



Barton

Marine Equipment Catalogue

Control the power

Our Story...

At Barton Marine we believe that performance and value go hand in hand. Our passion is to provide a comprehensive line of marine deck gear that exceeds your expectations for reliability, quality and longevity.

Whether coastal cruising, blue water sailing, or competing in your class, we promise to provide definitive style so your sailing experience is both exciting and a pleasure.

We manufacture in England, under one big roof, in our own factory, where quality control, continuity and service are paramount. And we don't rest on our laurels. Our design team is obsessed with upgrading, generating and constructing new marine designs and developments that deliver sailing solutions based on your requirements. We refuse to disappoint.

Barton is a global supplier, stocked in 33 countries through a loyal and expanding network of distributors whom we consider friends, fellow sailors and colleagues.

Barton has been expanding for 65 years – we are never satisfied – we strive to improve - we grow better with age.

Our new Barton catalogue features a number of unique offerings:

- Victory collection of precision engineered Classic Wooden blocks.
- Wear pads and discs in carbon fibre, Kevlar and clear polyurethane.
- 'T' lock deck hatches with superior durability and resilience.
- Advanced - designed furlers for dinghies and dayboats.
- Carbon fibre tiller extensions for lightweight robust performance.
- Replica laser dinghy control line packages.
- UPVC winch handle holders.



Contents

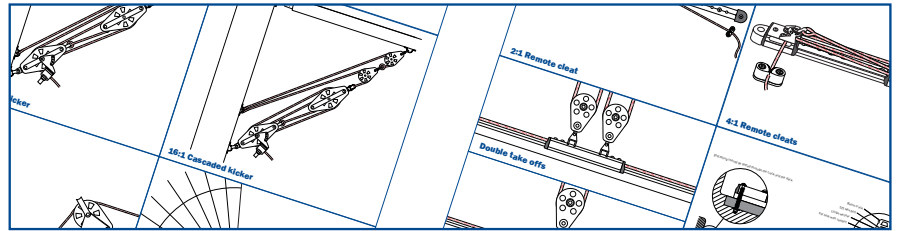
Index	Our Story	2
	Contents	3
Our Product Range Explained	Product guide	4
	The heart of the Barton block, “ The Sheave”	5
Block & Traveller System Diagrams	Block systems	6
	Traveller systems	7
Blocks	Series 0 (20mm sheave) blocks	8-9
	Series 1 (30mm sheave) blocks	10-11
	Series 2 (35mm sheave) blocks	12-13
	Series 3 (45mm sheave) blocks	14-15
	Series 4 (58mm sheave) blocks	16-17
	Series 5 (54mm sheave) blocks	18-19
	Series 6 (64mm sheave) blocks	20-21
	Series 7 (70mm sheave) blocks	22-23
	Classic Wooden blocks	24-25
	Snatch blocks	26
	Stainless steel blocks	27
	Wire rope blocks	28
	High load and foot blocks	29
	High load low friction eye	30-31
Ball Bearing Track & Travellers	Traveller systems	32-33
	Recirculating ball bearing dinghy range	34
	Complete packs	35
	Removable mainsheet systems	36
	Modular components for recirculating ball bearing traveller systems	37
	Travellers - recirculating ball bearing - single take off	38
	Travellers - recirculating ball bearing - double take off	39
	End fittings - recirculating ball bearing	40
	Track 20mm/26mm/30mm	41
‘I’ Section Track & Travellers	19mm ‘I’ section track and travellers	42
	24mm & 28mm ‘I’ section track and travellers	43
Special Cleats & ClamSeal™	Stanchion and shroud cleats, stanchion bullseyes and line tamer	44
	ClamSeal™	45
‘T’ Section Track, Sliders & Genoa Cars	20mm	46-47
	25mm	48-49
	32mm	50-51
	Towable ‘T’ track genoa cars	52
Clutches & Deck Organisers	Deck organisers	53
	Rope clutches and mast base organiser	54
	Barton DO 550 clutches	55
Winches, Winch Handles, Wear Pads & Rubbing Strakes	Winch handles and accessories	56
	Barton composite winches	57
	The Barton ‘Wincher’	58
	Wear pads and rubbing strakes	59
Sail Handling	Lazy jack kits; reefing kits, gooseneck hooks, mast steps	60-61
Barton Boomstrut	Barton Boomstrut and the Dinghy Boomstrut	62-63
Dinghy & Dayboat Fittings	Tiller extensions	64
	Carbon tiller extensions	65
	Dinghy and dayboat	66
	Dinghy mast support	67
‘K’ Cam Cleats	‘K’ cam cleats	68-69
Accessories	Inspection covers	70-71
	Furling gear	72
	Bullseyes, pad eyes and deck eyes	73
	Clevis pins, split pins, springs and sheaves	74
	Shackles and ‘S’ hooks	75
	Replica laser kit	76
	Suggested boat size	77
Part Number Index		78-79



Product guide

To ensure your safety, your yacht's performance and to make certain that you receive the best value for money, we provide guides to help clarify your deck gear choices.

The diagrams on page 6 and 7 help to explain how to achieve the task you are trying to accomplish from increasing your purchase on your kicker system or ensuring your halyards are lead back into the cockpit correctly.



Our suggested boat size table on page 77 is designed to help you correctly identify the right size of product for your application. From picking the correct size of blocks for your mainsheet system to ensuring you have the right size and type of blocks for your mast base, we provide some simple rules to consider when choosing a product.

Series 1 - 20mm sheave	6m	9m	10m	11.5m	13m	14m
Series 2 - 30mm sheave						
Series 3 - 35mm sheave						
Series 4 - 45mm sheave						
Series 5 - 54mm sheave						
Series 6 - 64mm sheave						
Series 7 - 70mm sheave						

Series 6 - 64mm sheave	6m	7m	8m	8.5m	11m	11.5m	13m
Series 7 - 70mm sheave							

Boat size +	6m	7m	8m	8.5m	11m	11.5m	13m
Series 0 - 20mm sheave							
Series 1 - 30mm sheave							
Series 2 - 35mm sheave							
Series 3 - 45mm sheave							
Series 4 - 54mm sheave							

Our team of experienced sailors are always available to assist you when making choices. Please contact us by phone or email at any time.

Some tips when selecting and fitting blocks...

- Ensure the block is strong enough for the job required, rope capacity does not denote strength
- Plain bearing versus ball bearing sheave – ball bearing sheaves do not hold the same load as plain sheaves – see page 5 for advice
- Check line capacity is sufficient. A tight fit will cause friction, side plate and line wear.
- Always ensure a fair lead. Blocks are designed to run at maximum load bearing and efficiency with the load running directly through the central axis.
- Never load one sheave of a double block. This will cause the block to fall to one side and create side plate and line wear.
- When fitting blocks to the mast head always ensure that there is sufficient articulation.
- When fitting mainsheet cam cleat blocks, ensure that the cam cleat is set at the correct angle to allow easy release in an emergency.
- Foot blocks & cheek blocks should always be through-bolted for maximum strength.

Care of blocks and deck fittings...

- Regularly rinse blocks and deck fittings with fresh water to remove salt.
- Ensure that sheaves run freely.
- Check all mast head blocks on a regular basis.
- Check shackles for signs of strain or overload.
- Inspect cam cleats (where fitted) for excessive wear.



Fixed Eye

With a plain attachment eye.



Snap Shackle

With a cast stainless steel swivelling snap shackle - ideal for quick-release downhauls or vang tackles.



Becket

All the appropriate blocks are available with or without becket.

The heart of a Barton block, "The Sheave"



Barton Plain Bearing Blocks

All Barton plain bearing blocks have a precision moulded Acetal sheave running on a large diameter brass bearing, ensuring free running under the highest of loads.



The Barton Ball Bearing Option

All Barton blocks from series 0 to size 7 offer the option of a high performance, low friction ball bearing sheave version.

Plain bearing versus ball bearing sheaves

Always use a plain bearing sheave when used on a high static load; for example mast base, (main and genoa) mast head and kicker or when the sheave will be under a high load and the sheave will turn infrequently.

Ball bearing sheaves are ideal for mainsheet systems, spinnaker sheets and where fast constant adjustment are anticipated.



Plain bearing sheave



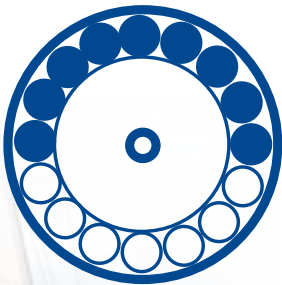
Ball bearing sheave

Barton ball bearing sheaves are proven time and again to provide the best performance and efficiency in independent tests conducted by UK and European sailing magazines stating Barton is the "best buy" choice among the competition.

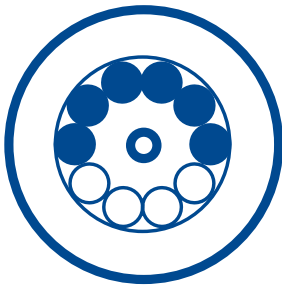
An explanation

Our design features twin rows of Acetal balls running on a large diameter centre boss. This enables the load bearing surface to be maximised over the greatest number of bearings, giving higher performance in all directions.

Ball bearing blocks to the unique Barton design bring you the possibility of upgrading your block systems at a realistic cost.



Barton roller sheave



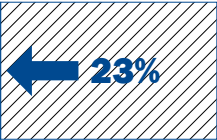
Competitor roller sheave

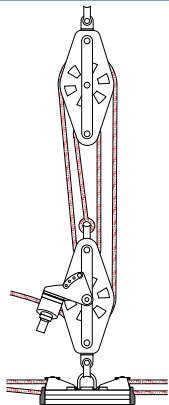


More ball bearings used result in increased capability and less rolling resistance.

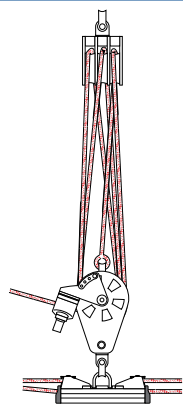


Friction is reduced by 23% when using a Barton ball bearing sheave compared to a plain sheave

