



# You might think it started in 1976. I would rather say the late 40s or early 50s.

A few nautical miles west of
Marstrand there's a small island
with a light house called *Pater Noster*.

It was built in 1868. Pater Noster is the
latin name of the prayer *Our Father*and its origin is much older than the light
house itself. In the old days when seamen and
fishermen approached Marstrand, they said that
prayer in hope of reaching their destination.

Marstrand is a fabulous sailing venue but it can quickly turn dangerous with hard winds, rough seas, a strong current and thousands of treacherous rocks.

This is where I grew up in the 40s and 50s, this is where I learned to both love and fear the sea, this

is where the Rutgerson philosophy was founded; we know what boat fittings must handle during the worst of circumstances and that's why our core values are innovation, performance and reliability.

In 1976 I invented the revolutionary *Super Ring* and founded Rutgerson Marin. I wanted to offer modern, user-friendly and reliable boat fittings to sailors all over the world. Today, after 40 years, these values are still true and we will continue to develop smart and innovative solutions for many years to come.

At Rutgerson we don't compromise about quality. Never have. Never will. You just don't do that if you're born and raised in a place like Marstrand.

Göran Rutgerson FOUNDER AND OWNER

## QUIGERSON Best in action

### CONTENTS

0

SUPER RINGS & TOOLS 4 Super Rings 4 Super Ring Closing Tools 6 Super Ring Removal Tools 7 Super Ring Hole Punching Tools 7
QUICK REEF SOLUTION 8
BATTEN FITTINGS & RECEPTACLES 9 Aluminum Receptacles 9 Composite Receptacles 10 Batten Fittings 11 Slide Connector 12 Spare Parts 13
BATTENS & ACCESSORIES 14 Flat Battens 14 Round Battens 15 PVC Endcaps 16 Stainless Steel Endcaps 16 Stainless Steel Batten Connectors 17 Aluminium Batten Connectors 17
PRESSURE ABSORBING SLIDES & BATTCARS . 18 Pressure Absorbing Slides
HEADBOARDS & CLEWBOARDS
CLEWBLOCKS 44

BLOCKS	45
SNATCH BLOCK	46
LOW FRICTION RINGS	47
ACCESSORIES Stainless Steel Rings Piston Hanks Sail Snap Hooks Plastic Sail Slides Sail Shackles Clamcleats E-cleats Single Slug Slides Rondo Chafe Protector	48 49 50 50 51 51 52 52
Tape Folder	53



Rutgerson's Super Ring, invented in the early 70's by the company's founder Göran Rutgerson, is still the most time efficient and commonly used solution on the market. The ring is pressed directly onto the cloth. There is no cutting, sewing, webbing, taping or other action needed, you simply punch a hole and press in the ring. The teeth penetrate easily without damaging the surrounding area of the cloth and bend uniformly to spread the load. The strength of the construction and the unsurpassed grip on the cloth makes the Super Ring perfect not only for sails but for all kinds of cloth, from heavy covers to tents and parachutes.

The standard version of the Super Ring is made of mirror-polished high grade Swedish stainless steel and comes in many different sizes and dimensions. It is also available in a more price-competitive unpolished version for industrial applications, whilst the latest addition to the range is an almost 50% lighter version made of non-conductive titanium which is ideal on carbon sails.

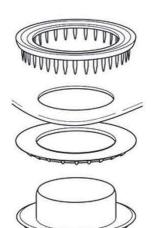
The Super Ring is delivered in a set with a toothed washer, a centre piece and a plastic insert. Closing and removal tools are ordered separately.

			Final dimensions [mm]					
Part no	Product description	Hole punch Ø [mm]	Inner Ø	Outer Ø	Steel thickness Liner/Tooth part	Approx max load [kg]	Packed per	
Super Ring	standard version							
1000-10	SR10 Super Ring Standard	11	10	23	0,05 / 0,05	250	100	
1000-12	SR12 Super Ring Standard	13	12	26	0,5 / 0,5	330	100	
1000-14	SR14 Super Ring Standard	15	14	28	0,8 / 0,8	500	100	
1000-14L	SR14 Super Ring Long	15	14	28	0,8 / 0,8	500	50	
1000-20	SR20 Super Ring Standard	22	20	40	1,5 / 1,0	1500	100	
1000-20LD	SR20LD Super Ring Light Duty	22	20	40	1,0 / 1,0	1125	100	
1000-25	SR25 Super Ring Standard	28	25	46	1,5 / 1,0	1590	100	
1000-25LD	SR25LD Super Ring Light Duty	28	25	46	1,0 / 1,0	1400	100	
1000-25SL	SR25SL Super Ring Super Light Duty	28	25	46	0,6 / 0,6	450	100	
1000-35	SR35 Super Ring Standard	38	35	58	1,5 / 1,5	2045	50	
1000-45	SR45 Super Ring Standard	48	45	72	1,5 / 2,0	2500	20	
1000-55	SR55 Super Ring Standard	60	55	86	2,0 / 2,5	3185	1	
Titanium Su	per Ring							
3000-14	TSR14 Titanium Super Ring	15	14	28	0,8 / 0,8	375	30	
3000-20	TSR20 Titanium Super Ring	22	20	40	1,5 / 1,0	840	20	
3000-25	TSR25 Titanium Super Ring	28	25	46	1,5 / 1,0	1190	20	
3000-35	TSR35 Titanium Super Ring	38	35	58	1,5 / 1,5	1530	20	
3000-45	TSR45 Titanium Super Ring	48	45	72	1,5 / 2,0	1875	10	
Super Ring	for Industrial applications - unpolished							
1005-10	SR10 Super Ring Unpolished	11	10	23	0,5 / 0,5	250	500	
1005-12	SR12 Super Ring Unpolished	13	12	26	0,5 / 0,5	330	500	
1005-20	SR20 Super Ring Unpolished	22	20	40	1,5 / 1,0	1500	500	
1005-20LD	SR20LD Super Ring Light Duty Unpolished	22	20	40	1,0 / 1,0	1125	500	
1005-25LD	SR25LD Super Ring Light Duty Unpolished	28	25	46	1,0 / 1,0	1400	500	
1005-25SL	SR25SL Super Ring Light Duty Unpolished	28	25	46	0,6 / 0,6	450	500	
1005-35	SR35 Super Ring Unpolished	38	35	58	1,5 / 1,5	2045	250	

## QUIGERSON Best in action

### Super Ring Selection Guide





				Patch weight		
Ring size	Suitable application	Hole punch Ø [mm]	Press force on die [tonnes]	Ounces/Sailmakers yard [smoz]*	grams/sq.metre [g/m²]	
10	Sailboards, dinghy's and reef points	11	Press by hand	25 35	1100 1500	
12	Sailboards, dinghy's and reef points	13	Press by hand	25 35	1100 1500	
14	Dinghy's light keel boats and reef points	15	3-5	25 40	1100 1700	
14L	Industrial and thick cloth applications	15	3-5	30 45	1300 1900	
20	25-30ft boats	22	11-13	40 70	1700 3000	
20LD	Sailboards and spinnakers	22	8-10	30 70	1300 3000	
25	28-32 ft boats	28	15	50 70	2100 3000	
25LD	Spinnakers and 28-32 ft boats	28	11-13	50 70	2100 3000	
25SL	Slider Parachutes and spinnakers	28	6-8	20 40	900 1700	
35	30-36 ft boats and heavy parachutes	38	22	70 90	3000 3900	
45	34-46 ft boats	48	25	80 100	3400 4300	
55	46-80ft boats	60	25 (1st pressing) 30 (2nd pressing)	80 100	3400 4300	
Titanium						
14	Dingy's, light keel boats and reef points	15	3-5	25 40	1100 1700	
20	25-30 ft boats	22	9-12	40 70	1700 3000	
25	28-32 ft boats	28	13	50 70	2100 3000	
35	30-36ft boats and heavy parachutes	38	20	70 90	3000 3900	
45	30-36ft boats and heavy parachutes	48	23	80 100	3400 4300	

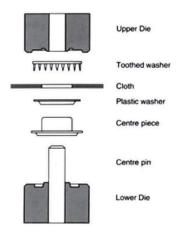
Press speed MAX 5,0 m/min

Sailmaker Ounces [smoz]: The weight in Ounces of a 36"x28.5" piece of cloth. Please note that recommended loads and max loads are typical values for a ring inserted in polyester reinforcement sailcloth in as many layers as required to achieve the specified patch weight

### **Super Ring Closing Tools**

The Closing tools for Rutgerson Super Rings are made of high grade tool steel that has been hard chromed and hardened to the highest possible industrial standard. The tools for SR10 and SR12 are suitable for hand hammering or hydraulic press operations. The SR55 requires a two-step pressing process and this tool is constructed as a four piece tool.

For maximum durability it is mandatory to keep the tools clean from dirt and not to exceed the recommended press force on the dies listed below. The Closing tools are specially constructed for pressing no other rings than the Rutgerson Super ring. This can cause substantial damage to the tool. The tools should be replaced every 10 000 presses if proper maintenance has been performed.









SRT20 - 25 - 25SI - 35 - 45



SRT55

Part no	Product description	For SR Ring part #	Press force on dies [tonnes]	Packed per	Numbers of parts	Part No Spare Parts	Product description
Super Ring	g closing tools						
1030-10	SRT10 Super Ring Closing Tool 10	1000-10 1005-10	Press by hand	Set	3	1030-001 1030-10-1 1030-10-2	Guide pin Bottom part Upper part
1030-12	SRT12 Super Ring Closing Tool 12	1000-12 1005-12	Press by hand	Set	3	1030-001 1030-12-1 1030-12-2	Guide pin Bottom part Upper part
1030-14	SRT14 Super Ring Closing Tool 14	1000-14 1000-14L 3000-14	3 - 5 / Press by hand	Set	3	1030-001 1030-14-1 1030-14-2	Gude pin Bottom part Upper part
1030-20	SRT 20 Super Ring Closing Tool 20	1000-20 1000-20LD 1005-20 1005-20LD 3000-20	11 - 13	Set	3	1030-004 1030-20-1 1030-20-2	Guide pin Bottom part Upper part
1030-25	SRT25 Super Ring Closing Tool 25	1000-25 1000-25LD 1005-25LD 3000-25	15	Set	3	1030-002 1030-25-1 1030-25-2	Guide pin Bottom part Upper part
1032-25	SRT25SL Super Ring Closing Tool 25SL	1000-25SL 1005-25SL	6 - 8	Set	3	1030-002 1032-25-1 1032-25-2	Guide pin Bottom part Upper part
1030-35	SRT35 Super Ring Closing Tool 35	1000-35 1005-35 3000-35	22	Set	3	1030-003 1030-35-1 1030-35-2	Guide pin Bottom part Upper part
1030-45	SRT45 Super Ring Closing Tool 45	1000-45 3000-45	25	Set	3	1030-003 1030-45-1 1030-45-2	Guide pin Bottom part Upper part
1030-55	SRT55 Super Ring Closing Tool 55	1000-55	25 (1st pressing) 30 (2nd pressing)	Set	4	1030-003 1030-55-01 1030-55-02 1030-55-03	Guide pin Bottom part Upper part Upper part

### Super Ring Removal Tools

The Rutgerson Ring Removal Tool is a simple and well engineered tool that quickly presses and disassembles the ring from the cloth without damaging or weakening the structural integrity of the cloth.

This hydraulic, press operated tool will reduce a two hour operation

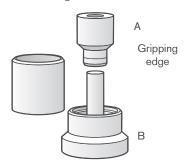
to 30 seconds. New rings may be pressed into the original cloth immediately, using the same holes in the cloth for a new toothed washer.



