



**KOHLHOFF**  
specialized in deck equipment



Liebe Kunden und Freunde,

seit nunmehr fast 30 Jahren sind wir Vertreter für die australisch/dänische Marke Ronstan.

In der Vergangenheit haben wir unseren Kunden häufig Kataloge in englischer Sprache zur Verfügung gestellt. Wir haben uns nun eine Menge Arbeit gemacht den Katalog für Sie teilweise zu übersetzen, um ihn Ihnen zum Teil in deutscher Sprache zur Verfügung stellen zu können. Wir freuen uns Ihnen hiermit einen komplett neuen eigenen Katalog zu überreichen.

Tabellen und technische Daten haben wir der Einfachheit halber in englischer Sprache gelassen. Sollte es Fragen geben oder Fehler auftauchen, würden wir uns über eine kleine Nachricht freuen.

Ich möchte mich an dieser Stelle für die vielen Jahre der Treue bedanken.

Weiterhin Mast und Schotbruch und viele erfolgreiche Regatten und schöne Segelreisen mit Ronstan Beschlägen und Andersen Winschen.

Ihr/Euer Peter Kohlhoff

*P. Kohlhoff*



Ihr Partner für RONSTAN Produkte.  
Beratung und Service auf höchstem Niveau

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## ORBITBLOCKS™ Ultimative Performance

Die Kugellager Orbit Blocks™ sind sensationell leicht und liefern dabei eine große Festigkeit und Zuverlässigkeit. Das Verhältnis von Gewicht und Arbeitslast und die Auswahl der verwendeten Materialien sind typisch für Ronstan von allerbesten Qualität. Die Orbitblöcke sind mit Dyneema® Loop oder Edelstahl Schäkeln erhältlich, je nachdem welche Blockversion man wählt. Das leistungsfähige Orbitallager vereint geringstmögliches Gewicht mit hoher Performance, die Reibung betreffend. Die oben angesprochenen Dyneema® Verbindungsloops gibt es für verschiedene Blocktypen, um Gewicht zu sparen. Sie lassen sich in 0°- oder 90°-Orientierung einstellen. Andere Versionen sind mit Edelstahlschäkeln ausgerüstet, um eine weniger anfällige, konventionelle Verbindung herzustellen. Die Orbit Blöcke™ mit Klemmarmen für beispielsweise Großschotensysteme, sind mit unserer kohlefaserverstärkten C-Cleat™ ausgestattet, welche mit Ihren einzigartigen Klemmbacken für maximalen Grip und Kontrolle eine ideale Ergänzung darstellt. Der Klemmwinkel läßt sich auf den gewünschten Winkel einstellen.



## Unglaublich Stark

Unsere weltberühmten Ratschenblöcke liefern viele Vorteile gegenüber anderen Blöcken auf dem Markt. Mehrere schräge Einfräsungen in einem einzigartigen Scheibendesign liefern eine Kraftreduzierung von bis zu 20:1. Trotzdem hält sich der Tauwerkabrieb in Grenzen. Die leichtgängigen Kugellager sorgen für minimale Reibung unter Last und aufgrund der hochwertigen Materialauswahl haben diese Blöcke eine überdurchschnittlich lange Lebensdauer. Der Ein/Aus -Schalter kann in drei Stellungen geschaltet werden: Ratschenfunktion eingeschaltet, ausgeschaltet oder Auto-Ratschenfunktion. In dieser Stellung schaltet der Block nur unter Last in die Ratschenfunktion und bleibt unbelastet ein normaler Kugellagerblock. Diese Funktion ist besonders für das Halsen mit Gennackern sinnvoll.



Ball Bearing Orbit sheave



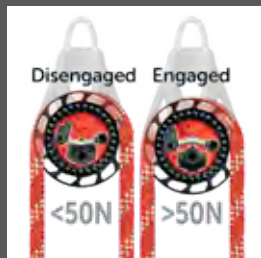
Dyneema® link or shackle head



Adjustable cleat arms



Ratchet block holding power



Ratchet block auto engagement



Ratchet block auto/manual models

# UTILITYBLOCKS

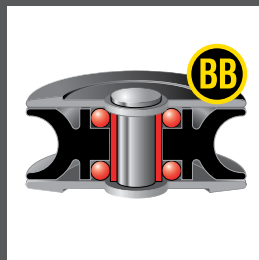
## Allround-Lösungen

Utility Blocks sind eine ideale Ergänzung für die Bedürfnisse des täglichen Freizeitsports. Sie sind auf wartungsarme Zuverlässigkeit ausgelegt und bieten je nach Einsatzzweck eine Auswahl an Scheiben-/Lagerkonfigurationen.

- AP** (Allround) Versionen sind eine gute Wahl für Langlebigkeit. Sie zeichnen sich durch selbstschmierende Acetal-Polymer-Scheiben aus, die auf polierten Edelstahlbuchsen laufen und ebenso gut bei dynamischen Belastungen funktionieren.
- BB** (Kugellager)-Versionen beinhalten unser zweistufiges Lagersystem mit Kugellagern zur Minimierung der Reibung und ein sekundäres Vollkontaktlager zur Aufrechterhaltung einer geringen Reibung über den gesamten Arbeitslastbereich.
- SP** (Special Purpose) Versionen eignen sich für den Einsatz mit Drahtseilen oder wenn hohe statische Lasten gefordert sind.

# ROPEGLIDE™ LÖSUNGEN Genial einfach

Für Anwendungen mit hohen statischen Lasten, bei denen nur eine einfache Umlenkung und eine geringe Trimmjustierung erforderlich ist, sind unsere reibungsarmen RopeGlide™-Ringe und -Leitösen eine leichte und robuste Alternative zu Blöcken. Für Strecker bieten unsere Shocks™ hohe Festigkeit und Vielseitigkeit in kompakter Form.



Ball Bearing sheave



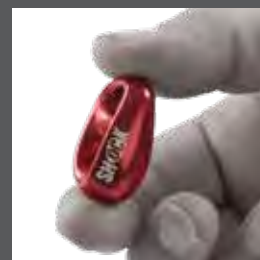
All Purpose &amp; Special Purpose sheave



RopeGlide™ rings



RopeGlide™ fairleads



Versatile Shocks™





## SERIE 15

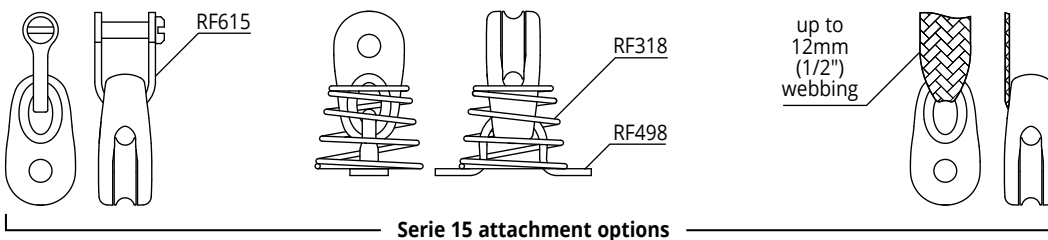


## SERIE 20 Orbit

✓ Passt bis zu  
4mm (5/32")  
lashing



© Marvin Baumeister  
Ronstan kitesurfing team rider



**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
<b>Series 15 -  All Purpose</b>											
RF13101-2	Single block, loop head, black (2 pack)	15	4	150	300	5	5/8	5/32	330	660	0.2
RF13101G-2	Single block, loop head, grey (2 pack)	15	4	150	300	5	5/8	5/32	330	660	0.2
RF13101R-2	Single block, loop head, red (2 pack)	15	4	150	300	5	5/8	5/32	330	660	0.2

## Accessories

RF9003-07 Dyneema® link to suit RF21107

\* Block must be lashed through hub. The supplied lashing line must have three passes through head and hub to achieve rated load. MWL & BL are dependent on the strength of lashing. Knots, splices, stitching will generally have a lower BL than the line itself.



**RF133**  
Suits loop head single blocks

**RF633S**  
3mm (1/8") slotted pin, suits RF15100

- ✓ 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 cheek block features lateral supports for improved mounting stability.

- ✓ 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.

- ⬆ Dinghy control lines.
- ⬆ Vangs, cunninghams and tweekers.
- ⬆ Shock cord tensioning systems.
- ⬆ Sheaves: UV stabilised acetal.
- ⬆ Ball bearings: Stainless steel.
- ⬆ Cheeks & head fittings: Grade 316 stainless steel.

PRODUCT No.	DESCRIPTION	SHEAVE	MAX.	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	WIRE	DIAM.				DIAM.	ROPE	WIRE	DIAM.			
		mm	mm	mm	mm	kg	kg	g	in.	in.	in.	in.	lb	lb	oz
<b>BB</b> 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
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
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
RF633S	Shackle, slotted pin, suits RF15100	-	-	-	3	-	-	3	-	-	-	1/8	-	-	0.1
RF633S	Shackle, suits double & triple blocks	-	-	-	4	-	-	5	-	-	-	5/32	-	-	0.2
RF1851	Shackle, suits single loop head blocks	-	-	-	3	-	-	2	-	-	-	1/8	-	-	0.1



RF498



RF318

Suits RF20101 &amp; RF20111



RF1850S

3mm (1/8") slotted pin, suits loop top single blocks

- ✓ 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.

- ⬆ Exit blocks minimise friction in lines passing through the deck or exiting masts and booms. Supplied with cover plate, or low profile version with side tabs only.
- ⬆ Linked blocks are used for dinghy barber haulers, cunninghams and spinnaker pole launching systems.

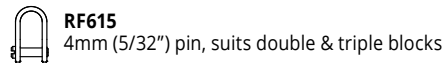
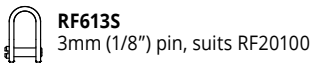
PRODUCT No.	DESCRIPTION	SHEAVE	MAX.	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	MAX.	PIN	M.W.L.	B.L.	WEIGHT	
		DIAM.	ROPE	WIRE	DIAM.				DIAM.	ROPE	WIRE	DIAM.				DIAM.
		mm	mm	mm	mm	kg	kg	g	in.	in.	in.	in.	lb	lb	oz	
<b>BB Ball Bearing</b>																
RF20100	Single block, swivel shackle head	20	6	-	3	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
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\* Line load through cleat not to exceed 125kg (275lb).





- ✓ Cheek block RF20151 has 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.

- ⚙ Dinghy control lines and vang.
- ⚙ Cunninghams.
- ⚙ Traveller controls.

- ⚙ BB sheaves: UV stabilised acetal.
- ⚙ SP sheaves: Self-lubricating Nylatron®.
- ⚙ Ball bearings: Stainless steel.
- ⚙ Load straps, head fittings & hook (RF20180): 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
<b>BB Ball Bearing</b>															
RF20151	Cheek block	20	6	-	-	250	550	14	3/4	1/4	-	-	550	1210	0.5
RF20151A	Cheek block, rivet mount	20	6	-	-	200	550	17	3/4	1/4	-	-	440	1210	0.6
RF20171	Upright lead block	20	6	-	-	250	550	18	3/4	1/4	-	-	550	1210	0.6
RF20174	Pivoting lead block	20	6	-	-	250	550	30	3/4	1/4	-	-	550	1210	1.1
RF20175	Pivoting lead block, cleat	20	6	-	-	150*	300	79	3/4	1/4	-	-	330*	660	2.8
RF20180	Single block, swivel hook head	20	6	-	-	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
RF20711	Exit block, cover plate	20	6	-	-	250	1000	22	3/4	1/4	-	-	550	2200	0.8
RF20711A	Exit block, side tabs	20	6	-	-	250	1000	22	3/4	1/4	-	-	550	2200	0.8
<b>SP Special Purpose - Nylatron® Sheave</b>															
RF20000HL	Sheave, Nylatron®	20	6	3	-	-	-	2	3/4	1/4	1/8	-	-	-	0.1
RF20711HL	Exit block, cover plate	20	6	3	-	275	1000	22	3/4	1/4	1/8	-	610	2200	0.8
RF20711AHL	Exit block, side tabs	20	6	3	-	275	1000	22	3/4	1/4	1/8	-	610	2200	0.8

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

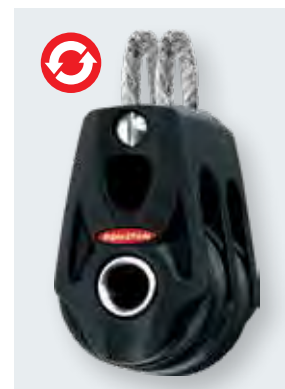


## NEU

RF35109HL



Design für extrem hohe Lasten wie beispielsweise: Cunninghams, Cascaden, Unterliekstrecker und High Performance Dinghies.

RF35100 **BB**  
RF35100D **SP**RF35202 **BB**RF35302 **BB**RF35101 **BB**  
RF35101D **SP**RF35212 **BB**RF35312 **BB**

Die Doppel und Dreifachblöcke können mit dem Softloop RF9003-07 umgerüstet werden



RF134  
RF134A (countersunk holes)



RF323  
Suits RF35100, RF35100D



RF1850S-2 (2 pack)  
Suits RF35101 in either direction



RF9003-07

- ✓ RF35101 and RF35100 - Ultra-low profile through-sheave becket.
- ✓ 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.

- ✓ RF9003-07 Dyneema® link is a lightweight option for double & triple blocks.
- ⚠ 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: High compression strength carbon black acetal.
- ⚠ SP sheaves: Self-lubricating Nylatron®.
- ⚠ Ball bearings: High compression strength acetal.
- ⚠ Frame/cheeks: Glass fibre reinforced nylon.
- ⚠ Rope link: UV stabilised, multi-strand SK75 Dyneema®.

PRODUCT No.	DESCRIPTION	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	DIAM.				DIAM.	DIAM.	ROPE			
		mm	mm	mm	kg	kg	g	in.	in.	in.	lb	lb	oz
<b>BB</b> Ball Bearing	<b>HHL</b> High Grade Stainless Steel Sheave												
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
RF35109	Single block HHL, lashing hub and becket option	30	8	-	550 <sup>*4</sup>	1650 <sup>*4</sup>	42	1 3/16	5/16	-	1210 <sup>*4</sup>	3630 <sup>*4</sup>	1.5
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 <sup>*1</sup> , non-swivel shackle head	30	8	-	450 <sup>*2</sup>	900	57	1 3/16	5/16	-	990 <sup>*2</sup>	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 <sup>*1</sup> , non-swivel shackle head	30	8	-	550 <sup>*3</sup>	1100	81	1 3/16	5/16	-	1210 <sup>*3</sup>	2430	2.9
<b>SP</b> 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
<b>Spare Parts &amp; Conversion Accessories</b>		<b>Blocks suited:</b>											
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 31% 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 Breaking Load is dependent on the strength of the lashing through the central hub. Knots, splices, stitching will generally have a lower BL than the line itself.



- ✓ RF35322 & RF35332 - Composite C-Cleat™ and fairlead.
- ✓ RF35151 - Base suits curved mounting surface.
- ✓ RF35286 - Stainless steel ring, 40mm (1 1/2") 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.

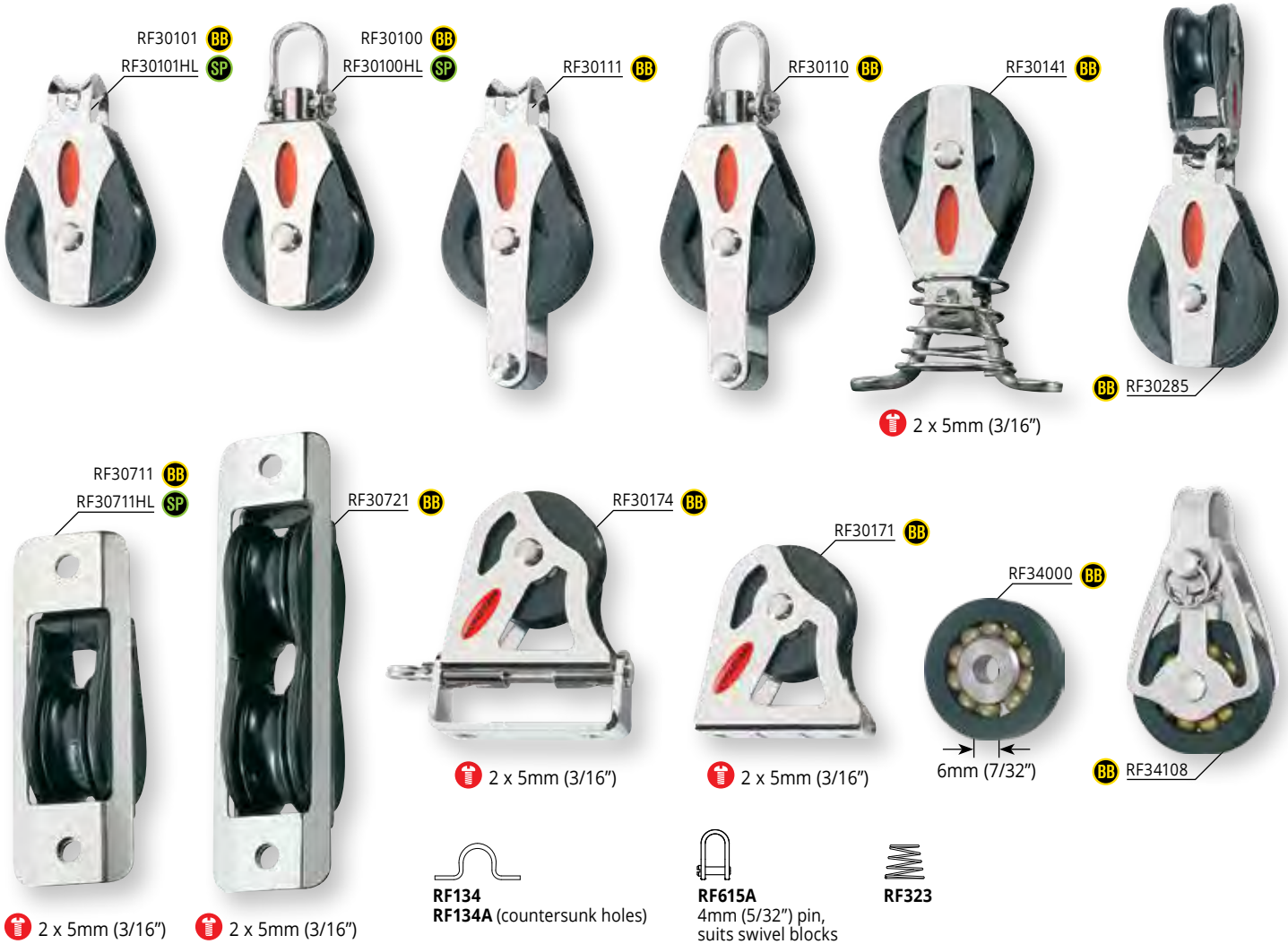
- ⚙️ Sheaves: High compression strength carbon black acetal.
- ⚙️ Ball bearings: High compression strength acetal.
- ⚙️ Frame/cheeks: Toughened, glass fibre reinforced nylon.
- ⚙️ Head fittings & hubs: Grade 316 stainless steel.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM.	MAX. ROPE	PIN DIAM.	M.W.L.	B.L.	WEIGHT	SHEAVE DIAM.	MAX. ROPE	PIN DIAM.	M.W.L.	B.L.	WEIGHT
		mm	mm	mm	kg	kg	g	in.	in.	in.	lb	lb	oz
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	-	300	600	36	1 3/16	5/16	-	660	1320	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

\*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).



- 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.

PRODUCT No.	DESCRIPTION	SHEAVE	MAX.	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	WIRE	DIAM.				DIAM.	ROPE	WIRE	DIAM.			
		mm	mm	mm	mm	kg	kg	g	in.	in.	in.	in.	lb	lb	oz
<b>BB</b> 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
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	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
RF30711	Single exit block	30	8	-	-	300	750	35	1 3/16	5/16	-	-	660	1650	1.2
RF30721	Double exit block	30	8	-	-	300	750	60	1 3/16	5/16	-	-	660	1650	2.1
RF34000	Sheave, alloy, 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	-	7/32	360	1490	1.3

<b>SP Special Purpose - Nylatron® Sheave</b>		SHEAVE	MAX.	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	MAX.	PIN	M.W.L.	B.L.	WEIGHT
PRODUCT No.	DESCRIPTION	DIAM.	ROPE	WIRE	DIAM.				DIAM.	ROPE	WIRE	DIAM.			
		mm	mm	mm	mm	kg	kg	g	in.	in.	in.	in.	lb	lb	oz
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
RF30711HL	Single exit block	30	8	3	-	300	750	43	1 3/16	5/16	1/8	-	660	1650	1.5





- ✓ 2-stage ball bearing system.
- ✓ Single inner cheeks on doubles and triples for reduced weight and bulk.
- ✓ RF45110, RF45111 & RF45140 - Ultra-low profile integrated becket.

- ✓ RF45110 - Stainless steel shackle head for unlimited block rotation, and compatibility with sharp fixing points.
- ⚠ Mainsheet systems and spinnaker sheets on dinghies to 5m (16ft).

- ⚠ Halyard, vang and backstay applications on boats to 8m (26ft).
- ⚠ Control line applications on larger yachts.
- ⚠ Rope link: UV stabilised, multi-strand SK75 Dyneema®.

PRODUCT No.	DESCRIPTION	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	DIAM.	kg	kg	g	DIAM.	ROPE	DIAM.	lb	lb	oz
		mm	mm	mm				in.	in.	in.			
<b>BB</b> Ball Bearing													
RF45101	Single block, Dyneema® link head	40	9	-	325	700	33	1 9/16	5/16	-	715	1540	1.2
RF45110	Single block, becket, swivel shackle head	40	9	4	325*1	650	44	1 9/16	5/16	5/32	715*1	1430	1.6
RF45111	Single block, becket, Dyneema® link head	40	9	-	325*1	700	36	1 9/16	5/16	-	715*1	1540	1.3
RF45130	Single block, becket, adjustable cleat, swivel shackle head	40	9	4	325*1&2	650	105	1 9/16	5/16	5/32	715*1&2	1430	3.7
RF45140	Stand-up block, becket, swivel head	40	9	-	325	650	54	1 9/16	5/16	-	715	1430	1.9
RF45201	Double block, Dyneema® link head	40	9	-	500	1000	67	1 9/16	5/16	-	1100	1650	2.4
<b>Accessories</b>													
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	-	-	-	320	700	11	-	-	-	715	1540	0.4
RF2454B	Stand-up boot, suits S40 Orbit Blocks™ - boot only	-	-	-	-	-	6	-	-	-	-	-	0.2

\*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).



Foto: Sailing Team Germany

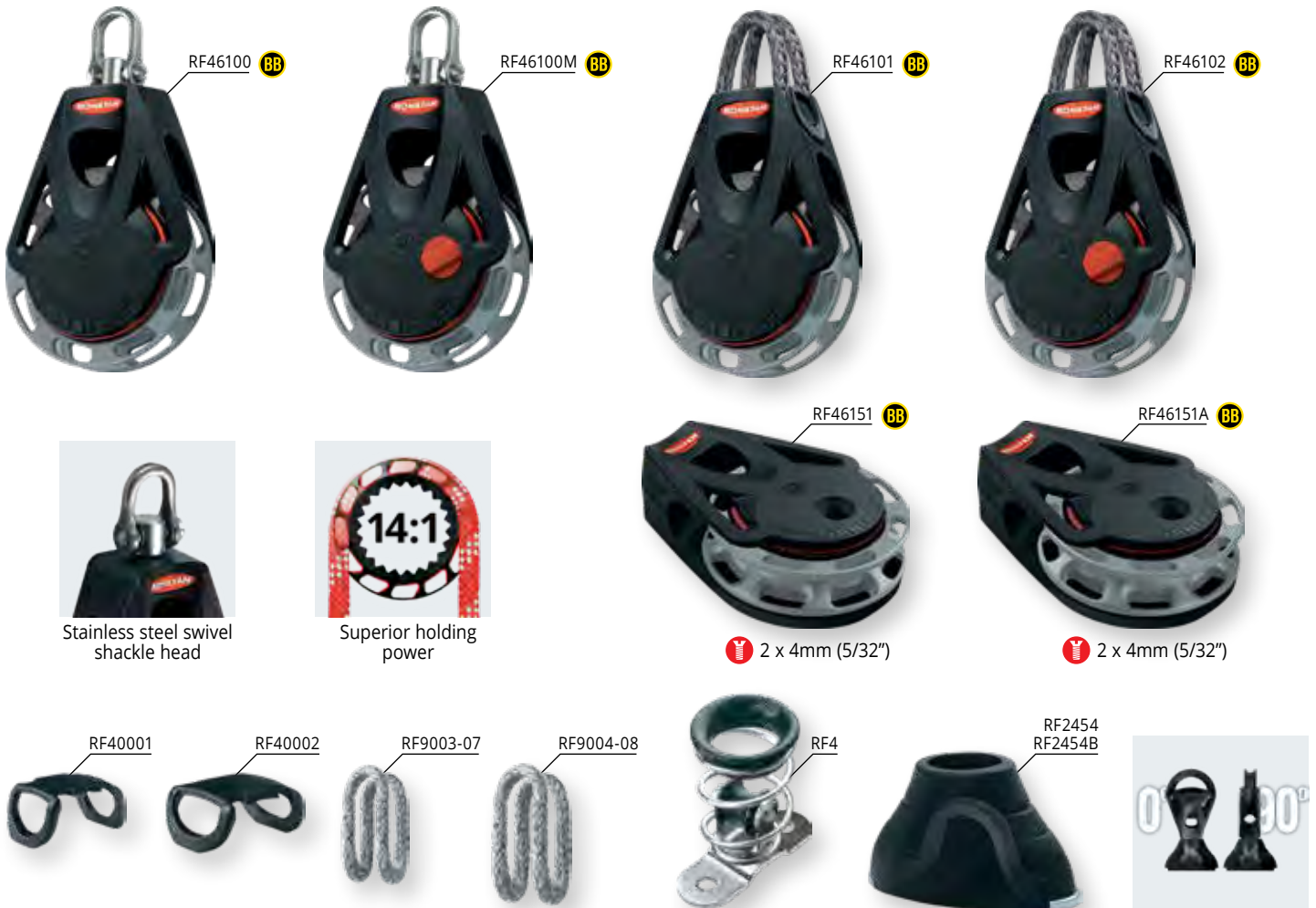
- RF45151 - Base suits flat or curved mounting surface.
- RF45511 & RF45531 - Lightweight integrated Dyneema® becket link.
- RF45130, RF45521 & RF45531 - Composite C-Cleat™ and fairlead.
- Spinnaker sheets on dinghies, sportsboats and small keelboats to 5m (16ft).
- Sheave: Carbon fibre reinforced, PTFE impregnated nylon.
- Ball bearings: High compression strength carbon black acetal.
- Stage 2 bearing: Glass fibre reinforced, MoS<sub>2</sub> impregnated nylon.
- Frame/cheeks: Toughened, glass fibre reinforced nylon.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in.	MAX. ROPE in.	M.W.L. lb	B.L. lb	WEIGHT oz
<b>BB</b> RF45151	Cheek block	40	9	325	700	32	1 9/16	5/16	715	1540	1.1
RF45501	Fiddle block* <sup>3</sup> , Dyneema® link head	40 + 22	9	325	700	47	1 9/16 + 7/8	5/16	715	1540	1.7
RF45511	Fiddle block* <sup>3</sup> , becket, Dyneema® link head	40 + 22	9	325* <sup>1</sup>	700	48	1 9/16 + 7/8	5/16	715* <sup>1</sup>	1540	1.7
RF45521	Fiddle block* <sup>3</sup> , adjustable cleat, Dyneema® link head	40 + 22	9	325* <sup>2</sup>	700	108	1 9/16 + 7/8	5/16	715* <sup>2</sup>	1540	3.8
RF45531	Fiddle block* <sup>3</sup> , becket, adjustable cleat, Dyneema® link head	40 + 22	9	325* <sup>1&amp;2</sup>	700	109	1 9/16 + 7/8	5/16	715* <sup>1&amp;2</sup>	1540	3.8

\*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.



Stainless steel swivel shackle head

Superior holding power

2 x 4mm (5/32")

2 x 4mm (5/32")

2 x 5mm (3/16")

2 x 5mm (3/16")

0° or 90° stand-up

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

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 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 carbon black acetal.

Frame/cheeks: Toughened, glass fibre reinforced nylon.

Rope link: UV stabilised, multi-strand SK75 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
<b>BB</b> 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

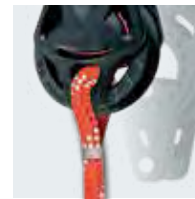
PRODUCT No.	DESCRIPTION	M.W.L. kg	B.L. kg	WEIGHT g	M.W.L. lb	B.L. lb	WEIGHT oz
<b>Accessories</b>							
RF4	Swivel shackle base. Suits Series 40 & 55 Orbit Block™ Dyneema® links. 4.8mm (3/16") diameter pin	250	500	30	550	1100	1.1
RF2454	Stand-up base, suits S40 Orbit Blocks™ - boot & saddle	325	700	11	715	1540	0.4
RF2454B	Stand-up boot, suits S40 Orbit Blocks™ - boot only	-	-	6	-	-	0.2

<b>Spare Parts - Dyneema® Links</b>	
RF9003-07	S40 single & fiddle Orbit Blocks™
RF9004-08	S40 double & triple Orbit Blocks™

<b>Spare Parts - Link Retainer Clips</b>	
RF40001	S40 single & fiddle Orbit Blocks™ (2 pack)
RF40002	S40 double & triple Orbit Blocks™ (2 pack)







**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 RF45201 lashed to the becket with a RF9004-09, produces a powerful 9:1 mainsheet system for use on catamarans to 5.5m (18ft). 8mm (5/16") rope recommended.

- ⬆ Halyard, vang and backstay applications on boats to 8m (26ft).
- ⬆ Control line applications on larger yachts.
- ⚙ Swivel shackle head fitting: Grade 316 stainless steel.

PRODUCT No.	DESCRIPTION	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	DIAM.	kg	kg	g	DIAM.	ROPE	DIAM.	lb	lb	oz
		mm	mm	mm				in.	in.	in.			
<b>BB</b> 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).



RF55101 BB



RF55111 BB



RF55171 BB

2 x 6mm (1/4")



RF55201 BB

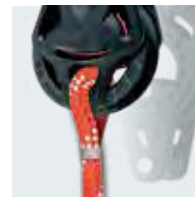


RF55301 BB



RF55151 BB

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.

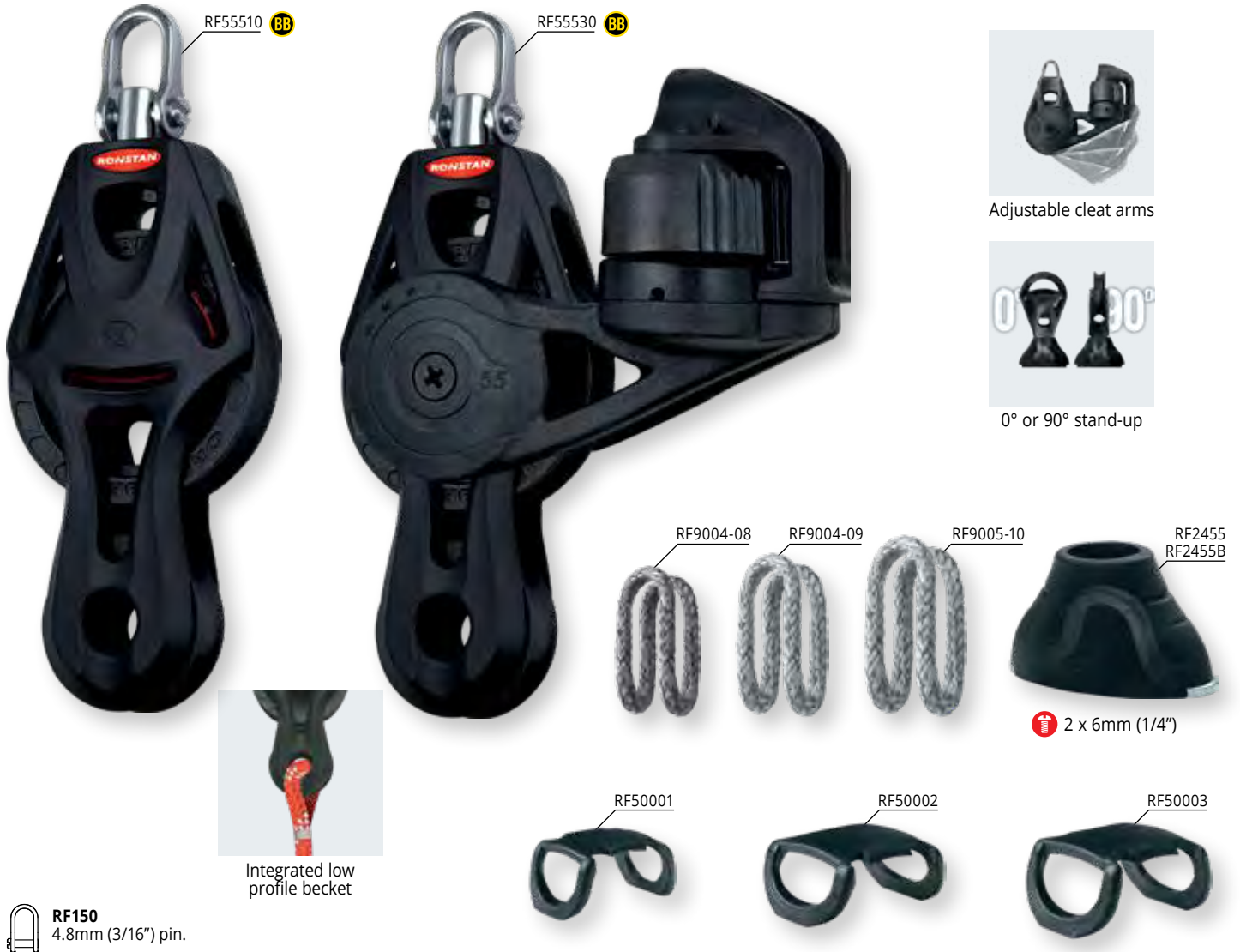
- Mainsheet systems and spinnaker sheets on dinghies, sportsboats and small keelboats to 9m (30ft).
- Halyard, vang and backstay applications on boats to 8m (26ft).

- Control line applications on larger yachts.

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

**BB Ball Bearing**

\* 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.



**RF150**  
4.8mm (3/16") pin.

Integrated low  
profile becket

- 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, PTFE impregnated nylon.
- Ball bearings: High compression strength carbon black acetal.
- Stage 2 bearing: Carbon fibre reinforced, PTFE impregnated nylon.

- Frame/cheeks: Toughened, glass fibre reinforced nylon.
- Swivel shackle head fitting: Grade 316 stainless steel.
- Rope link: UV stabilised, multi-strand SK75 Dyneema®.

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

#### Ball Bearing

RF55510	Fiddle block <sup>*1</sup> , becket, swivel shackle head	55 + 35	10	5	500 <sup>*2</sup>	1000	101	2 5/32 + 1 3/8	3/8	3/16	1100 <sup>*2</sup>	2200	3.6
RF55530	Fiddle block <sup>*1</sup> , becket, adjustable cleat, swivel shackle head	55 + 35	10	5	500 <sup>*2</sup>	1000	237	2 5/32 + 1 3/8	3/8	3/16	1100 <sup>*2</sup>	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 28)	Connecting RF45201 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 & triple 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).



Auto &amp; manual ratchet modes



Load sensing auto ratchet

## ORBITBLOCK™ RATCHET

# HALTE KRAFT 20:1


**RF150**  
 4.8mm (3/16") pin

- ✓ RF56100 & RF56110 - swivel shackle head for unlimited block rotation.
- ⬆ Dinghy mainsheet systems.
- ⬆ Mainsheet systems on sportsboats using 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 carbon black acetal.
- ⬆ Frame/cheeks: Toughened, glass fibre reinforced nylon.
- ⬆ Rope link: UV stabilised, multi-strand SK75 Dyneema®.

PRODUCT No.	DESCRIPTION	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	DIAM.	kg	kg	g	DIAM.	ROPE	DIAM.	lb	lb	oz
		mm	mm	mm				in.	in.	in.			
<b>BB</b> RF56100	Single block, auto and manual, swivel shackle head	55	10	5	250	650	82	2 5/32	3/8	3/16	550	1430	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*	650	86	2 5/32	3/8	3/16	550*	1430	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.



Adjustable cleat arms



Load sensing auto ratchet



© Ana Lukanc/Seascaper

**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 carbon black acetal.
- ⚙ Frame/cheeks: Toughened, glass fibre reinforced nylon.