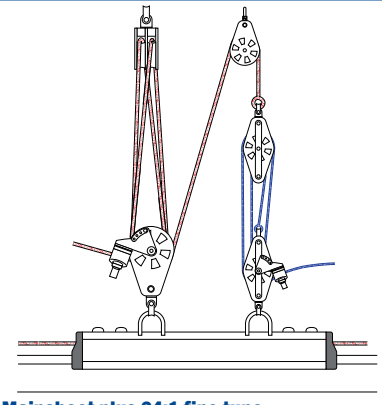




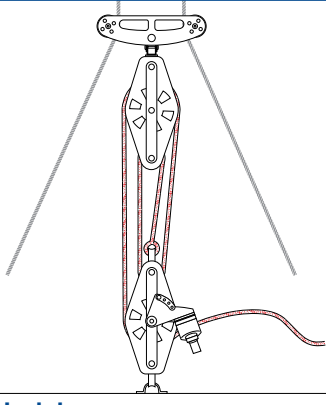
4:1 Mainsheet



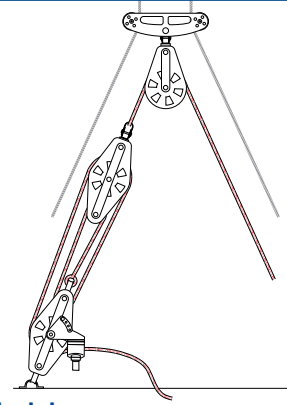
6:1 Mainsheet



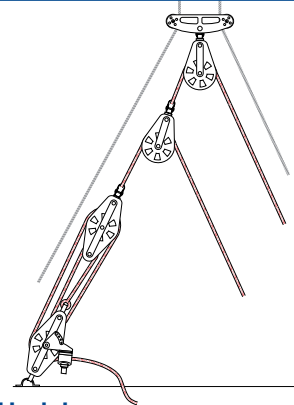
6:1 Mainsheet plus 24:1 fine tune



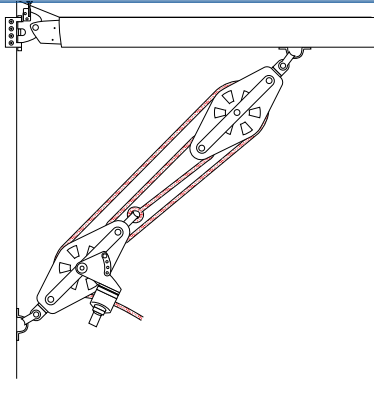
4:1 Split backstay



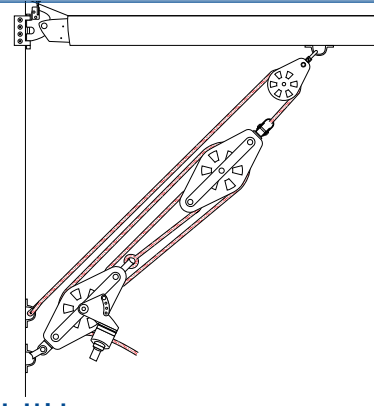
8:1 Split backstay



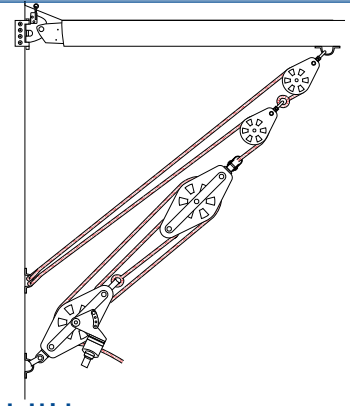
16:1 Split backstay



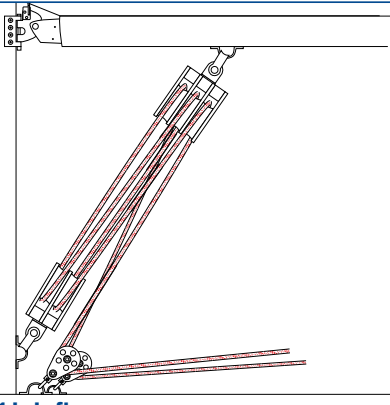
4:1 Kicker



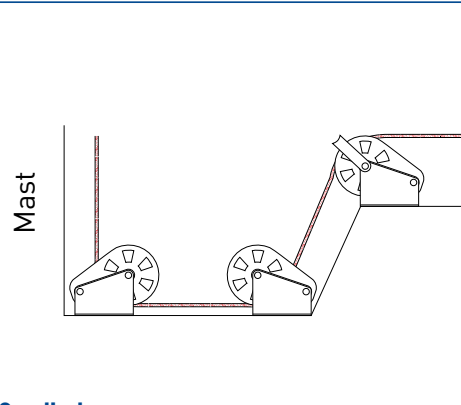
8:1 Cascaded kicker



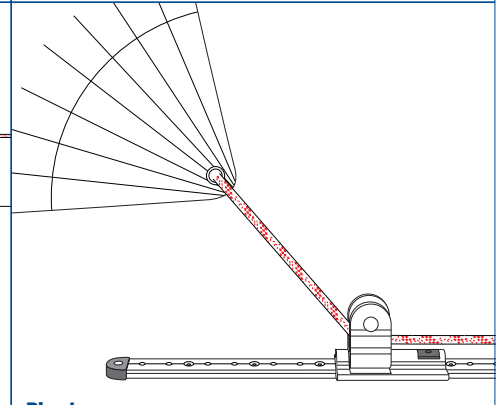
16:1 Cascaded kicker



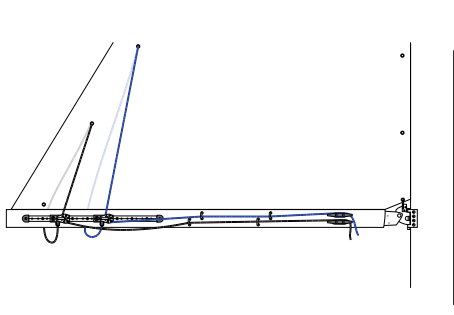
Kicker 6:1 led aft



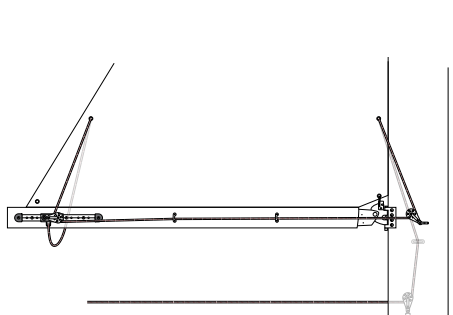
Over the top



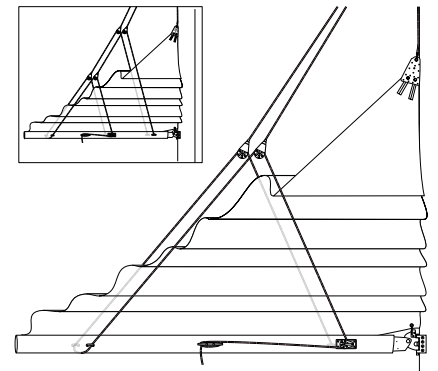
Pin stop cars



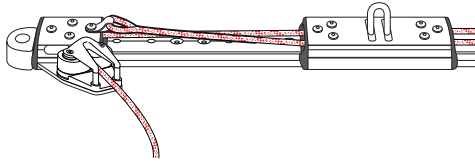
Slab reef



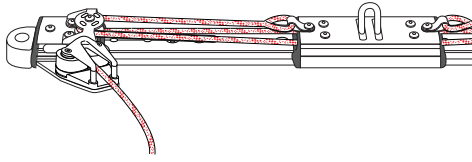
Single line reefing



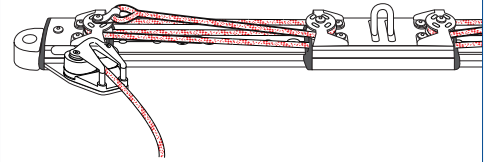
Lazy jacks



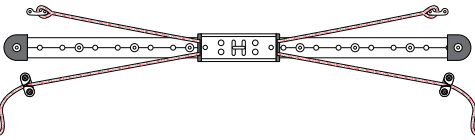
2:1 Traveller cleats on end



3:1 Traveller cleats on end



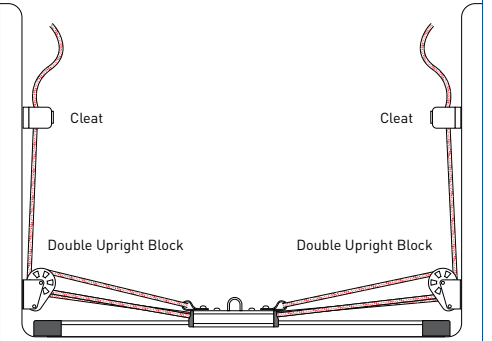
4:1 Traveller cleats on end



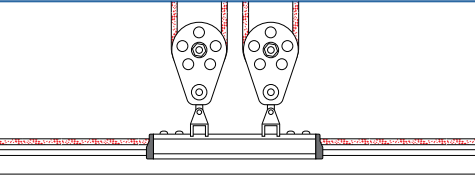
2:1 Remote cleat



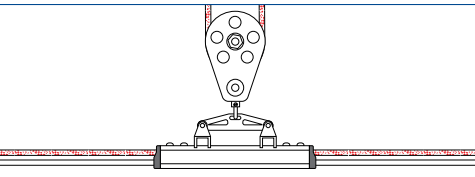
4:1 Remote cleats



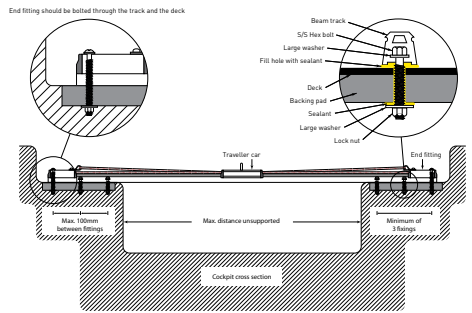
3:1 Remote cleat



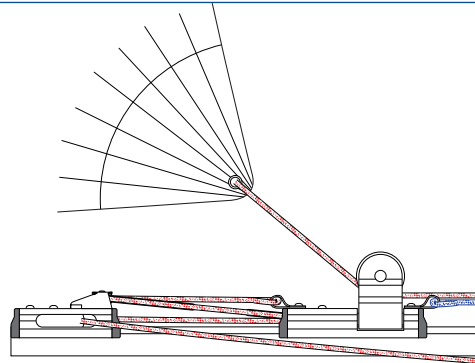
Double take offs



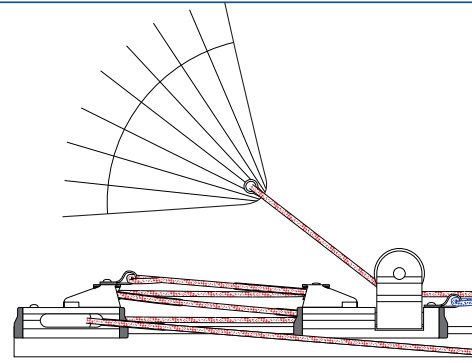
Link plate



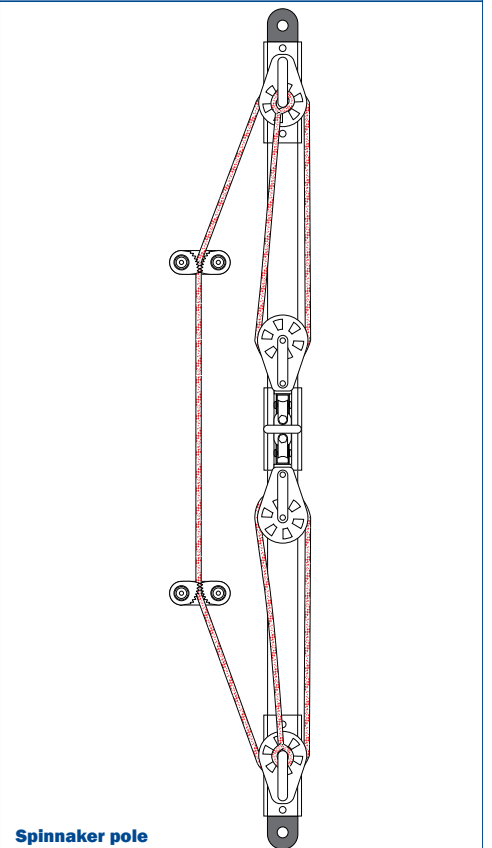
Beam track fitting



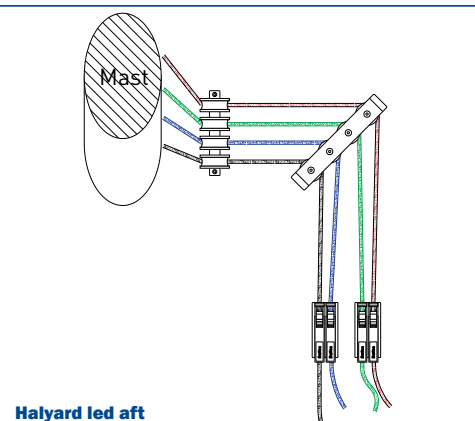
3:1 Genoa car



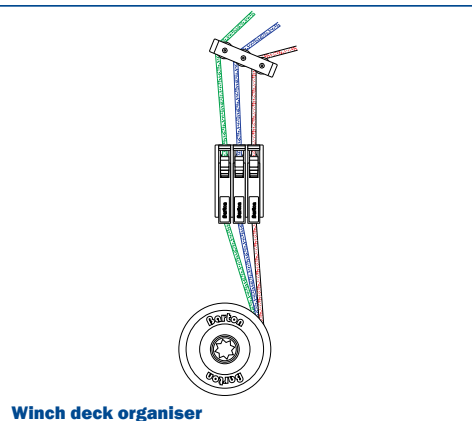
4:1 Genoa car



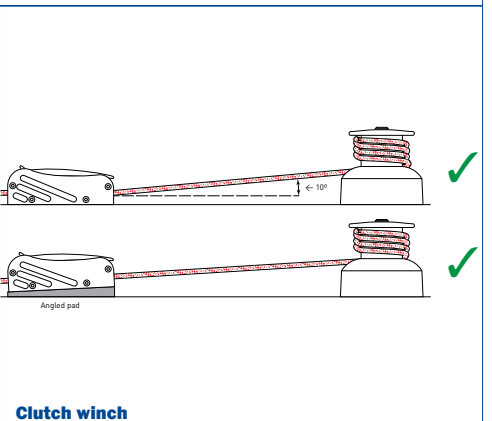
Spinnaker pole



Halyard led aft



Winch deck organiser

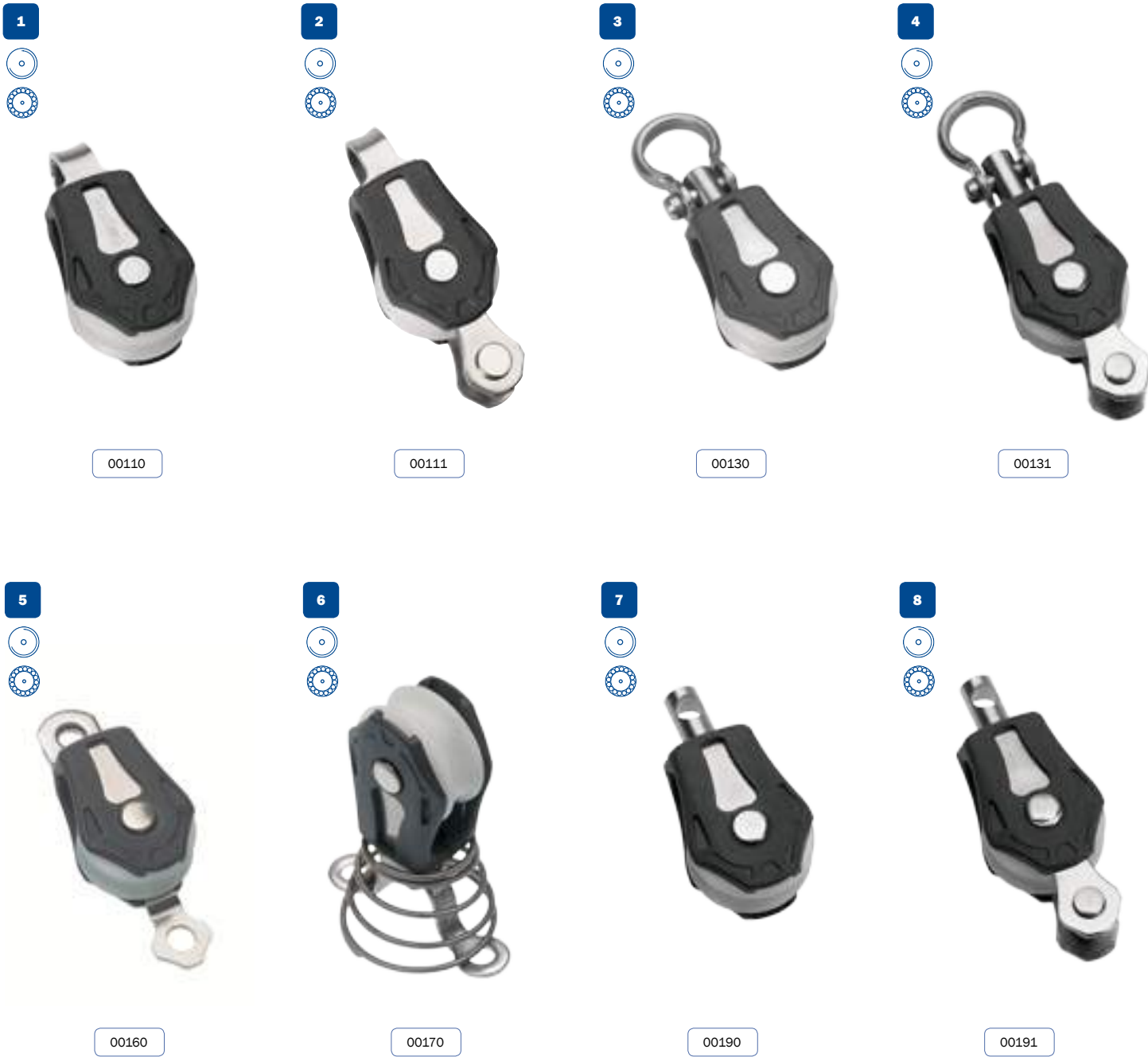


Clutch winch


20mm blocks

The 20mm sheave series 0 block range is available in both plain and ball bearing sheaves. Designed for high strength and performance but lightweight with the range starting at only 13gms. Ideal for use on dinghies, day boats and smaller craft or lead blocks, flag pennants etc. on larger yachts. See page 5 for technical details and performance values of both sheaves.


See page 77 for our suggested boat size table designed to help you clarify the correct size of block for your application.




Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
1	Single - fixed eye	00110	10110	39.1	13	13
2	Single - fixed eye + becket	00111	10111	52.2	19	17
3	Single - swivel	00130	10130	53.8	20	18
4	Single - swivel + becket	00131	10131	66.7	25	20
5	Single - cheek block	00160	10160	55	17	15
6	Single - stand up	00170	10170	47	21	23
7	Single - swivel (without shackle)	00190	10190	39.6	16	14
8	Single - swivel + becket (without shackle)	00191	10191	52.8	20	18
9	Double - fixed eye	00210	10210	50.4	37	33




Sheave size 20mm x 8mm (25/32 x 5/16")




Max rope diameter
5mm (3/16")




Break load
550kg (1210lbs)



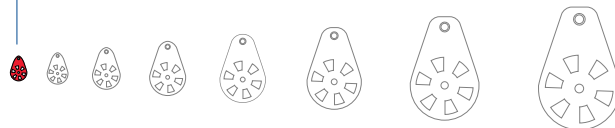
Becket




SWL 275kg
(606lbs)



Max rolling load
(ball bearing blocks)
130kg (286lbs)




9




00210

10




00230

11





00310

12




00311

13




00330

14





00331

15




00511

16

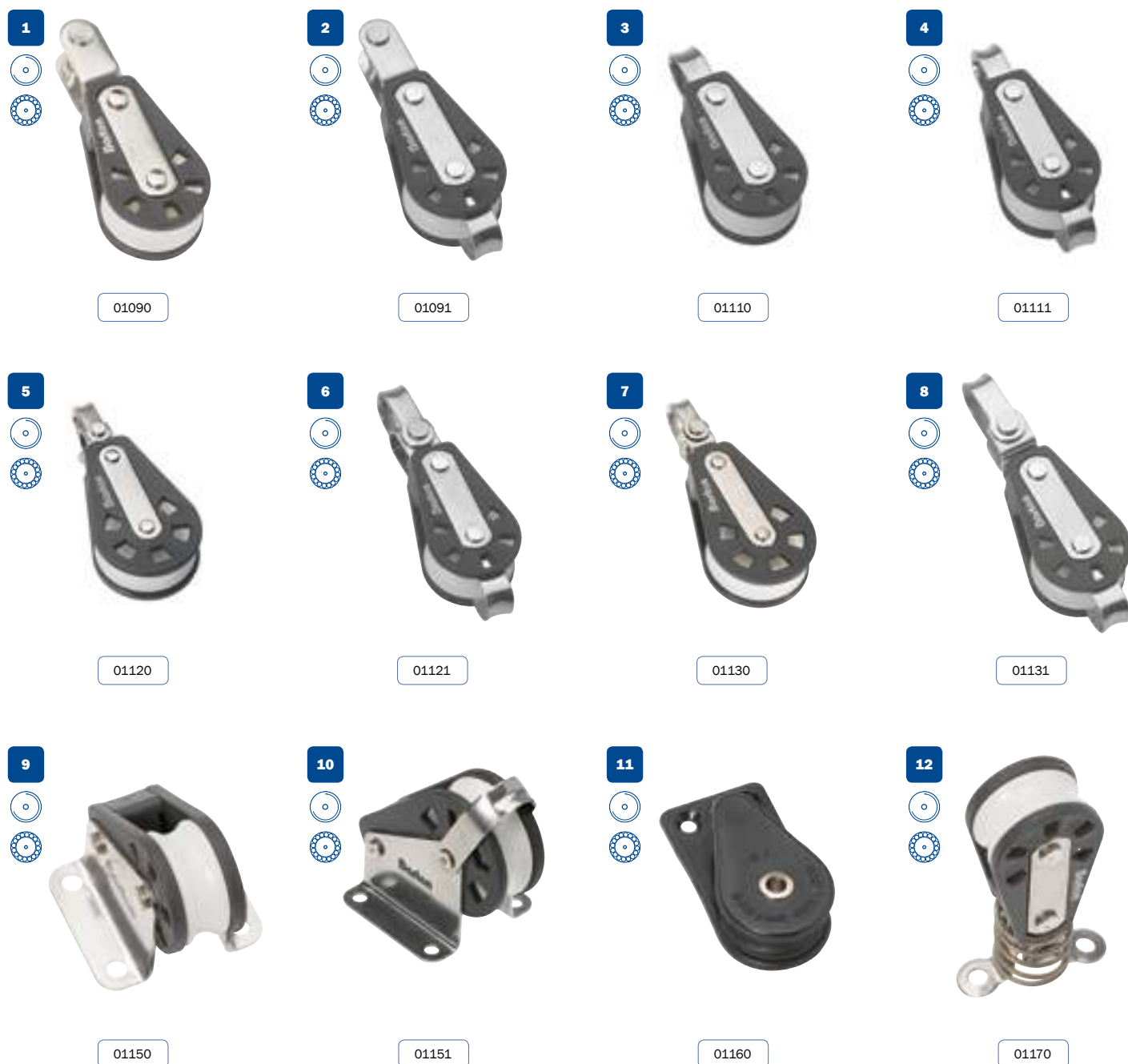
00931

Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
10	Double - fixed eye + becket	00211	10211	63.5	41	37
	Double - swivel	00230	10230	65.8	46	38
	Double - swivel + becket	00231	10231	79	47	42
11	Triple - fixed eye	00310	10310	50.4	55	48
12	Triple - fixed eye + becket	00311	10311	63.5	59	52
13	Triple - swivel	00330	10330	66.7	60	53
14	Triple - swivel + becket	00331	10331	79.3	64	57
15	Triple - fixed eye + becket + cam	00511	10511	71.7	103	96
16	Triple - swivel + becket + cam	00931	10931	88.5	110	102


30mm blocks

The 30mm sheave series 1 block range with its stainless steel frame for added strength is available in both plain and ball bearing options. Modern design, high strength, lightweight features allow for a multitude of uses on every size of craft. See page 5 for details and performance values of both sheaves.


See page 77 for our suggested boat size table designed to help you clarify the correct size of block for your application.




Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
1	Single - fixed eye clevis pin	01090	11090	78	48	46
2	Single - fixed eye clevis pin + becket	01091	11091	87	52	51
3	Single - fixed eye	01110	11110	70	41	40
4	Single - fixed eye + becket	01111	11111	80	46	44
5	Single - reverse shackle	01120	11120	82	51	49
6	Single - reverse shackle + becket	01121	11121	93	56	55
7	Single - swivel	01130	11130	85	57	55
8	Single - swivel + becket	01131	11131	98	61	60
9	Single - upright	01150	11150	53	64	62
10	Single - upright with fairlead	01151	11151	63	70	78
11	Lightweight cheek block	01160	11160	55	21	20
12	Single - stand up block	01170	11170	79	62	60
13	Single - spinnaker lead	01180	11180	114	59	57




Sheave size 30mm x 12mm (1 3/16" x 15/32")




Max rope diameter
8mm (5/16")




Break load
700kg (1543lbs)



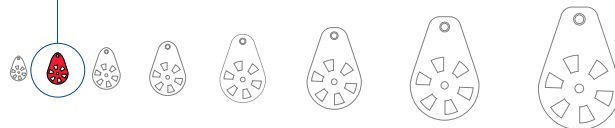
Becket



SWL 350kg
(771lbs)



Max rolling load
(ball bearing blocks)
245kg (540lbs)



01180



01190



01210



01211



01220



01221



01230



01231



01250



01280



01320



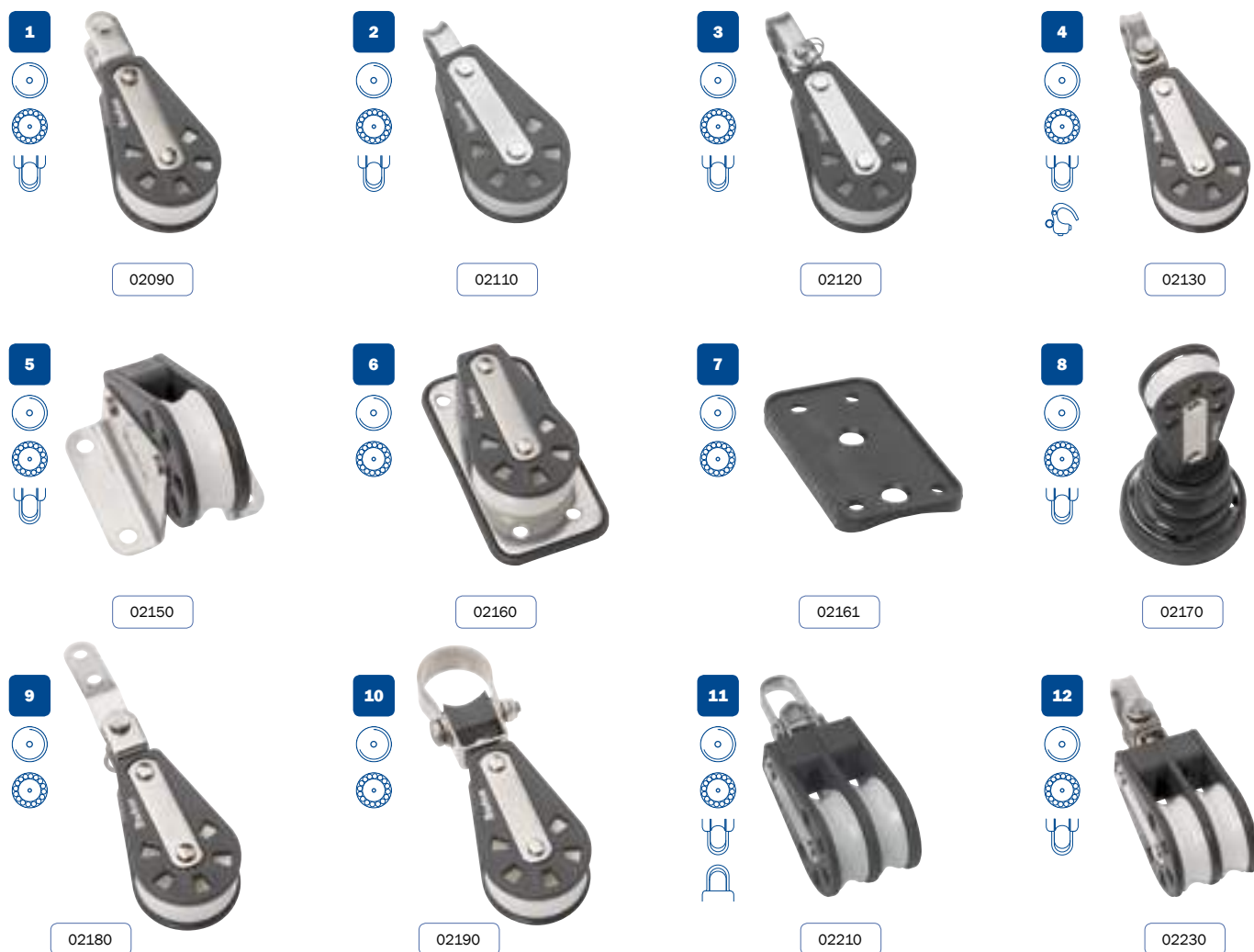
01330

Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
14	Lightweight lead block	01190	11190	44	20	18
15	Double - fixed eye	01210	11210	69	65	63
16	Double - fixed eye + becket	01211	11211	78	71	69
17	Double - reverse shackle	01220	11220	83	77	73
18	Double - reverse shackle + becket	01221	11221	91	82	78
19	Double - swivel	01230	11230	90	83	80
20	Double - swivel + becket	01231	11231	99	88	85
21	Double - upright	01250	11250	53	89	86
22	Back-to-back swivel	01280	11280	118	81	78
23	Triple - reverse shackle	01320	11320	81	102	97
	Triple - reverse shackle + becket	01321	11321	94	109	103
24	Triple - swivel	01330	11330	85	108	103
	Triple - swivel + becket	01331	11331	98	112	108


35mm blocks


The 35mm sheave series 2 block range with its stainless steel frame for added strength is available in both plain and ball bearing options. Modern design, high strength, lightweight features allow for a multitude of uses on every size of craft. See page 5 for details and performance values of both sheaves.


See page 77 for our suggested boat size table designed to help you clarify the correct size of block for your application.





Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
1	Single - fixed eye clevis pin	02090	12090	87	56	54
	Single - fixed eye clevis pin + becket	02091	12091	97	63	60
2	Single - fixed eye	02110	12110	79	50	47
	Single - fixed eye + becket	02111	12111	88	56	53
3	Single - reverse shackle	02120	12120	94	60	58
	Single - reverse shackle + becket	02121	12121	112	66	64
4	Single - swivel	02130	12130	97	64	62
	Single - swivel + becket	02131	12131	105	70	69
	Single - snap shackle	02140	12140	106	96	93
	Single - snap shackle + becket	02141	12141	115	101	98
5	Single - upright	02150	12150	51	78	76
	Single - upright with fairlead	02151	12151	75	87	85
6	Single - cheek block	02160	12160	80	73	69
7	Curved backing plate (for cheek block)	02161	-	80	15	-
8	Single - stand up	02170	12170	112	138	137
	Single - stand up + becket	02171	12171	117	142	140
9	Single - spinnaker lead	02180	12180	122	68	66
10	Single - stanchion lead	02190	12190	110	78	77
11	Double - fixed eye	02210	12210	79	80	77
	Double - fixed eye + becket	02211	12211	87	86	84
	Double - reverse shackle	02220	12220	93	91	89
	Double - reverse shackle + becket	02221	12221	97	97	94
12	Double - swivel	02230	12230	98	96	95


 Sheave size 35mm x 12mm (1 3/8" x 15/32")
 Fiddle 30/45mm x 12mm (1 3/16" x 1 3/4" x 15/32")


 Max rope diameter
 8mm (5/16")


 Break load
 740kg (1630lbs)

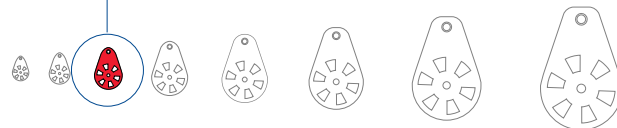
 Becket

 Fixed eye

 SWL 370kg
 (815lbs)

 Max rolling load
 (ball bearing blocks)
 260kg (573lbs)

 Snap shackle



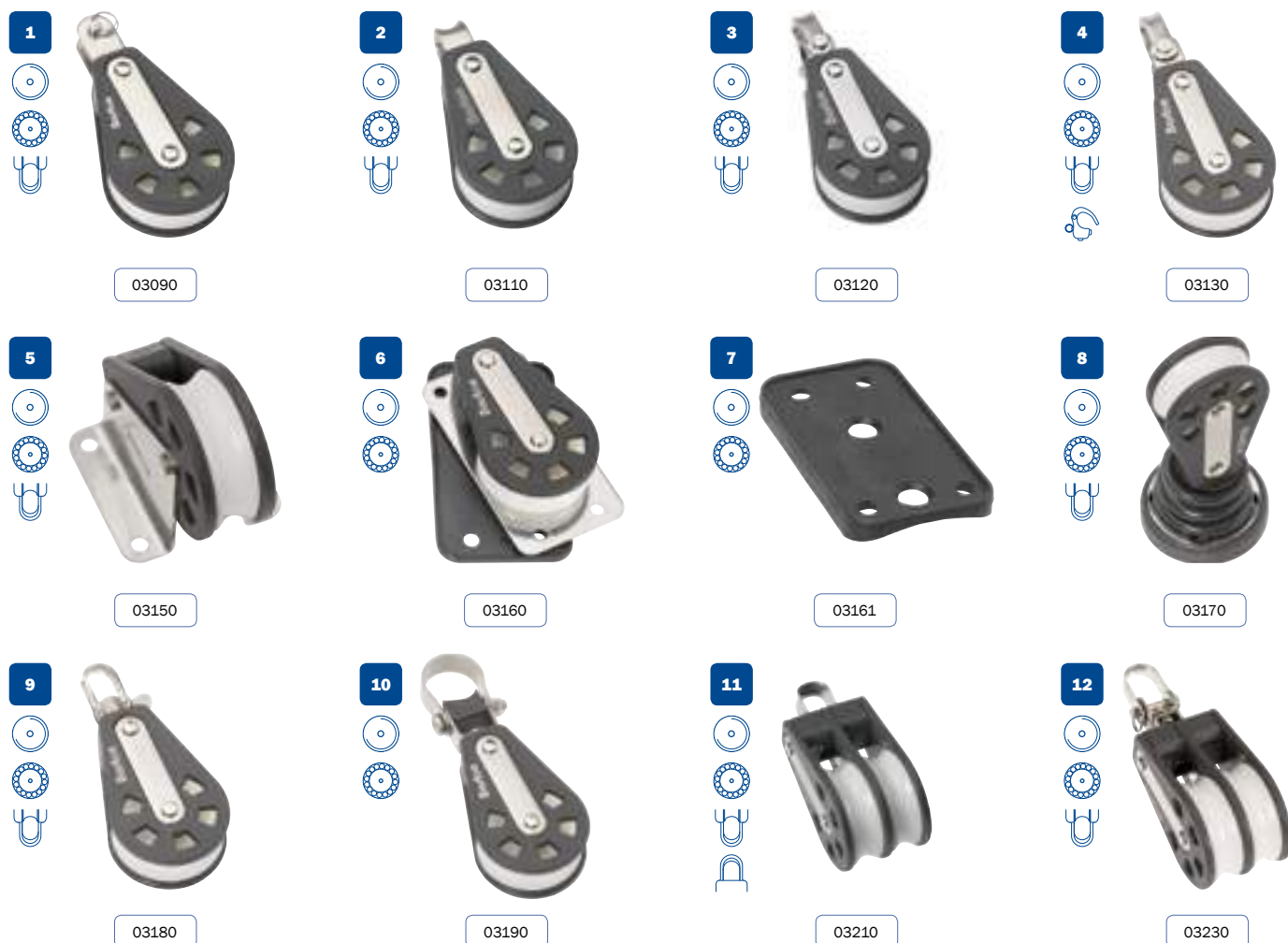
Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
	Double - swivel + becket	02231	12231	109	102	100
13	Double - upright	02250	12250	63	110	108
14	Back-to-back swivel	02280	12280	141	98	96
15	Double - stanchion lead	02290	12290	108	108	104
16	Triple - reverse shackle	02320	12320	91	121	120
	Triple - reverse shackle + becket	02321	12321	100	127	126
17	Triple - swivel	02330	12330	94	125	124
	Triple - swivel + becket	02331	12331	105	132	130
18	Fiddle - fixed eye	02410	12410	128	98	97
	Fiddle - fixed eye + becket	02411	12411	137	100	99
19	Fiddle - reverse shackle	02420	12420	140	109	108
	Fiddle - reverse shackle + becket	02421	12421	150	113	112
20	Fiddle - swivel	02430	12430	147	113	112
	Fiddle - swivel + becket	02431	12431	155	117	116
	Fiddle - snap shackle	02440	12440	155	142	141
	Fiddle - snap shackle + becket	02441	12441	163	150	147
21	Single - swivel + becket + cam	02531	12531	119	127	125
	Single - snap shackle + becket + cam	02541	12541	122	157	155
22	Single - stand up + becket + cam	02571	12571	132	201	197
23	Fiddle - swivel + becket + cam	02631	12631	155	165	164
	Fiddle - snap shackle + becket + cam	02641	12641	165	196	195
24	Fiddle - swivel + becket + plastic cam	02731	12731	157	167	166

45mm blocks


The 45mm sheave series 3 block range incorporates modern design, with stainless steel frames and the latest advanced materials, using 30 percent fibre glass filled nylon and Acetal sheaves to maximise their strength whilst keeping weight to minimum. See page 5 for details and performance values for both sheaves.


Suitable for use as mainsheet, vang, lead blocks or wherever a powerful and compact purchase tackle is required for dinghies to dayboats and lightweight cruisers.


See page 77 for our suggested boat size table designed to help you clarify the correct size of block for your application.





Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
1	Single - fixed eye clevis pin	03090	13090	97	85	88
	Single - fixed eye clevis pin + becket	03091	13091	112	94	96
2	Single - fixed eye	03110	13110	90	77	79
	Single - fixed eye + becket	03111	13111	107	84	88
3	Single - reverse shackle	03120	13120	105	85	88
	Single - reverse shackle + becket	03121	13121	117	94	96
4	Single - swivel	03130	13130	107	89	90
	Single - swivel + becket	03131	13131	122	97	99
	Single - snap shackle	03140	13140	118	121	122
	Single - snap shackle + becket	03141	13141	132	130	131
5	Single - upright	03150	13150	75	122	126
	Single - upright with fairlead	03151	13151	85	132	133
6	Single - cheek block	03160	13160	92	109	110
7	Curved backing plate (for cheek block)	03161	-	92	19	-
8	Single - stand up	03170	13170	118	158	162
	Single - stand up block + becket	03171	13171	129	169	172
9	Single - varilloc	03180	13180	104	90	92
	Single - varilloc + becket	03181	13181	117	98	100
10	Single - stanchion lead	03190	13190	120	104	106
11	Double - fixed eye	03210	13210	90	124	131
	Double - fixed eye + becket	03211	13211	100	132	136
	Double - reverse shackle	03220	13220	104	134	139
	Double - reverse shackle + becket	03221	13221	117	142	146
12	Double - swivel	03230	13230	107	138	144


 Single 45mm x 14mm (1 3/4" x 35/64")
 Fiddle 30/58mm x 14mm (1 3/16" x 35/64")


 Max rope diameter
 10mm (3/8")


 Break load
 770kg (1694lbs)

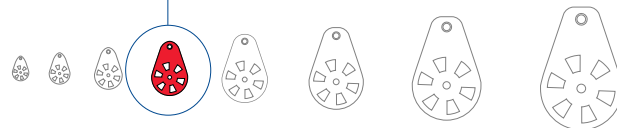
 Becket

 Fixed eye

 SWL 385kg
 (848lbs)

 Max rolling load
 (ball bearing blocks)
 270kg (595lbs)

 Snap shackle

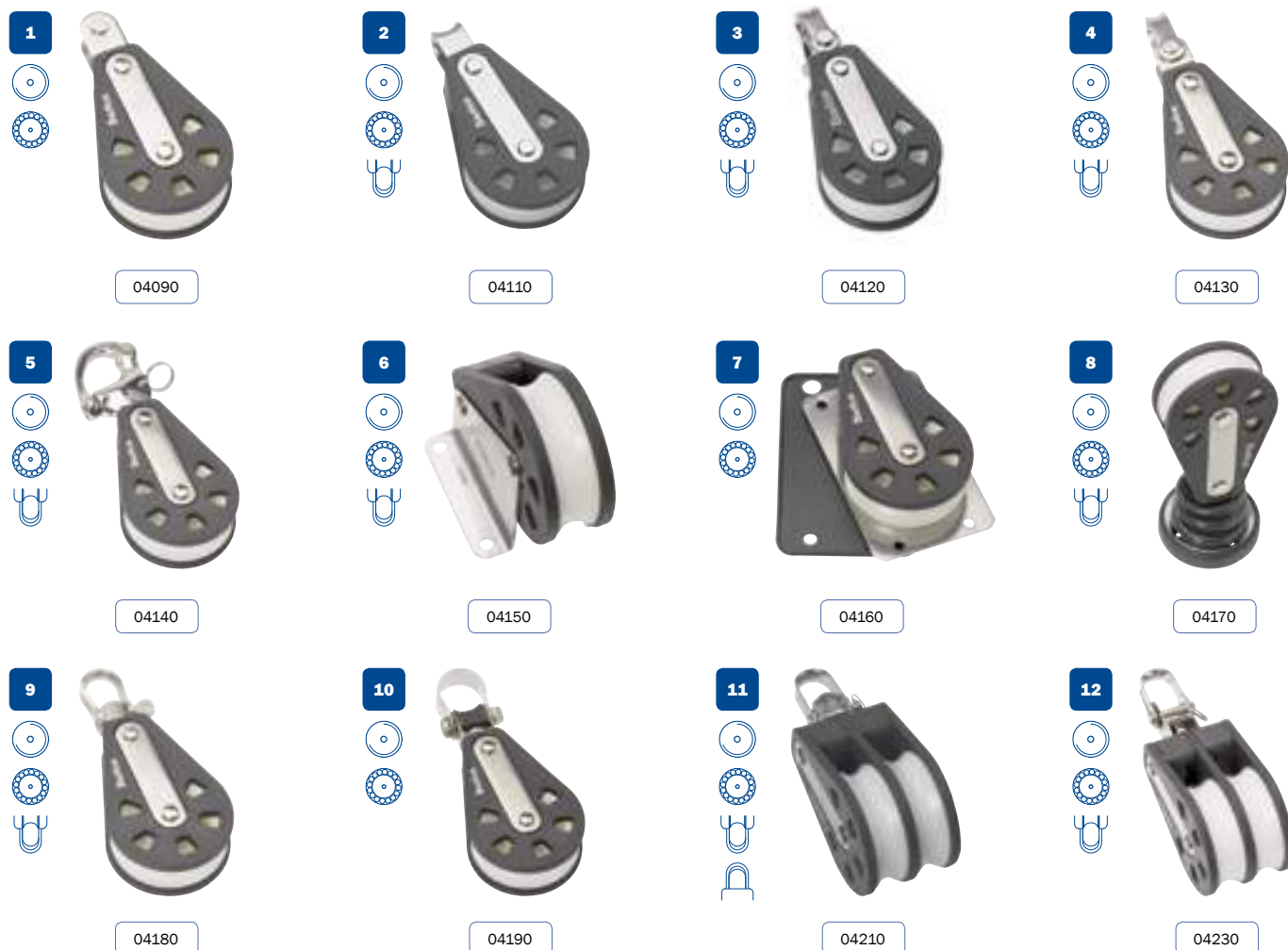


Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
	Double - swivel + becket	03231	13231	127	147	152
13	Double - upright	03250	13250	75	171	176
14	Triple - reverse shackle	03320	13320	104	183	193
	Triple - reverse shackle + becket	03321	13321	117	191	199
15	Triple - swivel	03330	13330	117	204	213
	Triple - swivel + becket	03331	13331	130	211	220
16	Fiddle - fixed eye	03410	13410	147	151	156
	Fiddle - fixed eye + becket	03411	13411	160	157	167
	Fiddle - reverse shackle	03420	13420	162	161	165
	Fiddle - reverse shackle + becket	03421	13421	175	168	172
17	Fiddle - swivel	03430	13430	165	163	168
	Fiddle - swivel + becket	03431	13431	176	170	177
	Fiddle - snap shackle	03440	13440	174	195	199
	Fiddle - snap shackle + becket	03441	13441	188	202	206
18	Fiddle - variloc	03480	13480	160	165	169
	Fiddle - variloc + becket	03481	13481	175	163	188
19	Single - swivel + becket + cam	03511	13511	121	188	196
	Single - snap shackle + becket + cam	03541	13541	129	345	347
20	Triple - swivel + becket + cam	03531	13531	137	306	315
21	Single - stand up + becket + cam	03571	13571	136	261	263
22	Fiddle - swivel + becket + cam	03631	13631	178	250	255
	Fiddle - snap shackle + becket + cam	03641	13641	188	281	280
23	Fiddle - variloc + becket + cam	03681	13681	170	253	257
24	Fiddle - swivel + becket + plastic cam	03731	13731	178	253	257



58mm blocks


The 58mm sheave series 4 block range is designed for dayboats and cruisers, with its stainless steel frame and using 30 percent fibre glass filled nylon for its sides making the range high strength but still lightweight. Available in both plain and ball bearing options. See page 5 for details and performance values of both sheaves.


See page 77 for our suggested boat size table designed to help you clarify the correct size of block for your application.





Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
1	Single - Fixed eye clevis pin	04090	14090	120	166	161
	Single - fixed eye clevis pin + becket	04091	14091	140	177	175
2	Single - fixed eye	04110	14110	114	156	150
	Single - fixed eye + becket	04111	14111	135	170	166
3	Single - reverse shackle	04120	14120	130	172	167
	Single - reverse shackle + becket	04121	14121	150	187	181
4	Single - swivel	04130	14130	138	187	181
	Single - swivel + becket	04131	14131	157	199	198
5	Single - snap shackle	04140	14140	148	257	250
	Single - snap shackle + becket	04141	14141	170	269	266
6	Single - upright	04150	14150	92	218	214
	Single - upright with fairlead	04151	14151	105	234	231
7	Single - cheek block	04160	14160	107	178	174
8	Single - stand up	04170	14170	135	243	237
	Single - stand up block + becket	04171	14171	152	262	253
9	Single - variloc	04180	14180	131	189	181
	Single - variloc + becket	04181	14181	150	203	200
10	Single - stanchion lead	04190	14190	140	197	190
11	Double - fixed eye	04210	14210	115	270	261
	Double - fixed eye + becket	04211	14211	135	286	277
	Double - reverse shackle	04220	14220	130	275	263
	Double - reverse shackle + becket	04221	14221	147	288	285
12	Double - swivel	04230	14230	138	291	283
	Double - swivel + becket	04231	14231	162	305	296


 Single 58mm x 17mm (2 1/4" x 5/8")
 Fiddle 32/58mm x 17mm (1 1/4"/2 1/4" x 5/8")


 Max rope diameter
 12mm (7/16")


 Break load
 1260kg (2770lbs)

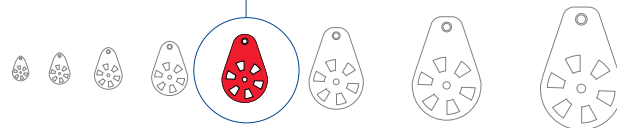
 Becket

 Fixed eye

 SWL 630kg
 (1385lbs)

 Max rolling load
 (ball bearing blocks)
 440kg (970lbs)

 Snap shackle



Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
13	Double - upright	04250	14250	92	321	314
14	Triple - reverse shackle	04320	14320	132	377	365
	Triple - reverse shackle + becket	04321	14321	145	391	380
15	Triple - swivel	04330	14330	139	391	380
	Triple - swivel + becket	04331	14331	155	406	396
16	Fiddle - fixed eye	04410	14410	160	225	211
	Fiddle - fixed eye + becket	04411	14411	178	237	225
	Fiddle - reverse shackle	04420	14420	175	239	228
	Fiddle - reverse shackle + becket	04421	14421	195	253	239
17	Fiddle - swivel	04430	14430	185	254	244
	Fiddle - swivel + becket	04431	14431	202	267	252
	Fiddle - snap shackle	04440	14440	195	326	316
	Fiddle - snap shackle + becket	04441	14441	215	339	322
18	Fiddle - varilloc	04480	14480	177	259	243
	Fiddle - varilloc + becket	04481	14481	197	269	260
19	Single - swivel + becket + cam	04531	14531	157	307	299
	Single - snap shackle + becket + cam	04541	14541	167	389	381
20	Single - stand up + becket + cam	04571	14571	152	365	358
21	Fiddle - swivel + becket + cam	04631	14631	198	372	358
	Fiddle - snap shackle + becket + cam	04641	14641	214	447	432
22	Fiddle - varilloc + becket + cam	04681	14681	195	375	361
23	Fiddle - swivel + becket + plastic cam	04731	14731	206	378	365
24	Triple - swivel + becket + cam	04931	14931	150	597	586

54mm cruiser blocks

This range of high load cruiser blocks are of rugged construction, featuring high grade injection moulded side plates, with all load-carrying components from 316 grade stainless steel. Side plates are through-bolted and riveted for added strength and security.

This good looking and versatile range is designed for use on larger cruising and racing yachts. All are designed for ease of use with our ball bearing mainsheet traveller systems - see pages 32-41. See page 5 for details and performance values of both sheaves.

A comprehensive range of cam cleat, fiddle, and fiddle and cam cleat versions are available (see page 6 for setup options).

See page 77 for our suggested boat size table designed to help you clarify the correct size of block for your application.



Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
1	Single - fixed eye clevis pin	05090	15090	114	162	151
2	Single - fixed eye	05110	15110	107	154	140
	Single - fixed eye + becket	05111	15111	130	177	163
3	Single - reverse shackle	05120	15120	130	178	164
	Single - reverse shackle + becket	05121	15121	150	204	189
4	Single - swivel	05130	15130	130	197	183
	Single - swivel + becket	05131	15131	153	220	206
5	Single - snap shackle	05140	15140	142	263	247
	Single - snap shackle + becket	05141	15141	165	286	272
6	Single - stand up	05170	15170	140	347	329
	Single - stand up block + becket	05171	15171	163	370	352
7	Single - variloc	05180	15180	125	195	181
	Single - variloc + becket	05181	15181	148	218	205
8	Double - reverse shackle	05220	15220	125	274	247
	Double - reverse shackle + becket	05221	15221	147	300	272
9	Triple - reverse shackle	05320	15320	130	382	337



Single 54mm x 17mm (2 1/8" x 5/8")
Fiddle 38/64mm x 17mm (1 1/2"/2 1/2" x 5/8")



Max rope diameter
12mm (7/16")



SWL 750kg
(1650lbs)



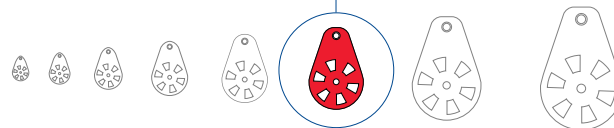
Break load
1500kg (3300lbs)



Max rolling load
(ball bearing blocks)
525kg (1157lbs)



Becket



10



05330

11



05420

12



05430

13



05440

14



05480

15



05631

16



05641

17



05681

18



05930

Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
10	Triple - reverse shackle + becket	05321	15321	148	402	365
	Triple - swivel	05330	15330	150	490	475
	Triple - swivel + becket	05331	15331	173	513	498
11	Fiddle - reverse shackle	05420	15420	185	278	255
	Fiddle - reverse shackle + becket	05421	15421	205	300	285
	Fiddle - swivel	05430	15430	185	300	278
12	Fiddle - swivel + becket	05431	15431	209	318	296
	Fiddle - snap shackle	05440	15440	200	362	340
	Fiddle - snap shackle + becket	05441	15441	220	378	360
14	Fiddle - variloc	05480	15480	185	295	275
	Fiddle - variloc + becket	05481	15481	209	296	276
	Fiddle - swivel + becket + cam	05631	15631	209	469	449
16	Fiddle - snap shackle + becket + cam	05641	15641	215	568	553
17	Fiddle - variloc + becket + cam	05681	15681	205	508	490
18	Triple - swivel + cam	05930	15930	150	660	645
	Triple - swivel + becket + cam	05931	15931	173	683	668

64mm cruiser blocks

This range of high load cruiser blocks are of rugged construction, featuring high grade injection moulded side plates, with all load-carrying components from 316 grade stainless steel. Side plates are through-bolted and riveted for added strength and security. This good looking and versatile range is designed for use on larger cruising and racing yachts. All are designed for ease of use with our ball bearing mainsheet traveller systems - see pages 32-41. See page 5 for details and performance values of both sheaves.