Part no	Product description	For SR Ring part #	Packed per	Part No Spare Parts	Product description
Super Ring	g removal tools				
1040-14	RP14 Super Ring Removal Tool	14	Set	1040-001 1040-14-1 1040-14-2 1040-14-3	Guide pin Bottom part Upper part Support ring
1040-20	RP20 Super Ring Removal Tool	20	Set	1030-002 1040-20-1 1040-20-2 1040-20-3	Guide pin Bottom part Upper part Support ring
1040-25	RP25 Super Ring Removal Tool	25	Set	1030-002 1040-25-1 1040-25-2 1040-25-3	Guide pin Bottom part Upper part Support ring
1040-35	RP35 Super Ring Removal Tool	35	Set	1030-003 1040-35-1 1040-35-2 1040-35-3	Guide pin Bottom part Upper part Support ring
1030-45	RP45 Super Ring Removal Tool	45	Set	1030-003 1040-45-1 1040-45-2 1040-45-3	Guide pin Bottom part Upper part Support ring
1030-55	RP55 Super Ring Removal Tool	55	Set	1030-003 1040-55-1 1040-55-2 1040-55-3	Guide pin Bottom part Upper part Support ring

#### How to use the Closing Tool

- 1. Place the pressed ring on the Lower Die (B) with the teeth part facing upwards and the liner part at the bottom.
- 2. Place the *Punch* (A) over the guide post with the *Gripping Edge* down on top of the ring. The Cutting Edge is recognised by its concave shape.
- 3. Press until the bottom of the ring has sheared completely free of the toothed part, but not more than when the bottom of the red band is level with the ring.
- 4. When the teeth and liner parts have opened, place them on the support ring and use a chisel or similar tool the press the ring from the cloth.



### Super Ring Hole Punches

These Hole Punches are produced from high quality tool steel. They are long lasting and trouble free. When using together with Super Rings it is essential that the hole punch with the correct specified dimension is used.

Part no	Product description	Hole punch Ø [mm]	Packed Per
Super Ring	Hole Punches		
1060-11	Hole Punch for SR10	11	Pc
1060-13	Hole Punch for SR12	13	Pc
1060-15	Hole Punch for SR14	15	Pc
1060-22	Hole Punch for SR20	22	Pc
1060-28	Hole Punch for SR25	28	Pc
1060-38	Hole Punch for SR35	38	Pc
1060-48	Hole Punch for SR45	48	Pc
1060-60	Hole Punch for SR55	60	Pc



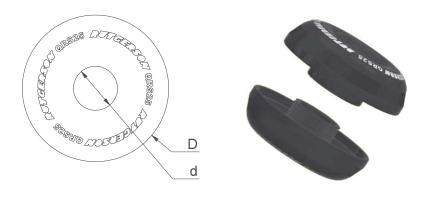
### QUICK REEF SOLUTION

Rutgerson's innovation QRS (Quick Reef solution) is the perfect solution for smooth reefing and a unique solution on the market. The ring could be described as a low friction ring, but made of two parts that are fastened together through the Super Ring and sailcloth, which centralises the weight on the sail. Therefore, the installation is very quick and easy, no webbing is required. Another benefit with this solution is that the boatowner can choose to have the reef line on starboard and/or port side of the sail and it's also possible to change sides.

The installed QRS gives the reefing line a larger radius through the reefing point and the unique hard-coat and Teflon-impregnated anodization provides even better low friction properties. The QRS exists for three Super Ring sizes: SR25, SR35 and SR45.



		Use with	D Outer diameter	d Hole diameter	Max load	Thickness of sail reinforcement		Weight			
Part no	Product description	Super Ring	[mm]	[mm]	[kg] *	Min [mm]	Max [mm]	[gr]			
Quick Reef Solution											
QRS25	Quick Reef Solution 25	SR25	50	15	1590	1	6	54			
QRS35	Quick Reef Solution 35	SR35	65	23	2045	1,5	7,5	121			
QRS45	Quick Reef Solution 45	SR45	80	30	2500	2	8	201			



#### Core benefits

- Unequalled easy reefing
- Centralised weight on the sail
- No more moving parts
- Low friction
- Modern design
- Made in Sweden



### **BATTEN FITTINGS & RECEPTACLES**

### **Aluminum Receptacles**

This batten receptacles range meets the increasing demand for big boat equipment. The largest model is suitable for boats up to 90ft monohull and 80ft multihull. A unique aspect of these receptacles is that they have a user-friendly push button function, which makes it very easy to remove the sliding lid. No extra tools are required. The receptacles are made of stainless steel and black anodized aluminum, and can be ordered with titanium screws for carbon fibre sails.



1601, 1602



1610, 1612



1622, 1624

			Dimensions [mm]								
Part no	Product description	А	В	C <sup>1</sup>	Battcar thread	Max width flat batten	Max Ø round batten	Suitable OR-batten	Fits battcar ref #	Weight [gr]	Packed per
Batten R	Receptacles										
1601	Batten receptacle 1601	135	55	24	M10	25 x 10	16	OR3 - OR4	1540-xx-06	400	1
1602	Batten receptacle 1602	135	55	24	M12	25 x 10	16	OR3 - OR4	1540-xx-05	400	1
1610	Batten receptacle 1610	153	67	32	M10	34 x 14	22	OR5	1540-xx-06	475	1
1612	Batten receptacle 1612	153	67	32	M12	34 x 14	22	OR5	1540-xx-05	475	1
1622	Batten receptacle 1622	227	67	39	M12	36 x 16	26	OR5	1540-xx-05	857	1
1624	Batten receptacle 1624	227	67	39	M14	36 x 16	26	OR5	any M14 battcar	857	1
Batten R	Receptacles with Titanum scre	W									
1601T	Batten receptacle 1601T with Titanium screw	135	55	24	M10	25 x 10	16	OR3 - OR4	1540-xx-06	400	1
1602T	Batten receptacle 1602T with Titanium screw	135	55	24	M12	25 x 10	16	OR3 - OR4	1540-xx-05	400	1
1610T	Batten receptacle 1610T with Titanium screw	153	67	32	M10	34 x 14	22	OR5	1540-xx-06	475	1
1612T	Batten receptacle 1612T with Titanium screw	153	67	32	M12	34 x 14	22	OR5	1540-xx-05	475	1
1622T	Batten receptacle 1622T with Titanium screw	227	67	39	M12	36 x 16	26	OR5	1540-xx-05	857	1
1624T	Batten receptacle 1624T with Titanium screw	227	67	39	M14	36 x 16	26	OR5	any M14 battcar	857	1





### Composite Receptacles

Rutgerson adjustable batten receptacles are manufactured in a highly durable, UV resistant composite material and can be used with all M10 threaded battcars and bolts.

1595



#### 1580

Receptacle for 25-33ft boats designed to retain both flat and round full battens up to 30mm width or  $\emptyset$ 10mm.



Receptacle for boats up to 30-42ft designed to retain flat battens of maximum 20 x 8mm, 30 x 6 or round battens of maximum  $\emptyset$ 10mm.



#### 1590

Receptacle for 33-45ft boats designed to retain flat battens up to 40x6mm.



Receptacle for boats 33-45ft designed for thicker battens and Blue Streak up to 25x10mm.



1596

Receptacle for boats 33-45ft designed for round battens up to  $\emptyset$  12mm.



Receptacle for 42-52ft boats. User-friendly design with the push-buttom to open the lid.

			Dimensions [mm]								
Part no	Product description	А	В	C <sup>1</sup>	C <sup>2</sup>	Max width flat batten	Max Ø batten	Suitable OR-batten	Fits battcar ref #	Weight [gr]	Packed per
Batten Receptacles											
1580	Batten receptacle 1580	110	49	21	5	20 x 4 30 x 6 20 x 10	10	OR1	153X-xx-05 153X-xx-09	120	10
1587	Batten receptacle 1587	125	61	19	7	20 x 8 30 x 6	10	OR1 - OR2	153x-xx-05 153x-xx-09 125x-xx**	208	10
1590	Batten receptacle 1590	145	78	20	7	40 x 6,5			153x-xx-05 153x-xx-09	185	10
1595	Batten receptacle 1595	145	78	20	7	25 x 10		OR1 - OR4	153x-xx-05 153x-xx-09	221	10
1596	Batten receptacle 1596	145	78	20	7		12		153x-xx-05 153X-XX-09	232	10
1597	Batten receptacle 1597	140	60	22	6	20 x 10	14	OR1 - OR4	153x-xx-05 153x-xx-09	246	10

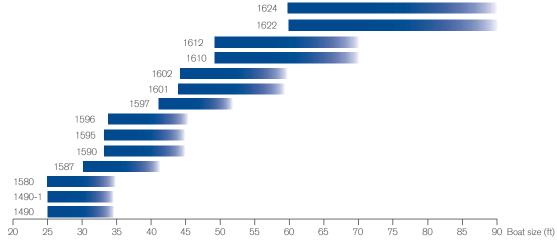
### **Batten Fittings**

Rutgerson's 1490 batten fitting system is a cost efficient and flexible solution for fully battened applications. Available for both knock-on shackle or battcar applications.



			Dimensions [mm]							
Part no	Product description	Colour	Length	Width	Max width flat batten	Max Ø round batten	Weight [gr]	Fits battcar ref #	Packed per	
Batten Fittings										
1490	Batten fitting 1490	White	84	63	45	12	63	1525 1526	20	
1490-1	Batten fitting 1490-1, cut to fit swivel	White	84	63	45	12	45	1530-xx-03 1531-xx-03 1530-xx-15	20	
1490B	Batten fitting 1490B	Black	84	63	45	12	63	1525 1526	20	
1490-1B	Batten fitting 1490-1B, cut to fit swivel	Black	84	63	45	12	45	1530-xx-03 1531-xx-03 1530-xx-15	20	

#### How to choose Batten Fittings & Receptacle



Please note that these are general recommendations, based on monohull standard boats cruising during average weather conditions. Selection of the appropriate product by the buyer shall rest solely with the buyer and Rutgerson accepts no responsibility for any such selection.

### Slide Connector

The Rutgerson Slide Connector is a simple, yet clever product designed to be used as a linkage between our batten receptacles and pressure absorbing slides. It effectively transfers the pressure from the batten onto the slide and works as a cost-efficient alternative to standard battcars on boats up to 35 feet.

It is made of stainless steel and black composite and has a threaded M10 stud in one end and a universal toggle in the other.

The Slide Connector is developed exclusively for Rutgerson's Pressure Absorbing Slides and recommended to be used with batten receptacle 1580 or 1587.





Part No	Product description	Color	Thread	Packed per	Weight [gr]
Slide Connector					
1529	Slide Connector	Black	M10	10	42



Photo: Curtesy of Elvstrøm Sails



### Spare Parts for Batten Fitting & Receptacles

Part no	Product description	Catalogue reference page #	Packed per
Spare parts for E	latten Fitting & Receptacles		
1490-11	Spare part kit for batten fitting 1490	11	Set
1580-11	Spare part kit for batten receptacle 1580	10	Set
1580-12	Sliding hatch for batten receptacle 1580	10	Pc
159X-12	Sliding hatch for batten receptacle 1590, 1595	10	Pc
1597-12	Sliding hatch for batten receptacle 1597	10	Pc
160X-12	Sliding hatch for batten receptacle 1601, 1601T, 1602, 1602T	9	Pc
161X-12	Sliding hatch for batten receptacle 1610, 1610T, 1612, 1612T	9	Pc
162X-12	Sliding hatch for batten receptacle 1622, 1622T, 1624, 1624T	9	Pc





### **BATTENS & ACCESSORIES**

### Flat Battens

Pulltruded flat glass fibre battens for high durability.

Dimensions [mm]		ons [mm] Stiffness Lei		Length Roll outer Ø			
Part no	Part no Width Thickness		[gr/100mm bending] [m]		[mm]	Weight [gr]	Packed per
Glass Fibre FL	AT BATTENS, F	Pulltruded					
3915-23-100	15	2-3	360	100	1000	7000	Pc
3922-03-100	22	3	1060	100	1000	13600	Pc
3930-03-100	30	3	1450	100	1000	19000	Pc
3930-04-50	30	4	3460	50	1000	12500	Pc
3930-05-50	30	5	6780	50	1000	15000	Pc
3940-04-50	40	4	4637	50	1000	18000	Pc

### **Round Battens**

Pulltruded round glass fibre battens, and carbon fibre battens for extra strength.