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

**BB Ball Bearing**

RF56120	Single block, adjustable cleat, auto, swivel shackle head	55	10	5	250 <sup>*2</sup>	650	204	2 5/32	3/8	3/16	550 <sup>*2</sup>	1430	7.2
RF56130	Single block, becket, adjustable cleat, auto, swivel shackle head	55	10	5	250 <sup>*1&amp;2</sup>	650	209	2 5/32	3/8	3/16	550 <sup>*1&amp;2</sup>	1430	7.4

\*1 Total block load. Load on becket not to exceed block load. i.e. MWL 250kg (550lb), BL 750kg (1650lb). Suitable for 2:1 system at rated block load.  
\*2 Line load through cleat not to exceed 175kg (385lb).



- ✓ 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 RF45201 lashed to the becket with a RF9004-09, produces a powerful 9:1 mainsheet system for use on catamarans to 5.5m (18ft). 8mm (5/16) rope recommended.

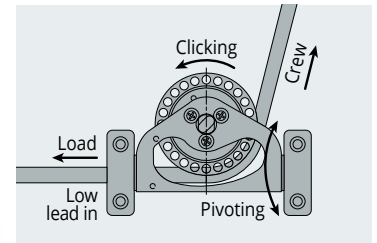
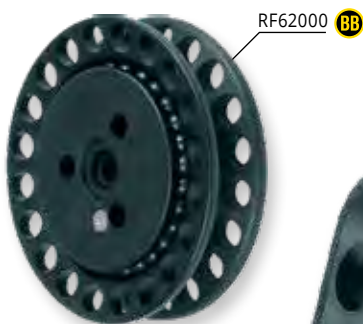
- ⚙️ Swivel shackle head fitting: Grade 316 stainless steel.

PRODUCT No.	DESCRIPTION	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	DIAM.	kg	kg	g	DIAM.	ROPE	DIAM.	lb	lb	oz
		mm	mm	mm				in.	in.	in.	lb	lb	oz
<b>BB</b> 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	650	112	2 5/32 + 1 3/8	3/8	3/16	550	1430	3.9
RF56530	Fiddle block*1, becket, adjustable cleat, auto, swivel shackle head	55 + 35	10	5	250*3	650	235	2 5/32 + 1 3/8	3/8	3/16	550*3	1430	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 carbon black acetal.
- ⚙️ Ratchet pawl: High strength Torlon®.
- ⚙️ Swivel shackle head fitting: Grade 316 stainless steel.

PRODUCT No.	DESCRIPTION	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	DIAM.	kg	kg	g	DIAM.	ROPE	DIAM.	lb	lb	oz
		mm	mm	mm				in.	in.	in.			
<b>BB</b> 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

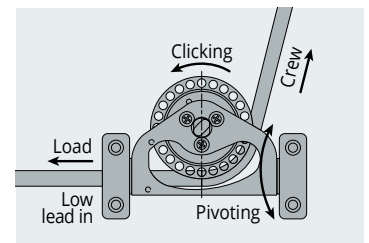


RF72100 **BB**RF72175 **BB**

4 x 6mm (1/4")

RF72000 **BB**RF72174 **BB**

4 x 6mm (1/4")

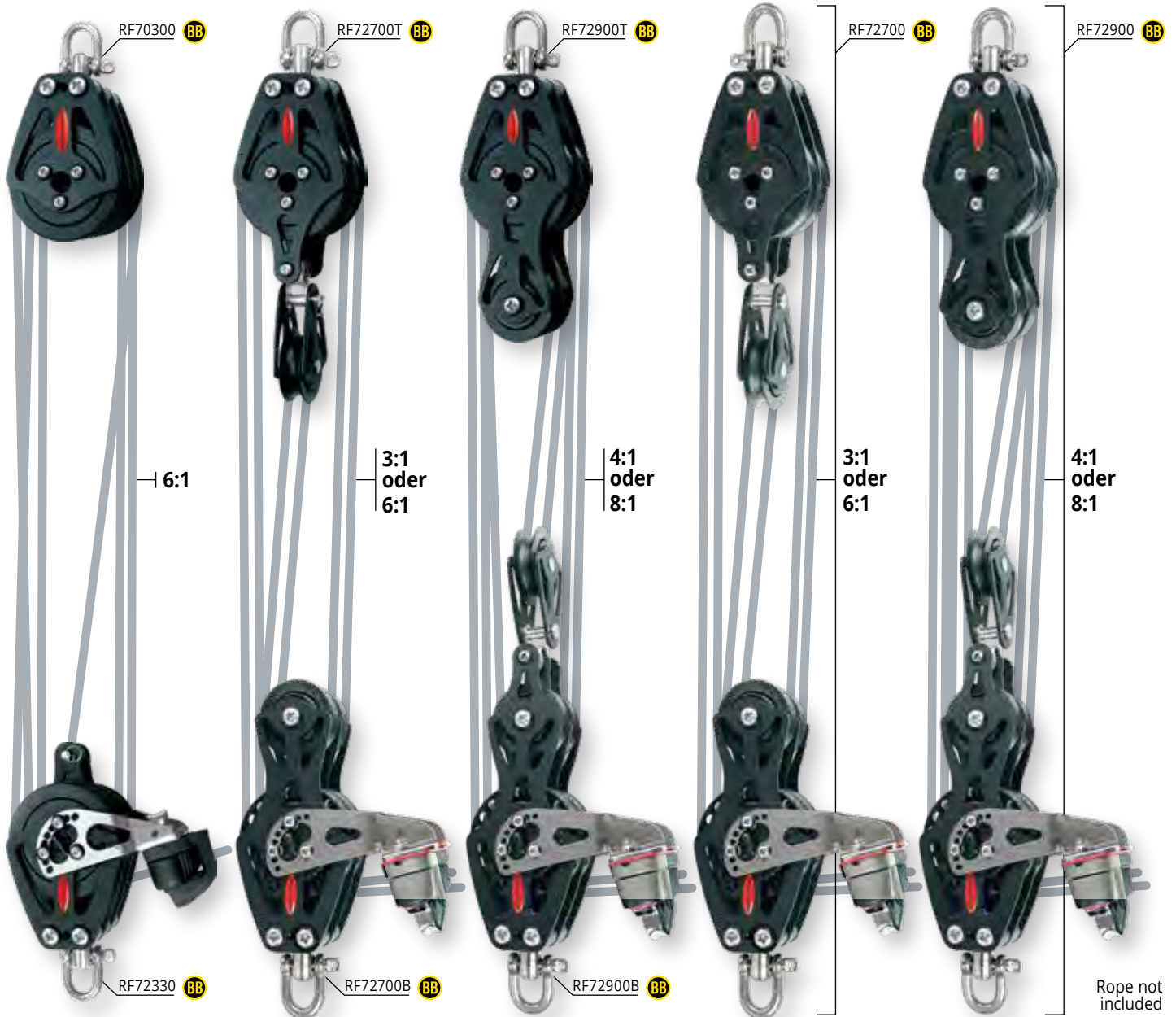


- Effective extruded hole design provides up to 20:1 holding power.
- On/Off switch is fitted to both sides of block so it can be used on port or starboard side. Switch can be removed from one side if required.
- Unique On/Off switch mechanism can be operated under load.
- Low friction ball bearing system.

- 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 carbon black acetal.
- Ratchet pawl: High strength Torlon®.
- Swivel shackle head fitting: Grade 316 stainless steel.

PRODUCT No.	DESCRIPTION	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	DIAM.	kg	kg	g	DIAM.	ROPE	DIAM.	lb	lb	oz
		mm	mm	mm				in.	in.	in.			
<b>BB</b> 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



Rope not included

- ✓ Two-speed mainsheet systems allow fine tuning of the mainsheet when sailing upwind by using one of the sheet tails and keeping the other cleated. Using both the sheets at once allows the trimmer to blow off the main quickly when rounding the top mark and trim on quickly when hardening up after rounding the bottom mark.
- ✓ When fitting to traveller cars, ensure adequate support for the bottom block and use stand-up spring kit RF324-1 or RF324-2. (Refer to traveller section pages 94 & 99 for more information).

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

#### MAXIMUM MAINSAIL AREA

RF72700: End boom = 38m<sup>2</sup> (409ft<sup>2</sup>),  
Mid-boom = 23m<sup>2</sup> (248ft<sup>2</sup>)

RF72900: End boom = 42m<sup>2</sup> (452ft<sup>2</sup>),  
Mid-boom = 27m<sup>2</sup> (290ft<sup>2</sup>)

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

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

#### BB Ball Bearing



- ✓ 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.	MAX. ROPE	HOLE	M.W.L.	B.L.	WEIGHT	SHEAVE DIAM.	MAX. ROPE	HOLE	M.W.L.	B.L.	WEIGHT		
		mm	mm	SPACING	(per sheave)	(per sheave)	g	in	in	in	(per sheave)	(per sheave)	lb	lb	oz
<b>Series 40 - AP All Purpose</b>															
RF41821	Double sheave organiser	40	12	116	48.5	500	1000	101	1 5/8	1/2	4 9/16	1 29/32	1100	2200	3.6
RF41831	Triple sheave organiser	40	12	164	48.5	500	1000	142	1 5/8	1/2	6 15/32	1 29/32	1100	2200	5.0
RF41841	Quadruple sheave organiser	40	12	213	48.5	500	1000	185	1 5/8	1/2	8 13/32	1 29/32	1100	2200	6.5
<b>Series 60 - AP All Purpose</b>															
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

PRODUCT No.	DESCRIPTION	SHEAVE DIAM.	MAX. ROPE	PIN DIAM.	M.W.L.	B.L.	WEIGHT	SHEAVE DIAM.	MAX. ROPE	PIN DIAM.	M.W.L.	B.L.	WEIGHT
		mm	mm	mm	kg	kg	g	in.	in.	in.	lb	lb	oz
<b>AP All Purpose</b>													
RF41811	Cheek block, aluminium cheeks	40	12	-	400	1000	65	1 9/16	1/2	-	880	2200	2.3
RF51151	Cheek block, aluminium cheeks	50	12	-	500	1000	85	2	1/2	-	1100	2200	3.0

RF20711 BB  
RF20711HL SP

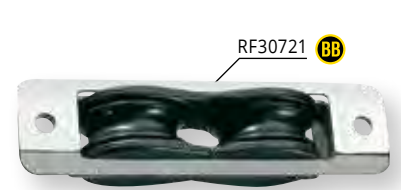
2 x 4mm (5/32")

RF30711 BB  
RF30711HL SP

2 x 5mm (3/16")

RF20711A BB  
RF20711AHL SP

2 x 4mm (5/32")



RF30721 BB

2 x 5mm (3/16")



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")



RF41171 AP

2 x 5mm (3/16")



RF55171 BB

2 x 6mm (1/4")



RF50171 BB

2 x 6mm (1/4")



RF51171 AP

2 x 6mm (1/4")

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

BB &amp; 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
-------------	-------------	-----------------	--------------	--------------	-----------	---------	----------	-----------------	--------------	--------------	-----------	---------	-----------

**Exit Blocks - SP Special Purpose, Nylatron® Rope/Wire Sheave**

RF20711HL	Single exit block, cover plate	20	6	3	275	1000	22	3/4	1/4	1/8	610	2200	0.8
RF20711AHL	Single exit block, side tabs	20	6	3	275	1000	22	3/4	1/4	1/8	610	2200	0.8
RF30711HL	Single exit block, cover plate	30	8	3	300	750	43	1 3/16	5/16	1/8	660	1650	1.5

**BB Ball Bearing**

RF20171	Upright lead block	20	6	-	250	550	18	3/4	1/4	-	550	1210	0.6
RF20174	Pivoting lead block	20	6	-	250	550	30	3/4	1/4	-	550	1210	1.1
RF30171	Upright lead block	30	8	-	300	750	30	1 3/16	5/16	-	660	1650	1.1
RF30174	Pivoting lead block	30	8	-	300	650	50	1 3/16	5/16	-	660	1320	1.8
RF40171	Upright lead block	40	10	-	350	1000	60	1 9/16	3/8	-	770	2200	2.1
RF50171	Upright lead block	50	12	-	500	1500	116	2	1/2	-	1100	3310	4.1
RF55171	Upright lead block	55	10	-	500	1000	91	2 5/32	3/8	-	1100	2200	3.2





RF8080BLU



RF8080GRY



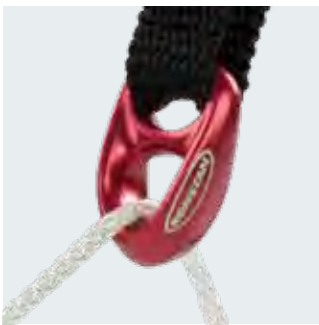
RF8080R



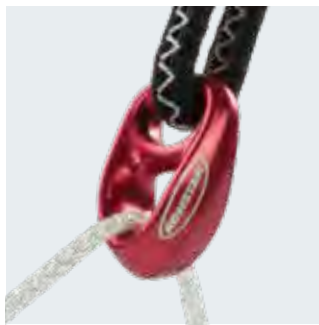
RF8081BLU



RF8081R



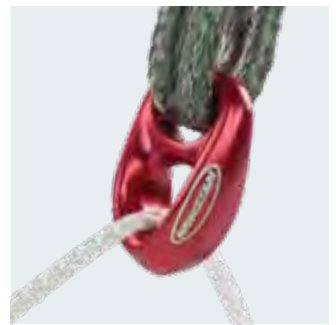
Webbing



Pigtail



Lashing



Dyneema® Link

Attachment options

- ✓ Ultra-lightweight.
- ✓ Ultra-compact.
- ✓ Durable.
- ✓ Colour coded.
- ✓ High load capacity.

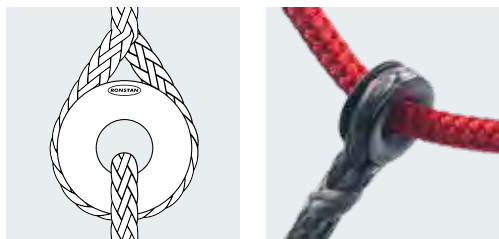
- ✓ Suits webbing or lashing.
- ✓ Versatile.
- ⊕ Vangs.
- ⊕ Tweakers.
- ⊕ Barberhaulers.

- ⊕ Sail cover zipper lines.
- ⊕ Lazy jacks.
- ⊕ Cunninghams.
- ⊕ Kite bridles.
- ⊕ Leech lines.

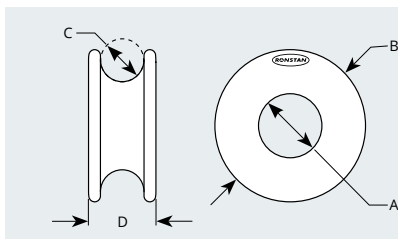
- ⊕ Trapeze elastics.
- ⊕ Various control lines.
- ⊕ Anodised aluminium.

For further technical details and the 'Shock™ or Block' selection guide see the SUPPORT tab of the Ronstan website.

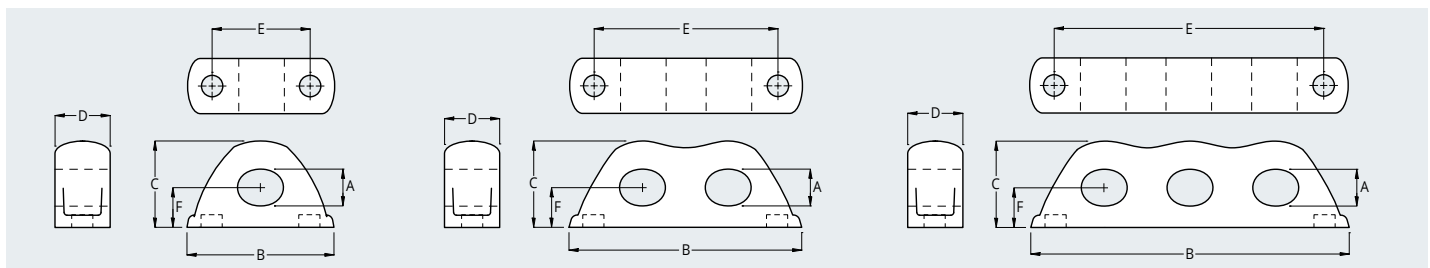
PRODUCT No.	COLOUR	ROPE SIZE mm	LENGTH mm	WIDTH mm	THICKNESS mm	MAX. ATTACHMENT mm	B.L. kg	WEIGHT g	ROPE SIZE in.	LENGTH in.	WIDTH in.	THICKNESS in.	MAX. ATTACHMENT in.	B.L. lb	WEIGHT oz
<b>Shocks™</b>															
RF8080BLU	Blue	1.5 - 5.0	22.9	14.9	8.5	8mm wide. 5mm diameter	350	2.5	1/16 - 3/16	7/8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



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 vang.
- ⚙ Hard anodised aluminium.



- ✓ 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	M.W.L. kg	WEIGHT g	A in	B in	C in	D in	M.W.L. lb	WEIGHT oz
<b>Rings</b>												
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

\* Setup shown has no BL rating as catastrophic failure will only occur when the line fails.

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
<b>Fairleads</b>																
RF8091-12	12	48	28	18	32	12	1000 <sup>*1</sup>	26	1/2	1 7/8	1 1/8	23/32	1 1/4	1/2	2200 <sup>*1</sup>	0.9
RF8092-12	12	76	28	18	60	12	1000 <sup>*1</sup>	49	1/2	3	1 1/8	23/32	2 3/8	1/2	2200 <sup>*1</sup>	1.7
RF8093-12	12	104	28	18	88	12	1000 <sup>*1</sup>	75	1/2	4 3/32	1 1/8	23/32	3 15/32	1/2	2200 <sup>*1</sup>	2.7
RF8091-16	16	60	32	22	39	12	1750 <sup>*2</sup>	38	5/8	2 3/8	1 1/4	7/8	1 17/32	1/2	3850 <sup>*2</sup>	1.3

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



## COREBLOCKS™ Core Blocks™ können Sie überall verwenden.

Ein modernes Design, das Funktionalität, Leistung und Styling vereint, macht es möglich, diese Blöcke sowohl für Regatta als auch für Tourenboote einzusetzen. Ein abgestimmtes zweistufiges Lagersystem sorgt für hervorragende Leistung über die gesamte Bandbreite bei langer Lebensdauer im Arbeitslastbereich. Das Lagersystem ist für die Aufnahme hoher dynamischer oder statischer Lasten ausgelegt. Optional sind neben der Standard Acetalscheibe auch Blöcke mit Aluminiumscheiben lieferbar.

### BB Dynamische und hohe statische Belastbarkeit

Core Blocks™ beinhalten unser bewährtes 2-stufiges Lagersystem.

**Stufe 1** - Bei mittlerer Belastung sorgen Acetalkugellager für minimale Reibung.

**Stufe 2** - Unter schwerer Last, wo die Verformung der Kugellager zu einer erhöhten Reibung führt, übernimmt ein Acetal Gleitlager auf einem polierten Edelstahlring die Last, sodass die volle Leistungsfähigkeit des Blockes erhalten bleibt. Zusätzlich sind die Kugellager so konfiguriert, dass sie als Drucklager zwischen der Scheibe und der Seitenplatte wirken, um ein Reiben der Scheibe zu verhindern. Das ist besonders bei Fussblöcken wichtig, bei denen die Leinen nicht genau fluchten.

### Stand-Up Funktion bei voller Bewegungsfreiheit

Die Stand-Up Modelle verfügen über eine besonders niedrige Befestigung. Die hier benutzten Padeyes haben eine relativ geringe Bauhöhe und nehmen nicht viel Platz weg. Der verwendete Gummibalb erhält die optimale Bewegungsfreiheit, sodass sich der Block frei bewegen kann.

### Universalkopf

Das Distanzstück zwischen den Seitenplatten besteht aus einem Messingklotz, der dem Block eine volle 360°Drehbewegung ermöglicht.

Eine Madenschraube ermöglicht die Fixierung in 0° oder 90°. Wir benutzen hochwertige, geschmiedete Schäkel aus AISI316 Edelstahl.

### Aluminiumlegierung der Seitenplatten

Die Seitenplatten der Blöcke werden aus hochwertigem Aluminium hergestellt. Die Wandstärken sind mit hohem konstruktivem Aufwand berechnet und optimiert worden. Die offene Konstruktion ermöglicht eine leichte Reinigung und Spülung der Blöcke mit Süßwasser. Der Abstand der Scheibe zur Seitenplatte ist so gewählt worden, dass sich Tauwerk auf keinen Fall dazwischen ziehen kann.

### Wahlweise Aluscheibe

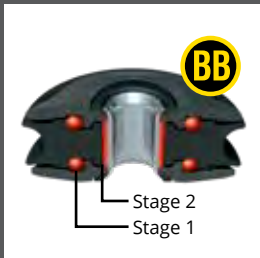
SP Für Achterstagsysteme oder dem Einsatz von vorgespießten Drahtstropfen, kann ein Block mit Aluscheibe gewählt werden.

### Ihre Leine ist schon fertig gespleißt?

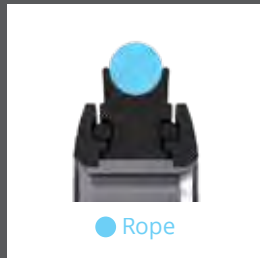
Der Hundsfotbolzen ist herausnehmbar und bündig eingelassen, sodass sich keine Leinen daran verhaken können.



reddot design award  
winner



2-stage bearing system



BB Acetal rope sheave



SP Alloy rope/wire sheave



Aluminium alloy cheek plates



Universal head



Removable becket pins



Fully articulated stand-up



## ORBITBLOCKS™ Specify The Best

Orbit Blocks™ ist eine kompromisslose Produktreihe, die speziell für die hohen Anforderungen und Erwartungen engagierter und zunehmend professioneller Regattasegler entwickelt wurde; mit Eigenschaften wie:

- Höchste Festigkeit bei geringem Gewicht
- Minimaler Reibungsverlust, insbesondere bei hohen Belastungen
- Absolut zuverlässige und störungsfreie Performance
- Einfaches Design und Konstruktion, um die Wartung und Instandhaltung zu erleichtern
- Elegantes, funktionelles Styling und Finish

### BB Lager System

Die Orbit-Scheibe hat ein unverlierbares Acetal oder Torlon®-Kugellager für Seitenschubkräfte, wodurch die Notwendigkeit von Seitenplatten entfällt. Das reduziert das Gewicht und ermöglicht eine breitere Oberfläche des Lagers, welches längere Torlon® Nadeln aufnehmen kann. Die hochwertigen Torlon®-Nadeln führen zu einem hohen "Kraft/Festigkeit/Gewichtsverhältnis".

### Design simplicity

Der Block besteht aus nur 3 Hauptkomponenten. Die doppelten Seitenteile, geformt aus einer hochfesten Aluminiumlegierung und das einteilige Stück mit seinem unverlierbaren Kugellager.

### Universalkopf

Die Schäkewirbelbolzen können in 0° oder 90° fixiert werden. Die hochbelastbaren Schäkell sind aus geschmiedetem Edelstahl 17-4PH.

### Fallen Blöcke

Sie lassen sich besonders leicht an Padeyes montieren und führen die Fallen extrem tief über Deck. Der Kopfbolzen dient zur leichten Montage und Demontage.

### Lasching Blöcke

Die Laschingblöcke lassen sich besonders leicht und überall montieren und sind damit universell einsetzbar. Durch die Einbeziehung der mittleren Hohlachse können extrem starke und zuverlässige Verbindungen mittels Dyneema® Tauwerk hergestellt werden. Durch die hochfesten Torlon™ Nadelager und entsprechend breite Auflagefläche, lassen sich Blöcke mit bis zu 40.000kg Bruchlast einfach befestigen. Führungslöcher im Kopf des Blockes sind als Verdrehschutz und Fixierung vorhanden. Die Vielseitigkeit der Laschingblöcke macht sie für nahezu jede Anwendung zu idealen Blöcken. Das zentrale Loch kann auch als Hundsfott Anschlagpunkt dienen und damit für eine 3:1 Untersetzung genutzt werden.

### Fußblöcke

Die Orbit Fussblöcke™ werden aus einem vollen Block Aluminium gefräst. Die Basisplatte wird fest an Deck montiert und stellt damit die feste Verbindung zum Deck sicher. Ein Mittelschaft übernimmt die Aufnahme der Torlon™Nadellager Walzen. Das Block-Oberteil, also die zweite Seitenplatte sichert das Lager gegen herausfallen und schützt die Scheibe vor Beschädigungen und Schmutz.

### Stand-Up Blöcke

Es stehen eine Reihe von Stand-Up Blöcken zur Verfügung. Die Padeyes und Gummibalge sind wahlweise auch durch Stahlfedern ersetzbar.



Bearing system



Lashing Orbit Block™



Design simplicity



Universal head



Stand-up block



Swivel-eye head blocks to suit padeyes





© Lutje Yachts

**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 carbon black 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	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	DIAM.	kg	kg	g	DIAM.	ROPE	DIAM.	lb	lb	oz
		mm	mm	mm				in	in	in			
<b>BB Ball Bearing</b>													
RF44100	Single block, swivel shackle head	45	12	5	700	1400	104	1 3/4	1/2	3/16	1540	3090	3.6
RF44140	Stand-up block, swivelling	45	12	-	700	1400	151	1 3/4	1/2	3/16	1540	3090	5.3
RF44188	Halyard block, swivel fork head	45	12	5	700	1400	121	1 3/4	1/2	3/16	1540	3090	4.2
<b>Accessories</b>													
RF2429-02	Padeye, 34mm (1 5/16") diameter (see page 203)	-	-	-	-	1500	26	-	-	-	1650	3300	0.9
RF6170	Snap shackle head adapter	-	-	5	500	1000	49	-	-	3/16	1100	2200	1.7



- ✓ 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") bucket 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.

- ⬆️ **RF617A**  
6mm (1/4") pin suits single & fiddle shackle head blocks
- ⬆️ 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 carbon black acetal.

- ⚙️ Shackle, post & hub: Grade 316 stainless steel.
- ⚙️ Padeye & snap shackle: Grade 15-5PH stainless steel.
- ⚙️ Pins: Grade 2205 stainless steel (RF64108, RF64108A, RF64202).
- ⚙️ Cleat: Fibre reinforced composite.

PRODUCT No.	DESCRIPTION	SHEAVE	MAX.	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	WIRE	DIAM.				DIAM.	DIAM.	DIAM.	DIAM.			
		mm	mm	mm	mm	kg	kg	g	in	in	in	in	lb	lb	oz
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 <sup>*1</sup>	2000 <sup>*1</sup>	186	2 3/8	1/2	-	5/16	2200 <sup>*1</sup>	4410 <sup>*1</sup>	6.6
RF64110	Single block, bucket, universal head	60	12	-	6	1000	2000	275	2 3/8	1/2	-	1/4	2200	4410	9.7
RF64130	Single block, bucket, cleat, universal head	60	12	-	6	1000 <sup>*2</sup>	2000	450	2 3/8	1/2	-	1/4	2200 <sup>*2</sup>	4410	15.9
RF64202	Double block, non-swivel shackle head	60	12	-	-	1000	2000	390	2 3/8	1/2	-	-	2200	4410	13.8

**BB Ball Bearing**

**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 <sup>*1</sup>	2000 <sup>*1</sup>	212	2 3/8	1/2	3/16	5/16	2200 <sup>*1</sup>	4410 <sup>*1</sup>	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 Line load through cleat not to exceed 175kg (385lb).



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

**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")

- ✓ 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/Allen Key.
- ⚙ BB sheaves: UV stabilised acetal.
- ⚙ Cheek plates: Aluminium alloy.
- ⚙ Ball bearings: High compression strength carbon black acetal.
- ⚙ Shackle, post & hub: Grade 316 stainless steel.
- ⚙ Pins: Grade 2205 stainless steel (RF64108, RF64108A, RF64202).
- ⚙ Snap shackle & pad eye: Grade 15-5PH investment cast stainless steel.
- ⚙ Cleat: Fibre reinforced composite.

PRODUCT No.	DESCRIPTION	SHEAVE	MAX.	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	WIRE	DIAM.	kg	kg	g	DIAM.	ROPE	WIRE	DIAM.	lb	lb	oz
		mm	mm	mm	mm	kg	kg	g	in	in	in	in	lb	lb	oz
<b>BB</b> RF64108A	Mast base block, clevis pin head	60	12	-	8	1000 <sup>*1</sup>	2000 <sup>*1</sup>	182	2 3/8	1/2	-	5/16	2200 <sup>*1</sup>	4410 <sup>*1</sup>	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	1000 <sup>*3</sup>	2000	490	2 3/8 + 1 3/16	1/2	-	1/4	2200 <sup>*3</sup>	4410	17.3
RF64523	Fiddle block, cleat, snap shackle head	60 + 30	12	-	-	1000 <sup>*3</sup>	2000	540	2 3/8 + 1 3/16	1/2	-	-	2200 <sup>*3</sup>	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 <sup>*2</sup>	2000 <sup>*2</sup>	370	2 3/8	1/2	-	-	2200 <sup>*2</sup>	4410 <sup>*2</sup>	13.1

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



**RF324**  
**RF2433-09**  
Suits RF69100 & RF69110

- 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 carbon black 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
<b>BB</b> 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	398	2 3/8	1/2	-	3970	8820	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.



**RF618A**  
8mm (5/16") pin suits  
single shackle head blocks

4 x 6mm (1/4")

**RF74108A** suits 14mm (9/16")  
mast collar post (not supplied)

- ✓ Universal head can be fixed at 0° or 90° or left free to swivel, by using a 2.5mm hex/Allen 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 carbon black 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	MAX.	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	WIRE	DIAM.				DIAM.	ROPE	WIRE	DIAM.			
		mm	mm	mm	mm	kg	kg	g	in	in	in	in	lb	lb	oz
<b>BB Ball Bearing</b>															
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 <sup>*1</sup>	3000 <sup>*1</sup>	230	3	9/16	-	5/16	3300 <sup>*1</sup>	6600 <sup>*1</sup>	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 <sup>*2</sup>	3000 <sup>*2</sup>	530	3	9/16	-	-	3300 <sup>*2</sup>	6600 <sup>*2</sup>	18.7
<b>SP Special Purpose - Aluminium Sheave</b>															
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.



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

4 x 6mm (1/4")

Suits use with RF2437-12  
removable lashing padeye.  
See page 205 for details.

**RF324**  
**RF2433-09**  
Suits RF79100 & RF79110

- ✓ 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 carbon black acetal. (RF79109A: Torlon®)
- ⬆ Forged shackle & head post: Grade 17-4PH stainless steel.

PRODUCT No.	DESCRIPTION	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	DIAM.	kg	kg	g	DIAM.	ROPE	DIAM.	lb	lb	oz
		mm	mm	mm				in	in	in			
<b>BB</b> 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*	2200	4500	251	3	9/16	3/8*	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	480	3	9/16	-	4400	8820	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

\* Bushed to 14mm (9/16") diameter.





RF104100 **BB**



RF104200 **BB**

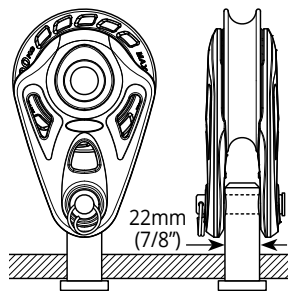


RF104110 **BB**



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")

- ✓ Universal head can be fixed at 0° or 90° or left free to swivel, by using a 2.5mm hex/Allen 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	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	DIAM.	kg	kg	g	DIAM.	ROPE	DIAM.	lb	lb	oz
		mm	mm	mm				in	in	in			
<b>BB</b> 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	1138	4	3/4	-	6600	13200	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.



- 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 carbon black acetal.
- Forged shackle & head post: Grade 17-4PH stainless steel.

Suit use with RF2437-12 removable lashing padeye. See page 205 for details.

PRODUCT No.	DESCRIPTION	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT	SHEAVE	MAX.	PIN	M.W.L.	B.L.	WEIGHT
		DIAM.	ROPE	DIAM.	kg	kg	g	DIAM.	ROPE	DIAM.	lb	lb	oz
		mm	mm	mm				in	in	in			
<b>BB</b> 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*	3000	6500	391	4	9/16	1/2*	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	600	4	9/16	-	4410	8820	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

\* Bushed to 16mm (5/8") diameter.



Foto: Jens Hoyer

- 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 carbon black acetal. (RF109109A: Torlon®)
- Forged shackle, head post & swivel eye: Grade 17-4PH stainless steel.

PRODUCT No.	DESCRIPTION	SHEAVE DIAM. mm	MAX. ROPE DIAM. mm	PIN/EYE DIAM. mm	M.W.L. kg	B.L. kg	WEIGHT g	SHEAVE DIAM. in	MAX. ROPE DIAM. in	PIN/EYE DIAM. in	M.W.L. lb	B.L. lb	WEIGHT oz
<b>BB</b> RF109100A	Single block, universal head	100	16	10.0	4250	8500	720	4	5/8	3/8	9350	18700	25.4
RF109106A	Single block, swivel eye for stand-up	100	16	15.5	4000*	8000*	740	4	5/8	19/32	8800*	17600*	26.1
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

\* When used with the recommended padeye.



- ✓ 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.
- ✓ Check 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
<b>BB Ball Bearing</b>											
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
<b>AP All Purpose</b>											
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




**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 -  
Brass 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<sub>2</sub> filler for lubrication and to minimise wear. They are suitable for use with wire or rope.
- ✓ Aluminium models have a self-lubricating brass bearing. 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
<b>BB</b> Acetal - Ball Bearing													
RF1020		28.0	5.0	11.1	6	-	-	1 1/8	3/16	7/16	1/4	-	-
RF1766		38.0	8.0	15.0	10	-	-	1 1/2	5/16	19/32	3/8	-	-
RF1767		50.4	8.0	14.3	10	-	-	2	5/16	9/16	3/8	-	-
RF60000		60.0	3 x 6.2	16.6	10	-	-	2 3/8	3 x 7/32	21/32	3/8	-	-
RF70000		75.0	3 x 6.2	20.8	12	-	-	3	3 x 7/32	13/16	1/2	-	-
<b>BB</b> Aluminium - Torlon® Ball Bearing													
RF34000		30.0	6.0	7.7	5	-	-	1 3/16	7/32	5/16	3/16	-	-
RF44000		40.0	6.0	10.1	6	-	-	1 9/16	7/32	13/32	1/4	-	-
RF62000	Series 60 Ultimate Ratchet	60.0	3 x 6.1	16.6	10	-	-	2 3/8	3 x 7/32	21/32	3/8	-	-
RF72000	Series 75 Ultimate Ratchet	75.0	3 x 6.1	20.8	12	-	-	3	3 x 7/32	13/16	1/2	-	-
<b>AP</b> Acetal													
RF1741		19.0	6.6	6.4	6	-	-	3/4	1/4	1/4	1/4	-	-
RF1743		19.0	8.2	9.5	6	-	-	3/4	5/16	3/8	1/4	-	-
RF578		25.0	6.5	9.5	6	-	-	1	1/4	3/8	1/4	-	-
RF1746		26.0	9.8	12.0	8	-	-	1	3/8	15/32	5/16	-	-
RF128		28.0	8.1	15.2	12	-	-	1 1/8	5/16	19/32	1/2	-	-
RF129		28.0	6.6	9.9	8	-	-	1 1/8	1/4	3/8	5/16	-	-
RF41000		40.0	8.1	14.4	10	-	-	1 9/16	5/16	9/16	13/32	-	-
RF1006	Series 40 Deck Organisers	38.0	12.7	15.5	12	-	-	1 1/2	1/2	19/32	1/2	-	-
RF1751		38.0	8.2	10.2	6	-	-	1 1/2	11/32	13/32	1/4	-	-
RF1759		50.0	8.1	15.6	14	-	-	1 15/16	11/32	19/32	9/16	-	-
RF437		59.0	11.0	19.0	16	-	-	2 5/16	7/16	3/4	5/8	-	-
RF1765		66.0	8.2	15.1	5	-	-	2 5/8	11/32	15/32	3/16	-	-
RF431*		73.0	13.0	22.0	14	-	-	2 7/8	15/32	7/8	9/16	-	-
RZ1000	Series 75 Industrial	75.0	21.7	20.5	14	-	-	2 15/16	7/8	13/16	9/16	-	-
<b>AP</b> Glass Reinforced Nylon													
PNP98JR		75.0	13.0	15.8	10	-	-	2 15/16	15/32	19/32	3/8	-	-
PNP98KR		100.0	13.0	19.0	12	-	-	3 15/16	15/32	3/4	1/2	-	-
<b>SP</b> Nylatron®													
RF430	RF468	25.0	6.5	7.0	5	5	-	1	1/4	9/32	3/16	3/16	-
RF30000HL		30.0	8.1	11.4	8	3	-	1 3/16	5/16	7/16	5/16	1/8	-
RF40000HL		40.0	8.1	13.4	10	4	-	1 1/2	5/16	17/32	3/8	5/32	-
RF132	RF103, RF104	45.0	8.0	9.5	-	6	-	1 3/4	5/16	3/8	-	1/4	-
RF50000HL		50.0	10.2	18.0	12	5	-	1 31/32	13/32	23/32	1/2	3/16	-
<b>SP</b> Aluminium - Brass Bearing													
RZ1000AW	Series 75 Industrial	75.0	21.7	20.2	-	8	-	-	7/8	13/16	-	5/16	-

\* Acetal sheave with brass bearing



**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 carbon black 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
<b>BB Ball Bearing</b>											
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
<b>AP All Purpose</b>											
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



## Für Leistung entwickelt

Intensive Entwicklungsanstrengungen haben diese Hochleistungs-Cam Cleat hervorgebracht, die eine unschlagbare Haltekraft bietet und gleichzeitig ein einfaches Reinigen und Lösen von Streckern und Schoten ermöglicht.

