plastic, L50mm x W49mm (2" x 2")	-	-	-	20	-	-	-	0.7
RC14281	End stop, alloy	100	75	-	345	4	2 15/16	-	12.2
RC1429-0.6*[1]	Gate track, 650mm (25 19/32") long, black	42	21	-	905	1 21/32	13/16	-	31.9
RC1429-0.6L*[1]	Luff groove gate track, 650mm (25 19/32") long, black	42	27	80	1525	1 21/32	1 1/16	3 5/32	53.8

* 1 Silver track available - Order as RCxxxxxxS
* 2 Longer track available on request.

SERIES 55 BB





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 (110ft) or sail area 300m2 (3229ft²).

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
Series 55 BB													
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
Spare Parts													
501005	Ball bearing, Torlon®, 12.7mm (1/2") diameter	-	-	-	-	-	2	-	-	-	-	-	0.2

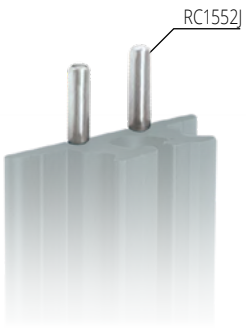
© Contest Yachts

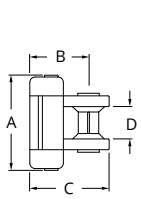
- Custom headboard cars, headboards and batten cars can be designed and manufactured to suit more demanding applications or individual requirements.
- Monohulls to 52m (170ft) or sail area 700m² (7500ft²).
- Multihulls to 39m (128ft) or sail area 525m² (5650ft²).

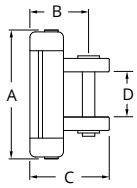
PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
Series 55 BB													
RC15561	Headboard car	710	74	204	34	126	18300	28	2 15/16	8	1 5/16	5	647.0

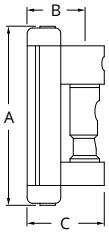
SERIES 55 TRACK

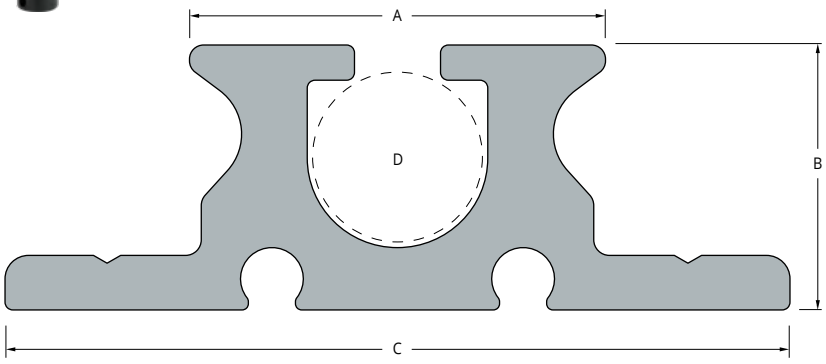
See page 169 for full details of batten links & receptacles











RC 1552
TRACK PROFILE

- Refer to the SUPPORT tab at ***www.ronstan.com*** for system schematics and installation information.
- Refer to page 130 for details of standard Series 55 track.

- Monohulls to 45m (148ft) or sail area 400m^2 (4306ft^2).
- Multihulls to 33m (110ft) or sail area 300m2 (3229ft^2).

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
Series 55											
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
RC15581	End stop, alloy, L110mm x W76mm (4 5/16″ x 3″)	-	-	-	-	477	-	-	-	-	16.8
RC1552-2.0*[1]	Luff groove track, 2025mm (79 23/32″) long, black	55	37.5	108	24	8856	2 5/32	1 15/32	4 1/4	15/16	312.4
RC1552-3.0*[1&2]	Luff groove track, 3025mm (119 3/32″) long, black	55	37.5	108	24	13284	2 5/32	1 15/32	4 1/4	15/16	468.6
RC1552J	Luff groove track joiners (pair)	-	-	-	-	49	-	-	-	-	1.7
RC1559-0.8L*[1]	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
Spare Parts											
601373	Replacement pin for RC15563	-	-	-	-	33	-	-	-	-	1.2
RC00024	Replacement bush for RC15563	-	-	-	-	130	-	-	-	-	4.6

*1 Silver track available - Order as RCxxxxxxS
*2 Longer track available on request.

PNP162 6 8 14 19 19CB 22 22CB 26 26CB

RC00140 6 14 19 19CB 22 22CB
RC00150

STANDARD

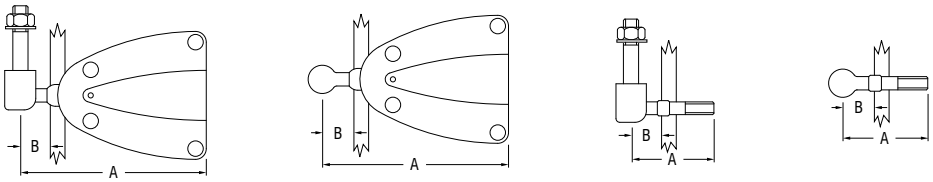
RC00110 6 14
RC00111 8 22 22CB
RC00112 19 19CB

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

QUICK RELEASE

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

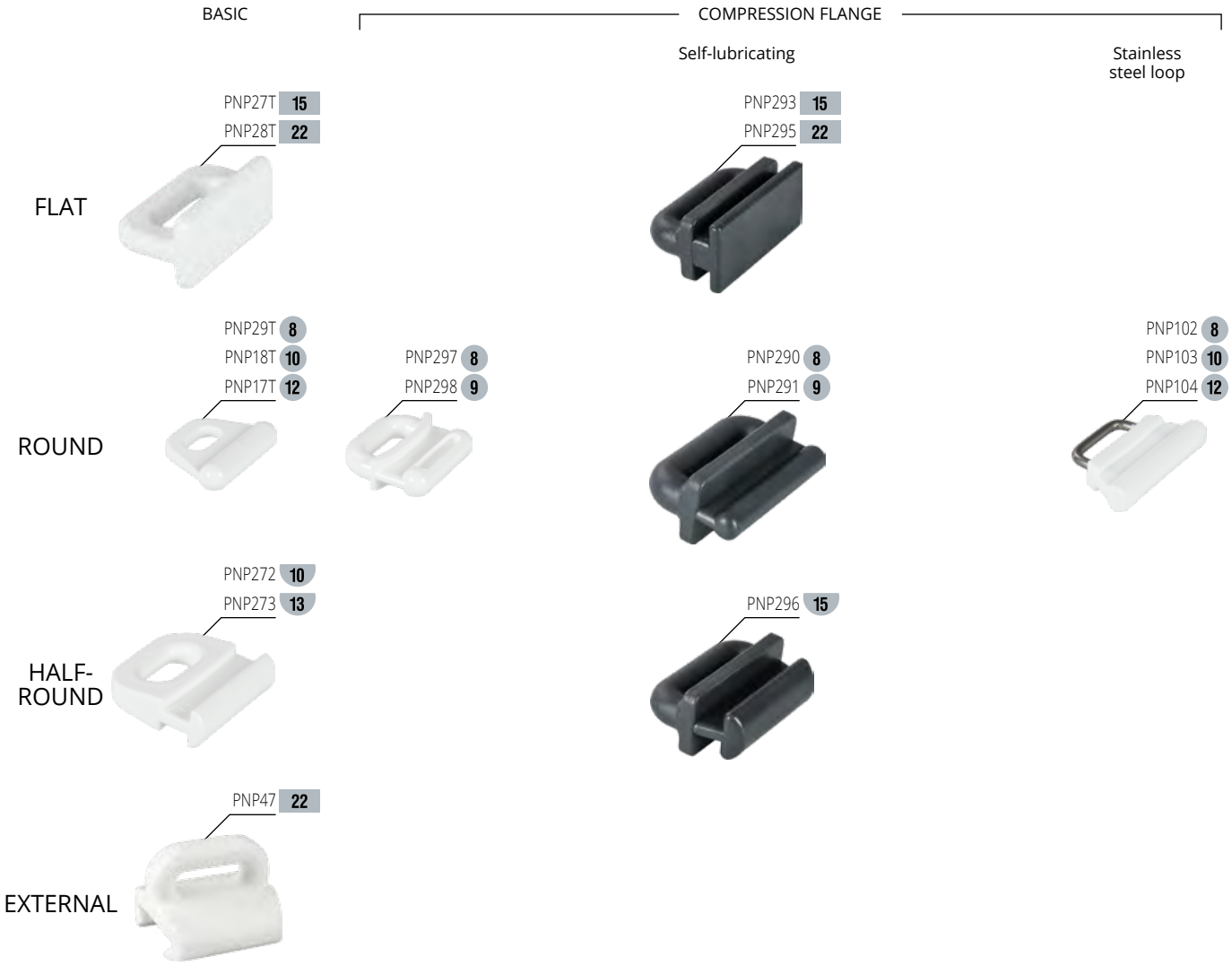
RC00241 19 19CB
RC00251 19 19CB
RC00252 8
RC00253 22 22CB 26 26CB



Numbers in yellow/green badges refer to the batten car system(s) that the receptacle link suits

PRODUCT No.	DESCRIPTION	A mm	B mm	WEIGHT g	A in	B in	WEIGHT oz
Standard Batten Receptacle Links							
RC00110	Batten receptacle link, M10, suits S14, S6 Ballslide™	58	19	61	2 9/32	3/4	2.2
RC00111	Batten receptacle link, M10, suits S22, S8 Ballslide™	58	19	81	2 9/32	3/4	2.9
RC00112	Batten receptacle link, M10, suits S19	58	19	77	2 9/32	3/4	2.7
RC00140	Batten receptacle, nylon, suits 40mm (1 1/2") flat & 14mm (9/16") diameter round battens	-	-	61	-	-	2.2
RC00141	Batten receptacle link with RC00140 receptacle, suits S14, S6 Ballslide™	92	15	105	3 5/8	19/32	3.7
RC00142	Batten receptacle link with RC00140 receptacle, suits S19	94	17	122	3 23/32	21/32	4.3
RC00143	Batten receptacle link with RC00140 receptacle, suits S22	96	19	116	3 25/32	3/4	4.1
RC00150	Batten receptacle, nylon, suits 50mm (2") flat & 18mm (3/4") diameter round battens	-	-	115	-	-	4.1
RC00151	Batten receptacle link, with RC00150 receptacle, suits S14, S6 Ballslide™	110	15	170	4 11/32	19/32	6.0
RC00152	Batten receptacle link, with RC00150 receptacle, suits S22, S8 Ballslide™	116	19	190	4 9/16	3/4	6.7
RC00153	Batten receptacle link, with RC00150 receptacle, suits S19	114	17	188	4 1/2	21/32	6.6
PNP162	Batten receptacle, vernier adjuster, suits 30mm (13/16") x 10mm (13/32") flat battens, suits M10 link	-	-	152	-	-	5.4
Quick Release Batten Receptacle Links							
RC00210	Batten receptacle link 11.5mm (7/16") diameter ball, M10, suits S19	58	19	37	2 9/32	3/4	1.3
RC00211	Batten receptacle link 13.0mm (1/2") diameter ball, M10, suits S8 Ballslide™	60	19	42	2 3/8	3/4	1.5
RC00212	Batten receptacle link 15.4mm (5/8") diameter ball, M10, suits S22, S26	62	19	49	2 7/16	3/4	1.7
RC00213	Batten receptacle link 15.4mm (5/8") diameter ball, M12, suits S26, S30	62	19	59	2 7/16	3/4	2.1
RC00214	Batten receptacle link 19.8mm (3/4") diameter ball, M14, suits S42	100	26	118	3 15/16	1 1/32	4.2
RC00215	Batten receptacle link 22.9mm (7/8") diameter ball, M16, suits S55	101	33	180	4	1 5/16	6.3
RC00241	Batten receptacle link 11.5mm (7/16") diameter ball, with RC00140 receptacle, suits S19	94	17	82	3 23/32	21/32	2.9
RC00251	Batten receptacle link 11.5mm (7/16") diameter ball, with RC00150 receptacle, suits S19	114	17	147	4 1/2	21/32	5.2
RC00252	Batten receptacle link 13.0mm (1/2") diameter ball, with RC00150 receptacle, suits S8 Ballslide™	116	19	152	4 9/16	3/4	5.4
RC00253	Batten receptacle link 15.4mm (5/8") diameter ball, with RC00150 receptacle, suits S22, S26	116	19	165	4 9/16	3/4	5.8

SAILMAKER HARDWARE



Numbers in grey badges refer to nominal diameter (round & semi-round), or width (flat) in millimetres.

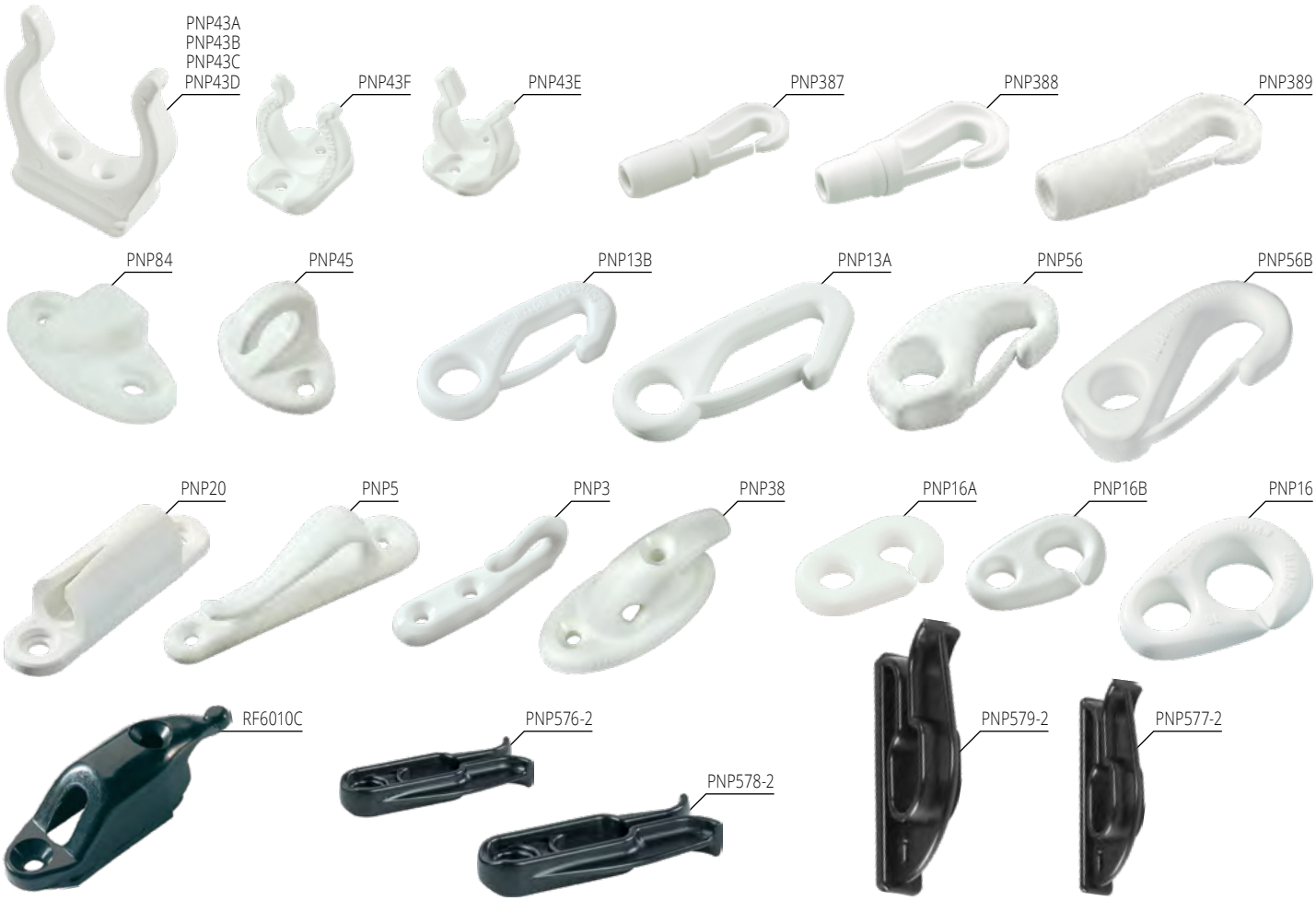
PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Slides, Flat			
PNP27T	Sail slide, flat, 15.2mm (5/8") wide x 32mm (1 1/4") long, 20mm (3/4") webbing slot	4	0.1
PNP293*	Sail slide, flat, 15.3mm (5/8") wide, 45mm (1 3/4") long, 25mm (1") webbing slot, flange	12	0.4
PNP295*	Sail slide, flat, 21.9 mm (7/8") wide, 45mm (1 3/4") long, 25mm (1") webbing slot, flange	14	0.5
PNP28T	Sail slide, flat, 23mm (7/8") wide x 42mm (1 5/8") long, 25mm (1") webbing slot	8	0.3
Slides, Round			
PNP290*	Sail slide, round, 7.4mm (5/16") diameter x 45mm (1 3/4") long, 25mm (1") webbing slot, flange	12	0.4
PNP297	Sail slide, round, 7.5mm (5/16") diameter x 28mm (1 1/8") long, 16mm (5/8") webbing slot, flange	4	0.1
PNP29T	Sail slide, round, 7.8mm (5/16") diameter x 32mm (1 1/4") long, 12mm (1/2") webbing slot, flange	2	0.1
PNP298	Sail slide, round, 8.9mm (3/8") diameter x 28mm (1 1/8") long, 16mm (5/8") webbing slot, flange	6	0.2
PNP102	Sail slide, round, 8.0mm (5/16") diameter x 42mm (1 5/8") long, 20mm (3/4") webbing slot, flange, stainless steel loop	8	0.3
PNP291*	Sail slide, round, 9.1mm (3/8") diameter x 45mm (1 3/4") long, 25mm (1") webbing slot, flange	12	0.4
PNP18T	Sail slide, round, 9.8mm (3/8") diameter x 40mm (1 9/16") long, 16mm (5/8") webbing slot, flange	4	0.1
PNP103	Sail slide, round, 9.8mm (3/8") diameter x 45mm (1 3/4") long, 20mm (3/4") webbing slot, flange, stainless steel loop	10	0.4
PNP17T	Sail slide, round, 11.7mm (1/2") diameter x 39mm (1 1/2") long, 16mm (5/8") webbing slot	4	0.1
PNP104	Sail slide, round, 12.3mm (1/2") diameter x 45mm (1 3/4") long, 20mm (3/4") webbing slot, flange, stainless steel pin	11	0.4
Slides, Half-Round			
PNP272	Sail slide, half-round, 10.1mm (7/16") wide x 32mm (1 1/4") long, 16mm (5/8") webbing slot, flange, suits Seldèn profile	6	0.2
PNP273	Sail slide, half-round, 12.7mm (1/2") wide, 32mm (1 1/4") long, 16mm (5/8") webbing slot, flange, suits Seldèn profile	8	0.3
PNP296*	Sail slide, half-round, 15mm (5/8") wide, 45mm (1 3/4") long, 25mm (1") webbing slot, flange, suits Seldèn profile	14	0.5
Slide, External			
PNP47	Sail slide, external, 23.2mm (7/8") internal width x 33mm (1 1/4") long, 20mm (3/4") webbing slot	10	0.4

*Self-lubricating

- Products are supplied with screws as shown.
- Larger batten pocket protectors and adjusters are slotted at luff end to allow webbing attachment to slides or cars.

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Hanks			
PNP14	Twist on hank, suits 3mm (1/8") wire, 31mm (1 1/4") long	5	0.2
PNP14A	Twist on hank, suits 4mm (5/32") wire, 34mm (1 11/32") long	6	0.2
PNP14B	Twist on hank, suits 5mm (3/16") wire, 38mm long (1/2") long	7	0.2
PNP88A	Piston hank, suits 6.4mm (1/4") diameter wire, 50mm (2") long	8	0.3
PNP88B	Piston hank, suits 8.0mm (5/16") diameter wire, 72mm (2 7/8") long	15	0.5
PNP88C	Piston hank, suits 11.2mm (7/16") diameter wire, 75mm (3") long	22	0.8
Sail Shackle			
PNP63	Sail shackle, screw-on, 12mm (1/2") x 8mm (5/16") internal clearance, suits slides PNP18T, PNP27T & PNP29T	2	0.1
PNP64	Sail shackle, snap-on, 16mm (5/8") x 11mm (7/16") internal clearance	4	0.1
PNP65	Sail shackle, snap-on, 29mm (1 1/8") x 9mm (3/8") internal clearance	6	0.2
PNP81A	Sail shackle, snap-on, 11mm (7/16") x 8mm (5/16") internal clearance, suits slides PNP18T, PNP27T & PNP29T	2	0.1
PNP81B	Sail shackle, snap-on, 12.7mm (1/2") x 8mm (5/16") internal clearance, suits slides PNP17T, PNP18T & PNP28T	4	0.1
PNP106	Sail shackle, screw-on, 16mm (5/8") x 10mm (3/8") internal clearance	8	0.3
PNP107	Sail shackle, screw-on, 28mm (1 1/8") x 9mm (3/8") internal clearance	6	0.2
PNP108	Sail shackle, screw-on, 29mm (1 1/8") x 13mm (1/2") internal clearance	8	0.3
Batten Pocket Protectors			
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 1/2") x 5mm (3/16")	17	0.6
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, suits battens up to 50mm (1 31/32") x 8mm (5/16")	90	3.2
Vernier Batten Adjuster			
PNP162	Batten receptacle, vernier adjuster, suits 30mm (13/16") x 10mm (13/32") flat battens, suits M10 link	152	5.4

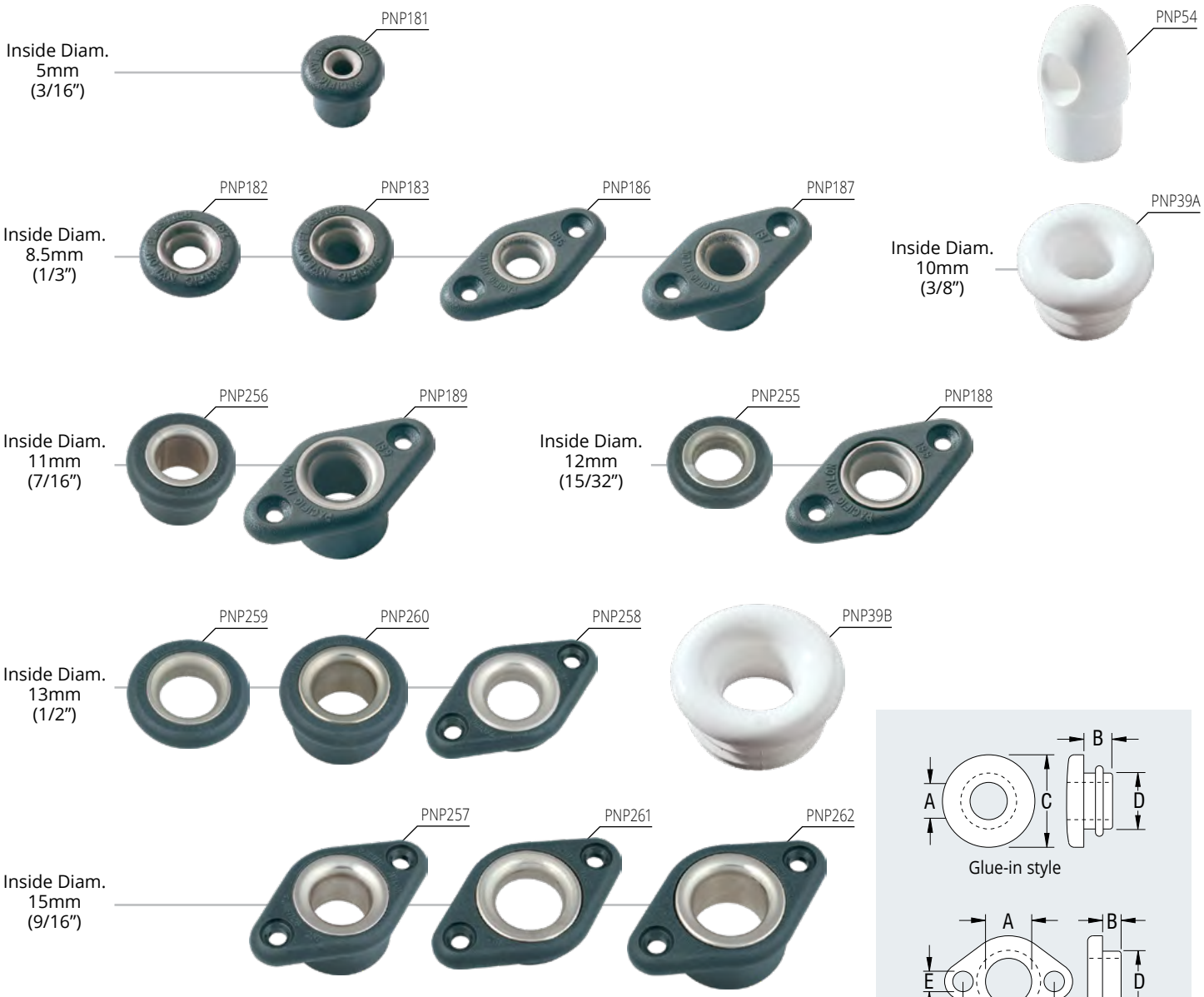
HOOKS & CLIPS



PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Tube Clips			
PNP43A	Tube clip, suits 44mm (1 3/4") diameter tube. Requires 2 x 4mm (5/35") fasteners	15	0.6
PNP43B	Tube clip, suits 38mm (1 1/2") diameter tube. Requires 2 x 4mm (5/35") fasteners	10	0.4
PNP43C	Tube clip, suits 32mm (1 1/4") diameter tube. Requires 2 x 4mm (5/32") fasteners	7	0.3
PNP43D	Tube clip, suits 25mm (1") diameter tube. Requires 2 x 4mm (5/32") fasteners	4	0.1
PNP43E	Tube clip, suits 16mm (5/8") diameter tube. In line fastening. Requires 2 x 3mm (1/8") fasteners	4	0.1
PNP43F	Tube clip, suits 19mm (3/4") diameter 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
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
PNP56	Shock cord hook. Suits 7mm (1/4") diameter shock cord. 8mm (5/16") hook clearance	12	0.4
PNP56B	Shock cord hook. Suits 5mm (3/16") diameter shock cord. 10mm (3/8") hook clearance	6	0.2
PNP387	Shock cord hook. Suits 3-5mm (1/8"- 3/16") diameter shock cord. 6mm (1/4") hook clearance	3	0.1
PNP388	Shock cord hook. Suits 4-6mm (5/32"-1/4") diameter shock cord. 9mm (11/32") hook clearance	8	0.3
PNP389	Shock cord hook. Suits 6-8mm (1/4"- 5/16") diameter shock cord. 10mm (3/8") hook clearance	10	0.3
Fixed Hooks			
PNP3	Hook, 5mm (3/16") hook clearance. 52mm (2") long. Requires 2 x 4mm (5/32") fasteners	3	0.1
PNP5	Hook, 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") diameter line. Suits 2 x 5mm (3/16") fasteners	4	0.1
PNP45	Hook, 11mm (7/16") hook clearance. Requires 2 x 4mm (5/32") fasteners	3	0.1
PNP84	Hook, 5mm (3/16") hook clearance. Requires 2 x 5mm (3/16") fasteners	5	0.2
PNP38	Line hanger clip, suits 5mm (3/16") diameter shock cord retaining loop. Knots are concealed in body. Requires 2 x 4mm (5/32") fasteners	8	0.3
RF6010C	Utility line hangers (2 pack), suits 5mm (3/16") diameter shock cord retaining loop. Requires 2 x 5mm (3/16") fasteners	7	0.2
Rope Clips			
PNP576-2	Rope clip, lash-on. Suits 5-10mm (3/16" - 3/8") diameter rope	12	0.4
PNP577-2	Rope clip, cable tie-on. Suits 5-10mm (3/16" - 3/8") diameter rope	12	0.4
PNP578-2	Rope clip, lash-on. Suits 8-14mm (5/16" - 9/16") diameter rope	24	0.8
PNP579-2	Rope clip, cable tie-on. Suits 8-14mm (5/16" - 9/16") diameter rope	24	0.8

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

BUSHES



Glue-in style

Screw mount style

Nylon bushes provide chafe protection where lines pass through decks, bulkheads or spars. They are available to suit various line diameters and deck thicknesses.

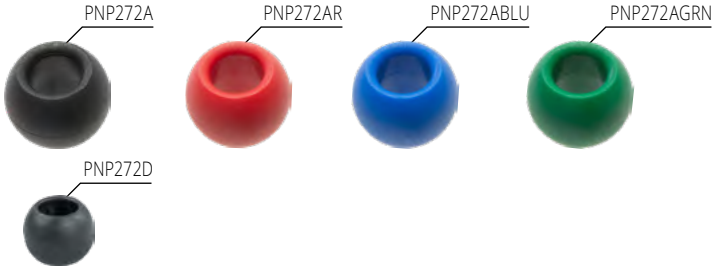
PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
Bushes													
PNP54	Staunchion cap. Suits 22.2mm (7/8") inside diameter tube	-	-	-	-	-	12	-	-	-	-	-	0.4
PNP181	Plastic bush, glue-in, stainless steel lined	5.0	14.0	18.5	13.0	-	5	3/16	9/16	3/4	1/2	-	0.2
PNP182	Plastic bush, glue-in, stainless steel lined	8.5	6.0	22.0	16.0	-	4	11/32	1/4	7/8	5/8	-	0.1
PNP183	Plastic bush, glue-in, stainless steel lined	8.5	14.0	22.0	16.0	-	7	11/32	9/16	7/8	5/8	-	0.2
PNP186	Plastic bush, screw mount, stainless steel lined	8.5	5.0	28.0	16.0	3.0	5	11/32	9/32	1 3/32	5/8	1/8	0.2
PNP187	Plastic bush, screw mount, stainless steel lined	8.5	14.0	28.0	16.0	3.0	8	11/32	9/16	1 3/32	5/8	1/8	0.3
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	12.0	6.0	31.0	20.0	3.0	5	15/32	1/4	1 7/32	25/32	1/8	0.2
PNP189	Plastic bush, screw mount, stainless steel lined	11.0	14.0	31.0	20.0	3.0	10	7/16	9/16	1 7/32	25/32	1/8	0.4
PNP255	Plastic bush, glue-in, stainless steel lined	12.0	5.0	25.0	20.0	-	3	15/32	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	13.0	13.0	33.0	25.0	-	4	1/2	1/2	1 5/16	1	-	0.1
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 1/32	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	13.0	28.0	23.0	-	13	1/2	1/2	1 3/32	25/32	-	0.5
PNP257	Plastic bush, screw mount, stainless steel lined	15.0	19.0	36.0	22.0	4.0	16	9/16	3/4	1 13/32	7/8	5/32	0.6
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

TIE BALLS

- Tie balls have a stepped bore allowing the rope end knot to be contained within the ball. Ideal for control lines.

HALYARD STOPPERS

- Tough nylon halyard stoppers are ideal for protecting halyard eye splices and whipping twine where they meet sheaves and exit plates. They have a straight bore with constant diameter.



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

PRODUCT No.	PRODUCT No.	PRODUCT No.	PRODUCT No.	INSIDE DIAM. mm	OUTSIDE DIAM. mm	WEIGHT g	INSIDE DIAM. in	OUTSIDE DIAM. in	WEIGHT oz
Halyard Stoppers									
Black	**Red**	**Blue**	**Green**						
PNP272A	PNP272AR	PNP272ABLU	PNP272AGRN	15.5	32	11	19/32	1 1/4	0.4
PNP272D	-	-	-	11.0	20	3	7/16	3/4	0.1

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Handle			
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
RF308	Hinge, pressed stainless steel. 61mm x 32mm (2 3/8" x 1 1/4") . Requires 4 x 5mm (3/16") fasteners	20	0.7

PLUMBING FITTINGS


PNP132A


PNP132B


PNP132C


PNP132E


PNP131


PNP310


PNP310G


PNP315

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

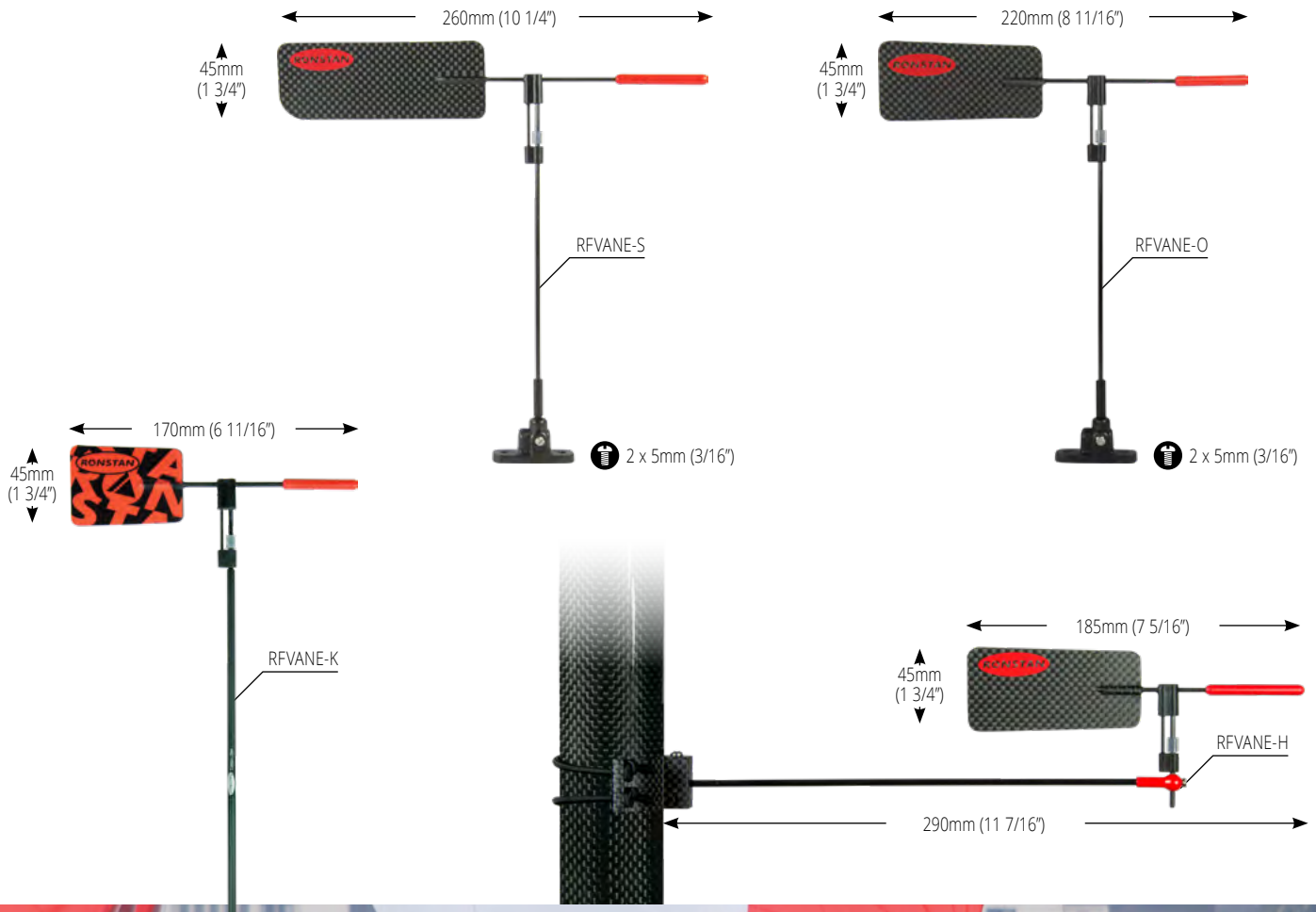
INSPECTION HATCHES & DRAIN PLUGS

- 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.
- Clipped housing flange on PNP245, PNP245BLK, PNP246, PNP246BLK allows plug to be fitted low in hull to maximise drainage.
- PNP390 & PNP393 feature an overlapping threaded lid for a smooth, clean style.
- PNP96, PNP97 and PNP390 are manufactured with dissimilar materials for the lid and deck ring to avoid binding.
- Impact resistant, UV stabilised nylon.

PRODUCT No.	DESCRIPTION	REPLACEMENT O-RING	REPLACEMENT PLUG	CUTOUT DIAM. mm	WEIGHT g	CUTOUT DIAM. in	WEIGHT oz
Drain Plugs							
PNP241	Drain plug & housing, nylon, white	-	PNP241A	19	10	3/4	0.4
PNP242	Drain plug & housing, nylon, white	PNP242B	PNP242A	25	10	1	0.3
PNP243	Drain plug & housing, nylon, white	PNP243B	PNP243A	30	16	1 3/16	0.6
PNP245	Drain plug & housing, nylon, white	PNP245B	PNP245A	40	27	1 7/16	0.9
PNP245BLK	Drain plug & housing, nylon, black	PNP245B	PNP245ABLK	40	27	1 7/16	0.9
PNP246	Drain plug & housing, nylon, white	PNP246B	PNP246A	50	38	2	1.3
PNP246BLK	Drain plug & housing, nylon, black	PNP246B	PNP246ABLK	50	38	2	1.3
RF294	Drain plug & housing, coarse thread, nylon, black	-	RF738	24	10	15/16	0.4
RF734	Drain plug & housing, low profile, chromed brass	-	-	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	REPLACEMENT LID	OPENING DIAM. mm	OUTSIDE DIAM. mm	CUTOUT DIAM. mm	WEIGHT g	OPENING DIAM. in	OUTSIDE DIAM. in	CUTOUT DIAM. in	WEIGHT oz
Inspection Hatches											
PNP96	Inspection hatch, white	-	-	102	144	112	94	4	5 5/8	4 1/2	3.3
PNP97	Inspection hatch, white	-	-	129	170	139	115	5 1/8	6 11/16	5 1/2	4.1
PNP390	Inspection hatch, white	-	-	150	192	163	166	5 7/8	7 9/16	6 7/16	5.8
PNP393	Inspection hatch, black	-	-	200	258	218	350	8	10 5/32	8 9/16	12.3
PNP393W	Inspection hatch, white	-	-	200	258	218	350	8	10 5/32	8 9/16	12.3
RF530	Inspection hatch, white	RF531	RF530LIDSW	106	148	122	110	4 3/16	5 3/16	4 13/16	3.9

WIND VANE PRO



- Ultra-lightweight, handmade composite wind vanes.
- Accurate from 0.8 to 40 knots.
- Suits small keelboats and dinghies with vertical or parallel mounting options.
- Perfect for every kind of performance sailing.

- Crazy Kids is specifically designed for carbon-free dinghies to 3.5m (12ft), mast top vane mounting plugs supplied by mast manufacturer.
- Horizontal is designed for boats to 5m (16ft) with adjustable mast clamp.