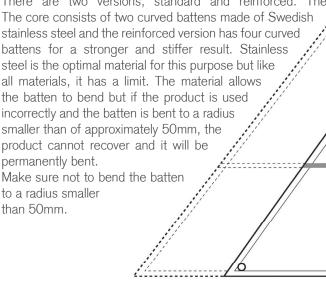
	Dimensio	ons [mm]	Length	Weight	
Part no	Outer Ø	Inner Ø	[m]	[gr]	Packed per
Longitudinal carbon	on fibre round Battens, pulltruded				
3980-08-038	7,90	4,00	3,8	175	Pc
3980-10-038	9,90	5,50	3,8	300	Pc
Glass Fibre round I	Battens, pulltruded				
3975-08-038	7,90	4,00	3,8	277	Pc
3975-10-038	9,90	5,5	3,8	357	Pc



### Roller Battens

Rutgerson Roller Battens are established and wide spread as a solution to furling sails world-wide. The product was originally an innovation from Rutgerson and there is today an extensive range of sizes. The roller batten rolls up smoothly on the furling system and allows the boat owner to use a roller furl cover. It can also be used in furling mainsails.

There are two versions, standard and reinforced. The reinforced battens will be indicated with an "R".







		Dimensi	ons [mm]	Weight	Recommended	
Part no	Product description	Width	Length	[gr]	Boatsize	Packed per
Roller Batten fo	or roller furling headsails					
3141-030	Roller Batten 40x300mm	40	300	53	<32ft	5
3141-040	Roller Batten 40x400mm	40	400	70	<32ft	5
3141-050	Roller Batten 40x500mm	40	500	87	<32ft	5
3141-060	Roller Batten 40x600mm	40	600	102	<32ft	5
3151-050	Roller Batten 50x500mm	50	500	118	30-40ft	5
3151-060	Roller Batten 50x600mm	50	600	145	30-40ft	5
3151-070	Roller Batten 50x700mm	50	700	166	30-40ft	5
3171-070	Roller Batten 70x700mm	70	700	235	>37ft	3
3171-080	Roller Batten 70x800mm	70	800	270	>37ft	3
3171-090	Roller Batten 70x900mm	70	900	290	>37ft	3
3171-140	Roller Batten 70x1400mm	70	1400	360	>37ft	2
Roller Batten fo	or roller furling headsails, Reinforced					
3141-030R	Roller Batten 40x300mm, Reinforced	40	300	85	<40ft	5
3141-040R	Roller Batten 40x400mm, Reinforced	40	400	112	<40ft	5
3141-050R	Roller Batten 40x500mm, Reinforced	40	500	140	<40ft	5
3141-060R	Roller Batten 40x600mm, Reinforced	40	600	163	<40ft	5
3151-050R	Roller Batten 50x500mm, Reinforced	50	500	190	40-50ft	5
3151-060R	Roller Batten 50x600mm, Reinforced	50	600	230	40-50ft	5
3151-070R	Roller Batten 50x700mm, Reinforced	50	700	265	40-50ft	5

### **PVC** Endcaps

Vinyl endcaps for usage on pulltruded flat battens (see page 14).

Part no	Product description	Packed per					
PVC Endcaps,	PVC Endcaps, white coloured for flat battens						
3992-10	Batten endcap, 10mm white vinyl	100					
3992-11	Batten endcap, 11mm white vinyl, round	100					
3992-15	Batten endcap, 15mm white vinyl	100					
3992-18	Batten endcap, 18mm white vinyl	100					
3992-22	Batten endcap, 22mm white vinyl	100					
3992-26	Batten endcap, 26mm white vinyl	100					
3992-30	Batten endcap, 30mm white vinyl	100					
3992-40	Batten endcap, 40mm vinyl	100					



### Stainless Steel Endcaps

These endcaps are for vertical round battens, and are available in a range of lengths. They are made in Stainless, acid proof steel and are supposed to be used together with the Batten connectors.



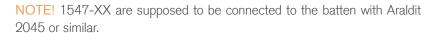
NOTE! 1545-XX are supposed to be connected to the batten with Araldit 2045 or similar.

		D	imensions [m	m]	Packed
Part no	Product description	A Length	B Length	C Outer Ø	per
Stainless Steel	Endcaps for vertical round battens				
1545-06-57	SS Endcap for Ø6mm round batten, 57mm	57	97	8	Pc
1545-06-85	SS Endcap for Ø6mm round batten, 85mm	85	125	8	Pc
1545-06-150	SS Endcap for Ø6mm round batten, 150mm	150	250	8	Pc
1545-08-57	SS Endcap for Ø8mm round batten, 57mm	57	97	10	Pc
1545-08-85	SS Endcap for Ø8mm round batten, 85mm	85	125	10	Pc
1545-08-150	SS Endcap for Ø8mm round batten, 150mm	150	250	10	Pc
1545-10-57	SS Endcap for Ø10mm round batten, 57mm	57	97	12	Pc
1545-10-85	SS Endcap for Ø10mm round batten, 85mm	85	125	12	Pc
1545-10-150	SS Endcap for Ø10mm round batten, 150mm	150	250	12	Pc



### Stainless Steel Batten Connectors

These connectors are made in Stainless, acid proof steel and joins round battens with identical diameter. They are specially constructed for vertical battens in roller furling mainsails, and the refined design enables the sail to easily be furled.





Part no	Product description	For batten Ø [mm]	Assembled outside Ø [mm]	Length [mm]	Packed per
Round Batter	n Connector, AISI 316 Stainless Steel, Straig	ht dividable			
1547-06	Round Batten connector 6mm	6	8	200	Set
1547-08 Round Batten connector 8mm		8	10	200	Set
1547-10	Round Batten connector 10mm	10	12	200	Set

### **Aluminium Batten Connectors**

These aluminum connectors are made to connect round battens with the same diameter or battens with different diameter.

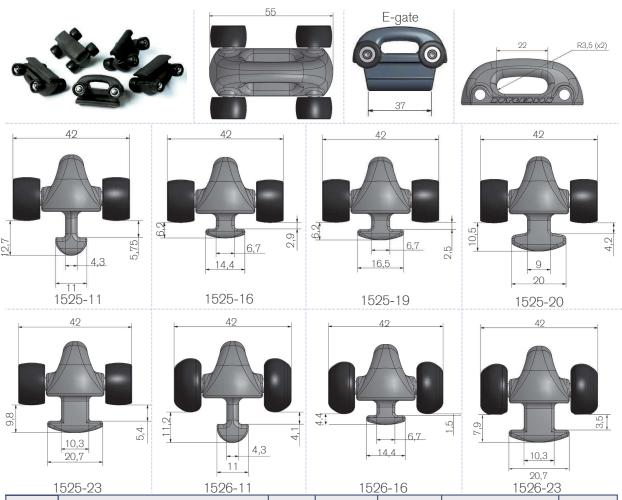
Part no	Product description	Batten 1 Ø [mm]	Batten 2 Ø [mm]	Packed per
Round Batten	step connector			
1548-0406	Round Batten connector step 4-6mm	4	6	Pc
1548-0608	Round Batten connector step 6-8mm	6	8	Pc
1548-0810	Round Batten connector step 8-10mm	8	10	Pc
1548-1013	Round Batten connector step 10-13mm	10	13	Pc
1548-1316	Round Batten connector step 13-16mm	13	16	Pc
Round Batten	straight connector			
1548-0606	Round Batten connector straight 6-6mm	6	6	Pc
1548-0808	Round Batten connector straight 8-8mm	8	8	Pc
1548-1010	Round Batten connector straight 10-10mm	10	10	Pc
1548-1313	Round Batten connector straight 13-13mm	13	13	Pc
1548-1616	Round Batten connector straight 16-16mm	16	16	Pc





### PRESSURE ABSORBING SLIDES

The Rutgerson Pressure Absorbing Slides have a unique design which requires minimum maintenance and makes the mainsail extremely easy to hoist and lower. The slides are made of high-strength composite and are suitable for boats up to 50ft monohull and 40ft multihull. The assortment consists of five different profiles and two wheel sizes to fit most masts.



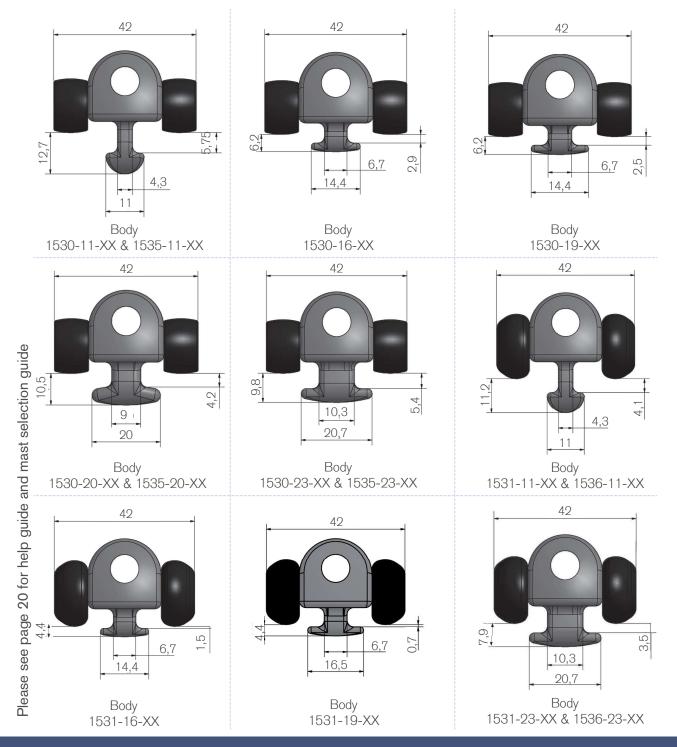
Part no	Part no Product description		Length / Stack height	Wheel Ø [mm]	Recommended fitting	Packed per
Pressure at	osorbing slide					
1525-11	Pressure absorbing slide 11mm	11mm	55mm	15,5	1490, 1490B or Webbing	10
1525-11E	Pressure absorbing slide 11mm, E-gate	11mm	55mm	15,5	1490, 1490B or Webbing	10
1525-16	Pressure absorbing slide 16mm	16mm	55mm	15,5	1490, 1490B or Webbing	10
1525-19	Pressure absorbing slide 19mm	19mm	55mm	15,5	1490, 1490B or Webbing	10
1525-20	Pressure absorbing slide 20mm	20mm	55mm	15,5	1490, 1490B or Webbing	10
1525-23	Pressure absorbing slide 23mm	23mm	55mm	15,5	1490, 1490B or Webbing	10
1526-11	Pressure absorbing slide 11mm with big wheels	11mm	55mm	19,5	1490, 1490B or Webbing	10
1526-16	Pressure absorbing slide 16mm with big wheels	16mm	55mm	19,5	1490, 1490B or Webbing	10
1526-19	Pressure absorbing slide 19mm with big wheels	19mm	55mm	19,5	1490, 1490B or Webbing	10
1526-20	Pressure absorbing slide 20mm with big wheels	20mm	55mm	19,5	1490, 1490B or Webbing	10
1526-23	Pressure absorbing slide 23mm with big wheels	23mm	55mm	19,5	1490, 1490B or Webbing	10

General tolerances for all dimentions equals ±0,5 mm

### **BATTCARS**

The Rutgerson Battcar solution has proven to be a winner for sailors on all oceans and in all environments. Available for a wide variety of mast applications, this fullbatten car makes the mainsail safer and simpler to handle and trim whilst sailing by requiring minimum maintenance, and is easy to hoist and lower. All Rutgerson Battcars have a tolerance of 0,5mm.