A comprehensive range of cam cleat, fiddle, and fiddle & cam cleat versions are available (see page 6 for setup options).

See page 77 for our suggested boat size table designed to help you clarify the correct size of block for your application.



Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
1	Single - fixed eye clevis pin	06090	16090	126	193	186
2	Single - fixed eye	06110	16110	118	180	172
	Single - fixed eye + becket	06111	16111	147	210	201
3	Single - reverse shackle	06120	16120	140	206	197
	Single - reverse shackle + becket	06121	16121	165	232	225
4	Single - swivel	06130	16130	142	227	217
	Single - swivel + becket	06131	16131	167	255	245
5	Single - snap shackle	06140	16140	170	292	283
	Single - snap shackle + becket	06141	16141	180	322	307
6	Single - stand up	06170	16170	150	369	361
	Single - stand up block + becket	06171	16171	179	399	391
7	Single - variloc	06180	16180	138	228	217
	Single - variloc + becket	06181	16181	165	254	244
8	Double - reverse shackle	06220	16220	135	325	307
	Double - reverse shackle + becket	06221	16221	164	352	334
9	Triple - reverse shackle	06320	16320	135	449	425



Single 64mm x 18mm (2 1/2" x 45/64")
Fiddle 44/72mm x 18mm (1 3/4"/2 53/64" x 45/64")



Max rope diameter
12mm (7/16")



Break load
2000kg (4400lbs)



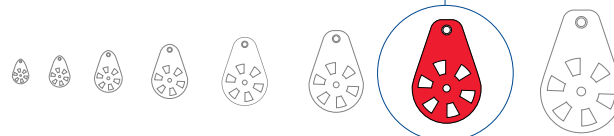
Becket



SWL 1000kg
(2200lbs)



Max rolling load
(ball bearing blocks)
700kg (1543lbs)



10



06330

11



06420

12



06430

13



06440

14



06480

15



06631

16



06641

17



06681

18



06930

Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
10	Triple - reverse shackle + becket	06321	16321	167	476	455
	Triple - swivel	06330	16330	170	686	662
	Triple - swivel + becket	06331	16331	193	716	692
11	Fiddle - reverse shackle	06420	16420	210	339	321
	Fiddle - reverse shackle + becket	06421	16421	233	366	350
12	Fiddle - swivel	06430	16430	210	357	346
	Fiddle - swivel + becket	06431	16431	235	388	358
13	Fiddle - snap shackle	06440	16440	220	417	407
	Fiddle - snap shackle + becket	06441	16441	250	450	437
14	Fiddle - varilloc	06480	16480	205	356	335
	Fiddle - varilloc + becket	06481	16481	232	383	362
15	Fiddle - swivel + becket + cam	06631	16631	232	575	554
16	Fiddle - snap shackle + becket + cam	06641	16641	245	639	618
17	Fiddle - varilloc + becket + cam	06681	16681	235	575	557
18	Triple - swivel + cam	06930	16930	170	856	832
	Triple - swivel + becket + cam	06931	16931	193	886	862

70mm cruiser blocks


This range of high load cruiser blocks are of rugged construction, featuring high grade injection moulded side plates, with all load-carrying components from 316 grade stainless steel. Side plates are through-bolted and riveted for added strength and security. This good looking and versatile range is designed for use on larger cruising and racing yachts. All are designed for ease of use with our ball bearing mainsheet traveller systems - see pages 32-41. See page 5 for details and performance values of both sheaves.

A comprehensive range of cam cleat, fiddle, and fiddle & cam cleat versions are available (see page 6 for setup options).


See page 77 for our suggested boat size table designed to help you clarify the correct size of block for your application.




Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
1	Single - fixed eye clevis pin	07090	17090	150	276	278
2	Single - fixed eye	07110	17110	137	246	237
	Single - fixed eye + becket	07111	17111	166	282	271
3	Single - reverse shackle	07120	17120	168	308	299
	Single - reverse shackle + becket	07121	17121	195	343	337
4	Single - swivel	07130	17130	163	354	345
	Single - swivel + becket	07131	17131	197	389	382
5	Single - snap shackle	07140	17140	168	359	350
	Single - snap shackle + becket	07141	17141	200	394	385
6	Single - stand up	07170	17170	162	444	439
	Single - stand up block + becket	07171	17171	191	480	471
7	Single - variloc	07180	17180	163	328	317
	Single - variloc + becket	07181	17181	192	364	348
8	Double - reverse shackle	07220	17220	160	461	448
	Double - reverse shackle + becket	07221	17221	195	491	484
9	Triple - reverse shackle	07320	17320	165	616	604




Single 72mm x 20mm (2 53/64" x 3/4")
Fiddle 44/72mm x 20mm (1 3/4" x 2 53/64" x 3/4")




Max rope diameter
14mm (9/16")




Break load
2500kg (5500lbs)



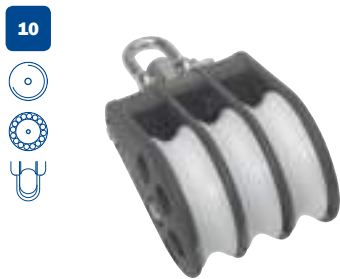
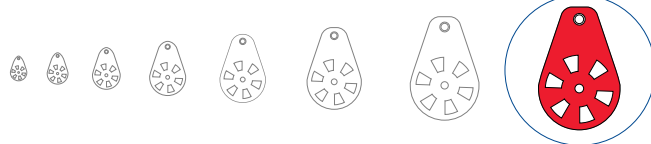
Becket



SWL 1250:kg
(2750lbs)



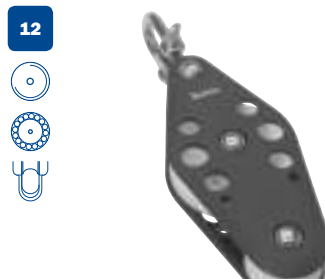
Max rolling load
(ball bearing blocks)
875kg (1929lbs)



07330



07420



07430



07440



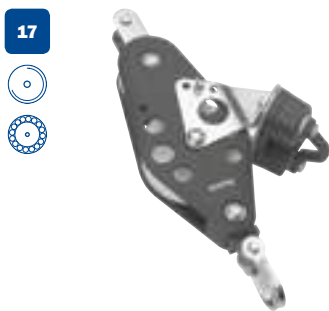
07480



07631



07641



07681



07930

Number	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
10	Triple - reverse shackle + becket	07321	17321	199	646	637
	Triple - swivel	07330	17330	163	734	725
	Triple - swivel + becket	07331	17331	192	770	761
11	Fiddle - reverse shackle	07420	17420	220	398	390
	Fiddle - reverse shackle + becket	07421	17421	252	428	410
	Fiddle - swivel	07430	17430	220	449	406
12	Fiddle - swivel + becket	07431	17431	248	470	361
	Fiddle - snap shackle	07440	17440	222	448	431
	Fiddle - snap shackle + becket	07441	17441	253	488	461
13	Fiddle - varilock	07480	17480	220	417	405
	Fiddle - varilock + becket	07481	17481	249	439	430
	Fiddle - swivel + becket + cam	07631	17631	248	660	651
14	Fiddle - snap shackle + becket + cam	07641	17641	250	668	644
	Fiddle - varilock + becket + cam	07681	17681	245	637	628
	Triple - swivel + cam	07930	17930	163	770	761
15	Triple - swivel + becket + cam	07931	17931	192	806	797

Classic Wooden blocks

Victory collection

Combining high performance engineering and classic design, our range of wooden blocks has been designed for mariners who appreciate elegance and want technical excellence. The range has been named in honour of the flagship of the British Navy – the HMS Victory.

Crafted by sailors for sailors, the Victory blocks are manufactured in the UK from traditional ash wood. Available in high gloss marine varnish finish, or in natural uncoated ash, the blocks can be painted or varnished to compliment the aesthetics of a dinghy or yacht. Victory blocks are bolted together allowing for servicing or refinishing.


The Victory collection of wooden blocks not only look good, but are highly durable and designed to withstand many years of use in harsh marine environments. The sleek style wooden plates conceal the modern technical working of Barton’s proven high performance engineering, with Delrin ball bearings, Torlon needle bearings, gun metal shaded sheave and solid brass fittings.


1







50030

Sheave size 30mm x 12mm (1 3/16 x 15/32")

Max rope diameter 8mm (5/16")

Max rolling load 245kg (540lbs)


Break load 700kg (1543lbs)


2







50045

Sheave size 45mm x 14mm (1 3/4 x 35/64")

Max rope diameter 10mm (3/8")

Max rolling load 270kg (595lbs)


Break load 700kg (1543lbs)


3







50060

Sheave size 64mm x 18mm (2 1/2 x 45/64")

Max rope diameter 12mm (7/16")

Max rolling load 700kg (1543lbs)

Break load 1400kg (3086lbs)

Number	Description:	Part number	Finish	Bearing	Length (mm)	Weight (g)	
						Plain	Ball
1	Wooden block	50030	High gloss marine varnish	Delrin balls	120	166	161
	Wooden block	50031	Natural finish	Delrin balls	120	166	161
2	Wooden block	50045	High gloss marine varnish	Delrin balls	140	177	175
	Wooden block	50046	Natural finish	Delrin balls	140	177	175
3	Wooden block	50060	High gloss marine varnish	Delrin balls	114	156	150
	Wooden block	50061	Natural finish	Delrin balls	114	156	150
4	Wooden block	50080	High gloss marine varnish	Torlon needle roller with Delrin ball bearing side bearing	135	170	166
	Wooden block	50081	Natural finish	Torlon needle roller with Delrin ball bearing side bearing	135	170	166



4



50080



Sheave size 80mm x 20mm (3 3/8 x 3/4")

Max rope diameter
14mm (35/64")Break load
2500kg (5511lbs)Max rolling load
1200kg (2645lbs)

Snatch blocks

Four sizes - accepting lines up to 16mm Ø (5/8")

Our ever popular range of snatch blocks - of rugged construction with an easy open/close action.

The range features a choice of stainless snap shackles, chromed bronze snap shackle or stainless steel 'D' shackle.

Small snatch blocks

Unique to Barton, these are probably the smallest block of this type available.

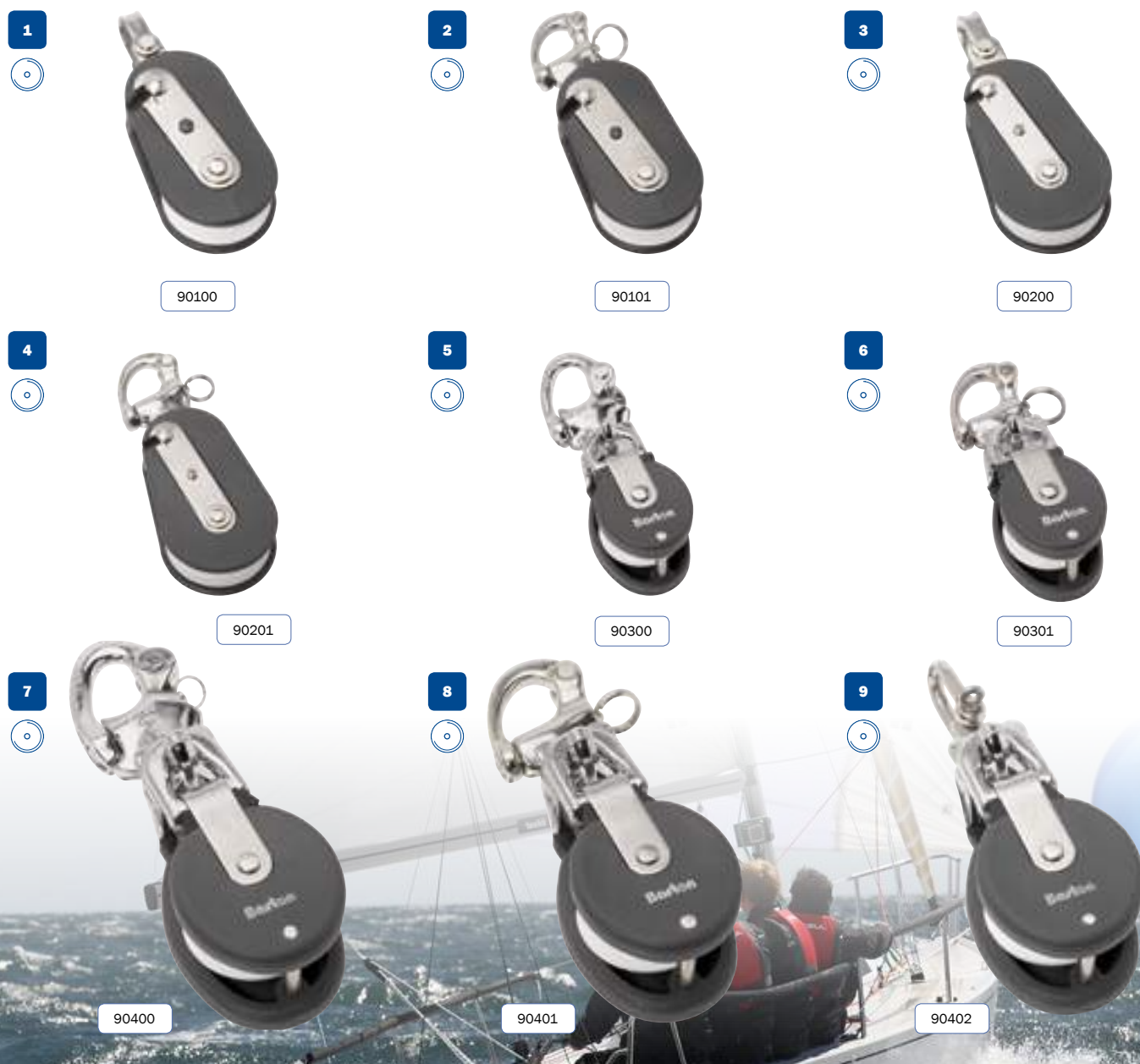
Extremely compact and strong, with a multitude of uses on cruising or racing yachts where a large unit is not required.

Available with a stainless steel or chromed bronze snap shackle.

Lightweight snatch blocks

Designed for applications on dinghies, dayboats or light cruising yachts where a high load capacity is not required. A pivoting side opening action allows for easy entry of sheets and lines.

Available with a stainless steel snap shackle or 'D' shackle.



Important note – snatch blocks:

When using small and medium snatch blocks on a toe rail, a bungee line should be attached to the becket to prevent the block 'tumbling' and causing damage by snagging.

Number	Description:	Part number	Sheave Ø (mm)	Sheave width (mm)	Rope Ø (mm)	Break load (kg)	SWL (kg)	Length (mm)	Weight (g)
1	Snatch block + S/S 'D' shackle	90100	45	13	10	190	95	120	148
2	Snatch block + S/S snap	90101	45	13	10	190	95	145	180
3	Snatch block + S/S 'D' shackle	90200	57	16	12	460	230	155	227
4	Snatch block + S/S snap	90201	57	16	12	460	230	178	298
5	Small snatch block + bronze snap	90300	35	17	12	500	250	120	203
6	Small snatch block + S/S snap	90301	35	17	12	800	400	110	170
7	Snatch block + bronze snap	90400	48	20	16	900	450	162	422
8	Snatch block + S/S snap	90401	48	20	16	1100	550	150	378
9	Snatch block + S/S 'D' shackle	90402	48	20	16	1300	650	144	316

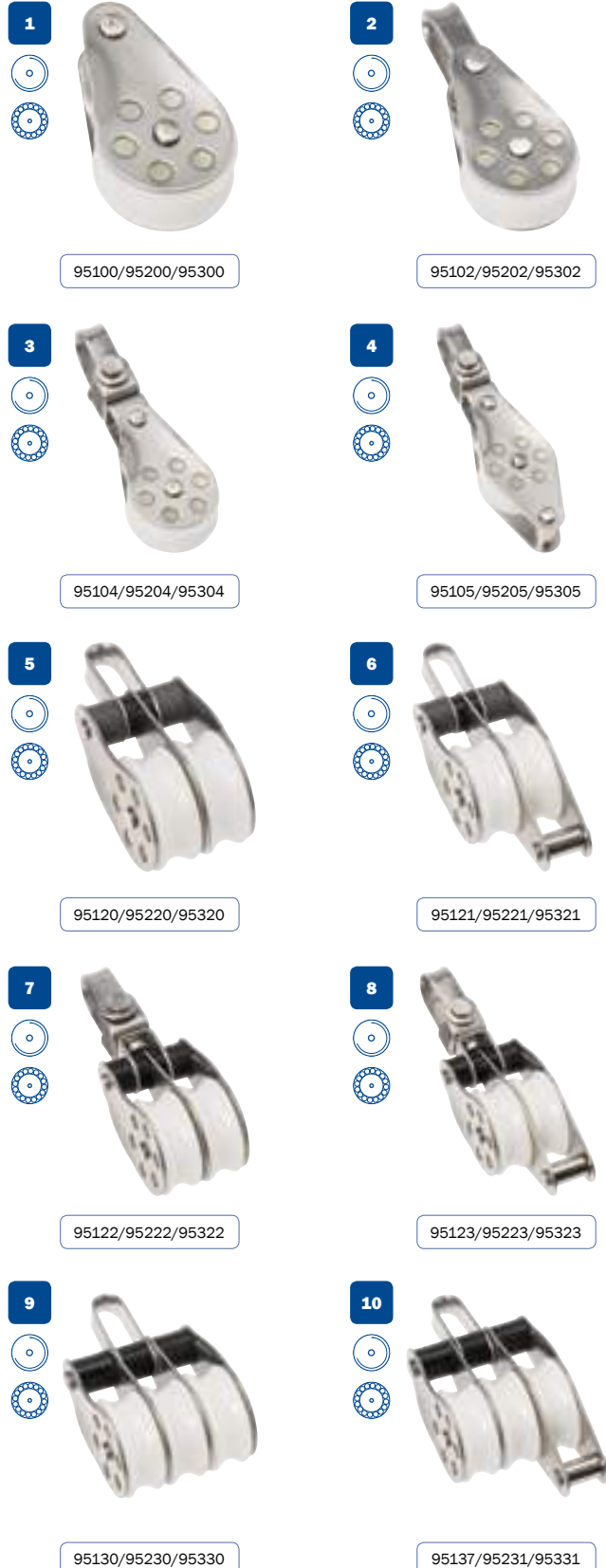
30/35/45mm Stainless Steel blocks

For lines up to 10mm diameter. Available with plain or ball bearing sheaves.

A robust range of stainless steel blocks with a multitude of uses on all types of sailing boats.

Highly polished side plates with flared cheeks prevent the possibility of chafing the line whilst giving added strength.

These are ideal for use on dinghies and dayboats for kicking straps or wherever a compact and powerful rope tackle is required.



Specifications

	Sheave Ø	30mm	35mm	45mm
	Sheave width	11mm	11mm	13mm
	Max rope Ø	8mm	8mm	10mm
	Break load	560kg	800kg	800kg
	SWL	280kg	400kg	400kg
	Max rolling load (ball bearing blocks)	200kg	280kg	280kg

Size 1

Size 2

Size 3

No.	Description:	Part number		Length (mm)	Weight (g)	
		Plain sheave	Ball bearing sheave		Plain	Ball
Size 1 s/s blocks						
1	Single	95100	95400	50	34	32
	Single + becket	95101	95401	67	45	43
2	Single - fixed eye	95102	95402	68	39	37
	Single - fixed eye + becket	95103	95403	85	48	46
3	Single - swivel	95104	95404	86	53	51
4	Single - swivel + becket	95105	95405	100	63	61
5	Double - fixed eye	95120	95420	68	60	54
6	Double - fixed eye + becket	95121	95421	85	70	66
7	Double - swivel	95122	95422	83	76	72
8	Double - swivel + becket	95123	95423	100	86	82
9	Triple - fixed eye	95130	95430	68	82	76
10	Triple - fixed eye + becket	95137	95437	85	93	87
11	Triple - swivel	95138	95438	83	99	93
	Triple - swivel + becket	95139	95439	100	109	103
Size 2 s/s blocks						
1	Single	95200	95500	61	45	45
	Single + becket	95201	95501	84	60	60
2	Single - fixed eye	95202	95502	76	48	48
	Single - fixed eye + becket	95203	95503	99	63	63
3	Single - swivel	95204	95504	96	63	63
4	Single - swivel + becket	95205	95505	119	79	79
5	Double - fixed eye	95220	95520	76	77	77
6	Double - fixed eye + becket	95221	95521	98	92	92
7	Double - swivel	95222	95522	95	92	92
8	Double - swivel + becket	95223	95523	116	107	107
9	Triple - fixed eye	95230	95530	75	105	105
10	Triple - fixed eye + becket	95231	95531	97	120	120
11	Triple - swivel	95232	95532	97	121	121
	Triple - swivel + becket	95233	95533	117	136	136
Size 3 s/s blocks						
1	Single	95300	95600	80	61	64
	Single + becket	95301	95601	112	80	83
2	Single - fixed eye	95302	95602	93	71	74
	Single - fixed eye + becket	95303	95603	124	94	97
3	Single - swivel	95304	95604	107	87	90
4	Single - swivel + becket	95305	95605	139	107	110
5	Double - fixed eye	95320	95620	93	112	118
6	Double - fixed eye + becket	95321	95621	124	136	142
7	Double - swivel	95322	95622	107	129	135
8	Double - swivel + becket	95323	95623	139	149	155
9	Triple - fixed eye	95330	95630	93	153	162
10	Triple - fixed eye + becket	95331	95631	124	185	194
11	Triple - swivel	95332	95632	167	135	144
	Triple - swivel + becket	95333	95633	139	167	176

Wire rope blocks

Aluminium high load blocks

A range of high strength blocks designed for use with wire ropes or in exceptionally rugged conditions.