### **C** Carbon C-Cleats™

C-Cleats™ zeichnen sich durch leichte, ultra-feste Kohlefaser-Klemmbacken aus, die korrosionsfrei, verschleißfest und abriebfest sind.

### **T** T-Cleats™

T-Cleats™ verfügen über strapazierfähige, glasfaserverstärkte Klemmbacken für zuverlässiges Einklemmen. Sie bieten eine preiswerte Lösung für mittelschwere Anwendungen.

### High Tech Kompositbasis

Die Klemmenbasen werden aus langfaser-verstärktem Polymer hergestellt, um Gewicht zu sparen und gleichzeitig eine extreme Steifigkeit zu gewährleisten.

### Geschlitzte Lager

Selbstschmierende, selbstreinigende Lager bieten einen geringeren Reibungswiderstand, schnellere Reaktionszeiten und eine bessere Beständigkeit gegen Sand und Salz als Kugellager, die sich unter Last verformen können.

### Mehrfachspiralfeder

Die im oberen Teil der Klemme versenkte Mehrfachspiralfeder erzeugt ein nahezu konstantes Drehmoment und gewährleistet damit ein sicheres Klemmen auch kleinster Leinendurchmesser bei minimalem Abrieb bzw. Tauwerkverschleiß.

### Einzigartige Zahnprofile

Geringer Kraftaufwand beim Ein- und Ausklemmen durch einzigartige Zähne und Einlaufgeometrie.

### Verwandlungsfähigkeit

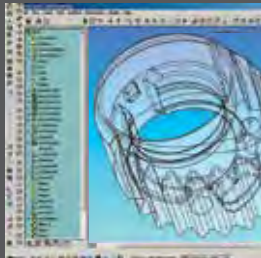
Ein umfangreiches Sortiment an speziellem Klemmenzubehör ermöglicht die Anpassung der Klemmenanordnung zur Optimierung der Leistung durch Steuerung der Einwärts- und Auswärtsrichtung, des Klemmenwinkels und der Höhe.

### Totale Kontrolle

Die drehbaren Klemmenbasen lassen sich in Ihrem Schwenkwinkel frei einstellen. Die montierten Kammklemmen lassen sich mit Keilen in der Höhe verstellen, um immer den optimalen Winkel zu erreichen.



Carbon fibre cam C-Cleat™



Design optimisation



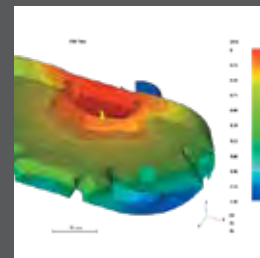
Effective slotted bearings



Multi-coil spring



Low line entry effort



Advanced composite base

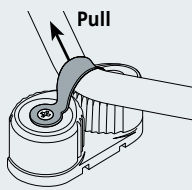


RF7 swivel cleat base

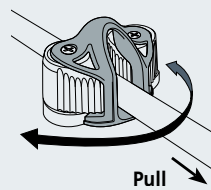




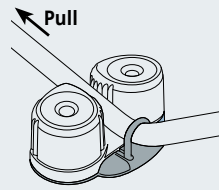
### ACCESSORIES



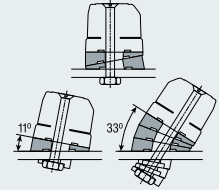
Saddle - Retains line near cleat



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
<b>Ⓢ C-Cleats™</b>															
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
<b>Ⓢ T-Cleat™</b>															
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



## ACCESSORIES



- ✓ 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	HOLE SPACING	FASTENER SIZE	DIMENSIONS	M.W.L.	B.L.	WEIGHT	ROPE CAPACITY	HOLE SPACING	FASTENER SIZE	DIMENSIONS	M.W.L.	B.L.	WEIGHT
		mm	mm	mm					in	in	in				
<b>C-Cleats™</b>															
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
<b>T-Cleat™</b>															
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

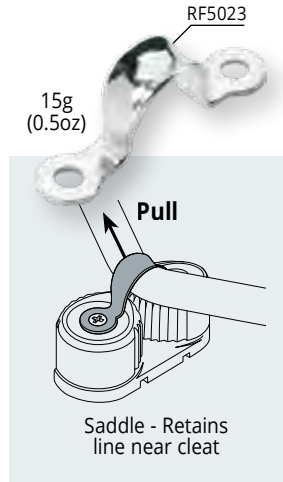


Foto: Lars Wehrmann

- ✓ 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	HOLE SPACING	FASTENER SIZE	DIMENSIONS			M.W.L.	B.L.	WEIGHT	ROPE CAPACITY	HOLE SPACING	FASTENER SIZE	DIMENSIONS			M.W.L.	B.L.	WEIGHT
		mm	mm	mm	mm	mm	kg	kg	g	in	in	in	in.	lb	lb	oz			
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				

**C-Cleats™**

# Wirbelbasen



RF67  
3 x 5mm (3/16")



RF58  
3 x 5mm (3/16")



RF60  
4 x 5mm (3/16")



RF20175  
2 x 4mm (5/32")



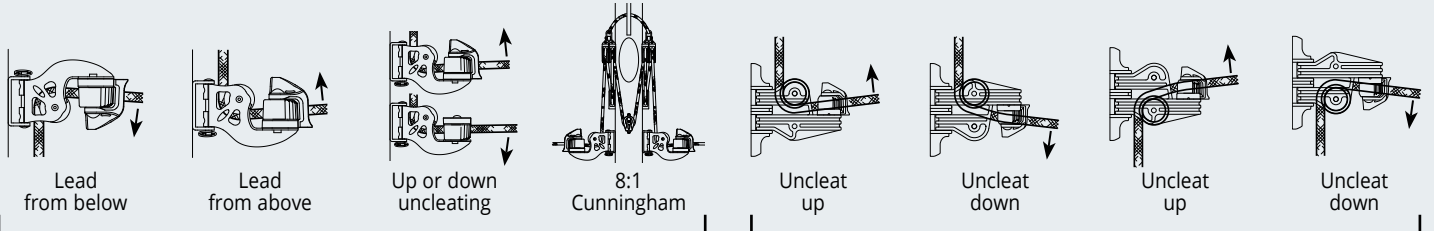
RF5  
2 x 5mm (3/16")



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 cleating arms.
- ⚙ Fibre reinforced nylon body (RF5).
- ⚙ Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	SUITS ROPE		SUITS ROPE	
		mm	g	in	oz
<b>Swivel Cleat Bases</b>					
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™ and 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
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

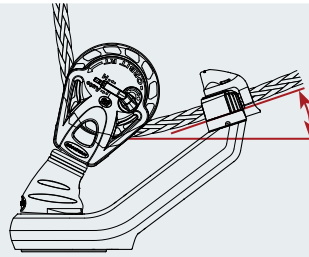


Foto: Sven Jürgensen

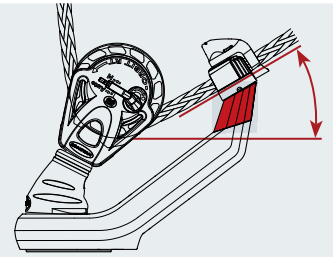


4 x 5mm  
(3/16")

RF6

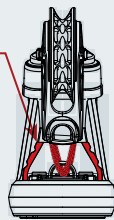


Lower cleating angle

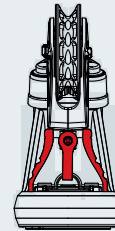


Higher cleating angle with  
cleat riser fitted to arm

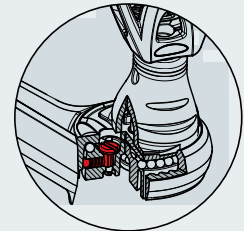
Stand-up boot  
cut down to suit.  
See instructions in  
SUPPORT section of  
Ronstan website  
for full details



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.



© www.toppersailboats.com

- ✓ Ball bearings support the cleat arm. An integral stop prevents over-rotation, but can be removed to allow full 360° rotation.
- ✓ The cleating angle can be set in one of two positions - use the included riser kit for a higher cleating angle - see the SUPPORT section of the Ronstan website for full user instructions.

- ✓ A switchable ratchet in the base allows the cleat arm to remain in its most recently used position. The ratchet can be turned off for free swivelling.
- ✓ Includes small C-Cleat™ cam cleat and fairlead, suitable for line sizes 2-8mm (3/32 - 5/16") diameter.

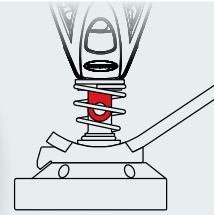
- ⬆ Suits traditional shackle head blocks and Dyneema® link head Orbit Blocks™.
- ⬆ Mainsheet systems on dinghies to 4.5m (15ft).
- ⬆ Glass fibre reinforced base and cleat arm.
- ⬆ Grade 316 stainless steel fixings and block attachment loop.

PRODUCT No.	DESCRIPTION	M.W.L.* kg	B.L.* kg	WEIGHT g	M.W.L.* lb	B.L.* lb	WEIGHT oz
RF6	Small ball bearing swivelling cleat base, small C-Cleat™, loop take-off	125	250	210	275	550	7.4

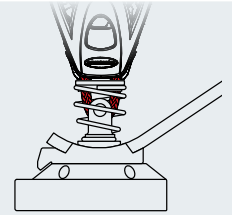
\*Load ratings are for the cleat base assembly, and are based on a 120° change in line direction.



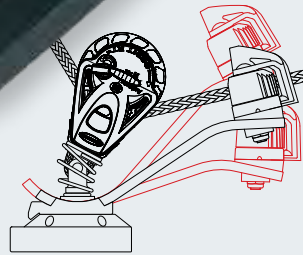
RF7



Conventional shackle head block - discard shackle and plastic roller

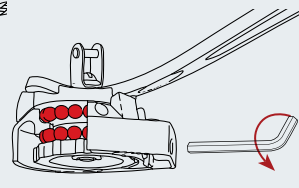


Dyneema® link head Orbit Block™ - use supplied plastic roller when attaching Dyneema® link.

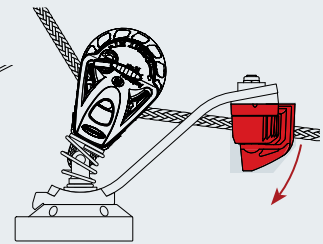


Height adjustable arm for optimum cleating angle.

4 x 5mm (3/16")



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.



Foto: Felix Diemer

- Adjustable height and angle of cleating arm for optimum control.
- Twin rows of ball bearings support the cleating arm. Stops are provided to limit travel to 260° and can be removed to allow full 360° rotation.
- Includes medium C-Cleat™ and fairlead, suitable for line sizes 3-12mm (1/8 - 1/2") diameter.
- Cleat mounting can be converted for downward release action.
- 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 (i.e. not using the shackle).
- An adjustable 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™.
- Mainsheet systems on dinghies and sportsboats to 8m (26ft).
- Alloy cleating arm.
- Fibre reinforced nylon base.
- Grade 316 stainless steel fixtures.

PRODUCT No.	DESCRIPTION	M.W.L.* kg	B.L.* kg	WEIGHT g	M.W.L.* lb	B.L.* lb	WEIGHT oz
RF7	Ball bearing swivelling cleat base, medium C-Cleat™, 5mm (3/16") pin	215	430	342	473	946	12.1

### Swivel Cleat Base

\*Load ratings are for the cleat base assembly, and are based on a 120° change in line direction.



# Constrictor® Textile Fallenstopper

Im Gegensatz zu herkömmlichen Stoppern drückt das Constrictor®-System das Tauwerk nicht zwischen zwei Metalloberflächen ein. Stattdessen wird die belastete Leine sicher in einem Aramid Mantelgeflecht gehalten, das selbst an einer Basiseinheit befestigt ist. Die Leine läuft frei durch die Hülse in eine Richtung, wird aber beim Auslaufen in die entgegengesetzte Richtung sofort fixiert. Dieser patentierte Verengungseffekt sorgt bei zunehmender Last für eine höhere Haltekraft.

## Anatomie des Constrictor® - Systemes

### Bikonischer Titanring

Das patentierte textile "Schlauchelement" wird zwischen einem Titanring und der Basiseinheit fixiert. Die einzigartige konische Geometrie ermöglicht ein einfaches Einführen der Leine und sorgt dafür, dass der Textilschlauch perfekt in die Aluminium-basiseinheit integriert ist, um die Last aufzunehmen.

### Kontrollierte Haltekraft

Durch Ziehen an der dünnen Auslöseleine vergrößert sich der Durchmesser des Schlauchgeflechts und gibt die abgeklemmte Leine in beide Richtungen frei. Die Auslöseleine kann in der Kerbe der Basiseinheit befestigt werden, um den Constrictor® in der offenen Position zu halten. Durch das Lösen der Auslöseleine kann der Textilschlauch durch ein Gummi in eine ausgestreckte Position gezogen werden, wodurch die Leine (z.B. Fall oder Strecker) in einem festen, sicheren Griff eingeeengt wird.

### Technora® Aramid-Textilschlauch

- **Geflechtorientierung:** CousinTrestec's Erfahrung in der Herstellung von Geflechten führte zur Entwicklung des idealen Flechtwinkels, um den Grip zu maximieren und den Schlupf zu minimieren.
- **Faser-Zusammenstellung:** Die Tests haben zu einer optimalen Faserbalance und Dichte für unüber-troffene Festigkeit geführt.

### Stärker und leichter

Doppelte Haltekraft und ein Drittel des Gewichtes herkömmlicher Leinenstopper.

### Freigabe unter Last

Die Leine kann unter Last ohne Einsatz einer Winde durch einfaches Ziehen der Auslöseleine leicht gelöst werden.

### Unkaputtbar

Der Textilschlauch schließt sich wie eine Würgeschlange um die Leine. Der außergewöhnliche Grip ist das Ergebnis des Faser-Faser-Kontaktes, der weitaus weniger aggressiv ist, als bei einem herkömmlichen Fallenstopper mit Metallbacke.

### Strukturelle Integration

Der Constrictor® ist auch in folgenden Ausführungen erhältlich: Anstatt des herkömmlichen Deckmontagebeschlages sind auch konische Buchsen erhältlich, die in eine Deckstruktur eingebaut werden können. Montageaufnahmen aus Aluminium, die in eine entsprechend verstärkte Schottwand oder eine Montageaufnahme mit kundenspezifischer Bodenverschraubung eingebaut werden kann.

### Fernauslösung

Die Dyneema® Auslöseleine kann zur Fernauslösung verlängert werden, z.B. um ein Fall oder eine Reffleine aus einiger Entfernung zu beklemmen.



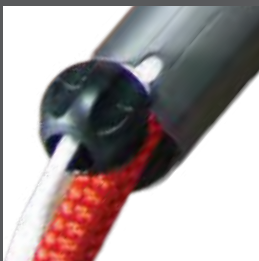
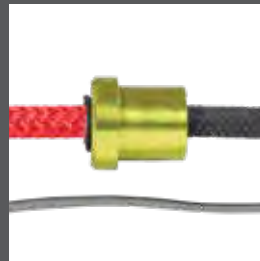
Release lanyard in 'gripping' position



Release lanyard in 'open' position



Structural integration model



Release lanyard knob



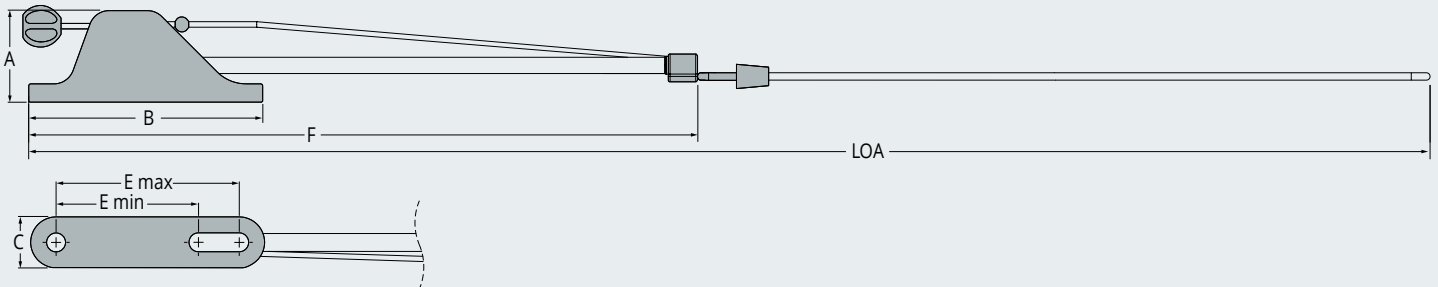



**CONSTRUCTOR® WITH ALLOY BASE UNIT**

 CT306P001  
 CT308P001  
 CT310P001

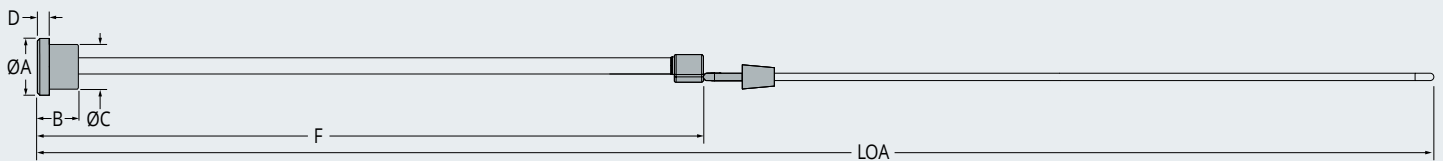
 CT312P001  
 CT314P001

 2 x 8mm  
(5/16")

 2 x 12mm  
(1/2")

**CONSTRUCTOR® FOR STRUCTURAL INTEGRATION**

 CT306P001-EN  
 CT308P001-EN  
 CT310P001-EN  
 CT312P001-EN  
 CT314P001-EN

1 x M4 to retain Constrictor® in structure



- Twice the holding power of conventional clutches.
- Three times lighter than conventional clutches.
- No point loading, abrasion or rope cover rupture.
- Easy release under load.

- Halyard and control applications on boats to 20m (65ft).
- Aluminium alloy deck base.
- Titanium locking ring.

- SK75 Dyneema® release lanyard.
- UV resistant black Technora® aramid sleeve.

PRODUCT No.	ROPE SIZES	B.L.*1 kg	A mm	B mm	C mm	E MIN. mm	E MAX. mm	F mm	L.O.A.*2 mm	WEIGHT g	B.L.*1 lb	A in	B in	C in	E MIN. in	E MAX. in	F in	L.O.A.*2 in	WEIGHT oz
<b>With Alloy Base Unit</b>																			
CT306P001	5mm (3/16")	460	45	115	25	70	90	588	1000	150	1010	4 1/2	4 9/16	1	2 3/4	3 1/2	23 5/32	39 3/8	5.3
	6mm (1/4")	750									1670								
CT308P001	6mm (1/4")	910	45	115	25	70	90	638	1085	155	1560	4 1/2	4 9/16	1	2 3/4	3 1/2	25 1/8	42 23/32	5.4
	8mm (5/16")	1170									2570								
CT310P001	8mm (5/16")	1220	45	115	25	70	90	638	1085	160	2680	4 1/2	4 9/16	1	2 3/4	3 1/2	25 1/8	42 23/32	5.6
	10mm (3/8")	2240									4920								
CT312P001	10mm (3/8")	1530	58	126	36	70	90	787	1210	330	3360	5	5	1 3/8	2 3/4	3 1/2	31	47 5/8	11.6
	12mm (1/2")	2850									6270								
CT314P001	12mm (1/2")	1830	58	126	36	70	90	787	1210	340	4020	5	5	1 3/8	2 3/4	3 1/2	31	47 5/8	12.0
	14mm (9/16")	3770									8290								

PRODUCT No.	ROPE SIZES	B.L.*1 kg	A mm	B mm	C mm	D mm	F mm	L.O.A.*2 mm	WEIGHT g	B.L.*1 lb	A in	B in	C in	D in	F in	L.O.A.*2 in	WEIGHT oz
<b>For Structural Integration</b>																	
CT306P001-EN	5mm (3/16")	460	25	25	20	7	550	910	56	1010	1	1	25/32	9/32	21 21/32	35 13/16	2.0
	6mm (1/4")	750								1670							
CT308P001-EN	6mm (1/4")	910	25	25	20	7	600	960	62	1560	1	1	25/32	9/32	23 5/8	37 25/32	2.2
	8mm (5/16")	1170								2570							
CT310P001-EN	8mm (5/16")	1220	40	30	30	10	600	960	116	2680	1 9/16	1 3/16	1 3/16	13/32	23 5/8	37 25/32	4.1
	10mm (3/8")	2240								4920							
CT312P001-EN	10mm (3/8")	1530	44	34	33	10	750	1110	156	3360	1 9/16	1 11/32	1 5/16	13/32	29 17/32	43 11/16	5.5
	12mm (1/2")	2850								6270							
CT314P001-EN	12mm (1/2")	1830	47	36	36	10	750	1110	192	4020	1 27/32	1 13/32	1 13/32	13/32	29 17/32	43 11/16	6.8
	14mm (9/16")	3770								8290							

\*1 For nominal rope diameter.

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



## Ultimative Leistung und Kontrolle

Ronstan Battlestick™; gehören zu den besten Pinnenauslegern der Welt. Ronstan hat eine Reihe von Pinnenauslegern aus Carbon-Verbundstoffen oder Aluminium im Programm, die ein Höchstmaß an Kontrolle für eine schnelle, entscheidende Steuerreaktion in jeder Situation bieten.

### Carbon Battlestick™ Für einen sicheren Griff

Die einzigartig weiche Griffigkeit bleibt auch erhalten, wenn der Ausleger nass ist. Sein schlankes Profil geht sanft in das Kohlefaserrohr über. Die gerippte Oberfläche des Rohres bietet zusätzlichen Grip auf der gesamten Länge. Ein Endanschlag sorgt für Komfort und Sicherheit. Die kurzen Pinnenverlängerungen haben kleinere Griffdurchmesser, um den kleineren Händen gerecht zu werden.

### Leicht & robust

Die Dual-Laminat-Konstruktion wurde präzise auf minimales Gewicht ausgelegt, ohne die Festigkeit zu beeinträchtigen. Eine Kombination aus Glas- und Kohlefasern in Längsrichtung und voller Länge sorgt für optimale Steifigkeit und zusätzliche Widerstandsfähigkeit gegen Bruch.

### Verjüngtes Kohlefaserrohr

Das konische Design maximiert die Steifigkeit und Stärke am Griffende für ein positives Steuergefühl und schützt vor Bruch auf Höhe der Scheuerleiste.

### Pinnenausleger mit ergonomischem Gummigriff

Das rutschfeste Griffmaterial nimmt kein Wasser auf und der große Griffdurchmesser am Ende steht im Kontrast mit dem Großschotdurchmesser, um Ermüdung in der Hand zu vermeiden. Der Knauf am Ende sorgt für eine sichere Positionierung in der Hand.

### Geriffeltes Alurohr

Ronstan's Aluminium Pinnenausleger haben ein einzigartiges geriffeltes Profil, das dem leichten Legierungsprofil zusätzliche Stabilität verleiht. Die Rohre sind zum Schutz vor Korrosion schwarz eloxiert.

### Die richtige Länge

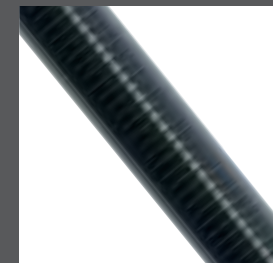
Battlesticks™ sind in sechs Standardlängen von 610mm bis 2500mm erhältlich, um praktisch jeder Bootsklasse und jedem persönlichen Geschmack gerecht zu werden. Um das Schneiden des Rohres auf eine kundenspezifische Länge zu erleichtern, enthält der 2500mm RF3137C keinen Griff oder Endkappe. Teleskop Pinnenausleger sind in vier Versionen erhältlich mit der Verlängerungsmöglichkeit um 960mm bis zu einer maximalen Länge von 2500mm.

### Urethan-Pinnenauslegergelenk

Das Pinnenauslegergelenk aus hochwertigem, UV-beständigem Urethan sorgt für eine sanfte, gleichmäßige Kontrolle und Flexibilität in alle Richtungen für schnelle und sichere Steuerbewegungen.



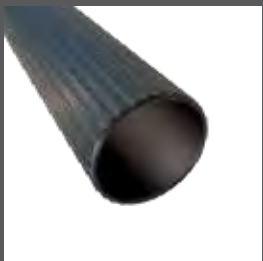
Lightweight carbon extension grip



Tapered carbon tube optimises weight



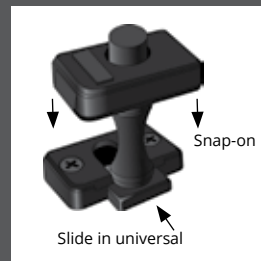
Lightweight EVA grip &amp; end knob



Lightweight &amp; rigid aluminium tube



Full-articulation universal joint



Removable urethane universal joint

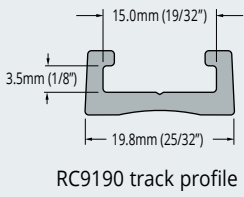




PRODUCT No.	DESCRIPTION	LENGTH	TUBE DIAM.	GRIP DIAM.	WEIGHT	LENGTH	TUBE DIAM.	GRIP DIAM.	WEIGHT
		mm	mm	mm	g	in	in	in	oz
<b>Carbon Fibre Tiller Extensions</b>									
RF3128C	Carbon fibre, tapered, fixed length	610	16 > 20	22	108	24	5/8 > 3/4	7/8	3.8
RF3129C	Carbon fibre, tapered, fixed length	840	16 > 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
<b>Alloy Tiller Extensions</b>									
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
<b>Accessories</b>									
RF1121	Stainless steel bolt-through universal joint. Suits 16mm (5/8") OD tube. Incorporating 1/4" UNCx1 3/4" (45mm) long bolt	-	-	-	64	-	-	-	2.3
RF1127	Stainless Steel screw down universal joint. Suits 16mm (5/8") OD tube	-	-	-	56	-	-	-	2.0
RF1135-16	Nylon Tiller extension retaining clip. Suits 16mm (5/8") dia. tube	-	-	-	7	-	-	-	0.2
RF1135-20	Nylon Tiller extension retaining clip. Suits 20mm (3/4") dia. tube	-	-	-	4	-	-	-	0.1
RF1136	Tiller extension end knob, EVA foam, suits 16mm (5/8") OD tube	-	-	-	35	-	-	-	1.2
RF3133	Urethane universal joint. Suits 13.5mm (17/32") ID 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.





Dominic & Steve Randall, International Cadet

- ✓ 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 camcleat and fairlead and suits line sizes 2-8mm (3/32-5/16").
- ✓ RC91941 RopeGlide™ ring has a 'soft' attachment which allows up to 250° rotation.
- ⊕ Dinghy and small catamaran jib sheet leads.
- ⊕ Dinghy outhauls.
- ⊕ Alloy track.
- ⊕ Glass fibre reinforced nylon slides.
- ⊕ Grade 316 stainless steel fixtures.

**TRACK FASTENINGS** – 4mm (5/32") countersunk fasteners at 75mm (2 15/16") centres. **STOP HOLES** – 19mm (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
<b>Series 19</b>									
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



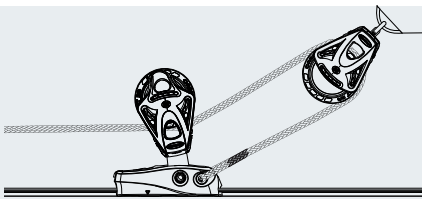
© Greg Scherwinski



Removable lead block



Ergonomic plunger stop operation



Integrated becket for 2:1 sheet system

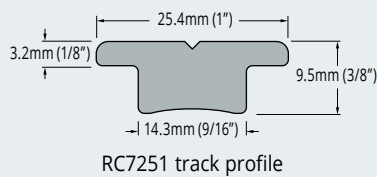
- ✓ Low profile and light weight, T-Track is a simple, reliable system for adjustable sheet leads.
- ✓ Composite slides have a removable attachment pin to suit either a Dyneema® link or a shackle.
- ✓ Composite slides have an integrated becket for 2:1 headsail sheet systems, popular on modern sport boats.
- ✓ 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).
- ⤴ Headsail sheet leads on boats up to 8m (26ft).
- ⤴ Toughened, glass fibre reinforced nylon slide.
- ⤴ Anodised 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	M.W.L.	B.L.	WEIGHT	LENGTH	M.W.L.	B.L.	WEIGHT
		mm	kg	kg	g	in	lb	lb	oz
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



© James Hill



PRODUCT No.	DESCRIPTION	LENGTH	M.W.L.	B.L.	WEIGHT	LENGTH	M.W.L.	B.L.	WEIGHT
		mm	kg	kg	g	in	lb	lb	oz
<b>Slides</b>									
RC72504	Composite slide, removable M4 pin, plunger stop	102	500	1000	107	4	1100	2200	3.8
RC72536S	Composite slide, Series 40 BB Orbit Block™, stand-up, suits up to 9mm (5/16") rope, plunger stop	102	325	700	152	4	715	1540	5.4
RC72544	Composite spinnaker pole slide, ring plunger stop	102	400	800	215	4	880	1760	7.6
<b>Accessories</b>									
RC7250-INS	Track bolt insulator	-	-	-	3	-	-	-	0.1
RC72581	Track end, plastic	-	-	-	5	-	-	-	0.2
<b>Track - Supplied with RC7250-INS nylon track bolt insulators</b>									
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



## Exakte Kontrolle

Ronstan Travellersysteme liefern die Leistung, die für die Optimierung des Segeltrimms, die schnelle Reaktion auf wechselnde Bedingungen und die richtige Balance der Lasten auf Segel, Rigg und Profile erforderlich ist. Ronstan-Systeme wurden von Volvo Race-Teams, Vendée Globe-Herausforderern und anderen Profis entwickelt und ohne Raum für Kompromisse getestet.

### BB Kugellager Wagen

Wagenkörper aus gefrästen Strangpressprofilen bieten hohe Festigkeit und Haltbarkeit bei minimalem Gewicht. Extrem flache Wagenprofile sorgen dafür, dass Schoten und Kontrollleinen nahe am Deck verlaufen. Umlaufende Torlon®-Kugellagersysteme ermöglichen eine präzise Einstellung und Kontrolle auch unter schwierigsten Bedingungen.

### SR Sliderodwagen mit Gleitstäben gelagert

Die Sliderodwagen eignen sich für statische Lastanwendungen, bei denen eine Anpassung unter Last nicht so häufig erforderlich ist, und werden aus einem speziellen Profil gefertigt, welches etwas schmaler ist als das der Kugellagerwagen.

### Liebe zum Detail

Wagenkörper werden nach genauen Spezifikationen bearbeitet, bevor sie endkontrolliert und eloxiert werden, um einen maximalen Korrosionsschutz zu gewährleisten. Edelstahlteile werden einem speziellen hochenergetischen Veredelungsverfahren unterzogen, um einzigartig glatte Kanten und Oberflächen zu erhalten. Federbelastete Pinstops rasten in die Stopplöcher der Schienen ein und können in der Position "oben" (ausgekuppelt) verriegelt werden.

### Schienen

Im Standardprogramm sind 7 Schienen verschiedener Größen erhältlich, um die Systemspezifikationen an die individuellen Anforderungen anzupassen. Für freitragende Spannweiten (Cockpit, Niedergang, Luken, etc.) sind Beam Track Schienen verfügbar. Gebogene Schienen können mit einer Biegung in horizontaler oder vertikaler Ebene geliefert werden. Der Mindestbiegeradius ist abhängig von der Wagenlänge. Siehe Seiten 83 & 84 für Optionen und Details.

### Zubehör

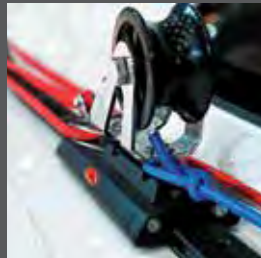
Die Klemmarme können auf den optimalen Winkel eingestellt werden. Verschiedene Endkontrollscheiben für Untersetzungen der Großschottraveller und Genuaschotbleche sind optional lieferbar. Für die Wagen und Endkontrollblöcke sind optional Kugellagerscheiben und zusätzliche Seitenplatten erhältlich. Dadurch lassen sich zusätzliche Untersetzungen auch nachträglich ergänzen.



Ball Bearing cars



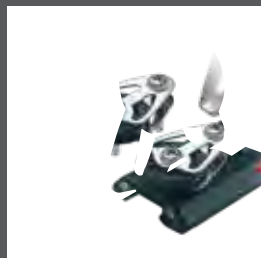
Sliderod cars



Track profile options



Plunger stops can be locked up



Control line accessories



Adjustable control end cleats





- ✓ Low profile, lightweight alloy cars and 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.

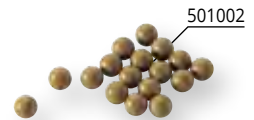
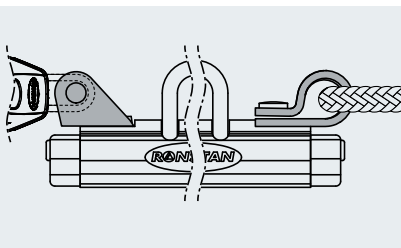
- ✓ Loop and fork style fittings are easily added for becket and control line block attachment.
- ✓ Cleats, fairleads and cheek blocks can be mounted directly on deck or cockpit sides to complete the control line systems.

- ⬆ 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	WIDTH	M.W.L.	B.L.	WEIGHT	LENGTH	WIDTH	M.W.L.	B.L.	WEIGHT
		mm	mm	kg	kg	g	in	in	lb	lb	oz
<b>BB Ball Bearing</b>											
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	51	2 11/16	1 5/8	330	880	1.8
RC11402	Car, pivoting shackle top	47	41	125	400	48	1 7/8	1 5/8	280	880	1.7
RC11403	Car, pivoting shackle top, 2 mounting screws	78	41	180	400	91	3 1/16	1 5/8	400	880	3.2
RC11405	Orbit Car, integrated lashing eye	50	41	125	250	33	2	1 5/8	275	550	1.2
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	Track, black	2996	14	-	-	690	117 15/16	9/16	-	-	24.3
RC1140-6.0*2	Track, black	5996	14	-	-	1380	236 1/16	9/16	-	-	48.7
RC11410	Car, saddle top, single AP control sheaves	68	41	150	400	89	2 11/16	1 5/8	330	880	3.1
RC11480	End cap, plastic	28	20	-	-	6	1 1/8	25/32	-	-	0.2
<b>Accessories</b>											
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 RCxxxxxS



- ✓ Low profile, lightweight alloy cars and 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 inch) diameter and suit up to 6mm (1/4 inch) 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	WIDTH	M.W.L.	B.L.	WEIGHT	LENGTH	WIDTH	M.W.L.	B.L.	WEIGHT
		mm	mm	kg	kg	g	in	in	lb	lb	oz
<b>BB Ball Bearing</b>											
RC11902	Car, pivoting shackle top	50	47	300	1050	65	2	1 7/8	660	2310	2.3
RC11903	Car, pivoting shackle top, 2 mounting screws	70	47	400	1490	90	2 3/4	1 7/8	880	3280	3.2
RC11905	Orbit Car, integrated lashing eye	50	47	300	600	43	2	1 7/8	660	1320	1.5
RC11910	Car, saddle top, single AP control sheaves	85	47	500	1240	125	3 11/32	1 7/8	1100	2730	4.4
RC11920	Car, saddle top, single AP control sheaves, C-Cleats™	85	47	500	1240	330	3 11/32	1 7/8	1100	2730	11.6
RC11921	Car, saddle top, double AP control sheaves, C-Cleats™	85	47	500	1240	350	3 11/32	1 7/8	1100	2730	12.3
RC11945	Car, 20mm (3/4 inch) BB Utility block	50	47	250	550	65	2	1 7/8	550	1210	2.3

**Accessories**

501002	Ball bearing, Torlon®, 5.00mm (0.197 inch) diameter	-	-	-	-	1	-	-	-	-	0.1
RF1050	Control becket, 8mm (5/16 inch) eye, suits RC11903	-	-	-	-	6	-	-	-	-	0.2
RF1052	Control becket fork, 5mm (3/16 inch) pin, suits RC11903	-	11	-	-	9	-	7/16	-	-	0.3



- ✓ Low profile, lightweight alloy cars and end caps.
- ✓ Twin rows of recirculating Torlon® ball bearings allow smooth adjustment of sheet lead position under load.
- ✓ Genoa cars pivot to 45° from vertical for optimum alignment with sheet load.
- ✓ Genoa car sheaves are 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
<b>BB Ball Bearing</b>											
RC11912	Car, pivoting saddle top, single control sheaves	100	47	605	1670	220	3 15/16	1 7/8	1330	3680	7.8
RC11922	Car, pivoting saddle top, single control sheaves & cleat	100	47	605	1670	370	3 15/16	1 7/8	1330	3680	13.0
RC11930	Genoa car, control beackets	100	47	605	1430	250	3 15/16	1 7/8	1330	3150	8.8

<b>SR Sliderod</b>											
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	235	3 1/4	1 9/16	1460	3150	8.3
RC51940	Car, sliderods, pivoting shackle plunger stop	55	39	310	1050	100	2 3/16	1 9/16	680	2310	3.5



**TRACK FASTENINGS** – 5mm (3/16") countersunk fasteners at 100mm (3 15/16") centres    **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.
- ✓ Standard low profile track has stop holes for cars fitted with plunger stops.
- ✓ Cleat kits include mounting screws and are easily fitted to control ends - supports can be adjusted to optimum cleating angle.
- ✓ High profile track can be used for unsupported spans to bridge cockpits and companionway hatches. See page 124 for mechanical data.
- ⬆ 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.