#### Battcar General Dimensions





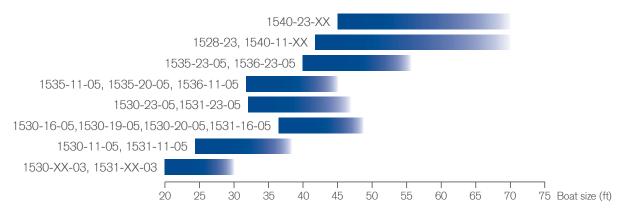


#### **Rutgerson Battcar ref #**

	1525-11 1530-11-XX 1535-11-XX 1540-11-XX	1525-16 1530-16-XX	1525-19 1530-19-XX	1525-20 1530-20-XX	1525-23 1530-23-XX 1535-23-XX 1528-23 1540-23-XX	1526-11 1531-11-XX 1536-11-XX	1525-11E 1530-11-XXE
Equivalent Holt Allen		HA89	HA90		HA91		
Sparcraft	F135, F195, F305, F385, F460, I620, S622, I830, S830*				NG60, NG70, NG80, NG86, NG105 F580, F740, F1060, F1395 S1630, S2100 F2390, F3360, F4600 S830*, S1210	F78, F101, S137, S180, S260, S330, IMS80, IMS256	
Seldén				C137, C153, C156, C175, C193, C211, C227, C245, C264, C285, C304			E138, E155, E170, E177, E189, E206, E224, E237, E274, D137, D160
John Mast	135D, 148D, 150D, 165D, 167D, 185D, 186D, 208D, 222D, 245D, 280D, 305D, 335D				220E, 262E, 290E	150E, 116E 125E	
Z Spar	Z301, Z351, Z380, Z401, Z501, Z531, Z601, Z602, Z701, Z702, Z902				Z1001, Z1250, Z1400, Z1602	Z170, Z190, Z230, Z265	
Soromap	NF200, NF270, NF350, NF430, NF540, NF710, NF1410						

For information regarding applications other mast sections than above specified, please contact Rutgerson or your local distributor.

\*For mast S830 and S1210 from Sparcraft produced before 2015, use 11 mm model and for S830 produced after 2015, use 23 mm models.



Please note that these are general recommendations, based on monohull standard boats cruising during average weather conditions. Selection of the appropriate product by the buyer shall rest solely with the buyer and Rutgerson accepts no responsibility for any such selection.

### How to choose ref number for Slides & Battcars

#### Pressure absorbing slide reference:

- 1. Choose batten fitting on Page 11.
- 2. Choose body ref no depending on mast section in the selection guide on Page 20.

#### Wheel size reference no

- 5 Standard wheel version
- 6 Bigger wheel version
- Boatsize 65ft monohull 47ft multihull

Body refe	erence no	For batten fitting
11 / 11E	Pressureabsorbing slide 11mm	1490 and 1490G
16	Pressure absorbing slide 16mm	1490 and 1490G
19	Pressure absorbing slide 19mm	1490 and 1490G
20	Pressure absorbing slide 20mm	1490 and 1490G
23	Pressure absorbing slide 23mm	1490 and 1490G

1 5 2 X - XX

#### Battcar reference:

- 1. Choose batten fitting/receptacle on Page 9-11.
- 2. Choose application ref no depending on fitting/receptacle on Page 22-27.
- 3. Choose body ref no depending on mast section in the selection guide on Page 20.

#### Material or wheel size reference no

- 0 Standard wheel and material version
- Bigger wheel and standard material version
- 5 Standard wheel and high load material version
- 6 Bigger wheel and high load material version

#### Application reference no

03 Battcar with swivel

05/05E Battcar with SS M10 thread

09/09E Battcar with SS M10 thread (extended)

10 Intermediate battcar

#### Battcar with SS fork (no swivel)

### For batten Fitting or Receptacle

1490 and 1490G

1580, 1590 and 1595

1580, 1590 and 1595

-

1490-1 and 1490-1G

15XX - XX - XX

15

#### Size referense no

- 3 Regular battcar assortment
- 4 Limousine battcar Maximum Boatsize 65ft monohull 47ft multihull

#### Body reference no

- 11 Battcar body 153041-XX, 1531-11-XX and 1535-11-XX
- 16 Battcar body 1530-16-XX and 1531-16-XX
- 19 Battcar body 1530-19-XX
- 20 Battcar body 1530-20-XX
- 23 Battcar body 1530-23-XX and 1535-23-XX

### **Battcar Tester**

The Battcar tester 1530 is a very useful tool to determine which battcar model that fits the boat-owner's mast. It consists of a fan with different testers that includes all the dimensions for the Rutgerson Battcar System



1530

### Battcar with Swivel

The Rutgerson Battcar has a unique design which requires minimum maintenance and makes the mainsail extremely easy to hoist and lower. This model with swirvel is made to fit together with the Rutgerson 1490-1/1B Batten Fittings. The Rutgerson Battcar is suitable for boats up to 30ft monohull and 25ft multihull, and comes in five different profiles and two wheel sizes to fit most masts. This product is made of high strength composite, aluminum and stainless steel. The slot width (bolt/shackle) is 44mm.



1530-11-03



1531-11-03

Part no	Product description	Profile	Length / Stack height	Wheel Ø [mm]	Adaptor material	Recommended Receptacle / Fitting	Approx. Push BL [kg]	Approx. Pull BL [kg]	Weight [gr]	Packed per
Battcar 1530-	Battcar 1530-xx-03 with swivel									
1530-11-03	Battcar, 11mm with swivel	11mm	66mm	15,5	Aluminium	1490-1, 1490-1B	290	260	83	10
1530-16-03	Battcar, 16mm with swivel	16mm	66mm	15,5	Aluminium	1490-1, 1490-1B	290	260	81	10
1530-19-03	Battcar, 19mm with swivel	19mm	66mm	15,5	Aluminium	1490-1, 1490-1B	290	260	83	10
1530-20-03	Battcar, 20mm with swivel	20mm	66mm	15,5	Aluminium	1490-1, 1490-1B	290	260	87	10
1530-23-03	Battcar, 23mm with swivel	23mm	66mm	15,5	Aluminium	1490-1, 1490-1B	290	260	87	10
1531-11-03	Battcar, 11mm with swivel and big wheels	11mm	66mm	19,5	Aluminium	1490-1, 1490-1B	290	260	83	10
1531-23-03	Battcar, 23mm with swivel and big wheels	23mm	66mm	19,5	Aluminium	1490-1, 1490-1B	290	260	87	10
1535-11-03	Battcar High Load, 11mm w swivel	11mm	66mm	15,5	Aluminium	1490-1, 1490-1B	290	260	87	5
1535-23-03	Battcar High Load, 23mm w swivel	23mm	66mm	15,5	Aluminium	1490-1, 1490-1B	290	260	87	5

### Battcar with M10 Thread

The Rutgerson Battcar has a unique design which requires minimum maintenance and makes the mainsail extremely easy to hoist and lower. This model is suitable for boats up to 50ft monohull and 40ft multihull. It is available in both high strength and standard version, and comes in five different profiles and two wheel sizes to fit most masts. This product is made of high strength composite and stainless steel. The slot width (bolt/shackle) is 30mm.





1530-11-05 1535-11-05

1531-11-05 1536-11-05

Part no	Product description	Profile	Length / Stack height	Wheel Ø [mm]	Adaptor material	Recommended Re- ceptacle / Fitting	Approx. Push BL [kg]	Approx. Pull BL [kg]	Weight [gr]	Packed per
Battcar 1530-x	x-05 with M10 stainless steel thread									
1530-11-05	Battcar, 11mm with M10 thread	11mm	66mm	15,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	350	105	10
1530-11-05E	Battcar, 11mm with M10 thread, E-gate	11mm E-gate	66mm	15,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	350	105	10
1530-16-05	Battcar, 16mm with M10 thread	16mm	66mm	15,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	400	105	10
1530-19-05	Battcar, 19mm with M10 thread	19mm	66mm	15,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	420	103	10
1530-20-05	Battcar, 20mm with M10 thread	20mm	66mm	15,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	430	109	10
1530-23-05	Battcar, 23mm with M10 thread	23mm	66mm	15,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	450	109	10
1531-11-05	Battcar, 11mm with M10 thread and big wheels	11mm	66mm	19,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	575	350	105	10
1531-16-05	Battcar, 16mm with M10 thread and big wheels	16mm	66mm	19,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	400	105	10
1531-19-05	Battcar, 19mm with M10 thread and big wheels	19mm	66mm	19,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	400	105	10
1531-20-05	Battcar, 20mm with M10 thread and big wheels	20mm	66mm	19,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	430	105	10
1531-23-05	Battcar, 23mm with M10 thread and big wheels	23mm	66mm	19,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	450	113	10
1535-11-05	Battcar High Load, 11mm with M10 thread	11mm	68mm	15,5	Stainless Steel	1590, 1595, 1596, 1597, 1601, 1610	785	450	108	5
1535-20-05	Battcar High Load, 20mm with M10 thread	20mm	68mm	15,5	Stainless Steel	1590, 1595, 1596, 1597, 1601, 1610	785	550	109	5
1535-23-05	Battcar High Load, 23mm with M10 thread	23mm	68mm	15,5	Stainless Steel	1590, 1595, 1596, 1597, 1601, 1610	900	575	109	5
1536-11-05	Battcar High Load, 11mm with M10 thread and big wheels	11mm	68mm	19,5	Stainless Steel	1590, 1595, 1596, 1597, 1601, 1610	785	450	111	5
1536-23-05	Battcar High Load, 23mm with M10 thread and big wheels	23mm	68mm	19,5	Stainless Steel	1590, 1595, 1596, 1597, 1601, 1610	900	575	109	5

### Battcar with Extended M10 Thread

The Rutgerson Battcar has a unique design which requires minimum maintenance and makes the mainsail extremely easy to hoist and lower. This model with extended threaded connector is suitable for boats up to 44ft monohull and 36ft multihull. It is available in both high strength and standard version and comes in five different profiles to fit most masts. This product is made of high strength composite and stainless steel. The slot width (bolt/shackle) is 45mm.



Part no	Product description	Profile	Length / Stack height	Wheel Ø [mm]	Adaptor material	Recommended Receptacle / Fitting	Approx. Push BL [kg]	Aprpox. Pull BL [kg]	Weight [gr]	Packed per
Battcar 1530-x	x-09 with extended M10 stainles	s steel thr	ead							
1530-11-09	Battcar, 11mm with M10 thread (extended)	11mm	66mm	15,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	350	115	10
1530-11-09E	Battcar, 11mm with M10 thread, (extended) E-gate	11mm E-gate	66mm	15,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	350	115	10
1530-16-09	Battcar, 16mm with M10 thread (extended)	16mm	66mm	15,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	400	115	10
1530-19-09	Battcar, 19mm with M10 thread (extended)	19mm	66mm	15,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	420	113	10
1530-20-09	Battcar, 20mm with M10 thread (extended)	20mm	66mm	15,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	430	119	10
1530-23-09	Battcar, 23mm with M10 thread (extended)	23mm	66mm	15,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	450	119	10
1531-11-09	Battcar, 11mm w M10 SS thread, (extended) with big wheels	11mm	66mm	19,5	Stainless Steel	1580, 1585, 1590, 1595, 1596, 1597	550	350	115	10
1535-23-09	Battcar High Load, 23mm with M10 thread (extended)	23mm	68mm	15,5	Stainless Steel	1590, 1595, 1596, 1597, 1601, 1610	900	575	131	5
1536-11-09	Battcar High Load, 11mm with M10 thread (extended) with big wheels	11mm	68mm	19,5	Stainless Steel	1590, 1595, 1596, 1597, 1601, 1610	785	450	121	5

### Intermediate Battcar

The Rutgerson Battcar has a unique design which requires minimum maintenance and makes the mainsail extremely easy to hoist and lower. This model is suitable for boats up to 50ft monohull and 40ft multihull. It is available in both high strength and standard version, and is available in five different profiles and two wheel sizes to fit most masts. This product is made of high strength composite and stainless steel.