- Olympic is designed for off-the-beach classes to 6m (20ft).
- Sportsboat is designed for boats to 8.5m (28ft).

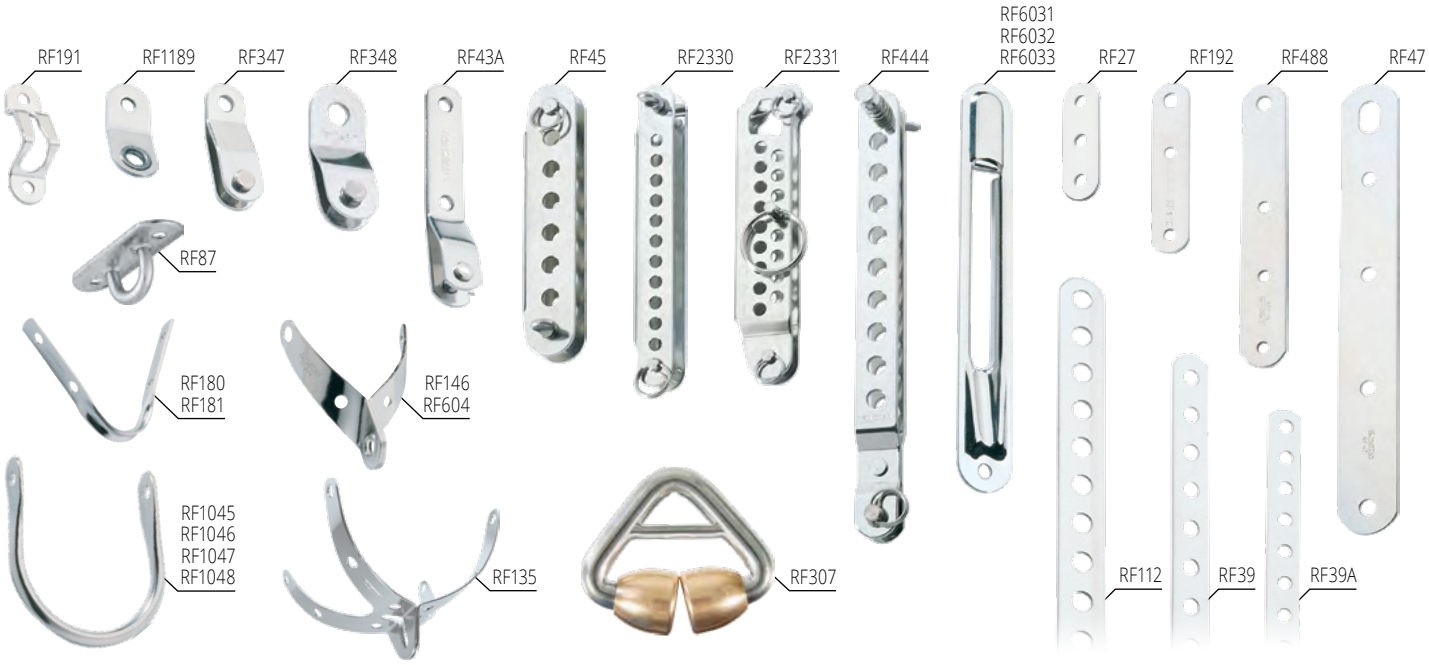
PRODUCT No.	DESCRIPTION	MAX. BOAT m	SIZE (W x H) mm	WEIGHT g	MAX. BOAT ft	SIZE (W x H) in	WEIGHT oz
Wind Indicators							
RFVANE-K	Fibreglass – Crazy Kids	3.5	170 x 320	22	12	7 x 12 1/2	0.8
RFVANE-H	Carbon – Horizontal	5	360 x 90	37	16	14 x 3 1/2	1.3
RFVANE-O	Carbon – Olympic	6	220 x 270	27	22	8 1/2 x 10 1/2	1.0
RFVANE-S	Carbon – Sportsboat	8.5	260 x 290	27	28	10 x 11	1.0

- Windex® wind indicators feature apparent wind angle indication, adjustable tacking angle arms, lightweight plastic and alloy construction, and sapphire jewel bearings for extreme sensitivity.
- Windex® WXLED light illuminates vane & arms for night sailing. Featuring a non-dazzling lens, 12 volts low power consumption LED globe. Encased in a sealed waterproof housing. Fits directly to WX10C, WX15 and WX23 mounts
- WX10C features Unifix 10 for vertical or horizontal mounting.
- WX15 and WX23 feature a secure screw-on mount.
- WX10C, WX15 and WX23 feature vane and arm underside reflectors for night sailing.
- PNP301 wind vane is balanced for accuracy and moulded in UV stabilised nylon. It has adjustable tacking angle arms and can be removed from the mast bracket for convenience and security.
- WX10C Medium Windex® is specifically designed for trailerables and small keelboats.
- WX15 Large Windex® is specifically designed for keelboats.
- WX23 Extra Large Windex® is specifically designed for large keelboats.

PRODUCT No.	DESCRIPTION	VANE LENGTH mm	WEIGHT g	VANE LENGTH in	WEIGHT oz
Wind Indicators					
PNP301	Arrow style wind vane. Mounting bracket and screws included.	220	18	8 5/8	0.6
WXD6	Dinghy Windex® 6, mast mount	150	33	6	1.2
WX10C	Medium Windex®, Unifix 10 bracket, vertical or horizontal mount	250	40	10	1.4
WX15	Large Windex®, 8mm (5/16") bolt-on mount, nut and washer included	380	100	15	3.5
WX23	Extra Large Windex®, 8mm (5/16") bolt-on mount, nut and washer included	580	285	23	10.0
WXLED	Windex® LED light	-	15	-	0.5
WX15-BIRD	Windex® BirdSpike suits WX15, carbon fibre	-	4	-	0.1

PRODUCT No.	DESCRIPTION	PRODUCT No. TO SUIT WXD6	PRODUCT No. TO SUIT WX10C	PRODUCT No. TO SUIT WX15	PRODUCT No. TO SUIT WX23	PRODUCT No. TO SUIT WXLED
Spare Parts						
Arms	Arms	-	WX10-A	WX15-A	WX23-A	-
Rods	Supporting rod	WXD6-R	WX10-R	WX15-R	WX23-R	-
Sockets	Mast socket	-	WX10C-S	WX15-S	WX23-S	-
Vanes	Vane unit	WXD6-V	WX10-V	WX15-V	WX23-V	-
Globes	Spare globe	-	-	-	-	WXLED-G
Mast Fitting	Mast fitting	WXD6-M	-	-	-	-
Mast Locking Device	Mast locking device	WXD6-MLD	-	-	-	-

STAY ADJUSTERS, HOUNDS & TANGS



PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Mast Tangs & Hounds			
RF43A	Tang. 5mm (3/16") diameter 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"). 10 x 4.2mm (5/32") fixing holes	110	3.9
RF347	Tang. 6.4mm (1/4") diameter clevis pin. 51mm (2") long. 1 x 6.4mm (1/4") diameter fixing hole	20	0.7
RF348	Tang. 8mm (5/16") diameter 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 51mm-64mm (2"-2 1/2"). 2 x 6.8mm (9/32") & 2 x 5.0mm (3/16") fixing holes	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") diameter loop. 2 x 5mm (3/16") diameter fixing holes	15	0.5
RF135	Four point hanger. Slotted attachment hole allows shackle body to be passed through. 8 x 5mm (3/16") diameter fixing holes	35	1.2
RF180	Strip hanger. 64mm (2 1/2") long. 4 x 5mm (3/16") diameter fixing holes	20	0.7
RF181	Strip hanger. 55mm (2 1/4") long. 4 x 5mm (3/16") diameter fixing holes	20	0.7
RF1045	Boom hanger. 80mm (3 1/8") long. 65mm (2 1/2") wide. Bar diameter 6.4mm (1/4"). 2 x 6.6mm (1/4") diameter fixing holes	45	1.6
RF1046	Boom hanger. 100mm (4") long. 80mm (3 1/8") wide. Bar diameter 6.4mm (1/4"). 2 x 6.6mm (1/4") diameter fixing holes	54	1.9
RF1047	Boom hanger. 125mm (5") long. 80mm (3 1/8") wide. Bar diameter 7.9mm (5/16"). 2 x 8.1mm (5/16") diameter fixing holes	107	3.8
RF1048	Boom hanger. 150mm (6") long. 115mm (4 1/2") wide. Bar diameter 9.5mm (3/8"). 2 x 10mm (3/8") diameter fixing holes	190	6.7
Exit Plates & Halyard Lock			
RF191	Halyard lock for locking halyards off on a copper ferrule	5	0.2
RF6031	Exit plate, stainless steel, slot width 10mm (3/8"), 159 x 21mm (6 1/4" x 13/16") overall	45	1.6
RF6032	Exit plate, stainless steel, slot width 12mm (1/2"), 203 x 26mm (8" x 1") overall	70	2.5
RF6033	Exit plate, stainless steel, slot width 17mm (11/16"), 210 x 28mm (8 1/4" x 1 1/8") overall	73	2.5
Sail Feeder			
RF307	Headsail Pre-Feeder, suits up to 7mm luff tapes	67	2.4

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 ADJUSTMENT 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.	DESCRIPTION	HOLE SPACING mm	LENGTH OVERALL mm	WIDTH x THICKNESS mm	HOLE DIAMS. mm	WEIGHT g	HOLE SPACING in	LENGTH OVERALL in	WIDTH x THICKNESS in	HOLE DIAMS. in	WEIGHT oz
Chain Plates & Perforated Strip											
RF27	Chain plate	-	48.6	16.0 x 1.5	5.0	5	-	2	5/8 x 1/16	3/16	0.2
RF39	Perforated strip	15.9	925	15.9 x 1.5	6.6	144	5/8	36 13/32	5/8 x 1/16	1/4	5.1
RF39A	Perforated strip	12.7	915	12.7 x 1.5	5.0	127	1/2	36 1/16	1/2 x 1/16	3/16	4.5
RF47	Chain plate	-	203	25.0 x 1.5	1 x 9.5 + 3 x 6.4	60	-	8	1 x 1/16	1 x 3/8 + 3 x 1/4	2.1
RF112	Perforated strip	15.9	896	19.0 x 2.0	8.1	222	5/8	35 1/4	3/4 x 5/64	5/16	7.8
RF192	Chain plate	-	76	16.0 x 1.5	1 x 6.4 + 2 x 5.0	10	-	3	5/8 x 1/16	1 x 1/4 + 3 x 3/16	0.4
RF488	Chain plate	-	127	19.0 x 3.0	1 x 6.4 + 2 x 5.0	53	-	5	3/4 x 1/8	1 x 1/4 + 3 x 3/16	1.9

TRAPEZE HARDWARE

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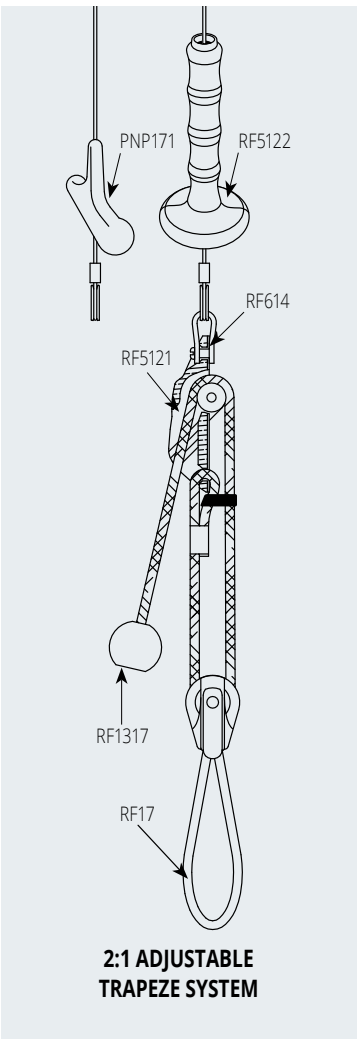
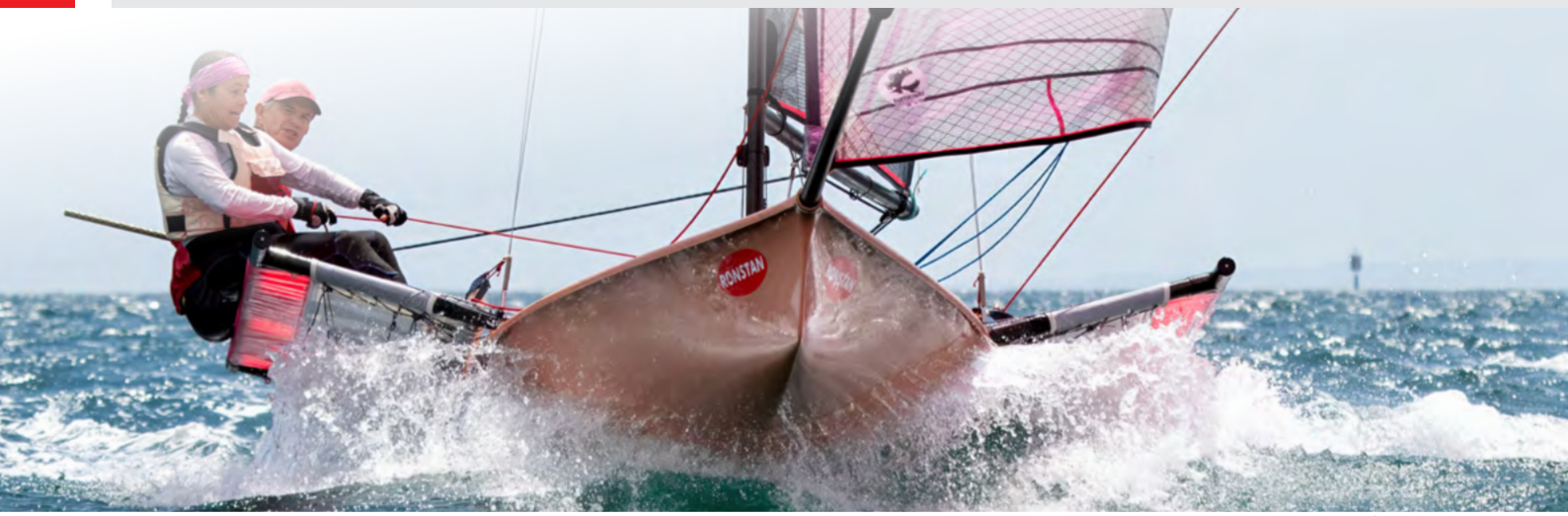


2:1 ADJUSTABLE TRAPEZE SYSTEM

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Trapeze Hardware			
PNP171BLU	Trapeze handle, 120mm (4 3/4") long, nylon, blue	25	0.9
PNP171R	Trapeze handle, 120mm (4 3/4") long, nylon, red	25	0.9
RF9	Fairlead, nylon, ID 7mm (1/4")	5	0.2
RF17	Trapeze ring, oversize loop in 6mm (7/32") stainless steel, incorporating Series 20 ball bearing sheave	84	3.0
RF27	Toe strap plate, stainless steel, 50mm x 16mm (2" x 5/8"), 5mm (3/16") diameter holes	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 clevis pin top	30	1.1
RF5121	Trapeze cleat, aluminium, suits 4-8mm (5/32"-5/16") diameter rope	46	1.6
RF5122R-2	Trapeze handles, vertical grip, red, hole diameter 7mm (9/32") (pair)	85	3.0

PRODUCT No.	PRODUCT No.	PRODUCT No.	PRODUCT No.	MAX. ROPE mm	OUTSIDE DIAM. mm	WEIGHT g	MAX. ROPE in	OUTSIDE DIAM. in	WEIGHT oz
Red Tie Ball	**Blue Tie Ball**	**Black Tie Ball**	**Green Tie Ball**						
RF1317R	RF1317BLU	RF1317BLK	RF1317GRN	5	20	3	3/16	3/4	0.1

SPINNAKER & SPAR HARDWARE



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RF91


RF92


RF30


RF602


RF41


PNP200


PNP94


PNP197R
PNP198R
PNP199R


PNP197GRN
PNP198GRN

PRODUCT No.	DESCRIPTION	DOUGHNUT DIAM. mm	ROPE DIAM. mm	WEIGHT g	DOUGHNUT DIAM. in	ROPE DIAM. in	WEIGHT oz
Spinnaker Brace 'Doughnut'							
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, accepts up to 6mm (1/4") diameter line, 1/4" diameter bolt-through attachment (includes 2 x self-tapping screws), nylon pad and line retainer				40				1.4
RF92	Spinnaker brace hook, screw-on attachment, (includes two 8g self-tapping screws), nylon pad and line retainer				20				0.7
PNP94	Spinnaker pole deck bracket, suits poles to 70mm (2 3/4") diameter				75				2.7
Mast Chock									
PNP200	Mast chock set, 8 pieces; with total thickness 70mm (2 3/4"); 1 x 20mm (25/32") piece, 5 x 10mm (13/32") pieces, suits mast with 50-60mm (2" - 2 3/8") diameter				134				4.7

SPINNAKER POLE ENDS

- PNP164, PNP165 and PNP166 small boat pole ends are manufactured from tough, abrasion resistant nylon for minimum weight and corrosion resistance.
- RF600, RF601 and RF677 grade 316 stainless steel small boat pole ends suit external fitting on solid or tubular sections.
- Acetal sleeves adapt end fittings to suit different pole diameters. Custom sizes available on request.
- Keelboat spinnaker pole ends are opened with an internal trip line, and close automatically when integrated trigger is depressed. Holes provided suit shackle or rope loop for topping lift and foreguy attachment.
- Isolating bush ensures smooth piston travel and protects against corrosion, integral ball bearing swivel for trip line attachment.
- RF1666 and RF1667 inboard ends suit RC13046 spinnaker pole car.
- RF1664 and RF1665 outboard ends: anodised aluminium body, grade 316 stainless steel hardware
- RF1666 and RF1667 inboard ends: acetal body with grade 316 stainless hardware.

PRODUCT No.	DESCRIPTION	A mm	WEIGHT g	A in	WEIGHT oz
Spinnaker Pole Ends - Small Boat					
PNP164	Nylon body, stainless steel push-on plunger pin, accepts up to 8mm (5/16") diameter ring or line	21	33	13/16	1.2
PNP165	Nylon body, stainless steel push-on plunger pin, accepts up to 12mm (1/2") diameter ring or line	28	46	1 1/8	1.6
PNP166	Nylon body, stainless steel push-on plunger pin, accepts up to 12mm (1/2") diameter ring or line	46	125	1 13/16	4.4
RF600	Stainless steel body, stainless steel snap-on plunger pin and straps, accepts up to 9.5mm (3/8") diameter ring or line	26	175	1	6.2
RF601	Stainless steel body, stainless steel snap-on plunger pin and straps, accepts up to 9.5mm (3/8") diameter ring or line	36	180	1 7/16	6.3
RF677	Stainless steel body, stainless steel snap-on plunger pin and straps, accepts up to 9.5mm (3/8") diameter ring or line	32	175	1 1/4	6.2
Spinnaker Pole Ends - Keelboat					
RF1664	Outboard pole end, aluminium with internal stainless steel plunger pin, trigger operated	45.8	290	1 13/16	10.2
RF1664S48	Acetal sleeve for RF1664, suits tube inside diameter 48mm	47.5	10	1 7/8	0.4
RF1664S56	Acetal sleeve for RF1664, suits tube inside diameter 56mm	55.8	60	2 3/16	2.1
RF1665	Outboard pole end, aluminium with internal stainless steel plunger pin, trigger operated	64.5	732	2 9/16	25.8
RF1665S74	Acetal sleeve for RF1655, suits tube inside diameter 74mm	73.8	90	2 15/16	3.2
RF1665S96	Acetal sleeve for RF1665, suits tube inside diameter 96mm	95.9	328	3 3/4	11.7
RF1666	Inboard pole end, acetal and stainless steel	73.8	933	2 15/16	32.9
RF1667	Inboard pole end, acetal and stainless steel	95.9	1174	3 3/4	41.4

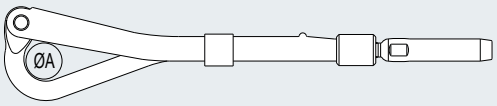
LIFE LINE HARDWARE

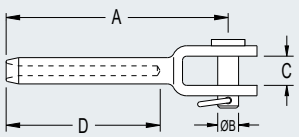
© X-Yachts

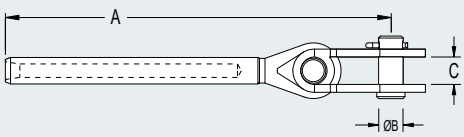
SWAGE FORK

SWAGE TOGGLE

- RF98, RF99: Pelican hooks are manufactured from stainless steel and have threaded tensioning adjustment, a long lever arm to facilitate closing under tension and a sliding sleeve retainer for quick opening and closing.
- PNP209 roller is used 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.







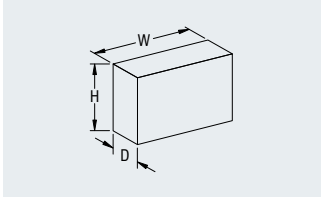
PRODUCT No.	DESCRIPTION	WIRE DIAM.	THREAD	A mm	B mm	C mm	D mm	WEIGHT g	A in	B in	C in	D in	WEIGHT oz
Pelican Hooks													
RF98	Pelican hook, swage end, BL 400kg (880lb)	4mm (5/32")	1/4"*	15	-	-	-	112	19/32	-	-	-	4.0
RF99	Pelican hook, 6.4mm (1/4") diameter eye end, BL 400kg (880lb)	-	1/4"*	15	-	-	-	115	19/32	-	-	-	4.1
Swage Fork, Swage Toggle & Threaded Swage Terminal													
RF1507M0404	Swage Toggle	4mm (5/32")	-	87.1	6.2	7.8	-	44	3 7/16	1/4	5/16	-	1.6
RF1509M0405	Swage Fork	4mm (5/32")	-	75.5	7.8	4.9	45.5	34	2 31/32	5/16	3/16	1 25/32	1.2
Anti-Chafe / Life Line Roller													
PNP209	Spreader / backstay / life line roller, nylon	5mm (3/16")						38					1.3

* R/H thread

RF3910
RF3911
RF3912

RF3941

RF3951



- Fibreglass entry edge rods for easy opening (rope bags).
- Mounting: hook-and-loop fixing, screw-on option for rope bags (screws not provided).
- Mesh panels for drainage & ventilation.

PRODUCT No.	DESCRIPTION	W mm	H mm	D mm	WEIGHT g	W in	H in	D in	WEIGHT oz
Rope Bags									
RF3910	Rope bag, grey PVC with mesh, wide	300	200	180	450	11 13/16	7 7/8	7 3/32	15.9
RF3911	Rope bag, grey PVC with mesh, wide	400	250	200	650	15 3/4	9 27/32	7 7/8	22.9
RF3912	Rope bag, grey PVC with mesh, wide	500	300	220	830	19 11/16	11 13/16	8 21/32	29.3
Winch Handle Pocket									
RF3941	Winch handle pocket, grey PVC with mesh	140	280	90	230	5 17/32	11 1/32	3 7/32	8.1
Drink Holder									
RF3951	Drink holder, grey PVC with mesh	130	130	90	130	5 1/8	5 1/8	3 17/32	4.6

CABLE STEERING HARDWARE

© Beau Outteridge


RF2422


RF144

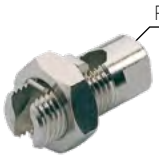

RF154


RF2419


RF2420


RF2421


RF149


RF2415


RF2416

- Steering cable pulleys have durable acetal sheaves with a deep groove to cradle 5mm (3/16") diameter wire.
- Pulley housings are stainless steel.

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	Pulley, single 65mm (2 1/2") diameter pulley. 4.8mm (3/16") diameter top swivel shackle	350	750	75	770	1650	2.7
RF154	Pulley, single 65mm (2 1/2") diameter pulley. 13mm (1/2") inside diameter top brass swivel ring	300	600	80	660	1320	2.8
RF2416	Pulley, single 32mm (1 1/4") diameter pulley. Upright mount	300	800	40	660	1760	1.4
RF2419	Pulley, single 55mm (2 1/8") diameter pulley. Flat mount	500	1500	80	1100	3300	2.8
RF2420	Pulley, single 55mm (2 1/8") diameter pulley. Upright mount	900	1800	70	1980	3960	2.5
RF2421	Pulley, single 55mm (2 1/8") diameter pulley with becket. Upright mount	350	1300	75	770	2860	2.7
RF2422	Pulley, 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

GELCOAT POLISH RF2632

- Ideal for restoring chalky and deteriorated 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 and painted surfaces.
- Ideal for cleaning and protecting stainless steel and chrome plated fittings.
- Contains waxes to promote high lustre and depth of colour.
- Contains silicone to ensure long lasting shine.
- Contains mild abrasive.
- No-run paste formulation.

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.

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.

SAILFAST™ SILICONE LUBRICANT SPRAY RF3004

- 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, halyard sheaves, and rigging screws.

Material Data Sheets are available under the **SUPPORT** tab at ***www.ronstan.com***.

PRODUCT No.	DESCRIPTION	VOLUME	WEIGHT g	WEIGHT oz
Boat Care Products				
RF2632*	Gelcoat polish	1 litre	1270	44.8
RF3001*	Super fine paste polish	-	500	17.7
RF3002*	Extra cut paste polish	-	500	17.7
RF3004*	Sailfast™ silicone lubricant spray	125 ml	145	5.1
RF3005*	Gelcoat restorer	500 ml	590	20.8
RF3005X5.0*	Gelcoat restorer	5 litre	5700	201

*BoatSmart™ products only available in Australia

CL800 RED & CL810 BLACK SMOCK TOP
PERFECT SOLUTION

The Regatta Smock Top's premium technical fabrics, practical design and smart-fit features meet the demands of today's casual and competitive sailors alike. Layered in combination with the Ronstan Thermal Top or Ronstan Rashie and you're set for whatever the day throws at you.

1 Extreme Waterproof Capability
Featuring Ronstan's improved and highly waterproof R-Tech10 fabric - exceeding the demands of today's competitive sailors.

2 High-Ingress Protection
Front neck opening with internal gusset and neck closure tab keeps water out and wearer dry.

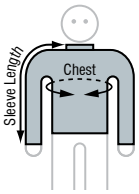
3 Breathable Comfort
Triple layered fabric with taped inner shell provides wearer with a comfortable, breathable fit.

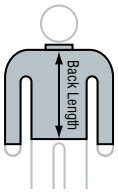
4 Snug-flex Fit
Neoprene waist band, stretch cuffs and neck seals with hook-and-loop adjustments, ensures a warm, snug fit and non-slip finish reduces ride-up.

PFD-Ready
Designed to be worn under PFD, the athletic cut makes for a closer fit, while still providing freedom of movement and zipped pockets are accessible, with or without a PFD on.

Easy Access
Side access breast pocket with water resistant zip provides easy access; even when wearing a PFD.

Available Sizes
Adult XS – XXL; Junior: J10, J12





SIZE	CHEST cm	BACK LENGTH cm	SLEEVE LENGTH cm	CHEST in	BACK LENGTH in	SLEEVE LENGTH in
Smock Top						
J08	77	54	62	30	21	24
J10	86	58	66	34	23	26
J12	94	63	71	37	25	28
Smock Top						
XXS	100	65	76	39	26	30
XS	106	68	79	42	27	31
S	111	70	82	44	28	32
M	119	72	84	47	28	33
L	124	74	86	49	29	34
XL	129	76	88	51	30	35
XXL	133	78	90	52	30	35
XXXL	135	80	92	53	31	36

*Sizes based on garment not person


RONSTAN

RF2607
SHORE CAP

Low profile cap in premium American twill with contrast colour under the visor for reduced sun glare.

- Structured 6 panel design with poplin-lined internal seams.
- Low profile.
- Pre-curved visor with contrast colour (under).
- **Available Sizes**
  One size with adjustable short touch strap at the back.

CL700 CUT FINGERS
CL710 THREE FULL FINGERS
RACE GLOVES

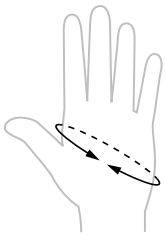
Durable, synthetic leather gloves that provide max performance with minimum stretch and shrinkage for all your demanding water sport activities – sailing, kayaking, kiteboarding, SUP-ing.

- **Double-Tough**
  Double Aramid-stitched in high-wear areas and double-thick palms and fingers for protection and grip.
- **Great Flex-Fit**
  Hook-and-loop closures and mesh panels add flexibility and comfort.
- **Versatile**
  Low-cut wrist bands for freedom of movement and excellent ClearStart™ watch visibility and operation.
- **Available Sizes**
  XXXXS – XXL

CL730 CUT FINGERS
CL740 THREE FULL FINGERS
STICKY RACE GLOVES

Sticky Race Gloves add grip and reduce fatigue by minimising the physical effort to hold rope – the perfect partner for endurance sailing.

- **Double-Tough**
  Double Aramid-stitched in high-wear areas and double-thick palms and fingers for protection and grip.
- **Great Flex-Fit**
  Hook-and-loop closures and mesh panels add flexibility and comfort.
- **Versatile**
  Low-cut wrist bands for freedom of movement and excellent ClearStart™ watch visibility and operation.
- **Available Sizes**
  XXS – XXL



SIZE	HAND SIZE* cm	HAND SIZE* in
Gloves		
XXXXS	18	7
XXXS	19	7 1/2
XXS	20	7 7/8
XS	21	8 1/4
S	22	8 5/8
M	23	9
L	24	9 1/2
XL	25.5	10
XXL	26.5	10 3/8

CL600
SUPERFLEX SAILING SHOE

- **Ultra-Light & Super-Flexible**
  The perfect combination.
- **Unrivalled Stability & Comfort**
  Internal toe separator and outer bridge strap give you improved stability.
- **Extra Protection**
  Added heel, ankle and toe padding offer more protection.
- **Available Sizes**
  XXXS – XXXL

CL620
RACE BOOT

- **Race-Ready!**
  Hard-wearing, moulded sole with extra heel and toe texturing provides reliable grip and firm footing.
- **Easy-On**
  Side zipper with secure fastener tab for an easy on-and-off and a snug fit.
- **Reinforced Comfort**
  Padded neoprene upper reinforced for hiking comfort.
- **Available Sizes**
  XXS – XXXL

SIZE*	FOOT LENGTH cm	FOOT LENGTH in	EUROPE	US & CANADA MENS	UK MENS	AUSTRALIA MENS	JAPAN MENS	US & CANADA WOMENS	UK WOMENS	AUSTRALIA WOMENS	JAPAN WOMENS
Footwear											
XXXS	21 - 22	8 1/4 - 8 5/8	33 - 34	3	2	2	21	3	2	2	21
XXS	22.5 - 23.5	8 7/8 - 9 1/4	35 - 36	3.5 - 4.5	3 - 4	3 - 4	21 - 22	5 - 6	2.5 - 3.5	3.5 - 4.5	21 - 22
XS	23.5 - 24.5	9 1/4 - 9 5/8	36 - 38	4.5 - 6	4 - 5.5	4 - 5.5	22 - 23.5	6 - 7.5	3.5 - 5	4.5 - 6	22 - 23.5
S	24.5 - 25.5	9 5/8 - 10	38 - 40	6 - 7.5	5.5 - 7	5.5 - 7	23.5 - 25	7.5 - 9	5 - 6.5	6 - 7.5	23.5 - 25
M	25.5 - 26.5	10 - 10 1/2	40 - 43	7.5 - 9	7 - 8.5	7 - 8.5	25 - 27	9 - 10.5	6.5 - 8	7.5 - 9	25 - 27
L	26.5 - 27.5	10 3/8 - 10 3/4	43 - 44	9 - 10.5	8.5 - 10	8.5 - 10	27 - 28	10.5 - 12	8 - 9.5	9 - 10.5	27 - 28
XL	27.5 - 28.5	10 3/4 - 11 1/4	44 - 46.5	10.5 - 12.5	10 - 12	10 - 12	28 - 30	12 - 14	9.5 - 11.5	10.5 - 12.5	28 - 30
XXL	28.5 - 29.5	11 1/4 - 11 5/8	46.5 - 48.5	12.4 - 14	12 - 13.5	12 - 13.5	30 - 31	14 - 15.5	11.5 - 13	12.5 - 14	30 - 31
XXXL	29.5 - 30.5	11 5/8 - 12	48.5 - 50	14 - 15	13.5 - 14	13.5 - 14	-	-	-	-	-

* Typical equivalent country size. Indicative only and subject to variation. Your 'foot length' measurement should be used as the most accurate guide for sizing.

© Martina Orsini

RF4020 PROTEST FLAG

- Hook-and-loop fastener strips secure the flag around any stay.
- Rolls up to secure with locking tab, ready to deploy.
- 230mm x 140mm (9" x 5 1/2").
- Laser cut ripstop nylon.

RF4025 TELL TAILS (SET OF 3 PAIRS)
RF4026 LEECH TAILS (SET OF 3 PAIRS)

- Essential guide for proper sail trim.
- Adhesive patches for attachment to sail.
- Vivid colour fabric tails for maximum visibility; colour coded for port and starboard.
- Laser cut ripstop nylon.

RF1706 NUMBER STRIP

- Use as a reference scale for halyard tension, jib lead or main traveller positions.
- 230mm (9") long.
- Self-adhesive backing.

WEATHERPROOF BAGS

© Siren Williams

Roll-top closure

RF4015

55-LITRE ROLL-TOP DRY CREW BAG

A large, lightweight yet durable carry-all; highly water resistant, protects and keeps all your crew kit dry.

- **Weather Ready**
  Secure water-resistant zipper to main compartment with roll-top seal for additional protection from the elements. Lightweight yet durable thermoplastic polyurethane (TPU) fabric with fully welded construction.
- **Accessory-Friendly**
  2x fast access outside pockets with water resistant zippers for additional storage.
- **Travel Equipped**
  Padded carry handles with additional removable padded over- shoulder strap makes for a comfortable and versatile carry-all.
- **Outside Dimensions**
  H300mm x W800mm x D350mm
  (H12" x W31 1/2" x D14").

  Note: external pocket zip is water resistant, not waterproof. Outside dimensions measured when folded 3x.


Adjustable padded harness

RF4014
55-LITRE DRY BACKPACK

A rugged, highly water resistant roll-top dry bag that is loaded with practical features and big enough for all your sailing, kiting, surfing or paddling gear delivered in a smart, ergonomic backpack that makes packing and travelling a breeze.

- **Room to Spare**
  A big 55-litre capacity with a large opening for ease of packing and handling.
- **Versatile, Snug Fit**
  Fully padded backpack harness, padded straps, and adjustable cross-chest strap for extra comfort and fit. 4x adjustable side compression straps for attaching additional items or cinching when the bag is not full.
- **Watertight**
  Light but durable TPU fabric, leak-proof welded construction with water resistant zipper and reliable fold and clip closure keeps your gear dry.
- **Accessory-Friendly**
  Large external accessory pocket with water resistant zipper. Additional pocket inside main bag compartment for additional secure storage.
- **Outside Dimensions**
  H600mm x W430mm x D270mm
  (H23 1/2" x W17" x D10 1/2")

  Note: external pocket zip is water resistant, not waterproof. Outside dimensions measured when folded 3x.

RF4013
30-LITRE DRY BACKPACK

The 30-litre dry backpack combines a water-resistant roll-top seal with the practical features of an ergonomic backpack that makes packing light a cinch.

- **Versatile, Feature Packed**
  Light but durable TPU fabric with fully welded construction. Main compartment with roll-top, side mount closure.
  Includes fast access front pocket with water resistant zipper and side-mounted accessory loops.
- **Fully-Adjustable**
  Fully padded backpack harness, padded straps, and adjustable cross-chest strap for comfort and fit.
- **Notebook Friendly**
  Padded neoprene sleeve inside main compartment 230mm x 320mm (9" x 12 1/2").
- **Outside Dimensions**
  H500mm x W300mm x D270mm
  (H19 1/2" x W12" x D10 1/2").

  Note: external pocket zip is water resistant, not waterproof. Outside dimensions measured when folded 3x.

RF4012
10-LITRE DRY BAG

A handy compact dry bag that is highly water resistant, the perfect size for protecting personal items.

- **Secure**
  Simple, reliable fold and clip closure keeps everything dry. Removable shoulder strap.
- **Leak-Proof Construction**
  Durable TPU fabric with full welded construction. Clear window allows you to see what is inside.
- **Outside Dimensions**
  H300mm x W200mm (H12" x W8") when folded 3x.

CLEARSTART™ WATCHES & RACE TIMER

Large quick-view displays

Selectable start sequences on digital watches

Re-synchronisation feature

Digital watches water resistant to 5ATM / 50m / 150ft

Analogue watches water resistant to 10ATM / 100m / 300ft

Mast mounting option

CLEARSTART™ WATCHES

INNOVATIVE RACE FUNCTIONS WITH BOLD STYLING

The Clearstart™ Watch range combines contemporary styling with true sailing functionality. Featuring large buttons, easy to read displays and advanced, intuitive programming, Clearstart™ Timer and Watches are specifically designed with the racing sailor in mind. Developed in collaboration with some of the world's top sailors, they set the standard on and off the water. If you're looking for that competitive edge, the difference is Clearstart™.

Big, Quick-View Displays

The digital Clearstart™ range features oversized digit displays for quick & easy viewing so that you never have to take your hand off the helm.

Water & Shock Resistant

Designed to survive the rigours of competitive sailing, digital Clearstart™ Watches and Timer are water resistant, rated at 5ATM and are highly shock-resistant. The Analogue Clearstart™ watch is also water resistant, rated to 10ATM with a hard mineral crystal lens.

DIGITAL WATCH & TIMER FUNCTIONS

Pre-programmed Race Sequence Sounds

ClearStart™ sound signals let you know exactly where you are in the start sequence without looking at the display. Pre-programmed with World Sailing 5-4-1-0 and match-racing start sequences, users can also program ClearStart™ for other count down sequences.

End of Sequence – Count Down or Count Up

Depending on the user's preference, the ClearStart™ can be set up to repeat the count down at the end of the sequence for general recall restarts, or to start counting up, to track elapsed time.

Multi-Line Display with Real-Time

No need to switch between 'count down' and 'time' modes because the actual current time is displayed below the count down time on the multi-line ClearStart™ display.

Daily Life Functionality

From waking up to working out, a ClearStart™ watch is also great for everyday activities. Standard modes include 12 or 24-hour time format, date in day/month or month/day format, daily alarm and chronograph stop watch.

Luminescent Backlight

Bright, full-face electroluminescent backlighting is easy to read at night and can be turned on temporarily for a quick view.

CLEARSTART™ RACE TIMER & ANALOGUE WATCH

RF4050

RF4056

RF4050
CLEARSTART™ RACE TIMER

- 65mm (2 9/16") diameter face.
- Oversized 16mm (5/8") digit display.
- Rotating face.
- Wrist/hull/mast/boom mount options.
- 30mm (1 1/8") wide stretch nylon band with security loop.
- Flush fit buckle.
- Dual batteries.
- Extra large easy-press silicon buttons – highlighted Start/Stop button.
- Weight 92g (3.3oz).