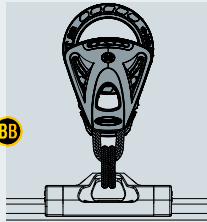
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		mm	mm	kg	kg	g	in	in	lb	lb	oz
<b>BB</b> RC00410	BB control end sheave addition kit	39	30	165	675	33	1 9/16	1 3/16	360	1490	1.2
RC00420	Control end C-Cleat™ addition kit	-	-	-	-	94	-	-	-	-	3.3
RC1190-1.0*	Track, black	996	19	-	-	310	39 3/16	3/4	-	-	10.9
RC1190-1.5*	Track, black	1496	19	-	-	465	58 7/8	3/4	-	-	16.4
RC1190-2.0*	Track, black	1996	19	-	-	620	78 9/16	3/4	-	-	21.9
RC1190-3.0*	Track, black	2996	19	-	-	930	117 15/16	3/4	-	-	32.8
RC1190-6.0*	Track, black	5996	19	-	-	1860	236 1/16	3/4	-	-	65.6
RC1191J	Track joiner	60	-	-	-	3	2 3/8	-	-	-	0.1
RC1194-2.0	High profile track, black. 194mmW x 21mmH (3/4"W x 13/16"H)	1996	19	-	-	1000	78 9/16	3/4	-	-	35.3
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

\* Silver track available - Order as RCxxxxxS

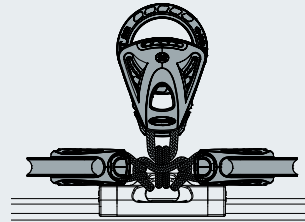
# ORBIT



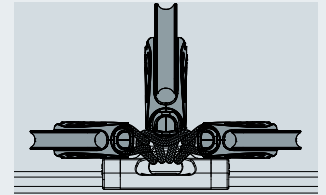
RC12205 **BB**



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.



RC12210 **BB**



RC12203 **BB**

2 x M6 screw



RC12220 **BB**



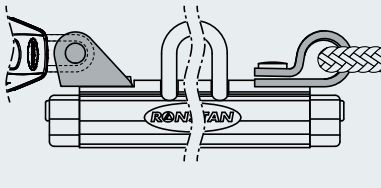
RC12221 **BB**



RF1053  
6mm (1/4")



RC00412

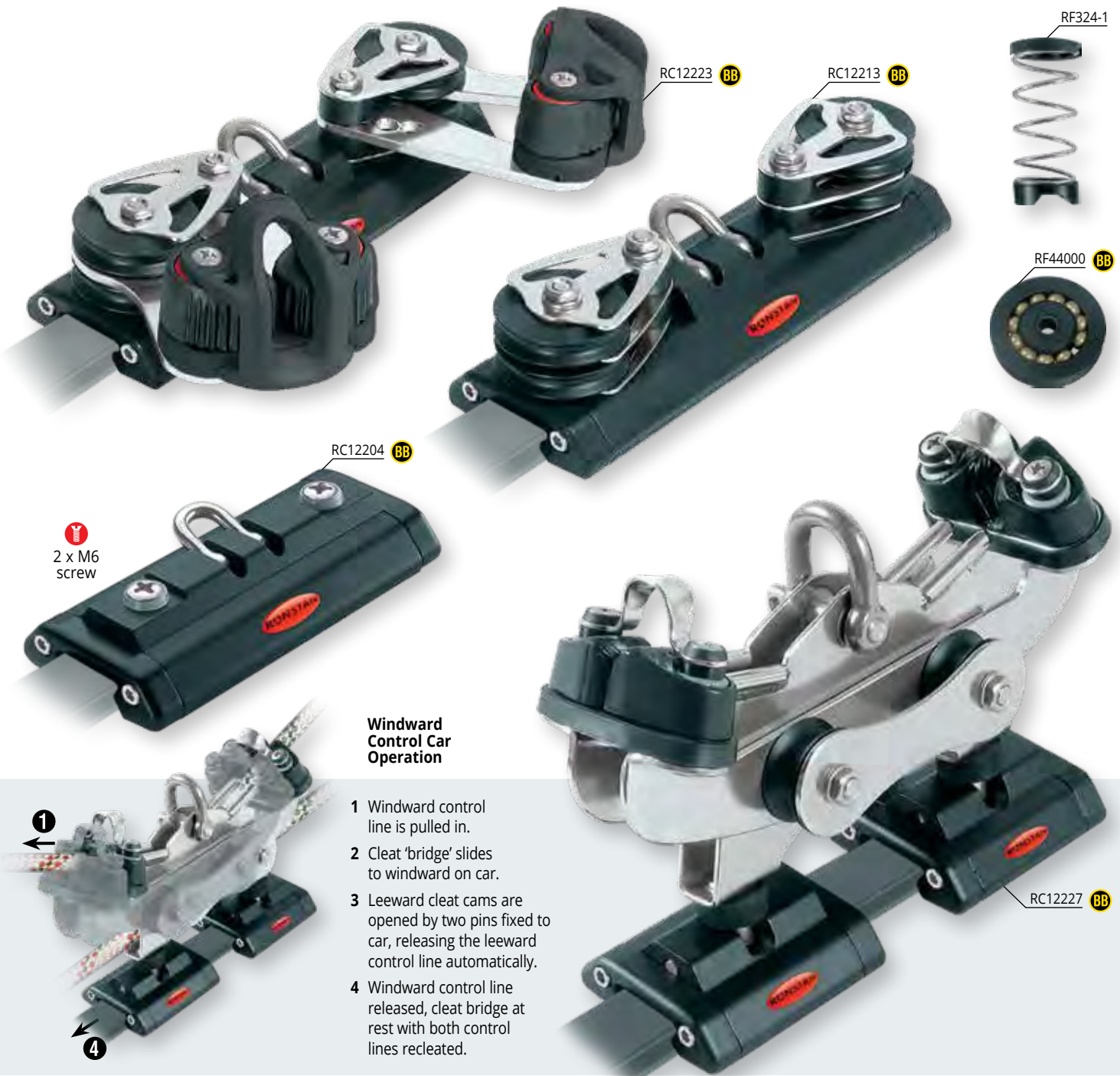


- ✓ Low profile, lightweight alloy cars and end caps.
- ✓ Loop and fork style fittings are easily added for becket and control line block attachment.

- ✓ Compact sheave arrangements for neat, low profile control line purchase systems. Control sheaves are 30mm (1 3/16") 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
<b>BB Ball Bearing</b>											
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
<b>Accessories</b>											
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



2 x M6 screw

### 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 recreated.



- ✓ 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.
- ✓ Stand-up spring kit RF324-1 is available to suit mainsheet cars RC12213, RC12223. Combine with a mainsheet system RF72700 or RF72900 for ultimate mainsheet control.
- ⚠ 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.

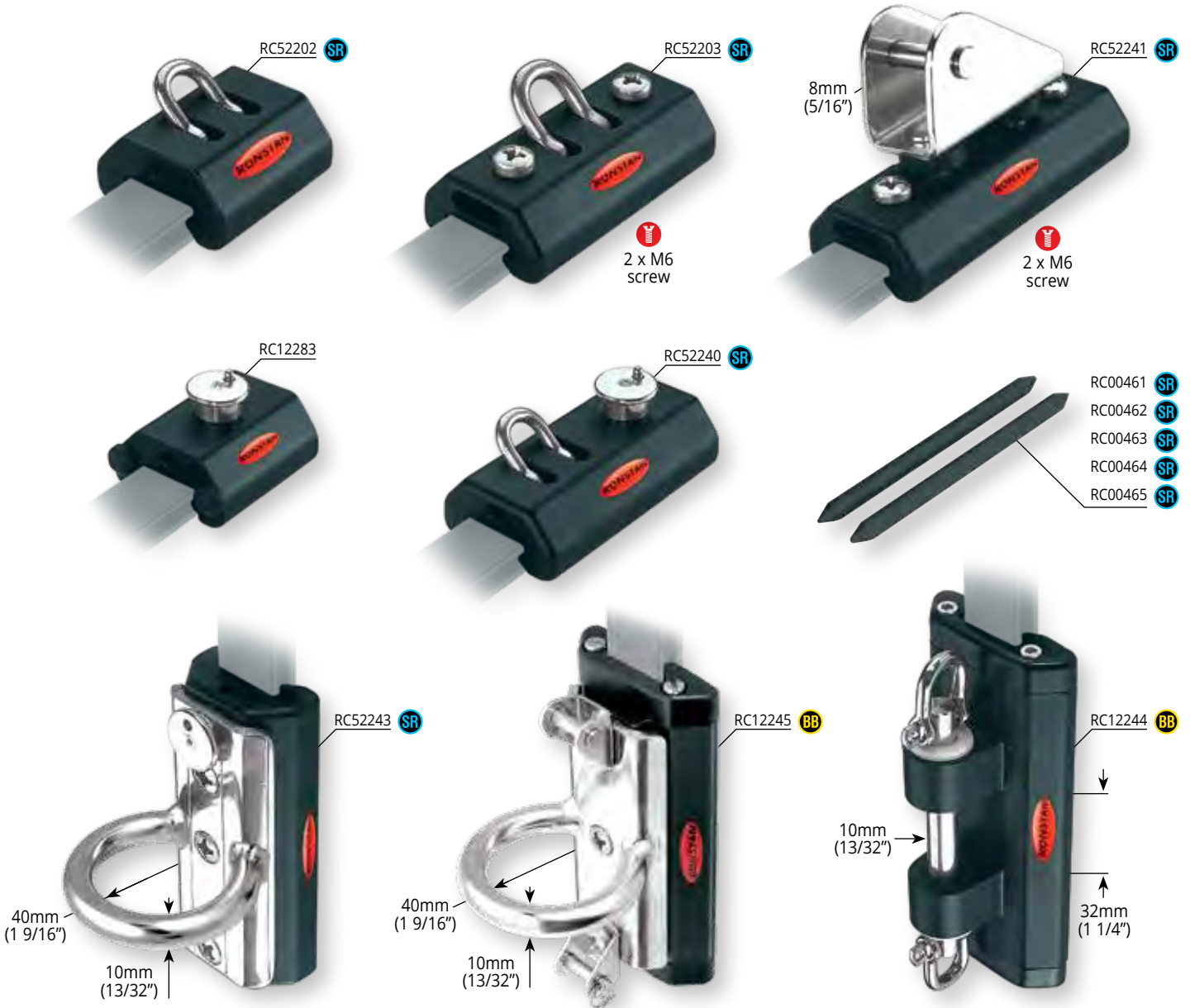
PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in	WIDTH in	M.W.L. lb	B.L. lb	WEIGHT oz
<b>BB Ball Bearing</b>											
RC12204	Car, pivoting shackle top, 2 mounting screws	125	58	880	2640	230	5	2 5/16	1940	5820	8.1
RC12213	Car, pivoting shackle top, double control sheaves	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
<b>Accessories</b>											
RF324-1	Stand-up spring kit, suits RC12213, RC12223	-	-	-	-	60	-	-	-	-	2.1
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 1/2") 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
<b>BB Ball Bearing</b>											
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
<b>SR Sliderod</b>											
RC52230	Genoa car, sliderods, plunger stop	125	45	1205	2410	520	5	1 3/4	2660	5310	18.3
<b>Accessories</b>											
501001	Ball bearing, Torlon®, 6.35mm (1/4") diameter	-	-	-	-	1	-	-	-	-	0.1
RC00411	Control sheave addition kit, suits RC12231	65	40	240	900	47	2 9/16	1 9/16	530	1980	1.7
RC00412	Control becket, 8mm (5/16") eye, M6 screws, suits RC12203, RC12204 & RC12231	-	-	-	-	6	-	-	-	-	0.2

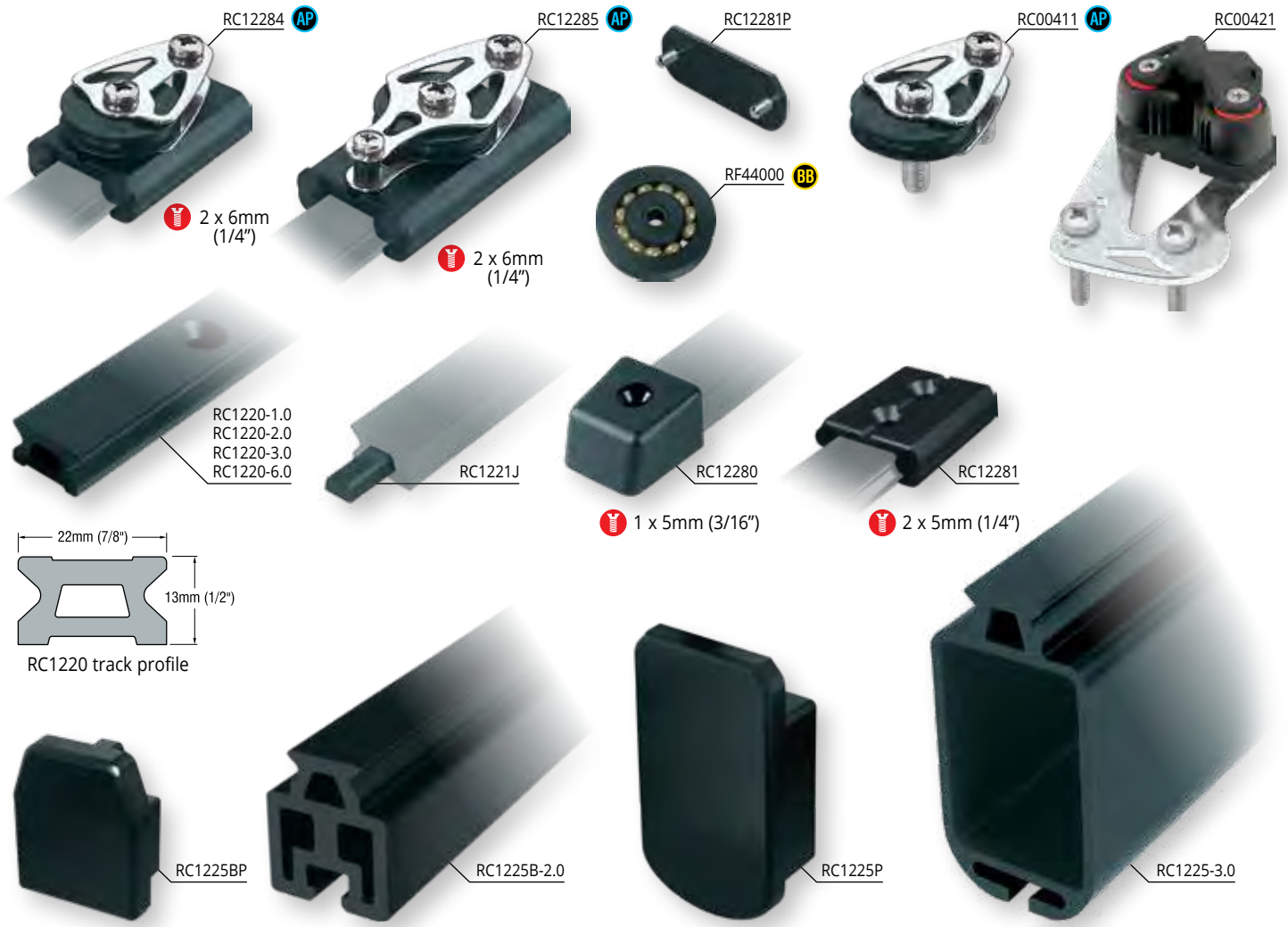
# Serie 22 Kugellager & Sliderod



- ✓ 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	WIDTH	M.W.L.	B.L.	WEIGHT	LENGTH	WIDTH	M.W.L.	B.L.	WEIGHT
		mm	mm	kg	kg	g	in	in	lb	lb	oz
<b>BB Ball Bearing</b>											
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
<b>SR Sliderod</b>											
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 beackets	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 beackets	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 124 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.
- ⬆ Mainsheet systems on boats to 10m (33ft).
- ⬆ Genoa sheet systems on boats to 11m (36ft).

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in	WIDTH in	M.W.L. lb	B.L. lb	WEIGHT oz
<b>Accessories</b>											
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*	Track, black	996	22	-	-	460	39 3/16	7/8	-	-	16.2
RC1220-2.0*	Track, black	1996	22	-	-	920	78 9/16	7/8	-	-	32.5
RC1220-3.0*	Track, black	2996	22	-	-	1380	117 15/16	7/8	-	-	48.7
RC1220-6.0*	Track, black	5996	22	-	-	2760	236 1/16	7/8	-	-	97.4
RC1221J	Track joiner	60	-	-	-	4	2 3/8	-	-	-	0.1
RC1225-3.0*	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*	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*	Track end stop, anodised aluminium	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 control sheave, 40mm (1 1/2") diameter	-	-	-	-	16	-	-	-	-	0.6

\* Silver track available - Order as RCxxxxxS



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✓ 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).

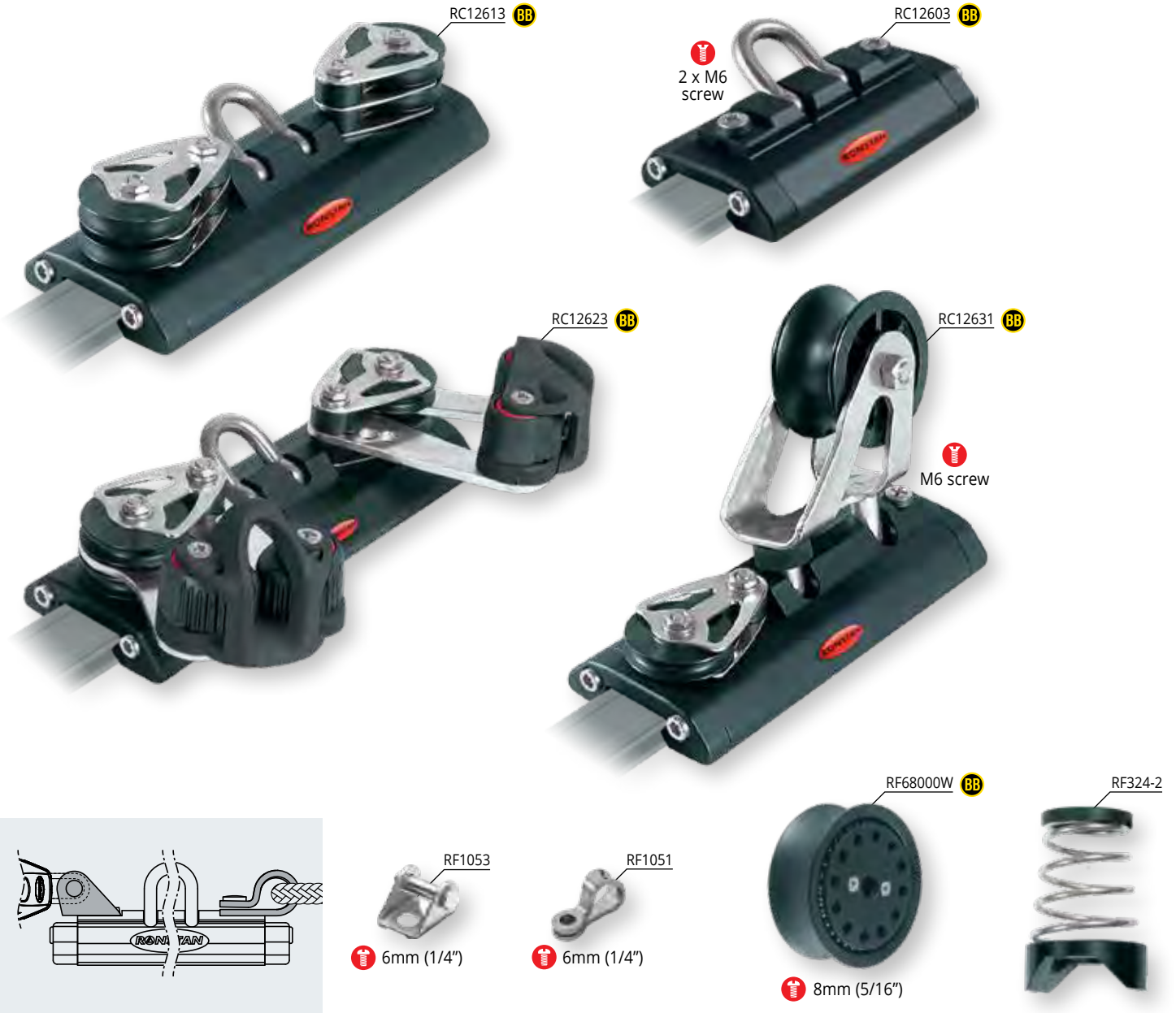
⚙ Alloy track, cars and control ends.

⚙ Torlon® ball bearings in cars.

⚙ Alloy ball bearing sheave upgrade available (RC12617).

⚙ Grade 316 stainless steel fixtures (RC12617).

PRODUCT No.	DESCRIPTION	LENGTH	WIDTH	M.W.L.	B.L.	WEIGHT	LENGTH	WIDTH	M.W.L.	B.L.	WEIGHT
		mm	mm	kg	kg	g	in	in	lb	lb	oz
<b>BB</b> Ball Bearing											
RC12605	Orbit Car, integrated lashing eye	108	69	850	1700	18	4 1/4	2 3/4	1870	3740	0.6
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
<b>Accessories</b>											
501003	Ball bearing, Torlon®, 7.95mm (5/16") diameter	-	-	-	-	1	-	-	-	-	0.1
RF78000W	Aluminium roller ball bearing sheave, 75mm (3") diameter, suits RC12617	-	-	-	-	280	-	-	-	-	9.9
RF54000	Aluminium ball bearing control sheave, 50mm (2") diameter, suits RC12613, RC12631, RC12623, RC12617	-	-	-	-	32	-	-	-	-	1.1

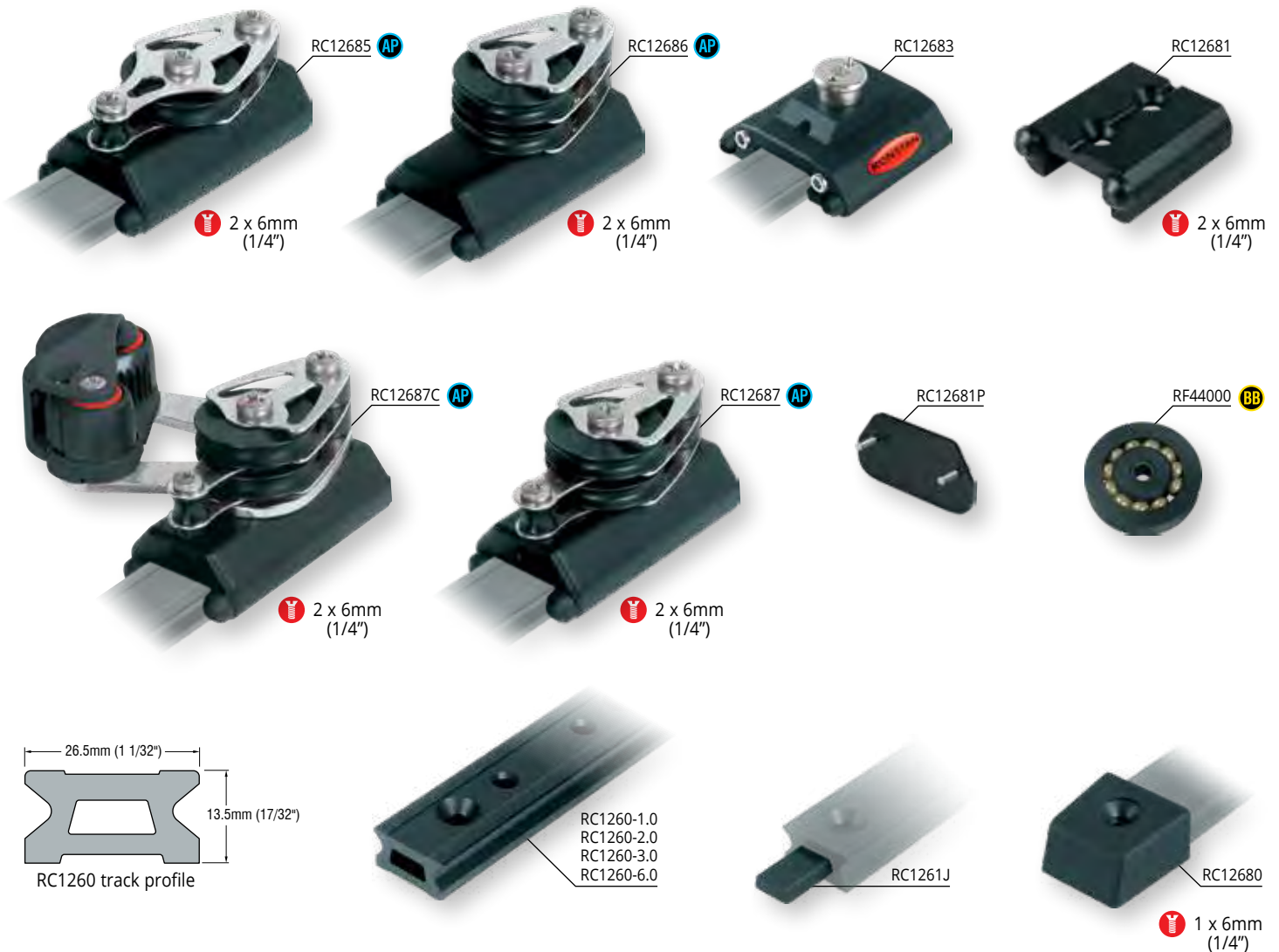


- ✓ Ball bearing cars have twin rows of recirculating Torlon® ball bearings for smooth, precise adjustment under load.
- ✓ 40mm (1 9/16") diameter control sheaves suit up to 6mm (1/4") rope.
- ✓ RC12631 genoa car sheave is 60mm (2 3/8") diameter and can accept two sheets for easy headsail changes.

- ✓ 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	WIDTH	M.W.L.	B.L.	WEIGHT	LENGTH	WIDTH	M.W.L.	B.L.	WEIGHT
		mm	mm	kg	kg	g	in	in	lb	lb	oz
<b>BB</b> 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
<b>Accessories</b>											
RF324-2	Stand-up spring kit, suits RC12603, RC12613, RC12623	-	-	-	-	60	-	-	-	-	2.1
RF1051	Control becket, 8mm (5/16") eye, suits RC12203 & RC12204	-	-	-	-	6	-	-	-	-	0.2
RF1053	Control becket fork, 5mm (3/16") pin, suits RC12603 & RC12631	-	14	-	-	9	-	9/16	-	-	0.3
RF68000W	Aluminium roller ball bearing sheave, 60mm (2 3/8") diameter, suits RC12631	-	33	1150	-	128	-	1 1/4	2540	-	4.5



**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.

⊗ Alloy track and end caps.

⊗ Torton® 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
<b>Accessories</b>											
RC1260-1.0*	Track, black	996	26	-	-	600	39 3/16	1 1/16	-	-	21.2
RC1260-2.0*	Track, black	1996	26	-	-	1200	78 9/16	1 1/16	-	-	42.3
RC1260-3.0*	Track, black	2996	26	-	-	1800	117 15/16	1 1/16	-	-	63.5
RC1260-6.0*	Track, black	5996	26	-	-	3600	236 1/16	1 1/16	-	-	127.0
RC1261J	Track joiner	60	-	-	-	5	2 3/8	-	-	-	0.2
RC12680	End cap, plastic	34	32	-	-	7	1 5/16	1 1/4	-	-	0.2
RC12681	End stop, aluminium	55	45	-	-	73	2 5/32	1 25/32	-	-	2.6
RC12681P	Cover plate for control end & track, 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

\* Silver track available - Order as RCxxxxxS



Foto: Paso Garibaldi, Wilhelm Schumann

# Serie 30 Kugellager



✓ 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 suits Series 60 & 75 Orbit Blocks™ 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
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**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
RF78000W	Aluminium roller ball bearing sheave, 75mm (3") diameter, suits RC13017	-	-	-	-	280	-	-	-	-	9.9
RF54000	Aluminium ball bearing control sheave, 50mm (2") diameter, suits RC12613, RC12631, RC12623, RC13017	-	-	-	-	32	-	-	-	-	1.1



- ✓ 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 Tordon® 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
<b>BB Ball Bearing</b>											
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
<b>Accessories</b>											
501003	Ball bearing, Tordon®, 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

# Serie 30 Kugellager & Sliderod



- ✓ 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.

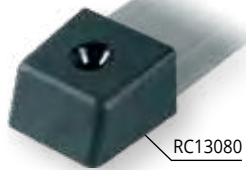
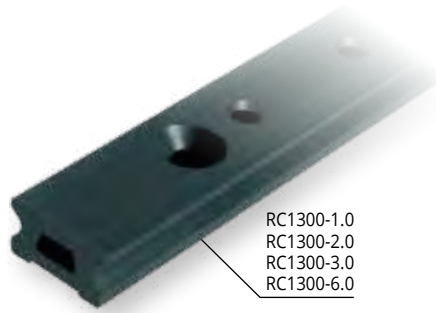
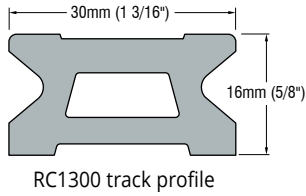
PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	M.W.L. kg	B.L. kg	WEIGHT g	LENGTH in	WIDTH in	M.W.L. lb	B.L. lb	WEIGHT oz
<b>BB Ball Bearing</b>											
RC13031	Genoa car, single control sheave	200	77.0	1800	3200	1130	7 7/8	3 1/16	3970	7050	39.9
RC13033	Genoa car, double control sheaves	200	77.0	1800	3200	1227	7 7/8	3 1/16	3970	7050	43.3
<b>SR Sliderod</b>											
RC53030	Genoa car, sliderods, plunger stop	160	55.0	1700	3400	848	6 5/16	2 3/16	3750	7500	29.9
<b>Accessories</b>											
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





- ✓ 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
<b>Accessories</b>											
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 control end, including screws	-	55	-	-	16	-	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



1 x 6mm (1/4")



Foto: © martinezstudio.es

**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 124 for mechanical data.
- ✓ Standard low profile track has stop holes for cars fitted with plunger stops.
- ⚙ 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
<b>Accessories</b>							
RC1300-1.0*	Track, black	996	30	810	39 3/16	1 3/16	28.6
RC1300-2.0*	Track, black	1996	30	1620	78 9/16	1 3/16	57.1
RC1300-3.0*	Track, black	2996	30	2430	117 15/16	1 3/16	85.7
RC1300-6.0*	Track, black	5996	30	4860	236 1/16	1 3/16	171.4
RC1301J	Track joiner	60	-	7	2 3/8	-	0.2
RC1305B-3.0*	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	End plug for RC1305B beam track	-	76	42	-	3	1.5
RC13080	End cap, plastic	37	37	27	1 7/16	1 7/16	1.0

\* Silver track available - Order as RCxxxxxS





✓ Beam Track Profilschienen werden typischerweise verwendet, um Cockpits, Niedergänge und freitragende Decksabschnitte zu überspannen, wo die Befestigungsmöglichkeiten eingeschränkt sind, oder um zu vermeiden, dass zusätzliche Konstruktionen in das Boot eingebaut werden müssen.

✓ Nachfolgend sind die schnitt- und mechanischen Daten, einschließlich der Trägheitsmomente ( $I_{xx}$  &  $I_{yy}$ ) und der Querschnittsfläche (CSA) für die verschiedenen Trägerabschnitte dargestellt. Der Designer oder die Werft sollte gefragt werden, um das geeignete Profil für eine bestimmte Anwendung festzulegen.

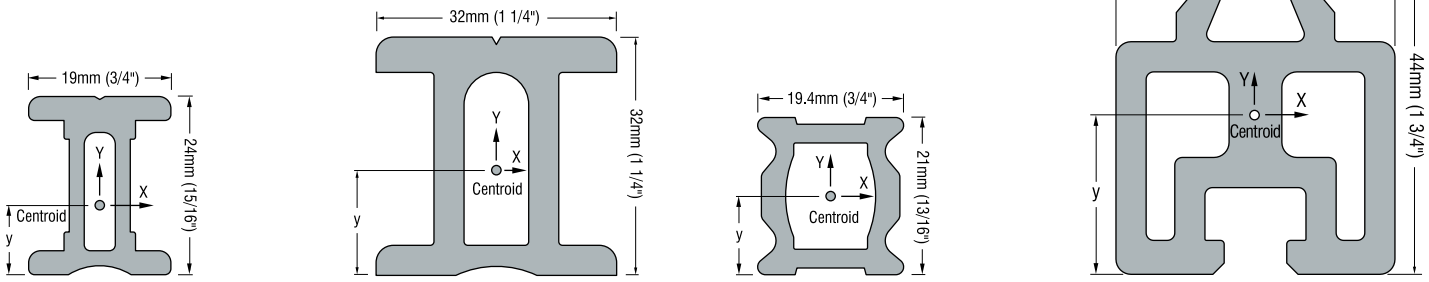
✓ Standardmäßig werden Beam Tracks ohne Löcher geliefert. Auf Wunsch können sie mit kundenspezifischen Lochanordnungen nach individuellen Anforderungen gebohrt werden. Kontaktieren Sie unser Vertriebsteam für weitere Informationen.