1530-23-10 1535-23-10



1531-11-10 1536-11-10

Part no	Product description	Profile	Length / Stack height	Wheel Ø [mm]	Adaptor material	Recommended Receptacle / Fitting	Approx. Pull BL [kg]	Weight [gr]	Packed per
Battcar 1530	-xx-10 Intermediate for webbing								
1530-11-10	Battcar, 11mm Intermediate	11mm	66mm	15,5	Stainless Steel	Webbing	350	65	10
1530-16-10	Battcar, 16mm Intermediate	16mm	66mm	15,5	Stainless Steel	Webbing	400	63	10
1530-19-10	Battcar, 19mm Intermediate	19mm	66mm	15,5	Stainless Steel	Webbing	420	65	10
1530-20-10	Battcar, 20mm Intermediate	20mm	66mm	15,5	Stainless Steel	Webbing	430	65	10
1530-23-10	Battcar, 23mm Intermediate	23mm	66mm	15,5	Stainless Steel	Webbing	450	65	10
1531-11-10	Battcar, 11mm Intermediate with big wheels	11mm	66mm	19,5	Stainless Steel	Webbing	350	73	10
1531-23-10	Battcar, 23mm Intermediate with big wheels	23mm	66mm	19,5	Stainless Steel	Webbing	350	73	10
1535-11-10	Battcar High Load, 11mm Intermediate	11mm	68mm	15,5	Stainless Steel	Webbing	450	65	5
1535-20-10	Battcar High Load, 20mm Intermediate	20mm	68mm	15,5	Stainless Steel	Webbing	550	65	5
1535-23-10	Battcar High Load, 23mm Intermediate	23mm	68mm	15,5	Stainless Steel	Webbing	575	65	5
1536-11-10	Battcar High load, 11mm Intermediate with big wheels	11mm	68mm	19,5	Stainless Steel	Webbing	450	65	5
1536-23-10	Battcar high Load, 23mm Intermediate with big wheels	23mm	68mm	19,5	Stainless Steel	Webbing	575	85	5

### Battcar with Fork

The Rutgerson Battcar has a unique design which requires minimum maintenance and makes the mainsail extremely easy to hoist and lower. This model with fork has no swivel, and it is made to fit together with the Rutgerson 1490-1/1B Batten Fittings. It is suitable for boats up to 34ft monohull and 28ft multihull. It is available in both high strength and standard version, and comes in five different profiles and two wheel sizes to fit most masts. This product is made of high strength composite and stainless steel. The slot width (bolt/shackle) is 22mm.





1530-11-15 1535-11-15

1531-11-15 1536-11-15

Part no	Product description	Profile	Length / Stack height	Wheel Ø [mm]	Adaptor material	Recommended Receptacle / Fitting	Approx. Push BL [kg]	Approx. Pull BL [kg]	Weight [gr]	Packed per
Battcar 1530-	-xx-15 with stainless steel fork ( r	o swivel)								
1530-11-15	Battcar, 11mm with fork (no swivel)	11mm	66mm	15,5	Stainless Steel	1490-1, 1490-1B	200	175	95	10
1530-16-15	Battcar, 16mm with fork (no swivel)	16mm	66mm	15,5	Stainless Steel	1490-1, 1490-1B	200	175	75	10
1530-19-15	Battcar, 19mm with fork (no swivel)	19mm	66mm	15,5	Stainless Steel	1490-1, 1490-1B	200	175	75	10
1530-20-15	Battcar, 20mm with fork (no swivel)	20mm	66mm	15,5	Stainless Steel	1490-1, 1490-1B	200	175	72	10
1530-23-15	Battcar, 23mm with fork (no swivel)	23mm	66mm	15,5	Stainless Steel	1490-1, 1490-1B	200	175	72	10
1531-11-15	Battcar, 11mm with fork (no swivel) and big wheels	11mm	66mm	19,5	Stainless Steel	1490-1, 1490-1B	200	175	98	10
1535-11-15	Battcar High Load, 11mm with fork (no swivel)	11mm	68mm	15,5	Stainless Steel	1490-1, 1490-1B	785	450	98	5
1536-11-15	Battcar High Load, 11mm with fork (no swivel) and big wheels	11mm	68mm	19,5	Stainless Steel	1490-1, 1490-1B	785	450	98	5

### Limousine Battcars & Slide

The Limousine Battcar is the largest model of the Rutgerson Battcar system and is suitable for boats up to 60ft monohull and 47ft multihull. It is available in 11mm and 23mm profile and M10 or M12 stainless steel thread. The Limousine is made of aluminium from a solid extrusion profile, which makes it extremely strong in order to withstand the loads generated under these conditions. There is also an intermediate battcar made of composite with 25mm webbing application.



### Mainsail Headboard Cars

These headboard cars in black anodized aluminum are robust and easy to attach to the their corresponding headboards. They can move both horizontally and vertically, which allows them to easily enter almost any track gate and thus fit most masts.

The system is available with either two or three cars which are disassembled from the cheek plate with a retractable circlip on system A and B or a hex key on system C. The standard A headboard car also come in a high load (HL) version as well as a long (L) version where the attachment point is located further in from the luff.











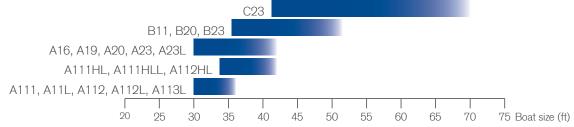
System A

System B

System C

Length / stack height Headboard Length Weight Packed Horizontal SWL [kg] Part no Product description Car system plate [mm] [mm] [gr] per Headboard Car application & specification chart A111 Headboard car A111 2 x 1530-11 A1 or A2 143 585 12 259 Headboard car A111L, Long 2 x 1530-11 A111L A1 or A2 143 585 35 275 1 1 2 x 1535-11 12 A111HL Headboard car A111HL, High Load A1 or A2 145 650 275 A111HLL Headboard car A111HLL, High Load, Long 2 x 1535-11 A1 or A2 145 650 35 291 1 A112 2 x 1531-11 585 12 263 Headboard car A112, Big wheels A1 or A2 143 1 A112L Headboard car A112L, Big wheels, Long 2 x 1531-11 A1 or A2 143 585 35 279 1 A112HL Headboard car A112HL, Big wheels, High Load 2 x 1536-11 A1 or A2 145 650 12 279 A112HLL Headboard car A112L, 2 x 1536-11, Long 2 x 1536-11 A1 or A2 145 650 35 291 1 A113L 2 x 1531-23 Headboard car A113L, Big wheels, Long A1 or A2 143 585 35 287 1 A16 Headboard car A16 2 x 1530-16 A1 or A2 143 585 12 261 1 1 A19 2 x 1530-19 12 Headboard car A19 A1 or A2 143 585 263 A20 2 x 1530-20 A1 or A2 143 585 12 265 1 Headboard car A20 A23 2 x 1530-23 12 267 Headboard car A23 A1 or A2 143 585 1 A23L Headboard car A23L, Long 2 x 1530-23 A1 or A2 143 585 35 295 1 B11 Headboard car B11 3 x 1535-11 B1 or B2 211 685 22 464 B20 Headboard car B20 3 x 1535-20 B1 or B2 211 685 22 469 1 B23 Headboard car B23 3 x 1535-23 B1 or B2 211 685 22 472 1 Headboardcar C23 2 x 1540-23 C1 or C2 184 1385





Please note that these are general recommendations, based on monohull standard boats cruising during average weather conditions. Selection of the appropriate product by the buyer shall rest solely with the buyer and Rutgerson accepts no responsibility for any such selection.

### Quick Release Pin

The Quick release pin makes it incredibly easy to detach the headboard from the headboard car. The pin replaces the fixed bolt and just by pulling the strap the pin exits the pin hole and the headboard is free. This construction is unique on the market and very user-friendly since the headboard can be detached from a distance.

The Quick release pin works not only with the Rutgerson Mainsail System B and C but other brands of headboard systems as well.

Part no	Product description	Length [mm]	Width Ø [mm]	Approx SWL [kg]	Weight [gr]	Packed per			
Quick Release pin									
1570-12-32	Quick release pin	50	12	2500	50	1			





### **Battcar Spare Parts**

Part no	Product description	Catalogue reference page #	Packed per
Spare parts fo	r Pressure absorbing slides & Battcars		
1530-03	1530-XX-03 adaptor with swivel fork	22	Pc
1530-05	1530-XX-05 adaptor M10 Stainless Steel thread	23	Pc
1530-09	1530-XX-09 adaptor M10 Stainless Steel thread (Extended)	24	Pc
1530-10	1530-XX-10 rod pin Stainless Steel	25	Pc
1530-11	1530-11-XX slide with 15,5mm wheels only	19	Pc
1530-11E	1530-11-XXE slide with 15,5mm wheels only, E-gate	19	Pc
1530-15	1530-XX-15 adaptor with fork (no swivel)	26	Pc
1530-16	1530-16-XX slide with 15,5mm wheels only	19	Pc
1530-19	1530-19-XX slide with 15,5mm wheels only	19	Pc
1530-20	1530-20-XX slide with 15,5mm wheels only	19	Pc
1530-23	1530-23-XX slide with 15,5mm wheels only	19	Pc
1531-11	1531-11-XX slide with 19,5mm wheels only	19	Pc
1531-16	1531-16-XX slide with 19,5mm wheels only	19	Pc
1531-20	1531-20-XX slide with 19,5mm wheels only	19	Pc
1531-23	1531-23-XX slide with 19,5mm wheels only	19	Pc
1535-05	1535-XX-05 adapter M10 Stainless Steel thread	25	Pc
1535-09	1535-xx-09 adaptor M10 thread (extended)	24	Pc
1535-11	1535-11-XX High Load slide with 15,5mm wheels only	19	Pc
1535-20	1535-20-XX High Load slide with 15,5mm wheels only	19	Pc
1535-23	1535-23-XX High Load slide with 15,5mm wheels only	19	Pc
1536-11	1536-11-XX High Load slide with 19,5mm wheels only	19	Pc
1536-23	1536-23-XX High Load slide with 19,5mm wheels only	19	Pc
1540-05	1540-XX-05 adapter M12 Stainless Steel thread	27	Pc
1540-23	1540-23-XX slide with 18mm wheels only	27	Pc



### **HEADBOARDS**

### Mainsail Headboards for Webbing Fastening

The web on headboard plates are manufactured in anodized aluminium, and are easily attached to the to section by standard webbing sizes. All slots and outer edges are rounded to prevent chafing and both halyard and car attachment holes have pre-pressed stainless steel liners. In racing applications where weight saving and strength plays a significant role, all plates can be custom made in carbon fibre with titanium liners upon request.



Headboard A fathead



Headboard B fathead



Headboard C fathead



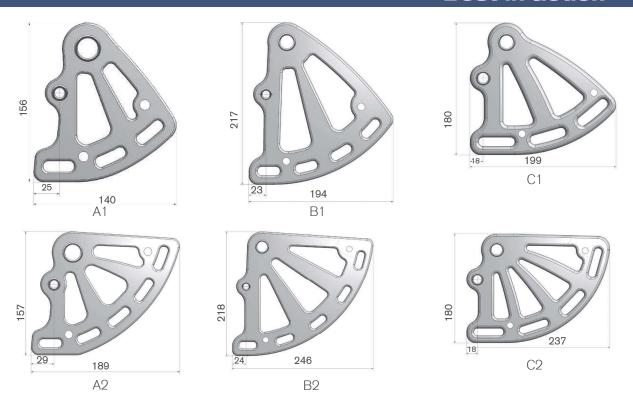
Headboard A Standard



Headboard B Standard



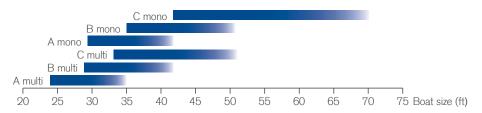
Headboard C Standard



Part no	Product description	Aspect ratio	Thickness [mm]	Weight [gr]	Vertical SWL [kg]	Webbing slot [mm]	Halyard Ø [mm]	Car pin Ø [mm}	Headboard car	
Headboard Application & Specification chart										
A1-B	Standard headboard A1, Black	40 deg	4	120	850	3 x 30	19	9,5	A111,A111L, A111HL, A111HLL, A112, A112L, A112HL, A113L, A16, A19, A20, A23, A23L	
A2-B	Fat headboard A2, Black	90 deg	4	160	850	5 x 30	19	9,5	A111,A111L, A111HL, A111HLL, A112, A112L, A112HL, A113L, A16, A19, A20, A23, A23L	
B1-B	Standard headboard B1, Black	40 deg	6	295	1350	4 x 30	19	13,5	B11, B20, B23	
B2-B	Fat headboard B2, Black	90 deg	6	350	1350	5 x 30	19	13,5	B11, B20, B23	
C1-B	Standard headboard C1, Black	40 deg	10	485	2800	3 x 40	19	13,5	C23	
C2-B	Fat headboard C2, Black	90 deg	10	600	2200	4 x 40	19	13,5	C23	

Packed per 1

### How to choose Mainsail Headboard for Webbing Fastening



Please note that these are general recommendations, based on monohull standard boats cruising during average weather conditions. Selection of the appropriate product by the buyer shall rest solely with the buyer and Rutgerson accepts no responsibility for any such selection.