FEATURES
RACE MODE

- Multiple start sequence options – World Sailing 5,4,1,0, match racing, user set.
- SYNChronisation function – resynchronise if you start the countdown late.
- Multi-line display – start sequence + time.
- Loud intuitive countdown and start sound signals.
- Countdown repeat, or count down and up (for elapsed race time).
- Separate fast access race and time mode scrolling.
- Water resistant to 5 ATM (50m/150ft).

RF4056
CLEARSTART™ ANALOGUE WATCH

- Analogue quartz chronograph movement.
- 43mm (1 11/16") brushed matt black stainless steel case.
- Hard mineral crystal lens.
- 12 and 24 hour time with date window.
- Stopwatch (60 sec and 10 min).
- Timer (5 minute countdown).
- Water resistant to 10 ATM (100m/300ft).
- Weight 90g (3.2oz).

CLEARSTART™ 50MM WATCHES

RF4055
50MM SAILING WATCHES

- Durable, ultra-clear mineral crystal lens.
- 50mm (2") diameter face.
- Oversized 13mm (1/2") digit display.
- Large easy-press buttons.
- Stainless steel buckle and security loop.
- Flexible polymer band.
- Stainless steel back.
- Weight 65g (2.3oz).

FEATURES
RACE MODE

- Multiple start sequence options – World Sailing 5,4,1,0, match racing, user set.
- SYNChronisation function – resynchronise if you start the countdown late.
- Multi-line display – start sequence + time.
- Loud intuitive countdown and start sound signals.
- Countdown repeat, or count down and up (for elapsed race time).
- Separate fast access race and time mode scrolling.
- Water resistant to 5 ATM (50m/150ft).

FEATURES
STANDARD FEATURES

- Time, hours/minutes/seconds – 12 or 24 hour format.
- Month/day or day/month format.
- Daily alarm.
- Chronograph - including hours and time of the day.
- Luminescent backlight.
- Battery saving mode – light can be turned off.
- Shock resistant.

RF4054
40MM SAILING WATCHES

- Durable, ultra-clear mineral crystal lens.
- 40mm (1 9/16") diameter face.
- Oversized 10mm (3/8") digit display.
- Recommended wrist circumference 13cm - 18.5cm (5 1/8" - 7 1/4").
- Large easy-press buttons.
- Stainless steel buckle and security loop.
- Flexible polymer band.
- Stainless steel back.
- Weight 42g (1.5oz).

FEATURES
RACE MODE

- Multiple start sequence options – World Sailing 5,4,1,0, match racing, user set.
- SYNChronisation function – resynchronise if you start the countdown late.
- Multi-line display – start sequence + time.
- Loud intuitive countdown and start sound signals.
- Countdown repeat, or count down and up (for elapsed race time).
- Separate fast access race and time mode scrolling.
- Water resistant to 5 ATM (50m/150ft).

FEATURES
STANDARD FEATURES

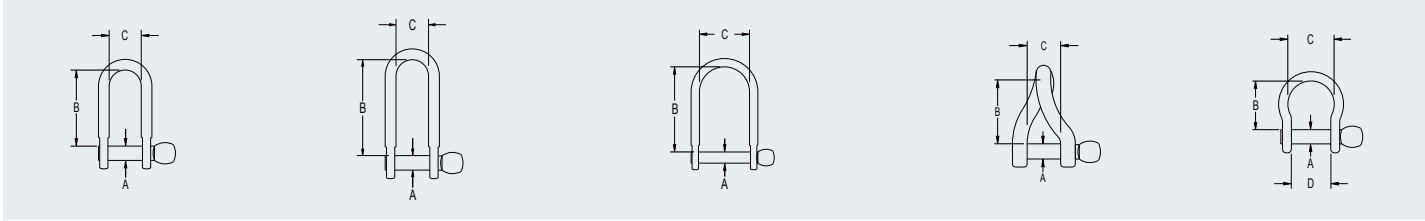
- Time, hours/minutes/seconds – 12 or 24 hour format.
- Month/day or day/month format.
- Daily alarm.
- Chronograph - including hours and time of the day.
- Luminescent backlight.
- Battery saving mode – light can be turned off.
- Shock resistant.

STAINLESS STEEL HARDWARE

SHACKLES

STANDARD D | LONG D | WIDE | TWISTED | BOW

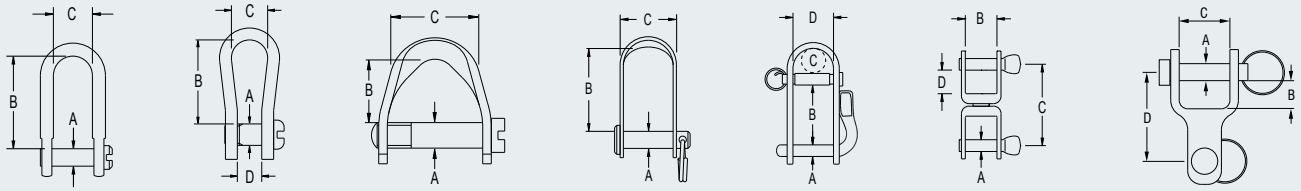
- Many shapes and sizes to suit any application.
- Coined shackle pin head - some models with hole for seizing wire.
- Grade 316 stainless steel bodies and pins.



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 D														
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
RF617H*2	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
RF618H*2	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	15.9	47	25	-	14000	11000	280	5/8	1 25/32	1	-	30860	24250	9.9
Long D														
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														
RF1850S	3.2	11	13	-	500	280	2	1/8	7/16	1/2	-	1100	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*3	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 UDL BL – The "Uniformly Distributed Load" breaking load of the shackle; the load is applied across the full span of the shackle pin.
PL BL – 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 RF613S has a slotted head.

- Slotted head shackle pins are low profile to prevent snagging on ropes etc.
- Lightweight clevis pin shackles use a split ring for security.
- Halyard shackles have a lever action for easy finger opening and closing. They also have a keyed pin for pin retention and spring engagement to retain pin in closed position.
- RF1320R shackle key suits both coined and slotted shackle pins, and small nylon-insert nuts.
- Grade 316 stainless steel bodies and pins.

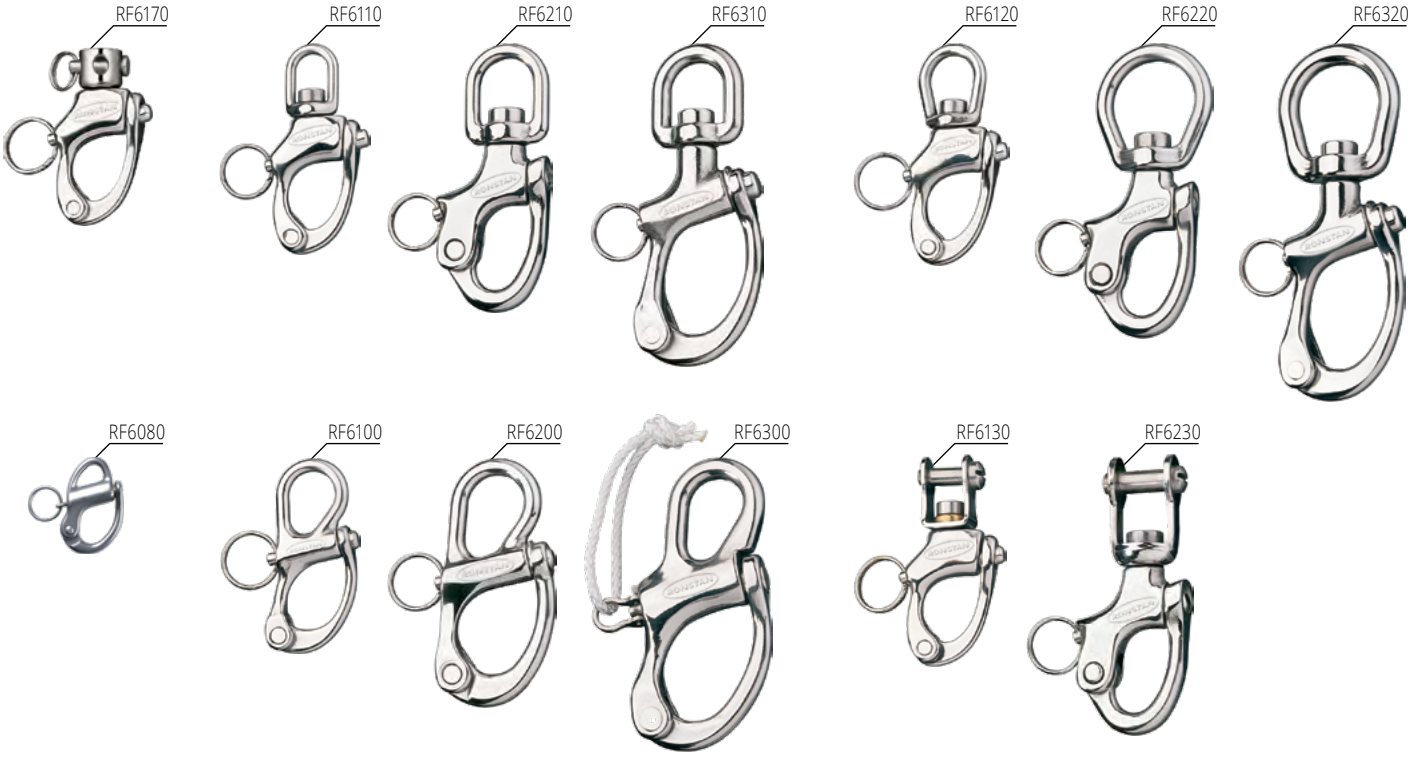


PRODUCT No.	A mm	B mm	C mm	D mm	U.D.L.*1 B.L. kg	P.L.*1 B.L. kg	WEIGHT g	A in	B in	C in	D in	U.D.L.*1 B.L. lb	P.L.*1 B.L. lb	WEIGHT oz
Slotted Pin														
RF615	4.0	16.0	10.0	-	850	650	5	5/32	5/8	13/32	-	1870	1430	0.2
RF615A	4.0	13.0	8.0	-	850	700	7	5/32	1/2	5/16	-	1870	1540	0.2
RF150	4.8	18.0	12.0	-	1500	900	10	3/16	23/32	15/32	-	3300	1980	0.4
RF806S	4.8	11.5	16.0	-	950	700	10	3/16	7/16	5/8	-	2090	1540	0.4
RF707S	4.8	17.0	18.0	-	1200	700	10	3/16	21/32	23/32	-	2640	1540	0.4
RF614	4.8	19.0	10.0	5.0	1300	1300	5	3/16	13/32	3/8	3/16	2860	2860	0.2
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
Lightweight Clevis Pin														
RF807	4.8	20.0	14.0	-	700	-	10	3/16	25/32	9/16	-	1540	-	0.4
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	1800	1400	55	1/4	1 1/4	1/2	3/4	3960	3080	1.9
RF1034	7.9	39.0	18.5	20.0	2200	1800	90	5/16	1 17/32	23/32	25/32	4840	3960	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 Key														
RF1320R	Shackle key and multi-purpose tool. Suits coined and slotted head shackle pins. Features sockets for 3/16" & 1/4" nuts. Screwdriver tip. Hollow end ideal for tightening drain plugs. Red plastic grip handle.						90							3.2

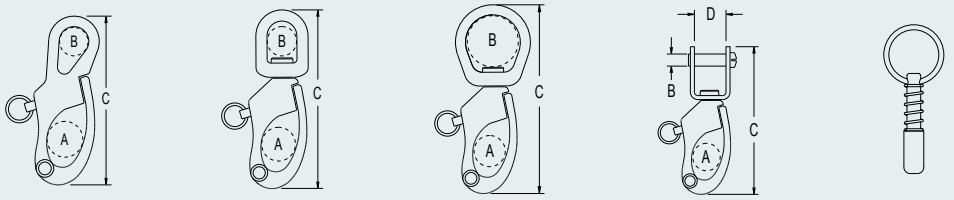
*1 UDL BL – The "Uniformly Distributed Load" breaking load of the shackle; the load is applied across the full span of the shackle pin.
PL BL – The "Point Load" breaking load of the shackle; the load is only applied at the centre or one side of the shackle pin.
*2 RF75 swivel shackle has stainless steel ball bearings.

STAINLESS STEEL HARDWARE

SNAP SHACKLES



- 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.
- High strength-to-weight ratio.
- Stainless steel is used throughout for excellent corrosion resistance.
- 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 adapter for blocks with a 5mm (3/16") pin.
- Grade 15-5PH investment cast stainless steel body and hasp.
- Grade 316 stainless steel plunger pin and spring.



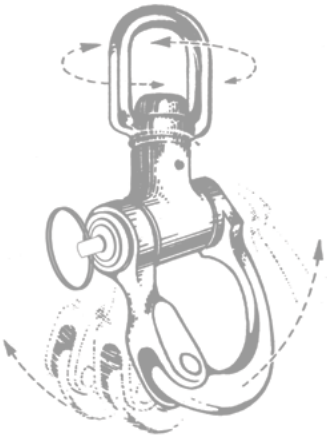
Replacement Plunger Pin Kits

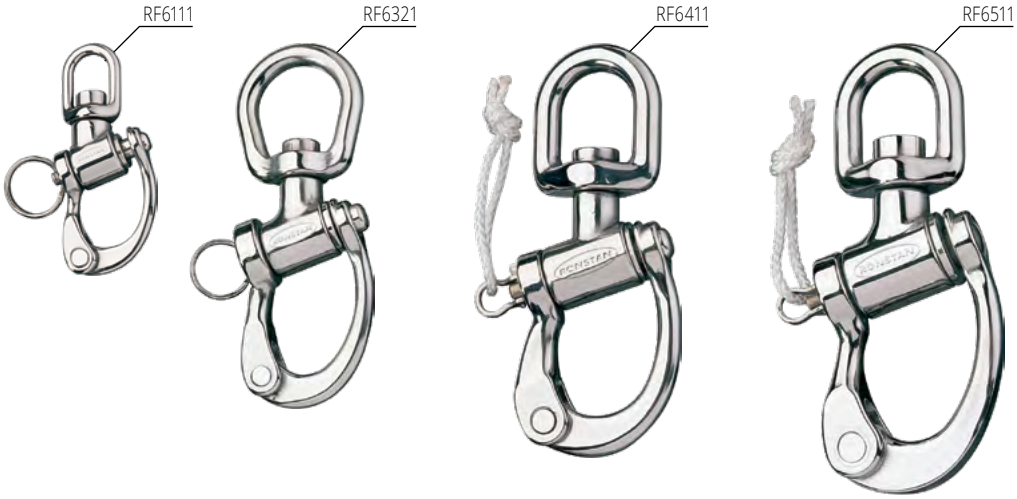
RF6160	Suits RF6110, RF6120, RF6130, RF6170
RF6161	Suits RF6100, RF6111
RF6260	Suits RF6200
RF6262	Suits RF6210, RF6220, RF6230, RF6230A
RF6360	Suits RF6310, RF6320, RF6321
RF6361	Suits RF6300
RF6461	Suits RF6411
RF6561	Suits RF6511

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	-	2205	4410	1.5
RF6110	Small swivel bail	16	10.0	69	-	850	1700	50	5/8	13/32	2 23/32	-	1875	3750	1.8
RF6120	Large swivel bail	16	13.0	73	-	750	1500	57	5/8	1/2	2 7/8	-	1655	3310	2.0
RF6130	Swivel shackle	16	6.4	72	13	750	1500	64	5/8	1/4	2 27/32	1/2	1655	3310	2.3
RF6170	Block head adapter	16	5.0	60	-	500	1000	49	5/8	3/16	2 3/8	-	1105	2210	1.7
Series 200															
RF6200	Fixed bail	20	19.0	85	-	1100	2200	100	13/16	3/4	3 11/32	-	2425	4850	3.5
RF6210	Small swivel bail	16	16.0	92	-	1600	3200	113	5/8	5/8	3 5/8	-	3530	7060	4.0
RF6220	Large swivel bail	16	25.0	101	-	1100	2200	120	5/8	1	3 31/32	-	2425	4850	4.2
RF6230	Swivel shackle	16	7.9	95	17.5	1100	2200	120	5/8	5/16	3 3/4	11/16	2425	4850	4.2
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	-	2975	5950	6.0

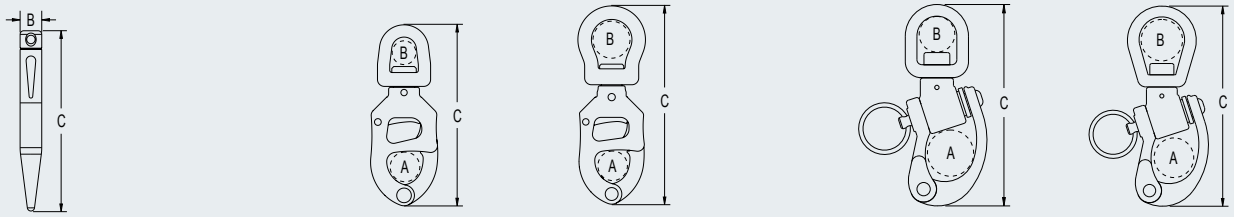
TRIGGERSNAPS™ & TRUNNION SNAP SHACKLES

TRUNNION ARTICULATION



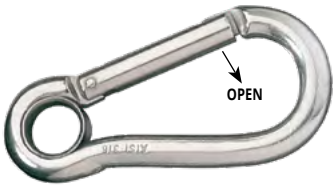


- Trunnion swivel head allows both 360° rotation and side to side articulation.
- Small and large bail versions
- RF1322 release spike with shackle key for safe release of Triggersnaps™ while under load.
- Triggersnaps™ are stamped with a production code for traceability.
- Triggersnaps™ are individually proof-load tested.
- Heat treated grade 15-5PH investment cast stainless steel body, bail, latch and trigger.
- Grade 316 stainless steel rivets and spring.

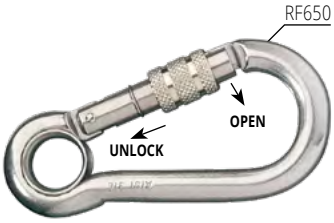


PRODUCT No.	HEAD TYPE	A mm	B mm	C mm	M.W.L. kg	B.L. kg	WEIGHT g	A in	B in	C in	M.W.L. lb	B.L. lb	WEIGHT oz
Triggersnaps™													
RF7110	Series 100, small swivel bail	14	9	80	1000	2000	60	9/16	11/32	3 5/32	2205	4410	2.1
RF7120	Series 100, large swivel bail	14	18	89	1000	2000	66	9/16	23/32	3 1/2	2205	4410	2.3
RF7210	Series 200, small swivel bail	16	13	97	1600	3200	106	5/8	1/2	3 13/16	3530	7060	3.7
RF7220	Series 200, large swivel bail	16	22	108	1600	3200	116	5/8	7/8	4 1/4	3530	7060	4.1
RF7310	Series 300, small swivel bail	19	16	114	2400	4800	170	3/4	5/8	4 1/2	5290	10580	6.0
RF7320	Series 300, large swivel bail	19	25	123	2400	4800	194	3/4	31/32	4 27/32	5290	10580	6.8
RF1322	Aluminium alloy release spike with shackle key	-	18	150	-	-	78	-	23/32	5 29/32	-	-	2.8
Trunnion Snap Shackles													
RF6111	Series 100, small swivel bail	16	10	70	750	1500	57	5/8	13/32	2 3/4	1655	3310	2.0
RF6321	Series 300, large swivel bail	26	26	122	1350	2700	198	1 1/32	1 1/32	4 13/16	2975	5950	7.0
RF6411	Series 400, small swivel bail	32	25	137	3000	6000	369	1 1/4	1	5 13/32	6615	13230	13.0
RF6511	Series 500, small swivel bail	36	22	150	3750	7500	454	1 13/32	7/8	5 29/32	8270	16540	16.0

HOOKS & WELDED RINGS



CARABINER HOOKS, NON-LOCKING



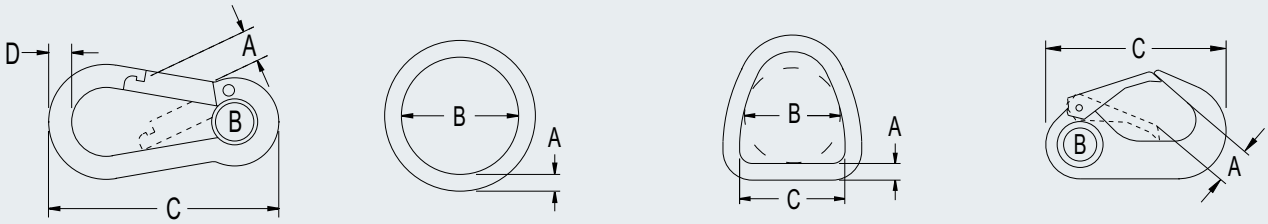
CARABINER HOOK, LOCKING

ROUND RINGS

D-RING

SNAP HOOK

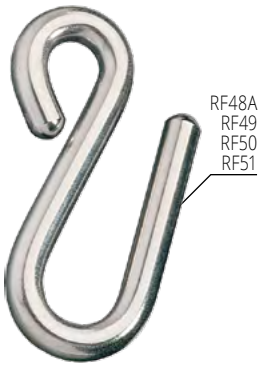
- Carabiner hooks have ferrule lined eyes to retain the fixed line.
- RF650 carabiner hook opens inwards and has a threaded locking sleeve for added security.
- Quick links have large openings and secure threaded locking sleeves.
- RF16 D-ring suits use with 50mm (2") webbing.



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
Carabiner Hooks - Non-Locking															
RF2355	Carabiner Hook 60mm	8.0	6.0	60	6	-	120	30	5/16	1/4	2 3/8	1/4	-	260	1.1
RF652	-	11.0	11.0	80	8	-	800	68	7/16	7/16	3 1/8	5/16	-	1760	2.4
RF653	-	15.0	11.0	100	10	-	1200	129	19/32	7/16	3 15/16	13/32	-	2640	4.6
Carabiner 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
Rings															
RF122	Round	4.0	38.0	-	-	200	1000	12	5/32	1 1/2	-	-	440	2200	0.4
RF123	Round	5.0	25.4	-	-	600	1500	14	3/16	1	-	-	1320	3310	0.5
RF48	Round	6.0	25.4	-	-	1000	2000	15	1/4	1	-	-	2200	4410	0.5
RF124	Round	6.0	38.0	-	-	750	2000	40	1/4	1 1/2	-	-	1650	4410	1.4
RF125	Round	8.0	42.5	-	-	1000	2500	55	5/16	1 5/8	-	-	2200	5510	1.9
RF16	D-ring	8.0	45.0	50	-	500	1000	75	5/16	1 3/4	2	-	1100	2200	2.7
Snap Hook															
RF533	-	10.0	9.0	51	-	180	360	25	13/32	11/32	2	-	395	790	0.9

SWIVELS, SISTER CLIPS, S-HOOKS & BECKETS

SWIVELS
See page 203 for swivel shackles

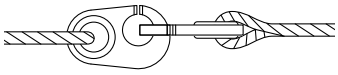


S-HOOKS

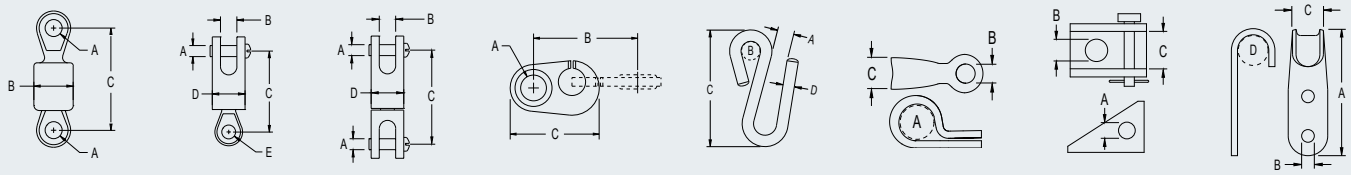
BECKETS

SISTER CLIPS

Swivels are used in conjunction with blocks and rigging systems to provide articulation and rotation (not suitable for high speed rotating applications).



Sister clip to sister clip connections

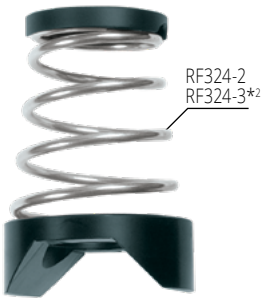


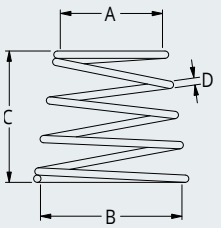
PRODUCT No.	TYPE	A mm	B mm	C mm	D mm	E mm	B.L. kg	WEIGHT g	A in	B in	C in	D in	E in	B.L. lb	WEIGHT oz
Swivels - Ball Bearing															
RF78*		8.1	19.1	51.8	-	-	1000	65	5/16	3/4	2 3/32	-	-	2200	2.3
RF78A		6.4	9.6	54.0	19.0	-	1700	80	1/4	3/8	2 1/8	3/4	-	3740	2.8
RF78B*		6.4	9.6	44.3	19.0	8.1	1700	60	1/4	3/8	1 3/4	3/4	5/16	3740	2.1
RF79		7.9	12.7	89.8	25.1	16.0	2600	190	5/16	1/2	3 17/32	1	5/8	5720	6.7
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	Hook becket	50.5	5.0	13.5	8.0	-	-	13	2	3/16	17/32	5/16	-	-	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 / block anchor	5.0	5.0	11.5	-	-	-	9	3/16	3/16	7/16	-	-	-	0.3
RF1053	Fork becket / block anchor	5.0	6.0	14.0	-	-	-	9	3/16	1/4	9/16	-	-	-	0.3

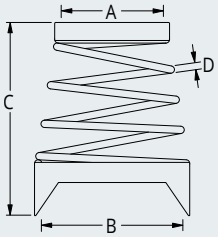
*Eye thickness = 6.4mm (1/4")

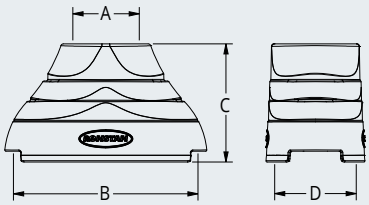
STAND-UP SPRINGS & BOOTS

2 x 5mm (3/16")









- RF324, RF324-2, RF324-3, RF328 include top and bottom acetal collars.
- Springs and boots are used to support blocks in an upright position.
- Grade 316 stainless steel springs.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	WEIGHT g	A in	B in	C in	D in	WEIGHT oz
Stand-Up Springs											
RF318*1	Stand-up spring, suits Series 15 and Series 20 Utility blocks with saddle RF498	16	23	22	1	3	5/8	7/8	7/8	1/32	0.1
RF319	Stand-up spring	16	16	32	2	3	5/8	5/8	1 1/4	3/32	0.1
RF321*1	Stand-up spring, suits Series 40 Utility blocks (use saddle RF134 or RF134A) or Series 50 (use saddle RF1055)	16	24	41	2	9	5/8	15/16	1 5/8	3/32	0.3
RF323*1	Stand-up spring, suits Series 30 Utility blocks and Orbit Blocks™ with saddle RF134/RF134A	19	25	32	1	4	3/4	1	1 1/4	1/32	0.1
RF324	Stand-up spring, suits Series 60 & 75 Core Blocks™ and Orbit Blocks™ with padeye RF2433-09	20	30	81	4	80	3/4	1 3/16	3 3/16	5/32	2.8
RF324-2	Stand-up spring, suits Series 60 & 75 Core Blocks™ and Orbit Blocks™ , S26 & S30 traveller cars	20	38	89	4	60	3/4	1 1/2	3 1/2	5/32	2.1
RF324-3*2	Stand-up spring, suits Series 60, 75 & 100 Core Blocks™ and Orbit Blocks™ , S26 traveller cars	20	38	94	4	60	3/4	1 1/2	3 11/16	5/32	2.1
RF328	Stand-up spring, suits S100 Orbit Blocks™ with padeye RF2429-10	47	72	95	4	120	1 7/8	2 7/8	3 3/4	5/32	4.2
Stand-Up Bases & Boots											
RF2454	Stand-up base, suits S40 Orbit Blocks™ - includes RF134 stainless steel saddle	17	42	28	19	11	5/8	1 5/8	1 1/8	3/4	0.4
RF2455	Stand-up base, suits S55 Orbit Blocks™ - includes RF1055 stainless steel saddle	20	53	35	23	26	3/4	2 1/8	1 3/8	15/16	0.9
RF2454B	Stand-up boot, suits S40 Orbit Blocks™ - boot only	17	42	28	19	6	5/8	1 5/8	1 1/8	3/4	0.2
RF2455B	Stand-up boot, suits S55 Orbit Blocks™ - boot only	20	53	35	23	11	3/4	2 1/8	1 3/8	15/16	0.4

*1Tapered spring.
*2 Suits no end cap version Series 26 traveller cars.


RF2429-06
RF2429-08
RF2429-10


RF2429-02


RF529

PADEYES


RF44
RF415
RF416


RF87

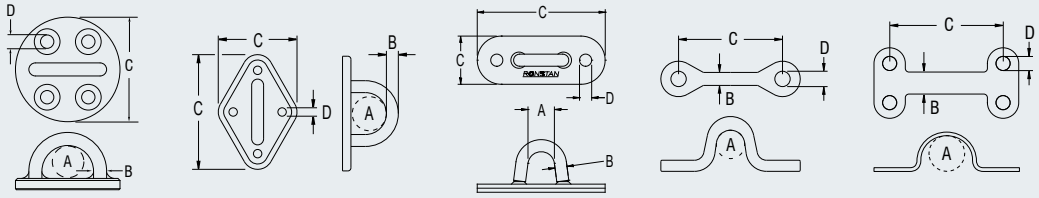

SADDLES - NARROW


SADDLES - FLARED TOP


RF4714
SADDLE - FLARED TOP


SADDLES - FERRULE EYE

- Grade 316 stainless steel.
- RF2429-xx - Grade 15-5PH stainless steel.



PRODUCT No.	DESCRIPTION	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 - Fixed, Round													
RF2429-02	2 mounting holes	7.2	5.0	34.0	6.4	1500*2	26	9/32	3/16	1 5/16	1/4	3310*2	0.9
RF2429-06	4 mounting holes	16.0	7.3	50.0	6.4	4000*2	82	5/8	5/16	2	1/4	8800*2	2.9
RF2429-08	4 mounting holes	17.2	10.0	57.7	8.3	6000*2	127	43/64	25/64	2 1/4	21/64	13200*2	4.5
RF2429-10	4 mounting holes	21.1	11.5	72.3	10.2	9000*2	240	53/64	7/16	2 3/4	13/32	19800*2	8.5
Padeyes - Fixed, Diamond Base													
RF87	Straight sided, concave underside	10.0	5.0	51 x 19	5.1	-	15	3/8	3/16	2 x 3/4	3/16	-	0.5
RF529*	Includes 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	Includes 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	Includes 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													
RF133		9.0	4.0	27.0	4.8	-	2	3/8	5/32	1 1/16	3/16	-	0.1
RF134		14.0	5.1	36.6	5.1	-	5	9/16	3/16	1 7/16	3/16	-	0.2
RF134A	Countersunk holes	14.0	5.1	36.6	5.0	-	5	9/16	3/16	1 7/16	3/16	-	0.2
RF498		12.0	3.2	27.7	4.3	-	4	15/32	1/8	1 3/32	5/32	-	0.1
RF528		12.0	6.8	44.5	8.1	-	25	15/32	9/32	1 23/32	5/16	-	0.9
RF1054		18.0	7.0	60.0	8.4	-	35	23/32	9/32	2 3/8	5/16	-	1.2
RF1055		16.0	5.8	43.0	6.6	-	15	5/8	7/32	1 11/16	1/4	-	0.5
Saddles - Flared Top													
RF94		6.0	9.0	27.0	5.0	-	3	1/4	11/32	1 1/16	3/16	-	0.1
RF94A		5.0	5.8	29.0	5.0	-	3	3/16	7/32	1 1/8	3/16	-	0.1
RF96		10.0	8.3	29.0	6.4	-	5	3/8	5/16	1 1/8	1/4	-	0.2
RF148		15.0	11.0	40.0	6.5	-	8	9/32	7/16	1 5/8	1/4	-	0.3
RF291		12.0	9.0	31.8	5.3	-	7	1/2	11/32	1 1/4	3/16	-	0.2
RF4714	4 fixing points	9.0	8.0	32.0 / 19.5	5.0	-	9	11/32	5/16	1 1/4 / 3/4	3/16	-	0.3
RF5003		7.0	9.0	27.0	5.0	-	4	1/4	3/8	1 1/16	3/16	-	0.1
RF5013		15.0	12.5	38.1	5.0	-	8	5/8	1/2	1 1/2	3/16	-	0.3
RF5023		18.0	14.0	51.0	6.6	-	11	3/4	9/16	2	1/4	-	0.4
Saddles - Ferrule Eye													
RF499		9.4	4.9	27.7	4.3	-	4	3/8	3/16	1 3/32	5/32	-	0.1
RF1056		16.3	8.8	60.0	8.4	-	40	5/8	5/16	2 3/8	5/16	-	1.4
RF1057		13.0	6.8	45.7	6.6	-	18	1/2	1/4	1 3/4	1/4	-	0.6
RF1058		10.0	9.0	36.6	5.1	-	11	3/8	11/32	1 7/16	3/16	-	0.4

* Turned U-Bolt with a pad eye base. Thread size is 6.4mm (1/4" UNC). Suits maximum deck thickness of 22mm (7/8")
*2 A4-80 DIN7991 grade fasteners recommended to achieve BL

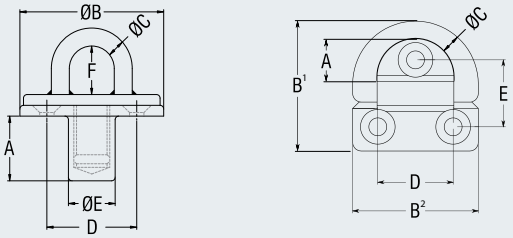
PADEYES

RF2433-09 4 X M6
RF2433-10 4 X M8

REMOVABLE

RF2436-06 3 X M6
RF2436-08 3 X M8
RF2436-10 3 X M10

FOLDING



- Screw in, removable padeyes allow the block and padeye to be easily removed when not in use.
- Integral threaded plug in removable padeyes prevents grit from entering the threaded socket when the padeye is removed.
- Folding padeyes provide a low profile solution with the eye pivoting upright when required for use.
- Hand-polished finish.
- Grade 316 stainless steel.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	F mm	M.W.L. kg	B.L.*3 kg	WEIGHT g	A in	B in	C in	D in	E in	F in	M.W.L. lb	B.L.*3 lb	WEIGHT oz
Padeyes																			
RF2433-09	Removable	30	55	9.0	38.0	14	23	2000	4000	285	1 3/16	2 5/32	11/32	1 1/2	9/16	29/32	4410	8820	10.1
RF2433-10	Removable	32	72	10.0	99.5	19	30	2500	5000	550	1 1/4	2 27/32	13/32	1 15/16	3/4	1 3/16	5510	11020	19.4
RF2436-06	Folding	13.5*1	46.5 x 45*2	7.7	27.0	24	-	1100	2200	74	1/2*1	1 7/8 x 1 13/16*2	5/16	1 1/16	-	-	2420	4840	2.6
RF2436-08	Folding	18.5*1	61 x 59*2	10.4	35.0	29.5	-	2000	4000	172	11/16*1	2 7/16 x 2 3/8*2	7/16	1 3/8	1 5/32	-	4400	8800	6.1
RF2436-10	Folding	23.5*1	77 x 75*2	13.2	45.0	39	-	3650	7300	356	7/8*1	3 1/16 x 3*2	9/16	1 3/4	1 17/32	-	8030	16060	12.6

*1 Eye clearance when upright.
*2 B^1 x B^2
*3 A4-80 DIN7991 grade fasteners recommended to achieve BL

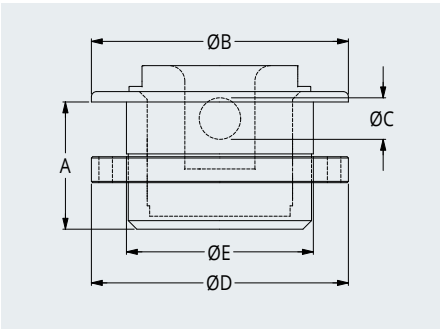
REMOVABLE LASHING PADEYES

© Michael Chittenden Photography

Padeye with Dyneema® lashing

Threaded plug flush with deck surface when padeye removed from socket

- Lashed block and padeye are easily removed when not in use.
- Integral threaded plug prevents grit from entering the base and provides a clean, flush finish when the padeye is removed.
- Lightweight, strong alloy construction.
- Lashing padeyes are ideal for use with Dyneema® lashings/strops RF2437-12 up to 10mm (3/8") diameter, RF2437-16 up to 12mm (1/2") diameter.
- Allowable deck thickness RF2437-12: minimum 13mm (1/2"), maximum 32mm (1 1/4"), RF2437-16: minimum 20mm (25/32"), maximum 39mm (1 1/2").
- Alloy padeye, socket and clamping ring.
- Grade 316 stainless steel cross pin.



NOTE: Full installation and user instructions available in the **SUPPORT** section at ***www.ronstan.com***.

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
Padeyes																	
RF2437-12	Removable, lashing attachment	39	76	12	77	54	4000	8000	300	1 17/32	3	15/32	3 1/32	2 1/8	8820	17640	10.6
RF2437-16	Removable, lashing attachment	49	99	16	99	72	7000	14000	650	1 15/16	3 29/32	5/8	3 29/32	2 27/32	15430	30860	22.9
Accessories																	
RD738000	Pin spanner, suits RF2437-xx	-	-	-	-	-	-	-	298	-	-	-	-	-	-	-	10.5

EYE BOLTS & U-BOLTS

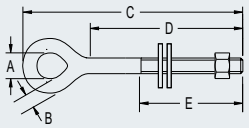
RING BOLTS

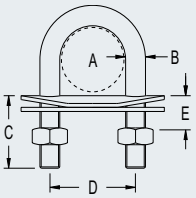
EYE BOLTS

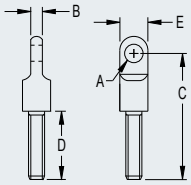
U-BOLTS - STEPPED

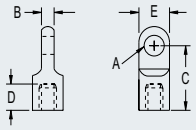
ANCHOR BOLTS

- Eye bolts and ring 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.
- Grade 316 stainless steel.