### Typical Material Properties

(unless otherwise stated)

σ yield = 225 MPa (32.6 ksi)

σ ult = 270 MPa (39.2 ksi)

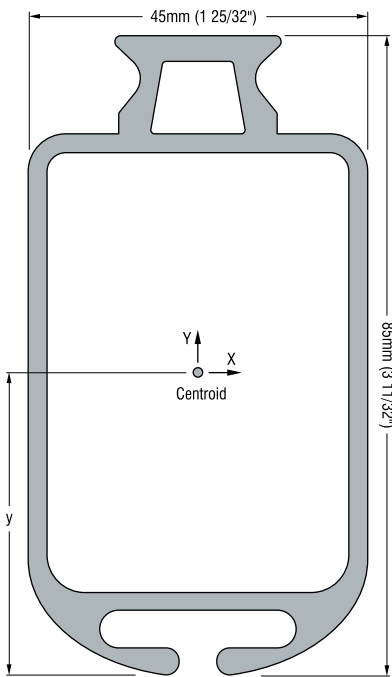


**RC6190**  
 $I_{xx} = 14294\text{mm}^4$  (0.0343in<sup>4</sup>)  
 $I_{yy} = 4219\text{mm}^4$  (0.0101in<sup>4</sup>)  
 $y = 12.56\text{mm}$  (0.4945")  
 CSA = 196mm<sup>2</sup> (0.3038in<sup>2</sup>)

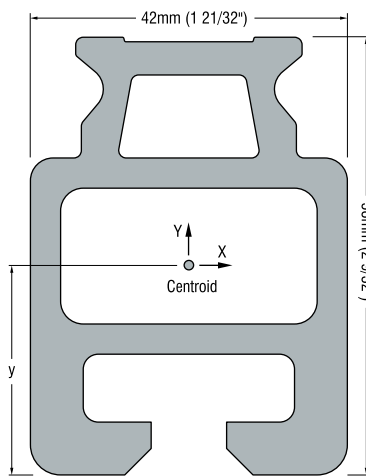
**RC6320**  
 $I_{xx} = 59000\text{mm}^4$  (0.1417in<sup>4</sup>)  
 $I_{yy} = 30360\text{mm}^4$  (0.0729in<sup>4</sup>)  
 $y = 14.75\text{mm}$  (0.5807")  
 CSA = 471mm<sup>2</sup> (0.7301in<sup>2</sup>)

**RC1194-2.0**  
 $I_{xx} = 9009\text{mm}^4$  (0.0216in<sup>4</sup>)  
 $I_{yy} = 7001\text{mm}^4$  (0.0168in<sup>4</sup>)  
 $y = 10.5\text{mm}$  (0.4134")  
 CSA = 179mm<sup>2</sup> (0.2775in<sup>2</sup>)

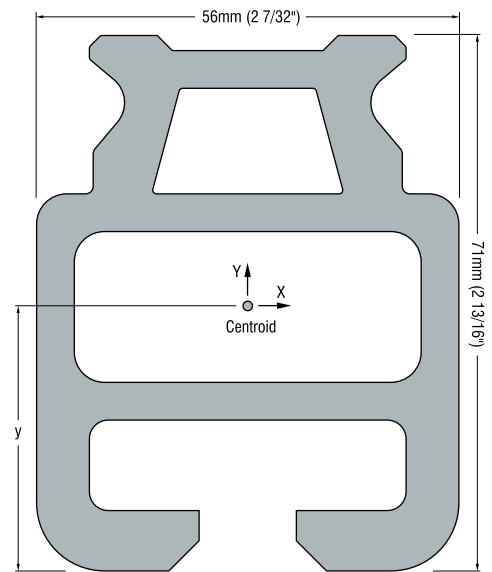
**RC1225B-2.0**  
 $I_{xx} = 133881\text{mm}^4$  (0.3217in<sup>4</sup>)  
 $I_{yy} = 98716\text{mm}^4$  (0.2372in<sup>4</sup>)  
 $y = 20.2\text{mm}$  (0.7957")  
 CSA = 836 mm<sup>2</sup> (1.2969in<sup>2</sup>)



**RC1225-3.0**  
 $I_{xx} = 664730\text{mm}^4$  (1.5970in<sup>4</sup>)  
 $I_{yy} = 184248\text{mm}^4$  (0.4427in<sup>4</sup>)  
 $y = 42.3\text{mm}$  (1.6654")  
 CSA = 768mm<sup>2</sup> (1.1904in<sup>2</sup>)  
 σ yield = 170 MPa (24.7 ksi)  
 σ ult = 215 MPa (31.2 ksi)



**RC1305B-3.0**  
 $I_{xx} = 338641\text{mm}^4$  (0.8136in<sup>4</sup>)  
 $I_{yy} = 202808\text{mm}^4$  (0.4872in<sup>4</sup>)  
 $y = 26.9\text{mm}$  (1.0591")  
 CSA = 1051mm<sup>2</sup> (1.6291in<sup>2</sup>)



**RC1425-3.0**  
 $I_{xx} = 797749\text{mm}^4$  (1.9166in<sup>4</sup>)  
 $I_{yy} = 558530\text{mm}^4$  (1.3419in<sup>4</sup>)  
 $y = 34.7\text{mm}$  (1.3611")  
 CSA = 1687mm<sup>2</sup> (2.6149in<sup>2</sup>)

## Schienen biegen

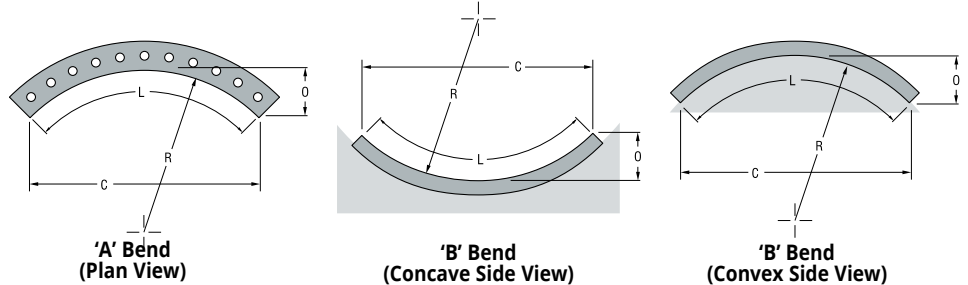
In bestimmten Anwendungen ist es vorteilhaft, Schienen entweder horizontal oder vertikal zu biegen. Das horizontale Biegen nennen wir - A-Biegung. Die vertikale Biegung nennen wir B-Biegung.

### Horizontale Biegung - 'A' Bend

Das horizontale Biegen über die Schmalseite der Schiene (beispielsweise bei einer langen Travellerschiene eines IMOCA Race Bootes) nennt man A-Biegung.

### Vertikale Biegung - 'B' Bend

Manchmal ist es sinnvoll die Enden einer Schiene parallel zum Deck mit den Enden nach unten (konvexe B-Biegung) oder wie bei einem S-Focksystem, beispielsweise mit den Enden nach oben (konkave B-Biegung) zu biegen.



## Minimum Bend Radius

TRAVELLER SERIES	CAR LENGTH mm	MINIMUM HORIZONTAL	MINIMUM HORIZONTAL	MINIMUM HORIZONTAL	MINIMUM HORIZONTAL	MINIMUM HORIZONTAL
		'A' BEND RADIUS mm	'B' BEND RADIUS mm			
<b>BB Series 14</b>	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
<b>BB Series 19</b>	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
<b>BB Series 22</b>	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
<b>BB Series 26</b>	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
<b>BB Series 30</b>	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
<b>I-Track 19</b>	51	400	400	2	15 3/4	15 3/4
	86	1200	Not suitable	3 3/8	47 1/4	Not suitable
<b>I-Track 32</b>	76	350	500	3	14	20
	157	350	Not suitable	6 3/16	14	Not suitable

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

## Spezifikation für gebogene Schienen

Für jeden Biegetyp sind Spezifikationen erforderlich mit mindestens zwei genauen Abmessungen (wenn möglich drei) und sofern möglich einer eindeutigen Zeichnung.

### Diese Maße sind erforderlich (s. die Abbildungen oben)

Radius	R	und	O	Durchbiegung
		OR		
Radius	R	und	L	Schienenlänge
		OR		
Radius	R	und	C	Sehnenlänge
		OR		
Durchbiegung	O	und	C	Sehnenlänge

Häufig ist bei der B-Bend Situation der Radius unbekannt. Dann kann man diesen anhand der Sehnenlänge (C) und Durchbiegung (O) errechnen. Die Biegung der Schiene kann in diesem Falle nur ein Kreisbogen, also konstant sein.

### Bitte beachten Sie folgendes:

- Die kugelgelagerten Traveller laufen am besten auf geraden Schienen. Wagen, die auf gebogenen Schienen laufen, können schwergängig sein oder aber nicht mehr die volle Arbeitslast liefern, da die Kugeln ungleichmäßig belastet sind.
- Auch wenn es wünschenswert wäre alle Schienen in jede Richtung zu biegen, ist es manchmal nicht möglich die Schienen überhaupt zu biegen.
- Gerade kleine Radien sind kritisch. Bitte beachten Sie die Angaben in der Tabelle links, dort sind max. Biegeradien bei max. Wagenlänge angegeben.
- Leichte Biegungen in beide Richtungen können während der Montage „hingedrückt“ werden. Bitte testen Sie den Wagen nach der Montage, ob er noch leichtgängig auf der Schiene läuft.

Sie können die Schienen gegen einen Aufpreis von RONSTAN auch ab Werk gebogen bestellen.

### Geben Sie bei der Bestellung bitte folgende Daten an:

- Schientyp mit Artikelnummer
- Geben Sie an, wie die Schiene gebogen werden soll. „A“ - Bend (horizontal) oder „B“ - Bend (vertikal), konkav oder konvex (s. Abbildung oben).
- Liefern Sie aufschlussreiche Spezifikationen und Daten (z.B. Zeichnungen oder Skizzen).



## Verbessertes Design - Performance & Zuverlässigkeit

Unsere Endlosfurler von Ronstan bringen hohe Leistung und Zuverlässigkeit in greifbare Nähe von Cruising- und Regattaseglern gleichermaßen.

### Fortschrittliches Trommeldesign

Durch die verschiedenen Größen, können wir für jeden Lastbereich das richtige System liefern. Egal, ob schnell gerollt werden soll oder der Vorgang eher leicht gehen muß. Die Abstufungen sind ideal abgestimmt.

Die Trommeln verfügen über eine Querlochgeometrie für maximalen Grip der Rollleine in der Trommel. Beim Ausrollen des Segels fliegt die Leine durch die hohe Abrollgeschwindigkeit nach außen und wird dabei quasi ausgekuppelt. Die Leine bleibt beim Abrollvorgang lose und still an Deck liegen. Eine Teflon-Lagerschale sorgt für wenig Reibung und Abrieb der Rollleine in der Trommel. Die Rollleine kann nicht aus der Trommel herausfliegen oder sich in irgend einer Art verklemmen.

### Top-Down-Furler Modelle für fliegende Segel

Das Top-Down-Furling bietet eine neue Art des Segelrollens. Die Einfachheit, Sicherheit und Geschwindigkeit bei der Handhabung steht hier im Vordergrund. Egal welche Vorwindsegel Sie rollen möchten, einfacher geht's nicht. Für Tourensegler sind diese Furler ideal: Einrollen, ausrollen sowie das Segel verpacken mit einem System. Fast wie bei einer Rollgenua kann die Bedienung aus dem geschützten Cockpit erfolgen. Regattasegler können durch das blitzschnelle und sichere Einrollen Ihre Manöver optimieren. Segel, wie beispielsweise Code Zeros, lassen sich mit TopDown Furlern besser einrollen. Die Segel werden von oben nach unten gerollt (Top-Down). So wickelt sich das Segel oben strammer auf als bei herkömmlichen Furlern.

### Wartungsfreies Lagersystem

Die Lager in den Furlern sind spezielle wartungsfreie Industrielager, die auf gehärtenden Lagerflächen laufen. Lediglich die Torlon Kugellager des Top-Down Lagers müssen, wie bei Blöcken üblich, mit Süßwasser gespült werden. Das garantiert beste Rolleigenschaften und hohe Zuverlässigkeit.

### Einfacher Ein- und Ausbau der Rollleine

Die endlos gespleißte Rollleine ist einfach zu montieren und zu bedienen. Durch eine kleine Öffnung in der Trommel, kann die vorkonfektionierte, gespleißte Leine eingelegt und dann gleich benutzt werden. Die Leine verbleibt im Furler und ist somit jederzeit einsatzbereit.

### Montage an Ihrem Segel – einfach und sicher

Sowohl am Kopfwirbel, als auch auf der Trommel befindet sich eine Gabelaufnahme mit einem leicht zu lösenden Pin, der die Montage des Segels ganz einfach macht. Optional gibt es für die Trommel verschiedene Zubehörteile wie Schnappschäkel, Laschbolzen oder Frictionsheaves. Die Rollleinenöffnung kann in der Richtung 0° oder 90° eingestellt werden, um die Leinenführung an Deck richtig einzustellen.

### Drehstop und Zubehör

Ein kompakter Drehstop kann als Zubehör bestellt werden. Er ermöglicht das Arretieren des Systemes mit Hilfe eines Federstops, der ein oder ausgerastet eingestellt werden kann. Der Drehstop ist einfach zu bedienen und wird auf der Unterseite der Trommel installiert.



Lightweight machined drum



Secure, snag-free connections



Rotation stop accessory



Top swivel with optional lashing pin



Top-down models



Retained, quick release clevis pins

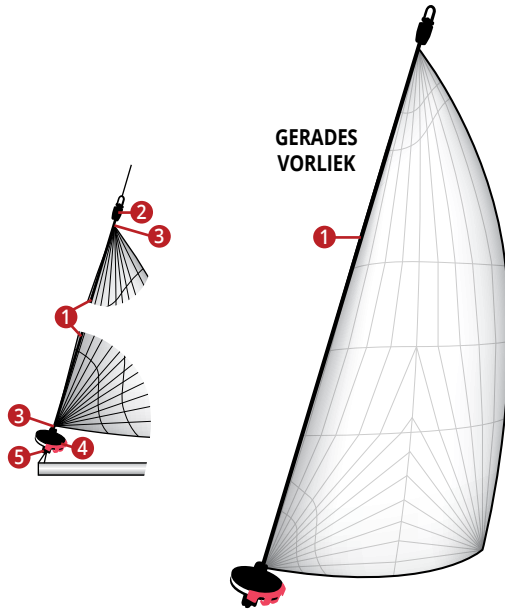


Low friction line guide



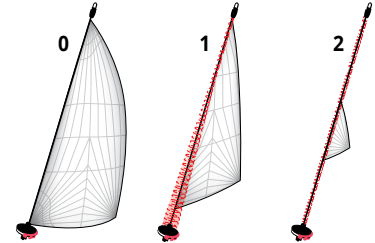
## Standard Furling System

- 1 Torsionskabel
- 2 Top Wirbel
- 3 Kausch
- 4 Standard Furler
- 5 2:1/3:1 Frictionsheave, Schäkel oder Schnappschäkel an das Padeye



### Einsatzgebiet: Segel mit geradem Vorliek

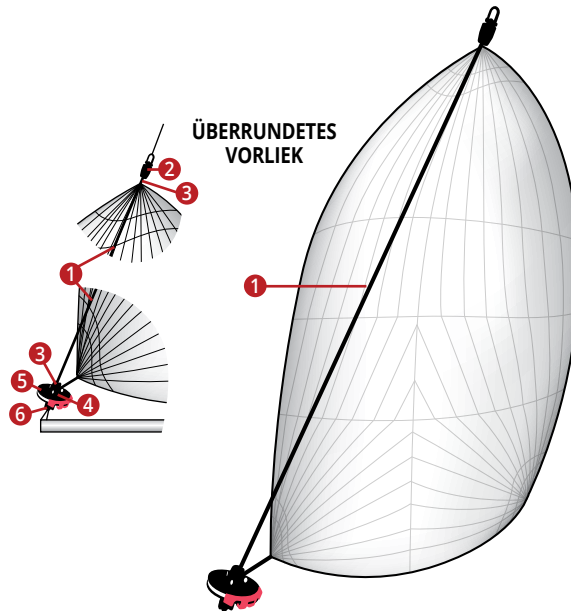
Für "Hoch am Wind" Segel mit True-Wind Winkel unter 90 Grad. Code Zero, Screecher, Genuastagsegel, Spinnakerstagsegel



1. Furler Trommel dreht das Vorliek des Segels gleichmäßig über die gesamte Länge des Vorlieks auf.
2. Das Segel rollt sich gleichmäßig auf dem Torsionskabel auf.

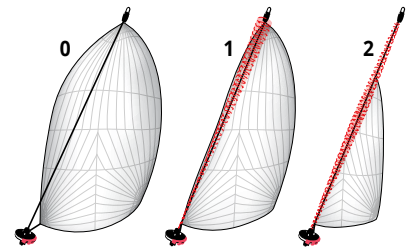
## Top Down Furling System

- 1 Torsionskabel
- 2 Top Wirbel
- 3 Kausch
- 4 Top Down Furler
- 5 Integrierter Top Down Wirbel
- 6 2:1/3:1 Frictionsheave, Schäkel oder Schnappschäkel an das Padeye



### Einsatzgebiet: Segel mit überrundetem Vorliekschnitt.

Für Vormwindsegel mit True-Wind Winkeln größer als 90 Grad. Code 1 bis 6, Reacher, Runner, Gennaker



1. Furler Trommel dreht das Torsionskabel, der Segelhals bleibt durch den kugelgelagerten Halswirbel trotz Drehbewegung stehen. Das Segel rollt sich von oben nach unten auf dem Torsionskabel auf.
2. Das Segel rollt sich von oben nach unten (Top Down) auf dem Torsionskabel auf.

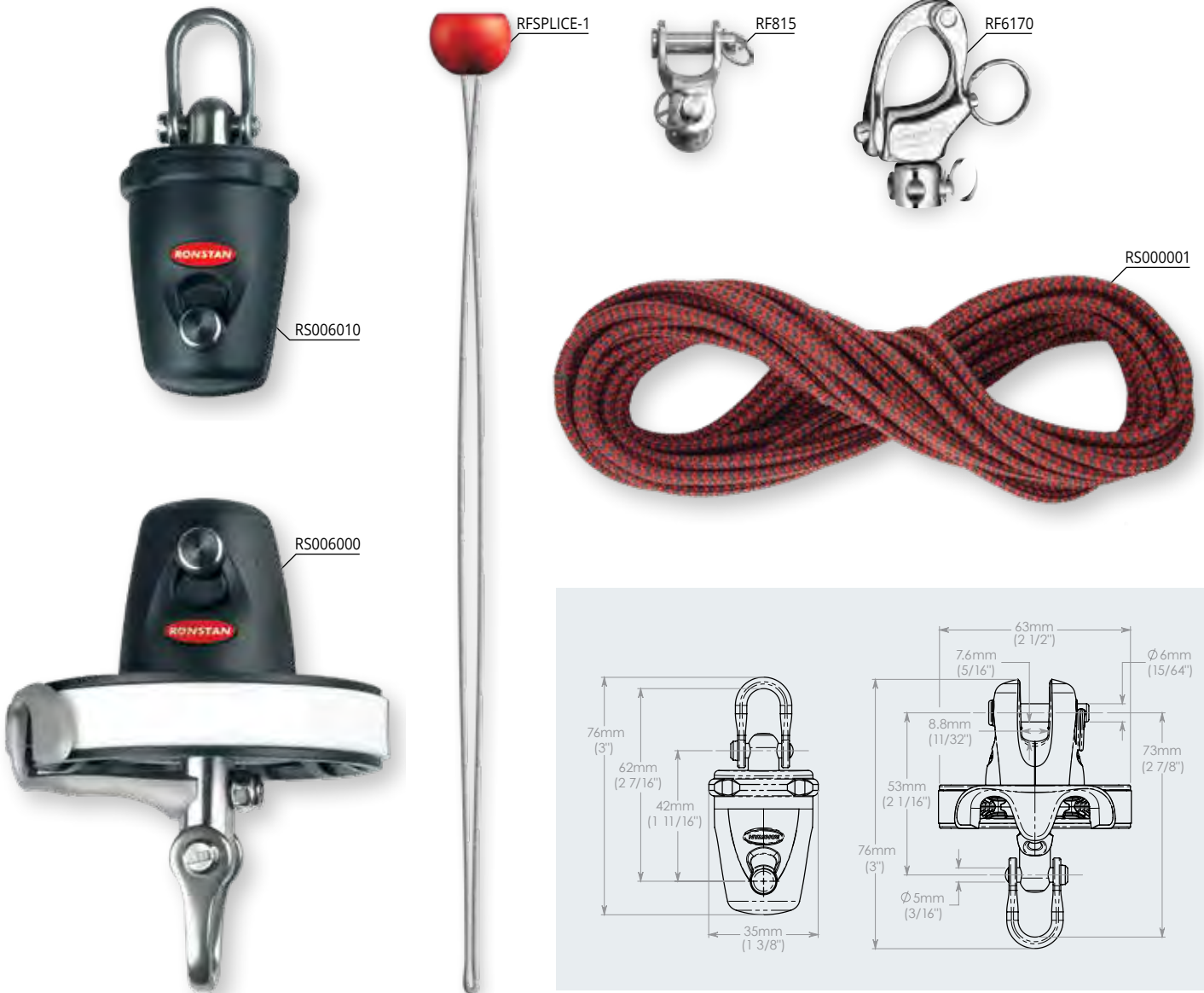
## Selection Guide

FURLERS	TYPICAL MAXIMUM BOAT SIZE					
	CODE ZERO (STANDARD FURLING)			SPINNAKER (TOP-DOWN FURLING)		
SERIES	Monohull LOA	Multihull LOA	Sail Area	Monohull LOA	Multihull LOA	Sail Area
Series 80	9m (30')	8m (26')	40m <sup>2</sup> (430ft <sup>2</sup> )	10m (33')	8m (26')	75m <sup>2</sup> (805ft <sup>2</sup> )
Series 120	12m (40')	10m (33')	90m <sup>2</sup> (965ft <sup>2</sup> )	14m (46')	12m (40')	140m <sup>2</sup> (1505ft <sup>2</sup> )
Series 160	14m (46')	12m (40')	130m <sup>2</sup> (1395ft <sup>2</sup> )	16m (53')	14m (46')	200m <sup>2</sup> (2150ft <sup>2</sup> )
Series 200	18m (60')	15m (50')	270m <sup>2</sup> (2900ft <sup>2</sup> )	21m (69')	18m (60')	400m <sup>2</sup> (4305ft <sup>2</sup> )
Series 280	21m (69')	18m (60')	350m <sup>2</sup> (3765ft <sup>2</sup> )	25m (82')	21m (69')	525m <sup>2</sup> (5650ft <sup>2</sup> )

### ACCESSORIES



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



- ✓ 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.
- ✓ High performance ball bearings are factory sealed and maintenance free.

- ✓ 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 on the Ronstan website for details.
- ⬆ Furling on off-the-beach dinghies, multihulls and sportsboats to 7m (23ft).

- ⚙ Low friction PTFE 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	SWIVEL	LINE	M.W.L.	B.L.	WEIGHT	DRUM	SWIVEL	LINE	M.W.L.	B.L.	WEIGHT
		DIAM.	SIZE					DIAM.	SIZE				
		mm	mm	mm	kg	kg	g	in	in	in	lb	lb	oz
<b>Furler &amp; Top Swivel</b>													
RS006000	Gennaker furler	63	-	5	650	1300	138	2 1/2	-	3/16	1430	2860	4.9
RS006010	Top swivel	-	35	-	650	1300	85	-	1 3/8	-	1430	2860	3.0
<b>Accessories</b>													
RF815	Two-way link, 5mm (3/16") pin, suits RS006000					1100	14					2425	0.5
RF6170	Snap shackle adapter, swivelling, 16mm (5/8") eye clearance, suits RS006000				500	1135	49				1100	2500	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



## 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 on the Ronstan website.
- ✓ 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.
- ⚙️ PTFE 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
<b>Top Swivels</b>									
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
<b>Top-Down Furlers</b>									
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
<b>Standard Furlers</b>									
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).



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99

# Schnell, einfach und zuverlässig

Ronstan's Ballslide™ System macht das Setzen und Bergen des Großsegels schnell und einfach möglich. Die umlaufenden und unverlierbaren Kugellager sorgen für eine einwandfreie Laufleistung, und da die Wagen die vorhandene Mastnut des Mastes nutzen, ist die Installation einer Schiene nicht erforderlich.

## Kompatibilität

Mit einem umfangreichen Sortiment an Wagenprofilen und -Füßchen gibt es eine Ballslide™-Lösung für die meisten verfügbaren Mastprofile auf Booten bis 18m (60ft). Siehe Seite 91 für Details zu den Wagen und Füßen. Auswahltabellen und Datenblätter können von der Ronstan-Website heruntergeladen werden.

## Komfort

Ballslide™-Wagen lassen sich leicht einführen und ebenso leicht aus der Nut Ihres Mastes entfernen. Bei größere Booten, für die das System der Serie 8 verwendet wird, stehen wahlweise Wagen mit Quick Release Lattengelenken zur Auswahl, welche das An- und Abschlagen größerer Großsegel erleichtern.

## Performance

**BB** Die Ballslide™ Wagen laufen auf zwei Kugelkanälen mit Kugelumlaufagern, die speziell für Druckbelastungen ausgelegt und ausgerichtet sind. Das Setzen und Bergen des Großsegels war noch nie so einfach! Kugelgelenke für Lattenaufnahmen und die Bolzen für die Zwischenwagen sind so konfiguriert, dass der Abstand vom Mast zum Vorliek des Großsegels besonders klein ist.



Captive ball bearings



Use existing mast luff groove



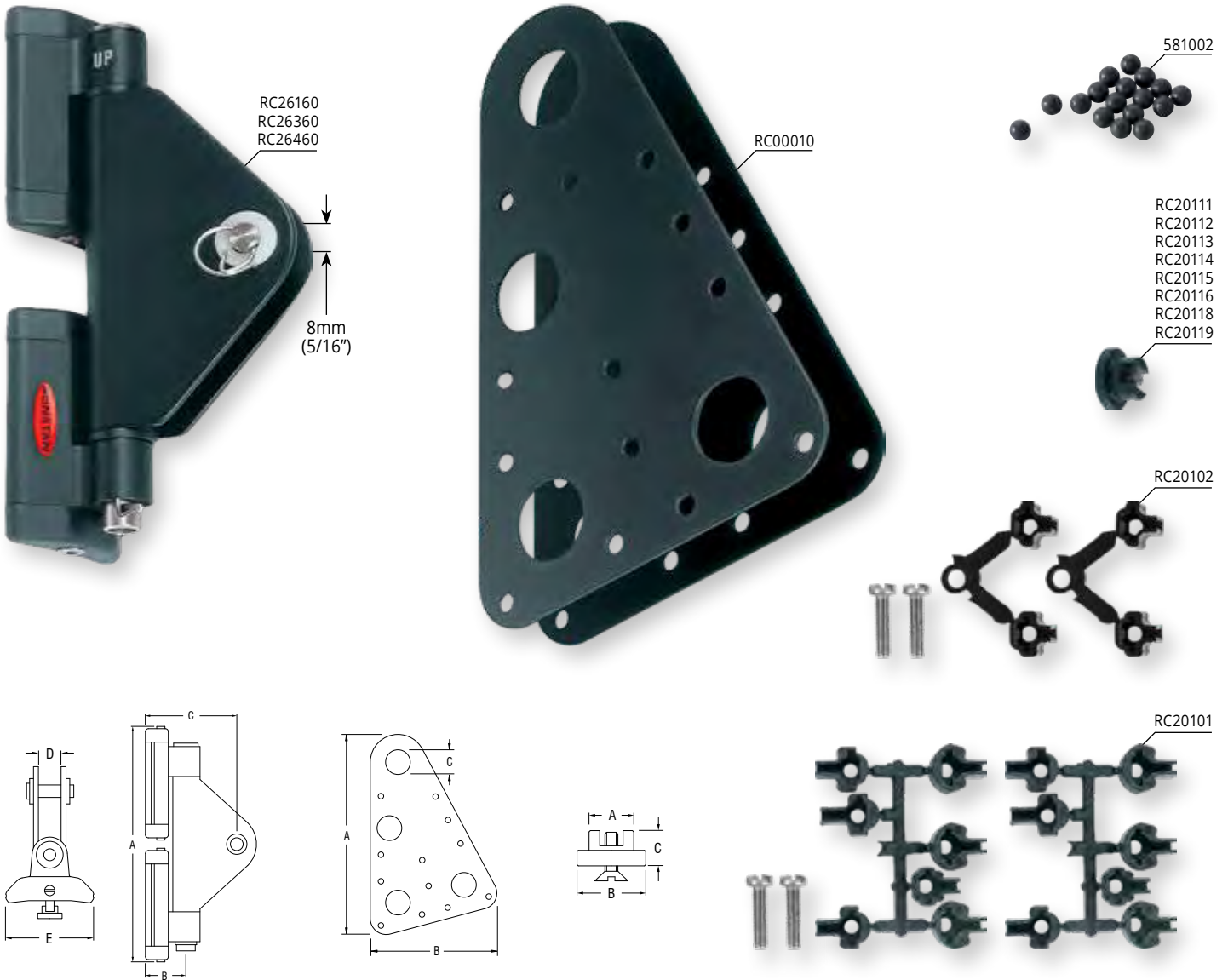
Quick release battens car models



Flexible solutions



Ball joint articulation



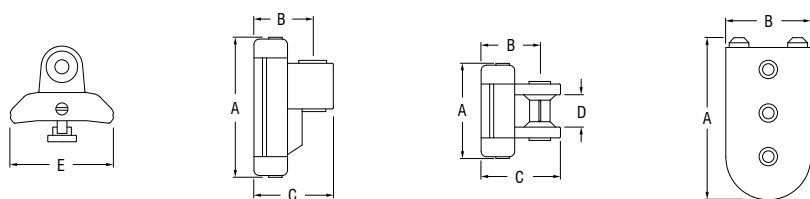
✓ Refer to page 138 and the SUPPORT tab of the Ronstan website for additional details regarding cars and feet installation information.

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

PRODUCT No.	DESCRIPTION	A	B	C	D	E	WEIGHT	A	B	C	D	E	WEIGHT
		mm	mm	mm	mm	mm	g	in	in	in	in	in	oz
<b>Series 6 <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">BB</span></b>													
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 foot N1-N7	-	-	-	-	-	1	-	-	-	-	-	0.1
RC20102	Replacement Ballslide™ feet kit, suits RC263xx cars, includes one pair of each size foot N8 & N9	-	-	-	-	-	1	-	-	-	-	-	0.1
RC20111	Ballslide™ feet (pair), with s/s screws & washers, suits RC264xx cars	13.0	20	10.3	-	-	14	1/2	25/32	13/32	-	-	0.5
RC20112	Ballslide™ feet (pair), with s/s screws & washers, suits RC264xx cars	13.7	20	11.4	-	-	14	17/32	25/32	7/16	-	-	0.5
RC20113	Ballslide™ 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™ 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™ 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™ 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™ 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	9.9	-	-	10	3/8	25/32	3/8	-	-	0.3
RC26160	Headboard car	160.0	23	62.0	12	41	280	6 5/16	29/32	2 7/16	15/32	1 5/8	9.9
RC26360	Headboard car	160.0	23	62.0	12	41	280	6 5/16	29/32	2 7/16	15/32	1 5/8	9.9
RC26460	Headboard car	160.0	23	62.0	12	41	280	6 5/16	29/32	2 7/16	15/32	1 5/8	9.9
<b>Spare Parts</b>													
581002	Ball bearing, acetal, 6.35mm (1/4") diameter	-	-	-	-	-	1	-	-	-	-	-	0.1



© Armare

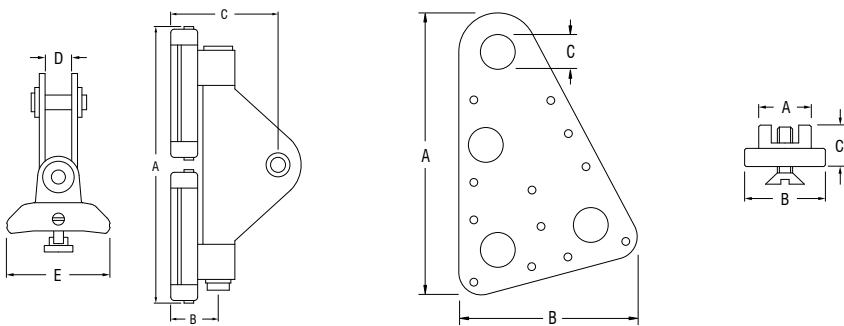


✓ Refer to page 138 and the SUPPORT tab of the Ronstan website for additional details regarding cars and feet.

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

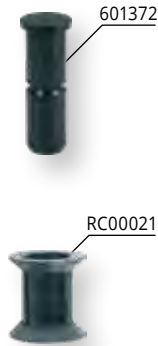
⊕ Monohulls to 12m (40ft) or sail area 38m<sup>2</sup> (409ft<sup>2</sup>).  
 ⊕ Multihulls to 9m (30ft) or sail area 30m<sup>2</sup> (323ft<sup>2</sup>).

PRODUCT No.	DESCRIPTION	A	B	C	D	E	WEIGHT	A	B	C	D	E	WEIGHT
		mm	mm	mm	mm	mm	g	in	in	in	in	in	oz
<b>Series 6</b>													
RC26163	Intermediate car	55	23	31	18	41	50	2 5/32	29/32	1 7/32	23/32	1 5/8	1.8
RC26166	Batten car	68	23	31	-	41	65	2 11/16	29/32	1 7/32	-	1 5/8	2.3
RC26181	End stop, plastic	68	33	-	-	-	11	2 11/16	1 5/16	-	-	-	0.4
RC26363	Intermediate car	55	23	31	18	41	50	2 5/32	29/32	1 7/32	23/32	1 5/8	1.8
RC26366	Batten car	68	23	31	-	41	65	2 11/16	29/32	1 7/32	-	1 5/8	2.3
RC26463	Intermediate car	55	23	31	18	41	50	2 5/32	29/32	1 7/32	23/32	1 5/8	1.8
RC26466	Batten car	68	23	31	-	41	65	2 11/16	29/32	1 7/32	-	1 5/8	2.3
<b>Spare Parts</b>													
601372	Replacement pin for RC26163, RC26363, RC26463	-	-	-	-	-	5	-	-	-	-	-	0.2
RC00021	Replacement bush for RC26163, RC26363, RC26463	-	-	-	-	-	1	-	-	-	-	-	0.1



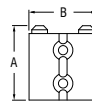
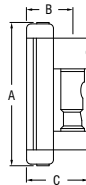
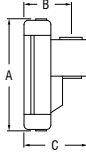
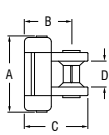
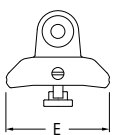
✓ Refer to page 138 and the SUPPORT tab of the Ronstan website for additional details regarding cars and feet.  
 ↗ Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.

PRODUCT No.	DESCRIPTION	A	B	C	D	E	WEIGHT	A	B	C	D	E	WEIGHT
		mm	mm	mm	mm	mm	g	in	in	in	in	in	oz
<b>Series 8</b>													
RC00010	Headboard plates (pair)	188	119	23	-	-	173	7 13/32	4 11/16	29/32	-	-	6.1
RC28160	Headboard car	214	30	75	16.5	51	520	8 7/16	1 3/16	2 15/16	2 1/32	2	18.3
RC20101	Replacement Ballslide™ feet kit, suits RC281xx cars, includes one pair of each size foot N1-N7	-	-	-	-	-	1	-	-	-	-	-	0.1
RC20130	Ballslide™ feet (pair), suits RC284xx cars	13.3	24.0	11.4	-	-	22	17/32	15/16	7/16	-	-	0.8
RC20131	Ballslide™ feet (pair), suits RC284xx cars	11.6	23.0	11.8	-	-	20	15/32	29/32	15/32	-	-	0.7
RC20135	Ballslide™ feet (pair), suits RC284xx cars	12.5	24.0	10.5	-	-	22	1/2	15/16	13/32	-	-	0.8
RC28161	Headboard car	290	30	75	16.5	51	750	11 7/16	1 3/16	2 15/16	2 1/32	2	26.5
RC28460	Headboard car	214	30	75	16.5	51	520	8 7/16	1 3/16	2 15/16	2 1/32	2	18.3
RC28461	Headboard car	290	30	75	16.5	51	750	11 7/16	1 3/16	2 15/16	2 1/32	2	26.5
<b>Spare Parts</b>													
581004	Ball bearing, acetal, 8.00mm (0.315") diameter	-	-	-	-	-	1	-	-	-	-	-	0.1



See page 161 for full details of batten links & receptacles

See page 161 for full details of batten links & receptacles



- ✓ Refer to page 138 and the SUPPORT tab of the Ronstan website for additional details regarding cars and feet.
- ⬆ Refer to the SUPPORT tab of the Ronstan website for assistance in specifying system requirements and schematic diagrams.

- ⬆ Long cars: Monohulls to 18m (60ft) or sail area 60m<sup>2</sup> (646ft<sup>2</sup>).
- ⬆ Long cars: Multihulls to 13m (43ft) or sail area 48m<sup>2</sup> (517ft<sup>2</sup>).

- ⬆ Short cars: Monohulls to 16m (53ft) or sail area 53m<sup>2</sup> (570ft<sup>2</sup>).
- ⬆ Short cars: Multihulls to 11m (36ft) or sail area 42m<sup>2</sup> (452ft<sup>2</sup>).