### Quick Flex Fitting Headboards for Liner Fastening

The QFF headboard are available in a wide range of sizes to cover the required range of mainsails for boats up to aproximately 50ft.

Available in black anodized aluminium, this standard fitting only requires liners and no additional rivets. This makes the assembly of the boards quick and easy which saves valuable time in sailmakers production by being more efficient. As all boards can be turned to make any straight side the vertical top side, this product will also decrease product variances in stock.

Webbing to add strength and/or spreading loads can be applied through the liners if necessary. For liners, see page 43.



1115-121B



1115-070B



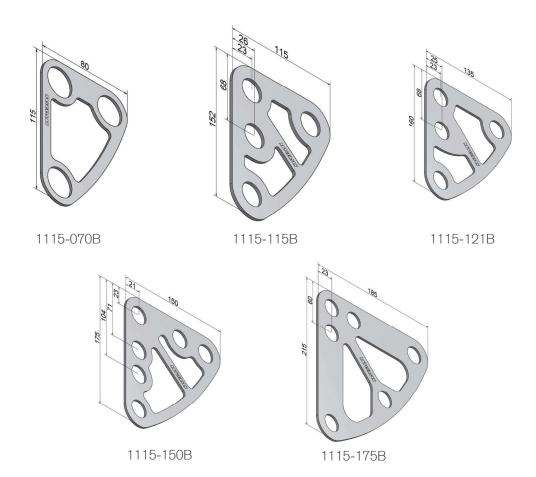
1115-150B



1115-115B

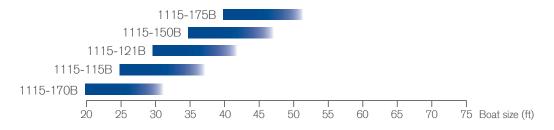


1115-175B



				imensions [mm	1]	Liners					
Part no	Product description	Color	Length	Height	Thickness	required	Packed Per				
QFF Quick Flex	QFF Quick Flex Fitting Headboards for liner fastening										
1115-070B	QFF Headboard 115x80x2mm	Black	80	115	2,0	3 x 19	10				
1115-115B	QFF Headboard 152x115x3mm	Black	115	152	3,0	4 x 19	10				
1115-121B	QFF Headboard 160x135x3mm	Black	135	160	3,0	4 x 19	10				
1115-150B	QFF Headboard 175x150x3mm	Black	150	175	3,0	6 x 19	4				
1115-175B	QFF Headboard 215x185x3mm	Black	185	215	3,0	6 x 19	4				

#### How to choose Headboards for Liner Fastening



Please note that these are general recommendations, based on monohull standard boats cruising during average weather conditions. Selection of the appropriate product by the buyer shall rest solely with the buyer and Rutgerson accepts no responsibility for any such selection.

### Racing Headboard

The Rutgerson headboard assortment has been extended with a racing headboard. The new model has been developed for smaller boats when weight saving is critical. With a weight of only 37 grams, this headboard is perfect for racing. The product has been tested for Finn boats with impeccable results.





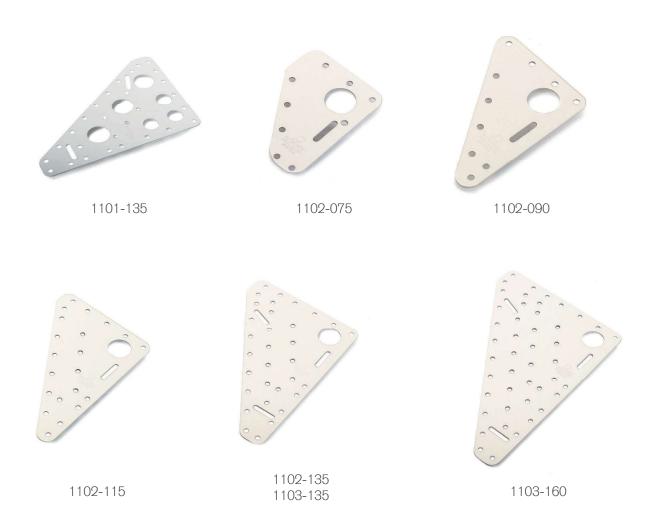
			С	Liners	Rivets	Weight	Packed				
Part no	Product description	Color	Top width Luff height Thickness			required	required	[gr]	Per		
Racing Head	Racing Headboard										
1115-110B	Racing Headboard 165x134x1,5mm	Black	134	165	1,5	1 x 14	16	37	2		



Photo: Curtesy of Elvstrøm Sails

### Headboards for Rivet Fastening

These regular headboards for rivet fastening have webbing slots along the luff side for web-on applications. The 1101-135 is made extremely light for usage in dinghies, where weight saving is crucial. Rivets and liners, see page 42-43.



		[	Dimensions [mi	m]	Liners	Rivets	Weight	Packed
Part no	Product description	Top width	Luff height	Thickness	required	required	[gr]	per
Headboards f	or rivet fastening							
1101-135	Headboard 135x185x1,5mm	135	185	1,5	3 x 14	26	48	10
1102-075	Headboard 75x103x2mm	75	103	2,0	1 x 19	9	27	10
1102-090	Headboard 90x120x2mm	90	120	2,0	1 x 19	10	30	10
1102-115	Headboard 115x162x2mm	115	162	2,0	1 x 19	21	56	10
1102-135	Headboard 135x185x2mm	135	185	2,0	1 x 19	32	58	10
1103-135	Headboard 135x185x3mm	135	185	3,0	1 x 19	32	110	10
1103-160	Headboard 220x160x3mm	160	220	3,0	1 x 19	45	162	10

### One-Design Headboards for Rivet Fastening

These two headboards suit a lot of One-Designs. Rivets and liners, see page 42-43.



		Dimensions [mm]			Liners	Rivets	Weight	Packed			
Part no	Product description	Top width	Luff height	Thickness	required	required	[gr]	per			
One-Design Headboards for rivet fastening											
1102-112	One-Design Headboard 112x140x2mm	112	140	2,0	1 x19	11	50	10			
1102-113	One-Design Headboard 112x140x2mm	112	140	2,0	3 x 19	11	40	10			

### Heavy Duty Headboards

These Heavy-Duty headboards are mainly aimed for cruising yachts and especially for fully battened mainsails. The top shape of the headboards prevents them from being hooked in the backstay when tacking. Rivets and liners, see page 42-43.



		Dimensions [mm]			Liners	Rivets	Weight	Packed			
Part no	Product description	Top width	Luff height	Thickness	required	required	[gr]	per			
Heavy Duty Headboards											
1120-125	Heavy Duty Headboard Small	125	140	2,5	4 x19	11	60	2			
1120-170	Heavy Duty Headboard Medium	170	195	3,0	4 x 19	12	136	2			
1120-210	Heavy Duty Headboard Large	210	230	4,0	5 x 19	13	268	2			

### Flex Fitting Composite Headboards

The FFC Flex Fitting Composite headboard is available in a wide range of sizes and thicknesses, and is a cost efficient solution for dinghy and One-Design applications. These headboards are made in a strong polyamide composite material. Rivets and liners, see page 42-43.









1105-115

1105-135

		Dimensions [mm]			Liners	Rivets	Weight	Packed	
Part no	Product description	Top width	Luff height	Thickness	required required		[gr]	per	
FFC Flex Fitting Composite Headboards									
1104-090	FFC Composite Headboard #1	70	90	2,0	1 x 14	7	11	10	
1105-090	FFC Composite Headboard #2	70	90	2,0	1 x 14	7	13	10	
1105-115	FFC Composite Headboard #3	100	115	3,0	3 x 14	8	26	10	
1105-135	FFC Composite Headboard #4	115	135	4,0	3 x 19	14	50	10	

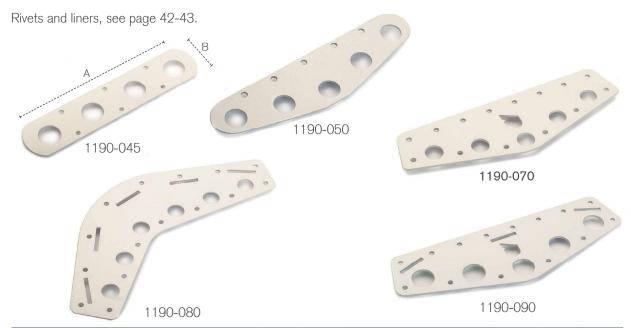


### Dinghy Clewboard for Webbing Fastening



			Dimensions [mm]		ns [mm]		Weight	Packed	
Part no	Product description	Color	Α	В	Thickness	Fastening	[gr]	per	
Clewboard for dir	nghy								
1194-014B	Clewboard for dinghy 140x35x4mm	Black	140	35	4,0	webbing	32	1	
1194-014B-HR	Clewboard for dinghy 140x35x4mm, High load	Black	140	35	4,0	webbing	34	1	

### ST-jib Clewboards for Rivet & Webbing Fastening

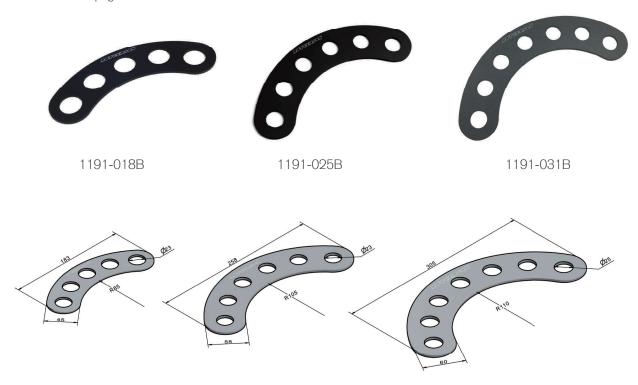


			Dir	mensions	[mm]	Liners	Rivets	Weight	Packed	
Part no	Product description	Color	А	В	Thickness	required	required	[gr]	per	
Clewboards for	Clewboards for rivet fastening									
1190-045	Clewboard #1	Silver	220	45	2,0	4 x 19	6	40	10	
1190-050	Clewboard #3	Silver	190	50	2,0	5 x 14	5	35	10	
1190-070	Clewboard #2	Silver	230	70	2,0	5 x 14	14	60	10	
1190-080	Clewboard inverted	Silver	275	75	2,0	6 x 14	15	79	10	
1190-090	Clewboard #9	Silver	260	90	3,0	5 x 19	14	113	10	



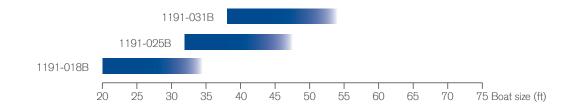
### Quick Fitting Inverted ST-jib Clewboards for Liner Fastening

For liners, see page 42-43.



			Dimensions [mm]			Liners	Weight	Packed
Part no	Product description	Color	Length	Width	Thickness	required	[gr]	per
QFI Quick Fitting Inverted Clewboards for liner fastening								
1191-018B	QFI Clewboard #3	Black	183	45	3,0	5 x 19	49	2
1191-025B	QFI Clewboard #2	Black	258	55	3,0	6 x 19	80	2
1191-031B	QFI Clewboard #4	Black	305	60	4,0	7 x 23	188	2

#### How to choose ST-jib Clewboards for Liner Fastening



Please note that these are general recommendations, based on monohull standard boats cruising during average weather conditions. Selection of the appropriate product by the buyer shall rest solely with the buyer and Rutgerson accepts no responsibility for any such selection.

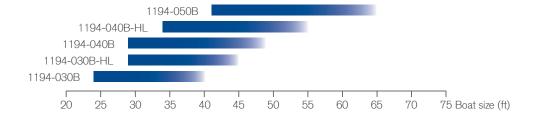
### ST-jib Clewboards for Webbing Fastening

These self-tailing jib boards are designed to be easily attached to the sail by webbing. No extra tools or parts are required for the fastening and the slots are smoothly rounded to prevent chafing. The board plates are made in both black and silver anodized aluminum, and come in three different sizes. The latest addition to the range is a high-load (HL) version with increased thickness for extra strength. This stronger version is available in size A and B.