Cheeks are manufactured from marine-grade aluminium, 'Spectro' grey anodised for high UV-resistance and durability.

Sheaves are precision-turned from solid aluminium bar, silver anodised and running on nylon bearings to reduce friction under load.

Reinforcing plates, rivets, shackles and straps are all from 316 stainless steel.

Cheek block dimensions

91650 Base 103 x 53mm
Fastenings 5mm

91750 Base 120 x 65mm
Fastenings 6mm

Brass sheave blocks

A simple lead block with turned brass sheave and stainless steel fixed eye strap.

Upright blocks

With heavy-duty 316 stainless steel side plates. Sheaves are precision turned from solid aluminium bar, silver anodised and running on nylon bearings to reduce friction under load.

Upright block dimensions

91400 Base 38 x 45mm
Fastenings 5mm

91500 Base 51 x 55mm
Fastenings 6mm

High load wire rope blocks

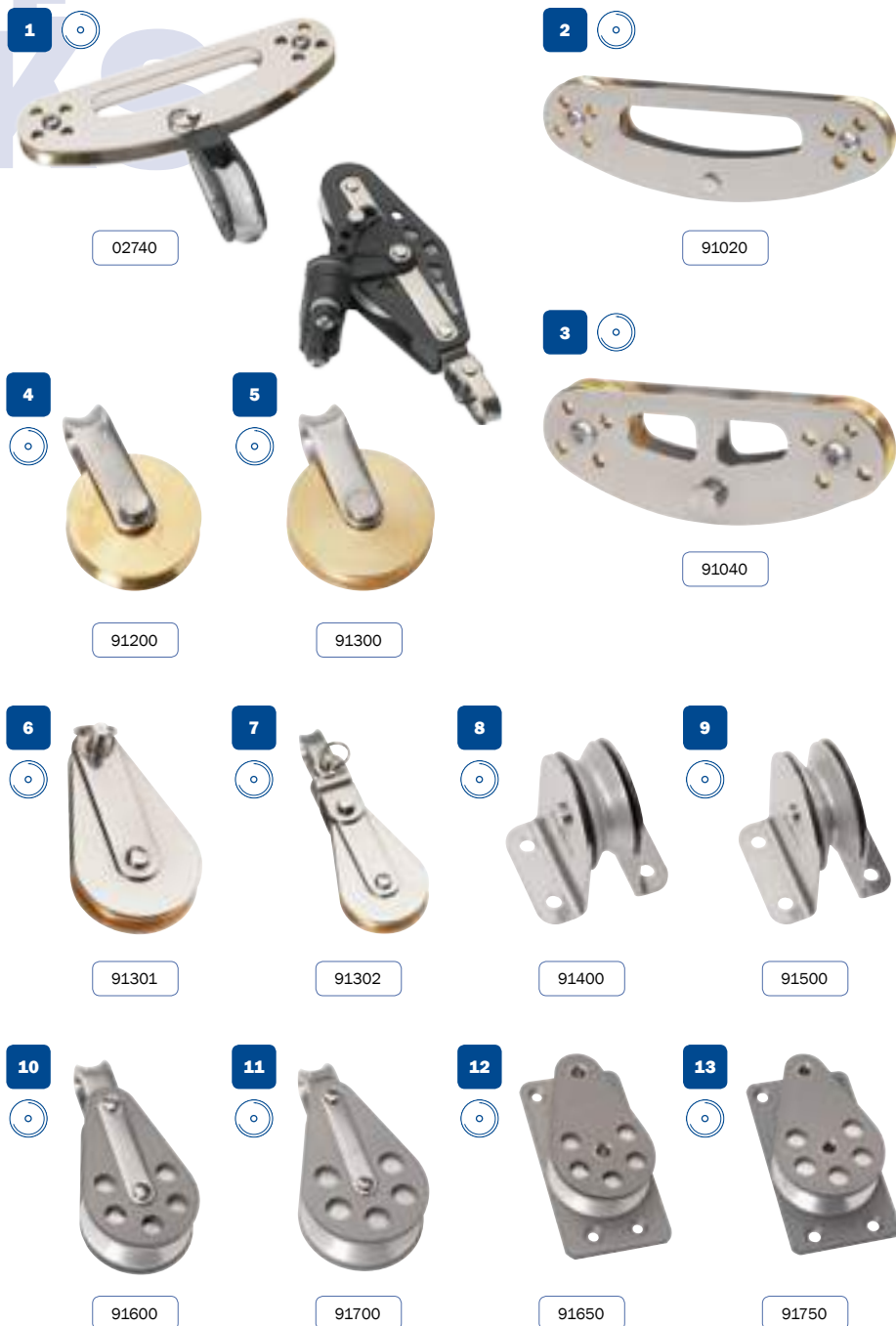
Available in fixed eye or swivel head. Cheeks are manufactured from 316 stainless steel and sheaves are precision turned from solid brass bar, running on a stainless steel centre bush.

Backstay tensioner system

A block and tackle system designed for use on split or twin backstays. Features stainless steel double block with brass sheaves, together with tensioning blocks from our series 2 range (see page 6 for setup options).

Backstay tensioner blocks

Featuring laser-cut stainless steel side plates with precision turned brass shaves. For use on twin or split backstays - for backstay wire of up to 10mm Ø (see page 6 for setup options).



No.	Description:	Part no.	Sheave Ø (mm)	Sheave width (mm)	Rope Ø (mm)	Wire Ø (mm)	Break load (kg)	SWL (kg)	Weight (g)
Backstay tensioner									
1	Backstay tensioner system	02740	45	8	5	5	1300	650	163
2	Backstay tensioner block	91020	35	8	-	5	-	-	277
3	Backstay tensioner block	91040	50	15	-	10	-	-	585
Brass sheave blocks									
4	Single - fixed eye	91200	35	8	4	4	400	200	67
5	Single - fixed eye	91300	45	8	5	5	750	375	106
High load wire rope blocks									
6	Fixed eye	91301	45	8	5	5	1300	650	163
7	Swivel eye	91302	45	8	5	5	1300	650	212
Upright blocks									
8	Single - fixed eye	91400	38	12	8	4	-	-	92
9	Single - fixed eye	91500	51	15	12	5	-	-	160
Aluminium blocks									
10	Single - fixed eye	91600	51	15	12	4	1750	875	155
11	Single - fixed eye	91700	63	18	16	5	3000	1500	248
12	Cheek	91650	51	15	12	4	-	-	141
13	Cheek	91750	63	18	16	5	-	-	227

High load and foot blocks

High load blocks

Manufactured from marine grade aluminium and 'Spectro' grey anodised for high UV stability and durability.

- Sheaves are precision turned from solid 'Ertalyle' bar with a profile that is kind to modern ropes.
- Running on a large diameter centre bearing for easy running under high loads.
- Fitted with a stainless steel bow shackle to allow for snag-free operation.
- Bolt-together construction not only adds to good looks, but allows for easy dismantling should servicing become necessary.
- Available in three sizes, these blocks are compatible with the toggle connections on our ball bearing mainsheet travellers (page 37).



Foot blocks

Featuring the same side plate and sheave construction as the high load blocks detailed above.

- Hollow stainless steel rivets allow for through-bolt fastening, giving added strength.
- Through-bolt mounting also means that these blocks can easily be stacked to achieve double block capabilities. Note; stacking blocks will reduce working loads.
- Fastenings of the minimum diameter suggested should be used to gain full load capability (see page 49 for fastening size specifications).
- Ensure that suitable mounting pads are used under deck.

Foot blocks with cam

Available in two sizes; specifications as per our high load foot block range. Suitable for a multitude of uses, including locking control lines on headsail furling gear.

Max holding power of cams: 50mm - 250kg; 65mm - 300kg.



No.	Description:	Part no.	Sheave Ø (mm)	Sheave width (mm)	Rope Ø (mm)	Break load (kg)	SWL (kg)	Length (mm)	Weight (g)
High load blocks									
1	High load block - 50mm	82100	50	15	12	1000	500	116	146
2	High load block - 65mm	82200	65	18	16	1600	800	142	267
3	High load block - 85mm	82300	85	21	18	3000	1500	185	551
Foot blocks									
4	Foot block - 50mm	82995	50	15	12	1000	500	79	114
5	Foot block - 65mm	82996	65	18	16	1600	800	100	211
6	Foot block - 85mm	82997	85	21	18	3000	1500	132	427
Foot blocks with cams									
7	Foot block - 50mm	82998	50	15	12	1000	500	84	130
8	Foot block - 65mm	82999	65	18	16	1600	800	105	230

High load low friction eyes

High load eyes

Available in 6 sizes. Manufactured in marine grade aluminium and finished in a hard coat anodising.

These lightweight high load eyes are suitable for a variety of uses on board, from lazy jacks, barber haulers, mast base ties to stanchion lead eyes. The smallest size can be attached using a 3mm line with a bullseye diameter of 6mm. The largest size can be attached using a 16mm line with a bullseye diameter of 28mm.



Ergonomically designed to maximise the strength and efficiency of the eye and with the HV500 hard coat anodising and the profile of the curved surfaces, which have been developed to keep friction as low as possible, the range have amazing strength to weight to efficiency ratios

High load eye compared to a standard plain bearing block on average across the range

Friction increase by only	15%
Strength increased by	272%
Weight reduced by	51%

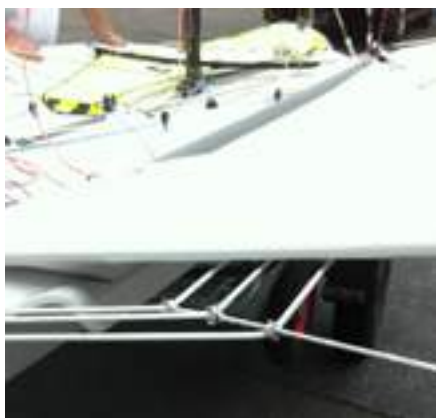
Data based on using 4mm D12 SK75 Dyneema core.

Making this range ideal for use as kickers, tweakers, genoa, barber haulers and where weight saving and strength is more important than the power required to adjust them.

Wear resistance

The hard anodising HV500 has amazing low friction properties and after over 300 hours on an abrasion test machine no visual signs of wear on the anodised coating could be found.

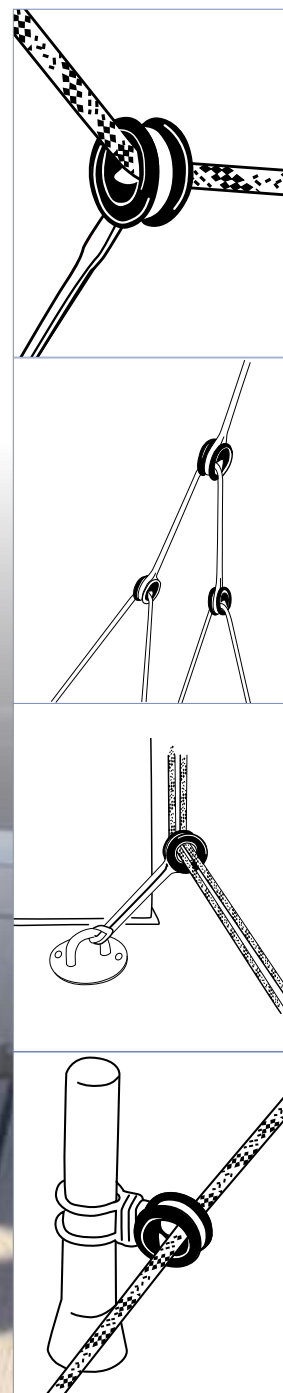
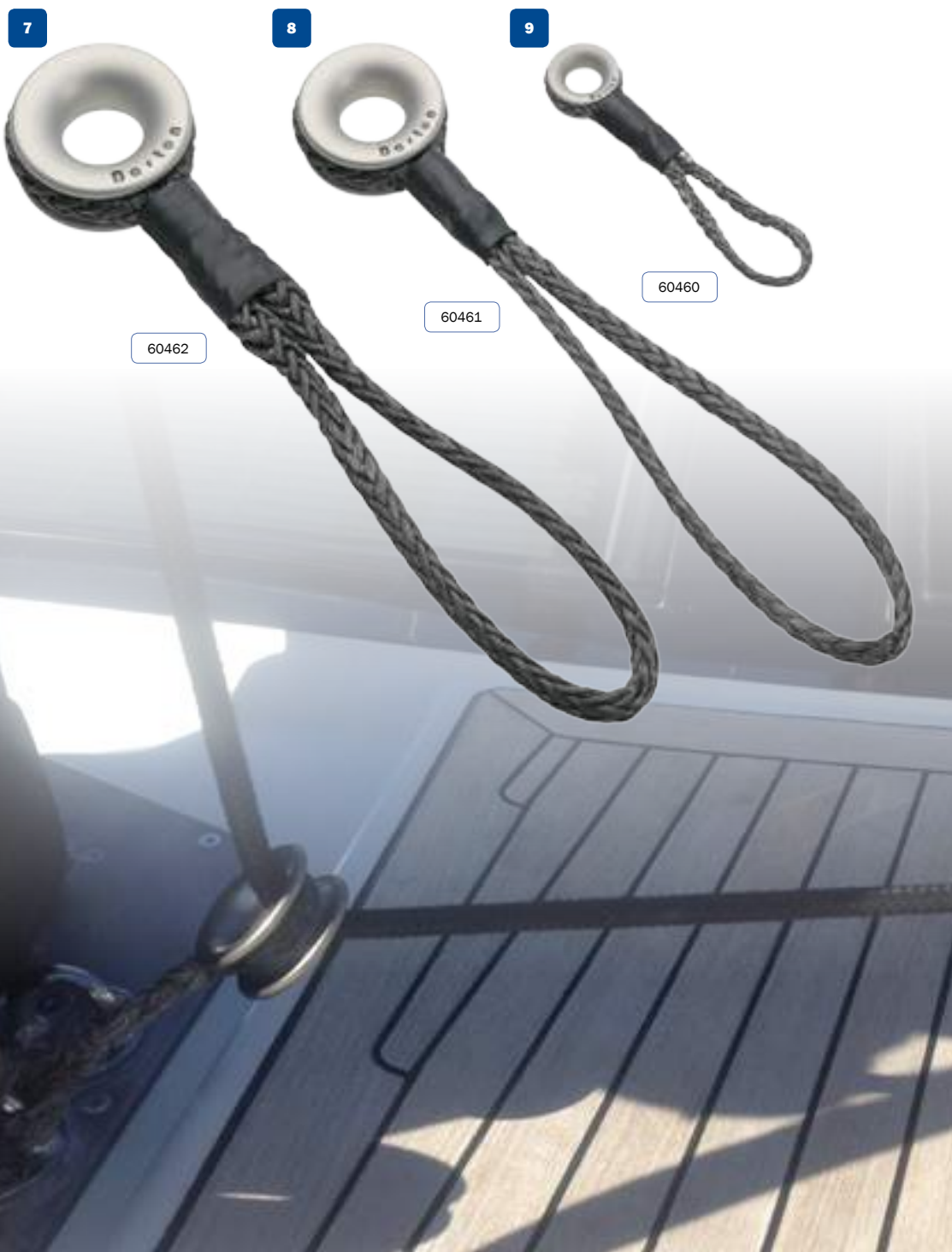
No.	Description:	Part no.	External Ø (mm)	Internal rope Ø (mm)	Bore Ø (mm)	Length (mm)	SWL (kg)	Weight (g)
High load low friction eye								
1	High load low friction eye - 12mm	60449	12	3	6	-	300	0.8
2	High load low friction eye - 18mm	60450	18	4	9	-	550	3
3	High load low friction eye - 26mm	60451	26	6	12	-	800	5
4	High load low friction eye - 38mm	60452	38	10	16	-	1800	24
5	High load low friction eye - 52mm	60453	52	12	22	-	3300	52
6	High load low friction eye - 65mm	60454	65	16	28	-	4500	104
High load low friction eye with Dyneema loop								
7	High load low friction eye with Dyneema loop - 12mm	60460	-	-	12	100	750	11
8	High load low friction eye with Dyneema loop - 22mm	60461	-	-	22	230	2400	91
9	High load low friction eye with Dyneema loop - 28mm	60462	-	-	28	310	3600	152



High load eye with Dyneema loop

The Barton High load eye with loop is available in 3 sizes and can be used in various applications on board including barber hauler, preventers, mast base block tidies, emergency blocks, occasional blocks and toe rail blocks etc.

The High load eye combined with the Dyneema loop gives you a fast, efficient, simple and extremely strong solution for changing the direction of any line. The 'Spectro' anodised aluminium eye is designed to have very good wear resistant properties with low friction, this combined with the Dyneema loop gives you exceptional low weight to very high performance load ratio.



Traveller Systems

Towable genoa car systems

Available in three sizes for yachts up to 14m LOA (46ft) - all three run on the three track profiles available.

2:1, 3:1 and 4:1 systems can be achieved with the unique Barton modular system. Modular components are listed on pages 37 to 41.

Featuring a precision-turned Ertalyte sheave running on a large diameter bearing.

The bolt-through sheave design not only looks good, but gives added strength to these rugged units.



2:1 purchase system

Recirculating ball bearing mainsheet systems

A unique way to select the best traveller and genoa car system for your boat and personal requirements - a truly low friction system, realistically priced and designed for use on both cruising and racing yachts.



2:1 purchase system



3:1 purchase system



4:1 purchase system; cleating on end fittings



4:1 purchase system; cleating on traveller

Travellers, end fittings and track are manufactured from high quality marine grade aluminium with our unique 'Spectro' grey anodised finish for added protection.

- Recirculating precision ground Delrin ball system
- Three sizes for yachts up to 14m LOA (46ft)
- Three track options
- Construct your own system from modular components (page 29) or choose one of our new pre-packaged complete systems (page 28)
- Single or double take off travellers
- Shackle or toggle take off travellers
- Multiple control line purchase (2:1, 3:1, 4:1)
- Cleating on end fitting or car
- Kevlar 'K' cam with 70° or 90° angled cleating options
- Torlon ball option

Towable genoa cars.

Barton travellers can be easily built up from modular components to give a wide variety of control line purchase, either cleated on track ends, traveller or remotely.

The following pages explain how to make up your own individual system by putting together modular components, including a choice of three types of track.

When selecting which system will suit your requirements, ask the following questions:

1. Size of boat?
2. Control line purchase (2:1, 3:1 or 4:1)?
3. Shackle or toggle take off?
4. Single or double take off?
5. Cleating on car, end fittings or remote?
6. End fitting cleats straight or angled?

Guide to choice of size:

Size 1 for yachts up to 8.5m (28.5ft)

Size 2 for yachts up to 11.0m (36ft)

Size 3 for yachts up to 14.0m (46ft)

Please see our suggested boat size table on page 77.

Curved track

Track can be custom curved to special requirements. Please enclose a detailed drawing when ordering, giving all dimensions of curvature.

Please see our suggested boat size table on page 77, designed to help you clarify the correct size of fitting for your application.

	Length (mm)	Weight (g)	Width (mm)	Height (mm)	SWL (kg)	Sheave Ø (mm)	Sheave width (mm)
Genoa cars							
Size 1	118	400	57	97	500	50	36
Size 2	145	775	70	116	700	60	36
Size 3	170	1181	87	133	1000	70	45



4:1 purchase system

Travellers

Aesthetic design, clean lines, high-tech materials and finishes all go to make this range of traveller cars a functional and practical enhancement for any sailboat.

All end fittings feature a soft rubberised moulded cap, designed to withstand high impact without causing damage.

Standard travellers run on precision ground Delrin balls.

A Torlon ball package is available where higher load applications are required. Torlon balls give up to 40% more load bearing capacity.

These packages are available in all three sizes and for long or short travellers.