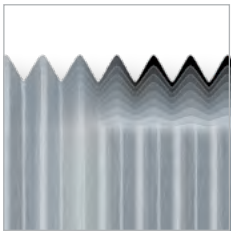






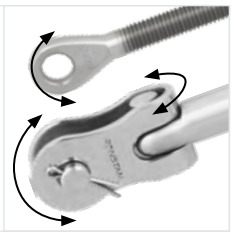


PRODUCT No.	THREAD TYPE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
Ring Bolts													
RF26	1/4 UNC	25	5.0	63	25	20	35	1	3/16	2 1/2	1	3/4	1.2
RF424	1/4 UNC	25	5.0	90	51	22	40	1	3/16	3 1/2	2	7/8	1.4
Eye Bolts													
RF156	3/16 UNC	10	4.0	76	51	38	10	13/32	5/32	3	2	1 1/2	0.4
RF157	3/16 UNC	10	4.0	100	75	51	15	13/32	5/32	4	3	2	0.5
RF159	1/4 UNC	12	5.5	81	51	38	25	15/32	7/32	3 3/16	2	1 1/2	0.9
RF160	1/4 UNC	12	5.5	108	76	51	30	15/32	7/32	4 1/4	3	2	1.1
RF161	1/4 UNC	12	5.5	132	102	51	35	15/32	7/32	5 3/16	4	2	1.2
RF162	1/4 UNC	12	5.5	160	127	51	40	15/32	7/32	6 5/16	5	2	1.4
RF163	1/4 UNC	12	5.5	180	152	51	50	15/32	7/32	7	6	2	1.8
RF164	5/16 UNC	13	7.0	111	76	51	60	1/2	9/32	4 3/8	3	2	2.1
RF165	5/16 UNC	13	7.0	139	102	51	65	1/2	9/32	5 1/3	4	2	2.3
RF166	5/16 UNC	13	7.0	162	127	51	75	1/2	9/32	6 3/8	5	2	2.7
RF167	5/16 UNC	13	7.0	187	152	51	80	1/2	9/32	7 3/8	6	2	2.8
RF168	3/8 UNC	17	8.5	116	76	51	80	21/32	11/32	4 1/2	3	2	2.8
RF169	3/8 UNC	17	8.5	140	102	51	90	21/32	11/32	5 1/2	4	2	3.2
RF170	3/8 UNC	17	8.5	167	127	51	100	21/32	11/32	6 5/8	5	2	3.5
RF171	3/8 UNC	17	8.5	193	152	51	110	21/32	11/32	7 5/8	6	2	3.9
Anchor Bolts & Nuts													
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	22.5	9	14.4	18	1/4	3/16	7/8	11/32	9/16	0.7
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-M6	M6	6.4	4.8	22.5	8	14.4	12	1/4	3/16	7/8	5/16	9/16	0.4
RF5292-M8	M8	6.4	4.8	22.5	8	14.4	12	1/4	3/16	7/8	5/16	9/16	0.4
U-Bolts - 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	26	9.5	25	35.0	4	95	1	3/8	31/32	1 3/8	5/32	3.4
RF541	5/16 UNC	26	9.5	38	35.0	7	105	1	3/8	1 1/2	1 3/8	9/32	3.7
RF544	5/16 UNC	26	9.5	52	35.0	7	110	1	3/8	2 1/16	1 3/8	9/32	3.9
RF547	5/16 UNC	26	9.5	76	35.0	29	130	1	3/8	3	1 3/8	1 3/32	4.6
RF548	5/16 UNC	26	9.5	102	35.0	55	150	1	3/8	4 1/32	1 3/8	2 5/32	5.3
RF549	5/16 UNC	26	9.5	128	35.0	69	170	1	3/8	5 1/32	1 3/8	2 3/4	6.0



Rolled threads for maximum strength

Roll swage integrity



Versatile end connection options

Calibrated models

TYPE 10 TURNBUCKLES

ELEGANT DESIGN, EXCEPTIONAL PERFORMANCE

From their clean lines to the use of the highest grade materials and quality finish, Ronstan Type 10 turnbuckles are engineered to deliver performance while enhancing the appearance of any yacht, or tensile project.

Type 10

Type 10 closed body turnbuckles have a sleek, modern profile with no sharp edges. They are easily adjusted by turning the unique adjustment nut, which is free to rotate within the sleeve on the turnbuckle body, and are secured with a quick turn on the locking nut. A sight hole is provided in the body to verify adequate thread engagement. With fine thread and single end adjustment, Type 10 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 lateral articulation for easy installation and connection compatibility.

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 the full length of the thread. Threads are UNF (Unified National Fine), short pitch threads for fine adjustment and reduced adjustment effort.

Roll swage integrity

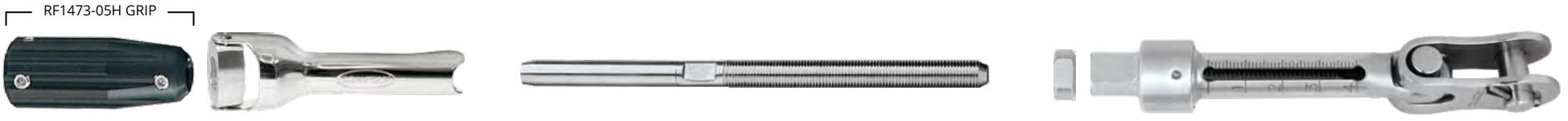
Swage fittings suit industry-standard roll swaging presses and dimensions are derived from the original 'Milspec' for maximum integrity. They are suitable for use with modern and traditional wire constructions, including 1x19, 7x19 and compact strand.

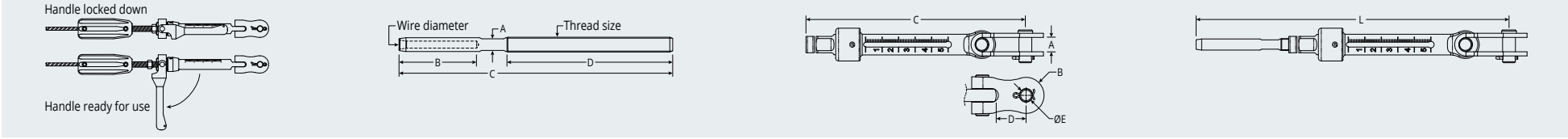
Termination options

A full range of eye, fork and toggle fittings complement 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 turnbuckle models are available for wire sizes up to 8mm (5/16"); thread sizes 1/4", 5/16", 3/8", 1/2" UNF.





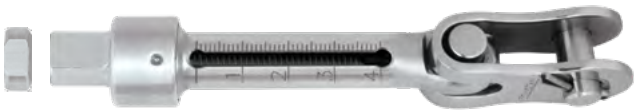
METRIC DIMENSIONS

WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. kg	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	WEIGHT g	TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	L MIN. mm	L MAX.* mm
Calibrated Turnbuckles - Metric Wire																				
3mm	760	**RF1512M0304**	1350	1/4" UNF	4.9	39.2	133	74	24	**RF1481-04**	1480	1/4" UNF	7.8	9.1	115	16.3	6.2	75	174	229
4mm	1350	**RF1512M0404**	1480		6.0	45.5	141	74	30										182	237
4mm	1350	**RF1512M0405**	1780	5/16" UNF	6.0	45.5	153	89	44	**RF1481-05**	2360	5/16" UNF	9.4	11.2	138	20.7	7.9	144	202	267
5mm	2120	**RF1512M0505**	2360		7.5	55.5	164	89	52										213	278
5mm	2120	**RF1512M0506**	2550	3/8" UNF	7.5	55.5	179	105	76	**RF1481-06**	3580	3/8" UNF	10.5	14.4	162	23.2	9.4	245	237	317
6mm	3020	**RF1512M0606**	3580		10.5	70.4	195	105	115										253	333
6mm	3020	**RF1512M0608**	5410	1/2" UNF	10.5	70.4	245	143	196	**RF1481-08**	5410	1/2" UNF	13.9	17.5	213	29.1	12.4	506	312	422
7mm	4120	**RF1512M0708**	5410		12.2	79	250	143	222										320	430
8mm	5380	**RF1512M0808**	5410		14.0	88.5	263	143	258										333	443

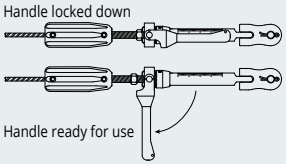
PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Handles			
RF1473-05	Handle kit, suits 5/16" threaded turnbuckle body combinations. Features 87mm (3 7/16") long handle for maximum tensioning leverage, and lift and re-position operation for ease of use or when rotation space is restricted. Handle snaps into snag-free locked position. Includes black plastic grip.	75	2.6
RF1473-05H	Black plastic upper grip for 5/16" threaded swage terminals	50	1.8

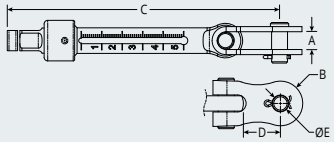
* The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.

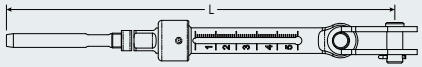
THREADED SWAGE
TERMINAL



TOGGLE END TURNBUCKLE BODY
& LOCK NUT



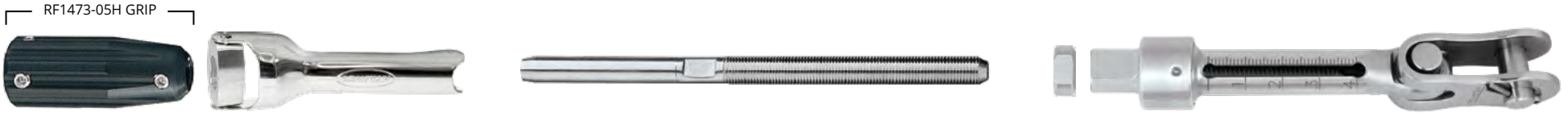


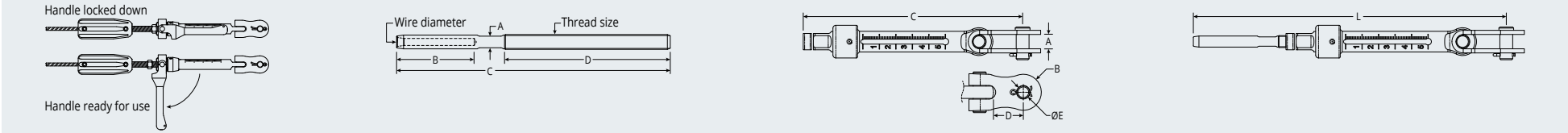


IMPERIAL DIMENSIONS

WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. lb	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. lb	THREAD SIZE	A in	B in	C in	D in	WEIGHT oz	TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. lb	THREAD SIZE	A in	B in	C in	D in	E in	WEIGHT oz	L MIN. in	L MAX.* in
Calibrated Turnbuckles - Metric Wire																				
3mm	1670	RF1512M0304	2970	1/4" UNF	3/16	1 9/16	5 1/4	2 15/16	0.8	RF1481-04	3250	1/4" UNF	9/32	3/8	4 9/16	5/8	1/4	2.7	6 13/16	9
4mm	2970	RF1512M0404	3250		1/4	1 3/8	5 1/2	2 15/16	1.1										5 1/8	9 3/8
4mm	2970	RF1512M0405	3910	5/16" UNF	1/4	1 3/8	6	3 1/2	1.6	RF1481-05	5190	5/16" UNF	11/32	15/32	5 5/16	13/16	5/16	5.1	7 15/16	10 9/16
5mm	4660	RF1512M0505	5190		9/32	2 3/16	6 1/2	3 1/2	1.8										8 3/8	11
5mm	4660	RF1512M0506	5610	3/8" UNF	9/32	2 3/16	7 1/16	4 1/8	2.7	RF1481-06	7870	3/8" UNF	13/32	19/32	6 3/8	29/32	3/8	8.6	9 5/16	12 1/2
6mm	6640	RF1512M0606	7870		7/16	2 3/4	7 11/16	4 1/8	4.1										9 15/16	13 1/8
6mm	6640	RF1512M0608	11900	1/2" UNF	7/16	2 3/4	9 5/8	5 5/8	196	RF1481-08	11900	1/2" UNF	17/32	11/16	8 3/8	1 1/8	1/2	17.8	12 1/4	16 5/8
7mm	9060	RF1512M0708	11900		1/2	3 1/8	9 7/8	5 5/8	222										12 9/16	16 15/16
8mm	11840	RF1512M0808	11900		9/16	3 1/2	10 3/8	5 5/8	258										13 1/8	17 7/16

* The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.





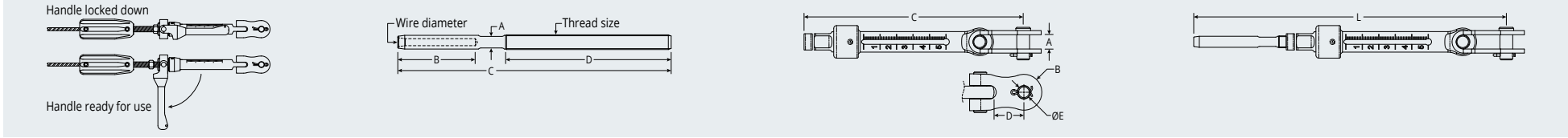
METRIC DIMENSIONS

WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. kg	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	WEIGHT g
Calibrated Turnbuckles - Imperial Wire									
1/8"	860	**RF1510-0404**	1300	1/4" UNF	4.9	39.2	133	74	22
5/32"	1350	**RF1510-0504*1**	1480		6.0	45.5	141	74	30
5/32"	1350	**RF1510-0505*1**	1780	5/16" UNF	6.0	45.5	153	89	44
3/16"	1930	**RF1510-0605**	2360		7.5	55.5	164	89	56
3/16"	1930	**RF1510-0606**	2620	3/8" UNF	7.5	55.5	179	105	78
7/32"	2630	**RF1510-0706**	3580		9.0	61.0	185	105	90
1/4"	3440	**RF1510-0806**	3580		9.0	70.4	195	105	110
1/4"	3450	**RF1510-0808**	5360	1/2" UNF	10.5	70.4	245	143	196
9/32"	4130	**RF1510-0908*1**	5410		12.2	79	253	143	222
5/16"	5380	**RF1510-1008*1**	5410		14.0	88.5	267	143	258

TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	L MIN. mm	L MAX.*2 mm
RF1481-04	1480	1/4" UNF	7.8	9.1	115	16.3	6.2	75	174	229
									182	237
RF1481-05	2360	5/16" UNF	9.4	11.2	138	20.7	7.9	144	202	267
									213	278
RF1481-06	3580	3/8" UNF	10.5	14.4	162	23.2	9.4	245	237	317
									242	322
									255	335
RF1481-08	5410	1/2" UNF	13.9	17.5	213	29.1	12.4	506	312	422
									320	430
									333	443

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Handle Kit			
RF1473-05	Handle kit, suits 5/16" threaded turnbuckle body combinations. Features 87mm (3 7/16") long handle for maximum tensioning leverage, and lift and re-position operation for ease of use or when rotation space is restricted. Handle snaps into snag-free locked position. Includes black plastic grip.	75	2.6
RF1473-05H	Black plastic upper grip for 5/16" threaded swage terminals	50	1.8

*1 Product supplied as the metric equivalent with metric wire code stamping.
*2 The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.



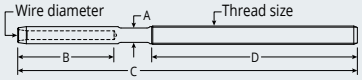
IMPERIAL DIMENSIONS

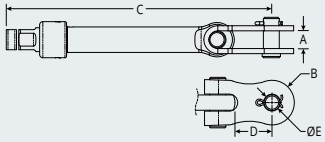
WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. lb	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. lb	THREAD SIZE	A in	B in	C in	D in	WEIGHT oz	TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. lb	THREAD SIZE	A in	B in	C in	D in	E in	WEIGHT oz	L MIN. in	L MAX.*2 in
Calibrated Turnbuckles - Imperial Wire																				
1/8"	1890	**RF1510-0404**	2860	1/4" UNF	3/16	1 9/16	5 1/4	2 15/16	0.8											
5/32"	2980	**RF1510-0504*1**	3250		1/4	1 3/8	5 1/2	2 15/16	1.1	**RF1481-04**	3250	1/4" UNF	9/32	3/8	4 9/16	21/32	1/4	2.7	6 13/16	9
																			5 1/8	9 3/8
5/32"	2980	**RF1510-0505*1**	3920	5/16" UNF	1/4	1 3/8	6	3 1/2	1.6										7 15/16	10 9/16
3/16"	4260	**RF1510-0605**	5190		9/32	2 3/16	6 1/2	3 1/2	2.0	**RF1481-05**	5190	5/16" UNF	11/16	15/32	5 7/16	13/16	5/16	5.1	8 3/8	11
3/16"	4260	**RF1510-0606**	5760	3/8" UNF	9/32	2 3/16	7 1/16	4 1/8	2.8										9 5/16	12 1/2
7/32"	5810	**RF1510-0706**	7870		3/8	2 3/8	7 5/16	4 1/8	3.2	**RF1481-06**	7870	3/8" UNF	13/32	19/32	6 3/8	29/32	3/8	8.6	9 9/16	12 11/16
1/4"	7580	**RF1510-0806**	7870		3/8	2 3/4	7 11/16	4 1/8	3.9										10 1/16	13 3/16
1/4"	7590	**RF1510-0808**	11792	1/2" UNF	7/16	2 3/4	9 5/8	5 5/8	6.9										12 1/4	16 5/8
9/32"	9090	**RF1510-0908*1**	11900		1/2	3 1/8	9 15/16	5 5/8	7.8	**RF1481-08**	11900	1/2" UNF	17/32	11/16	8 3/8	1 1/8	1/2	17.8	12 9/16	16 15/16
5/16"	11840	**RF1510-1008*1**	11900		9/16	3 1/2	10 1/2	5 5/8	9.1										13 1/8	17 7/16

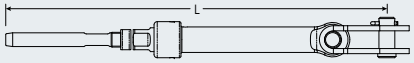
*1 Product supplied as the metric equivalent with metric wire code stamping.
*2 The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.

THREADED SWAGE TERMINAL

TOGGLE END TURNBUCKLE BODY & LOCK NUT





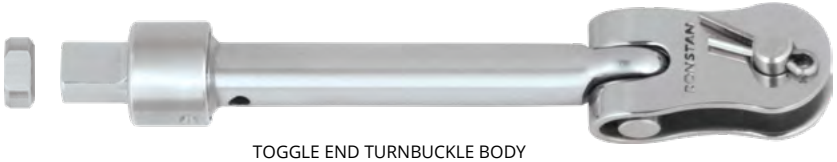


METRIC DIMENSIONS

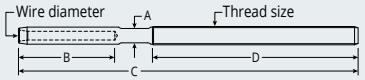
WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. kg	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	WEIGHT g	TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	L MIN. mm	L MAX.*2 mm
Swage/Toggle Turnbuckles - Metric Wire																				
3mm	760	**RF1512M0304**	1350	1/4" UNF	4.9	39.2	133	74	24	**RF1480-04**	1480	1/4" UNF	7.8	9.1	115	16.3	6.2	75	174	229
4mm	1350	**RF1512M0404**	1480		6.0	45.5	141	74	30										182	237
5mm	2120	**RF1512M0504*1**	1480		7.5	32.0	129	74	30										170	225
4mm	1350	**RF1512M0405**	1780	5/16" UNF	6.0	45.5	153	89	44	**RF1480-05**	2360	5/16" UNF	9.4	11.2	138	20.7	7.9	144	202	267
5mm	2120	**RF1512M0505**	2360		7.5	55.5	164	89	52										213	278
5mm	2120	**RF1512M0506**	2550	3/8" UNF	7.5	55.5	179	105	76	**RF1480-06**	3580	3/8" UNF	10.5	14.4	162	23.2	9.4	245	237	317
6mm	3020	**RF1512M0606**	3580		10.5	70.4	195	105	115										253	333
6mm	3020	**RF1512M0608**	5410	1/2" UNF	10.5	70.4	245	143	196	**RF1480-08**	5410	1/2" UNF	13.9	17.5	213	29.1	12.4	506	312	422
7mm	4120	**RF1512M0708**	5410		12.2	79.0	250	143	222										320	430
8mm	5380	**RF1512M0808**	5410		14.0	88.5	263	143	258										333	443
8mm	5380	**RF1512M0810**	7600	5/8" UNF	14.0	88.5	310	190	420	**RF1480-10**	8670	5/8" UNF	17.0	20.8	267	40.8	15.7	939	397	537
10mm	8420	**RF1512M1010**	8390		15.8	110.5	330	190	446										417	557
11mm	10570	**RF1512M1112**	10400	3/4"UNF	12.2	122.7	368	205	723	**RF1480-12**	12630	3/4"UNF	20.0	23.8	314	47.2	18.9	1495	480	640
12mm	12130	**RF1512M1212**	12140		12.2	140.4	386	205	755										498	658
14mm	16510	**RF1512M1414**	16520	7/8"UNF	14.4	157.9	436	234	1150	**RF1480-14**	17230	7/8"UNF	26.6	28.5	348	44.4	22.0	2444	553	733
16mm	21500	**RF1512M1616**	22450	1"UNF	18.0	176.7	473	240	1610	**RF1480-16**	22450	1"UNF	29.3	31.8	379	63.3	25.2	3468	617	797

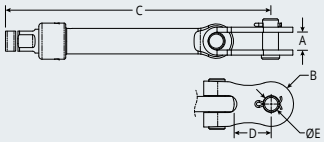
*1 Threaded swage terminal BL is below the typical BL of grade 1570 1x19 stainless steel wire.
*2 The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.
Note: Larger sizes available to order.

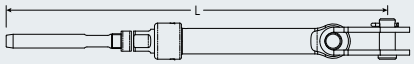
THREADED SWAGE TERMINAL



TOGGLE END TURNBUCKLE BODY & LOCK NUT







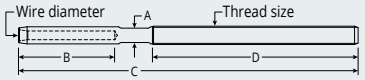
IMPERIAL DIMENSIONS

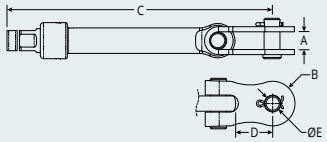
WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. lb	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. lb	THREAD SIZE	A in	B in	C in	D in	WEIGHT oz	TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. lb	THREAD SIZE	A in	B in	C in	D in	E in	WEIGHT oz	L MIN. in	L MAX.*2 in
Swage/Toggle Turnbuckles - Metric Wire																				
3mm	1670	**RF1512M0304**	2970	1/4" UNF	3/16	1 9/16	5 1/4	2 15/16	0.9											
4mm	2970	**RF1512M0404**	3250		1/4	1 3/8	5 1/2	2 15/16	1.1	**RF1480-04**	3250	1/4" UNF	9/32	3/8	4 9/16	5/8	1/4	2.7	5 1/8	9 3/8
5mm	4660	**RF1512M0504*1**	3250		9/32	1 1/4	5 1/16	2 15/16	1.1										6 11/16	8 7/8
4mm	2970	**RF1512M0405**	3910	5/16" UNF	1/4	1 3/8	6	3 1/2	1.6	**RF1480-05**	5190	5/16" UNF	11/32	15/32	5 7/16	25/32	5/16	5.1	7 15/16	10 9/16
5mm	4660	**RF1512M0505**	5190		9/32	2 3/16	6 1/2	3 1/2	1.8										8 3/8	11
5mm	4660	**RF1512M0506**	5610	3/8" UNF	9/32	2 3/16	7 1/16	4 1/8	2.9	**RF1480-06**	7870	3/8" UNF	13/32	19/32	6 3/8	29/32	3/8	8.6	9 5/16	12 1/2
6mm	6640	**RF1512M0606**	7870		7/16	2 3/4	7 11/16	4 1/8	4.1										9 15/16	13 1/8
6mm	6640	**RF1512M0608**	11900	1/2" UNF	7/16	2 3/4	9 5/8	5 5/8	6.8										12 5/16	16 5/8
7mm	9060	**RF1512M0708**	11900		1/2	3 1/8	9 7/8	5 5/8	7.8	**RF1480-08**	11900	1/2" UNF	17/32	11/16	8 3/8	1 1/8	1/2	17.8	12 9/16	16 15/16
8mm	11840	**RF1512M0808**	11900		9/16	3 1/2	10 3/8	5 5/8	8.5										13 1/8	17 7/16
8mm	11840	**RF1512M0810**	16720	5/8" UNF	9/16	3 1/2	12 3/8	7 1/2	14.8	**RF1480-10**	19070	5/8" UNF	21/32	27/32	10 7/8	1 5/8	5/8	33.1	15 5/8	21 3/16
10mm	18520	**RF1512M1010**	18450		5/8	4 3/8	13	7 1/2	15.7										16 7/16	21 15/16
11mm	23250	**RF1512M1112**	22880	3/4"UNF	1/2	4 13/16	14 1/2	8 1/16	25.5	**RF1480-12**	27780	3/4"UNF	25/32	15/16	12 3/8	1 7/8	3/4	52.7	18 15/16	25 3/16
12mm	26690	**RF1512M1212**	26700		1/2	5 1/2	15 3/16	8 1/16	26.6										19 5/8	25 15/16
14mm	36320	**RF1512M1414**	36340	7/8"UNF	9/16	6 1/4	17 3/16	9 1/4	40.6	**RF1480-14**	37900	7/8"UNF	1 1/32	1 1/8	13 11/16	1 3/4	7/8	86.2	21 3/4	28 7/8
16mm	47300	**RF1512M1616**	49390	1"UNF	3/4	6 15/16	18 5/8	9 7/16	56.8	**RF1480-16**	49390	1"UNF	1 1/8	1 1/4	14 15/16	2 1/2	1	122.3	24 5/16	31 3/8

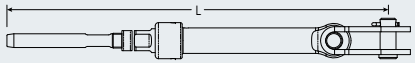
*1 Threaded swage terminal BL is below the typical B.L. of grade 1570 1x19 stainless steel wire.
*2 The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.
Note: Larger sizes available to order.

THREADED SWAGE TERMINAL

TOGGLE END TURNBUCKLE BODY & LOCK NUT





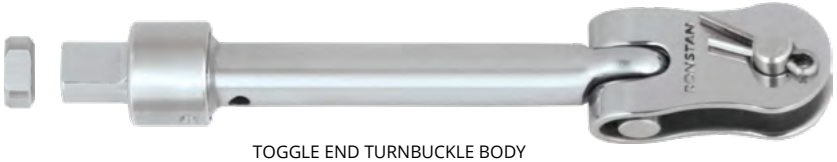


METRIC DIMENSIONS

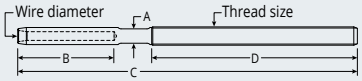
WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. kg	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	WEIGHT g	TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	L MIN. mm	L MAX.*3 mm
Swage/Toggle Turnbuckles - Imperial Wire																				
1/8″	860	**RF1510-0404**	1300	1/4″ UNF	4.9	39.2	133	74	22	**RF1480-04**	1480	1/4″ UNF	7.8	9.1	115	16.3	6.2	75	174	229
5/32″	1360	**RF1510-0504*2**	1480		6.0	45.5	141	74	30										182	237
3/16″	1940	**RF1510-0604*1**	1480		7.5	32.0	129	74	32										170	225
5/32″	1360	**RF1510-0505*2**	1780	5/16″ UNF	6.0	45.5	153	89	44	**RF1480-05**	2360	5/16″ UNF	9.4	11.2	138	20.7	7.9	144	202	267
3/16″	1940	**RF1510-0605**	2360		7.5	55.5	164	89	56										213	278
3/16″	1940	**RF1510-0606**	2620	3/8″ UNF	7.5	55.5	179	105	78	**RF1480-06**	3580	3/8″ UNF	10.5	14.4	162	23.2	9.4	245	237	317
7/32″	2640	**RF1510-0706**	3580		9.0	61.0	185	105	90										242	322
1/4″	3450	**RF1510-0806**	3580		9.0	70.4	195	105	110										255	335
1/4″	3450	**RF1510-0808**	5360	1/2″ UNF	10.5	70.4	245	143	196	**RF1480-08**	5410	1/2″ UNF	13.9	17.5	213	29.1	12.4	506	312	422
9/32″	4130	**RF1510-0908*2**	5410		12.2	79.0	253	143	222										320	430
5/16″	5380	**RF1510-1008*2**	5410		14.0	88.5	267	143	258										333	443
5/16″	5380	**RF1510-1010*2**	7600	5/8″ UNF	14.0	88.5	310	190	420	**RF1480-10**	8670	5/8″ UNF	17.0	20.8	276	40.8	15.7	939	397	537
3/8″	7590	**RF1510-1210**	8670		15.8	110.5	328	190	452										417	557
7/16″	10570	**RF1510-1412*2**	10400	3/4″UNF	12.2	122.7	368	205	723	**RF1480-12**	12630	3/4″UNF	20.0	23.8	314	47.2	18.9	1495	480	640
1/2″	13560	**RF1510-1614*1**	11360	7/8″UNF	14.4	140.4	410	234	1025	**RF1480-14**	17230	7/8″UNF	26.6	28.5	348	44.4	22.0	2444	523	703
9/16″	16510	**RF1510-1814*2**	16520		14.4	157.9	436	234	1150										553	733
5/8″	21510	**RF1510-2016*2**	22450	1″UNF	18.0	176.7	473	240	1610	**RF1480-16**	22450	1″UNF	29.3	31.8	379	63.3	25.2	3468	617	797

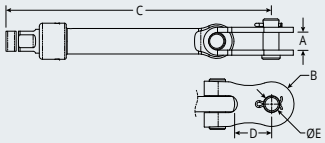
*1 Threaded swage terminal B.L. is below the typical B.L. of grade 1570 1x19 stainless steel wire.
*2 Product supplied as the metric equivalent with metric wire code stamping.
*3 The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.
Note: Larger sizes available to order.

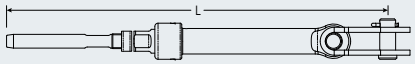
THREADED SWAGE TERMINAL



TOGGLE END TURNBUCKLE BODY & LOCK NUT



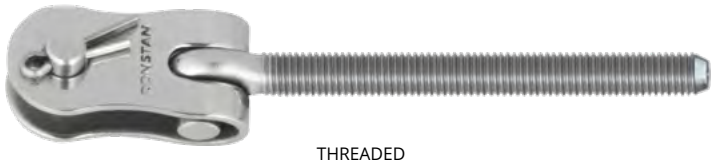




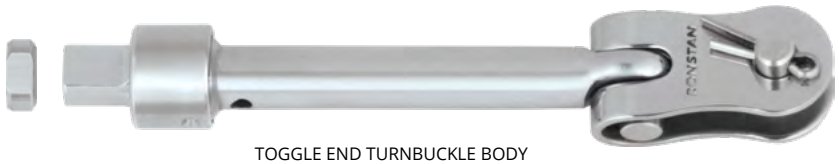
IMPERIAL DIMENSIONS

WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. lb	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. lb	THREAD SIZE	A in	B in	C in	D in	WEIGHT oz	TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. lb	THREAD SIZE	A in	B in	C in	D in	E in	WEIGHT oz	L MIN. in	L MAX.*3 in
Swage/Toggle Turnbuckles - Imperial Wire																				
1/8"	1890	**RF1510-0404**	2860	1/4" UNF	3/16	1 9/16	5 1/4	2 15/16	0.8	**RF1480-04**	3250	1/4" UNF	9/32	3/8	4 9/16	5/8	1/4	2.7	6 13/16	9
5/32"	2980	**RF1510-0504*2**	3250		1/4	1 3/8	5 1/2	2 15/16	1.1										5 1/8	9 3/8
3/16"	4260	**RF1510-0604*1**	3250		9/32	1 1/4	5 1/16	2 15/16	1.1										6 11/16	8 7/8
5/32"	2980	**RF1510-0505*2**	3916	5/16" UNF	1/4	1 3/8	6	3 1/2	1.6	**RF1480-05**	5190	5/16" UNF	3/8	15/32	5 7/16	25/32	5/16	5.1	7 15/16	10 9/16
3/16"	4260	**RF1510-0605**	5190		9/32	2 3/16	6 1/2	3 1/2	2.0										8 3/8	11
3/16"	4260	**RF1510-0606**	5764	3/8" UNF	9/32	2 3/16	7 1/16	4 1/8	2.8	**RF1480-06**	7870	3/8" UNF	13/32	19/32	6 3/8	29/32	3/8	8.6	9 5/16	12 1/2
7/32"	5810	**RF1510-0706**	7870		3/8	2 3/8	7 5/16	4 1/8	3.2										9 1/2	12 11/16
1/4"	7590	**RF1510-0806**	7870		3/8	2 3/4	7 11/16	4 1/8	3.9										10 1/16	13 3/16
1/4"	7590	**RF1510-0808**	11792	1/2" UNF	7/16	2 3/4	9 5/8	5 5/8	6.9	**RF1480-08**	11900	1/2" UNF	17/32	11/16	8 3/8	1 1/8	1/2	17.8	12 1/4	16 5/8
9/32"	9090	**RF1510-0908*2**	11900		1/2	3 1/8	9 15/16	5 5/8	7.8										12 9/16	16 15/16
5/16"	11840	**RF1510-1008*2**	11900		9/16	3 1/2	10 1/2	5 5/8	9.1										13 1/8	17 7/16
5/16"	11840	**RF1510-1010*2**	16720	5/8" UNF	9/16	3 1/2	12 3/8	7 1/2	14.8	**RF1480-10**	19070	5/8" UNF	21/32	27/32	10 7/8	1 5/8	5/8	33.1	15 5/8	21 3/16
3/8"	16700	**RF1510-1210**	19070		5/8	4 3/8	12 15/16	7 1/2	15.9										16 7/16	21 15/16
7/16"	23250	**RF1510-1412*2**	22880	3/4"UNF	1/2	4 13/16	14 5/8	8 1/16	25.5	**RF1480-12**	27780	3/4"UNF	25/32	15/16	12 3/8	1 7/8	3/4	52.7	18 15/16	25 3/16
1/2"	29830	**RF1510-1614*1**	24992	7/8"UNF	9/16	5 1/2	16 5/32	9 1/4	36.2	**RF1480-14**	37900	7/8"UNF	1 1/32	1 1/8	13 11/16	1 3/4	7/8	86.2	20 5/8	27 11/16
9/16"	36320	**RF1510-1814*2**	36344		9/16	6 1/4	17 5/8	9 1/4	40.6										21 3/4	28 7/8
5/8"	47320	**RF1510-2016*2**	49390	1"UNF	3/4	6 15/16	19	9 7/16	56.8	**RF1480-16**	49390	1"UNF	1 1/8	1 1/4	14 15/16	2 1/2	1	122.3	24 5/16	31 3/8

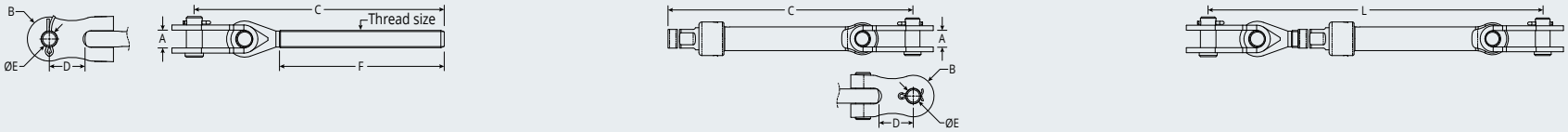
*1 Threaded swage terminal B.L. is below the typical B.L. of grade 1570 1x19 stainless steel wire.
*2 Product supplied as the metric equivalent with metric wire code stamping.
*3 The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.
Note: Larger sizes available to order.



THREADED
TOGGLE



TOGGLE END TURNBUCKLE BODY
& LOCK NUT



METRIC DIMENSIONS

WIRE DIAM.	THREADED TOGGLE PRODUCT No.	THREADED TOGGLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	F mm	WEIGHT g	TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	L MIN. mm	L MAX.* mm
Toggle/Toggle Turnbuckles																					
3mm, 4mm, 5mm 1/8", 5/32", 3/16"	RF1504-0404	1480	1/4" UNF	7.8	9.1	112	15.5	6.2	74.6	46	RF1480-04	1480	1/4" UNF	7.8	9.1	115	16.3	6.2	75	152	207
4mm, 5mm 5/32", 3/16"	RF1504-0505	2360	5/16" UNF	9.4	11.2	131	20.0	7.9	89.0	88	RF1480-05	2360	5/16" UNF	9.4	11.2	138	20.7	7.9	144	180	245
5mm, 6mm 3/16", 7/32", 1/4"	RF1504-0606	3580	3/8" UNF	10.5	14.4	154	20.8	9.4	104.8	160	RF1480-06	3580	3/8" UNF	10.5	14.4	162	23.2	9.4	245	212	292
6mm, 7mm, 8mm 1/4", 9/32", 5/16"	RF1504-0808	5410	1/2" UNF	13.9	17.5	212	28.0	12.4	142.8	358	RF1480-08	5410	1/2" UNF	13.9	17.5	213	29.1	12.4	506	282	392

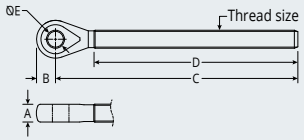
IMPERIAL DIMENSIONS

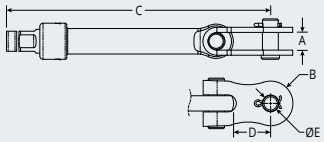
		lb		in	in	in	in	in	in	oz		lb		in	in	in	in	in	oz	in	in
Toggle/Toggle Turnbuckles																					
3mm, 4mm, 5mm 1/8", 5/32", 3/16"	RF1504-0404	3250	1/4" UNF	9/32	3/8	4 3/8	5/8	1/4	2 15/16	1.6	RF1480-04	3250	1/4" UNF	9/32	3/8	4 9/16	5/8	1/4	2.7	6	8 1/8
4mm, 5mm 5/32", 3/16"	RF1504-0505	5190	5/16" UNF	3/8	7/16	5 3/16	13/16	5/16	3 1/2	3.1	RF1480-05	5190	5/16" UNF	11/32	15/32	5 7/8	25/32	5/16	5.1	7 1/16	9 5/8
5mm, 6mm 3/16", 7/32", 1/4"	RF1504-0606	7870	3/8" UNF	13/32	9/16	6 1/16	29/32	3/8	4 1/8	5.6	RF1480-06	7870	3/8" UNF	13/32	19/32	6 3/8	29/32	3/8	8.6	8 3/8	11 1/2
6mm, 7mm, 8mm 1/4", 9/32", 5/16"	RF1504-0808	11900	1/2" UNF	9/16	11/16	8 3/8	1 1/8	1/2	5 5/8	12.6	RF1480-08	11900	1/2" UNF	17/32	11/16	8 3/8	1 1/8	1/2	17.8	11 1/8	15 7/16

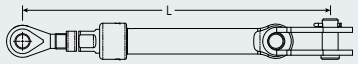
* The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.
Note: Larger sizes available to order.