			Di	imensio	ns [mm]	Sheet	Webbing	Approx		
Part no	Product description	Color	А	В	Thickness	positions [mm]	slots [mm]	SWL [kg]	Weight [gr]	Packed per
ST-jib Clewboard	ds for webbing fastening									
1194-030B	Clewboard, Webbing A	Black	204	207	4	4 x Ø19	5 x 30	1300	180	1
1194-040B	Clewboard, Webbing B	Black	279	268	6	5 x Ø19	7 x 30	1800	380	1
1194-050B	Clewboard, Webbing C	Black	370	368	10	6 x Ø23	7 x 40	3000	1000	1
ST-jib Clewboard	ds for webbing fastening, High Load									
1194-030B-HL	Clewboard, Webbing A, High Load	Black	204	207	6	4 x Ø19	5 x 30	1800	270	1
1194-040B-HL	Clewboard, Webbing B, High Load	Black	279	268	8	5 x Ø19	7 x 30	2200	510	1

#### How to choose ST-jib Clewboards for Webbing Fastening



Please note that these are general recommendations, based on monohull standard boats cruising during average weather conditions. Selection of the appropriate product by the buyer shall rest solely with the buyer and Rutgerson accepts no responsibility for any such selection.

#### **CARBON FIBRE PRODUCTS**

Carbon fibre is an amazing material that outperforms conventional products due to its extraordinary strength and bending properties. The material also has an extremely light weight, which is critical for racing. Thusly, an entire market has evolved due to the increasing demand for lighter and stronger fittings.

At Rutgerson we have the advantage of having all production processes under one roof in our factory in Sweden, making us well-equipped to design and produce many different kinds of carbon fibre products.

We can also offer custom products that are customised exactly after the customer's needs.



#### Carbon Clewboard

Rutgerson's standard assortment of carbon fibre products includes two models of clewboards. They are webbed onto the sail and have a perfect, lacquered finish.



			Dimensions [mm]			Weight	Packed
Part no	Product description	Color	Length	Width	Thickness	[gr]	per
Carbon Clew	board						
1210-10	Carbon fibre clewboard 10mm	Black	369	368	10	570	1
1210-13	Carbon fibre clewboard 13mm	Black	369	368	13	750	1

### ASTENERS & TOOLS FOR HEAD- AND CLEWBOARD

### Rivets & Closing Tools

Rutgerson's rivets are available in two different versions, hollow tubular in AISI 316 stainless steel and solid aluminium. Please note that these rivets should only be pressed with Rutgerson's closing tool.



SS Rivets 2140-12



Aluminium Rivets 2141-XX

			Dimension	s [mm]			
Part no	Product description	Material	Outer Ø	Length	Packed per		
Rivets Hollow	tubular Stainless Steel AISI 316 for Head- and Clew	boards					
2140-12	Rivet, tubular SS 12mm	Stainless Steel	4,5	12	500pcs		
Rivets Solid Al	uminum for Head- and Clewboards						
2141-12	Rivet, solid Alu 12mm	Aluminium	5,0	12	250pce		
2141-14	Rivet, solid Alu 14mm	Aluminium	5,0	14	250pce		
2141-16	Rivet, solid Alu16mm	Aluminium	5,0	16	250pce		
2141-20	Rivet, solid Alu 20mm	Aluminium	5,0	20	250pce		
Closing Tools f	or Rivets						
1230	Closing tool for 5mm solid Aluminum rivets				Set		
1240	Closing tool for 4,5mm tubular Stainless Steel rivets						

The lower tool part has a spring loaded center part to guide rivets during press operations.

Closing tool 1240 for hollow tubular rivets consists of two parts, and should be used in a hydraulic, fly, toggle or cam operated press. The lower tool part has a spring loaded center part to guide rivets during press operations.



Part no 1240: Closing tool for 4,5mm Hollow tubular SS Rivets



Part no 1230: Closing tool for 5mm Solid Alu Rivets

### **Liners & Cloosing Tools**

Rutgerson's liners for head- and clewboards are made out of AISI 316 stainless steel, and should only be pressed with Rutgerson's closing tool.



				Dimensions [mm	]	
Part no	Product description	Material	Length	Inner Ø	Outer Ø	Packed per
Liners Stainle	ss Steel AISI 316 for Head- and Clewboard	ls				
1250-14	Liner 14mm #1	Stainless Steel	15,0	14,0	16,0	20
1250-142	Liner 14mm #2	Stainless Steel	19,0	14,0	16,0	20
1250-19	Liner 20mm #3	Stainless Steel	22,0	20,0	22,0	20
1250-192	Liner 20mm #4	Stainless Steel	26,5	20,0	22,0	20
1250-193	Liner 20mm #2	Stainless Steel	19,0	20,0	22,0	20
1250-194	Liner 20mm #1	Stainless Steel	16,0	20,0	22,0	20
1250-23	Liner 23mm #1	Stainless Steel	17,0	23,0	25,0	20
1250-232	Liner 23mm #2	Stainless Steel	19,0	23,0	25,0	20
1250-233	Liner 23mm #3	Stainless Steel	22,0	23,0	25,0	20
1250-234	Liner 23mm #4	Stainless Steel	26,5	23,0	25,0	20
Liners Titaniu	m for Head- and Clewboards	·				
1250-19T	Liner 20mm	Titanium	22,0	20,0	22,0	10
1250-192T	Liner 20mm	Titanium	26,5	20,0	22,0	10
Closing Tools t	for Liners					
1260-14	Closing tool for 14mm Liners					Set
1260-19	Closing tool for 20mm Liners					Set
1260-23	Closing tool for 23mm Liners					Set

The tools should be replaced every 10 000 presses if proper maintenance has been performed.



#### How to use the Closing Tool

- 1. Place the liner on the Lower Die (B) with the rubber tube.
- 2. Place the Punch (A) over the guide post and press until the edges of the liner has curled down without a gap.

1260-XX Closing tools for liners

#### **CLEWBLOCKS**

Rutgerson's Clewblocks have a 60mm, 80mm or 100mm removable acetal sheave and are available in black anodized cheek plates. The webbing slots are smoothly rounded in order to prevent chafe for maximum durability, and the appliance angles of the slots have been improved to better line up with the aspect ratio of the sail.

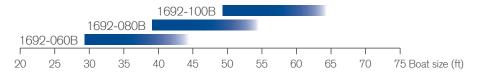
The sheave can easily be removed by unscrewing the M5 bolt that assembles the construction through a Stainless Steel socket.



1692-060B 1692-080B 1692-100B

					Dimensions		Approx		
Part no	Product description	Color	Sheave material	Sheave Ø	Cheek plate thickness	For webbing width	Max Line Ø	SWL [kg]	Packed per
Clewblocks									
1692-060B	Clewblock 60	Black	Composite	60	3	30	12	1200	Pc
1692-080B	Clewblock 80	Black	Composite	80	4	40	16	1650	Pc
1692-100B	Clewblock 100	Black	Composite	100	4	40	16	3000	Pc

#### How to choose Clewblocks



Please note that these are general recommendations, based on monohull standard boats cruising during average weather conditions. Selection of the appropriate product by the buyer shall rest solely with the buyer and Rutgerson accepts no responsibility for any such selection.

#### **RAW BLOCKS**

Rutgerson's popular plain bearing block has been relaunched under a new name: The RAW Block, an extremely reliable block with the best price on the market considering its strength.

This block is produced from a high-tech composite of such strength that no stainless-steel reinforcement is needed. Consequently, overall weight of the block is reduced. The block is completely maintenance free, as the spherical plain bearings will never deform under static high loads like ball bearings do.

Furthermore, the RAW Block is available in many different sizes and comes with a range of different fastening alternatives which makes it extremely versatile on the boat.









Single block

Webbing block

				Dimen	sions [mm]		Breaking	Approx		
Part no	Product description	Color	A Sheave Ø	B Length	C Shackle pin Ø	Line Ø	load [kg]	SWL [kg]	Weight [gr]	Packed per
RAW Single	blocks									
B300301B	RAW Block 35mm, Single	Black	35	55	4	3 - 8	850	450	50	Pc
B300501B	RAW Block 50mm, Single	Black	50	80	5	4 - 12	1250	700	116	Pc
B300601B	RAW Block 60mm, Single	Black	60	94	6	6 - 14	2100	1150	205	Pc
B300801B	RAW Block 80mm, Single	Black	80	130	10	10 - 16	3600	2000	557	Pc
RAW Webb	ing Blocks									
B300305B	RAW Block 35mm, Single for strap head	Black	35	55		3 - 8	850	450	35	Pc
B300505B	RAW Block 50mm, Single for strap head	Black	50	80		4 - 12	1250	700	80	Pc
B300605B	RAW Block 60mm, Single for strap head	Black	60	94		6 - 14	2100	1150	155	Pc
B300805B	RAW Block 80mm, Single for strap head	Black	80	130		10 - 16	3600	2000	333	Pc

#### SNATCH BLOCK

We are proud to introduce our first openable block ever: Rutgerson Snatch Block (RSB). This snatch block is very flexible and can be used on almost any block application on a boat or sail such as barber, hauler, genoa line. It's easy to remove and install on a line already under load. The block is designed with a Rutgerson Low Friction Ring and a strong Dyneema loop which is perfect for low load high speed or high load low speed applications.

The RSB is our lightest block yet with an incredible strength/weight ratio as well as an extremely high working load compared to dimension. It is also designed so that there are no loose parts. The block can be opened without risking to lose the low friction ring. The low friction ring is anodised with a unique hard-coat and Teflon-impregnated anodization with very low friction properties. The Dyneema loop has a diamond knot, which we have developed ourselves, that generates almost twice the strength to the loop shackle compared to a standard diamond knot shackle with the same line dimension.



			Din	nensions [mm]			
Part No	Product description	Low Friction Ring	A Sheave Ø	B Length	Max Line Ø	SWL [kg]	Weight [g]
Rutgerson	Snatch Block						
RSB15	Rutgerson Snatch block size 15	LFR15X10	35	46	6	1600	30
RSB21	Rutgerson Snatch block size 21	LFR21X14	49	65	10	3200	78
RSB25	Rutgerson Snatch block size 25	LFR25X17	60	78	14	5200	135





#### Core benefits

- Very high load
- Light weight
- No lose parts
- Stronger version of diamond knot
- Made in Sweden

Please find product video: https://www.rutgerson.se

### LOW FRICTION RINGS

Low friction rings provide a good alternative to blocks in most applications where the line movements are minimal and the loads are high. For example back-stays, reefing points, jibs' sheet leads and lazy jacks. Their versatility seems to have no limits on the boat.

The rings are extremely resistant and strong. Both cost and weight is low compared to blocks. Plus, with no moving parts maintenance is zero.

The assortment consists of five sizes, all made of high strength aluminum with an extremely durable and low friction hard-coat and Teflon impregnated anodazation in black.



			Dimensio	ons [mm]		Approx SWL	Weight	Packed		
Part no	Product description	Size	Max Line Ø	Hole Ø	Outer Ø	[kg]	[gr]	per		
Low Friction Rings										
LFR7x5	Low Friction Ring	7 x 5	5	7	17,5	400	1,8	10		
LFR10x7	Low Friction Ring	10 x 7	7	10	24,5	800	5	10		
LFR15x10	Low Friction Ring	15 x 10	10	15	35	1600	16	10		
LFR21x14	Low Friction Ring	21 x 14	14	21	49	3200	42	10		
LFR25x17	Low Friction Ring	25 x 17	17	25	59,5	5200	72	10		





### **ACCESSSORIES**

### Stainless Steel Rings



O-Rings 2320-XXXX



D-Rings 2325-XXXX

			Dimensions [mm]		Approx SWL [kg]	Weight [gr]	
Part no	Product description	Thickness	Outer Ø	Inner Ø			Packed per
Stainless Stee	el O-Rings						
2320-1503	O-Ring, 15x3mm	3	21	20	150	3	10
2320-2003	O-Ring, 20x3mm	3	26	20	100	5	10
2320-2004	O-Ring, 20x4mm	4	28	20	250	10	10
2320-2503	O-Ring, 25x3mm	3	32	26	100	8	10
2320-2504	O-Ring, 25x4mm	4	33	25	250	10	10
2320-2505	O-Ring, 25x5mm	5	35	25	500	15	10
2320-3005	O-Ring, 30x5mm	5	40	30	500	18	10
2320-3006	O-Ring, 30x6mm	6	42	30	650	26	10
2320-3008	O-Ring, 30x8mm	8	46	30	1250	30	10
2320-4005	O-Ring, 40x5mm	5	50	40	270	23	10
2320-4006	O-Ring, 40x6mm	6	52	40	450	32	10
2320-4008	O-Ring, 40x8mm	8	56	40	1150	60	10
2320-4010	O-Ring, 40x10mm	10	60	40	2000	99	10
2320-5010	O-Ring, 50x10mm	10	70	50	1600	119	10
Stainless Stee	el D-Rings						
2325-2505	D-Ring, 25x5mm	5	35	25	450	15	10
2325-5006	D-Ring, 50x6mm	6	62	50	600	39	10

### Piston Hanks

These knock on piston hanks are made of solid brass with stainless steel springs.