	Length single take off (mm)	Length double take off (mm)	Weight single take off (g)	Weight double take off (g)	Width (mm)	Fastenings (mm)	Width mm control line cleats (mm)	Height 2:1 (mm)	Height 4:1 (mm)	SWL (kg)	Max control line Ø (mm)
Travellers											
Size 1	132	204	252	411	57	4	98	30	43	500	6
Size 2	166	254	547	923	70	6	120	44	57	700	8
Size 3	198	292	872	1378	87	6	130	47	65	1000	8

Double take off travellers

With either shackle or toggle attachments, these allow coarse/fine tune mainsheet systems to be achieved. They can also be used with a link plate (page 39) to allow for increased rolling load with the longer cars.

Control line sheave cage

Size 1 uses a plain bearing sheave, sizes 2 and 3 feature our low friction large diameter ball bearing sheave system.

	Length (mm)	Weight (mm)	Width (mm)	Sheave Ø (mm)	Max control line Ø (mm)
Control line sheave cage					
Size 1	41	15	38	20	6
Size 2	52	27	49	30	8
Size 3	65	42	57	35	8

Shackle take off

Feature a high load forged stainless steel pivoting shackle.

Toggle take off

Features a solid cast stainless steel upstand with a soft rubber anti-tumble bearing fitted, preventing damage when blocks are not under load. These take offs accept the swivel post from our cruiser blocks and help achieve a truly low profile system.

End Fittings

	Length (mm)	Weight (g)	Width (mm)	Width with control line cleats (mm)	Height 2:1 (mm)	Height 4:1 (mm)	Max control line Ø (mm)
End fittings							
Size 1	67	117	59	100	39	50	6
Size 2	88	234	72	127	50	65	8
Size 3	96	362	85	137	60	74	8

Cam cleats

From our Kevlar 'K' cam range. See page 68 and 69 for full details.

Important note: boat sizes

Suggested boat sizes are given as a guidance only and assume a monohull with boom end sheeting, loaded vertically to the traveller.

Mid-boom sheeting, severely angled take offs and curved tracks can impose greater loads and suitable allowances should be made for this. If at all unsure of your choice it is important to seek further advice.

If you are close to the maximum boat size suggested, we would advise upgrading to a Torlon package, long car or the next size up.

Recirculating ball bearing dinghy traveller range

Complementing Barton's successful larger traveller range, the dinghy traveller system uses proven recirculating Delrin ball technology and features a 16mm wide track.

With holding power of up to 130kgs. The optional attachment eye allows the system to be easily secured to our 20mm block range, creating powerful purchase ratios.

Travellers, end fitting and track are manufactured from high quality marine grade aluminium with our unique 'Spectro' grey anodised finish for added protection.

See page 77 for our suggested boat size table designed to help you clarify the correct size of traveller for your application.

Specifications

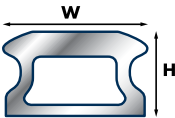


Max. boat size	5.5m (18ft)
SWL	130kg (286lbs)



Drilled track specification

	Width	16mm
	Height	9mm
	CSK	4mm
	Hole centres	50mm



No.		Part number
Dinghy travellers		
1	Traveller car with single shackle take off	18101
2	Traveller car with single toggle take off	18105
3	End fitting (supplied in pairs)	18110
4	Control attachment eye (supplied in pairs)	18111
5	Loop eyes (supplied in pairs)	18112
Drilled track		
6	Per metre	18000
	0.6 metre	18010
	1.2 metre	18020
	1.8 metre	18030
	2.4 metre	18040
	3.0 metre	18050
	5.0 metre	18060
7	Track end cap (pair)	18001

Complete packs

Pre-packaged mainsheet systems with all components required in one complete kit - sliding bolt track, traveller, end fittings, plastic end caps, pilot track and full fitting instructions.

Travellers, end fittings and track are manufactured from high quality marine grade aluminium with our unique 'Spectro' grey anodised finish for added protection.

Sliding bolt track allows for a smooth, clean profile and also makes retro-fitting easier as bolts can slide along the extrusion to match existing fastening holes.

- Two sizes - for yachts up to 11m LOA (36ft)
- 2:1 or 4:1 purchase systems
- Recirculating precision ground Delrin ball system.

Important note: boat sizes

Suggested boat sizes are given as guidance only and assume a monohull with boom end sheeting, loaded vertically to the traveller.

Mid-boom sheeting and severely angled take offs can impose greater loads and suitable allowances should be made for this. If at all unsure of your choice it is important to seek further advice.

If you are close to the maximum boat size suggested, we would advise upgrading to the next size up.

Complete pack kits are not suitable for open span applications as they require beam section track - see page 36 for removable mainsheet systems or page 41 for beam section track.



2:1 Purchase kit

with cleats at 70° on end fittings

- 1.4m (size 1)/ 1.6m (size 2) sliding bolt track
- Traveller car with single shackle take off
- End fittings (pair)
- Plastic end caps (pair)
- Pilot track & fitting instructions.

Size 1	Size 2
20900	24900

4:1 Purchase kit

with cleats at 70° on end fittings

- 1.4m (size 1)/ 1.6m (size 2) sliding bolt track
- Traveller car with single shackle take off
- End fittings (pair)
- Plastic end caps (pair)
- Pilot track & fitting instructions.

Size 1	Size 2
20901	24901

4:1 Purchase kit

incorporating cleats on traveller

- 1.4m (size 1)/ 1.6m (size 2) sliding bolt track
- Traveller car with single shackle take off
- End fittings (pair)
- Plastic end caps (pair)
- Pilot track & fitting instructions.

Size 1	Size 2
20902	24902

Guide to choice of size:

Size 1 for yachts up to 8.5m (28.5ft)

Size 2 for yachts up to 11.0m (36ft)



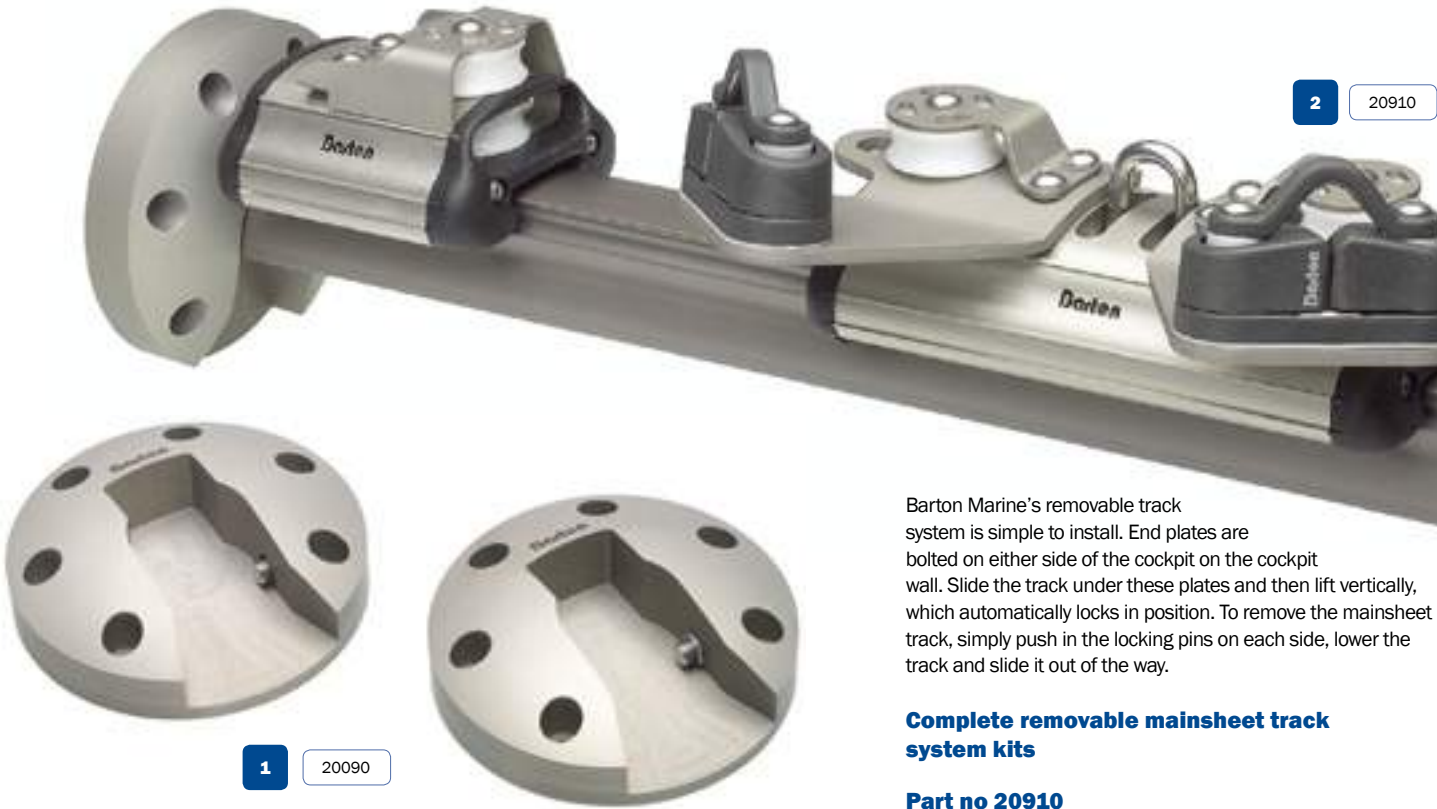
TRAVELLER SYSTEMS

Removable mainsheet systems

The removable mainsheet track system, which is ideally suited for all yachts up to 11.0m (36ft).

This adaptable mainsheet track system is designed to span between the cockpit seats when sailing but is easily removed to ensure cockpit space is not compromised when you want to relax on board. A perfect solution for converting modern coach roof mainsheet sheeting systems to one that is within reach of the helmsman, offering greater sail control and safety.

The removable track system is available in 2 sizes and can be used on yachts up to a maximum of 11.0m (36ft). The track has a maximum unsupported length of up to 700mm (28in). It can be attached and removed in seconds and uses Barton's beam section track.



Barton Marine's removable track system is simple to install. End plates are bolted on either side of the cockpit on the cockpit wall. Slide the track under these plates and then lift vertically, which automatically locks in position. To remove the mainsheet track, simply push in the locking pins on each side, lower the track and slide it out of the way.

Complete removable mainsheet track system kits

Part no 20910

Suitable for yachts up to 8.5m (28.5ft)

The kit consists of:

- Size 1 beam track 1m length
- 1 pr removable mainsheet track plates
- 4:1 traveller system with cleats on the traveller

Part no 24910

Suitable for yachts up to 11m (36ft)

The kit consists of:

- Size 2 beam track 1m length
- 1 pr removable mainsheet track plates
- 4:1 traveller system with cleats on the traveller

The maximum un-supported span of the beam track is

Size 1 = 400mm for yachts up to 8.5m (28ft)

Size 2 = 700mm for yachts up to 11.0m (36ft)

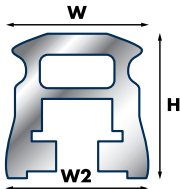
(Size 2 = 900mm for yachts up to 9.75m (32ft))



A pelican hook assembly mid track connected to a floor mounted pad eye doubles the unsupported length.

Beam track

Use beam track when spanning cockpits or companionway hatches, where unsupported length is required. A minimum of three fastenings should be used on either side of the unsupported length - place fastenings at 100mm centres in supported sections.

Ensure washers are fitted under the head of the bolt and between track & deck to ensure a secure seal.



Specifications		Size 1	Size 2
Max unsupported length		400mm	700mm
	Width W	20mm	26mm
	Width W2	26mm	34mm
	Height	27mm	34.5mm

No.		Part number	Max unsupported length
Beam track end fittings (pair)			
1	Fits size 1 20003 beam track	20090	400mm
	Fits size 2 24003 beam track	24090	700mm

No.		Size 1	Size 2
Beam track			
	Per metre	20003	24003
	0.6 metre	20013	24013
	1.2 metre	20023	24023
	1.8 metre	20033	24033
	End cap (pair)	20100	24100

No.		Part number
Complete removable mainsheet track system kits		
2	Suitable for yachts up to 8.5m (28.5ft)	20910
	Suitable for yachts up to 11m (36ft)	24910

Modular components for recirculating ball bearing traveller systems

Choose the individual components required to build the system which is the most suitable for your boat. See pages 37 to 41 for pre-designed combinations available.

- Recirculating precision ground Delrin ball system.
- Three sizes for yachts up to 14m LOA (46ft).
- Build your choice of traveller, cleating system and end fittings.

Guide to choice of size:

Size 1 for yachts up to 8.5m (28.5ft)

Size 2 for yachts up to 11.0m (36ft)

Size 3 for yachts up to 14.0m (46ft)

Please see our suggested boat size table on page 77.

Important note: boat sizes

Suggested boat sizes are given as a guidance only and assume a monohull with boom end sheeting, loaded vertically to the traveller.

Mid-boom sheeting, severely angled take offs and curved tracks can impose greater loads and suitable allowances should be made for this. If at all unsure of your choice it is important to seek further advice.

If you are close to the maximum boat size suggested, we would advise upgrading to a torlon package, long car or the next size up.



Traveller car

with single shackle take off and internal control line sheaves

Size 1	Size 2	Size 3
20101	24101	30101

see page 33 for specifications.



Traveller car

with double shackle take off and internal control line sheaves

Size 1	Size 2	Size 3
20103	24103	30103

see page 33 for specifications.



Traveller car

with single toggle take off and internal control line sheaves

Size 1	Size 2	Size 3
20105	24105	30105

see page 33 for specifications.



Traveller car

with double toggle take off and internal control line sheaves

Size 1	Size 2	Size 3
20107	24107	30107

See page 33 for specifications.



End fitting

with integral sheaves (supplied in pairs).

Size 1	Size 2	Size 3
20110	24110	30110

See page 33 for specifications.



Genoa car

with integral sheaves (2:1, 3:1 or 4:1)

Size 1	Size 2	Size 3
20300	24300	30300

See page 33 for specifications.



End fitting cleat plate

at 90° to track (supplied in pairs).

Size 1	Size 2	Size 3
20113	24113	30113



End fitting cleat plate

at 70° to track (supplied in pairs).

Size 1	Size 2	Size 3
20114	24114	30114



Traveller cleat plate assembly

(supplied in pairs)

Size 1	Size 2	Size 3
20117	24117	30117



Control line sheave cage

for use on travellers and end fittings (supplied in pairs)

Size 1	Size 2	Size 3
20112	24112	30112

Travellers - recirculating ball bearing - single take off

The unique Barton modular system allows a wide variety of systems to be constructed, giving multiple control line options.

In the following tables, order both part numbers listed (where appropriate) for the traveller illustrated.



Traveller car

with single shackle take off and integral control line sheaves 2:1 or 3:1 purchase.

Size 1	Size 2	Size 3
20101	24101	30101



Traveller car

with single shackle take off 4:1 purchase.

Comprises:-

Size 1	Size 2	Size 3
20101	24101	30101
20112	24112	30112

Order both part numbers to achieve the product shown.



Traveller car

with single toggle take off 4:1 purchase.

Comprises:-

Size 1	Size 2	Size 3
20105	24105	30105
20112	24112	30112

Order both part numbers to achieve the product shown.



Traveller car

with single toggle take off and integral control line sheaves 2:1 or 3:1 purchase.

Size 1	Size 2	Size 3
20105	24105	30105



Traveller car

with cleats and single shackle take off 4:1 purchase.

Comprises:-

Size 1	Size 2	Size 3
20101	24101	30101
20117	24117	30117

Order both part numbers to achieve the product shown.



Traveller car

with cleats and single toggle take off 4:1 purchase.

Comprises:-

Size 1	Size 2	Size 3
20105	24105	30105
20117	24117	30117

Order both part numbers to achieve the product shown.



Genoa car

with integral control line sheaves 2:1 or 3:1

Size 1	Size 2	Size 3
20300	24300	30300



Genoa car

with integral control line sheaves (4:1)

Comprises:-

Size 1	Size 2	Size 3
20300	24300	30300
20112	24112	30112

Order both part numbers to achieve the product shown.



MODULAR COMPONENTS

Travellers - recirculating ball bearing - double take off



Traveller car

with double shackle take off and integral control line sheaves 2:1 or 3:1 purchase.

Size 1	Size 2	Size 3
20103	24103	30103



Traveller car

with double toggle take off and integral control line sheaves 2:1 or 3:1 purchase.

Size 1	Size 2	Size 3
20107	24107	30107



Traveller car

with double shackle take off 4:1 purchase.

Comprises:-

Size 1	Size 2	Size 3
20103	24103	30103
20112	24112	30112

Order both part numbers to achieve the product shown.



Traveller car

with double toggle take off 4:1 purchase.

Comprises:-

Size 1	Size 2	Size 3
20107	24107	30107
20112	24112	30112

Order both part numbers to achieve the product shown.



Traveller car

with cleats and double shackle take off 4:1 purchase.

Comprises:-

Size 1	Size 2	Size 3
20103	24103	30103
20117	24117	30117

Order both part numbers to achieve the product shown.



Traveller car

with cleats and double toggle take off 4:1 purchase.

Comprises:-

Size 1	Size 2	Size 3
20107	24107	30107
20117	24117	30117

Order both part numbers to achieve the product shown.



Link plate

For long double toggle take off cars. Heavy-duty stainless plate that spans toggles - for heavy-duty applications.

Size 1	Size 2	Size 3
20202	24202	30202



End Fittings - recirculating ball bearing

The unique Barton modular system allows a wide variety of systems to be constructed, giving multiple control line and cleating options for track end fittings.

In the following tables, order both part numbers listed (where appropriate) for the end fitting illustrated.



End fitting

2:1 or 3:1 purchase. (supplied in pairs).

Size 1	Size 2	Size 3
20110	24110	30110

See page 33 for specifications.



End fitting

4:1 purchase. (supplied as a pair of each p/no.).

Size 1	Size 2	Size 3
20110	24110	30110
20112	24112	30112

Order both part numbers to achieve the product shown.



End fitting with cleat at 90°

2:1 or 3:1 purchase. (supplied as a pair of each p/no.).

Size 1	Size 2	Size 3
20110	24110	30110
20113	24113	30113

Order both part numbers to achieve the product shown.



End fitting with cleat at 70°

2:1 or 3:1 purchase. (supplied as a pair of each p/no.).

Size 1	Size 2	Size 3
20110	24110	30110
20114	24114	30114

Order both part numbers to achieve the product shown.



End fitting with cleat at 90°

4:1 purchase. (supplied as a pair of each p/no.).

Size 1	Size 2	Size 3
20110	24110	30110
20113	24113	30113
20112	24112	30112

Order all part numbers to achieve the product shown.



End fitting with cleat at 70°

4:1 purchase. (supplied as a pair of each p/no.).

Size 1	Size 2	Size 3
20110	24110	30110
20114	24114	30114
20112	24112	30112

Order all part numbers to achieve the product shown.



Crash stop for genoa track.

(supplied in pairs).

Size 1	Size 2	Size 3
20310	24310	30310



Torlon balls

Torlon ball packages available for all traveller sizes:

Size 1		Size 2		Size 3	
short	long	short	long	short	long
20200	20201	24200	24201	30200	30201

Track 20mm/26mm/30mm

Per metre or in set lengths - choose from the table below.

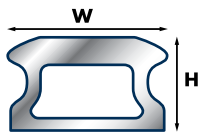
Hollow section extruded aluminium track for lightweight yet retaining high load capacity.

'Spectro' grey anodised finish is extremely durable and adds to the friction-free efficient performance of these products.

Three styles of track are available - drilled, sliding bolt and beam:

Drilled track

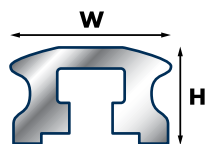
The most commonly used, drilled and countersunk at 100mm centres, with the first hole at 50mm from track end.



Specifications	Size 1	Size 2	Size 3
Width	20mm	26mm	30mm
Height	12mm	15mm	18mm
Fastenings	5mm	6mm	8mm

Sliding bolt track

To allow for a smooth profile with no visible fastenings. Also makes retro fit an easier job. As bolts can slide along the extrusion to match existing fastening holes.

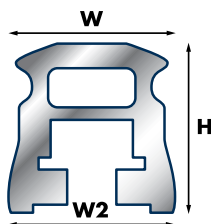


Ensure washers are fitted beneath track to ensure a good seal (see diagram).

Specifications	Size 1	Size 2	Size 3
Width	20mm	26mm	30mm
Height	12mm	16.5mm	19mm
Fastenings	5mm	6mm	8mm

Beam track

Use beam track when spanning cockpits or companionway hatches, where unsupported length is required. A minimum of three fastenings should be used on either side of the unsupported length - place fastenings at 100mm centres in supported sections.



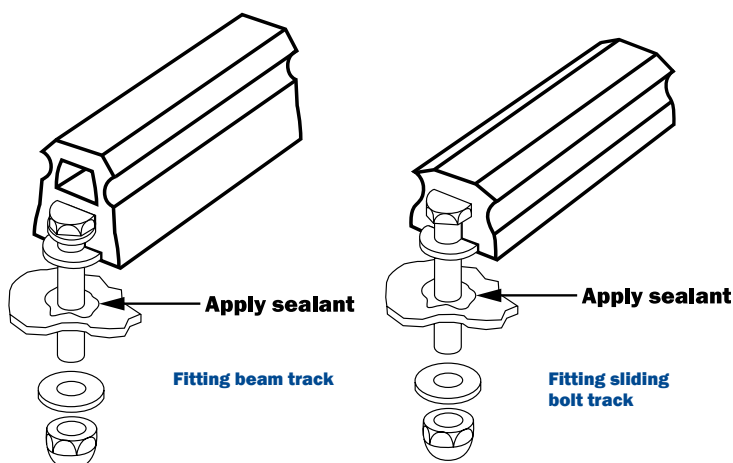
Ensure washers are fitted under the head of the bolt and between track & deck to ensure a secure seal (see diagram).