THREADED
EYE

TOGGLE END TURNBUCKLE BODY
& LOCK NUT







METRIC DIMENSIONS

WIRE DIAM.	THREADED EYE PRODUCT No.	THREADED EYE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	L MIN. mm	L MAX.* mm
Eye/Toggle Turnbuckles																				
3mm, 4mm, 5mm 1/8", 5/32", 3/16"	**RF1502-0404**	1480	1/4" UNF	4.6	5.7	88	75	6.5	19	**RF1480-04**	1480	1/4" UNF	7.8	9.1	115	16.3	6.2	75	130	185
4mm, 5mm 5/32", 3/16"	**RF1502-0505**	2360	5/16" UNF	6.1	9.0	102	87	8.1	37	**RF1480-05**	2360	5/16" UNF	9.4	11.2	138	20.7	7.9	144	150	215
5mm, 6mm 3/16", 7/32", 1/4"	**RF1502-0606**	3580	3/8" UNF	7.7	10.5	126	105	9.7	73	**RF1480-06**	3580	3/8" UNF	10.5	14.4	162	23.2	9.4	245	178	258

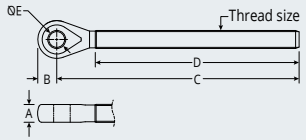
IMPERIAL DIMENSIONS

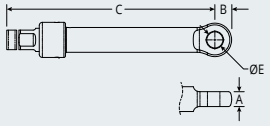
		lb		in	in	in	in	in	oz		lb		in	in	in	in	in	oz	in	in
Eye/Toggle Turnbuckles																				
3mm, 4mm, 5mm 1/8", 5/32", 3/16"	**RF1502-0404**	3250	1/4" UNF	3/16	7/32	3 1/2	2 15/16	1/4	0.7	**RF1480-04**	3250	1/4" UNF	9/32	3/8	4 9/16	5/8	1/4	2.7	5 1/8	7 5/16
4mm, 5mm 5/32", 3/16"	**RF1502-0505**	5190	5/16" UNF	1/4	11/32	4	3 7/16	5/16	1.3	**RF1480-05**	5190	5/16" UNF	11/32	15/32	5 7/8	25/32	5/16	5.1	5 15/16	8 1/2
5mm, 6mm 3/16", 7/32", 1/4"	**RF1502-0606**	7870	3/8" UNF	5/16	13/32	4 15/16	4 1/8	3/8	2.6	**RF1480-06**	7870	3/8" UNF	13/32	19/32	6 3/8	29/32	3/8	8.6	7	10 3/16

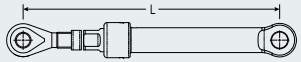
* The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.

THREADED
EYE

EYE END TURNBUCKLE BODY
& LOCK NUT







METRIC DIMENSIONS

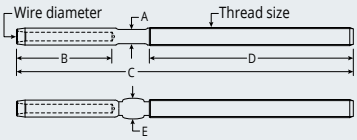
WIRE DIAM.	THREADED EYE PRODUCT No.	THREADED EYE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	EYE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	L MIN. mm	L MAX.* mm
Eye/Eye Turnbuckles																				
3mm, 4mm, 5mm 1/8", 5/32", 3/16"	**RF1502-0404**	1480	1/4" UNF	4.6	5.7	88	75	6.5	19	**RF1484-04**	1480	1/4" UNF	4.6	7.0	92	-	6.5	48	107	162
4mm, 5mm 5/32", 3/16"	**RF1502-0505**	2360	5/16" UNF	6.1	9.0	102	87	8.1	37	**RF1484-05**	2360	5/16" UNF	6.1	8.8	109	-	8.1	93	121	186
5mm, 6mm 3/16", 7/32", 1/4"	**RF1502-0606**	3580	3/8" UNF	7.7	10.5	126	105	9.7	73	**RF1484-06**	3580	3/8" UNF	7.7	9.8	129	-	9.7	153	145	225

IMPERIAL DIMENSIONS

		lb		in	in	in	in	in	oz		lb		in	in	in	in	in	oz	in	in
Eye/Eye Turnbuckles																				
3mm, 4mm, 5mm 1/8", 5/32", 3/16"	**RF1502-0404**	3250	1/4" UNF	3/16	7/32	3 1/2	2 15/16	1/4	0.7	**RF1484-04**	3250	1/4" UNF	3/16	9/32	3 5/8	-	1/4	1.7	4 3/16	6 3/8
4mm, 5mm 5/32", 3/16"	**RF1502-0505**	5190	5/16" UNF	1/4	11/32	4	3 7/16	5/16	1.3	**RF1484-05**	5190	5/16" UNF	1/4	11/32	4 5/16	-	5/16	3.3	4 3/4	7 5/16
5mm, 6mm 3/16", 7/32", 1/4"	**RF1502-0606**	7870	3/8" UNF	5/16	13/32	4 15/16	4 1/8	3/8	2.6	**RF1484-06**	7870	3/8" UNF	5/16	3/8	5 1/8	-	3/8	5.4	5 11/16	8 7/8

* The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.

THREADED SWAGE TERMINAL

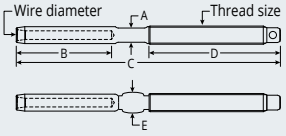


THREADED SWAGE TERMINAL PRODUCT No.	WIRE DIAM.	THREAD SIZE	SUITS TYPE 10 TURNBUCKLE BODY	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
Threaded Swage Terminals - Metric Wire						METRIC DIMENSIONS						IMPERIAL DIMENSIONS			
RF1512M0304	3mm	1/4" UNF	RF1480-04 RF1481-04	4.9	39.2	133	74	6.4	24	7/32	1 9/16	5 1/4	2 15/16	1/4	0.9
RF1512M0404	4mm			6.0	45.5	141	74	7.5	30	1/4	1 3/8	5 1/2	2 15/16	5/16	1.1
RF1512M0504*1	5mm			7.5	32.0	129	74	9.1	30	5/16	2 3/16	5 1/16	2 15/16	3/8	1.1
RF1512M0405	4mm	5/16" UNF	RF1480-05 RF1481-05	6.0	45.5	153	89	7.5	44	1/4	1 3/8	6	3 1/2	5/16	1.6
RF1512M0505	5mm			7.5	55.5	164	89	9.1	52	5/16	2 3/16	6 1/2	3 1/2	3/8	1.8
RF1512M0506	5mm	3/8" UNF	RF1480-06 RF1481-06	7.5	55.5	179	105	9.1	76	5/16	2 3/16	7 1/16	4 1/8	3/8	2.9
RF1512M0606	6mm			10.5	70.4	195	105	12.5	115	7/16	2 3/4	7 11/16	4 1/8	1/2	4.1
RF1512M0608	6mm	1/2" UNF	RF1480-08	10.5	70.4	245	143	12.5	194	7/16	2 3/4	9 5/8	5 5/8	1/2	6.8
RF1512M0708	7mm			12.2	79.0	250	143	14.3	222	1/2	3 1/8	9 7/8	5 5/8	9/16	7.8
RF1512M0808	8mm			14.0	88.5	263	143	16.1	258	9/16	3 1/2	10 3/8	5 5/8	21/32	8.5
RF1512M0810	8mm	5/8" UNF	RF1480-10	14.0	88.5	310	190	16.1	420	9/16	3 1/2	12 3/8	7 1/2	21/32	14.8
RF1512M1010	10mm			15.8	110.5	330	190	17.9	446	5/8	4 3/8	13	7 1/2	23/32	15.7
RF1512M1112	11mm	3/4"UNF	RF1480-12	12.2	122.7	368	205	20.7	723	1/2	4 13/16	14 1/2	8 1/16	13/16	25.5
RF1512M1212	12mm			12.2	140.4	386	205	21.4	755	1/2	5 1/2	15 3/16	8 1/16	27/32	26.6
RF1512M1414	14mm	7/8"UNF	RF1480-14	14.4	157.9	436	234	25.0	1150	9/16	6 1/4	17 3/16	9 1/4	1	40.6
RF1512M1616	16mm	1"UNF	RF1480-16	18.0	176.7	473	240	28.2	1610	3/4	6 15/16	18 5/8	9 7/16	1 1/8	56.8
Threaded Swage Terminals - Imperial Wire															
RF1510-0404	1/8"	1/4" UNF	RF1480-04 RF1481-04	4.9	39.2	133	74	6.4	22	7/32	1 9/16	5 1/4	2 15/16	1/4	0.8
RF1510-0504*2	5/32"			6.0	45.5	141	74	7.5	30	1/4	1 3/8	5 1/2	2 15/16	5/16	1.1
RF1510-0604*1	3/16"			7.5	32.0	129	74	9.1	32	5/16	1 1/4	5 1/16	2 15/16	3/8	1.1
RF1510-0505*2	5/32"	5/16" UNF	RF1480-05 RF1481-05	6.0	45.5	153	89	7.5	44	1/4	1 3/8	6	3 1/2	5/16	1.6
RF1510-0605	3/16"			7.5	55.5	164	89	9.1	56	5/16	2 3/16	6 1/2	3 1/2	3/8	2.0
RF1510-0606	3/16"	3/8" UNF	RF1480-06 RF1481-06	7.5	55.5	179	105	9.1	78	5/16	2 3/16	7 1/16	4 1/8	3/8	2.8
RF1510-0706	7/32"			9.0	61.0	185.0	105	10.8	90	3/8	2 3/8	7 5/16	4 1/8	7/16	3.2
RF1510-0806	1/4"			9.0	70.4	195.0	105	12.5	110	3/8	2 3/4	7 11/16	4 1/8	1/2	3.9
RF1510-0808	1/4"	1/2" UNF	RF1480-08	10.5	70.4	245	143	12.5	196	7/16	2 3/4	9 5/8	5 5/8	1/2	6.9
RF1510-0908*2	9/32"			12.2	79.0	253	143	14.3	222	1/2	3 1/8	9 15/16	5 5/8	9/16	7.8
RF1510-1008*2	5/16"			14.0	88.5	267	143	16.1	258	9/16	3 1/2	10 1/2	5 5/8	21/32	9.1
RF1510-1010*2	5/16"	5/8" UNF	RF1480-10	14.0	88.5	310	190	16.1	420	9/16	3 1/2	12 3/8	7 1/2	21/32	14.8
RF1510-1210	3/8"			15.8	110.5	328	190	17.9	452	5/8	4 3/8	12 15/16	7 1/2	23/32	15.9
RF1510-1412*2	7/16"	3/4"UNF	RF1480-12	12.2	122.7	368	205	20.7	723	1/2	4 13/16	14 1/2	8 1/16	13/16	25.5
RF1510-1614*1	1/2"	7/8"UNF	RF1480-14	14.4	140.4	423	234	24.0	1025	9/16	5 1/2	16 5/8	9 1/4	31/32	36.2
RF1510-1814*2	9/16"			14.4	157.9	436	234	25.0	1150	9/16	6 1/4	17 3/16	9 1/4	1	40.6
RF1510-2016*2	5/8"	1"UNF	RF1480-16	18.0	176.7	473	240	28.2	1610	3/4	6 15/16	18 5/8	9 7/16	1 1/8	56.8

*1 Threaded swage terminal BL is below the typical BL of grade 1570 1x19 stainless steel wire.
*2 Product supplied as the metric equivalent with metric wire code stamping.
Note: Larger sizes available to order.

SHORT THREADED SWAGE TERMINALS

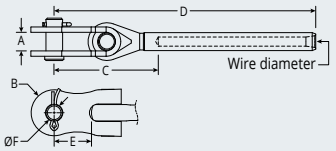
SHORT THREADED SWAGE TERMINAL



THREADED SWAGE TERMINAL PRODUCT No.	WIRE DIAM.	THREAD SIZE	SUITS OPEN BODY TURNBUCKLE*3	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						METRIC DIMENSIONS						IMPERIAL DIMENSIONS			
RF1519M0304	3mm	1/4" UNF	RF1532M0304	4.9	39.2	109	56.0	6.4	21	3/16	1 9/16	4 5/16	2 3/16	1/4	0.7
RF1519M0404	4mm		RF1532M0404	6.0	45.5	123	56.0	7.5	25	1/4	1 3/8	4 13/16	2 3/16	5/16	0.9
RF1519M0504*1	5mm		RF1532M0504	7.5	55.5	134	56.0	9.1	35	9/32	2 3/16	5 1/4	2 3/16	3/8	1.2
RF1519M0405	4mm	5/16" UNF	RF1532M0405	6.0	45.5	123	60.0	7.5	40	1/4	1 3/8	4 7/8	2 3/8	5/16	1.4
RF1519M0505	5mm		RF1532M0505	7.5	55.5	135	60.0	9.1	44	9/32	2 3/16	5 5/16	2 3/8	3/8	1.6
RF1519M0506	5mm	3/8" UNF	RF1532M0506	7.5	55.5	144	70.0	9.1	60	9/32	2 3/16	5 5/8	2 3/4	3/8	2.1
RF1519M0606	6mm		RF1532M0606	10.5	70.4	160	70.0	12.5	92	7/16	2 3/4	6 5/16	2 3/4	1/2	3.3
RF1519M0608	6mm	1/2" UNF	RF1532M0608	10.5	70.4	177	80.0	12.5	141	7/16	2 3/4	7	3 1/8	1/2	5.0
RF1519M0708	7mm		RF1532M0708	12.2	79.0	193	80.0	14.3	172	1/2	3 1/8	7 5/8	3 1/8	9/16	6.1
RF1519M0808	8mm		RF1532M0808	14.0	88.5	200	80.0	16.1	202	9/16	3 1/2	7 7/8	3 1/8	21/32	7.1
RF1519M0810	8mm	5/8" UNF	RF1532M0810	14.0	88.5	219	98.0	16.1	290	9/16	3 1/2	8 5/8	3 7/8	21/32	10.2
RF1519M1010	10mm		RF1532M1010	15.8	110.5	238	98.0	17.9	313	5/8	4 3/8	9 3/8	3 7/8	23/32	11.1
RF1519M1112	11mm	3/4" UNF	RF1532M1112	12.2	122.7	280	125.0	20.7	500	1/2	4 13/16	11	4 15/16	13/16	17.7
RF1519M1212	12mm		RF1532M1212	12.2	140.4	306	125.0	20.7	597	1/2	5 1/2	12 1/16	4 15/16	13/16	21.1
RF1519M1414	14mm	7/8" UNF	RF1532M1414	14.4	157.9	346	144.0	25.0	916	9/16	6 3/16	13 5/8	5 11/16	1	32.4
RF1519M1616	16mm	1" UNF	RF1532M1616	18.0	176.7	388	158.0	28.0	1323	3/4	6 15/16	15 1/4	6 1/4	1 1/8	46.7
Threaded Swage Terminals - Imperial Wire															
RF1518-0404	1/8"	1/4" UNF	RF1531-0404	4.9	39.2	109	56.0	6.4	21	3/16	1 9/16	4 5/16	2 3/16	1/4	0.7
RF1518-0504*2	5/32"		RF1531-0504	6.0	45.5	123	56.0	7.5	25	1/4	1 3/8	4 13/16	2 3/16	5/16	0.9
RF1518-0604*1	3/16"		RF1531-0604	7.5	55.5	134	56.0	9.1	35	9/32	2 3/16	5 1/4	2 3/16	3/8	1.2
RF1518-0505*2	5/32"	5/16" UNF	RF1531-0505	6.0	45.5	123	60.0	7.5	40	1/4	1 3/8	4 7/8	2 3/8	5/16	1.4
RF1518-0605	3/16"		RF1531-0605	7.5	55.5	135	60.0	9.1	44	9/32	2 3/16	5 5/16	2 3/8	3/8	1.6
RF1518-0606	3/16"	3/8" UNF	RF1531-0606	7.5	55.5	144	70.0	9.1	60	9/32	2 3/16	5 5/8	2 3/4	3/8	2.1
RF1518-0706	7/32"		RF1531-0706	9.0	61.0	150	70.0	10.8	70	3/8	2 3/8	5 7/8	2 3/4	7/16	2.5
RF1518-0806	1/4"		RF1531-0806	10.5	70.4	160	70.0	12.5	94	3/8	2 3/4	6 5/16	2 3/4	1/2	3.3
RF1518-0808	1/4"	1/2" UNF	RF1531-0808	10.5	70.4	177	80.0	12.5	139	7/16	2 3/4	7	3 1/8	1/2	4.9
RF1518-0908*2	9/32"		RF1531-0908	12.2	79.0	193	80.0	14.3	172	1/2	3 1/8	7 5/8	3 1/8	9/16	6.1
RF1518-1008*2	5/16"		RF1531-1008	14.0	88.5	200	80.0	16.1	202	9/16	3 1/2	7 7/8	3 1/8	21/32	7.1
RF1518-1010*2	5/16"	5/8" UNF	RF1531-1010	14.0	88.5	219	98.0	16.1	290	9/16	3 1/2	8 5/8	3 7/8	21/32	10.2
RF1518-1210	3/8"		RF1531-1210	15.8	110.5	238	98.0	17.9	323	5/8	4 3/8	9 3/8	3 7/8	23/32	11.4
RF1518-1412*2	7/16"	3/4" UNF	RF1531-1412	12.2	122.7	280	125.0	20.7	500	1/2	4 13/16	11	4 15/16	13/16	17.7
RF1518-1614*1	1/2"	7/8" UNF	RF1531-1614	14.4	140.4	331	144.0	24.0	758	9/16	5 1/2	13	5 11/16	31/32	26.8
RF1518-1814*2	9/16"		RF1531-1814	14.4	157.9	346	144.0	25.0	916	9/16	6 3/16	13 5/8	5 11/16	1	32.4
RF1518-2016*2	5/8"	1" UNF	RF1531-2016	18.0	176.7	388	158.0	27.4	1323	23/32	6 31/32	15 9/32	6 1/8	1 3/32	46.7

*1 Threaded swage terminal BL is below the typical BL of grade 1570 1x19 stainless steel wire.
*2 Product supplied as the metric equivalent with metric wire code stamping.
*3 'Open Body' turnbuckles discontinued in 2017.

TOGGLE SWAGE TERMINAL

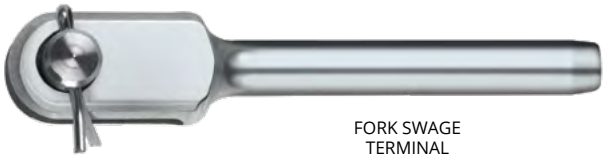


PRODUCT No.	WIRE DIAM.	A mm	B mm	C mm	D mm	E mm	F mm	WEIGHT g	A in	B in	C in	D in	E in	F in	WEIGHT oz
Toggle Swage Terminals - Metric Wire															
RF1507M0304	3mm	7.8	9.1	37.9	77.0	16.8	6.2	44	5/16	11/32	1 1/2	3 1/32	21/32	1/4	1.6
RF1507M0404	4mm	7.8	9.1	43.2	87.1	16.8	6.2	44	5/16	11/32	1 11/16	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
RF1507M1112	11mm	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
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	1460	1 1/32	1 1/8	4 3/4	10 31/32	1 3/4	7/8	51.5
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
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*2	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*2	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*2	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*2	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*2	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*2	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*2	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
RF1506-2016*2	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

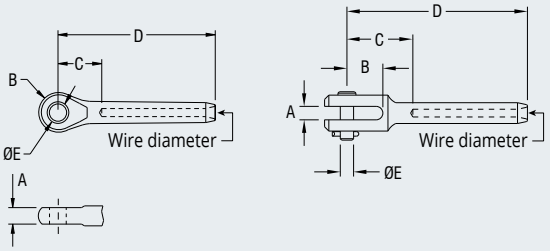
*1 Toggle swage terminal BL is below the typical BL of grade 1570, 1x19 stainless steel wire.
*2 Product supplied as the metric equivalent with metric wire code stamping.
Note: Larger sizes available to order.

EYE SWAGE TERMINALS, FORK SWAGE TERMINALS

EYE SWAGE TERMINAL



FORK SWAGE TERMINAL



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
RF1501M1112	11mm	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
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
Eye Swage Terminals - Imperial Wire													
RF1500-0303*	3/32"	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	1/8"	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"	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"	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"	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"	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"	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*	9/32"	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*	5/16"	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*	5/16"	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"	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"	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"	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"	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*	5/8"	25.0	27.2	58.1	234.8	25.8	1070	1	11/16	2 3/8	9 1/4	1	29.6

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
Fork Swage Terminals - Metric Wire													
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
Fork Swage Terminals - Imperial Wire													
RF1508-0404	1/8"	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*	5/32"	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"	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

* Product supplied as the metric equivalent with metric wire code stamping.

PRODUCT No.	THREAD TYPE
Lock Nuts, R/H Thread	
RF1415-04	1/4" UNF
RF1415-05	5/16" UNF
RF1415-06	3/8" UNF
RF1415-08	1/2" UNF
RF1415-10	5/8" UNF
RF1415-12	3/4" UNF
RF1415-14	7/8" UNF
RF1415-16	1" UNF

LOCK NUT,
R/H THREAD

Grade 316 stainless steel.

SWAGING DIMENSIONS

Correct installation of a swage fitting requires that the swage portion of the fitting be formed down onto the wire with specialised dies and presses in accordance with the following dimensions:

WIRE DIAM. mm	CODE mm	LENGTH OF WIRE INSIDE SWAGE mm	O.D. BEFORE SWAGING mm	O.D. AFTER SWAGING mm	TOLERANCE ON O.D. mm
Swaging Dimensions - Metric Wire					
2.5	2.5M	32.3	5.54	4.83	+0, -0.13
3.0	03M	38.4	6.35	5.56	+0, -0.13
4.0	04M	45.0	7.54	6.35	+0, -0.13
5.0	05M	55.0	9.12	7.95	+0, -0.13
5.6	-	60.5	10.85	9.53	+0, -0.18
6.0	06M	70.0	12.55	11.13	+0, -0.18
7.0	07M	78.5	14.30	12.70	+0, -0.20
8.0	08M	88.0	16.13	14.30	+0, -0.20
10.0	10M	110.0	17.86	15.88	+0, -0.20
11.0	-	122.0	19.84	17.48	+0, -0.20
12.0	12M	140.0	21.44	19.05	+0, -0.23
14.0	14M	157.0	24.99	22.23	+0, -0.23
16.0	16M	176.0	28.17	25.40	+0, -0.26

WIRE DIAM. in	CODE in	LENGTH OF WIRE INSIDE SWAGE in	O.D. BEFORE SWAGING in	O.D. AFTER SWAGING in	TOLERANCE ON O.D. in
Swaging Dimensions - Imperial Wire					
3/32	03	1.27	0.218	0.190	+0, -0.005
1/8	04	1.51	0.250	0.219	+0, -0.005
5/32	05	1.77	0.297	0.250	+0, -0.005
3/16	06	2.17	0.359	0.313	+0, -0.005
7/32	07	2.38	0.427	0.375	+0, -0.007
1/4	08	2.76	0.494	0.438	+0, -0.007
9/32	09	3.09	0.563	0.500	+0, -0.008
5/16	10	3.46	0.635	0.563	+0, -0.008
3/8	12	4.33	0.703	0.625	+0, -0.008
7/16	14	4.80	0.781	0.688	+0, -0.008
1/2	16	5.51	0.844	0.750	+0, -0.009
9/16	18	6.18	0.984	0.875	+0, -0.009
5/8	20	6.93	1.109	1.000	+0, -0.010

PINS & RINGS

SPLIT RINGS
RF113
RF114

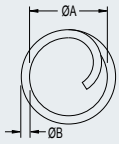
SPLIT RINGS
RF686
RF687
RF688

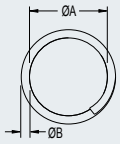
RETAINING CLIP
RF413

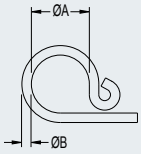
CLEVIS PINS

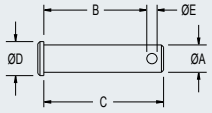
FAST PIN
RF5310

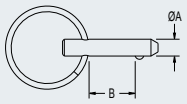
TOGGLE PINS

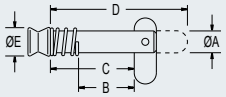












PRODUCT No.	SUITS CLEVIS PINS	DESCRIPTION	A mm	B mm	WEIGHT g	A in	B in	WEIGHT oz
Split Rings & Clips								
RF113	RF259 - RF266	Split ring	9.5	1.0	1	3/8	1/32	0.1
RF114	RF260 - RF266	Split ring	11.1	1.3	2	7/16	1/16	0.1
RF413	RF267 - RF274	Retaining clip	16.0	2.7	3	5/8	3/32	0.1
RF686	RF260 - RF274	Split 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												
RF115 x 1/2	6.4	7.8*	17.4	32.5	7.9	10	1/4	5/16*	11/16	1 9/32	5/16	0.4
RF115 x 5/8	6.4	11.2*	20.8	35.9	7.9	10	1/4	7/16*	13/16	1 13/32	5/16	0.4
RF115 x 3/4	6.4	14.2*	23.8	38.9	7.9	10	1/4	9/16*	15/16	1 17/32	5/16	0.4
RF115 x 1	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
RF115 x 1 1/4	6.4	27.1*	36.7	51.8	7.9	13	1/4	1 1/16*	1 7/16	2	5/16	0.5

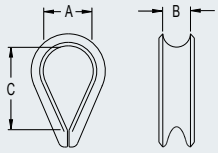
*Maximum thickness of material the toggle pin can pass through, allowing correct toggle operation.

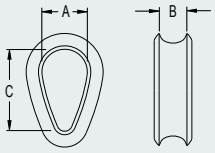
THIMBLES

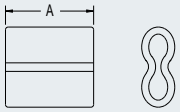
SAILMAKER THIMBLES

COPPER FERRULES

- Copper ferrules are nickel plated for aesthetic appearance and long-term weather resistance.

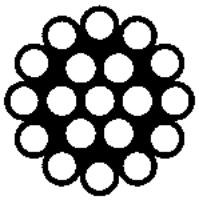






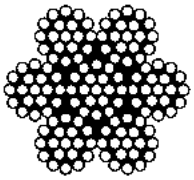
PRODUCT No.	WIRE DIAM. mm	A mm	B mm	C mm	WEIGHT g	WIRE DIAM. in	A in	B in	C in	WEIGHT oz
Thimbles - Stainless Steel										
RF481	2.5	9.0	3.0	16	2	3/32	11/32	1/8	5/8	0.1
RF482	3.0	10.0	4.0	18	2	1/8	3/8	5/32	23/32	0.1
RF483	4.0	11.0	5.0	19	5	5/32	7/16	3/16	3/4	0.2
RF484	5.0	13.0	6.0	23	5	3/16	1/2	1/4	29/32	0.2
RF485	6.0, 7.0	19.0	9.0	36	15	1/4, 9/32	3/4	11/32	1 3/8	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

STAINLESS STEEL WIRE



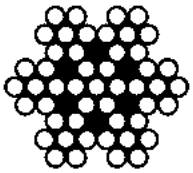
1 X 19
CONSTRUCTION
19 single strands

- 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)

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 as load increases. Where stretch is critical to the application, initial stretch can be accounted for with cables stretched (pre-stressed) during swaging and cable manufacturing. Elastic stretch can be estimated by the following formula:

Elastic stretch (mm) = $\frac{W \times L}{E \times A}$

where:
W = Applied load (kN)
L = Cable length (mm)
E = Strand modulus (kN/mm^2)
A = Metallic Cross Sectional Area (mm^2) as indicated in the tables below

Typical values for E are:

1 x 19	127 kN/mm^2 (18.42 x 10^6 P.S.I.)
7 x 19	97.1 kN/mm^2 (14.08 x 10^6 P.S.I.)
7 x 7	106 kN/mm^2 (15.37 x 10^6 P.S.I.)

PRODUCT No.	WIRE DIAM. mm	A mm^2	REEL LENGTH m	B.L.*3 kg	WEIGHT PER METRE kg	A in^2	REEL LENGTH ft	B.L.*3 lb	WEIGHT PER 100ft lb
1 x 19 Grade 316 Stainless Steel (Tensile Strength Grade 1570 N/mm^2)*1									
WR6119-1.5M	1.5	1.3	305	180	0.012	0.002	1000	397	0.77
WR6119-02M	2.0	2.3	305	330	0.020	0.004	1000	728	1.37
WR6119-2.5M	2.5	3.7	305	530	0.032	0.006	1000	1168	2.14
WR6119-03M	3.0	5.4	305	760	0.046	0.008	1000	1675	3.09
WR6119-04M	4.0	9.6	305	1350	0.082	0.015	1000	2975	5.49
WR6119-05M	5.0	15.0	305	2100	0.128	0.023	1000	4630	8.61
WR6119-06M	6.0	21.5	305	3020	0.184	0.033	1000	6657	12.37
WR6119-07M	7.0	29.2	305	4130	0.250	0.045	1000	9105	16.81
WR6119-08M	8.0	38.2	305	5380	0.320	0.059	1000	11860	21.92
WR6119-10M	10.0	59.7	305	8420	0.510	0.093	1000	18562	34.29
WR6119-12M	12.0	86.0	305	12130	0.734	0.133	1000	26742	49.35
WR6119-14M	14.0	117.0	305	16510	1.000	0.181	1000	36398	67.24
WR6119-16M	16.0	153.0	305	21510	1.310	0.237	1000	47421	88.09
7 x 19 Grade 316 Stainless Steel									
WR6719-1.5M	1.5	1.2	305	150	0.009	0.002	1000	331	0.62
WR6719-02M	2.0	2.0	305	250	0.016	0.003	1000	551	1.10
WR6719-2.5M	2.5	3.2	305	380	0.026	0.005	1000	838	1.72
WR6719-03M	3.0	4.6	305	540	0.037	0.007	1000	1191	2.47
WR6719-04M	4.0	8.2	305	960	0.066	0.013	1000	2117	4.40
WR6719-05M	5.0	12.9	305	1480	0.103	0.020	1000	3263	6.90
WR6719-06M	6.0	18.5	305	2150	0.148	0.029	1000	4740	9.92
WR6719-07M	7.0	25.1	305	2920	0.201	0.039	1000	6439	13.47
WR6719-08M	8.0	32.8	305	3810	0.262	0.051	1000	8401	17.55
WR6719-10M	10.0	51.3	305	5960	0.410	0.080	1000	13140	27.47
WR6719-12M	12.0	73.8	305	8600	0.590	0.114	1000	18960	39.53
WR6719-14M	14.0	100.5	305	11690	0.804	0.156	1000	25772	53.87
WR6719-16M	16.0	131.3	305	14450	1.050	0.204	1000	31857	70.35
7 x 7 Grade 316 Stainless Steel									
WR677-03M	3.0	4.2	305	580	0.037	0.007	1000	1279	2.35
WR677-04M	4.0	7.5	305	1040	0.066	0.012	1000	2293	4.23
WR677-03MP*2	3.0	4.2	305	580	0.055	0.007	1000	1279	4.84

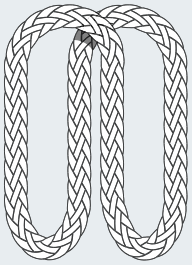
*1 Larger diameters available on request.
*2 Wire diameter excludes PVC Coating, Ø including PVC = 5.0mm
*3 Cable Breaking Load: does not include the typical 10% reduction in cable strength due to swaging. B.L. ratings are for standard Ronstan mill-ordered, and stocked wire. From time to time wire may be sourced from other suppliers and ratings may vary.

SOFT LINKS & SOFT SHACKLES

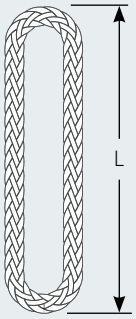
SOFT LINK

SOFT SHACKLE

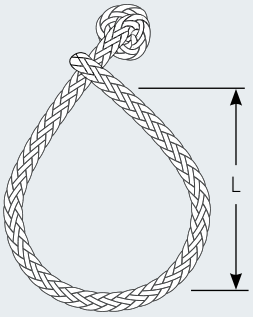
Robline
World Class Yachting Ropes



Basket Load



Vertical Load



- Small diameter puller line allows for easy removal after soft shackle being loaded.
- Lightweight and easy on the boat.
- Alternative to traditional metal shackles.
- SK98 Dyneema® Soft Links.
- UHMWPE Soft Shackles.
- XG coating for UV stability and resistance to abrasion.

PRODUCT No.	DESCRIPTION	WHERE USED	DIAM. mm	L mm	B.L.* BASKET kg	B.L.* VERTICAL kg	WEIGHT g	DIAM. in	L in	B.L.* BASKET lb	B.L.* VERTICAL lb	WEIGHT oz
Soft Links												
RF9003-07	Soft Link	S30 Double & Triple, S40 Single & Fiddle Blocks	3.0	70	1200	600	1	1/8	2 3/4	2645	1320	0.1
RF9004-08	Soft Link	S40 Single & Fiddle, S55 Single & Fiddle Blocks	4.0	76	1800	900	1	5/32	3	2970	1985	0.1
RF9004-09	Soft Link	S40 Double & Triple Blocks	4.0	95	1800	900	2	5/32	3 3/4	2970	1985	0.1
RF9004-11	Soft Link		4.0	110	1800	900	2	5/32	4 11/32	2970	1985	0.1
RF9004-13	Soft Link	RC72541	4.0	128	1800	900	2	5/32	5 2/16	2970	1985	0.1
RF9005-10	Soft Link	S55 Double & Triple Blocks	5.0	100	2400	1200	3	3/16	3 15/16	5290	2645	0.1
RF9006-12	Soft Link		6.0	120	3400	1700	5	1/4	4 3/4	7495	3750	0.2
Soft Shackles												
DSH-2.5GRY	Soft Shackle		2.5	50	-	450	10	3/32	1 31/32	-	990	0.4
DSH-4GRY	Soft Shackle		4.0	65	-	1000	15	5/32	2 9/16	-	2200	0.6
DSH-6GRY	Soft Shackle		6.0	90	-	1700	18	1/4	3 17/32	-	3750	0.7
DSH-9GRY	Soft Shackle		9.0	100	-	3000	20	11/32	3 15/16	-	6610	0.7
DSH-12GRY	Soft Shackle		12.0	70	-	5000	40	1/2	2 3/4	-	11020	1.4
DSH-14GRY	Soft Shackle		14.0	100	-	7000	60	9/16	3 15/16	-	15430	2.2

* Considerations: Published breaking loads are based on as new condition. Fatigue, wear and UV exposure will deteriorate performance.
Inspect regularly and replace if there are significant amount of wear or fibre damage.
Attach to a mounting point with a smooth, well rounded profile without sharp edges or burrs.

ORIGINAL ANDERSEN BAILERS

OUTSIDE MOUNT


RA554130


RA554136


RA574153
RA574154

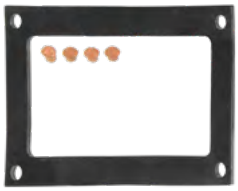
INSIDE MOUNT


RA554131


RA435200


RA554132


RA554133



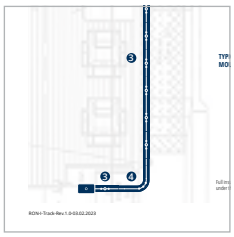

RA574150
RA574151
RA574152

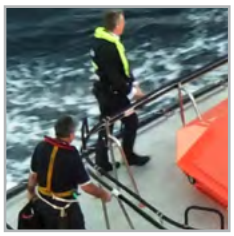
- Recognised as the industry standard for automatic bailers.
- Ingenious design uses venturi effect to produce suction and maximise water transfer – simply open the bailer when the boat is sailing at adequate speed to drain. Close when stationary or at low speed.
- Available in outside mount and inside mount models.
- Inside mount models have a plastic grate to prevent lines being sucked out.
- Robust stainless steel construction, provides long trouble free service life.
- Bailer and service kit installation instructions are available in the SUPPORT section at ***www.ronstan.com***.
- Effective means of automatic bailing for dinghies and small one design keelboats.
- Install on port and starboard sides for optimum bailing on both tacks.
- RA435200 Super Mini Special bailer is designed for racing dinghies where the bailer is operated from a hiking position.
- Stainless steel construction.
- Rubber gaskets.

PRODUCT No.	DESCRIPTION	SIZE OF DRAINAGE OPENING mm²	FLANGE SIZE mm	CUTOUT HOLE mm	NOMINAL HULL THICKNESS mm	WEIGHT g	SIZE OF DRAINAGE OPENING in²	FLANGE SIZE in	CUTOUT HOLE in	NOMINAL HULL THICKNESS in	WEIGHT oz	SERVICE KIT
Bailers - Outside Mount												
RA554130	Mini	255	56 x 92	38 x 73	4	100	0.395	2 1/4 x 3 5/8	1 1/2 x 2 7/8	5/32	3.5	RA574153
RA554136	Large	435	80 x 142	41 x 104	4	275	0.674	3 3/16 x 5 9/16	1 5/8 x 4 1/8	5/32	9.7	RA574154
Bailers - Inside Mount												
RA435200	Super Mini Special*	250	61 x 106	40 x 85	7	175	0.387	2 7/16 x 4 3/16	1 5/8 x 3 3/8	1/4	6.2	RA574150
RA554131	Super Mini	250	61 x 106	40 x 85	7	175	0.387	2 7/16 x 4 3/16	1 5/8 x 3 3/8	1/4	6.2	RA574150
RA554132	Super Medium	350	67 x 135	43 x 110	7	275	0.543	2 11/16 x 5 5/16	1 3/4 x 4 3/8	1/4	9.7	RA574151
RA554133	Super Max	540	78 x 135	54 x 110	7	320	0.837	3 1/8 x 5 5/16	2 1/8 x 4 3/8	1/4	11.3	RA574152

Service Kits	
RA574150	Service kit to suit Super Mini bailer (RA54131). Includes internal and external gaskets, rivets
RA574151	Service kit to suit Super Medium bailer (RA554131). Includes internal and external gaskets, rivets
RA574152	Service kit to suit Super Max bailer (RA554133). Includes internal and external gaskets, rivets
RA574153	Service kit to suit Mini bailer (RA554130). Includes internal gasket
RA574154	Service kit to suit Large bailer (RA554136). Includes internal gasket

*Super Mini Special is designed for racing dinghies where the bailer is operated from a hiking position using a control line.





WORK BOAT SAFETY SYSTEM

INCREASED PROTECTION & CREW SAFETY

The Ronstan Series 32 I-Track Safety System is designed to provide protection and safety for crew on commercial work boats when working on deck or outside the safety of the vessel's cabin.

The system has been tried and proven on many commercial vessels including but not limited to pilot boats, fire and rescue boats, police and military patrol boats and commercial fishing boats.

The safety system provides a method of attachment for use in conjunction with personal fall protection equipment to protect crew against falls and overboard situations and allows freedom to move about the work boat uninhibited and with ease in any sea conditions.

Thoroughly tested at the factory and in the field, our Series 32 I-Track Safety System meets the requirements of the Australian National Standards for Commercial Vessels (NSCV), Part C, Section 1, 6.17.3 (Pilot Launch – Equipment) and 6.12.7.5.6 (Clipping point strength).