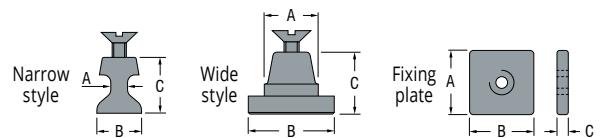
PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
<b>Series 8 <sup>BB</sup></b>													
RC28163	Intermediate car	76.0	30.0	37.0	18	51	115	3	1 3/16	1 15/32	23/32	2	4.1
RC28166	Batten car	92.0	30.0	37.0	-	51	140	3 5/8	1 3/16	1 15/32	-	2	4.9
RC28169	Quick release batten car	105.0	30.0	37.0	-	51	220	4 1/8	1 3/16	1 15/32	-	2	7.8
RC28181	End stop	54.0	45.0	-	-	-	35	2 1/8	1 25/32	-	-	-	1.2
RC28463	Intermediate car	76.0	30.0	37.0	18	51	115	3	1 3/16	1 15/32	23/32	2	4.1
RC28466	Batten car	92.0	30.0	37.0	-	51	140	3 5/8	1 3/16	1 15/32	-	2	4.9
RC28469	Quick release batten car	105.0	30.0	37.0	-	51	220	4 1/8	1 3/16	1 15/32	-	2	7.8
<b>Spare Parts</b>													
601372	Replacement pin for RC28163, RC28463	-	-	-	-	-	5	-	-	-	-	-	0.2
RC00021	Replacement bush for RC28163, RC28463	-	-	-	-	-	1	-	-	-	-	-	0.1



## Ballslide™ System - Füsschen-Identifikation & Ersatzteile

		SCHMALE Wagenfüsschen		BREITE (TELLER) Wagenfüsschen																																																																
		<p>Foot identification number</p> <p>Series 6 - 41mm (1 5/8") wide Series 8 - 51mm (2") wide</p>		<p>Series 6 - 41mm (1 5/8") wide Series 8 - 51mm (2") wide</p>																																																																
<b>SERIES 6</b>	<b>Car PRODUCT No.</b>	<b>RC261XX</b> Includes 2 x foot sets (N1 to N7), and 2 x screws.	<b>RC263XX</b> Includes 2 x foot sets (N8 & N9), and 2 x screws.	<b>RC264XX</b> Feet not included. Order separately, 1 pair required per car - see below.																																																																
Replacement Foot Set		<p><b>RC20101</b> Includes 2 x foot sets, and 2 x screws.</p>	<p><b>RC20102</b> Includes 2 x foot sets, and 2 x screws.</p>	<p>Order separately. Includes washer &amp; screw.</p> <table border="1"> <thead> <tr> <th>Foot PRODUCT No.</th> <th>A mm</th> <th>B mm</th> <th>C mm</th> <th>A in</th> <th>B in</th> <th>C in</th> </tr> </thead> <tbody> <tr><td>RC20111</td><td>13.0</td><td>20.0</td><td>10.4</td><td>1/2</td><td>25/32</td><td>13/32</td></tr> <tr><td>RC20112</td><td>13.7</td><td>20.0</td><td>11.4</td><td>17/32</td><td>25/32</td><td>7/16</td></tr> <tr><td>RC20113</td><td>13.7</td><td>20.0</td><td>11.0</td><td>17/32</td><td>25/32</td><td>7/16</td></tr> <tr><td>RC20114</td><td>13.7</td><td>20.0</td><td>11.5</td><td>17/32</td><td>25/32</td><td>7/16</td></tr> <tr><td>RC20115</td><td>12.8</td><td>20.0</td><td>10.5</td><td>1/2</td><td>25/32</td><td>13/32</td></tr> <tr><td>RC20116</td><td>8.8</td><td>16.0</td><td>6.6</td><td>11/32</td><td>5/8</td><td>1/4</td></tr> <tr><td>RC20118</td><td>8.8</td><td>16.0</td><td>7.6</td><td>11/32</td><td>5/8</td><td>5/16</td></tr> <tr><td>RC20119</td><td>9.8</td><td>20.0</td><td>10.0</td><td>12/32</td><td>25/32</td><td>13/32</td></tr> </tbody> </table>		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	11.4	17/32	25/32	7/16	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																																																														
RC20111	13.0	20.0	10.4	1/2	25/32	13/32																																																														
RC20112	13.7	20.0	11.4	17/32	25/32	7/16																																																														
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																																																														
Replacement Ball		<b>581002</b> 6.35mm (1/4") diameter	<b>581002</b> 6.35mm (0.25in) diameter	<b>581002</b> 6.35mm (0.25in) diameter																																																																
<b>SERIES 8</b>	<b>Car PRODUCT No.</b>	<b>RC281XX</b> Includes 2 x foot sets (N1 to N7), and 2 x screws.		<b>RC284XX</b> Feet not included. Order separately, 1 pair required per car - see below.																																																																
Replacement Foot Set		<p><b>RC20101</b> Includes 2 x foot sets, and 2 x screws.</p>		<p>Order separately. Includes washer &amp; screw.</p> <table border="1"> <thead> <tr> <th>Foot PRODUCT No.</th> <th>A mm</th> <th>B mm</th> <th>C mm</th> <th>A in</th> <th>B in</th> <th>C in</th> </tr> </thead> <tbody> <tr><td>RC20130</td><td>13.3</td><td>24.0</td><td>11.4</td><td>17/32</td><td>15/16</td><td>7/16</td></tr> <tr><td>RC20131</td><td>11.6</td><td>23.0</td><td>11.8</td><td>15/32</td><td>29/32</td><td>15/32</td></tr> </tbody> </table>		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																																										
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																																																														
Replacement Ball		<b>581004</b> 8.00mm (0.315in) diameter		<b>581004</b> 8.00mm (0.315in) diameter																																																																

## Lattensysteme mit Schiene - Nutensteine & Montageplatten



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



## Einfach und stark

Segelprofis auf der ganzen Welt wählen Ronstan Lattensysteme für überlegene und innovative Funktion. Die Systeme sind in etlichen Regatten getestet und als besonders zuverlässig bekannt. Mit sieben Schienengrößen im Standardprogramm, gibt es ein passendes System mit den richtigen Spezifikationen für jedes Boot und jeden Segelplan.

### Flexible Lösungen

**BB Kugellagerwagen** laufen auf einem doppelten Kugelumlauf auf dem Schienenprofil. Sie sind damit auch für das Reffen vor dem Wind geeignet.

**CB Captive Ball Cars** verwenden eine Kombination aus unverlierbaren Kugelumlaufagern, die auf der Lauffläche bei Druckbelastungen laufen, und Gleitlagern, um zusätzliche Festigkeit für hohe statische Belastungen zu bieten. Alle Lager sind unverlierbar, was ein leichtes An- und Abschlagen ermöglicht.

Luff Groove Tracks haben eine zusätzliche Nut eingebaut, die auch das Setzen von Segeln mit Vorliekstreifen und/oder durchgelatteten Segeln erlauben. Die Luff Groove Tracks haben einen Klebeflansch, der mit speziellen Klebstoffen auf Kohlefasermasten verklebt werden kann.

Quick Release Cars erleichtern die Arbeit, wenn das Segel zum Wechseln, Reparieren oder Verstauen entfernt werden muss.

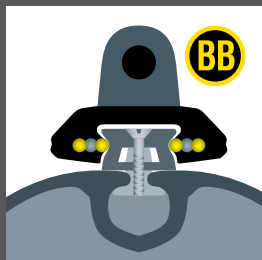
### Kugelgelenk Verbindung

Ein Kugelgelenk aus Edelstahl zwischen den Wagen und der Lattenaufnahme sorgt für eine Bewegung in alle Richtungen mit einem Minimum von 105° (112° für die Kugellagerwagen)

### Installationsmöglichkeiten

Die Installation kann erheblich vereinfacht werden. Für die Serien 19, 22 und 30 sind Nutensteine erhältlich, die bei den meisten Masten passend in die Nut geschoben werden können. Das Bohren von Löchern oder Schneiden von Gewinden wird mit diesen Befestigungselementen unnötig. Die Nutensteine rutschen durch Ihre Bauform von selbst in das dafür passende Loch und ermöglichen dadurch sogar die Montage am stehenden Mast.

Siehe Seite Seile 91 (links unten) für Track Details zur Montage der Nutensteine im Mast.



Ball Bearing systems



Captive Ball systems



Quick release batten car models



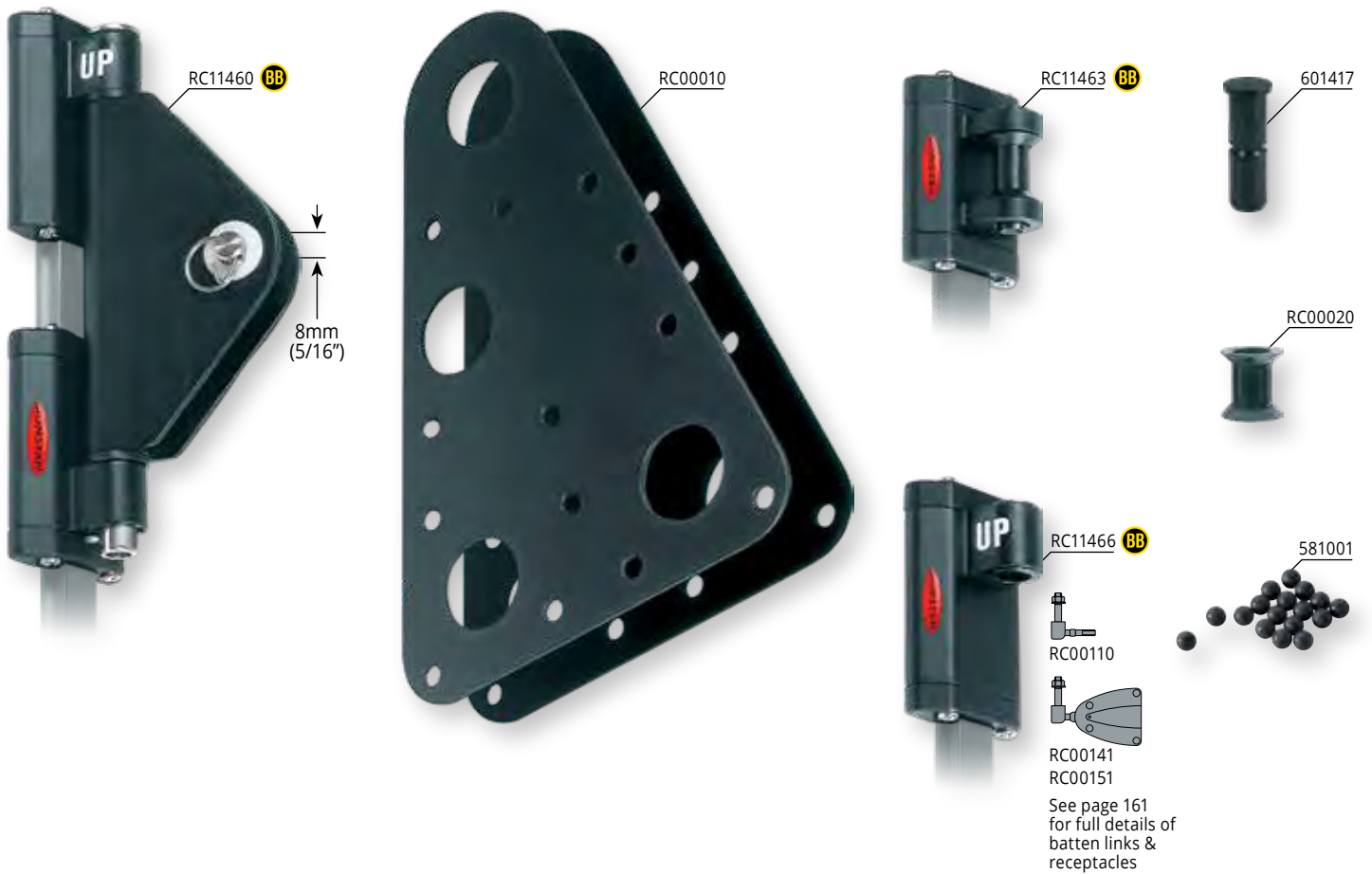
Luff groove tracks for sail flexibility



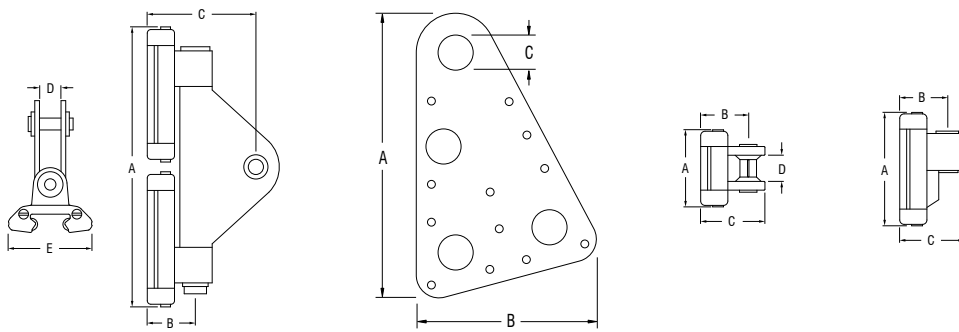
Track mounting slugs



# Serie 14 BB



See page 161  
for full details of  
batten links &  
receptacles



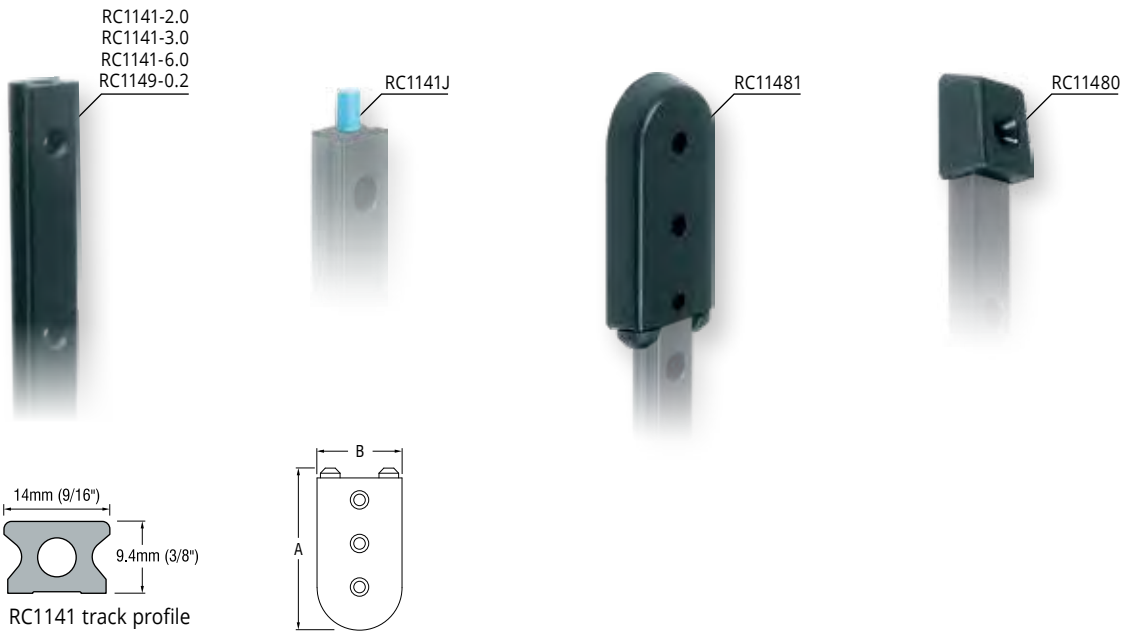
Monohulls to 12m (40ft)  
or sail area 38m<sup>2</sup> (409ft<sup>2</sup>).

Multihulls to 9m (30ft)  
or sail area 30m<sup>2</sup> (323ft<sup>2</sup>).

PRODUCT No.	DESCRIPTION	A	B	C	D	E	WEIGHT	A	B	C	D	E	WEIGHT
		mm	mm	mm	mm	mm	g	in	in	in	in	in	oz
<b>Series 14 BB</b>													
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	243	6 3/32	7/8	2 3/8	1/2	1 5/8	8.6
RC11463	Intermediate car	54	22	30	18.0	41	47	2 1/8	7/8	1 3/16	23/32	1 5/8	1.7
RC11466	Batten car	66	22	30	-	41	60	2 19/32	7/8	1 3/16	-	1 5/8	2.1
<b>Spare Parts</b>													
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



© Essence Yachts

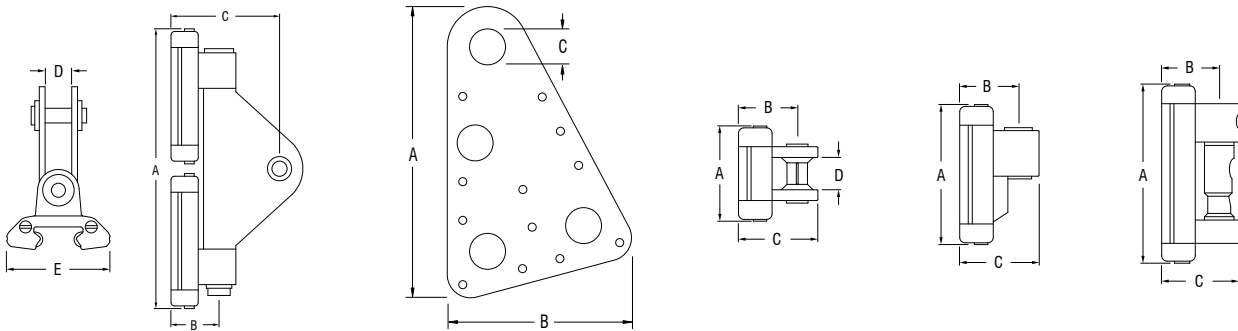


Refer to page 138 and the SUPPORT tab of the Ronstan website for system schematics and installation information.

**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
<b>Series 14</b>									
RC1141-2.0*	Track, 1975mm (77 13/16") long, black	14	9.4	-	421	9/16	3/8	-	14.9
RC1141-3.0*	Track, 3025mm (119 3/16") long, black	14	9.4	-	625	9/16	3/8	-	22.0
RC1141-6.0*	Track, 6025mm (237 3/8") long, black	14	9.4	-	1261	9/16	3/8	-	44.5
RC1141J	Track joiner, acetal	-	-	-	1	-	-	-	0.1
RC11480	End cap, plastic, 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*	Gate track, 250mm (9 27/32") long, black	14	9.4	-	52	9/16	3/8	-	1.8

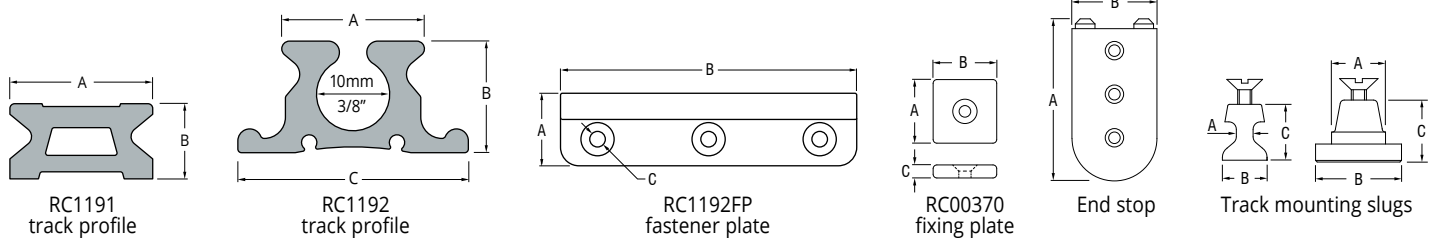
\* Silver track available - Order as RCxxxxxxS



Monohulls to 14m (46ft) or sail area 44m<sup>2</sup> (474ft<sup>2</sup>).

Multihulls to 11m (36ft) or sail area 37m<sup>2</sup> (398ft<sup>2</sup>).

PRODUCT No.	DESCRIPTION	A	B	C	D	E	WEIGHT	A	B	C	D	E	WEIGHT
		mm	mm	mm	mm	mm	g	in	in	in	in	in	oz
<b>Series 19 BB</b>													
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	315	6 3/4	1 1/32	2 9/16	7/16	27/32	11.1
RC11963	Intermediate car	48	26	36	18.0	47	59	29/32	1 1/32	13/32	23/32	27/32	2.1
RC11965	Track slide, acetal	37	26	36	17.5	38	30	15/32	1 1/32	13/32	11/16	1 1/2	1.1
RC11966	Batten car	66	26	36	-	47	80	19/32	1 1/32	13/32	-	27/32	2.8
RC11969	Quick release batten car	88	26	36	-	47	150	15/32	1 1/32	13/32	-	27/32	5.3
<b>Spare Parts</b>													
501002	Ball bearing, Torlon®, 5.00mm (0.197") diameter	-	-	-	-	-	1	-	-	-	-	-	0.1
601443	Replacement pin for RC11963	-	-	-	-	-	4	-	-	-	-	-	0.1
RC00020	Replacement bush for RC11963	-	-	-	-	-	1	-	-	-	-	-	0.1

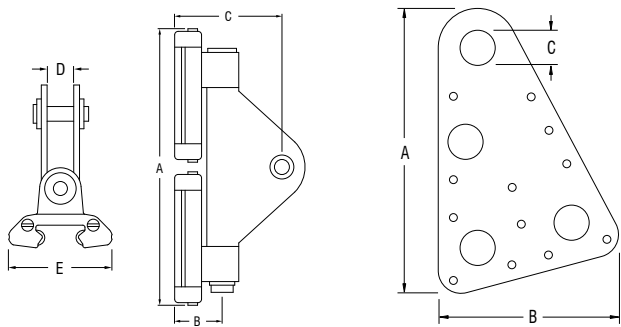


✓ Refer to page 138 and the SUPPORT tab of the Ronstan website for full track mounting slug details, system schematics and installation information.

**TRACK FASTENINGS** - M5 (3/16") countersunk head fasteners at 100mm (3 15/16") centres.

PRODUCT No.	DESCRIPTION	A	B	C	WEIGHT	A	B	C	WEIGHT
		mm	mm	mm	g	in	in	in	oz
<b>Series 19</b>									
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*	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*	Track, 3025mm (119 3/16") long, black. Requires 31 track mounting slugs	19.4	10.4	-	932	25/32	13/32	-	32.9
RC1191-6.0*	Track, 6025mm (237 3/8") long, black. Requires 61 track mounting slugs	19.4	10.4	-	1862	25/32	13/32	-	65.7
RC1192-2.0	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	Luff groove track, 3025mm (119 3/16") long, black	19.5	15.3	31.5	1630	25/32	19/32	1 1/4	57.5
RC1192-6.0	Luff groove track, 6025mm (237 3/8") long, black	19.5	15.3	31.5	3250	25/32	19/32	1 1/4	114.6
RC1192FP*	Luff groove track 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	-	-	-	0.1
RC1199-0.3*	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*	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

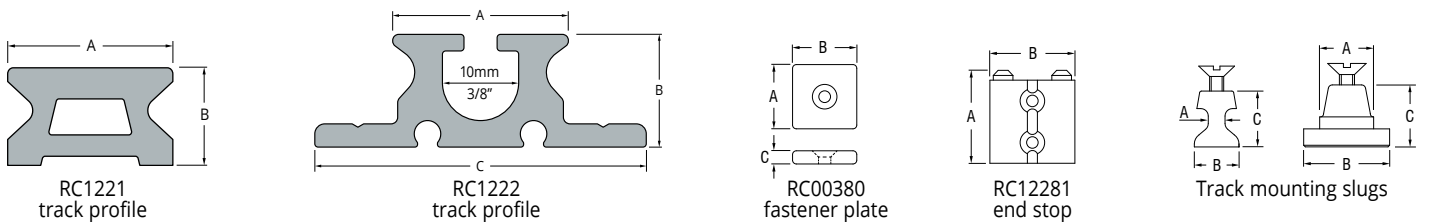
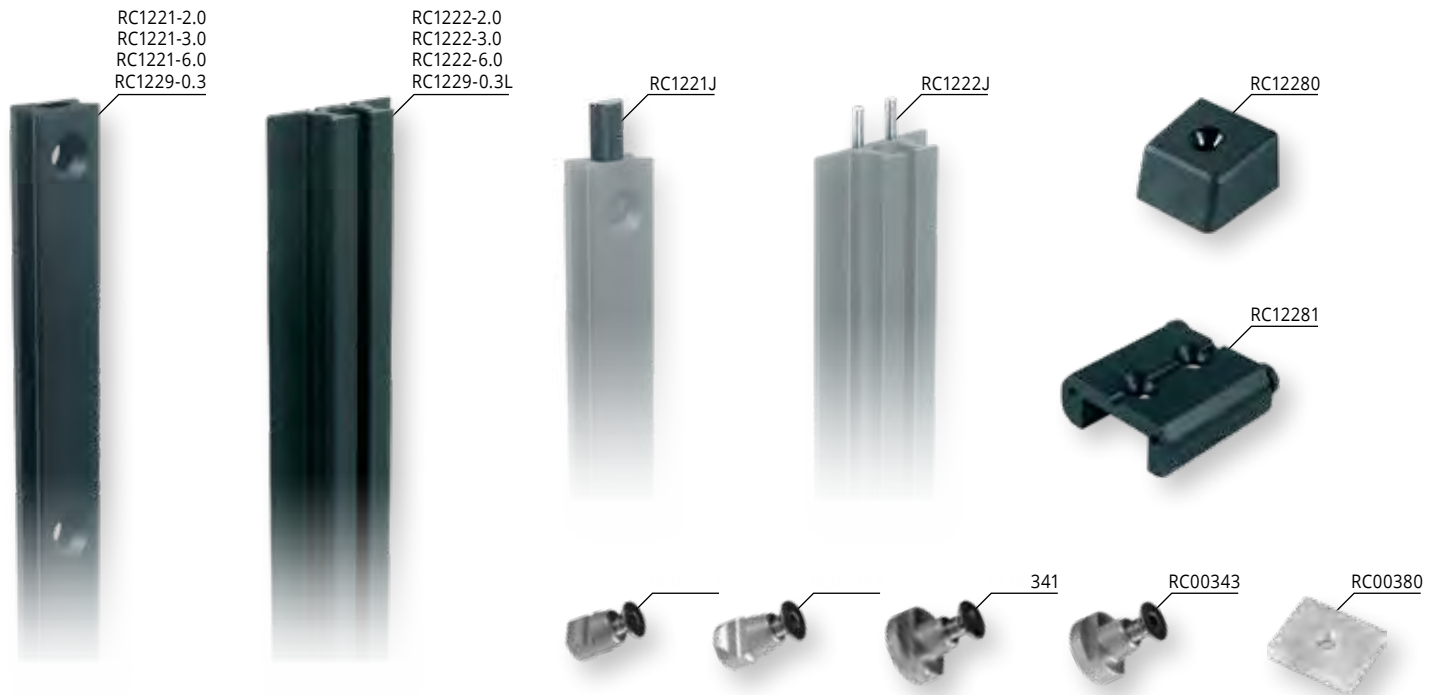
\* Silver track available - Order as RCxxxxxxS



Monohulls to 18m (60ft)  
or sail area 58m<sup>2</sup> (624ft<sup>2</sup>).

Multihulls to 12m (40ft)  
or sail area 46m<sup>2</sup> (495ft<sup>2</sup>).

PRODUCT No.	DESCRIPTION	A	B	C	D	E	WEIGHT	A	B	C	D	E	WEIGHT
		mm	mm	mm	mm	mm	g	in	in	in	in	in	oz
<b>Series 22 BB</b>													
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	130	33	45	32	57.5	350	5 1/8	1 5/16	1 25/32	1 1/4	2 1/4	12.3
<b>Spare Parts</b>													
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



✓ Refer to page 138 and the SUPPORT tab of the Ronstan website 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	B	C	WEIGHT	A	B	C	WEIGHT
		mm	mm	mm	g	in	in	in	oz
<b>Series 22</b>									
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*	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*	Track, 3025mm (119 3/16") long, black. Requires 31 track mounting slugs	22.0	13.0	-	1453	7/8	1/2	-	51.2
RC1221-6.0*	Track, 6025mm (237 3/8") long, black. Requires 61 track mounting slugs	22.0	13.0	-	2880	7/8	1/2	-	101.6
RC1221J	Track joiner, acetal	-	-	-	4	-	-	-	0.1
RC1222-2.0*	Luff groove track, 2025mm (79 25/32") long, black	22.0	15.0	44.0	1185	7/8	19/32	1 23/32	41.8
RC1222-3.0*	Luff groove track, 3025mm (119 3/16") long, black	22.0	15.0	44.0	1770	7/8	19/32	1 23/32	62.4
RC1222-6.0*	Luff groove track, 6025mm (237 3/8") long, black	22.0	15.0	44.0	3525	7/8	19/32	1 23/32	124.3
RC1222J	Luff groove track joiner (pair)	-	-	-	2	-	-	-	0.1
RC1229-0.3*	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*	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*	End stop, alloy	50.0	45.0	-	50	1 31/32	1 25/32	-	1.8

\* Silver track available - Order as RCxxxxxxxS



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

26

STANDARD



RC00110 6 14  
RC00111 8 22 22  
RC00112 19 19



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

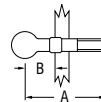
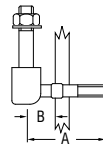
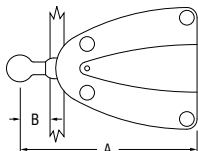
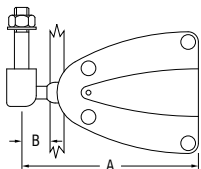
QUICK RELEASE



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



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



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

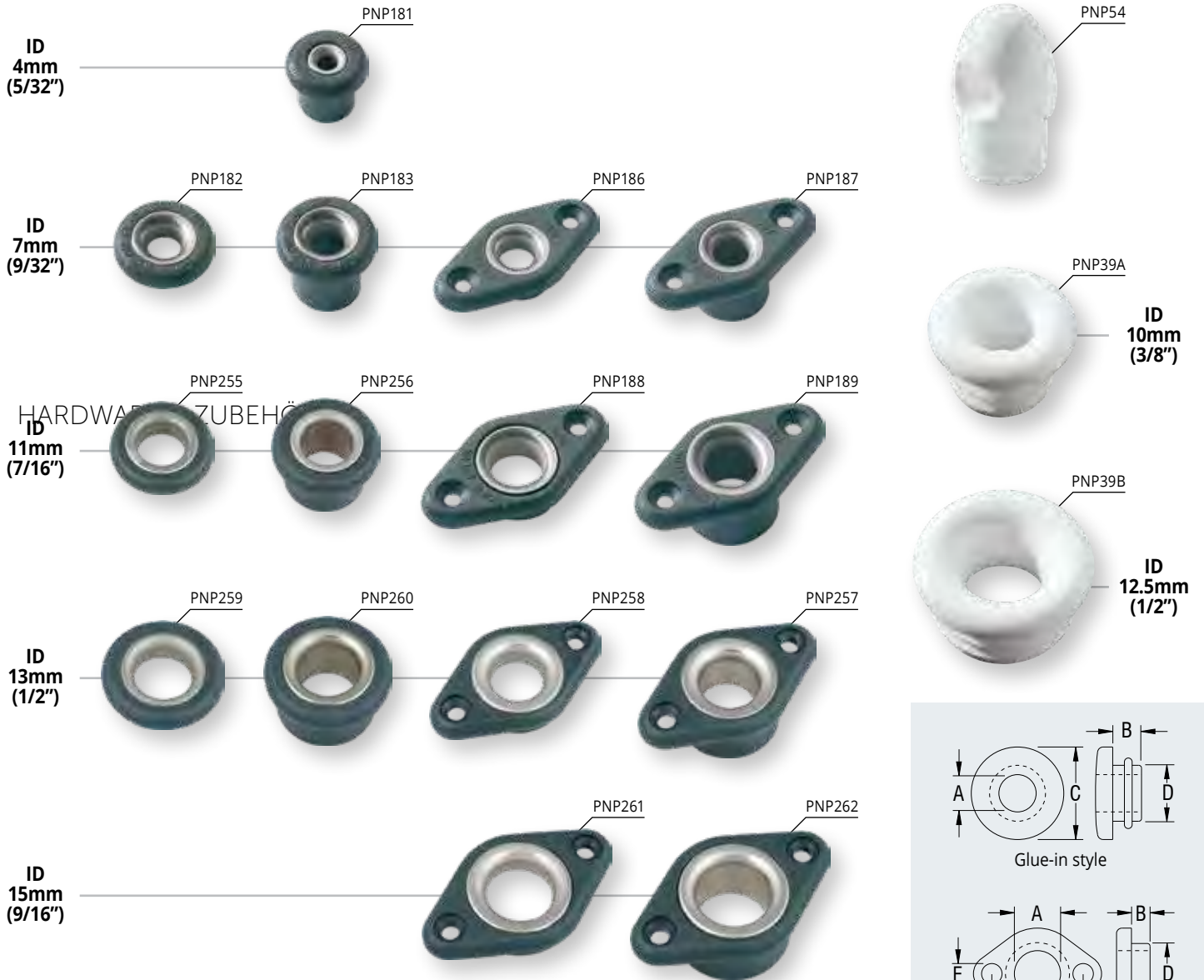
PRODUCT No.	DESCRIPTION	A mm	B mm	WEIGHT g	A in	B in	WEIGHT oz
<b>Standard Batten Receptacle Links</b>							
RC00110	Batten receptacle link, M10, suits S14, S6 Ballslide™	58	19	61	2 9/32	3/4	2.2
RC00111	Batten receptacle link, M10, suits S22, S8 Ballslide™	58	19	81	2 9/32	3/4	2.9
RC00112	Batten receptacle 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

<b>Quick Release Batten Receptacle Links</b>							
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

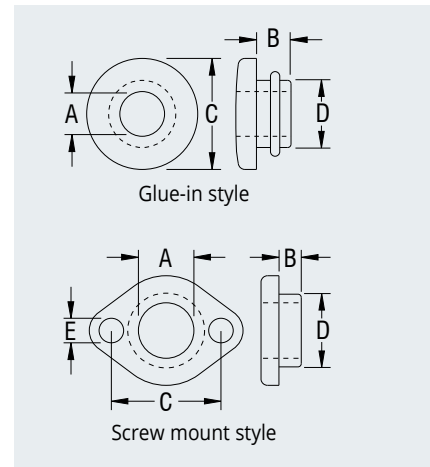




# Kunststoff Buchsen



✓ 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	B	C	D	E	WEIGHT	A	B	C	D	E	WEIGHT
		mm	mm	mm	mm	mm	g	in	in	in	in	in	oz
<b>Bushes</b>													
PNP54	Staunchion cap. Suits 22.2mm (7/8") ID tube	-	-	-	-	-	12	-	-	-	-	-	0.4
PNP181	Plastic bush, glue-in, stainless steel lined	4.0	14.0	18.0	13.0	-	5	5/32	9/16	11/16	1/2	-	0.2
PNP182	Plastic bush, glue-in, stainless steel lined	7.0	5.0	22.0	16.0	-	4	9/32	3/16	7/8	5/8	-	0.1
PNP183	Plastic bush, glue-in, stainless steel lined	7.0	14.0	22.0	16.0	-	7	9/32	9/16	7/8	5/8	-	0.2
PNP186	Plastic bush, screw mount, stainless steel lined	7.0	5.0	28.0	16.0	3.0	5	9/32	3/16	1 3/32	5/8	1/8	0.2
PNP187	Plastic bush, screw mount, stainless steel lined	7.0	14.0	28.0	16.0	3.0	8	9/32	9/16	1 3/32	5/8	1/8	0.3
PNP39A	Plastic bush, glue-in	10.0	13.0	22.0	16.0	-	3	3/8	1/2	7/8	5/8	-	0.1
PNP188	Plastic bush, screw mount, stainless steel lined	11.0	5.0	31.0	19.0	3.0	5	7/16	3/16	1 7/32	3/4	1/8	0.2
PNP189	Plastic bush, screw mount, stainless steel lined	11.0	14.0	31.0	19.0	3.0	10	7/16	9/16	1 7/32	3/4	1/8	0.4
PNP255	Plastic bush, glue-in, stainless steel lined	11.0	5.0	25.0	20.0	-	3	7/16	3/16	1	25/32	-	0.1
PNP256	Plastic bush, glue-in, stainless steel lined	11.0	14.0	25.0	20.0	-	7	7/16	9/16	1	25/32	-	0.2
PNP39B	Plastic bush, glue-in	12.5	13.0	31.0	25.0	-	4	1/2	1/2	1 1/4	1	-	0.1
PNP257	Plastic bush, screw mount, stainless steel lined	13.0	14.0	36.0	26.0	4.0	16	1/2	9/16	1 13/32	1	5/32	0.6
PNP258	Plastic bush, screw mount, stainless steel lined	13.0	5.0	36.0	26.0	4.0	10	1/2	3/16	1 13/32	1	5/32	0.4
PNP259	Plastic bush, glue-in, stainless steel lined	13.0	5.0	28.0	23.0	-	7	1/2	3/16	1 3/32	25/32	-	0.2
PNP260	Plastic bush, glue-in, stainless steel lined	13.0	14.0	28.0	23.0	-	13	1/2	9/16	1 3/32	25/32	-	0.5
PNP261	Plastic bush, screw mount, stainless steel lined	15.0	5.0	39.0	28.0	4.0	11	9/16	3/16	1 17/32	1 3/32	5/32	0.4
PNP262	Plastic bush, screw mount, stainless steel lined	15.0	14.0	39.0	28.0	4.0	20	9/16	9/16	1 17/32	1 3/32	5/32	0.7

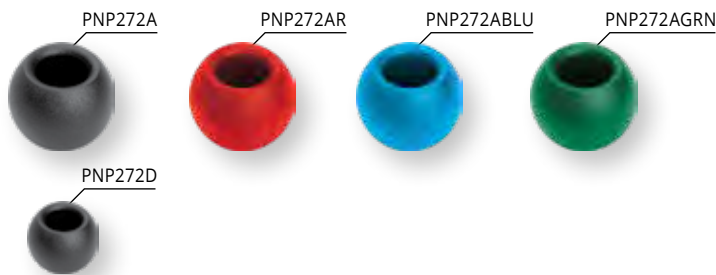
### TIE BALLS

✓ 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
<b>Tie Balls</b>									
<b>Black</b>	<b>Red</b>	<b>Blue</b>	<b>Green</b>						
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
<b>Halyard Stoppers</b>									
<b>Black</b>	<b>Red</b>	<b>Blue</b>	<b>Green</b>						
PNP272A	PNP272AR	PNP272ABLU	PNP272AGR	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
<b>Handles</b>			
PNP207	Handle. 150mm (6") wide. Requires 2 x 6mm (1/4") fasteners	52	1.8
<b>Hinges &amp; Latches</b>			
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

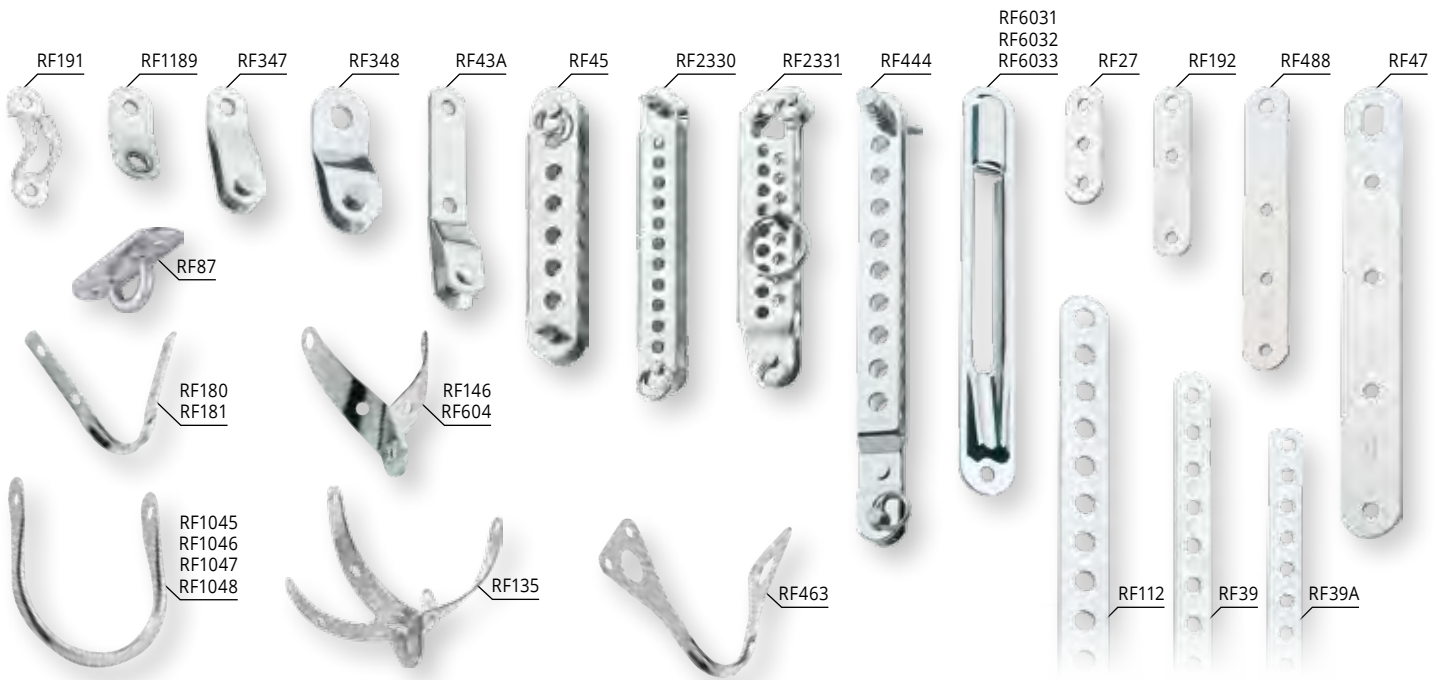
# Inspektionsdeckel & Stöpsel



- ✓ 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.
- ✓ PNP96, PNP97 and PNP390 are manufactured with dissimilar materials for the lid and deck ring to avoid binding.
- ✓ PNP35, PNP390 & PNP393 feature an overlapping threaded lid for a smooth, clean style.
- ⚙️ Impact resistant, UV stabilised nylon.