Specifications	Size 1	Size 2	Size 3
Max unsupported length	400mm	700mm	800mm
Width W	20mm	26mm	30mm
Width W2	26mm	34mm	40mm
Height	27mm	34.5mm	40.5mm
Fastenings	6mm	8mm	10mm

Curved track

Track can be custom curved to special requirements.

Please enclose a detailed drawing when ordering, giving all dimensions of curvature.



No.		Size 1	Size 2	Size 3
Drilled track				
1	Per metre	20000	24000	30000
	0.6 metre	20010	24010	30010
	1.2 metre	20020	24020	30020
	1.8 metre	20030	24030	30030
	2.4 metre	20040	24040	30040
	3.0 metre	20050	24050	30050
	5.0 metre	20060	24060	30060
2	End cap (pair)	20001	24001	30001
Sliding bolt track				
4	Per metre	20002	24002	30002
	0.6 metre	20012	24012	30012
	1.2 metre	20022	24022	30022
	1.8 metre	20032	24032	30032
	2.4 metre	20042	24042	30042
	3.0 metre	20052	24052	30052
	5.0 metre	20062	24062	30062
	End cap (pair)	20001	24001	30001
Beam track				
5	Per metre	20003	24003	30003
	0.6 metre	20013	24013	30013
	1.2 metre	20023	24023	30023
	1.8 metre	20033	24033	30033
	2.4 metre	20043	24043	30043
	3.0 metre	20053	24053	30053
	5.0 metre	20063	24063	30063
3	End cap (pair)	20100	24100	30100

19mm 'I' section track and travellers

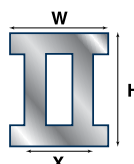
For yachts up to 7.3m (24ft) LOA

A comprehensive range of traveller systems suitable for use on dinghies, dayboats and light cruising yachts.

Also ideal for use in self-tacking jib systems on larger yachts and catamarans.

Manufactured from marine grade aluminium and stainless steel. 'I' section track is silver anodised. Fittings are black anodised.

- Stainless steel captive bearing ball race wheels
- Rugged, lightweight 'I' section track
- Various control line options
- Cam cleat versions feature 'K cam' Kevlar cleats.



19mm 'I' section track

Extruded with a hollow section for lightweight and high load capacity. Drilled for fastenings and plunger stops.

Supplied in metric lengths as shown in the table below.

Specifications & dimensions

	Width W	19mm		Fastening centres	100mm
	Height	24mm		Plunger hole centres	50mm
	Width X	11mm		Weight	479g per m
	Fastenings Ø	5mm			

No.		Part number	End fitting	Length (mm)	Width (mm)	Break load (kg)	SWL (kg)	Weight (g)
19mm traveller cars								
1	4 wheel plain	19100	19900	52	38	1200	600	127
2	4 wheels, control cleats & sheaves	19103	19902	122	75	1000	500	339
19mm track end fittings (pairs)								
3	Adjustable plunger stops	19900	-	38	29	-	-	83
4	Plastic track end	19901	-	-	-	-	-	16
5	End fitting - horizontal sheave	19902	-	45	22	-	-	44
24mm traveller cars								
6	4 wheels plain	26101	26900	69	47	2560	1280	257
7	4 wheels, control line sheave	26102	26110	69	47	2560	1280	287
24mm track end fittings (pairs)								
8	End fitting with sheave and cleat	26110	-	90	75	-	-	426
9	End fitting with double sheave and cleat	26111	-	90	75	-	-	445
10	Adjustable plunger stops	26900	-	32	30	-	-	64
11	Plastic track end	26901	-	-	-	-	-	20
12	Crash stop	26902	-	32	30	-	-	36
28mm traveller cars								
13	4 wheels plain	28101	28900	88	54	2522	1250	438
14	4 wheels, control line sheaves	28102	28110	88	54	2500	1250	472
28mm track end fittings (pairs)								
15	End fitting with sheave, becket & cleat	28110	-	108	90	-	-	620
16	End fitting with double sheave fitting, becket and cleat	28112	-	108	90	-	-	724
17	Adjustable plunger stops	28900	-	35	34	-	-	112
21	Plastic track end	28901	-	-	-	-	-	42
18	Crash stop	28902	-	35	34	-	-	76



No.		Part number
19mm 'I' section track		
19	Per metre	19000
	0.6 metre	19010
	1.2 metre	19020
	1.8 metre	19030
	2.4 metre	19040
	3.0 metre	19050
	5.0 metre	19060
	Track end cap (pair)	19901
24mm 'I' section track		
20	Per metre	26000
	0.6 metre	26010
	1.2 metre	26020
	1.8 metre	26030
	2.4 metre	26040
	3.0 metre	26050
	5.0 metre	26060
11	Track end cap (pair)	26901
28mm 'I' section track		
	Per metre	28000
	0.6 metre	28010
	1.2 metre	28020
	1.8 metre	28030
	2.4 metre	28040
	3.0 metre	28050
	5.0 metre	28060
21	Track end cap (pair)	28901

24mm 'I' section track and travellers

For yachts up to 10.7m (35ft) LOA

A mid range of traveller systems, manufactured from marine grade aluminium and stainless steel. All feature heavy-duty attachments. Control line blocks (where fitted) have low friction ball bearing sheaves, accepting lines up to 8mm diameter. 'I' section track is silver anodised. Fittings are black anodised. End fittings are secured through track with track fastening bolts.

- Heavy duty take off attachments
- Stainless steel captive bearing ball race wheels
- Ball bearing control line blocks
- End fittings give varied control line options
- Cam cleat versions feature 'K cam' Kevlar cleats.



24mm 'I' section track

Extruded with a hollow section for lightweight and high load capacity.

Silver anodised drilled for fastenings and plunger stops.

Supplied in metric lengths as shown in the table.

Specifications & dimensions

	Width W	24mm		Fastening centres	100mm
	Height	28mm		Plunger hole centres	50mm
	Width X	16mm		Weight	721g per m
	Fastenings Ø	5mm			

28mm 'I' section track and travellers

For yachts up to 12m (40ft) LOA

A range of traveller systems for larger yachts up to 12m LOA running on our heavy-duty track.

All feature heavy-duty attachments, through-bolted for added security. Control line blocks (where fitted) have low friction ball bearing sheaves, accepting lines up to 10mm diameter. 'I' section track is silver anodised. Fittings are black anodised.

End fittings are secured through track with track fastening bolts.

- Stainless steel captive bearing ball race wheels
- Rugged, lightweight 'I' section track
- Cam cleat versions feature 'K' cam Kevlar cleats
- End fittings give varied control line options
- Ball bearing control line blocks.



28mm 'I' section track

Extruded with a hollow section for lightweight and high load capacity.

Silver anodised drilled for fastenings and plunger stops.

Supplied in metric lengths as shown in the table.

Specifications & dimensions

	Width W	28mm			
	Height	34mm			
	Width X	17mm			
	Fastenings Ø	6mm			
	Fastening centres	100mm			
	Plunger hole centres	50mm			
	Weight	1041g per m			



Curved track

'I' section track can be custom curved to special requirements. Please enclose a detailed drawing when ordering, giving all dimensions of curvature.

Important note: boat sizes

Suggested boat sizes are given as guidance only and assume a monohull with boom end sheeting, loaded vertically to the traveller.

Mid-boom sheeting and severely angled take offs can impose greater loads and suitable allowances should be made for this. If at all unsure of your choice it is important to seek further advice.

Crash stops should be used to prevent cars from damaging track and end fittings.

SPECIAL CLEATS

Special cleats

A wide range of specialised glass filled nylon cleats designed for a variety of uses onboard.

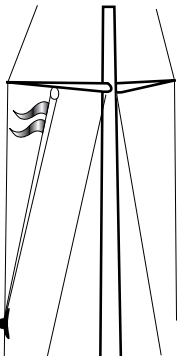
Tubular cleats

Available in 2 sizes, these handy cleats have many uses where light loads are expected.

The Barton ‘Line Tamer’

A line storage device designed to keep cockpits free from unused lines and halyards. A smooth profile ensures no snagging as crew members brush past. Sold in pairs in grey or white.

Full fitting instructions are included. Suitable for rope coils of up to 20cm diameter.



Shroud cleats

Two handy cleats that simply clamp onto shroud wire (max 8mm Ø) without causing damage.

52110 is a plain cleat for flag halyards etc.

52111 features a wide eye opening for stowage of halyard shackles.



- 6 52140
- 7 52141
- 8 52142
- 9 52143
- 10 52144
- 11 52145



- 12 60142

Stanchion bullseye

Designed to fit stanchions or pushpit/pullpit tubes, suitable for line up to 12mm.



- 4 52110



- 5 52111



- 13 52121

- 14 52120



- 3 52100

Stanchion cleat

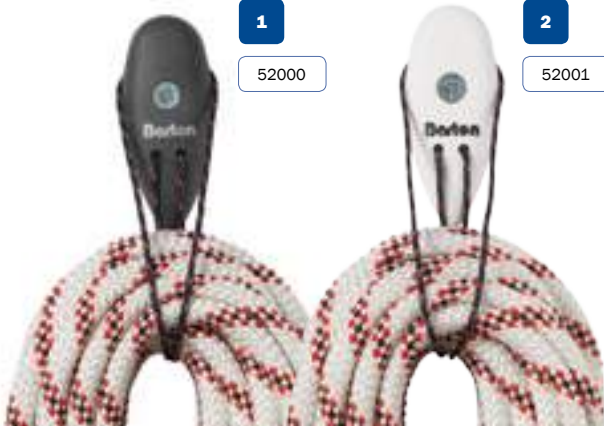
Designed to fit stanchions or pushpit/pullpit tubes - fits in seconds and features soft nylon jaws that will not damage the tube.

No.		Part number	Cleat material	Length (mm)	Weight (g)	Fastenings Ø (mm)
Line Tamer						
1	Line Tamer grey (pair)	52000	Nylon	73	12	-
2	Line Tamer white (pair)	52001	Nylon	73	12	-
Stanchion cleat						
3	Stanchion cleat	52100	Nylon	111	90	-
Shroud cleat						
4	Shroud cleat	52110	Nylon	100	26	-
5	Shroud cleat with eye	52111	Nylon	100	26	-
Open nylon cleat						
6	Open cleat	52140	Nylon	75	6	3
7	Open cleat	52141	Nylon	100	12	4
8	Open cleat	52142	Nylon	130	26	4
9	Open cleat	52143	Nylon	170	49	5
10	Open cleat	52144	Nylon	210	84	6
11	Open cleat	52145	Nylon	245	157	8
Stanchion bullseye						
12	Stanchion bullseye	60142	Nylon	bullseye int. Ø 17mm		

No.		Part number	Length (mm)	Fastenings Ø (mm)	Weight (g)	Bore (int Ø) (mm)
Tubular cleats						
13	Tube cleat	52120	55	4	4	8
14	Tube cleat	52121	80	6	13	13

- 1 52000

- 2 52001





The ClamSeal™

REPAIRS INFLATABLES – FAST

DAME award category winner.

Winner of a National Marine Manufacturer's Association Product Innovation Award.

The award-winning, patented ClamSeal™ - repairs inflatables fast - even when wet

The ClamSeal™ can instantly repair splits and tears up to 90mm (3½") in length without the use of any hand tools, or adhesive.

ClamSeal™ is a patented glue-less repair system that instantly repairs small tears or splits in inflatables above or below the waterline - regardless of the fact that the material may be wet.

The system works by using two half 'shells' that screw together tightly, using the inflatable material itself as a water and air-tight seal. It is quick and easy to fit and effects an immediate repair which can keep you afloat until a more permanent repair can be made.

- Quick and easy to fit
- Requires no adhesive or tape
- Can be used above or below the waterline
- Can be used on wet materials
- Provides an instant repair
- Re-useable again and again.

The ClamSeal™ can be carried as part of your emergency equipment onboard. It can be used at sea, on shore; even underwater as no adhesive or tape is involved. The clever mechanics of the ClamSeal™ design mean this simple product can keep you safely afloat.

The ClamSeal™ has now become a permanent part of the safety kit on many RIBs around the world and is continuing to amaze those who have used them - an effective, low cost solution to an otherwise complicated problem.

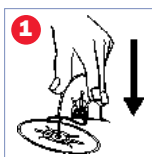
ClamSeal™ is suitable for use on:

- RIBs
- Dinghies
- Liferrafts
- Buoyancy bags
- Virtually any inflatable product.



60001

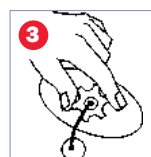
Pat pending GB0329522.7



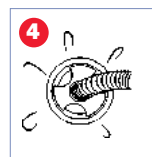
Open the ClamSeal™ and insert the base plate into the split.



Pull the plates of the ClamSeal™ together, across the split, using the lanyard



With the 2 plates pulled together, simply hand-tighten the nut for a Clam-tight seal!



Reinflate and you're safe to continue on your way!

	Part number
ClamSeal™	
Barton ClamSeal™	60001

20mm 'T' section track, sliders, genoa cars

Plain bearing genoa cars and sliders

A lightweight and compact range of plain bearing extruded aluminium sliders, running on 20mm (3/4") 'T' track and manufactured from high quality marine grade aluminium with our unique 'Spectro' grey anodised finish for added protection.

This useful range will find a wide variety of applications on larger dinghies, dayboats and light cruiser/racers.

See page 77 for our suggested boat size table designed to help you clarify the correct size of sliders for your application.

1



22100

2



22200

3



22220

4



22210

5



22221

6



22300

7

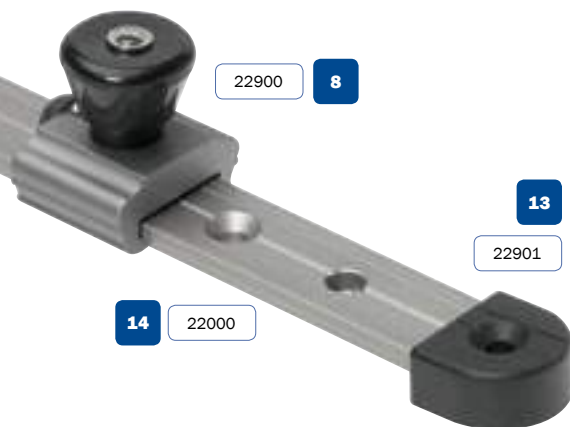


22301

9

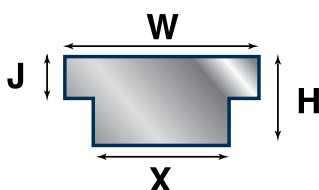


22310



20mm 'T' section track

For use with all sliders featured on this page. Drilled for fastenings and plunger stops. 'Spectro' grey anodised and supplied in metric lengths.



Specifications and dimensions

	Width W	20mm
	Width X	11mm
	Height H	8mm
	Height J	2.5mm
	Fastenings Ø	5mm
	Fastening centres	100mm
	Plunger hole centres	50mm
	Weight	270g per m

10



22311

No.		Part number
20mm 'T' section track		
14	Per metre	22000
	0.6 metre	22010
	1.2 metre	22020
	1.8 metre	22030
	2.4 metre	22040
	3.0 metre	22050
	5.0 metre	22060
	Track end cap (pair)	22901

Genoa car with plunger stop

Features a precision turned Ertalyte sheave, through-bolted for extra strength. The positive action plunger mechanism has an easy-grip knob (see page 6 for setup options).

Towable genoa cars

With tow eye or sheave in place of plunger, allowing a control line to be lead aft so that genoa car adjustments can be made from the cockpit. Use in conjunction with end fittings shown.

Genoa and mainsheet slides

A strong unit which will accept most Barton blocks - with a stainless steel attachment loop, through-bolted for strength.

Bullseye slide

With a swivelling bullseye that will always accommodate the correct angle of sheeting. Accepts lines up to 14mm diameter. A stainless steel insert is provided to prevent wear.

Fairlead slide

Features a plain moulded plastic fairlead fitted to an adjustable slide. Accepts lines up to 12mm diameter; not suitable for high loads.

Stand up block

Has a stainless eye fitted to a stainless loop, through-bolted for strength. The moulded plastic spring/gaiter prevents the block tumbling or ropes snagging. Supplied with a series 2 block accepting lines up to 8mm diameter.

Plunger stops

For use with mainsheet or genoa track sliders. Sold singly.

11



42102

12



22312

No.		Part number	Length (mm)	Width (mm)	Height (mm)	Sheave Ø (mm)	Max rope Ø (mm)	Break load (kg)	SWL (kg)	Weight (g)
Genoa cars and towable genoa cars										
1	Genoa car	22100	60	34	65	30	10	1160	580	119
2	Towable genoa car	22200	110	34	65	30	10	1160	580	127
3	Towable genoa car 2:1 purchase	22220	138	34	65	30	10	1160	580	160
Towable car end fittings										
4	Track end	22210	80	32	36	30	8	-	-	97
5	Track end + becket	22221	80	32	47	30	8	-	-	99
Mainsheet/genoa slides and stops										
6	Mainsheet slide	22300	60	32	35	-	-	1200	600	55
7	Genoa slide	22301	60	32	35	-	-	1200	600	68
8	Plunger stop	22900	30	32	30	-	-	-	-	30
Bullseye and fairlead slides										
9	Bullseye slide	22310	80	32	60	-	14	400	200	150
10	Fairlead slide	22311	90	32	42	-	12	400	200	102
11	Fairlead + cam (handed pair)	42102	90	-	-	-	12	-	-	732
Stand up block										
12	Stand up block	22312	75	32	115	35	8	740	370	195
Track end cap (pair)										
13	Track end caps (supplied in pairs)	22901	20	-	-	-	-	-	-	55

25mm 'T' section track, sliders, genoa cars

Plain bearing genoa cars, sliders and spinnaker pole slides

A popular range of genoa cars and sliders designed to run on 25mm (1") 'T' track. All are manufactured from high quality marine grade aluminium with our unique 'Spectro' grey anodised finish for added protection.

All cars and sliders featured on these pages have moulded nylon inserts to ensure free, smooth running under load and prevent damage to finish or potential corrosion.

- 'Spectro' grey anodised finish
- Stainless plunger stops with positive action
- Moulded nylon slide inserts ensure free running
- Large, easy-grip plunger knobs.

Cars and sliders are compatible with all makes of 'T' track.

See page 77 for our suggested boat size table designed to help you clarify the correct size of sliders for your application.

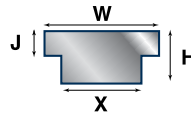
No.		Part number
25mm 'T' section track		
14	Per metre	25000
	0.6 metre	25010
	1.2 metre	25020
	1.8 metre	25030
	2.4 metre	25040
	3.0 metre	25050
	5.0 metre	25060
13	Track end cap (pair)	25901



no.	Description:	Part number	Length (mm)	Width (mm)	Height (mm)	Sheave Ø (mm)	Max rope Ø (mm)	Break load (kg)	SWL (kg)	Weight (g)
Genoa cars and towable genoa cars										
1	Genoa car	25100	80	42	87	40	2 x 12	2280	1140	247
2	Towable genoa car	25200	127	42	87	40	2 x 12	2280	1140	258
3	Towable genoa car 2:1 purchase	25220	170	42	87	40	2 x 12	2280	1140	297
Towable car end fittings										
4	Track end (no insert required)	25210	88	37	35	35	8	-	-	116
5	Track end + becket	25221	88	37	50	35	8	-	-	121
Mainsheet/genoa slides and stops										
6	Mainsheet slide	25300	80	42	42	-	-	2860	1430	111
7	Genoa slide	25301	80	42	40	-	-	2860	1430	123
10	Plunger stop	25900	30	33	34	-	-	-	-	36
Bullseye slide										
11	Bullseye slide	25303	80	42	60	-	14	-	-	184
Stand up blocks										
	Stand up block - size 3	25310	80	42	120	45	10	980	490	223
12	Stand up block - size 4	25311	80	42	142	57	12	1580	790	312
Track end cap (pair)										
13	Track end caps (supplied in pairs)	25901	23	-	-	-	-	-	-	11

25mm 'T' section track

For use with all sliders featured on this page. Drilled for fastenings and plunger stops. 'Spectro' grey anodised and supplied in metric lengths.



15



51253

16



51254

Sliding cleats

A cost-effective solution to fitting a mid-ship spring cleat where access under the side deck is limited - simply remove a genoa track end stop, slide on the cleat and lock it in the desired position.

When not in use, slide the cleat to one end of the track, or leave off one track end permanently to enable easy removal of cleat.

Alternatively, fit a short length of track in the desired position so that cleats can be fitted when required and removed when not in use - reducing deck clutter and rope snags.