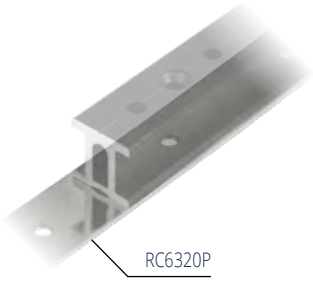
MODULAR SYSTEM FOR EASE OF SPECIFICATION AND INSTALLATION

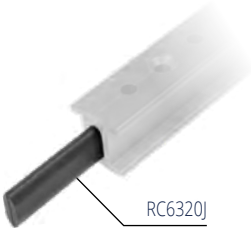
To achieve greater economy with the flexibility to adapt, we have created a modular system of standard components that make it easy to design, specify and install these systems to a wide range of commercial vessels.

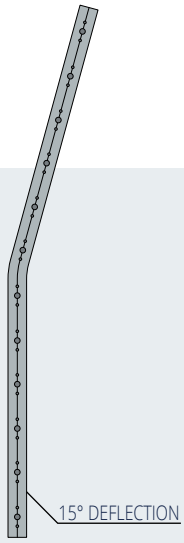
For designers and builders, 2D and 3D drawings are available to assist and ensure it's a Ronstan Safety System that you next specify. Customised track rails are available for vessels where standard track rail corners are not suitable.

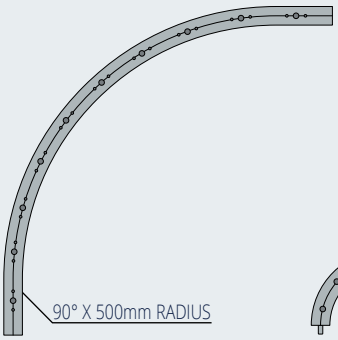
Features

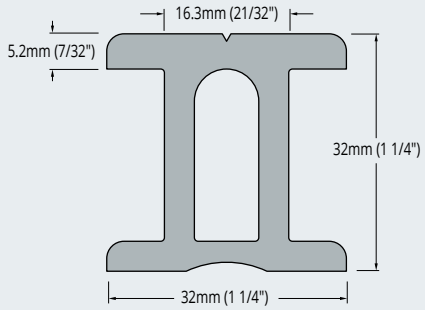
- Track rails, rigid profile, marine grade black anodised aluminium (AL6061-T6).
- Track rails available in standard straight and curved lengths easily adapted to suit many work boat deck plans.
- 90-degree corner, 500mm radius bend can be trimmed to adapt to the required angle. These are primarily used for corners found at the front of the cabin.
- 90-degree corner, 125mm radius bend. These tight radius corners are excellent for applications where space on the side deck is limited or where track rails need to traverse around sharp corners.
- 15-degree track rail deflection lengths. These can be used where angle changes occur along the cabin side.
- Cars have strong grade 316 stainless steel bodies with flared sides and angled stainless steel bearing wheels to provide high load capacity, smooth operation, and require minimal maintenance.
- Cars are available in free running and plunger lock configurations with large lanyard take off points for easy attachment.











RC6320 TRACK PROFILE

- Strong stainless steel bodies.
- Flared sides and angled ball bearing wheels provide high load capacity and smooth operation.
- Please see ronstan.com for custom track bending.
- Meets the requirements of the Australian National Standards for Commercial Vessels (NSCV), Part C, Section 1, 6.17.3 (Pilot Launch – Equipment) and 6.12.7.5.6 (Clipping point strength).
- Commercial work boats and pilot boats.
- Grade 316 stainless steel car bodies, wheels, bearing races, and fixtures.
- Grade AL6061-T6 aluminium alloy track.

TRACK FASTENINGS – M6 (1/4") countersunk fasteners at 100mm (3 15/16") centres. Unsupported fastening span no greater than 1500mm (59 1/16"). Each span or join must be supported by a minimum of two fastenings at each end at a maximum of 100mm (3 15/16") centres.

Grade 316 stainless steel fasteners with a nominal minimum strength of 700MPa (101ksi), installed at a torque setting of no more than 7.1Nm (5.2 ft lbf) as per industry standards.

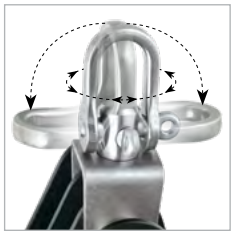
Strength of substrate, backing plates, brackets must be designed to support a minimum 600kg (1320lb) ultimate static load.

STOP HOLES – 50mm (2") centres.

Full installation, usage and maintenance details available under the SUPPORT tab at ***www.ronstan.com***.

PRODUCT No.	DESCRIPTION	LENGTH mm	WEIGHT g	LENGTH in	WEIGHT oz
Series 32 I-Track Safety System					
RC63202	Car, saddle top	76	320	3	11.3
RC63221	Car, single attachment point, plunger stop	76	461	3	16.3
RC63286	End stop, rubber buffer	98	260	3 7/8	9.2
Track – Supplied with RC7320-INS nylon track bolt insulators					
RC6320-1.0*	Track, 996mm (39 3/16"), black	996	1210	39 3/16	42.8
RC6320-1.5*	Track, 1496mm (58 7/8"), black	1496	1810	58 7/8	64.0
RC6320-2.0*	Track, 1996mm (78 9/16"), black	1996	2410	78 9/16	85.2
RC6320-3.0*	Track, 2996mm (117 15/16"), black	2996	3620	117 15/16	127.9
RC6320R125A	Track, 293mm (11 9/16"), black, 90° x 125mm radius, horizontal A-bend	293	444	11 9/16	15.7
RC6320R500A*	Track, 1196mm (47 1/16"), black, 90° x 500mm radius, horizontal A-bend	1196	1470	47 1/16	51.8
RC6320R515A*	Track, 1996mm (78 9/16"), black, 15° deflection, horizontal A-bend	1996	2410	78 9/16	85.2
RC6320P	Track splice plate, stainless steel	340	255	13 3/8	9.0
RC6320J	Track joiner	90	14	3 9/16	0.5
RC7320-INS	Track bolt insulator	-	3	-	0.1

*For standard length track rails, as delivered from the manufacturer, the centre of the last mounting hole at each end of the track rail is located at 48mm (1 29/32") from the end, and the distance between fasteners across a track join will be 96mm (3 25/32"). The distance between the two fasteners at the end of each track rail, whether across a join or at an end, must never exceed 100mm (3 15/16").

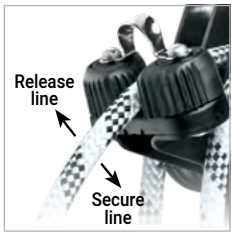

Swivelling & pivoting shackle head


Clevis pin shackle option


Removable becket pins


Durable, UV stabilised sheaves


Aluminium Rope/Wire sheave (S75)



Simple and secure rope cleating

INDUSTRIAL PULLEY BLOCKS

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 is available for use with wire rope. Ronstan Industrial Blocks are load rated and are backed by a full factory warranty.

Swivelling and pivoting shackle head

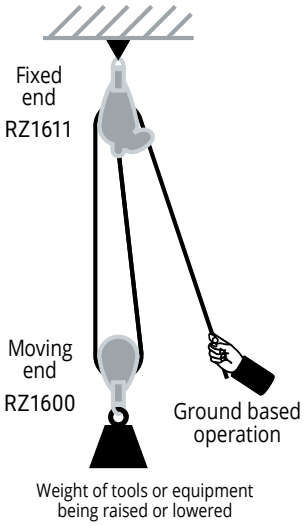
Allows easy attachment and correct alignment of the pulley block. Shackle pins are drilled for use of security wire. The option of shackle with clevis pin and retaining ring is available in Series 75 - order as RZxxxxC. Provides tool-free attachment and removal.

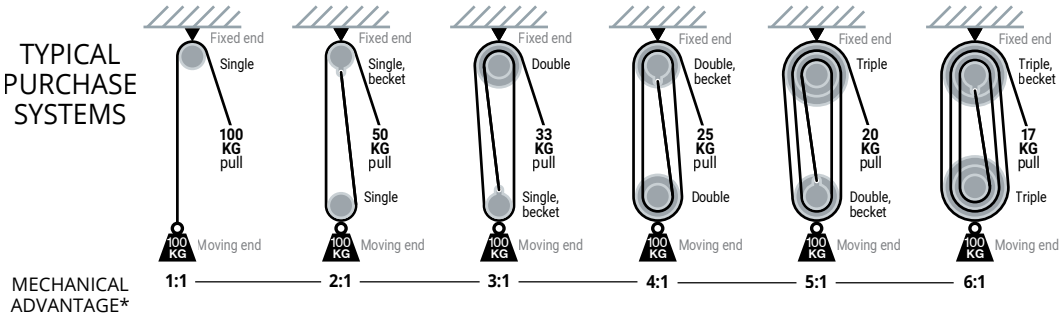
Removable becket to suit pre-spliced lines

Pre-spliced lines are neat, compact and provide greater security and strength than knotted terminations. Beckets on all Ronstan Industrial Blocks are removable to accommodate the use of pre-spliced lines.

Simple and secure rope holding

Blocks fitted with cam cleats provide a simple means of holding the rope. Just pull the rope through the spring-loaded jaws, which prevent the rope from slipping back. Flick the rope up and out of the jaws to release. A stainless steel eye strap keeps the rope in position ready for re-cleating.





- Load rated.
- Fully articulating head/attachment.
- Durable, low friction acetal polymer sheave.
- RZ1611 has a cleating angle of 60° from the mounting plane and is ideal for 'remote' operation as in the case of a ground based assistant raising tools or equipment to an overhead worker.
- 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 and fastenings.

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, 6mm (1/4") screw pin with security wire hole	-	-	6	1000*2	2000*2	25	-	-	1/4	2200*2	4410*2	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
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	600*1	2000	705	2 3/8	1/2	1/4	1320*1	4410	24.9
RZ1611	Single block, becket, 60˚cleat, swivel shackle head	60	12	6	600*1	2000	795	2 3/8	1/2	1/4	1320*1	4410	28.1

*1 MWL based on maximum allowable line load through cleat of 300kg (660lb), 2:1 purchase.
*2 Uniformly distributed load on shackle; i.e. load applied across the full width of the shackle pin. See page 200 for full details.

SERIES 75

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
RZ1700AW	Single block, swivel shackle head, aluminium rope/wire sheave	75	8	8	1500	3000	740	3	5/16	5/16	3300	6600	26.1
RZ1703	Single block, becket, swivel shackle head	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, becket, swivel shackle head	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, becket, swivel shackle head	75	14	8	1500	3000	1325	3	9/16	5/16	3300	6600	46.7

- Load rated.
- Fully articulating head/attachment.
- Easy to service removable sheaves (bolt & nylon-insert nut).
- Durable, low friction acetal polymer sheave.
- Heavy duty aluminium sheave models available ('AW' suffix) or by conversion with RZ1000AW sheave.
- Blocks available to order with clevis pin and retaining ring shackle head.
- UV stabilised acetal sheaves.
- Aluminium sheave on 'AW' models.
- Grade 316 stainless steel side plate/cheeks, powder coated black.
- Fibre reinforced polymer rope cleats.
- Grade 316 stainless steel head, shackle and fasteners.

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													
RZ1707	Single block, becket, 30° cleat, swivel shackle head	75	14	8	600*1	3000	955	3	9/16	5/16	1320*1	6600	33.7
RZ1710	Triple block, becket, 30° cleat, swivel shackle head	75	14	8	1500*2	3000	1565	3	9/16	5/16	3300*2	6600	55.2

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. WIRE mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in	MAX. WIRE in	MAX. ROPE in	M.W.L. lb	B.L. lb	WEIGHT oz
Accessories													
RF618H	Shackle, 7.9mm (5/16") diameter screw pin with security wire hole	-	-	-	1500*3	3300*3	50	-	-	-	3300*3	6600*3	1.5
RZ1000	Sheave, acetal (POM)	75	-	14	-	-	70	3	-	9/16	-	-	2.5
RZ1000AW	Sheave, aluminium with composite bearing	75	8	-	-	-	180	3	9/16	-	-	-	6.4

*1 MWL based on maximum allowable static line load through cleat of 300kg (660lb), 2:1 purchase. Controlled release of loaded line will only be possible at lower loads that are within the user's capability for manual handling.
*2 Line load not to exceed static load of 300kg through cleat. Controlled release of loaded line will only be possible at lower loads that are within the user's capability for manual handling.
*3 Uniformly distributed load on shackle; i.e. load applied across the full width of shackle pin. See page 200 for full details.








SAFETY RAIL SYSTEMS

A HIGHER STANDARD OF SAFETY

Track and car systems and single point anchorage 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.

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 their everyday work, and has developed Safety Rail & Single Point Anchorage systems which have been tested to the relevant European and Australian Standards. Testing for conformity to these standards is witnessed by a Recognised Organisation, member of the International Association of Classification Societies (IACS).

Purpose

Ronstan Fall Protection 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 motor yachts or other vessels. They should not be used for any other purpose.

Features

SAFETY RAIL SYSTEMS

- Certified to European Standard EN795:2012, Type D for single person use (S22 system also certified to European Technical Specification CEN/TS16415:2013 Type D for multiple users and Australian Standard AS1891.2:2001, Part 2).
- 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 repositioning 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.

SINGLE POINT ANCHORAGE SYSTEMS

- Removable Screw-In padeye anchorages are certified to the European standard EN795:2012, Type A, , for single person use, as well as the Australian standards AS1891.4.2009 & AS5532:2013.
- Marine grade 316 stainless steel structural anchor base, screw-in anchor device and identification plate.
- Identification plate features the unique serial number.
- The screw-in anchor device can be removed from the structural anchor base when not in use for safety or maintenance. It should always be locked to the base when in use with the locking screw.

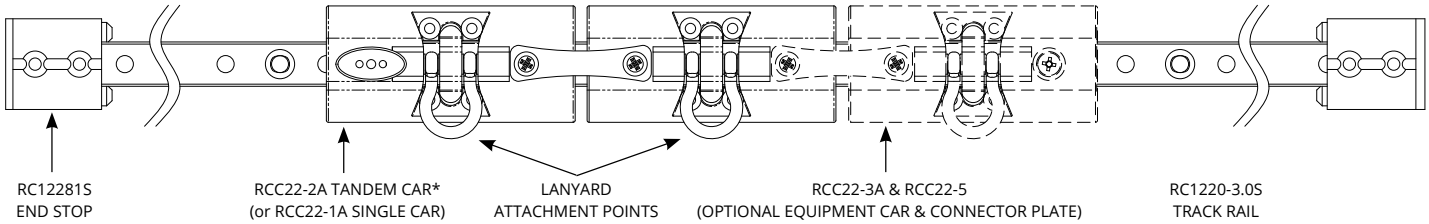
SAFETY RAIL SYSTEM
SYSTEM DESCRIPTION

The complete Safety Rail System consists of the following components:

- One track rail with stop holes at 50mm centres and mounting holes at 100mm centres (centre of the last mounting hole at each end of the track rail is located 48mm from the end).
- A single car assembly for an S30 system, or for a S22 system a maximum of 3 independent car assemblies, with each car assembly dedicated to an individual user and incorporating a spring-loaded plunger.
  - Each individual car has a single attachment point for personal protection equipment.
  - The spring-loaded plunger allows the car assembly to be fixed in position at any of the stop holes in the track rail. The 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. The joining insert should be 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 with the connector plate.
- Optional end stop cover plates.
- Black or silver anodised cars and track.



* Tandem car is required if the user's weight while working or accessing the work site is supported by the car, as the tandem car provides separate attachment points for both the working line and fall arrest safety line, as recommended in the EN363 standard: Personal fall protection equipment - Personal fall protection systems.

TRACK RAIL MOUNTED IN VERTICAL PLANE

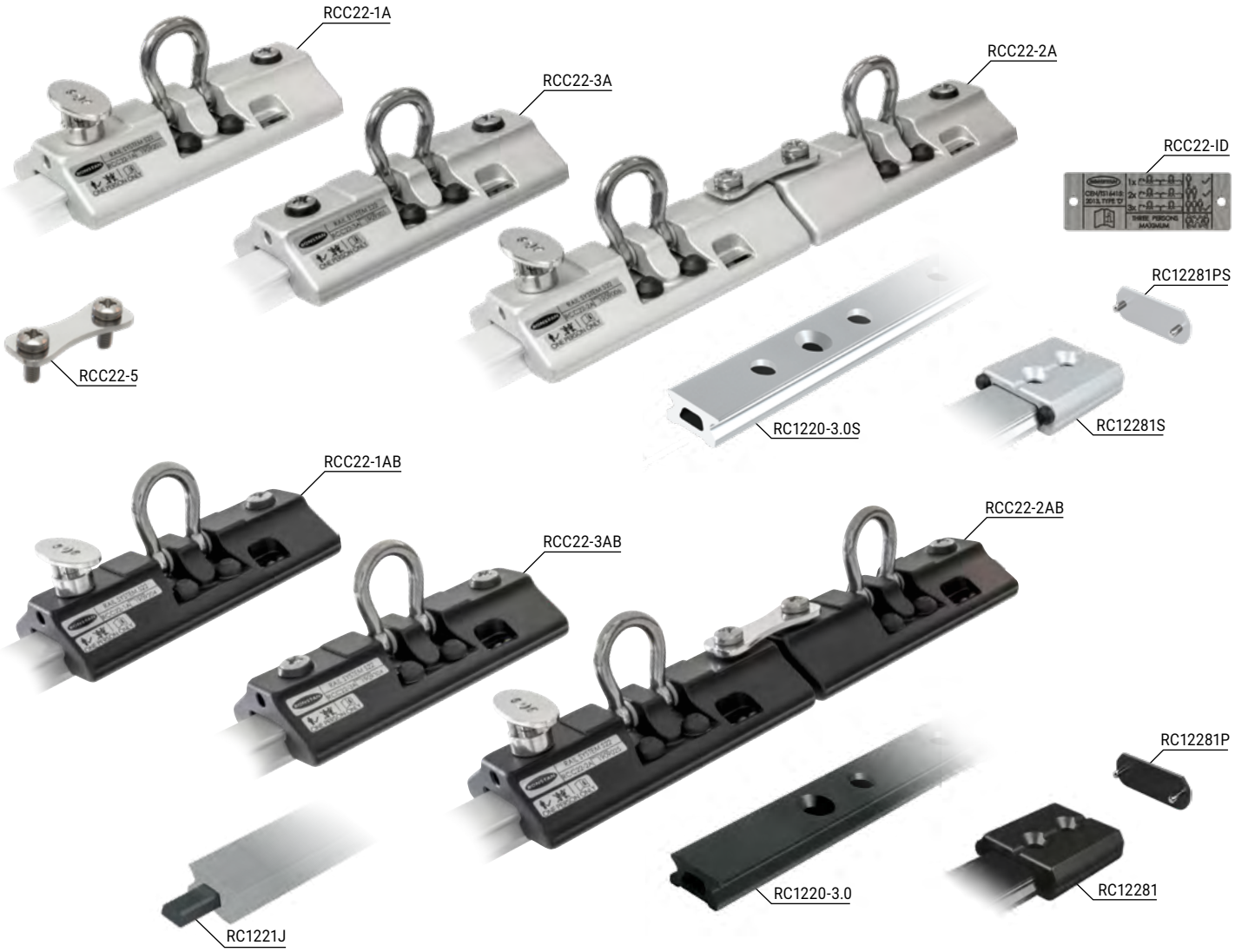
TRACK RAIL MOUNTED IN HORIZONTAL PLANE

IMPORTANT ADVICE

Ronstan Fall Protection Systems are tested and certified to relevant European and Australian Standards, and are appropriate for single person use (or, for S22 Safety Rail Systems, up to a maximum of three simultaneous users, with one dedicated car for each individual user) with an energy absorber to the EN355 standard. Testing for conformity to these standards is witnessed by a Recognised Organisation, member of the International Association of Classification Societies (IACS).

These systems must only be used with personal protection equipment (harnesses, lanyards, fall arresters and other devices) that are approved to the relevant standards for such equipment, such as EN363. Each harness or device must be secured to a separate attachment point. Full product range details can be found at ***www.ronstan.com***. Installation, usage and maintenance information is available under the **SUPPORT** tab on the site.

SERIES 22

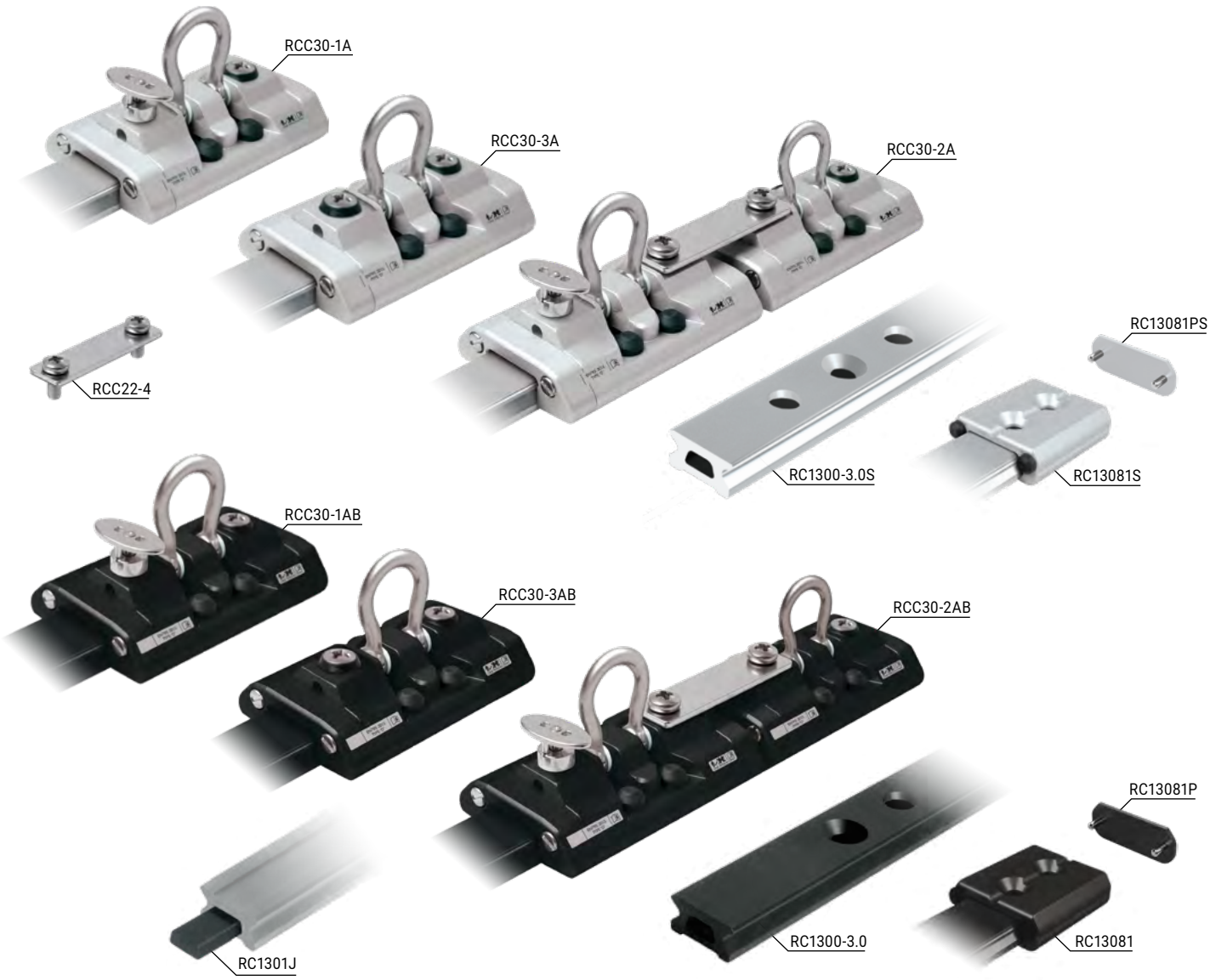


Full installation, usage and maintenance details available under the **SUPPORT** tab at ***www.ronstan.com***.

- Certified to European Standard EN795:2012 Type D and European Technical Specification CEN/TS16415:2013 Type D for a maximum of three simultaneous users, and Australian Standard AS1891.2.2001, Part 2.
- 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.	DESCRIPTION	LENGTH mm	WIDTH mm	WEIGHT g	LENGTH in	WIDTH in	WEIGHT oz
Series 22 Safety Rail System							
RCC22-1A	Single car, 1 attachment point, plunger stop, silver	124	58	252	4 7/8	2 5/16	8.9
RCC22-1AB	Single car, 1 attachment point, plunger stop, black	124	58	252	4 7/8	2 5/16	8.9
RCC22-2A	Tandem car, 2 attachment points, plunger stop, silver	254	58	504	10	2 5/16	17.8
RCC22-2AB	Tandem car, 2 attachment points, plunger stop, black	254	58	504	10	2 5/16	17.8
RCC22-3A	Single car, 1 attachment point, silver	124	58	234	4 7/8	2 5/16	8.3
RCC22-3AB	Single car, 1 attachment point, black	124	58	234	4 7/8	2 5/16	8.3
RCC22-5	Connector plate, including screws	-	-	37	-	-	1.3
RC1221J	Track rail joiner	-	-	4	-	-	0.1
RC12281S	Track rail end stop, silver	50	45	50	1 31/32	1 25/32	1.8
RC12281	Track rail end stop, black	50	45	50	1 31/32	1 25/32	1.8
RC1220-3.0S	Track rail, silver, 2996mm	2996	22	1380	117 15/16	7/8	48.7
RC1220-3.0	Track rail, black, 2996mm	2996	22	1380	117 15/16	7/8	48.7
RC12281P	End stop cover plate, including screws, black	-	45	5	-	1 25/32	0.2
RC12281PS	End stop cover plate, including screws, silver	-	45	5	-	1 25/32	0.2
RCC22-ID*	CEN/TS16415:2013 Type 'D' Multi-User Identification Plate	88	30	-	3 15/32	1 3/16	-

* If multiple car assemblies are installed on a continuous run of track rail, the multi-user ID plate RCC22-ID must be displayed at the user entry point(s) of the system (typically adjacent to an end stop), to indicate the maximum number of simultaneous users allowed.



Full installation, usage and maintenance details available under the **SUPPORT** tab at ***www.ronstan.com***.

- Certified to European Standard EN795:2012 Type D for single person use..
- Low friction.
- Anti-clatter rubber buffers.
- Lock up/down track position plunger stop.
- Suitable for curved track installations with a radius of no less than 2500mm (8'2")
- Anodised aluminium car bodies and track.
- Torlon® ball bearings.
- Grade 316 shackle, plunger stop, pivot pin, fasteners and connector plate.

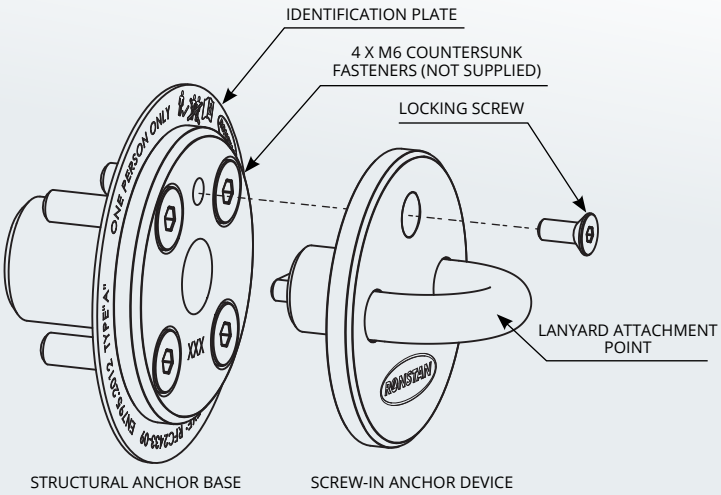
PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	WEIGHT g	LENGTH in	WIDTH in	WEIGHT oz
Series 30 Safety Rail System							
RCC22-4	Connector plate, including screws	-	-	37	-	-	1.3
RCC30-1A	Single car, 1 attachment point, plunger stop, silver	104	77	364	4 1/8	3	12.9
RCC30-1AB	Single car, 1 attachment point, plunger stop, black	104	77	364	4 1/8	3	12.9
RCC30-2A	Tandem car, 2 attachment points, plunger stop, silver	215	77	720	8 1/2	3	25.4
RCC30-2AB	Tandem car, 2 attachment points, plunger stop, black	215	77	720	8 1/2	3	25.4
RCC30-3A	Single car, 1 attachment point, silver	104	77	328	4 1/8	3	11.6
RCC30-3AB	Single car, 1 attachment point, black	104	77	328	4 1/8	3	11.6
RC1301J	Track rail joiner	-	-	10	-	-	0.4
RC13081S	Track rail end stop, silver	58	55	89	2 9/32	2 3/16	3.1
RC13081	Track rail end stop, black	58	55	89	2 9/32	2 3/16	3.1
RC1300-3.0S	Track rail, silver, 2996mm	2996	30	2430	117 15/16	1 3/16	85.7
RC1300-3.0	Track rail, black, 2996mm	2996	30	2430	117 15/16	1 3/16	85.7
RC13081P	End stop cover plate, including screws, black	-	55	16	-	2 3/16	0.6
RC13081PS	End stop cover plate, including screws, silver	-	55	16	-	2 3/16	0.6

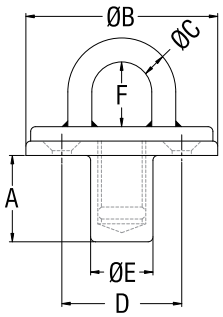
REMOVABLE SCREW-IN PADEYE

SCREW-IN PADEYE
SYSTEM DESCRIPTION

The Removable Screw-In Padeye Anchor Device consists of two parts:

- A structural anchor base which is permanently fixed to the structure.
- A screw-in anchor for connection of personal protection equipment.
  - The structural anchor base is to be permanently fastened to the structure using 4 x M6 fasteners.
  - The screw-in anchor is attached to the structural anchor base by means of a central threaded spigot. Once fully threaded in place the anti-rotation locking screw must be engaged to ensure that the anchor cannot unintentionally become detached from the structural anchor base.
  - The screw-in anchor has a single attachment point for personal protection equipment.





- Certified to European Standard EN795:2012 Type A for single person use and Australian Standards AS1891.4:2009 & AS5532:2013.
- Screw-in anchor for lanyard attachment can be removed from the base when not in use.
- Separate locking screw ensures that the screw-in anchor for lanyard attachment remains secure when in use.
- A threaded plug remains in the base when the screw-in anchor is removed to prevent dirt and grit from entering the threads.
- Grade 316 stainless steel throughout for maximum corrosion resistance and longevity.

PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	F mm	WEIGHT g
METRIC DIMENSIONS								
Removable Screw-In Padeye Anchor Device								
RFC2433-09	Certified, Screw-In Padeye, 9mm Bar	29.0	70	9.0	26.9	14.0	23.2	303

PRODUCT No.	DESCRIPTION	A in	B in	C in	D in	E in	F in	WEIGHT oz
IMPERIAL DIMENSIONS								
Removable Screw-In Padeye Anchor Device								
RFC2433-09	Certified, Screw-In Padeye, 11/32" Bar	1 5/32	2 3/4	11/32	1 1/16	9/16	29/32	10.7

INTRODUCING RONSTAN ORBIT WINCHES™

THE ORBIT WINCH™ STORY

Laying the foundation for a new range of aluminium self-tailing winches, we were able to draw on years of experience manufacturing Andersen Stainless Steel Winches® within our own operations in Denmark. This experience was invaluable, setting the standard for reliability, mechanical efficiency, and an unparalleled user experience. For everything else, the new winches were developed from the deck up with different priorities determining material selection, weight optimisation, dimensions, gear and power ratios, manufacturing processes, surface finish, and performance.

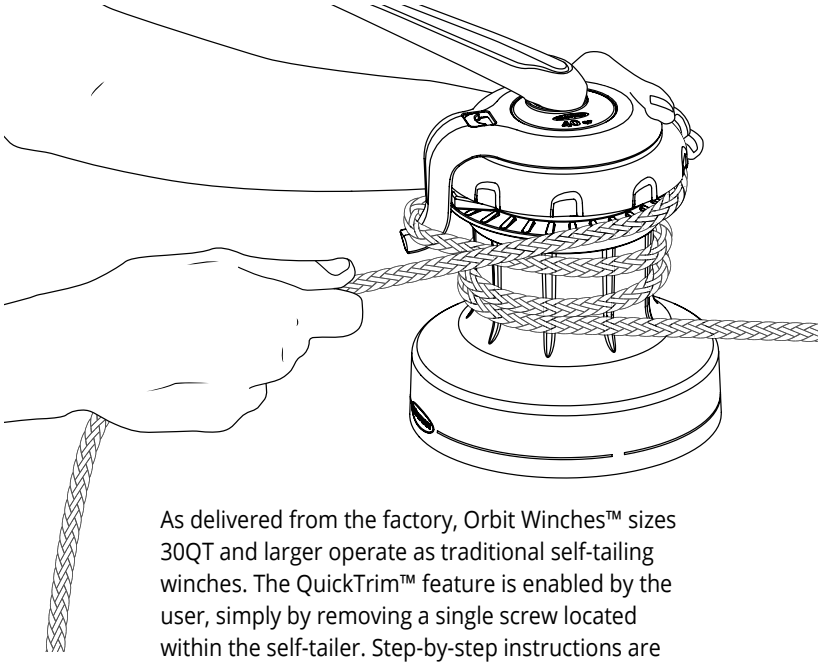
The first Orbit Winches™ were released in 2023, with three sizes suitable for boats up to around 12m where Ronstan is renowned for its comprehensive and competitive deck hardware range. Notably, the initial product launch marked the debut of the patented QuickTrim™ self-tailer*. The significance of this unique innovation was acknowledged with the Orbit Winch™ being named as a 2023 DAME Award joint category winner.

Building on the momentum of these award-winning winches, we have extended the range with the addition of two larger sizes: 45QT and 50QT. This offers new opportunities for using Orbit Winches™ on larger boats of 14m or more. In addition to the QuickTrim™ feature, the 45QT and 50QT can be specified with either a two-speed or a three-speed configuration.

E1 Electric Orbit Winches™ are a further addition to the range. Perfect for enjoying sailing short-handed or with friends and family, E1 Electric winches are engineered with unsurpassed levels of functionality, monitoring, and protections. Electric winches and conversion kits are available for sizes 30QT and 40QT in either 12V or 24V systems.

*Available from size 30QT and up

INTRODUCING QUICKTRIM™



The innovative QuickTrim™ functionality allows sailors to easily and safely ease line tension to make minor sail trim adjustments without having to remove the winch handle or take the line out of the self-tailer. Racing sailors can react and respond instantly to minor changes in wind direction or steering, providing an unmatched advantage when frequent sail trim adjustments are required. It's also a nice convenience for cruising sailors.

On the water, using QuickTrim™ is intuitive and quickly becomes second nature. With one hand on the tail of the sheet, rotating the top cover of the winch anti-clockwise against spring pressure allows the self-tailer to turn beneath it like a sheave as the rope is eased out, with smooth grip and control assured by the drum surface and Power Ribs™. When the top cover is allowed to spring back, the self-tailer locks again and grips the line to resume normal use. This simple, reliable feature is a real advantage when making frequent minor adjustments.

As delivered from the factory, Orbit Winches™ sizes 30QT and larger operate as traditional self-tailing winches. The QuickTrim™ feature is enabled by the user, simply by removing a single screw located within the self-tailer. Step-by-step instructions are included in the Quick Reference Guide provided with the winch, and in the product manual available from the Ronstan website.

POWER RIBS™

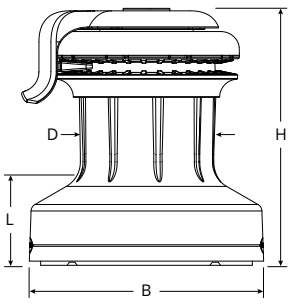
Inspired by the distinctive drum profile of Andersen Stainless Steel Winches®, Power Ribs™ have been incorporated into the fully machined drums of Ronstan's Orbit Winches™ to deliver the same impressive line handling with maximum grip and minimal rope wear.

The exceptional grip provided by the Power Ribs™ offers a multitude of benefits: requiring fewer wraps around the drum, reducing the load held in the self-tailer, and encouraging the line to slide easily upward on the drum to avoid riding turns. The non-abrasive drum surface extends the service life of running rigging and allows for smooth and controlled easing, even under high loads.

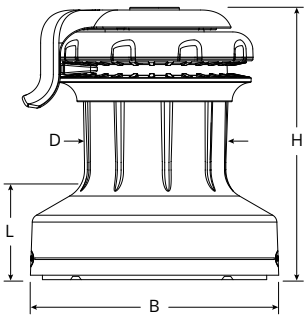
ANATOMY OF AN ORBIT WINCH™

20ST

RA6201		
Gear Ratio	2.7 : 1	
Power Ratio	19.5 : 1	
	METRIC	IMPERIAL
Line Size	6 - 10mm	1/4" - 13/32"
Drum "D"	75mm	2 15/16"
Base "B"	120mm	4 23/32"
Height "H"	124mm	4 7/8"
Line Entry "L"	42mm	1 21/32"
Weight	1.7kg	3.75lb
Max Pulling Load	550kg	1210lb



- Sprung self-tailing jaws to accept 6 - 10mm line.
- Proven Andersen winch gearing configuration.
- Power Rib™ ensures a controlled grip on the line at all times, whether trimming or easing. Minimal rope wear compared to more abrasive drum surface finishes.
- No tools required for disassembly and servicing.
- Machined aluminium drum – stronger and lighter than traditional cast aluminium drums.
- Lightweight aluminium centre stem provides significant weight savings over traditional bronze stems.
- Low line entry due to gearing configuration geometry.
- Hard anodised aluminium drum and centre stem.
- Grade 316 stainless steel shaft, pawls, and axle pins.
- Aluminium bronze gears.
- Hard anodised aluminium self-tailing arm.
- Glass-filled nylon jaws.
- Self-lubricating acetal bearings.



- Sprung self-tailing jaws to accept 7 - 12mm line.
- QuickTrim™ patented self-tailing feature for rapid sail trim and smooth adjustment.
- Ball bearings carry the thrust loads, roller bearings carry the radial loads of the drum to minimise rotational friction.
- Proven Andersen winch gearing configuration.
- Power Rib™ ensures a controlled grip on the line at all times, whether trimming or easing. Minimal rope wear compared to more abrasive drum surface finishes.
- No tools required for disassembly and servicing.
- Machined aluminium drum – stronger and lighter than traditional cast aluminium drums.
- Lightweight aluminium centre stem provides significant weight savings over traditional bronze stems.
- Low line entry due to gearing configuration geometry.
- Hard anodised aluminium drum and centre stem.
- Grade 316 stainless steel shaft and pawls.
- Grade 316 and 2205 stainless steel axle pins.
- Aluminium bronze gears.
- Hard anodised aluminium self-tailing arm.
- Glass-filled nylon jaws.
- Self-lubricating acetal bearings.