PRODUCT No.	DESCRIPTION	REPLACEMENT O-RING	REPLACEMENT PLUG	CUTOUT DIAM. mm	WEIGHT g	CUTOUT DIAM. in	WEIGHT oz
<b>Drain Plugs</b>							
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
<b>Inspection Hatches</b>											
PNP35	Inspection hatch, white	-	-	100	130	112	66	4	5 1/8	4 1/2	2.3
PBP35BLK	Inspection hatch, black	-	-	100	130	112	66	4	5 1/8	4 1/2	2.3
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
RF530	Inspection hatch, white	RF531	RF530LIDSW	106	148	122	110	4 3/16	5 3/16	4 13/16	3.9

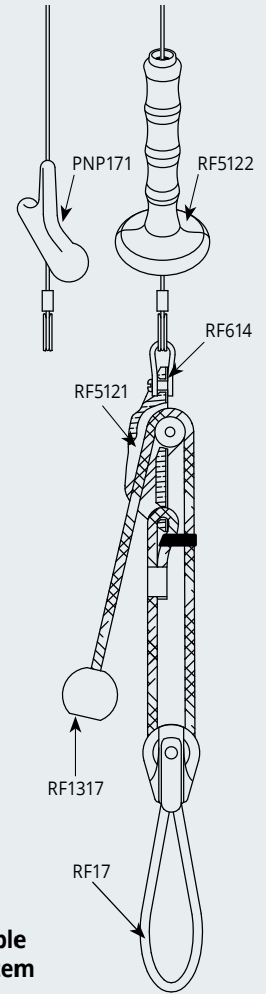


PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
<b>Mast Tangs &amp; Hounds</b>			
RF43A	Tang, 5mm (3/16") diameter clevis pin. 76mm (3") long. 2 x 5mm (3/16") diameter fixing holes	15	0.5
RF146	Mast hound to suit mast diameters between 76mm-115mm (3"-4 1/2")	110	3.9
RF347	Tang, 6.4mm (1/4") diameter clevis 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")	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
<b>Boom Hangers</b>			
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
RF463	Boom hanger 64mm (2 1/2") long. 4 x 5mm (3/16") diameter fixing holes	25	0.9
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
<b>Exit Plates &amp; Halyard Lock</b>			
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

PRODUCT No.	LENGTH OVERALL		RANGE OF ADJUSTMENT		PIN DIAM.	INCREMENTS	WEIGHT g	LENGTH OVERALL		RANGE OF ADJUSTMENT		PIN DIAM.	INCREMENTS	WEIGHT oz	NO. OF ADJUSTMENT SETTINGS
	mm	mm	mm	mm				in	in	in	in				
<b>Stay Adjusters</b>															
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		LENGTH OVERALL		WIDTH x THICKNESS		HOLE DIAMS.		WEIGHT g	HOLE SPACING		LENGTH OVERALL		WIDTH x THICKNESS		HOLE DIAMS.		WEIGHT oz
		mm	mm	mm	mm	mm	mm	in	in		in	in	in	in	in	in	in	in	
<b>Chain Plates &amp; Perforated Strip</b>																			
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	923	15.9 x 1.5	6.6	144	5/8	36 6/16	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								

# Trapezhardware



**2:1 Adjustable Trapeze System**



© Victor Kovalenko

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
<b>Trapeze Hardware</b>			
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 6mm (7/32") diameter loop, 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
<b>Red Tie Ball</b>	<b>Blue Tie Ball</b>	<b>Black Tie Ball</b>	<b>Green Tie Ball</b>						
RF1317R	RF1317BLU	RF1317BLK	RF1317GRN	5	20	3	3/16	3/4	0.1



© Heidi Bucktin

PRODUCT No.	DESCRIPTION	DOUGHNUT DIAM. mm	ROPE DIAM. mm	WEIGHT g	DOUGHNUT DIAM. in	ROPE DIAM. in	WEIGHT oz
<b>Spinnaker Brace 'Doughnut'</b>							
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
<b>Spinnaker Pole Rings</b>									
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), neoprene pad and line retainer	40	1.4
RF92	Spinnaker brace hook, screw-on attachment, (includes two 8g self-tapping screws), neoprene 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
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RF3810  
 RF3811  
 RF3812



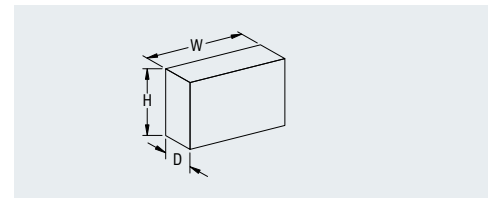
RF3821



RF3841



RF3851



✓ Fibreglass entry edge rods for easy opening (rope bags).

✓ Mounting options: hook-and-loop fixing or screw-on (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
<b>Rope Bags</b>									
RF3821	Rope bag, white PVC with mesh, high	250	400	200	1000	9 7/8	15 3/4	7 7/8	35.3
RF3810	Rope bag, white PVC with mesh, wide	300	200	180	400	11 13/16	7 7/8	7 3/32	14.1
RF3811	Rope bag, white PVC with mesh, wide	400	250	200	460	15 3/4	9 7/8	7 7/8	16.3
RF3812	Rope bag, white PVC with mesh, wide	500	300	220	550	19 11/16	11 13/16	8 11/16	19.4
<b>Winch Handle Pockets</b>									
RF3841	Winch handle pocket, white PVC with mesh	130	130	90	130	5 1/8	5 1/8	3 9/16	4.6
<b>Drink Holders</b>									
RF3851	Drink holder, white PVC with mesh	140	280	90	235	5 1/2	11 1/16	3 9/16	8.3







# QUICK-LOCK™

## Power, Performance und intuitive Bedienung

Die Ronstan Quick-Lock™ Winschkurbeln sind die benutzerfreundlichsten Winschkurbeln, die für den Regattasport aber auch für Tourensegler erhältlich sind. Sie verfügen über die praktische Einhandbedienung. Man kann die Kurbel, ohne die Klinke herunterzudrücken, in die Winsch einsetzen und mit drücken der roten Klinke kinderleicht entnehmen und das alles mit nur einer Hand! Der patentierte Quick-Lock Mechanismus ist anders konstruiert als bei anderen Winschkurbeln und daher deutlich besser. Bei einem Vergleichstest im deutschen YACHT Magazin im Sommer 2019 haben diese Ronstan Quick-Lock™ Kurbeln als Testsieger abgeschnitten!

### Quick-Lock™

#### Automatische Einsteckfunktion

Ronstan Quick-Lock™ Kurbeln ermöglichen es Ihnen, den Kurbelkopf sofort in die Windenaufnahme zu stecken, ohne dass ein Knopf gedreht oder eine Taste gedrückt werden muss. Ein rostfreier Stahlverriegelungshebel hält die Kurbel dann sicher an seinem Platz.

#### Intuitives Greifen und Loslassen

Der große, leicht zu findende Entriegelungsknopf ist auf der Oberseite der Kurbel etwas verlängert, und daher leicht erreichbar. Damit ist die Quick-Lock™ Kurbel ideal für die volle Kraftentfaltung mit nur einer Hand und als sichere und perfekte Lösung ideal für den Einsatz bei unerfahrenen und erfahrenen Crews.

#### Power in Your Hands

Ein Präzisionskugellagering im Handgriff sorgt für die freie Rotation bei hohen Geschwindigkeiten oder leistungsstarkem Kurbeln. Das 8"- 200mm Modell für Situationen mit beengten Platzverhältnissen und die 10"- 250mm Kurbel für eine größere Untersetzung.



Einfach zu bedienender Quick Lock™ Mechanismus



Ein rostfreier Stahlverriegelungshebel hält die Kurbel sicher an seinem Platz.



Präzisionskugellagering für freie Rotation bei sportlichen Anforderungen.



Ein großer Handknauf ermöglicht beidhändiges Kurbeln mit geringem Kraftaufwand.





- ✓ 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 coat anodised finish.

PRODUCT No.	GRIP	LENGTH mm	WEIGHT g	LENGTH in	WEIGHT oz
<b>Single Grip</b>					
RF4410	Single	200	415	8	14.6
RF4415	Single	250	450	10	15.9
<b>Palm Grip</b>					
RF4430	Palm	200	470	8	16.6
RF4435	Palm	250	525	10	18.5



# ClearStart™ Uhren & Race Timer

## Innovative Race Funktionen mit neuem, markantem Design

Ronstan's ClearStart™ Regattauhren kombinieren zeitgemäßes Design mit echter Segelfunktionalität. Sie verfügen über große Tasten und gut lesbare Displays. Die fortschrittliche intuitive Programmierung ist speziell für den Regattasport entwickelt worden. Die Uhren sind mit den weltbesten Seglern designed und entwickelt worden. ClearStart™ Uhren und Timer setzen seit Jahren den Standard für zuverlässige, günstige Regattauhren.

## Große Quick View Displays

Die gesamte ClearStart™-Produktreihe zeichnet sich durch übergroße Zifferanzeigen für eine einfache Ablesbarkeit aus. Der Ronstan Race Timer (die Opti-Uhr) hat riesige 16mm Zahlen, die für die Crew leicht einsehbar sind, wenn sie am Baum oder am Mast montiert wird. Das 50mm Display ist mit 13mm Ziffern nur unwesentlich kleiner. Auch diese Zahlen sind schnell auf einen Blick abzulesen, ohne die Hand von der Pinne zu nehmen. Die 40mm Segeluhr hat noch immer beeindruckende 10 mm Ziffern.

## Regattasequenzen nachsynchronisieren

Alle Segler wissen, wie schwer es sein kann die Uhr genau in der Sekunde in Gang zu bringen, in der das erste Signal zum Regattastart gegeben wird. Mit der praktischen SYNC-Funktion, können Sie schnell und einfach nachsynchronisieren.

## Vorprogrammierte Sequenztöne

Die intuitiven ClearStart™ Tonsignale ermöglichen, dass Du genau weißt, in welcher Startphase Du Dich befindest, ohne auf die Anzeige zu schauen. Vorprogrammiert mit World Sailing 5-4-1-0 und Match-Racing-Startsequenzen, kann aber auch auf einen anderen Countdown individuell programmiert werden.

## Ende der Sequenz - Countdown oder Countup

Abhängig von der Präferenz des Benutzers kann die Uhr so eingestellt werden, dass sie die automatische Wiederholung des Countdowns am Ende der Sequenz startet (ready zum erneuten Start) oder die abgelaufene Zeit (Dauer der Wettfahrt) zählt.

## Stoß- & wasserfest

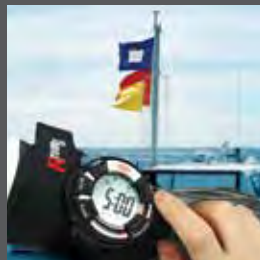
Entwickelt, um den extremen Bedingungen im Segelsport stand zu halten. ClearStart™ Uhren und Timer sind wasserdicht bis 5ATM (5m) und stoßfest.



Large quick view displays



Selectable start sequences



Resynchronisation function



Compact 40mm models



Mast mounting option



Removable timer unit



50mm models



Water resistant



Backlight



Stylish models

# CLEARSTART™

## ClearStart™ 40mm Segeluhren

- ✓ Langlebige, ultraklare Mineralglaslinse
- ✓ Bequemes und sicheres Armband aus Silikon mit Edelstahlschnalle
- ✓ Verstärktes Polycarbonatgehäuse
- ✓ 40mm Durchmesser
- ✓ Übergroße 10mm hohe Anzeige
- ✓ Erhabene leicht zu findende Schaltknöpfe
- ✓ Rückseite aus Edelstahl
- ✓ Gewicht 50g

RF4054 (Rot, Schwarz)  
 RF4054A (Schwarz)  
 RF4054B (Blau, Schwarz)



RF4054



RF4054A



RF4054B

## ClearStart™ 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).

### 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.



# CLEARSTART™

## ClearStart™ 50mm Segeluhren

- ✓ Langlebige, ultraklare Mineralglaslinse
- ✓ Bequemes und sicheres Armband aus Silikon mit Edelstahlschnalle
- ✓ Verstärktes Polycarbonatgehäuse
- ✓ 50mm Durchmesser
- ✓ Übergroße 13mm hohe Anzeige
- ✓ Erhabene leicht zu findende Schaltknöpfe
- ✓ Rückseite aus Edelstahl
- ✓ Gewicht 73g

RF4055 (Rot, Grau)  
RF4055A (Schwarz, Grau)  
RF4055B (Blau, Grau)



RF4055



RF4055A



RF4055B

### 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).

### 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.

# CLEARSTART™



## ClearStart™ Race Timer

- ✔ 65mm Durchmesser
- ✔ Übergroße 16mm große Ziffern
- ✔ Drehbarer Außenkranz
- ✔ Befestigung an Handgelenk, Rumpf, Mast, Baum
- ✔ 30mm breites Stretch-Gummi Armband mit Sicherheits-Loop
- ✔ Flache Arbandschnalle
- ✔ Doppelbatterie
- ✔ Extra große Silikonknöpfe – Start/Stop-Knopf
- ✔ Gewicht, 92g



### 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) options.
- ✔ Separate fast access race and time mode scrolling.
- ✔ Water resistant to 5 ATM (50m/150ft).

### 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.



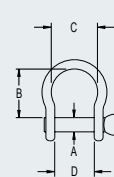
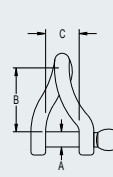
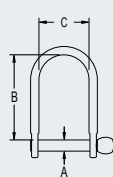
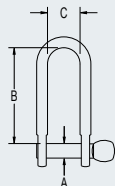
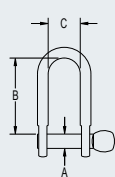




✓ Many shapes and sizes to suit any application.

✓ Coined shackle pin head - some models with hole for seizing wire.

🌀 Grade 316 stainless steel bodies and pins.



PRODUCT No.	A	B	C	D	U.D.L.*1	P.L.*1	WEIGHT	A	B	C	D	U.D.L.*1	P.L.*1	WEIGHT
	mm	mm	mm	mm	B.L.	B.L.		in	in	in	in	B.L.	B.L.	
<b>Standard D</b>														
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*3	15.9	47	25	-	14000	11000	280	5/8	1 25/32	1	-	30860	24250	9.9
<b>Long D</b>														
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
<b>Wide D</b>														
RF1850S	3.2	11	13	-	550	280	2	1/8	7/16	1/2	-	1210	620	0.1
RF1852	4.8	29	20	-	1200	700	15	3/16	1 5/32	25/32	-	2640	1540	0.5
RF1853	6.4	39	31	-	2300	1100	26	1/4	1 17/32	1 7/32	-	5070	2430	0.9
RF639	7.9	51	28	-	3400	1700	70	5/16	2	1 3/32	-	7480	3740	2.5
RF640	9.5	56	29	-	5400	3600	95	3/8	2 7/32	1 5/32	-	11900	7940	3.4
RF641*2	12.7	68	33	-	7700	5500	170	1/2	2 11/16	1 5/16	-	16980	12130	6.0
<b>Twisted</b>														
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
<b>Bow</b>														
RF613S*4	3.0	12	9	6.4	550	280	3	1/8	15/32	11/32	1/4	1210	620	0.1
RF633	4.0	15	17	11.0	800	600	5	5/32	9/16	9/16	7/16	1760	1320	0.2
RF634	4.8	18	14	13.0	1200	800	10	3/16	23/32	9/16	1/2	2640	1760	0.4
RF635	6.4	21	19	16.0	2300	1400	20	1/4	13/16	3/4	5/8	5070	3090	0.7
RF636	7.9	27	22	16.0	3600	2700	45	5/16	1 1/16	7/8	5/8	7940	5950	1.6
RF638*2	7.9	27	22	16.0	3600	2700	45	5/16	1 1/16	7/8	5/8	7940	5950	1.6
RF637*2	9.5	52	36	21.0	5400	3600	90	3/8	2 1/16	1 13/32	13/16	11900	7940	3.2

\*1 UD.L. 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 RF1035 features 20.7mm (13/16") A/F hexagonal head pin.

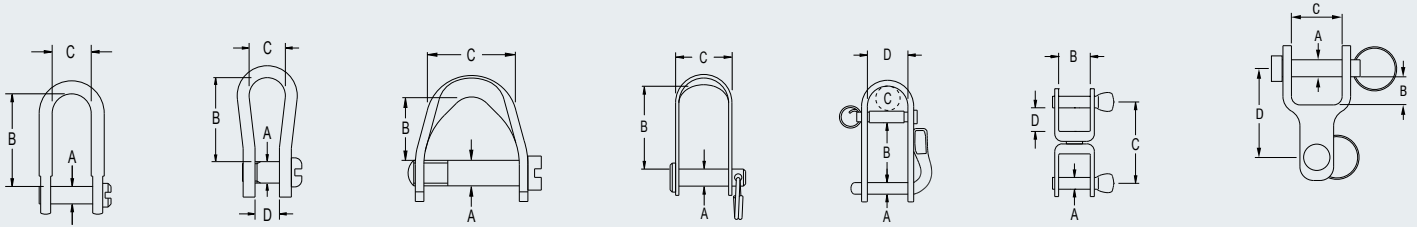
\*4 RF613S has a slotted head.



- ✓ Slotted head shackle pins are low profile to prevent snagging on ropes etc.
- ✓ Lightweight clevis pin shackles use a split ring for security.

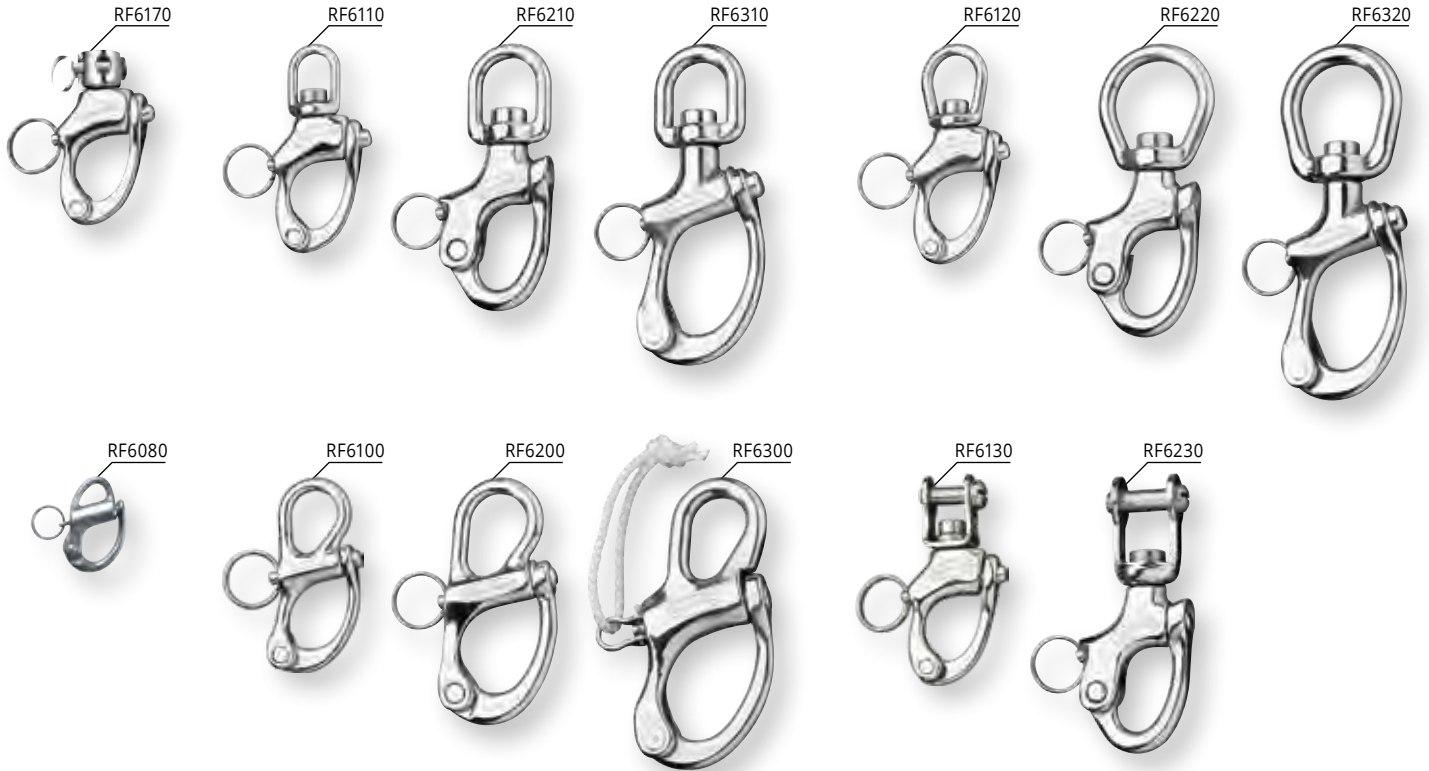
- ✓ Halyard shackles have a lever action for easy finger opening and closing. They also have a keyed pin for pin retention and spring engagement to retain pin in closed position.

- ✓ RF1320R shackle key suits both coiled and slotted shackle pins, and small nylon-insert nuts.
- ⚙️ Grade 316 stainless steel bodies and pins.

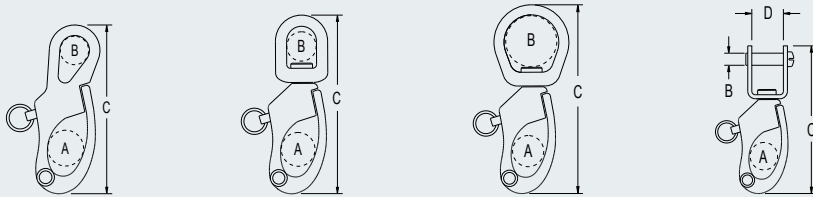


PRODUCT No.	A	B	C	D	U.D.L.*1	P.L.*1	WEIGHT	A	B	C	D	U.D.L.*1	P.L.*1	WEIGHT		
	mm	mm	mm	mm	B.L.	B.L.						lb	lb		oz	
<b>Slotted Pin</b>																
RF615	4.0	16.0	10.0	-	850	650	5	5/32	5/8	13/32	-	1870	1430	0.2		
RF615A	4.0	13.0	8.0	-	850	700	7	5/32	1/2	5/16	-	1870	1540	0.2		
RF150	4.7	18.0	12.0	-	1500	900	10	3/16	23/32	15/32	-	3300	1980	0.4		
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		
<b>Lightweight Clevis Pin</b>																
RF807	4.8	20.0	14.0	-	700	-	10	3/16	25/32	9/16	-	1540	-	0.4		
<b>Halyard</b>																
RF1032	4.8	22.0	10.0	15.0	1200	900	30	3/16	7/8	13/32	19/32	2650	1980	1.1		
RF1033	6.4	32.0	13.0	19.0	2100	1500	55	1/4	1 1/4	1/2	3/4	4630	3310	1.9		
RF1034	7.9	39.0	18.5	20.0	2700	2200	90	5/16	1 17/32	23/32	25/32	5950	4850	3.2		
<b>Swivel</b>																
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		
<b>Two-Way Link</b>																
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		
<b>Shackle Key</b>																
RF1320R	Shackle key and multi-purpose tool. Suits coiled 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.



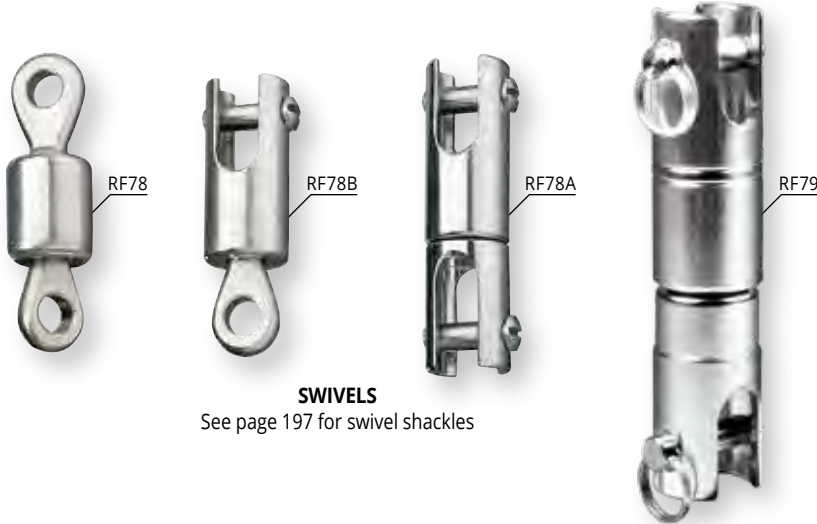
- ✓ Fixed or swivel heads.
- ✓ Heavy duty plunger springs and precision components ensure dependable service.
- ✓ Body and hasp profiles are designed for easy clearance of lines and fittings when released.
- ✓ High strength-to-weight ratio.
- ✓ Stainless steel is used throughout for excellent corrosion 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-SPH 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
RF6260	Suits RF6200
RF6262	Suits RF6210, RF6220, RF6230, RF6230A
RF6360	Suits RF6310, RF6320
RF6361	Suits RF6300

PRODUCT No.	HEAD TYPE	A	B	C	D	M.W.L.	B.L.	WEIGHT	A	B	C	D	M.W.L.	B.L.	WEIGHT
		mm	mm	mm	mm	kg	kg	g	in	in	in	in	lb	lb	oz
<b>Series 80</b>															
RF6080	Fixed bail	6.2	4.7	32	-	75	150	10	1/4	3/16	1 1/4	-	165	330	0.4
<b>Series 100</b>															
RF6100	Fixed bail	16	15.0	66	-	1000	2000	43	5/8	19/32	2 19/32	-	2200	4410	1.5
RF6110	Small swivel bail	16	10.0	69	-	850	1700	50	5/8	13/32	2 23/32	-	1870	3750	1.8
RF6120	Large swivel bail	16	13.0	73	-	750	1500	57	5/8	1/2	2 7/8	-	1650	3310	2.0
RF6130	Swivel shackle	16	6.4	72	13	750	1500	64	5/8	1/4	2 27/32	1/2	1650	3310	2.3
RF6170	Block head adapter	16	5.0	60	-	500	1135	49	5/8	3/16	2 3/8	-	1100	2500	1.7
<b>Series 200</b>															
RF6200	Fixed bail	20	19.0	85	-	1100	2200	100	13/16	3/4	3 11/32	-	2420	4840	3.5
RF6210	Small swivel bail	16	16.0	92	-	1600	3200	113	5/8	5/8	3 5/8	-	3530	7050	4.0
RF6220	Large swivel bail	16	25.0	101	-	1100	2200	120	5/8	1	3 31/32	-	2430	4850	4.2
RF6230	Swivel shackle	16	7.9	95	17.5	1100	2200	120	5/8	5/16	3 3/4	11/16	2430	4850	4.2
<b>Series 300</b>															
RF6300	Fixed bail	26	19.0	100	-	2000	4000	155	1 1/32	3/4	3 15/16	-	4410	8820	5.5
RF6310	Small swivel bail	26	16.0	110	-	1800	3600	142	1 1/32	5/8	4 11/32	-	3970	7940	5.0
RF6320	Large swivel bail	26	26.0	122	-	1350	2700	170	1 1/32	1 1/32	4 3/4	-	2980	5950	6.0

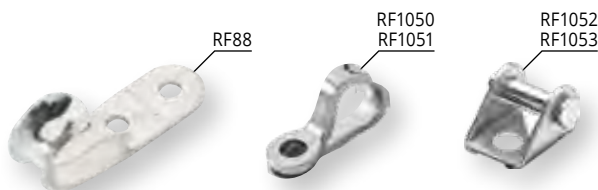


**SWIVELS**

See page 197 for swivel shackles



**S-HOOKS**

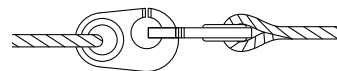


**BECKETTS**

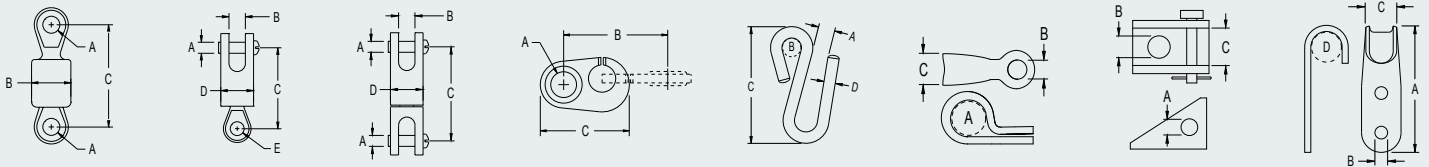


**SISTER CLIPS**

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

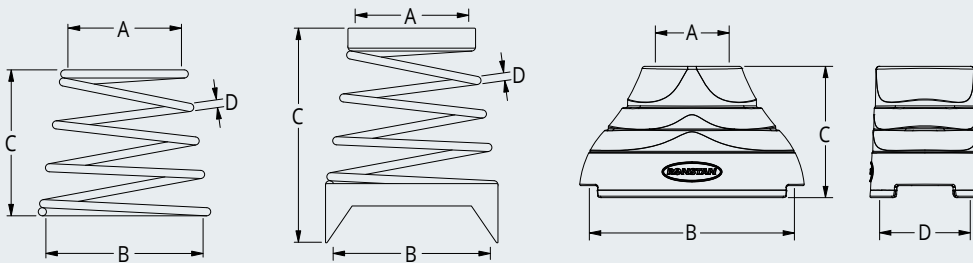


PRODUCT No.	TYPE	A	B	C	D	E	B.L.	WEIGHT	A	B	C	D	E	B.L.	WEIGHT
		mm	mm	mm	mm	mm	kg	g	in	in	in	in	in	lb	oz
<b>Swivels - Ball Bearing</b>															
RF78*		8.1	19.1	51.8	-	-	1000	65	5/16	3/4	2 3/32	-	-	2200	2.3
RF78A		6.4	9.6	54.0	19.0	-	1700	80	1/4	3/8	2 1/8	3/4	-	3740	2.8
RF78B*		6.4	9.6	44.3	19.0	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
<b>Sister Clips</b>															
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
<b>S-Hooks</b>															
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	1 1/32	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
<b>Becketts</b>															
RF88	Hook becket	50.5	5.0	13.5	8.0	-	-	13	2	3/16	1 7/32	5/16	-	-	0.5
RF1050	Eye becket	8.0	5.0	9.0	-	-	-	6	5/16	3/16	1 1/32	-	-	-	0.2
RF1051	Eye becket	8.0	6.0	9.0	-	-	-	6	5/16	1/4	1 1/32	-	-	-	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")



2 x 5mm (3/16")



- RF324, RF324-1, RF324-2, RF328 include top and bottom collars.
- Springs and boots are used to support blocks in an upright position.
- Grade 316 stainless steel springs.

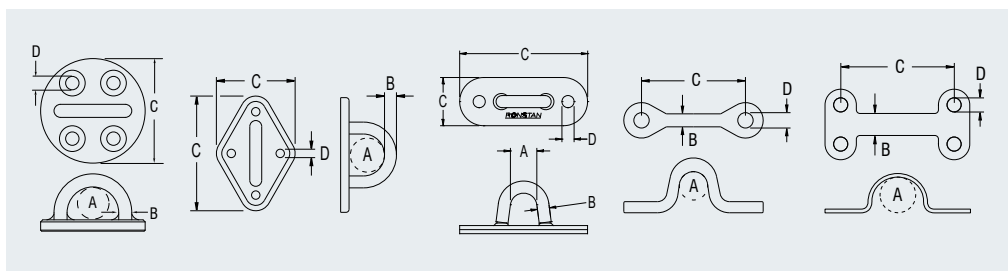
PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	WEIGHT g	A in	B in	C in	D in	WEIGHT oz
<b>Stand-Up Springs</b>											
RF318*	Stand-up spring. Suits Series 15 and Series 20 Utility blocks with saddle RF498	16	23	22	1	3	5/8	7/8	7/8	1/32	0.1
RF319	Stand-up spring	16	16	32	2	3	5/8	5/8	1 1/4	3/32	0.1
RF321*	Stand-up spring. Suits Series 40 Utility blocks with saddles RF134 or RF134A	16	24	41	2	9	5/8	15/16	1 5/8	3/32	0.3
RF323*	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
RF324-1	Stand-up spring. Suits Series 60 & 75 Core Blocks™ and Orbit Blocks™	20	24	103	3	60	3/4	15/16	4 1/16	1/8	2.1
RF324-2	Stand-up spring. Suits Series 60 & 75 Core Blocks™ and Orbit Blocks™	20	38	89	4	60	3/4	1 1/2	3 1/2	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
<b>Stand-Up Bases &amp; Boots</b>											
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
RF2457	Stand-up base, suits S70 Orbit Blocks™ - includes RF1054 stainless steel saddle	25	66	45	31	50	1	2 9/16	1 3/4	1 1/4	1.8
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
RF2457B	Stand-up boot, suits S70 Orbit Blocks™ - boot only	25	66	45	31	15	1	2 9/16	1 3/4	1 1/4	0.5

\* Tapered spring.