		Dimensio					
Part no	Product description	Length	Opening width	Packed per			
Piston Hanks	Piston Hanks Solid brass with Stainless Steel springs						
2160-040	Piston Hank, 40mm	44	6,8	10			
2160-050	Piston Hank, 50mm	54	9	10			
2160-060	Piston Hank, 60mm	64	12,4	10			
2160-070	Piston Hank, 70mm	74	15,6	10			
2160-080	Piston Hank, 80mm	83	16,7	10			
2160-090	Piston Hank, 90mm	95	21,1	10			
2160-100	Piston Hank, 100mm	107	25,3	10			



### Sail Snap Hooks

These sail snap hooks are made of solid brass with stainless steel springs.

		Dimensions [mm]		Approx	
Part no	Product description	Length	Max wire	SWL [kg]	Packed per
Sail Snap H	looks, Solid brass				
W72486	Sail Snap Hook 50mm	50	7,5	80	10
W72483	Sail Snap Hook 55mm	55	9	120	10
W72487	Sail Snap Hook 65mm	65	11	200	10

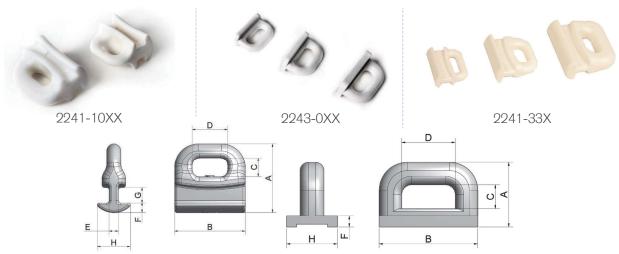


Hobycat outside Marstrand, our headquarters.



### Plastic Sail Slides

Plastic Sail slides fit various mast sections. Made of white Nylon to absorb high frequency chock loads.



	5.											
			Dimensio	ons [mm	1]	F	Profile dime	nsions [mm	]			
Part no	Product description	А	В	С	D	Gap width E	Profile foot F	Profile depth G	Profile width H	B/Ino	For profile	Packed per
Plastic Sail S	Blides											
2241-334	Sail slide 1334	21	25	5,5	16	3	3,5	3,5	10,5	A013	Seldén 1334 / HA558	100
2241-335	Sail slide 1335	28	29	8	16	4	4,5	4,5	14	A014	Seldén 1335 / HA458	100
2241-336	Sail slide 1336	34	39	8,5	20	4	7	8	15	A015	Seldén 1336	100
2241-1030	Sail slide 1030 C	28	29	8	14	8,5	6,5	4	19,5	A011	Seldén C	100
2241-1040	Sail slide 1040 C	37	39	8	19	8,5	6,5	4	19,5		Seldén C	100
2243-089	Sail slide HA89	21	32	7,5	19	7,5	3,5	3,5	16	A007	HA89	100
2243-090	Sail slide HA90	23	35	8,5	19	8	4	4	18	A008	HA90	100
2243-091	Sail slide HA91	25	40	9,5	21	8	5,5	5	21	A009	HA91	100

### Sail Shackles

These knock on shackles are available in both plastic and stainless steel.

		Dim	ensions [ı	ensions [mm]		
Part no	Product description	Α	В	ØC	Packed per	
Sail Shackle	es Knock-on					
2260-749	Sail Shackle, HA749 Knock-on plastic	20	9,5	5	50	
2260-849	Sail Shackle, HA849 Knock-on plastic	28	10	5	50	
2260-850	Sail Shackle, HA850 Knock-on plastic	39	10	5	50	
2260-851	Sail Shackle, HA851 Knock-on plastic	55	11	5	50	
2262-101	Sail Shackle, HA749 Knock-on Stainless steel	25	11	5	10	
2262-102	Sail Shackle, HA849 Knock-on Stainless steel	34	15	5	10	
2262-103	Sail Shackle, HA859 Knock-on Stainless steel	24	15	5	10	



### Clamcleats

These original Clamcleats®, available in both white nylon and aluminum, are efficient for adjusting leech lines.



			Dimensio		Packed		
Part no	Product description	For line Ø	Length	Width	Fastening Ø	Material	per
Clamcleats							
2200-212	Clamcleat CL212 + PR	2-5	70	21	5	Nylon	100
2200-214	Clamcleat CL214W + PR	2-5	70	21	5	Nylon	100
2200-233	Clamcleat CL233 + P	2-6	57	34	5	Nylon	100
2200-241	Clamcleat CL241 + PR	3-6	70	21	5	Aluminium	10
2200-258	Clamcleat CL258 + PR	3-6	70	21	5	Aluminium	10
2200-259	Clamcleat CL259 + PR	3-6	70	21	5	Aluminium	10
2200-273	Clamcleat CL273 + PR	3-6	70	21	5	Aluminium	10

Clamcleat® is a registered trademark of Clamcleats Ltd.

### E-Cleats

Rutgerson Leech line cleat is a cost efficient and durable solution to leech line handling.

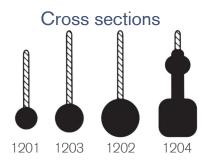
		[	Dimensions [mm]			Packed
Part no	Product description	Line Ø	Length	Width	Material	per
Leech Line Cle	eats					
2215-01	Leech line cleat, E-cleat No1	2-3	70	21	Nylon	100
2215-02	Leech line cleat, E-cleat No2	3-6	70	30	Nylon	50



### Single Slug Slides

Slug slides are perfectly suited for attaching a cloth to a track or rail. This product is moulded in super tough polyamide over a stainless steel plate.

			Dimensions [mm]	Approx SWL	Packed	
Part no	Product description	Length	Profile Ø	Plate thickness	[kg]	per
Slug Slides						
1201	Slug Slide Ø7mm	48	7	2,0	250	10
1202	Slug Slide Ø12mm	54	12	2,0	500	10
1203	Slug Slide Ø9mm	48	9	2,0	500	10
1204	Slug Slide Square 12mm	54	12	2,0	500	10



#### Rondo Chafe Protector

Rondo is a clip on system that prevent sails and running tackle from chafing against standing rigging. The Rondo is pre-drilled to fit  $\emptyset$  6mm wire but can be drilled to fit wires up to  $\emptyset$ 11mm, and is ideally suited for wire, shrouds etc.

Part no	Product description	Min wire Ø [mm]	Max wire Ø [mm]	Packed per				
RONDO (	RONDO Chafe Protector							
1800	Rondo Chafe Protector	6	11	30 pair				



### Tape Folder

The Rutgerson Tape Folder greatly increases efficiency for the time consuming operation of creasing tapes.

Part no	rt no Product description			
Tape folder				
1650	Rutgerson Tape Folder	Set		

#### How to use the Tape Folder

- 1. Loosen the two wing nuts. Push the two stainless plates and upwards.
- 2. Fold/crease half a metre of the tape precisely in the middle.
- 3. Insert the folded/creased tape into one of the slots. Use the narrow slot for tapes lighter than 280gr/sqm, and the wider slot for tapes heavier than 280gr/sqm. The fold should point towards the stainless plate.
- 4. Push the stainless plate down against the folded tape. Tighten the wing nuts again. Pull the tape straight through the tape folder.





Photo: Curtesy of Hallberg-Rassy



#### Made in Sweden since 1976

The Rutgerson company is a world leading manufacturer of yacht equipment, founded in 1976 by Swedish America's Cup sailor and entrepreneur Göran Rutgerson. Today the company is represented by distributors in more than 40 countries, but all our products are still made in Sweden as they always have been. For more information, please visit our website www.rutgerson.se.



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# GENERAL WARRANTY & KEY TERMS OF SUPPLY BY RUTGERSON MARIN AB

#### A) Warranty

#### 1) Period of Warranty

Rutgerson Marin AB issues a general warranty time durable for three years against malfunction or breakage from the date of delivery.

#### Warranty Coverage

Products sold by Rutgerson Marin AB and in normal and customary use, are conditionally warranted against malfunction or breakage. The warranty does not cover:

- i) Defects or damage resulting from use of the product in other than its normal and customary manner;
- ii) Defects or damage from misuse, accident or neglect;
- iii) Defects from improper testing, operation, maintenance, installation, alteration, modification or adjustment;
- iv) Damage from unauthorized repair or alterations;
- v) Damage from corrosive materials, ultra violet degradation, wear or tear beyond the specification of the case or enclosure.

#### 3) Warranty Procedure of Service or Replacement

Notice of a claim for defect, service or replacement covered by this limited warranty shall be made promptly and in writing to the local Rutgerson distributor that supplied the product or to Rutgerson Marin AB. Products returned for service or replacement under this limited warranty must be assigned a valid RGA Return Goods Authorization number by Rutgerson Marin AB. Unidentified and unauthorized goods returned to Rutgerson Marin AB will NOT be approved or eligible for further investigation.

The customer is responsible for undertaking all expenses associated with transporting the goods to and from Rutgerson Marin AB or the local Rutgerson distributor that supplied the product. If the investigation of the product and the warranty claim reveals that the defect, malfunction or breakage is not covered by this limited warranty, the customer will be contacted and advised with respect to additional cost in conjunction with service or replacement.

For approved RGA goods, please send these together with assigned RGA documents to:

WARRANTY GOODS Rutgerson Marin AB Mjölkekilsgatan 21 SE-442 66 Marstrand SWEDEN

#### B) Purchase on Approval

Rutgerson Marin AB issues a general purchase on approval period durable for 60 days after delivery. Products that are subject for return needs to be unused and delivered to Rutgerson Marin AB in their original packing and according to the procedure stated in section (A3) above. Returned products will thereafter be subject to investigation and upon approval a 15% handling fee of the original purchase amount will be surcharged to all eventual credits. For all customized or one-off items, purchase on approval does not apply.

#### C) Supply

#### 1) Packing Quantity

Products are supplied in stated packing and minimum purchase quantities only. For supply in smaller and/or customized quantities, additional terms will apply. For further information about alternative supply conditions, please contact Rutgerson Marin AB.

#### 2) Delivery Time

All official delivery times endorsed by Rutgerson Marin AB are estimated and can be subject to changes, Rutgerson Marin AB is in the event of such related changes legislated to inform the customer.

#### 3) Unanticipated Defects & Delays

Rutgerson Marin AB shall not be liable for unanticipated defects/delays, nor shall it be liable for any damage, whether direct or indirect, beyond the provisions set forth above or otherwise provided to customers under statutory law legislation. In connection with delivery of incorrect or defective goods, the customer must promptly submit a complaint to Rutgerson Marin AB.

#### D) Definitions

#### 1) Safe Working Load (SWL)

Is the maximum static and/or dynamic load at which the product will still function without excessive friction, distortion, wear or permanent deformation of its components. Above this load, systems may fail, moving parts may seize and stainless steel or plastic components may begin to bend, stretch or otherwise deform. SWL should never exceed 55% of the breaking load (BL), and should never be exceeded in use.

#### 2) Breaking Load (BL)

Is the load at, or around which, a major failure can be expected to occur to some part of the product's structure when new. Plastic components may split, rivets may give way, shackles may break and other metallic components may fracture. No product should be used at more than 55% of the breaking load.



## The Rutgerson original philosophy

It is my firm belief that innovator, designer or manufacturer of yacht fittings should know the open sea in really bad weather to understand what is going on.

The Rutgerson staff have been out there...

Göran Rutgerson - 1976