PRODUCT No.	WINCH MODEL	GEAR RATIO 1ST SPEED	GEAR RATIO 2ND SPEED	POWER RATIO 1ST SPEED	POWER RATIO 2ND SPEED	LINE SIZE mm	DRUM "D" mm	BASE "B" mm	HEIGHT "H" mm	LINE ENTRY "L" mm	WEIGHT kg	MAX PULLING LOAD kg
METRIC DIMENSIONS												
RA6302	30QT	1.4 : 1	5.2 : 1	8.3 : 1	30.2 : 1	7 - 12	86	136	166	57	3.1	700
RA6402	40QT	1.4 : 1	6.8 : 1	8.3 : 1	39.5 : 1	7 - 12	86	151	166	57	3.1	850

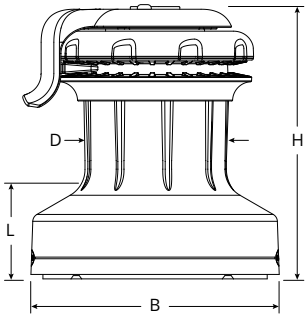
PRODUCT No.	WINCH MODEL	GEAR RATIO 1ST SPEED	GEAR RATIO 2ND SPEED	POWER RATIO 1ST SPEED	POWER RATIO 2ND SPEED	LINE SIZE in	DRUM "D" in	BASE "B" in	HEIGHT "H" in	LINE ENTRY "L" in	WEIGHT lb	MAX PULLING LOAD lb
IMPERIAL DIMENSIONS												
RA6302	30QT	1.4 : 1	5.2 : 1	8.3 : 1	30.2 : 1	9/32-15/32	3 3/8	5 11/32	6 17/32	2 1/4	6.84	1540
RA6402	40QT	1.4 : 1	6.8 : 1	8.3 : 1	39.5 : 1	9/32-15/32	3 3/8	5 15/16	6 17/32	2 1/4	6.84	1870

NO TOOLS REQUIRED

Full disassembly and reassembly can conveniently be performed without the need for any tools. To remove the drum, pull back the spring-loaded release latch and a slight anti-clockwise rotation will allow the self-tailing arm to be lifted from the winch. From there, the drum can be removed from the winch centre stem.

When completing reassembly in reverse order, an audible click confirms positive engagement between the self-tailing arm and bayonet notches on the centre stem. These notches allow the self-tailing arm to be locked in one of 8 positions at rotational increments of 45 degrees.

45QT & 50QT



PRODUCT No.	WINCH MODEL	GEAR RATIO 1ST SPEED	GEAR RATIO 2ND SPEED	GEAR RATIO 3RD SPEED	POWER RATIO 1ST SPEED	POWER RATIO 2ND SPEED	POWER RATIO 3RD SPEED	LINE SIZE mm	DRUM "D" mm	BASE "B" mm	HEIGHT "H" mm	LINE ENTRY "L" mm	WEIGHT kg	MAX PULLING LOAD kg
METRIC DIMENSIONS														
RA6452	45QT	3.0 : 1	10.0 : 1	-	13.4 : 1	45.5 : 1	-	8 - 14	110	183	207	80	5.4	1200
RA6453	45-3QT	1.4 : 1	3.0 : 1	10.0 : 1	6.3 : 1	13.4 : 1	45.5 : 1	8 - 14	110	183	207	80	5.9	1200
RA6502	50QT	3.0 : 1	10.8 : 1	-	13.4 : 1	49.3 : 1	-	8 - 14	110	183	207	80	5.4	1350
RA6503	50-3QT	1.4 : 1	3.0 : 1	10.8 : 1	6.3 : 1	13.4 : 1	49.3 : 1	8 - 14	110	183	207	80	5.9	1350

PRODUCT No.	WINCH MODEL	GEAR RATIO 1ST SPEED	GEAR RATIO 2ND SPEED	GEAR RATIO 3RD SPEED	POWER RATIO 1ST SPEED	POWER RATIO 2ND SPEED	POWER RATIO 3RD SPEED	LINE SIZE in	DRUM "D" in	BASE "B" in	HEIGHT "H" in	LINE ENTRY "L" in	WEIGHT lb	MAX PULLING LOAD lb
IMPERIAL DIMENSIONS														
RA6452	45QT	3.0 : 1	10.0 : 1	-	13.4 : 1	45.5 : 1	-	5/16 - 9/16	4 1/3	7 7/32	8 5/32	3 5/32	11.91	2650
RA6453	45-3QT	1.4 : 1	3.0 : 1	10.0 : 1	6.3 : 1	13.4 : 1	45.5 : 1	5/16 - 9/16	4 1/3	7 7/32	8 5/32	3 5/32	13.01	2650
RA6502	50QT	3.0 : 1	10.8 : 1	-	13.4 : 1	49.3 : 1	-	5/16 - 9/16	4 1/3	7 7/32	8 5/32	3 5/32	11.91	2980
RA6503	50-3QT	1.4 : 1	3.0 : 1	10.8 : 1	6.3 : 1	13.4 : 1	49.3 : 1	5/16 - 9/16	4 1/3	7 7/32	8 5/32	3 5/32	13.01	2980

- Sprung self-tailing jaws to accept 8 - 14mm line.
- QuickTrim™ patented self-tailing feature for rapid sail trim and smooth adjustment.
- Ball bearings carry the thrust loads, roller bearings carry the radial loads of the drum to minimise rotational friction.
- Proven gearing configuration.
- Power Rib™ ensures a controlled grip on the line at all times, whether trimming or easing. Minimal rope wear compared to more abrasive drum surface finishes.
- 45QT and 50QT available as three-speed models.
- Machined aluminium drum – stronger and lighter than traditional cast aluminium drums.
- Lightweight aluminium centre stem provides significant weight savings over traditional bronze stems.
- Low line entry due to gearing configuration geometry.
- Hard anodised aluminium drum and centre stem.
- Grade 316 stainless steel shaft and pawls.
- Grade 316 and 2205 stainless steel axle pins.
- Aluminium bronze gears.
- Hard anodised aluminium self-tailing arm.
- Glass-filled nylon jaws.
- Self-lubricating acetal bearings.

THREE SPEED MODE

Featuring the fastest line speeds in our range, Ronstan three-speed Orbit Winches™ offer significant advantages in many racing and cruising situations that require rapid line retrieval. In the initial stages of trimming or hoisting sails, the high-speed first gear reduces the time and effort required to adjust sails efficiently. After quick initial line recovery at low load, the winch can be shifted to the slower second and third gears as load increases, using their greater mechanical advantage for precise control of heavy loads. The added versatility provided by the extra gear results in improved performance and safety on the water.

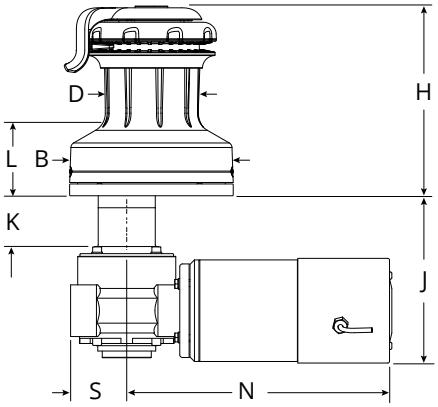
To engage the first gear with a fast 1.4:1 gear ratio, push the button on top of the winch and turn the winch handle clockwise. When the load becomes too heavy, turn the handle anti-clockwise to switch to the second gear. The winch will now operate as a two-speed winch, shifting between second and third gear with changes in handle direction. To return to the first gear for extra speed, simply push the button again.

ORBIT WINCH™ E1 ELECTRIC

ELECTRIFY YOUR EXPERIENCE

Orbit Winches™ are now available with an E1 Single Speed Electric Motor. Perfect for enjoying sailing short-handed or with friends and family, E1 Electric winches are engineered with unsurpassed levels of functionality, monitoring, and protections. Installation is simple with no external control box required, while the illuminated "intelligent" push button aids in several safety precautions including overload protection, thermal overload protection, accidental start protection, reverse polarity protection, and more. At the heart of the system is a high quality, European engineered and manufactured series-wound motor, matched with the optimum gearbox for efficient pulling power and line speed.

Available for sizes 30QT and 40QT in 12V or 24V versions, for further information about E1 features see page 261 and ***www.ronstan.com***.



WINCH MODEL	PRODUCT No. 12V	PRODUCT No. 24V	LINE SIZE mm	DRUM "D" mm	BASE "B" mm	HEIGHT "H" mm	LINE ENTRY "L" mm	MAX. DECK "K" mm*	MOTOR DEPTH "J" mm	GEAR LENGTH "S" mm	MOTOR LENGTH "N" mm	WEIGHT kg
METRIC DIMENSIONS												
30QT	RA630201100	RA630201200	7 - 12	86	136	182	74	50	182	65	300	15.2
40QT	RA640201100	RA640201200	7 - 12	86	153	182	74	50	182	65	300	15.3

WINCH MODEL	PRODUCT No. 12V	PRODUCT No. 24V	LINE SIZE in	DRUM "D" in	BASE "B" in	HEIGHT "H" in	LINE ENTRY "L" in	MAX. DECK "K" in*	MOTOR DEPTH "J" in	GEAR LENGTH "S" in	MOTOR LENGTH "N" in	WEIGHT lb
IMPERIAL DIMENSIONS												
30QT	RA630201100	RA630201200	9/32 - 15/32	3 3/8	5 11/32	7 3/16	3	2	7 3/16	2 9/16	11 13/16	33.5
40QT	RA640201100	RA640201200	9/32 - 15/32	3 3/8	6 1/32	7 3/16	3	2	7 3/16	2 9/16	11 13/16	33.7

* Extensions available to suit longer "K" dimensions.

E1 ELECTRIC CONVERSION KITS

All Orbit Winches™ size 30QT or 40QT can be easily converted to electric with an E1 Electric Conversion Kit for either 12V or 24V systems. The Conversion Kit includes the E1 Electric Motor unit, input/output cable from motor, illuminated push button, and mounting deck plate. Marine grade circuit breakers are also available for protection and isolation.

WINCH MODEL	E1 WINCH CONVERSION KITS 12V	24V
Conversion Kits		
30QT	RA630251100	RA630251200
40QT	RA640251100	RA640251200

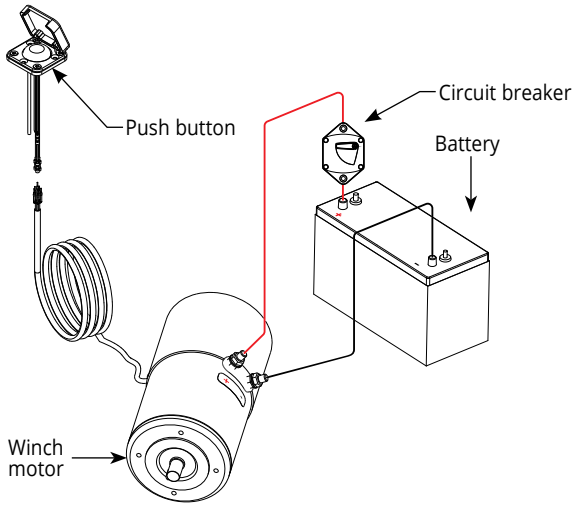
What's included in the Conversion Kit?

- E1 Electric Motor
- Input/output cable
- RA582000 push button
- Deck Plate

PUSH BUTTONS

PRODUCT No.	DESCRIPTION
Push Buttons	
RA582000	Push button on/off switch, LED, plastic hinged cover, incl. 500mm (19 5/8") cable with connectors
RA582010	Push button on/off switch, LED, stainless steel hinged cover, incl. 500mm (19 5/8") cable with connectors
RA582020	Push button on/off switch, LED, stainless steel hinged cover with finger access, incl. 500mm (19 5/8") cable with connectors

- Rubber gasket included.
- Requires only 25mm (1") clearance below mounting surface.



CIRCUIT BREAKERS

PRODUCT NO.	DESCRIPTION	COMPATIBLE WINCH SIZES
Circuit Breakers		
RA590070	Circuit breaker 70 amp	For full technical and installation details, refer to Winch Data Sheets and User Manuals available on ***www.ronstan.com***
RA590120	Circuit breaker 120 amp	
RA590150	Circuit breaker 150 amp	
RA590200	Circuit breaker 200 amp	

- "Slow blow" type, manual reset
- On/Off switch capability
- External ignition protected (ABYC E-11; CE; SAE J1171)
- Marine weatherproof rated
- DC power systems only
- 8mm (5/16") cable terminals (same as E1 motor unit)

ORBIT WINCH™ SELECTION GUIDE

Choose your Ronstan Orbit Winch™ keeping in mind the size of your yacht and your sailing requirements. This selection guide is intended for masthead rigged monohull yachts of medium displacement. Refer to the notes to the right regarding other rig or displacement types.

Please note that this table lists typical winch sizing for the given applications, but can not take into account all variables due to the wide variety of sailing vessels and conditions.

For electric winches, the size selection is generally similar to that of a manually operated winch.

For further details see our website at ***www.ronstan.com*** or consult your local Ronstan representative for assistance in selecting your winches and information on features, options and installation.

Masthead Rigged
Use the Length Overall (LOA) figures as your primary selection criteria.

Fractional Rigged
Refer primarily to the sail area, rather than LOA.

Heavy Displacement
For boats with heavy displacement and/or a high righting moment, it is advisable to choose a winch larger than those indicated in the table.

Multihulls
Catamarans and trimarans have higher righting moments than monohulls of the same size, and should use winches larger than those indicated in the table.

LOA (Feet)	25-28	29-32	33-35	36-39	40-43	44-48	49-54
LOA (Metres)	7.6-8.5	8.8-9.8	10.1-10.7	11.0-11.9	12.2-13.1	13.4-14.6	14.9-16.5
Genoa Sail Area (ft^2/m^2)	300/28	350/33	470/44	560/52	770/72	880/82	1300/120
Spinnaker Sail Area (ft^2/m^2)	410/38	600/56	800/74	1200/111	1600/150	2000/185	2800/260
Main Sail Area (ft^2/m^2)	150/14	210/20	260/24	320/30	430/40	470/46	750/70

Application	*Recommended Winch Size*						
Genoa Sheet	20	30/40	40	45/50	50		
Spinnaker Sheet	20	20	20/30	30/40	40/45	45/50	
Main Sheet	20	20	20/30	30	30/40	45/50	50
Genoa Halyard	20	20	20/30	30/40	40/45	45/50	50
Spinnaker Halyard	20	20	20/30	30	40/45	45	50
Main Halyard	20	20	20/30	30/40	40	40/45	45/50
Reef Line	20	20	20	20	20/30	40	40/45

ANDERSEN WINCHES

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WINCH SELECTION

Choose your Andersen winches to suit the type and size of your yacht and your sailing requirements. This selection guide is intended for masthead rigged monohull yachts of medium displacement. Refer to the notes to the right of this page regarding other rig or displacement types.

Please note that this table lists typical winch sizing for the given applications, but cannot take into account all variables due to the wide variety of sailing vessels and conditions.

For electric or hydraulic winches, the size selection is generally similar to that of a manually operated winch.

For further details see our website at ***www.ronstan.com*** or consult your local Andersen winches representative for assistance in selecting your winches and information on features, options and installation.

Masthead Rigged
Use the length overall (LOA) figures as your primary selection criteria.

Fractional Rigged
Refer primarily to the sail area rather than LOA.

Heavy Displacement
For boats with heavy displacement and/or a high righting moment, it is advisable to choose a winch larger than those indicated in the table.

Multihulls
Catamarans and trimarans have higher righting moments than monohulls of the same size and should use winches larger than those indicated in the table.

LOA (Metres) **LOA (Feet)**	**7.6 - 8.5** **25 - 28**	**8.8 - 9.8** **29 - 32**	**10.1 - 10.7** **33 - 35**	**11.0 - 11.9** **36 - 39**	**12.2 - 13.1** **40 - 43**	**13.4 - 14.6** **44 - 48**	**14.9 - 16.5** **49 - 54**	**16.8 - 18.6** **55 - 61**	**18.9 - 21.6** **62 - 71**	**21.9 - 24.4** **72 - 80**	**24.4+** **80+**
Genoa Sail Area (m^2/ft^2)	28/300	33/355	44/470	52/560	72/770	82/880	120/1300	170/1800	200/2100	250/2700	-
Spinnaker Sail Area (m^2/ft^2)	38/410	56/600	74/800	111/1200	150/1600	185/2000	260/2800	345/3700	420/4500	500/5400	-
Main Sail Area (m^2/ft^2)	14/150	20/210	24/260	30/320	40/430	46/470	70/750	88/950	102/1100	121/1300	-
APPLICATION	**RECOMMENDED WINCH SIZE**										
Genoa Sheet	12/16/18	28/34/40	40	46/50	50/52	58/62	62/68	68/72	72/82	82	-
Spinnaker Sheet	10/12	16/18	18/28	28/34/40	40/46	46/50/52	52/58	58/62/68	68/72/82	82	-
Main Sheet	10	12	18/28	18/28	34/40	46/50	52	52/58	58/62/68	68/72	82
Genoa Halyard	10/12	12/18	18/28	34/40	40/46	46/50	52	52/58/62	58/62	72	82
Spinnaker Halyard	10	12	12/18	18/28	40	46	46/50/52	52/58	58/62	68/72	82
Main Halyard	10	12	12/18	28/34/40	40	40/46	46/50/52	52/58	58/62	68/72	82
Reef Line	10	10	10	12/18	18/28	34/40	40/46	46/50/52	52/58	58/62	68








ANDERSEN STAINLESS STEEL WINCHES™

ENDURING STRENGTH, EVERLASTING FINISH

Every Andersen winch is made with the care and craftsmanship that come from more than fifty years of experience. Andersen winches are built to last, to retain their exceptional finish and to deliver season after season of reliable performance and sailing pleasure to their owner through the years.

Materials

Andersen winch drums are produced from grade 316L stainless steel, cold formed in stages during manufacture to further increase strength and hardness as it takes its final form. The resulting construction is lightweight, yet stiff and unyielding.

Drive shafts are in grade 329 duplex stainless steel. Pawls are cut from a cold pressed profile in grade 316 stainless steel and are virtually unbreakable.

The upper centre stems of Andersen winches are manufactured from aluminium bronze for ultimate durability. The combination of materials and design contribute to a lightweight, rigid final assembly that enhances the mechanical efficiency of the winch.

Features

Andersen winch drums incorporate the distinctive Power Rib™ which ensures a controlled grip on the line at all times, whether trimming or easing. The highly polished stainless steel surface minimises vertical friction and allows the loaded rope turns to slide easily upward as the drum rotates, without the shuddering and excessive rope wear seen on winches that rely on a rough surface finish for grip.

Stainless steel roller bearings and ball bearings carry the highest drum loads to the centre stem of the winch, minimising efficiency losses due to friction.

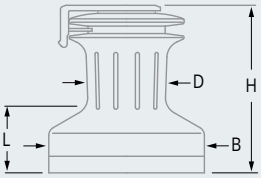
The self-tailing arm can be rotated incrementally through 360 degrees for optimum positioning (40ST and larger). Stainless steel self-tailing jaws adjust automatically to suit various rope sizes.

Andersen winches are designed for simple, straightforward installation and maintenance. Servicing is only required every two years or so under normal use.

SELF-TAILING WINCH RANGE

WINCH TYPE	MODEL	12ST	18ST	28ST	34ST	40ST	46ST	50ST	52ST	58ST	62ST	68ST	72ST	82ST
	MANUAL SPEEDS	1	1	2	2	2	2	2	2	2	2	2	2	3
MANUAL														
Self-Tailing		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ELECTRIC*														
E1 Single Speed				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
E2 Two Speed												24V only	24V only	
Three Speed														24V only
COMPACT MOTOR™ ELECTRIC*[1]														
Variable Speed Above Deck				✓	✓	✓	✓	✓	✓	✓	✓ *2	✓ *2	✓	
Variable Speed Below Deck				✓	✓	✓	✓	✓	✓	✓	✓ *2	✓ *2	✓	
HYDRAULIC														
Single Speed									✓	✓	✓	✓	✓	
Three Speed														✓
ELECTRIC CONVERSION KIT*[1]														
E1 Single Speed				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
E2 Two Speed												24V only	24V only	
Compact Motor™ Variable Speed Above Deck				✓	✓	✓	✓	✓	✓	✓	✓ *2	✓ *2	✓	
Compact Motor™ Variable Speed Below Deck				✓	✓	✓	✓	✓	✓	✓	✓ *2	✓ *2	✓	

*1 Available in 12V or 24V unless specified otherwise.
*2 Sizes 68ST & 72ST Compact Motor™ electric winches have low range and high range variable speed control, via the two included push buttons.



PRODUCT No.	WINCH MODEL	GEAR RATIO 1ST SPEED	GEAR RATIO 2ND SPEED	GEAR RATIO 3RD SPEED	POWER RATIO 1ST SPEED	POWER RATIO 2ND SPEED	POWER RATIO 3RD SPEED	LINE SIZE mm	DRUM "D" mm	BASE "B" mm	HEIGHT "H" mm	LINE ENTRY "L" mm	WEIGHT kg
METRIC DIMENSIONS													
RA2012010000	12ST	1.3 : 1	-	-	9.5 : 1	-	-	8 - 14	70	115	128	44	2.6
RA2018010000	18ST	2.6 : 1	-	-	18.8 : 1	-	-	8 - 14	70	120	135	50	3.2
RA2028010000	28ST	1.3 : 1	4.0 : 1	-	9.5 : 1	28.6 : 1	-	8 - 14	70	125	149	65	3.9
RA2034010000	34ST	1.3 : 1	4.7 : 1	-	9.5 : 1	33.8 : 1	-	8 - 14	70	125	149	65	4.1
RA2040010000	40ST	1.3 : 1	6.0 : 1	-	8.9 : 1	40.0 : 1	-	8 - 14	75	152	174	71	4.9
RA2046010000	46ST	2.8 : 1	8.4 : 1	-	15.7 : 1	47.1 : 1	-	8 - 14	89	180	204	90	7.8
RA2050010000	50ST	2.8 : 1	8.8 : 1	-	15.7 : 1	49.3 : 1	-	8 - 14	89	180	204	90	7.8
RA2052010000	52ST	3.2 : 1	10.5 : 1	-	16.2 : 1	52.5 : 1	-	8 - 16	100	200	222	106	10.3
RA2058010000	58ST	3.7 : 1	13.1 : 1	-	16.0 : 1	57.1 : 1	-	8 - 18	115	230	251	111	16.0
RA2062010000	62ST	3.7 : 1	14.4 : 1	-	16.0 : 1	62.6 : 1	-	8 - 18	115	230	251	111	16.0
RA2068010000	68ST	5.8 : 1	18.8 : 1	-	20.7 : 1	67.1 : 1	-	10 - 18	140	280	275	120	24.5
RA2072010000	72ST	5.8 : 1	20.3 : 1	-	20.7 : 1	72.6 : 1	-	10 - 18	140	280	275	120	24.5
RA2082010000	82-3ST	3.7 : 1	8.8 : 1	27.7 : 1	11.0 : 1	26.0 : 1	81.6 : 1	12 - 18	170	318	305	127	28.9

PRODUCT No.	WINCH MODEL	GEAR RATIO 1ST SPEED	GEAR RATIO 2ND SPEED	GEAR RATIO 3RD SPEED	POWER RATIO 1ST SPEED	POWER RATIO 2ND SPEED	POWER RATIO 3RD SPEED	LINE SIZE in	DRUM "D" in	BASE "B" in	HEIGHT "H" in	LINE ENTRY "L" in	WEIGHT lb
IMPERIAL DIMENSIONS													
RA2012010000	12ST	1.3 : 1	-	-	9.5 : 1	-	-	5/16 - 9/16	2 3/4	4 1/2	5 1/16	1 3/4	5.7
RA2018010000	18ST	2.6 : 1	-	-	18.8 : 1	-	-	5/16 - 9/16	2 3/4	4 3/4	5 5/16	1 15/16	7.0
RA2028010000	28ST	1.3 : 1	4.0 : 1	-	9.5 : 1	28.6 : 1	-	5/16 - 9/16	2 3/4	4 15/16	5 7/8	2 9/16	8.6
RA2034010000	34ST	1.3 : 1	4.7 : 1	-	9.5 : 1	33.8 : 1	-	5/16 - 9/16	2 3/4	4 15/16	5 7/8	2 9/16	9.0
RA2040010000	40ST	1.3 : 1	6.0 : 1	-	8.9 : 1	40.0 : 1	-	5/16 - 9/16	2 15/16	6	6 7/8	2 13/16	10.8
RA2046010000	46ST	2.8 : 1	8.4 : 1	-	15.7 : 1	47.1 : 1	-	5/16 - 9/16	3 1/2	7 1/16	8	3 9/16	17.2
RA2050010000	50ST	2.8 : 1	8.8 : 1	-	15.7 : 1	49.3 : 1	-	5/16 - 9/16	3 1/2	7 1/16	8	3 9/16	17.2
RA2052010000	52ST	3.2 : 1	10.5 : 1	-	16.2 : 1	52.5 : 1	-	5/16 - 5/8	3 15/16	7 7/8	8 3/4	4 3/16	22.7
RA2058010000	58ST	3.7 : 1	13.1 : 1	-	16.0 : 1	57.1 : 1	-	5/16 - 5/8	4 1/2	9 1/16	9 7/8	4 3/8	35.3
RA2062010000	62ST	3.7 : 1	14.4 : 1	-	16.0 : 1	62.6 : 1	-	5/16 - 5/8	4 1/2	9 1/16	9 7/8	4 3/8	35.3
RA2068010000	68ST	5.8 : 1	18.8 : 1	-	20.7 : 1	67.1 : 1	-	3/8 - 5/8	5 1/2	11	10 3/16	4 3/4	54.0
RA2072010000	72ST	5.8 : 1	20.3 : 1	-	20.7 : 1	72.6 : 1	-	3/8 - 5/8	5 1/2	11	10 3/16	4 3/4	54.0
RA2082010000	82-3ST	3.7 : 1	8.8 : 1	27.7 : 1	11.0 : 1	26.0 : 1	81.6 : 1	1/2 - 3/4	6 11/16	12 1/2	12	5	63.6

SPECIAL FINISHES

Hand polished stainless steel has long been the signature finish for Andersen winches. They are also available in a high quality ZT finish – a surface finish for stainless steel obtained by hand polishing the surface, and then blasting the metal with a finishing media. The ZT finish is often described as “gun metal grey” or “titanium look”.








E1 ELECTRIC WINCHES

EMPOWERED SAILING

Andersen E1 electric winches allow you to hoist and trim sails at the push of a button regardless of physical strength, so any crew member can easily and safely trim sails and control lines. Perfect for enjoying sailing short-handed or with friends and family. In addition to the host of standard features that make Andersen self-tailing winches the benchmark for quality and performance, Andersen E1 electric winches are engineered with unsurpassed levels of functionality, monitoring and protection.

Ease of installation

Contactors and controller are contained within the motor unit, so no separate control box is necessary. Simplified electrical installation requires just the connection of positive and negative power cables to the motor terminals and the connection of the push button using the included output cable. Marine grade circuit breakers are also available for protection and isolation.

Efficient, high quality motor

At the heart of the E1 electric winch is a high quality European engineered and manufactured series wound motor. Carefully matched with the optimum gearbox these winches deliver high speed at low load for fast sheeting in, and low speed at high load for safe, fine tuning when trimming. They are available in 12 volt and 24 volt models providing smooth and quiet operation across a wide working load range.

Illuminated “intelligent” push button

E1 winches are supplied with a push button with an integrated LED which illuminates when power to the winch system is on. The push button incorporates a hinged safety cover to prevent inadvertent winch operation and is water resistant rated to IP67. The push button also acts with the controller to flash status codes that assist with troubleshooting in the event of overload or where other system protection intervention occurs. A cable for connection of the push button is included for convenient installation.

Unrivalled monitoring and protection

Integrated overload protection – The controller is pre-set to stop the winch if the maximum pull load is exceeded. Operation can resume within a few seconds when the load returns below the limit.
Thermal overload protection – The motor is fitted with a thermal cutout that disables the motor in case of overheating; it automatically resets after the temperature returns to normal. Reverse polarity protection – An integrated 5 amp fuse protects the motor against incorrect cable connection.
Accidental start protection – Winch operation is disabled if the push button is already inadvertently pressed when the power supply is turned on at the circuit breaker or battery.
Low voltage detection – Operation is disabled if the battery charge level is low, which prevents further drain on batteries and avoids triggering low voltage reset of navigation instruments and other electronic devices.
Continuous run time limit – Operation is disabled if continuous run time exceeds 10 minutes.

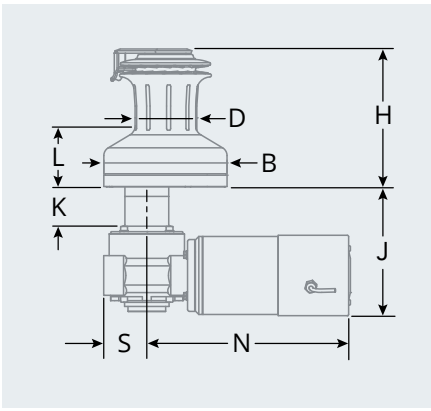
Manual operation

Two speed manual operation is always available as a backup.

E1 ELECTRIC

Included with all E1 electric winches and conversion kits:
- 1 x RA582000 push button
- 1200mm (47") input/output cable from the motor

E1 electric motor conversion kits also available



For full technical and installation details, refer to Winch Data Sheets and User Manuals available at ***www.ronstan.com***

WINCH MODEL	LINE SIZE mm	DRUM "D" mm	BASE "B" mm	HEIGHT "H" mm	LINE ENTRY "L" mm	MAX. DECK "K" mm*	MOTOR DEPTH "J" mm	GEAR LENGTH "S" mm	MOTOR LENGTH "N" mm	WEIGHT kg
METRIC DIMENSIONS										
28ST	8 - 14	70	125	157	75	49	183	65	300	18
34ST	8 - 14	70	125	157	75	49	183	65	300	18
40ST	8 - 14	75	152	182	79	49	183	65	300	19
46ST	8 - 14	89	181	204	90	57	191	65	300	21
50ST	8 - 14	89	181	204	90	57	191	65	300	21
52ST	8 - 16	100	200	222	106	57	196	65	350	28
58ST	8 - 18	115	230	261	122	41	213	75	384	35
62ST	8 - 18	115	230	261	122	41	213	75	384	35
68ST	10 - 18	140	280	285	130	41	213	75	384	42
72ST	10 - 18	140	280	285	130	41	213	75	384	42

WINCH MODEL	LINE SIZE in	DRUM "D" in	BASE "B" in	HEIGHT "H" in	LINE ENTRY "L" in	MAX. DECK "K" in*	MOTOR DEPTH "J" in	GEAR LENGTH "S" in	MOTOR LENGTH "N" in	WEIGHT lb
IMPERIAL DIMENSIONS										
28ST	5/16 - 9/16	2 3/4	4 15/16	6 3/16	2 15/16	1 15/16	7 3/16	2 9/16	11 13/16	39.7
34ST	5/16 - 9/16	2 3/4	4 15/16	6 3/16	2 15/16	1 15/16	7 3/16	2 9/16	11 13/16	39.7
40ST	5/16 - 9/16	2 15/16	6	7 3/16	3 1/8	1 15/16	7 3/16	2 9/16	11 13/16	41.9
46ST	5/16 - 9/16	3 1/2	7 1/8	8	3 9/16	2 1/4	7 1/2	2 9/16	11 13/16	46.3
50ST	5/16 - 9/16	3 1/2	7 1/8	8	3 9/16	2 1/4	7 1/2	2 9/16	11 13/16	46.3
52ST	5/16 - 5/8	3 15/16	7 7/8	8 3/4	4 3/16	2 1/4	7 1/2	2 9/16	13 13/16	61.7
58ST	5/16 - 5/8	4 1/2	9 1/16	10 1/4	4 13/16	1 5/8	8 3/8	2 15/16	15 1/8	77.1
62ST	5/16 - 5/8	4 1/2	9 1/16	10 1/4	4 13/16	1 5/8	8 3/8	2 15/16	15 1/8	77.1
68ST	13/32 - 5/8	5 1/2	11	11 1/4	5 1/8	1 5/8	8 3/8	2 15/16	15 1/8	92.6
72ST	13/32 - 5/8	5 1/2	11	11 1/4	5 1/8	1 5/8	8 3/8	2 15/16	15 1/8	92.6

* Extensions available to suit longer "K" dimensions.

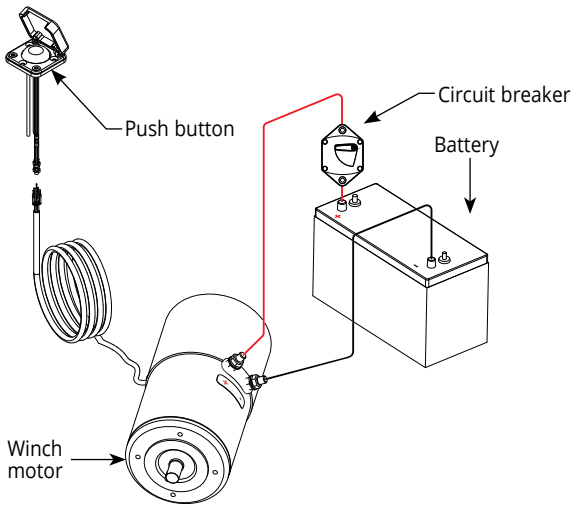
WINCHES & CONVERSION KITS

WINCH MODEL	E1 FULL STAINLESS WINCHES 12V	E1 FULL STAINLESS WINCHES 24V	E1 WINCH CONVERSION KITS 12V	E1 WINCH CONVERSION KITS 24V
Winches & Conversion Kits				
28ST	RA2028011300	RA2028011400	RA2028211300	RA2028211400
34ST	RA2034011300	RA2034011400	RA2034211300	RA2034211400
40ST	RA2040011300	RA2040011400	RA2040211300	RA2040211400
46ST	RA2046011300	RA2046011400	RA2046211300	RA2046211400
50ST	RA2050011300	RA2050011400	RA2050211300	RA2050211400
52ST	RA2052011300	RA2052011400	RA2052211300	RA2052211400
58ST	RA2058011300	RA2058011400	RA2058211300	RA2058211400
62ST	RA2062011300	RA2062011400	RA2062211300	RA2062211400
68ST	RA2068011300	RA2068011400	RA2068211300	RA2068211400
72ST	RA2072011300	RA2072011400	RA2072211300	RA2072211400

PUSH BUTTONS

PRODUCT No.	DESCRIPTION
Push Buttons	
RA582000	Push button on/off switch, LED, plastic hinged cover, incl. 500mm (19 5/8") cable with connectors
RA582010	Push button on/off switch, LED, stainless steel hinged cover, incl. 500mm (19 5/8") cable with connectors
RA582020	Push button on/off switch, LED, stainless steel hinged cover with finger access, incl. 500mm (19 5/8") cable with connectors

- Rubber gasket included.
- Requires only 25mm (1") clearance below mounting surface.

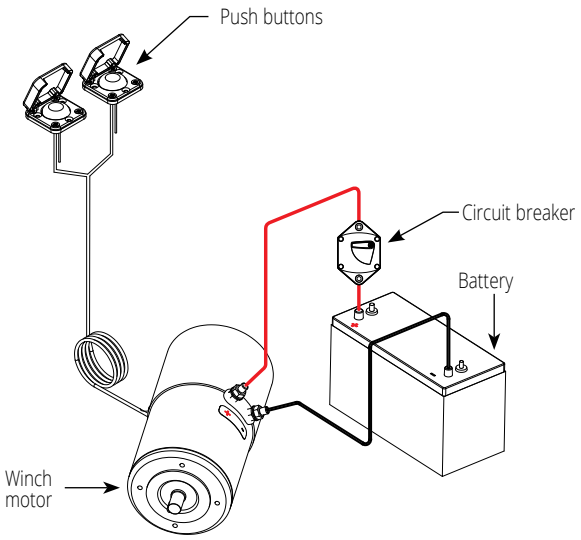


CIRCUIT BREAKERS

PRODUCT NO.	DESCRIPTION	COMPATIBLE WINCH SIZES
Circuit Breakers		
RA590070	Circuit breaker 70 amp	For full technical and installation details, refer to Winch Data Sheets and User Manuals available on ***www.ronstan.com***
RA590120	Circuit breaker 120 amp	
RA590150	Circuit breaker 150 amp	
RA590200	Circuit breaker 200 amp	

- "Slow blow" type, manual reset
- On/Off switch capability
- External ignition protected (ABYC E-11; CE; SAE J1171)
- Marine weatherproof rated
- DC power systems only
- 8mm (5/16") cable terminals (same as E1 motor unit)

TWO SPEED ELECTRIC

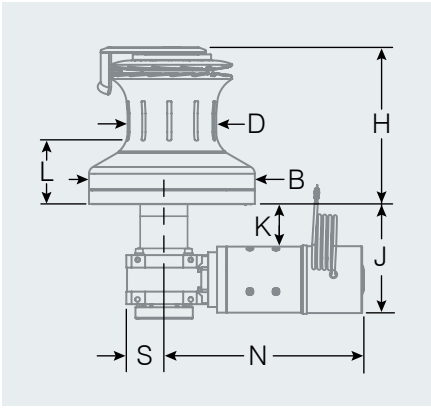


E2 Two Speed Electric

PRODUCT No.	DESCRIPTION
E2 Two Speed Electric	
RA2068011800	68ST winch, two speed electric 24V
RA2072011800	72ST winch, two speed electric 24V
RA2068211800	E2 electric conversion kit 24V, to suit 68ST
RA2072211800	E2 electric conversion kit 24V, to suit 72ST

Included with E2 electric winches and conversion kits:
- 2 x RA582000 push buttons
- 1200mm (47") input/output cable from the motor

E2 electric motor conversion kits also available



For full technical and installation details, refer to Winch Data Sheets and User Manuals available at ***www.ronstan.com***

WINCH MODEL	LINE SIZE mm	DRUM "D" mm	BASE "B" mm	HEIGHT "H" mm	LINE ENTRY "L" mm	MAX. DECK "K" mm*	MOTOR DEPTH "J" mm	GEAR LENGTH "S" mm	MOTOR LENGTH "N" mm	WEIGHT kg
METRIC DIMENSIONS										
68ST	10 - 18	140	280	285	130	75	240	73	382	43.1
72ST	10 - 18	140	280	285	130	75	240	73	382	43.1

WINCH MODEL	LINE SIZE in	DRUM "D" in	BASE "B" in	HEIGHT "H" in	LINE ENTRY "L" in	MAX. DECK "K" in*	MOTOR DEPTH "J" in	GEAR LENGTH "S" in	MOTOR LENGTH "N" in	WEIGHT lb
IMPERIAL DIMENSIONS										
68ST	3/8 - 5/8	5 1/2	11	11 7/32	5 1/8	2 15/16	9 7/16	2 7/8	15	95
72ST	3/8 - 5/8	5 1/2	11	11 7/32	5 1/8	2 15/16	9 7/16	2 7/8	15	95

* Extensions available to suit longer "K" dimensions.