✓ Removable screw-in padeyes are ideal for attaching blocks which may be removed when not in use or while cruising. A threaded plug remains in the base section when the top plate is removed to prevent dirt and grit from entering the threads.

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



PRODUCT No.	DESCRIPTION	A	B	C	D	B.L.	WEIGHT	A	B	C	D	B.L.	WEIGHT
		mm	mm	mm	mm	kg	g	in	in	in	in	lb	oz
<b>Padeyes - Fixed, Round</b>													
RF2429-02	2 mounting holes	7.2	5.0	34.0	6.4	1500	26	9/32	3/16	1 5/16	1/4	3310	0.9
RF2429-06	4 mounting holes	16.0	7.3	50.0	6.4	4000	82	5/8	5/16	2	1/4	8800	2.9
RF2429-08	4 mounting holes	17.2	10.0	57.7	8.3	6000	127	43/64	25/64	2 1/4	21/64	13200	4.5
RF2429-10	4 mounting holes	21.1	11.5	72.3	10.2	9000	240	53/64	7/16	2 3/4	13/32	19800	8.5
<b>Padeyes - Removable Round</b>													
RF2433-09	Removable, screw-in, 4 mounting holes	14.0	9.0	55.0	6.0	4000	285	9/16	3/8	2 5/32	1/4	8820	10.1
RF2433-10	Removable, screw-in, 4 mounting holes	19.0	10.0	72.0	8.0	5000	550	3/4	13/32	2 27/32	5/16	11020	19.4
<b>Padeyes - Fixed, Diamond Base</b>													
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*	Including nylon mounting pad	18.0	8.0	75 x 51	6.4	2000	100	23/32	5/16	3 x 2	1/4	4400	4.0
RF415	Including nylon mounting pad	21.0	8.0	75 x 51	5.0	1000	75	13/16	5/16	3 x 2	3/16	2200	2.7
RF44	Including nylon mounting pad	22.0	11.0	94 x 60	6.7	2000	130	7/8	7/16	3 11/16 x 2 3/8	1/4	4400	4.6
RF416		25.0	6.4	83 x 35	4.8	800	40	1	1/4	3 1/4 x 1 3/8	3/16	1760	1.4
<b>Saddles - Narrow</b>													
RF134		14.0	5.1	36.6	4.5	-	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
<b>Saddles - Flared Top</b>													
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
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
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
<b>Saddles - Ferrule Eye</b>													
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		13.9	6.8	45.7	6.6	-	18	1/2	1/4	1 3/4	1/4	-	0.6
RF1058		11.7	5.8	36.6	5.1	-	9	7/16	7/32	1 7/16	3/16	-	0.3

\* Turned U-Bolt with a pad eye base. Thread size is 6.4mm (1/4" UNC). Suits maximum deck thickness of 22mm (7/8")


**REMOVABLE, NON-TUMBLE**

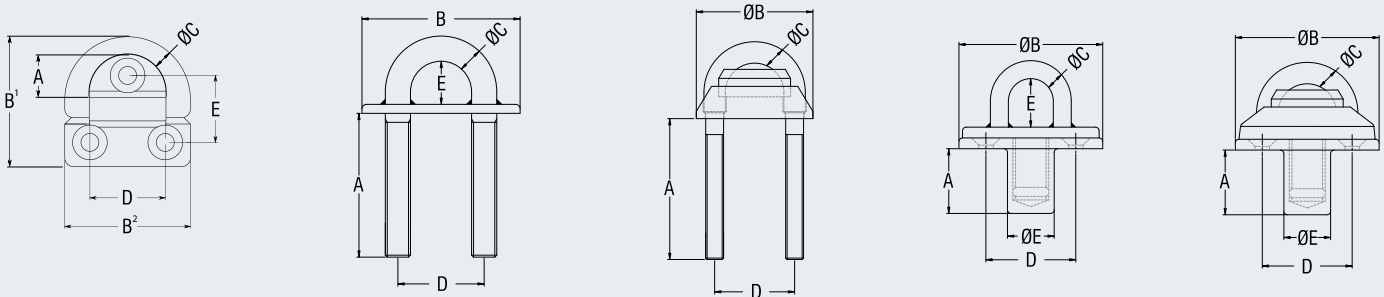
**REMOVABLE**

**FOLDING**

- ✓ Fixed style padeyes feature an all-in-one U-bolt mount for maximum strength.
- ✓ Screw in, removable padeyes allow the block and padeye to be easily removed when not in use.

- ✓ 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.



PRODUCT No.	DESCRIPTION	A	B	C	D	E	M.W.L.	B.L.	WEIGHT	A	B	C	D	E	M.W.L.	B.L.	WEIGHT
		mm	mm	mm	mm	mm	kg	kg	g	in	in	in	in	in	lb	lb	oz
<b>Padeyes</b>																	
RF2435-12B	Removable, non-tumble	36	80	12.0	50.0	26	4000	8000	560	1 7/16	3 5/32	15/32	1 31/32	1 1/32	8800	17600	19.8
RF2435-14	Removable	40	100 x 29	14.0	70.0	29	7500	15000	1100	1 9/16	3 15/16 x 1 5/32	9/16	2 3/4	1 1/8	16530	33070	38.8
RF2435-16B	Removable, non-tumble	40	100	16.0	70.0	-	8000	16000	2200	1 9/16	3 15/16	5/8	2 3/4	1 1/4	17640	35270	77.6
RF2435-20B	Removable, non-tumble	52	135	19.8	74.5	-	13500	27000	3700	2 1/16	5 5/16	25/32	2 15/16	-	29760	59520	130.4
RF2436-06	Folding	13.5* <sup>2</sup>	46.5 x 45* <sup>3</sup>	7.7	27.0	24	1100	2200	74	1/2* <sup>2</sup>	1 7/8 x 1 13/16* <sup>3</sup>	5/16	1 1/16	-	2420	4840	2.6
RF2436-08	Folding	18.5* <sup>2</sup>	61 x 59* <sup>3</sup>	10.4	35.0	29.5	2000	4000	172	1 1/16* <sup>2</sup>	2 7/16 x 2 3/8* <sup>3</sup>	7/16	1 3/8	1 5/32	4400	8800	6.1
RF2436-10	Folding	23.5* <sup>2</sup>	77 x 75* <sup>3</sup>	13.2	45.0	39	3650	7300	356	7/8* <sup>2</sup>	3 1/16 x 3* <sup>3</sup>	9/16	1 3/4	1 17/32	8030	16060	12.6

\*1 Nuts and washers included.

\*2 Eye clearance when upright.

\*3 B<sup>1</sup> x B<sup>2</sup>





# Elegantes Design, außergewöhnliche Leistung

Durch Ihre äußerst klaren Linien und durch die Verwendung hochwertigster Materialien und der hochwertigen Verarbeitung sind die Ronstan Typ 10 Wantenspanner eine Bereicherung für das Erscheinungsbild einer jeden Yacht.

## Typ 10

Die Wantenspanner des Typs 10 haben ein schlankes, modernes Profil ohne scharfe Ecken und Kanten. Sie lassen sich durch Drehen der Bronze Einstellmutter frei in der Hülse am Spannschlosskörper drehen, leicht einstellen und durch ein kurzes Drehen der Kontermutter sichern. Mit dem UNF Feingewinde sind die Wantenspanner des Typs 10 viel einfacher einzustellen als herkömmliche Wantenspanner. Die Verwendung unterschiedlicher, aber kompatibler Metalle, wie Bronze für die Gewindekomponenten, verhindert die Gefahr des Gewindefressens.

## Feines, gerolltes UNF Gewinde

Ronstan Rigging Beschläge haben gerollte Gewinde für maximale Festigkeit und Zuverlässigkeit – im Gegensatz zu geschnittenen Gewinden wird das Edelstahl-Rohmaterial auf und ab geformt, um ein Gewinde zu erzeugen, wobei die Maserung des Metalls ungebrochen bleibt und über die gesamte Länge des Gewindes fließt. Die Gewinde sind UNF (Unified National Fine) Feingewinde für eine saubere und genaue Einstellung.

## Integrität der Walzengesenke

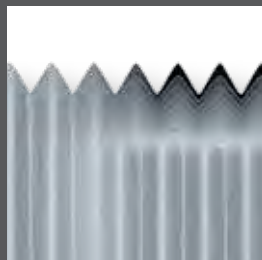
Walz-Terminals entsprechen dem Industriestandard. Sie eignen sich für den Einsatz mit modernen und traditionellen Drahtkonstruktionen, darunter 1x19, 7x19 und kompakte Litzen.

## Endbeschlagsoptionen

Das komplette Sortiment an Aug-, Gabel- und Toggelbeschlägen ergänzt die Wantenspanner und ermöglicht die Montage von fertigen Vorrichtungselementen für nahezu jede Anwendung.

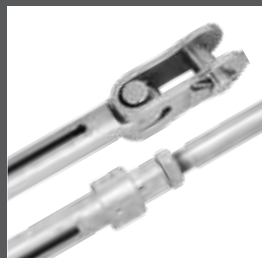
## Kalibrierte Wantenspanner

Für genaue, wiederholbare Einstellungen der Riggschraubung und präzise Einstellung stehen kalibrierte Wantenspannermodelle für Drahtdurchmesser bis 6 mm (1/4") zur Verfügung; Gewindegrößen 1/4", 5/16", 3/8" UNF.



Rolled threads for maximum strength

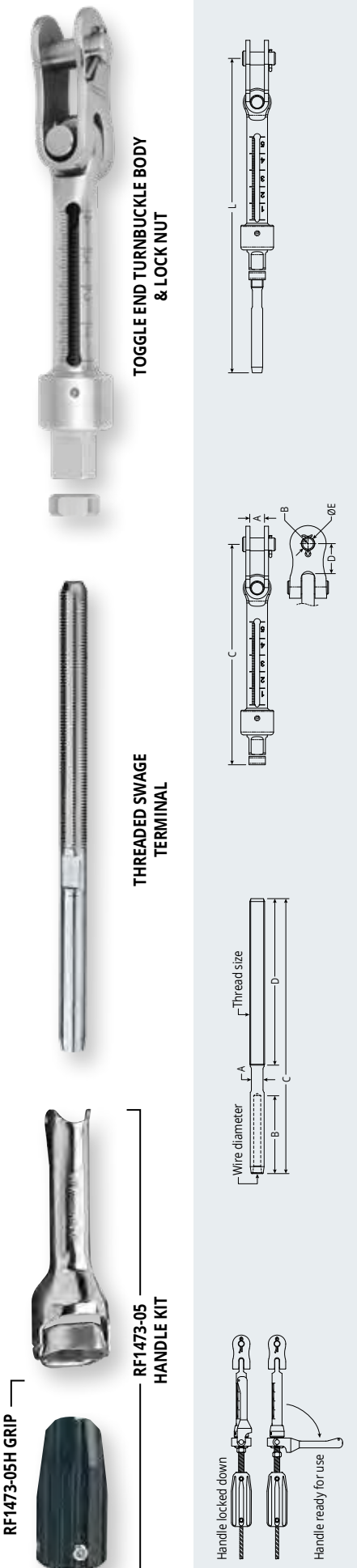
Roll swage integrity



Versatile end correction options

Calibrated models

# Kalibrierte Wantenspanner - metrisch



## METRIC DIMENSIONS

WIRE DIAM. mm	TYPICAL GRADE 1570 1X19 WIRE B.L. kg	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. kg	THREAD SIZE	THREADED SWAGE TERMINAL			TURNBUCKLE B.L. kg	TURNBUCKLE PRODUCT No.	THREAD SIZE	TOGGLE END TURNBUCKLE BODY & LOCK NUT			L MIN. mm	L MAX.* mm			
					A mm	B mm	C mm				A mm	B mm	C mm			D mm	E mm	WEIGHT g
<b>Calibrated Turnbuckles - Metric Wire</b>																		
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
4mm	1350	RF1512M0404	1480	1/4" UNF	6.0	45.5	141	74	30									
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
5mm	2120	RF1512M0505	2360	5/16" UNF	7.5	55.5	164	89	52									
5mm	2120	RF1512M0506	2550	3/8" UNF	7.5	55.5	179	105	76	RF1481-06	3580	3/8" UNF	10.0	14.4	162	23.2	9.4	245
6mm	3020	RF1512M0606	3580	3/8" UNF	10.5	70.4	195	105	115									

## IMPERIAL DIMENSIONS

PRODUCT No.	DESCRIPTION	WEIGHT	
		g	oz
<b>Calibrated Turnbuckles - Metric Wire</b>			
RF1512M0304	3mm	2970	10.5
RF1512M0404	4mm	3250	11.5
RF1512M0405	4mm	3910	13.8
RF1512M0505	5mm	5190	18.3
RF1512M0506	5mm	5610	19.8
RF1512M0606	6mm	7870	27.8

## 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 handle.	75	2.6
RF1473-05H	Black plastic upper grip for 5/16" threaded swage terminals	50	1.8

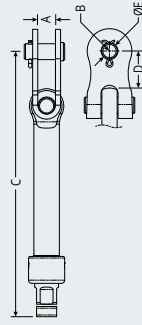
\* The sight hole relates to a length (L) slightly less than L.MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L.MAX dimension.



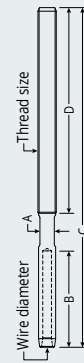
# Walz/Toggle Wantenspanner - metrisch



TOGGLE END TURNBUCKLE BODY & LOCK NUT



THREADED SWAGE TERMINAL



## 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
3mm	760	RF1512M0304	1350	—	4.9	39.2	133	74	24
4mm	1350	RF1512M0404	1480	1/4" UNF	6.0	45.5	141	74	30
5mm	2120	RF1512M0504*1	1480	—	7.5	32.0	129	74	30
4mm	1350	RF1512M0405	1780	5/16" UNF	6.0	45.5	153	89	44
5mm	2120	RF1512M0505	2360	—	7.5	55.5	164	89	52
5mm	2120	RF1512M0506	2550	3/8" UNF	7.5	55.5	179	105	76
6mm	3020	RF1512M0606	3580	—	10.5	70.4	195	105	115
6mm	3020	RF1512M0608	5410	—	10.5	70.4	245	143	196
7mm	4120	RF1512M0708	5410	1/2" UNF	12.2	79.0	250	143	222
8mm	5380	RF1512M0808	5410	—	14.0	88.5	263	143	258
8mm	5380	RF1512M0810	7600	5/8" UNF	14.0	88.5	310	190	420
10mm	8420	RF1512M1010	8390	—	15.8	110.5	330	190	446
11mm	10570	RF1512M1112	10400	3/4" UNF	12.2	122.7	368	205	723
12mm	12130	RF1512M1212	12140	—	12.2	140.4	386	205	755
14mm	16510	RF1512M1414	16520	7/8" UNF	14.4	157.9	436	234	1150
16mm	21500	RF1512M1616	22450	1" UNF	18.0	176.7	473	240	1610

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
RF1480-04	1480	1/4" UNF	7.8	9.1	115	16.3	6.2	75
RF1480-05	2360	5/16" UNF	9.4	11.2	138	20.7	7.9	144
RF1480-06	3580	3/8" UNF	10.0	14.4	162	23.2	9.4	245
RF1480-08	5410	1/2" UNF	13.9	17.5	213	29.1	12.4	506
RF1480-10	8670	5/8" UNF	17.0	20.8	267	40.8	15.7	939
RF1480-12	12630	3/4" UNF	20.0	23.8	314	47.2	18.9	1495
RF1480-14	17230	7/8" UNF	26.6	28.5	348	44.4	22.0	2444
RF1480-16	22450	1" UNF	29.3	31.8	379	63.3	25.2	3468

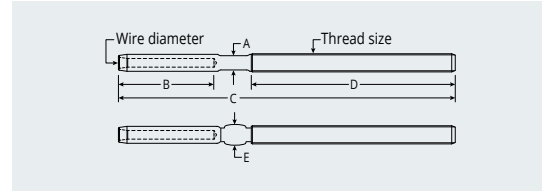
  

Swage/Toggle Turnbuckles - Metric Wire	WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. kg	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	WEIGHT g	L MIN. mm	L MAX.*2 mm
3mm	760	1350	RF1512M0304	1350	—	4.9	39.2	133	74	24	174	229
4mm	1350	1480	RF1512M0404	1480	1/4" UNF	6.0	45.5	141	74	30	182	237
5mm	2120	1480	RF1512M0504*1	1480	—	7.5	32.0	129	74	30	170	225
4mm	1350	1780	RF1512M0405	1780	5/16" UNF	6.0	45.5	153	89	44	202	267
5mm	2120	2360	RF1512M0505	2360	—	7.5	55.5	164	89	52	213	278
5mm	2120	2550	RF1512M0506	2550	3/8" UNF	7.5	55.5	179	105	76	237	317
6mm	3020	3580	RF1512M0606	3580	—	10.5	70.4	195	105	115	253	333
6mm	3020	5410	RF1512M0608	5410	—	10.5	70.4	245	143	196	312	422
7mm	4120	5410	RF1512M0708	5410	1/2" UNF	12.2	79.0	250	143	222	320	430
8mm	5380	5410	RF1512M0808	5410	—	14.0	88.5	263	143	258	333	443
8mm	5380	7600	RF1512M0810	7600	5/8" UNF	14.0	88.5	310	190	420	397	537
10mm	8420	8390	RF1512M1010	8390	—	15.8	110.5	330	190	446	417	557
11mm	10570	10400	RF1512M1112	10400	3/4" UNF	12.2	122.7	368	205	723	480	640
12mm	12130	12140	RF1512M1212	12140	—	12.2	140.4	386	205	755	498	658
14mm	16510	16520	RF1512M1414	16520	7/8" UNF	14.4	157.9	436	234	1150	553	733
16mm	21500	22450	RF1512M1616	22450	1" UNF	18.0	176.7	473	240	1610	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**



THREADED SWAGE TERMINAL PRODUCT No.	WIRE DIAM.	THREAD SIZE	SUITS TYPE 10 TURNBUCKLE BODY	SUITS TYPE 1 TURNBUCKLE*3	A mm	B mm	C mm	D mm	E mm	WEIGHT g	IMPERIAL DIMENSIONS										
											A in	B in	C in	D in	E in	WEIGHT oz					
<b>Threaded Swage Terminals - Metric Wire</b>												<b>METRIC DIMENSIONS</b>					<b>IMPERIAL DIMENSIONS</b>				
RF1512M0304	3mm	1/4" UNF	RF1480-04 RF1481-04	RF1578M0304 RF1575M0304	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			RF1578M0404 RF1575M0404	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			RF1578M0504 RF1575M0504	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	RF1578M0405 RF1575M0405	6.0	45.5	153	89	7.5	44	1/4	1 3/8	6	3 1/2	5/16	1.6					
RF1512M0505	5mm			RF1578M0505 RF1575M0505	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	RF1578M0506 RF1575M0506	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			RF1578M0606	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	RF1578M0608 RF1575M0608	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			RF1578M0708	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			RF1578M0808	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	RF1578M0810	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			RF1578M1010	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					

\*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 'Type 1' turnbuckles superseded by 'Type 10' turnbuckles in 2017.



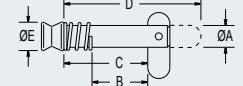
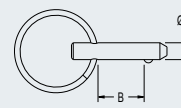
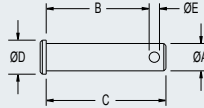
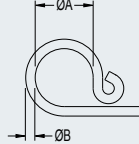
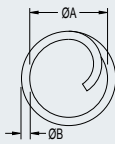
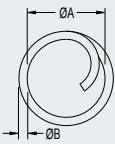

**SPLIT RINGS**  
 RF113  
 RF114

**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
<b>Split Rings &amp; Clips</b>								
RF113	RF258 - RF266	Split ring	9.5	1.0	1	3/8	1/32	0.1
RF114	RF260 - RF266	Split ring	11.1	1.3	2	7/16	1/16	0.1
RF413	RF267 - RF274	Retaining clip	16.0	2.7	3	5/8	3/32	0.1
RF686	RF260 - RF274	Split ring	14.3	1.3	4	9/16	1/16	0.1
RF687	RF260 - RF274	Split ring	18.8	1.6	5	3/4	1/16	0.2
RF688	RF267 - RF278	Split ring	25.0	2.0	5	1	3/32	0.2

PRODUCT No.	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
<b>Clevis Pins</b>												
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

<b>Fast Pin</b>												
RF5310	4.8	12.5	-	-	-	7	3/16	1/2	-	-	-	0.2

<b>Toggle Pins</b>												
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.



## Ein höherer Sicherheitsstandard

Wagen- und Schienensysteme werden seit langem eingesetzt, um der Besatzung einen mobilen Befestigungspunkt für die Reinigung von Rumpf, Aufbauten und Fenstern großer Motoryachten und anderer Schiffe zu bieten. Mit dem heutigen größeren Bewusstsein für Arbeitsplatzrisiken sind Bootsbauer und Sachverständige bestrebt, einen hohen Sicherheitsstandard zu gewährleisten, indem sie Systeme spezifizieren, die speziell entworfen, getestet und genehmigt wurden. Ronstan unterstützt diesen Ansatz, der die Sicherheit der Personen, die diese Systeme in ihrer täglichen Arbeit verwenden, nur verbessern kann, und hat Sicherheitsschienensysteme entwickelt, die vom Lloyds Register geprüft und zertifiziert wurden, um der europäischen Norm EN795:2012 Typ D zu entsprechen.

### Ronstan Sicherheits-Schienensysteme

Ronstan Sicherheits-Schienensysteme bieten eine Befestigungsmethode zur Verwendung in Verbindung mit persönlichen Schutzausrüstungen zum Schutz vor Abstürzen aus der Höhe, z.B. bei Arbeiten außerhalb von herkömmlichen Geländern zu Reinigungs- und Wartungszwecken auf Yachten oder anderen Schiffen. Sie dürfen nicht für Hebezeuge oder andere Zwecke verwendet werden.

### Merkmale

- Zertifiziert nach der europäischen Norm 75:2012 Typ D.
- Die Wagen, Schienen und Endanschlänge sind hergestellt aus einer sehr hochwertigen Aluminiumlegierung in Marine-Qualität und eloxiert zum Schutz vor Korrosion und für eine lange Lebensdauer.
- Umlaufende Torlon®-Kugellager in den Wagen sorgen für geringe Reibung und geringen Wartungsaufwand.
- Schwenkbare Schäkkel aus geschmiedetem Edelstahl der Güteklasse 316 zur Befestigung.
- Gummipuffer sorgen für weniger Vibrationen und zum Anheben der Schäkkel für einen schnellen Zugriff.
- Ein Federbelasteter Edelstahl-Pin zum einfachen Einrasten der Wagen an der gewünschten Position auf der Schiene, kann in der ausgekuppelten Position arretiert werden, um eine freie Bewegung des Wagens entlang der Schiene zu ermöglichen. Der elliptische Knopf ist leicht zu greifen und zu drehen und zeigt deutlich an, ob der Pin eingerastet ist oder nicht.
- Die Schiene kann sowohl vertikal als auch horizontal montiert werden, wie unten gezeigt.



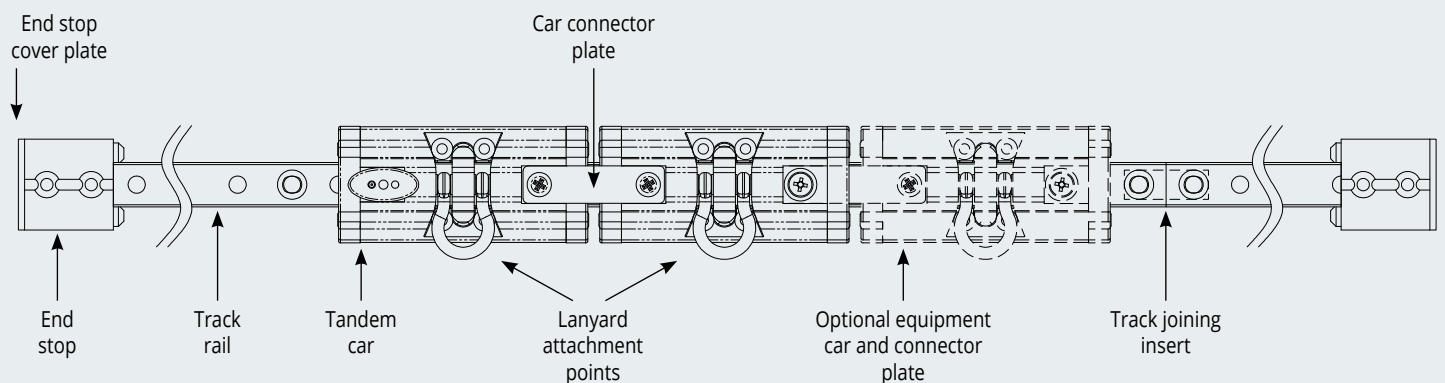
## Systembeschreibung

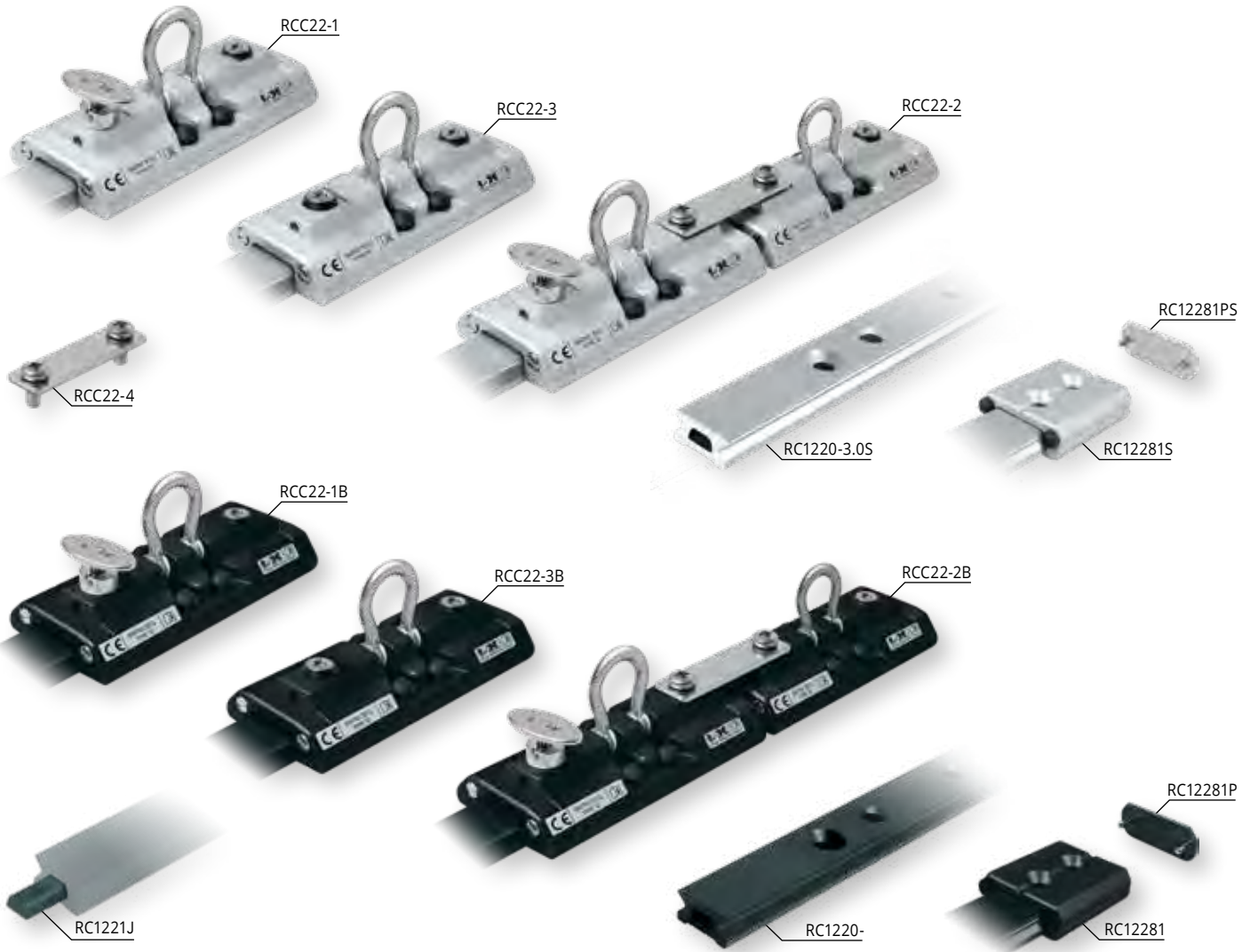
Das komplette Sicherheits Schienensystem besteht aus den folgenden Komponenten:

- Eine Schiene mit PinStop Löchern in 50mm Abstand Mitte/Mitte und Befestigungslöchern in 100 mm Abstand Mitte/Mitte
- Ein Tandemwagen bestehend aus zwei Wagen, die mit einer Verbindungsplatte verbunden sind
  - Jeder Wagen hat einen einzigen Befestigungspunkt für persönliche Schutzausrüstung
  - Einer der Wagen verfügt über einen federbelasteten Kolben, so dass die Baugruppe an jeder der Anschlaglöcher in der Schiene befestigt werden kann. Dieser Kolben kann ausgekuppelt werden, um die freie Bewegung der Wagenanordnung entlang der Schiene zu ermöglichen
- Zwei Endanschläge an den Enden der Schiene montiert

## Optionen

- Längere Schienen können durch den Einsatz von mehr als einem Abschnitt der Schiene und das bedarfsgerechte Ablängen erreicht werden, vorausgesetzt, dass der Abstand zwischen den Befestigungselementen 100 mm (3 15/16") nicht überschreitet. Der vorhandene Schienenverbindungseinsatz RC1221J sollte zur Unterstützung und Ausrichtung bei der Montage mehrerer Abschnitte der Schiene verwendet werden
- Zusätzliche Wagen können zur Benutzung von Werkzeugen oder anderen Geräten mit der Anschlussplatte RCC22-4 an den Haupttandem-Wagen RCC22-2 oder RCC30-2A montiert werden





Full installation, usage and maintenance details available under the **SUPPORT** tab of the Ronstan website.

- Certified to European Standard EN795:2012 Type D.
- Low friction.
- Anti-clatter rubber buffers.

- Lock up/down track position plunger stop.
- Anodised aluminium car bodies and track.
- Torlon® ball bearings.

- Grade 316 shackle, plunger stop, pivot pin, fasteners and connector plate.

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	CERTIFIED M.W.L. kg	WEIGHT g	LENGTH in	WIDTH in	CERTIFIED M.W.L. lb	WEIGHT oz
<b>Series 22 Safety Rail System</b>									
RCC22-1	Single car, 1 attachment point, plunger stop, silver	124	58	100	260	4 7/8	2 5/16	220	9.2
RCC22-1B	Single car, 1 attachment point, plunger stop, black	124	58	100	260	4 7/8	2 5/16	220	9.2
RCC22-2	Tandem car, 2 attachment points, plunger stop, silver	254	58	100	530	10	2 5/16	220	18.7
RCC22-2B	Tandem car, 2 attachment points, plunger stop, black	254	58	100	530	10	2 5/16	220	18.7
RCC22-3	Single car, 1 attachment point, silver	124	58	100	240	4 7/8	2 5/16	220	8.5
RCC22-3B	Single car, 1 attachment point, black	124	58	100	240	4 7/8	2 5/16	220	8.5
RCC22-4	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	2996	22	-	1380	117 15/16	7/8	-	48.7
RC1220-3.0	Track rail, black	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





Full installation, usage and maintenance details available under the **SUPPORT** tab of the Ronstan website.

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

PRODUCT No.	DESCRIPTION	LENGTH mm	WIDTH mm	CERTIFIED M.W.L. kg	WEIGHT g	LENGTH in	WIDTH in	CERTIFIED M.W.L. lb	WEIGHT oz
<b>Series 30 Safety Rail System</b>									
RCC22-4	Connector plate, including screws	-	-	-	37	-	-	-	1.3
RCC30-1A	Single car, 1 attachment point, plunger stop, silver	104	77	100	364	4 1/8	3	220	12.9
RCC30-1AB	Single car, 1 attachment point, plunger stop, black	104	77	100	364	4 1/8	3	220	12.9
RCC30-2A	Tandem car, 2 attachment points, plunger stop, silver	215	77	100	720	8 1/2	3	220	25.4
RCC30-2AB	Tandem car, 2 attachment points, plunger stop, black	215	77	100	720	8 1/2	3	220	25.4
RCC30-3A	Single car, 1 attachment point, silver	104	77	100	328	4 1/8	3	220	11.6
RCC30-3AB	Single car, 1 attachment point, black	104	77	100	328	4 1/8	3	220	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	2996	30	-	2430	117 15/16	1 3/16	-	85.7
RC1300-3.0	Track rail, black	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

# Erleben Sie Andersen Winden

Präzision. Zuverlässigkeit. Langlebigkeit

## Langlebigkeit & dauerhaftes Finish

Jede Andersen Winde wird mit Sorgfalt und Handwerkskunst hergestellt, die aus mehr als fünfzig Jahren Erfahrung stammen. Andersen Winden sind so konstruiert und hergestellt, dass sie ihr außergewöhnliches Finish lange beibehalten und ihrem Besitzer über viele Jahre hinweg zuverlässig begleiten.

## Materialien

Andersen Windentrommeln werden aus Edelstahl 316L hergestellt, der während der Herstellung in mehreren Stufen kaltgeformt wird, um die Festigkeit und Härte der endgültigen Form zu erhöhen. Das daraus resultierende Ergebnis ist leicht, aber dennoch steif und unnachgiebig. Die Antriebswellen sind aus Duplex-Edelstahl der Güte 32 gefertigt. Die Klinken werden aus einem kaltgepressten Edelstahlprofil 316 geschnitten und sind nahezu unzerbrechlich.

Die oberen Teile der Winden-Basis sind aus Aluminiumbronze gefertigt, um eine lange Lebensdauer zu gewährleisten. Die Zusammenstellung der Materialien sind mit großer Sorgfalt aufeinander abgestimmt und garantieren maximale Leistungsfähigkeit und Lebensdauer. Andersen Winden haben ein vergleichbares Gewicht wie gleich große Aluminium-Winden, bei einer deutlich längeren Lebensdauer.

## Merkmale

Andersen Windentrommeln verfügen über das unverwechselbare Power Rib™ System, das einen kontrolliertes Dichtholen und Fieren zu jeder Zeit gewährleistet. Die hochglanzpolierte Edelstahloberfläche minimiert die vertikale Reibung und lässt die belasteten Seilumdrehungen beim Drehen der Trommel leicht nach oben gleiten. Anders als bei herkömmlichen Winden, leidet das Tauwerk beim Fieren kaum.

Edelstahl-Rollen- und Kugellager tragen die höchsten Trommelbelastungen auf die Mittelwelle der Winde und minimieren so die Reibungsverluste. Der selbsttragende Selftailing-Arm kann zur optimalen Positionierung um 360 Grad gedreht werden (40ST und größer). Die Backen des Selftailers sind federbelastet und stellen sich deshalb auf viele Tauwerkdurchmesser ein. Die Wartung der Andersen Winden ist bei üblichem Gebrauch nur alle zwei Jahre erforderlich.

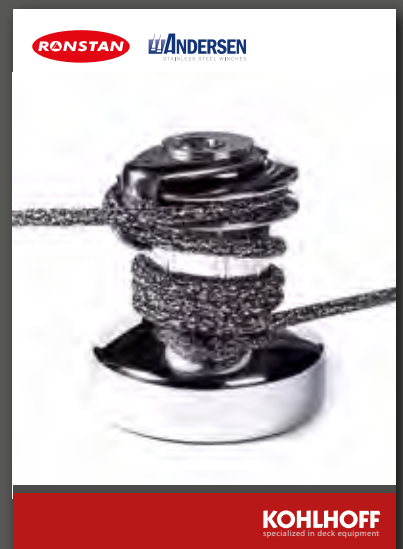




Foto: Bente Yachts

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