THREE SPEED ELECTRIC WINCHES

EMPOWERED SAILING

Andersen Three Speed electric winches are the perfect solution for larger boats, of 16m (60ft) or more, providing the power and control to safely hoist and trim sails of any size at the push of a button.
In addition to the host of standard features that make Andersen self-tailing winches the benchmark for quality and performance, Andersen Three Speed electric winches are engineered with unsurpassed levels of performance, monitoring and protection.

Powerful and efficient, high quality motor

At the heart of each Andersen Three Speed electric winch is a powerful European engineered and manufactured series wound motor. Carefully matched with the optimum gearbox these winches deliver high speed at low load for fast sheeting in, and low speed at high load for safe, fine tuning when trimming. For maximum performance and efficiency they are supplied in a 24 volt version, providing smooth operation across a wide working load range.

Illuminated "intelligent" push buttons

Three Speed electric winches are supplied with push buttons with integrated LED which illuminates when power to the winch system is on. The push buttons incorporate a hinged safety cover to prevent inadvertent winch operation and are water resistant rated to IP67. The push buttons also act with the controller to flash status codes that assist with trouble shooting in the event of overload or where other system protection intervention occurs.

Manual operation

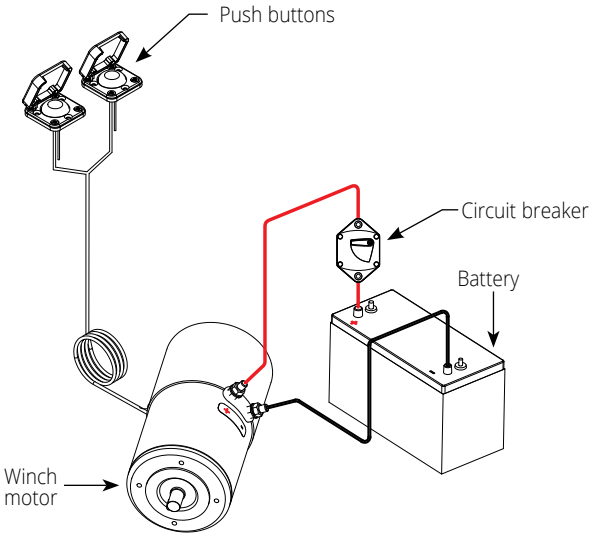
Manual operation is always available as a backup.

Unrivalled monitoring and protection

Integrated overload protection – The controller is pre-set to stop the winch if the maximum pull load is exceeded. Operation can resume within a few seconds when the load returns below the limit.
Thermal overload protection – The motor is fitted with a thermal cutout that disables the motor in case of overheating; it automatically resets after the temperature returns to normal.
Reverse polarity protection – An integrated 5 amp fuse protects the controller against incorrect cable connection.
Accidental start protection – Winch operation is disabled if a push button is already inadvertently pressed when the power supply is turned on at the circuit breaker or battery.
Low voltage detection – Operation is disabled if the battery charge level is low, which prevents further drain on batteries and avoids triggering low voltage reset of navigation instruments and other electronic devices.
Continuous run time limit – Operation is disabled if continuous run time exceeds 10 minutes.

THREE SPEED ELECTRIC

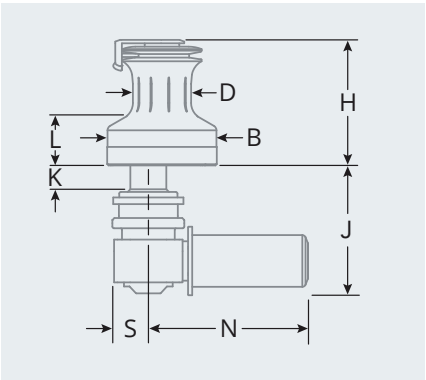
THREE SPEED ELECTRIC



82-3ST Three Speed Electric

PRODUCT No.	DESCRIPTION
Three Speed Electric Winches	
RA2082012200	82-3ST winch, three speed electric 24V

Included with 82-3ST Three Speed electric winch:
- 2 x RA582000 push buttons
- 1200mm (47") input/output cable from the motor



For full technical and installation details, refer to Winch Data Sheets and User Manuals available at ***www.ronstan.com***

WINCH MODEL	LINE SIZE mm	DRUM "D" mm	BASE "B" mm	HEIGHT "H" mm	LINE ENTRY "L" mm	MAX. DECK "K" mm*	MOTOR DEPTH "J" mm	GEAR LENGTH "S" mm	MOTOR LENGTH "N" mm	WEIGHT kg
METRIC DIMENSIONS										
82-3ST	12 - 18	170	318	305	127	106	247	73	382	49.5

WINCH MODEL	LINE SIZE in	DRUM "D" in	BASE "B" in	HEIGHT "H" in	LINE ENTRY "L" in	MAX. DECK "K" in*	MOTOR DEPTH "J" in	GEAR LENGTH "S" in	MOTOR LENGTH "N" in	WEIGHT lb
IMPERIAL DIMENSIONS										
82-3ST	1/2 - 3/4	6 11/16	12 1/2	12	5	4 3/16	9 3/4	2 7/8	15 1/16	108.9

* Extensions available to suit longer "K" dimensions.

© X-Yachts

PUSH BUTTONS

- Rubber gasket included.
- Push button requires only 25mm (1") clearance below mounting surface

PRODUCT No.	DESCRIPTION
Push Buttons	
RA582000	Push button on/off switch, LED, plastic hinged cover, incl. 500mm (19 5/8") cable with connectors
RA582010	Push button on/off switch, LED, stainless steel hinged cover, incl. 500mm (19 5/8") cable with connectors
RA582020	Push button on/off switch, LED, stainless steel hinged cover with finger hole, incl. 500mm (19 5/8") cable with connectors

CIRCUIT BREAKER

PRODUCT NO.	DESCRIPTION	COMPATIBLE WINCH SIZES
Circuit Breaker		For full technical and installation details, refer to Winch Data Sheets and User Manuals available at ***www.ronstan.com***
RA590150	Circuit breaker 150 amp	

- "Slow blow" type, manual reset
- On/Off switch capability
- External ignition protected (ABYC E-11; CE; SAE J1171)
- Marine weatherproof rated
- DC power systems only
- 8mm (5/16") cable terminals








EMPOWERED SAILING

EMPOWERED SAILING

Andersen Compact Motor™ electric winches allow you to hoist and trim sails at the push of a button regardless of physical strength, so any crew member can easily and safely trim sails and control lines.

Ease of installation

The Andersen Compact Motor™ electric winch is available in two formats for either Above Deck or Below Deck motor placement. Motor gearbox and controller are integrated into one compact unit with no extra control box necessary. Simplified electrical installation requires just the connection of positive and negative power cables to the motor terminals and the connection of the push button using the included output cable.

Efficient, variable speed

The Andersen Compact Motor™ is a brushless DC motor carefully matched to a low profile planetary gearbox which requires less space for installation and draws considerably less current than traditional motor/gearbox configurations. Available in 12 volt and 24 volt models, Compact Motor™ electric winches operate at variable speed in proportion to the pressure applied to the push button for smooth and quiet operation.

Illuminated “intelligent” push button

Compact Motor™ winches are supplied with a push button with integrated LED which illuminates when power is applied to the system. The push button incorporates a hinged safety cover to prevent inadvertent winch operation and is water resistant rated to IP67. The push button also acts with the controller to to assist with trouble shooting, by flashing in the event of overload or where other system protection intervention occurs. A cable for connection of the push button is included for convenient installation.

Built-in protection

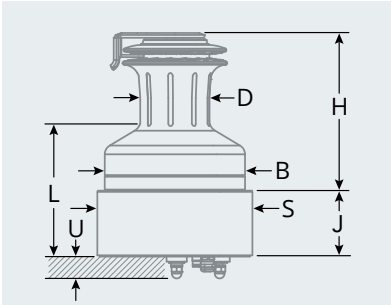
Integrated overload protection – The controller is pre-set to stop the winch if the maximum pull load is exceeded. Operation can resume within a few seconds when the load returns below the limit.
Thermal overload protection – The motor is fitted with a thermal cutout that disables the motor in case of overheating; it automatically resets after the temperature returns to normal.

Manual operation

Two speed manual operation is always available as a backup; to winch beyond the pre-set maximum pull load (but below the winch MWL) or just for the experience.

COMPACT MOTOR™, VARIABLE SPEED ELECTRIC

Above Deck
Compact Motor™ unit



Included with all above deck Compact Motor™ electric winches:
- 1*2 x RA866000 push button with 190mm (7 1/2") control cable
- 1*2 x RD877610 1m (39") control cable
- 1 x 877800 terminal extension kit
- 1 x 877750 circuit breaker with integrated controller
- Motor has 140mm (5 1/2") control cable included
- Drain tube
- Lip seal service kit.

For full technical and installation details, refer to Winch Data Sheets and User Manuals available at ***www.ronstan.com***

WINCH MODEL	LINE SIZE mm	DRUM "D" mm	BASE "B" mm	HEIGHT "H" mm	LINE ENTRY "L" mm	MOTOR HEIGHT "J" mm	MOTOR DIAM. "S" mm	MOTOR DEPTH "U" mm*1	WEIGHT kg
METRIC DIMENSIONS									
28ST	8 - 14	70	125	149	150	85	200	28	16
34ST	8 - 14	70	125	149	150	85	200	28	16
40ST	8 - 14	75	152	174	156	85	200	28	17
46ST	8 - 14	89	181	204	175	85	200	28	19
50ST	8 - 14	89	181	204	175	85	200	28	19
52ST	8 - 16	100	200	222	191	85	254	28	29
58ST	8 - 18	115	230	251	196	85	254	28	34
62ST	8 - 18	115	230	251	196	85	254	28	34
68ST	10 - 18	140	280	275	209	89	285	27	51
72ST	10 - 18	140	280	275	209	89	285	27	51

WINCH MODEL	LINE SIZE in	DRUM "D" in	BASE "B" in	HEIGHT "H" in	LINE ENTRY "L" in	MOTOR HEIGHT "J" in	MOTOR DIAM. "S" in	MOTOR DEPTH "U" in*1	WEIGHT lb
IMPERIAL DIMENSIONS									
28ST	5/16 - 9/16	2 3/4	4 15/16	5 7/8	5 15/16	3 3/8	7 7/8	1 1/8	35.3
34ST	5/16 - 9/16	2 3/4	4 15/16	5 7/8	5 15/16	3 3/8	7 7/8	1 1/8	35.3
40ST	5/16 - 9/16	2 15/16	6	6 7/8	6 1/8	3 3/8	7 7/8	1 1/8	37.5
46ST	5/16 - 9/16	3 1/2	7 1/8	8	6 7/8	3 3/8	7 7/8	1 1/8	41.9
50ST	5/16 - 9/16	3 1/2	7 1/8	8	6 7/8	3 3/8	7 7/8	1 1/8	41.9
52ST	5/16 - 5/8	3 15/16	7 7/8	8 3/4	7 1/2	3 3/8	10	1 1/8	63.9
58ST	5/16 - 5/8	4 1/2	9 1/16	9 7/8	7 3/4	3 3/8	10	1 1/8	75
62ST	5/16 - 5/8	4 1/2	9 1/16	9 7/8	7 3/4	3 3/8	10	1 1/8	75
68ST	13/32 - 5/8	5 1/2	11	10 3/16	8 1/4	3 1/2	11 1/4	1 1/16	112.5
72ST	13/32 - 5/8	5 1/2	11	10 3/16	8 1/4	3 1/2	11 1/4	1 1/16	112.5

*1 All Compact Motor™ Above Deck winches are supplied with 1 set of 41mm (1 5/8") terminal extensions. Additional 877800 terminal extension kits available to order to suit longer "U" dimensions.
*2 Sizes 68ST & 72ST Compact Motor™ electric winches are supplied with 2 x RA866000 control buttons and 2 x RD877610 1m (39") control cables.

WINCHES & CONVERSION KITS

WINCH MODEL	COMPACT MOTOR™ ABOVE DECK FULL STAINLESS WINCHES 12V	COMPACT MOTOR™ ABOVE DECK FULL STAINLESS WINCHES 24V	COMPACT MOTOR™ ABOVE DECK WINCH CONVERSION KITS 12V	COMPACT MOTOR™ ABOVE DECK WINCH CONVERSION KITS 24V
Winches & Conversion Kits				
28ST	RA2028015100	RA2028015200	RA2028215100	RA2028215200
34ST	RA2034015100	RA2034015200	RA2034215100	RA2034215200
40ST	RA2040015100	RA2040015200	RA2040215100	RA2040215200
46ST	RA2046015100	RA2046015200	RA2046215100	RA2046215200
50ST	RA2050015100	RA2050015200	RA2050215100	RA2050215200
52ST	RA2052015100	RA2052015200	RA2052215100	RA2052215200
58ST	RA2058015100	RA2058015200	RA2058215100	RA2058215200
62ST	RA2062015100	RA2062015200	RA2062215100	RA2062215200
68ST	RA2068015100	RA2068015200	RA2068215100	RA2068215200
72ST	RA2072015100	RA2072015200	RA2072215100	RA2072215200

PUSH BUTTONS & ACCESSORIES

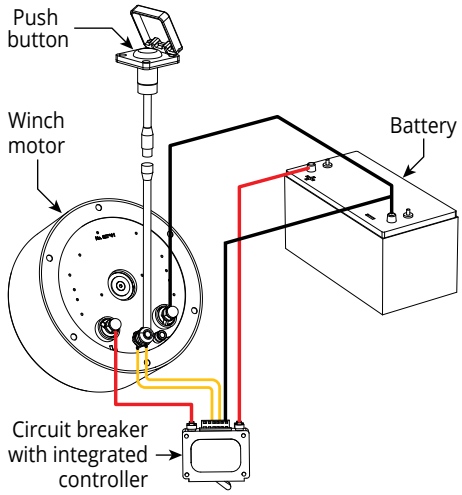

RA866000


RA866010

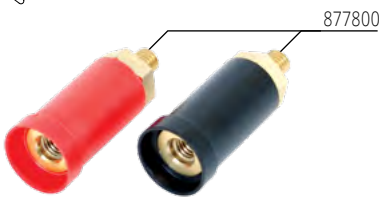

RA866020

PRODUCT No.	DESCRIPTION
Push Buttons	
RA866000	Push button, proportional switch, LED, plastic hinged cover, incl. 190mm (7 1/2") cable with connectors
RA866010	Push button, proportional switch, LED, stainless steel hinged cover, incl. 190mm (7 1/2") cable with connectors
RA866020	Push button, proportional switch, LED, stainless steel hinged cover with finger access, incl. 190mm (7 1/2") cable with connectors

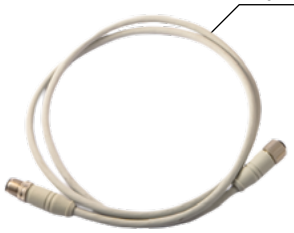
- Rubber gasket included.
- Requires only 25mm (1") clearance below mounting surface.



PRODUCT No.	DESCRIPTION
Control Cables	
RD877610	Compact Motor™ control cable 1000mm (39") long
RD877611	Compact Motor™ control cable 4000mm (157") long
Power Terminal Extensions	
877800	Compact Motor™ power terminal extension set (1 x Red & 1 x Black) 41mm (1 5/8") long, M8
Circuit Breaker	
877750	Circuit breaker with integrated controller


877800

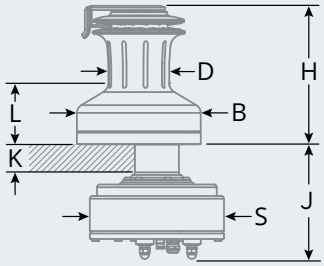
877750


RA877610
RA877611

COMPACT MOTOR™, VARIABLE SPEED ELECTRIC

Included with all below deck Compact Motor™ electric winches:
- 1*2 x RA866000 push button with 190mm (7 1/2") control cable
- 1*2 x RD877610 1m (39") control cable
- 1 x 877750 circuit breaker with integrated controller
- Motor has 140mm (5 1/2") control cable included
- Drain tube
- Lip seal service kit.

Below Deck
Compact Motor™ unit



For full technical and installation details, refer to Winch Data Sheets and User Manuals available at ***www.ronstan.com***

WINCH MODEL	LINE SIZE mm	DRUM "D" mm	BASE "B" mm	HEIGHT "H" mm	LINE ENTRY "L" mm	MAX. DECK "K" mm*1	MOTOR HEIGHT "J" mm	MOTOR DIAM. "S" mm	WEIGHT kg
METRIC DIMENSIONS									
28ST	8 - 14	70	125	157	75	50	173	195	17
34ST	8 - 14	70	125	157	75	50	173	195	17
40ST	8 - 14	75	152	182	79	50	173	195	18
46ST	8 - 14	89	181	204	90	57	182	195	21
50ST	8 - 14	89	181	204	90	57	182	195	21
52ST	8 - 16	100	200	222	106	56	179	250	30
58ST	8 - 18	115	230	261	122	44	168	250	36
62ST	8 - 18	115	230	261	122	44	168	250	36
68ST	10 - 18	140	280	285	130	47	171	250	45
72ST	10 - 18	140	280	285	130	47	171	250	45

WINCH MODEL	LINE SIZE in	DRUM "D" in	BASE "B" in	HEIGHT "H" in	LINE ENTRY "L" in	MAX. DECK "K" in*1	MOTOR HEIGHT "J" in	MOTOR DIAM. "S" in	WEIGHT lb
IMPERIAL DIMENSIONS									
28ST	5/16 - 9/16	2 3/4	4 15/16	6 3/16	2 15/16	2	6 13/16	7 11/16	37.5
34ST	5/16 - 9/16	2 3/4	4 15/16	6 3/16	2 15/16	2	6 13/16	7 11/16	37.5
40ST	5/16 - 9/16	2 15/16	6	7 3/16	3 1/8	2	6 13/16	7 11/16	39.7
46ST	5/16 - 9/16	3 1/2	7 1/8	8	3 9/16	2 1/4	7 3/16	7 11/16	46.3
50ST	5/16 - 9/16	3 1/2	7 1/8	8	3 9/16	2 1/4	7 3/16	7 11/16	46.3
52ST	5/16 - 5/8	3 15/16	7 7/8	8 3/4	4 3/16	2 3/16	7 1/16	9 7/8	66.2
58ST	5/16 - 5/8	4 1/2	9 1/16	10 1/4	4 13/16	1 3/4	6 5/8	9 7/8	79.4
62ST	5/16 - 5/8	4 1/2	9 1/16	10 1/4	4 13/16	1 3/4	6 5/8	9 7/8	79.4
68ST	13/32 - 5/8	5 1/2	11	11 1/4	5 1/8	1 7/8	6 3/4	9 7/8	99.2
72ST	13/32 - 5/8	5 1/2	11	11 1/4	5 1/8	1 7/8	6 3/4	9 7/8	99.2

*1 Extensions available to suit longer "K" dimensions.
*2 Sizes 68ST & 72ST Compact Motor™ electric winches are supplied with 2 x RA866000 control buttons and 2 x RD877610 1m (39") control cables.

WINCHES & CONVERSION KITS

WINCH MODEL	COMPACT MOTOR™ BELOW DECK FULL STAINLESS WINCHES 12V	COMPACT MOTOR™ BELOW DECK FULL STAINLESS WINCHES 24V	COMPACT MOTOR™ BELOW DECK WINCH CONVERSION KITS 12V	COMPACT MOTOR™ BELOW DECK WINCH CONVERSION KITS 24V
Winches & Conversion Kits				
28ST	RA2028014100	RA2028014200	RA2028214100	RA2028214200
34ST	RA2034014100	RA2034014200	RA2034214100	RA2034214200
40ST	RA2040014100	RA2040014200	RA2040214100	RA2040214200
46ST	RA2046014100	RA2046014200	RA2046214100	RA2046214200
50ST	RA2050014100	RA2050014200	RA2050214100	RA2050214200
52ST	RA2052014100	RA2052014200	RA2052214100	RA2052214200
58ST	RA2058014100	RA2058014200	RA2058214100	RA2058214200
62ST	RA2062014100	RA2062014200	RA2062214100	RA2062214200
68ST	RA2068014100	RA2068014200	RA2068214100	RA2068214200
72ST	RA2072014100	RA2072014200	RA2072214100	RA2072214200

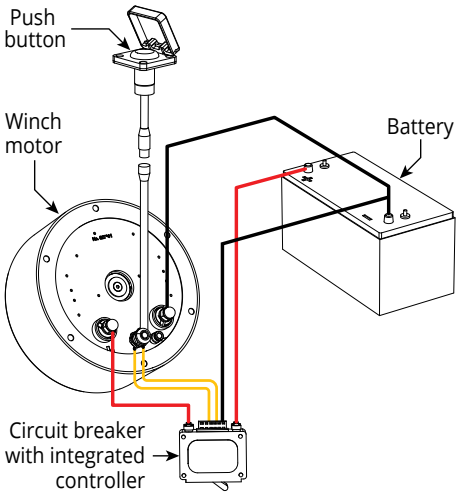

RA866000


RA866010

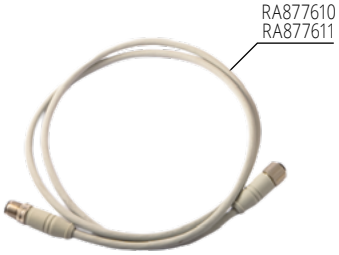

RA866020

PRODUCT No.	DESCRIPTION
Push Buttons	
RA866000	Push button, proportional switch, LED, plastic hinged cover, incl. 190mm (7 1/2") cable with connectors
RA866010	Push button, proportional switch, LED, stainless steel hinged cover, incl. 190mm (7 1/2") cable with connectors
RA866020	Push button, proportional switch, LED, stainless steel hinged cover with finger access, incl. 190mm (7 1/2") cable with connectors

- Rubber gasket included.
- Requires only 25mm (1") clearance below mounting surface.



PRODUCT No.	DESCRIPTION
Control Cables	
RD877610	Compact Motor™ control cable 1000mm (39") long
RD877611	Compact Motor™ control cable 4000mm (157") long
Circuit Breaker	
877750	Circuit breaker with integrated controller

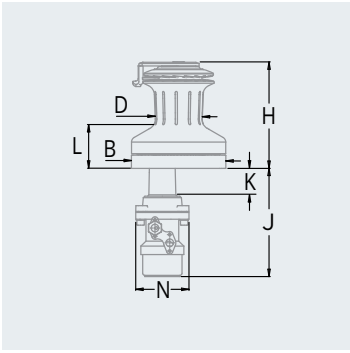


SINGLE SPEED HYDRAULIC

EMPOWERED SAILING

ANDERSEN hydraulic winches can be powered by an appropriately configured power pack which may already be installed on board for various other equipment such as a furler or anchor windlass.

Fitted with industry-standard hydraulic motors, our hydraulic winches are compatible with most common types of hydraulic systems found on board today's larger yachts.



PRODUCT No.	WINCH MODEL	LINE SIZE mm	DRUM "D" mm	BASE "B" mm	HEIGHT "H" mm	LINE ENTRY "L" mm	MAX. DECK "K" mm*1	MOTOR DEPTH "J" mm	MOTOR WIDTH "N" mm	WEIGHT kg
METRIC DIMENSIONS										
RA2052013100	52ST	8 - 16	100	200	220	116	54	246	130	23
RA2058013100	58ST	8 - 18	115	230	251	121	54	252	130	30
RA2062013100	62ST	8 - 18	115	230	251	121	54	252	130	30
RA2068013100	68ST	10 - 18	140	280	273	130	60	232	130	41
RA2072013100	72ST	10 - 18	140	280	273	130	60	232	130	41

PRODUCT No.	WINCH MODEL	LINE SIZE in	DRUM "D" in	BASE "B" in	HEIGHT "H" in	LINE ENTRY "L" in	MAX. DECK "K" in*1	MOTOR DEPTH "J" in	MOTOR WIDTH "N" in	WEIGHT lb
IMPERIAL DIMENSIONS										
RA2052013100	52ST	5/16 - 5/8	3 15/16	7 7/8	8 11/16	4 3/16	2 1/8	9 11/16	5 1/8	50.7
RA2058013100	58ST	5/16 - 5/8	4 1/2	9 1/16	9 7/8	4 3/8	2 1/8	9 29/32	5 1/8	66.1
RA2062013100	62ST	5/16 - 5/8	4 1/2	9 1/16	9 7/8	4 3/8	2 1/8	9 29/32	5 1/8	66.1
RA2068013100	68ST	3/8 - 5/8	5 1/2	11	10 3/4	4 3/4	2 3/8	9 1/8	5 1/8	90.4
RA2072013100	72ST	3/8 - 5/8	5 1/2	11	10 3/4	4 3/4	2 3/8	9 1/8	5 1/8	90.4

*1 Extensions available to suit longer "K" dimensions.

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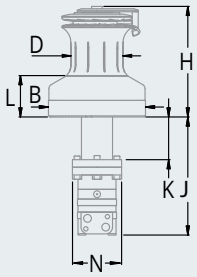


RA2082013200

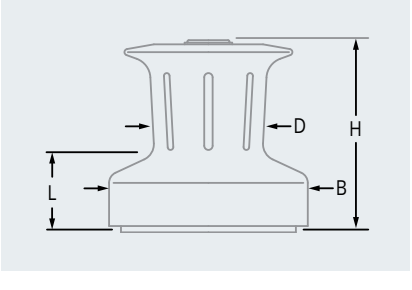
PRODUCT No.	WINCH MODEL	LINE SIZE mm	DRUM "D" mm	BASE "B" mm	HEIGHT "H" mm	LINE ENTRY "L" mm	MAX. DECK "K" mm*	MOTOR DEPTH "J" mm	MOTOR WIDTH "N" mm	WEIGHT kg
METRIC DIMENSIONS										
RA2082013200	82-3ST	12 - 18	170	318	305	127	145	350	132	43

PRODUCT No.	WINCH MODEL	LINE SIZE in	DRUM "D" in	BASE "B" in	HEIGHT "H" in	LINE ENTRY "L" in	MAX. DECK "K" in*	MOTOR DEPTH "J" in	MOTOR WIDTH "N" in	WEIGHT lb
IMPERIAL DIMENSIONS										
RA2082013200	82-3ST	1/2 - 3/4	6 11/16	12 1/2	12	5	5 23/32	13 25/32	5 3/16	94.8

* Extensions available to suit longer "K" dimensions.

CLASSIC WINCHES

© David Pichler / Robline



PRODUCT No.	WINCH MODEL	GEAR RATIO 1ST SPEED	GEAR RATIO 2ND SPEED	POWER RATIO 1ST SPEED	POWER RATIO 2ND SPEED	DRUM "D" mm	BASE "B" mm	HEIGHT "H" mm	LINE ENTRY "L" mm	WEIGHT kg
METRIC DIMENSIONS										
RA500010	10	1.0 : 1	-	8.8 : 1	-	57	92	89	28	1.1
RA500018	18	1.0 : 1	2.1 : 1	8.3 : 1	17.4 : 1	60	114	110	45	2.6
RA500028	28	1.0 : 1	4.0 : 1	7.1 : 1	28.6 : 1	70	124	126	53	3.3
RA500040	40	1.0 : 1	6.4 : 1	6.5 : 1	42.5 : 1	76	136	140	63	3.9
RA500046	46	1.0 : 1	6.4 : 1	6.4 : 1	45.6 : 1	78	143	140	63	4.0

PRODUCT No.	WINCH MODEL	GEAR RATIO 1ST SPEED	GEAR RATIO 2ND SPEED	POWER RATIO 1ST SPEED	POWER RATIO 2ND SPEED	DRUM "D" in	BASE "B" in	HEIGHT "H" in	LINE ENTRY "L" in	WEIGHT lb
IMPERIAL DIMENSIONS										
RA500010	10	1.0 : 1	-	8.8 : 1	-	2 1/4	3 5/8	3 1/2	1 3/32	2.4
RA500018	18	1.0 : 1	2.1 : 1	8.3 : 1	17.4 : 1	2 3/8	4 1/2	4 11/32	1 25/32	5.7
RA500028	28	1.0 : 1	4.0 : 1	7.1 : 1	28.6 : 1	2 3/4	4 7/8	4 31/32	2 3/32	7.3
RA500040	40	1.0 : 1	6.4 : 1	6.5 : 1	42.5 : 1	3	5 11/32	5 1/2	2 15/32	8.6
RA500046	46	1.0 : 1	6.4 : 1	6.4 : 1	45.6 : 1	3 1/16	5 5/8	5 1/2	2 15/32	8.8

- Andersen classic winches are used by the top match racing centres and fitted as standard equipment on a variety of classes that require simplicity combined with utmost dependability.
- Handles are included as shown.

PRODUCT No.	DESCRIPTION
Classic Winch Handles	
RA510901	Classic winch handle to suit Model 90
RA510911	Classic winch handle to suit Model 91
RA511001	Classic winch handle to suit Model 100
RA511011	Classic winch handle to suit Model 101
RA511021	Classic winch handle to suit Model 102

PRODUCT No.	WINCH MODEL	GEAR RATIO	POWER RATIO	DRUM "D" mm	BASE "B" mm	HEIGHT "H" mm	SHAFT LENGTH "J" mm	HANDLE CLEARANCE "S" mm	HANDLE CLEARANCE "R" mm	WEIGHT kg
METRIC DIMENSIONS										
RA510091	91	1.0 : 1	8.0 : 1	51	80	94	-	-	224	1.0
RA510101	101	1.0 : 1	5.5 : 1	83	111	89	-	-	275	1.5
RA510102	102	1.0 : 1	5.5 : 1	83	111	74	150	255	-	2.0
RA510103	102	1.0 : 1	5.5 : 1	83	111	74	200	255	-	2.1
RA510105	102	1.0 : 1	5.5 : 1	83	111	74	100	255	-	1.9

PRODUCT No.	WINCH MODEL	GEAR RATIO	POWER RATIO	DRUM "D" in	BASE "B" in	HEIGHT "H" in	SHAFT LENGTH "J" in	HANDLE CLEARANCE "S" in	HANDLE CLEARANCE "R" in	WEIGHT lb
IMPERIAL DIMENSIONS										
RA510091	91	1.0 : 1	8.0 : 1	2	3 5/32	3 11/16	-	-	8 13/16	2.2
RA510101	101	1.0 : 1	5.5 : 1	3 9/32	4 3/8	3 1/2	-	-	10 3/16	3.3
RA510102	102	1.0 : 1	5.5 : 1	3 9/32	4 3/8	2 29/32	5 29/32	10	-	4.4
RA510103	102	1.0 : 1	5.5 : 1	3 9/32	4 3/8	2 29/32	7 7/8	10	-	4.6
RA510105	102	1.0 : 1	5.5 : 1	3 9/32	4 3/8	2 29/32	3 15/16	10	-	4.2

Easy, single-handed release button

Secure, auto-insert locking mechanism

Ball bearing handle for minimum friction

Palm grip models for maximum speed and power

QUICK-LOCK™ HANDLES

POWER, PERFORMANCE & INTUITIVE OPERATION

The Ronstan Quick-Lock™ is the quickest and most user friendly winch handle available for racing and cruising sailors alike. In addition to its super fast grab-and-release mechanism for intuitive single handed removal, it is the only handle to feature the patented auto quick-locking mechanism that lets you put the handle in the winch without depressing a lever or rotating a knob – it couldn't be easier!

Quick-Lock™ automatic insertion

Ronstan Quick-Lock™ allows you to immediately place the drive head into the winch socket without the need to rotate a knob or depress a button. Its stainless steel locking lever then retains the handle securely in place until you are ready to remove it.

Intuitive grab & release

The large easy to locate release button extends up the length of the handle providing intuitive grab-and-release operation. This makes the Quick-Lock™ ideal for easy one-handed use by any crew.

Power in your hands

A precision ball bearing race in the hand grip provides free rotation for high speed or high power cranking, and the refined ergonomics ensure efficient transfer of effort. 8" (200mm) models cater to situations with restricted space and 10" (250mm) handles provide greater mechanical advantage - the basis on which winch power ratios are calculated. Palm grip handles are the ultimate option where fast two-handed cranking is required.

QUICK-LOCK™ HANDLES

- Patented auto lock-in latch.
- Large grab-and-release button.
- Single handed insert and release operation .
- 8" (200mm) and 10" (250mm) models.
- Standard and palm grip models.
- Ball bearing hand grips.
- Lightweight forged construction.
- Corrosion resistant hard anodised finish.

PRODUCT No.	GRIP	LENGTH mm	WEIGHT g	LENGTH in	WEIGHT oz
Single Grip					
RF4410	Single	200	415	8	14.6
RF4415	Single	250	450	10	15.9
Palm Grip					
RF4430	Palm	200	470	8	16.6
RF4435	Palm	250	525	10	18.5

BASIC HANDLES & POCKETS

PLASTIC WINCH HANDLES

- Lightweight.
- Two-piece welded construction.
- Serviceable locking mechanism.
- Aluminium drive plug.

STAINLESS STEEL WINCH HANDLES

- Robust stainless steel construction.
- Stainless steel drive plug.

RF4099 WINCH HANDLE POCKET

- Screw holes and webbing/lashing slots for mounting.
- UV stabilised.
- Strong but flexible for maximum durability.

PRODUCT No.	DESCRIPTION	LENGTH mm	WEIGHT g	LENGTH mm	WEIGHT oz
Winch Handles					
RA507297	Stainless steel Andersen winch handle	200	400	8	14.1
RA507298	Stainless steel Andersen winch handle	250	450	10	15.9
RF4110	Plastic winch handle	200	270	8	9.5
RF4115	Plastic winch handle	250	320	10	11.3
RF4109	Locking mechanism service kit, suits plastic winch handles	-	-	-	-
Winch Handle Pockets					
RF3941	Winch handle pocket, grey PVC with mesh	-	230	-	8.1
RF4099	Winch handle pocket, PVC	-	308	-	10.9

REPLACEMENT PARTS & GREASE

SERVICE KITS

RA500001-1

- For optimum performance and long life of your Andersen winch, it should be serviced every 2 years or so under normal use. Service kits contain the basic replacement parts for your specific winch model service.
- See the SUPPORT section of the ***www.ronstan.com*** for further information regarding installation, use and service of current and past models of Andersen winches, including Product Manuals, Service Tips, etc.

PRODUCT No.	WINCHES SUITED	DESCRIPTION
Service Kits		
RA700020	Line Tender	Replacement pawls & springs, circlips
RA700021	52ST (v3.0 2009/later)	Replacement pawls & springs, plain bearing, ball bearings, retaining ring, screws, washers
RA710001	12ST, 28ST (10.2005/earlier), 40ST	Replacement pawls & springs, ball bearings, circlips, screws, retaining ring, locking pin
RA710002	46ST (1982 - 1993)	Replacement pawls & springs, circlip, screws
RA710003	56ST, 66ST	Replacement pawls & springs, ball bearings, circlips, screws, washers, locking pin, sealing ring
RA710004	10, 18, 28, 40, 46 Classic	Replacement pawls & springs, circlips
RA710005	56 Classic	Replacement pawls & springs, ball bearings, circlips, locking pin
RA710007	78ST (10.2005/later)	Replacement pawls & springs, O-ring, ball bearings, circlips, screws, washers
RA710008	52ST (v2.5 2009/earlier)	Replacement pawls & springs, plain bearing, ball bearings, circlips, screws, retaining ring
RA710010	Springs for Andersen winches	Replacement pawl springs only: 10 x arm springs, 10 x spiral springs
RA710011	46ST (1993 - 1996)	Replacement pawls & springs, plain bearing, ball bearings, circlip, screws
RA710012	58ST, 62ST	Replacement pawls & springs, plain bearing, ball bearings, circlips, screws, retaining ring
RA710013	68ST, 72ST	Replacement pawls & springs, plain bearing, ball bearings, circlip, screws, retaining ring
RA710014	90, 91, 92 Classic	Replacement pawls & springs, circlip, screws, washers
RA710015	100, 101, 102 Classic	Replacement pawls & springs, circlip, screws, washers
RA710016	6 Classic	Replacement pawls & springs, screws, washers
RA710017	46ST (1997- v3.2 07.2006)	Replacement pawls & springs, plain bearing, ball bearings, circlips, screws
RA710018	12ST, 18ST, 28ST (11.2005/later), 34ST	Replacement pawls & springs, plain bearing, screws, locking pin
RA710019	46ST v.4.0 (08.2006/later), 48ST, 50ST	Replacement pawls & springs, plain bearing, circlip, screws
RA710040	82-3ST v1.0	Replacement pawls, auto-switch pawls, springs, slide plungers, disc springs
RA710052	Orbit Winches™, Andersen winches	Replacement pawls 8x & pawl springs 16x
Winch Grease		
RA500001		Winch grease tube, 12-pack, including display carton
RA500001-1		Winch grease, single tube

PRODUCT NUMBER INDEX

PRODUCT NUMBER INDEX

PRODUCT NUMBER INDEX

PRODUCT NUMBER INDEX

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. Stated values for Breaking Load refer to a test load situation representative of a product's typical use and applications. Load situation and circumstances of actual use may vary, affecting the load at which a major failure may occur. No product should be used at more than half of the stated 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.

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 factors including but not limited to safety implications, service life, fatigue (as may be caused by wave action, wind stresses or repetitive cyclical loading), type of load (e.g. cyclic, shock, rotational speed), orientation of load, environment (e.g. exposure to ultraviolet light, temperature extremes), corrosion and stress corrosion. Note that a 'safe working load' is not specified 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. While every precaution is taken in the 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. Contact your local representative for further assistance and advice.

Warranty

Details of Ronstan's Product Warranty can be found under the SUPPORT tab at ***www.ronstan.com***.

Fittings and Equipment

General guidance on fittings and equipment can be found under the SUPPORT tab at ***www.ronstan.com***.

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***.

TRADEMARKS

Trademark Acknowledgements

- Clamcleat® is a registered trademark of Clamcleats Limited
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- Windex® is a registered trademark of Windex Development AB

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- Andersen Stainless Steel Winches® is a registered trademark of Ronstan Denmark ApS

Ronstan Trademarks

- Andersen Winches™ (winches)
- Ballslide™ (batten cars)
- Battlestick™ (tiller extensions)
- BoatSmart™ (boat care products)
- Captive Lock™ (utility blocks)
- C-Cleat™ (cam cleats)
- ClearStart™ (sailing timer and watches)
- Compact Motor™ (electric winches)
- Core Block™ (blocks)
- Orbit Block™ (blocks)
- Orbit Winch™ (winches)
- Power Rib™ (winches)
- Quick-Lock™ (winch handles)
- QuickTrim™ (winch trim functionality)
- RopeGlide™ (Shocks™, rings, fairleads)
- Sailfast™ (silicon spray)
- Shock™ (sheaveless block)
- T-Cleat™ (cam cleats)
- Triggersnaps™ (trigger snap shackles)
- Ultimate Ratchet Block™ (ratchet blocks)
- V-Cleat™ (rope cleats)

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