25mm cleats have an extruded aluminium base, nylon moulded cleat and screw type lock.

No.	Description:	Part number	Cleat material	Length (mm)	'T' track width (mm)	Weight (g)
Sliding cleat						
15	165mm sliding cleat	51253	Nylon	165	25	134
16	200mm sliding cleat	51254	Nylon	200	25	178

8



25302

9



25304

No.	Description:	Part number	Length (mm)	Width (mm)	Height (mm)	Eye internal Ø (mm)	Weight (g)
Spinnaker pole slides							
8	Spinnaker pole slide	25302	80	42	74	35	237
9	Towable spinnaker pole slide	25304	80	42	74	35	253

17



82995

18



82996

No.	Description:	Part number	Sheave Ø (mm)	Sheave width (mm)	Rope Ø (mm)	Break load (kg)	SWL (kg)	Length (mm)	Fastenings (mm)	Weight (g)
Foot blocks										
17	Foot block - 50mm	82995	50	15	12	1000	500	79	3 x M6	114
18	Foot block - 65mm	82996	65	18	16	1600	800	100	2 x M6 / 1 x M8	211
	Foot block - 85mm	82997	85	21	18	3000	1500	132	2 x M8 / 1 x M10	427

Important note - foot blocks:

Fastenings of the minimum diameter suggested should be used to gain full load capacity. Ensure that suitable mounting pads are provided under deck. Stacking blocks to achieve doubles will severely reduce working loads quoted.

Specifications and dimensions

	Width W Width X	25mm 14mm
	Height H Height J	10mm 4mm
	Fastenings Ø	5mm
	Fastening centres	100mm
	Plunger hole centres	50mm
	Weight	441g per m

Genoa car with plunger stops

Features precision turned Ertalyte sheaves running on a large diameter centre bearing, for friction-free performance under load. Sheaves are designed with extra width to accept two sheets. The sheave axle is through-bolted and riveted for extra strength (see page 6 for setup options).

Towable genoa cars

With tow eye or sheave in place of plunger, allowing a control line to be lead aft so that genoa car adjustments can be made from the cockpit. Use in conjunction with end fittings shown.

Genoa and mainsheet slides

Have a heavy-duty stainless steel attachment loop, through-bolted and riveted for extra strength. These units will accept most Barton blocks featured on pages 8-25.

Bullseye slide

Features a swivelling bullseye that will always accommodate the correct angle of sheeting. A stainless steel insert is provided to prevent wear. Accepts lines up to 14mm diameter.

Spinnaker pole slide

Have a heavy-duty stainless steel ring welded to an attachment plate which is through-bolted to the slide. Generous ring opening to accept most pole ends.

Towable spinnaker pole slide

Have eyes fitted to both ends of the slide for the attachment of control lines. Use with 25210 end fittings (see page 7 for setup options).

Stand up blocks

Have a stainless steel eye fitted to a stainless steel loop, through-bolted for strength. The moulded plastic spring/gaiter prevents the block tumbling or ropes snagging. Two sizes are available - for 10mm and 12mm lines.

Foot blocks

Designed for use with the genoa cars shown in this range, these strong foot blocks have a three-bolt fixing and can be stacked to achieve doubles (see note below). 'Spectro' grey finish. Precision turned Ertalyte sheaves run on large diameter centre bearing to give low friction performance under high loads.

See page 29 for further details and our foot block with cam range.

32mm 'T' section track, sliders, genoa cars

Plain bearing genoa cars, sliders and spinnaker pole slides, plus stand up blocks

A popular range of genoa cars and sliders designed to run on 32mm (1 1/4") 'T' track. All are manufactured from high quality marine grade aluminium with our unique 'Spectro' grey anodised finish for added protection.

All cars and sliders featured on these pages have moulded nylon inserts to ensure free, smooth running under load and prevent damage to finish or potential corrosion.

All genoa cars in this range are available in a heavy-duty version for larger craft or for larger load applications.

- 'Spectro' grey anodised finish.
- Stainless steel plunger stops with positive action.
- Moulded nylon slide inserts ensure free running.
- Large, easy-grip plunger knobs.
- Heavy-duty genoa car options.

Cars and sliders are compatible with all makes of 'T' track. Modified slider inserts available for obscure sizes. Please contact Barton Marine for further information.

See page 77 for our suggested boat size table designed to help you clarify the correct size of sliders for your application.

32900

11

14

32000

13

32901

No.		Part number
32mm 'T' section track		
14	Per metre	32000
	0.6 metre	32010
	1.2 metre	32020
	1.8 metre	32030
	2.4 metre	32040
	3.0 metre	32050
	5.0 metre	32060
13	Track end cap (pair)	32901

1

32100

2

32101

3

32200

4

32201

5

32210

6

32211

7

32220

8

32221

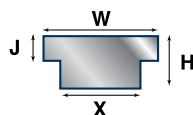
9

32300

	Description:	Part number	Length (mm)	Width (mm)	Height (mm)	Sheave Ø (mm)	Max rope Ø (mm)	Break load (kg)	SWL (kg)	Weight (g)
Genoa cars and towable genoa cars										
1	Genoa car	32100	109	52	102	50	2 x 16	3280	1640	469
2	Genoa car - heavy-duty	32101	127	55	117	60	2 x 16	5970	2985	728
3	Towable genoa car	32200	170	52	102	50	2 x 16	3280	1640	503
4	Towable genoa car - heavy-duty	32201	190	55	117	60	2 x 16	5970	2985	749
5	Towable genoa car 2:1 purchase	32210	220	52	102	50	2 x 16	3280	1640	561
6	Towable genoa car 2:1 purchase - heavy-duty	32211	235	55	117	60	2 x 16	5970	2985	820
Towable car end fittings										
7	Track end (no insert required)	32220	109	47	44	45	10	-	-	230
8	Track end + becket	32221	109	47	58	45	10	-	-	236
Mainsheet/genoa slides and stops										
9	Mainsheet slide	32300	109	52	50	-	-	2980	1490	231
10	Genoa slide	32301	109	52	50	-	-	2980	1490	254
11	Plunger stop	32900	35	42	40	-	-	-	-	70
Stand up blocks										
12	Stand up block - size 5	32310	109	52	150	54	12	1800	900	450
	Stand up block - size 6	32311	109	52	165	60	12	2300	1150	489
	Stand up block - size 7	32312	109	52	170	72	14	2800	1400	565
Track end cap (pair)										
13	Track end caps (supplied in pairs)	32901	29	-	-	-	-	-	-	19

32mm 'T' section track

For use with all sliders featured on this page. Drilled for fastenings and plunger stops. 'Spectro' grey anodised and supplied in metric lengths.



Sliding cleats

A cost-effective solution to fitting a mid-ship spring cleat where access under the side deck is limited - simply remove a genoa track end stop, slide on the cleat and lock it in the desired position.

When not in use, slide the cleat to one end of the track, or leave off one track end permanently to enable easy removal of cleat.

Alternatively, fit a short length of track in the desired position so that cleats can be fitted when required and removed when not in use - reducing deck clutter and rope snags.

32mm cleats have an extruded aluminium base, cast aluminium cleat and plunger type lock.

No.	Description:	Part number	Cleat material	Length (mm)	'T' track width (mm)	Weight (g)
Sliding cleat						
17	175mm sliding cleat	51322	Alu	175	32	328
18	205mm sliding cleat	51323	Alu	205	32	402



No.	Description:	Part number	Length (mm)	Width (mm)	Height (mm)	Eye internal Ø (mm)	Weight (g)
Spinnaker pole slides							
15	Spinnaker pole slide	32302	109	52	80	40	357
16	Towable spinnaker pole slide	32304	109	52	80	40	359



No.	Description:	Part number	Sheave Ø (mm)	Sheave width (mm)	Rope Ø (mm)	Break load (kg)	SWL (kg)	Length (mm)	Fastenings (mm)	Weight (g)
Foot blocks										
19	Foot block - 50mm	82995	50	15	12	1000	500	79	3 x M6	114
	Foot block - 65mm	82996	65	18	16	1600	800	100	2 x M6 / 1 x M8	211
	Foot block - 85mm	82997	85	21	18	3000	1500	132	2 x M8 / 1 x M10	427

Important note - foot blocks:

Fastenings of the minimum diameter suggested should be used to gain full load capacity. Ensure that suitable mounting pads are provided under deck. Stacking blocks to achieve doubles will severely reduce working loads quoted.

Specifications and dimensions

	Width W Width X	32mm 20mm
	Height H Height J	15mm 5mm
	Fastenings Ø	6mm
	Fastening centres	100mm
	Plunger hole centres	50mm
	Weight	756g per m

Genoa cars with plunger stops

Feature precision turned Ertalyte sheaves running on a large diameter centre bearing, for friction-free performance under load. Sheaves are designed with extra width to accept two sheets. The sheave axle is through-bolted and riveted for extra strength (see page 6 for setup options).

Towable genoa cars

With tow eye or sheave in place of plunger, allowing a control line to be lead aft so that genoa car adjustments can be made from the cockpit. Use in conjunction with end fittings shown.

Genoa and mainsheet slides

With a heavy-duty stainless steel attachment loop, through-bolted and riveted for extra strength. These units will accept most Barton blocks featured on pages 8-25.

Spinnaker pole slide

Has a heavy duty stainless steel ring welded to an attachment plate which is through-bolted to the slide. Generous ring opening to accept most pole ends.

Towable spinnaker pole slide

Have eyes fitted to both ends of the slide for the attachment of control lines. Use with 32220 end fittings (see page 7 for setup options).

Stand up blocks

Have a stainless steel eye fitted to a stainless steel loop, through-bolted for strength. The moulded plastic spring/gaiter prevents the block tumbling or ropes snagging. Three sizes are available - for lines up to 14mm.

Foot blocks

Designed for use with the genoa cars shown in this range, these strong foot blocks have a three-bolt fixing and can be stacked to achieve doubles (see note below). 'Spectro' grey finish. Precision turned Ertalyte sheaves run on large diameter centre bearing to give low friction performance under high loads.

See page 29 for further details and our foot block with cam range.

Towable 'T' track genoa cars

An established favourite with sailors around the globe, Barton 'T' track genoa cars are compatible with all types of 'T' Track. The advantage of a line adjust system is that the crew do not have to leave the safety of the cockpit to obtain perfect trim when reefing the headsail.

We have developed our current design and have incorporated control line sheaves within the body of the sliders and end fittings. The result is a more compact unit with less likelihood of sheet fouling, plus they look great too!

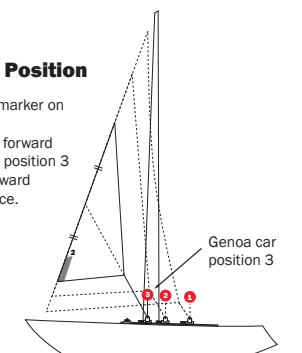
The towable 'T' track genoa car system is available in three sizes for yachts from 6m – 12m (18' – 40'), this includes 20mm 'T' track, 25mm 'T' track and 32mm 'T' track (both standard and heavy duty options).

No.		Part number
Genoa cars with towable end fittings		
1	20mm 'T' track towable genoa car	22220
2	20mm 'T' track end fitting (single)	22221
3	25mm 'T' track towable genoa car	25220
4	25mm 'T' track end fitting (single)	25221
5	32mm 'T' track towable genoa car	32210
6	32mm 'T' track towable genoa car (heavy duty)	32211
7	32mm 'T' track end fitting (single)	32221



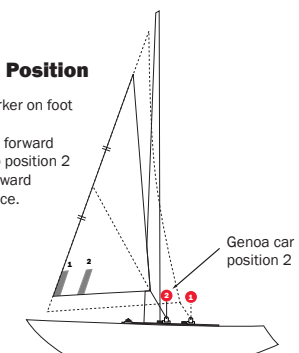
Working Jib Position

Furled to second marker on foot of Genoa.
Genoa car moved forward from position 2 to position 3 for optimum windward sailing performance.



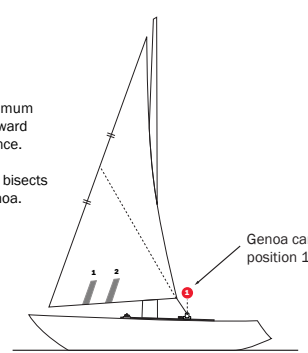
No.2 Genoa Position

Furled to first marker on foot of Genoa.
Genoa car moved forward from position 1 to position 2 for optimum windward sailing performance.



Full Sail

Genoa car in optimum position for windward sailing performance.
Rule of thumb - Sheet lead angle bisects luff length of Genoa.



Please see our suggested boat size table on page 77, to assist you in making the correct choice when determining the correct size of fitting for our application.



Deck organisers

Available in two sheave sizes and in 2, 3, 4, 5 and 6-sheave models

Designed for use when leading control lines and halyards across the coach roof and back to the cockpit.

This range features aluminium construction with 'Spectro' grey anodised finish. Sheaves are from moulded Acetal with hollow stainless rivets to allow easy and tidy fitting (see page 7 for setup options).

Please see our suggested boat size table on page 77, to assist you in making the correct choice to determine the right size of fitting for your application.

Specifications



Sheave Ø
Sheave width

Size 1

32mm
17mm

Size 2

44mm
18mm



Fastenings

6mm
8mm



Max line Ø

12mm
14mm



Hole centres

43mm
58mm

1

81582

2

81583

3

81584

4

81585

5

81586

No.	Description:	Part number	Length (mm)	Width (mm)	Height (mm)	Weight (g)
Size 1 deck organisers						
1	2-sheave	81582	115	28	25	108
2	3-sheave	81583	157	28	25	155
3	4-sheave	81584	200	28	25	200
4	5-sheave	81585	244	28	25	244
5	6-sheave	81586	287	28	25	295
Size 2 deck organisers						
	2-sheave	81682	148	38	28	205
	3-sheave	81683	205	38	28	290
	4-sheave	81684	262	38	28	378
	5-sheave	81685	318	38	28	465
	6-sheave	81686	376	38	28	555

Rope clutches and mast base organiser


Rope clutches

Manufactured from high grade plastics and aluminium with ‘Spectro’ grey anodised finish.

Lines can be drawn through the clutch in the locked position as the line moves freely in the direction of pull and is restricted from returning by a spring-loaded cam mechanism.


This compact range is suitable for securing halyards and control lines on yachts up to approx 30ft - or for lighter duties on large craft (see page 7 for setup options).

Specifications




Max holding capacity

350kg




Max rope capacity

10mm



Fastenings

6mm



Hole centres

88mm

Locking levers come in grey, red and white and a set of marking stickers is included.

Please see our suggested boat size table on page 77, to assist you in making the correct choice when determining the correct size of fitting for our application.



No.	Description:	Part number	Length (mm)	Width (mm)	Height (mm)	Weight (g)
Rope clutch						
1	Single rope clutch	80500	107	28	62	250
2	Double rope clutch	80501	107	54	62	480
3	Triple rope clutch	80502	107	80	62	710

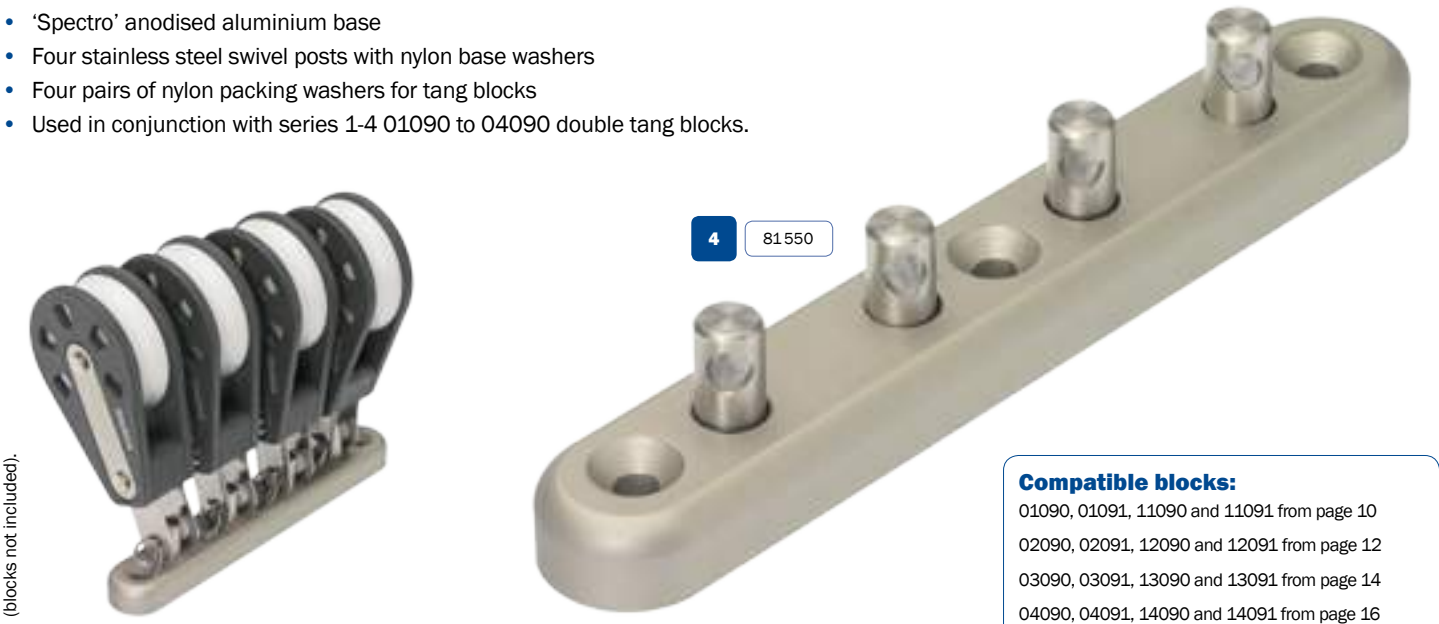
Mast base organiser

The Barton mast base organiser is finished in our unique ‘Spectro’ grey anodising for a long-lasting finish. It accepts up to four double tang blocks mounted on individual stainless steel swivel posts, but with just three deck fixing points.

The unit is fitted close to the mast base to accept halyards, reefing lines and topping lift and is designed to work in conjunction with our range of deck organisers, rope clutches and winches, doing away with the need to leave the cockpit when reefing, hoisting or lowering the mainsail (see page 7 for setup options).

Specification comprises:

- ‘Spectro’ anodised aluminium base
- Four stainless steel swivel posts with nylon base washers
- Four pairs of nylon packing washers for tang blocks
- Used in conjunction with series 1-4 01090 to 04090 double tang blocks.



Compatible blocks:

01090, 01091, 11090 and 11091 from page 10
02090, 02091, 12090 and 12091 from page 12
03090, 03091, 13090 and 13091 from page 14
04090, 04091, 14090 and 14091 from page 16

No.	Description:	Part number	Length (mm)	Width (mm)	Height (mm)	Weight (g)	SWL (kg)	Break load (kg)	Fixing hole (mm)	Swivel post
Mast base organiser										
4	Mast base organiser	81550	160	25	28	166	1540	3080	6	10

Barton DO 550 clutches

For cruising and racing yachts, offering a holding power of up to 550kgs (see chart below).

Modern, high-performance materials

Manufactured from modern lightweight materials, the DO 550 moulded parts are from high-grade plastics which are strong, light and impact-resistant. Cams and bases are from marine grade aluminium, 'Spectro' anodised for long life in the harsh marine environment.

True clutch mechanism

This true clutch mechanism allows line to be adjusted through the unit in the closed, locked position with minimal slippage. Release under load is positive and requires little effort.

The mechanism's opening and closing action is precise and easy to operate, even with cold wet hands. A positive handle lock in the closed position is also featured.

Kind to lines

The clutch's cam and base, manufactured from high-grade extruded aluminium, feature a specially tempered tooth design which allows for maximum grip with minimal slippage, whilst being kind to your lines.

Stainless steel rope fairleads are fitted to both line entry and exit points; a feature which helps to prevent wear to both clutch and lines.

Bolt-together construction for straightforward servicing

The DO 550 clutch range features the advantage of a bolt-together construction which allows for ease of servicing and replacement of parts. A full range of components is available from your Barton stockist.

Ergonomically designed handle

The handle is strong and easy to grip, with a positive smooth lock and unlock action.

A unique feature of this new design is the removable insert on the top face of the handle. These inserts are available packaged separately with a selection for both cruising and racing yachts.

81540 'Cruiser' insert pack contains: main, genoa 1, spin halyard 1, topping lift, spin pole up, spin pole down, blank.

81541 'Racer' insert pack contains: reef 1, cunningham, reef 2, kicker, mainsheet, genoa furling, genoa 2, spin halyard 2, backstay, outhaul, downhaul, blank.

Please see our suggested boat size table on page 77, to assist you in making the correct choice when determining the correct size of fitting for our application.

Specifications

	Max holding power	550kg
	Rope capacity	up to 12mm
	Fastening diameter	6mm
	Fastening centres	79mm

No.	Description:	Part number	Length (mm)	Width (mm)	Height (mm)	Weight (g)
DO 550 clutches						
1	Single DO 550 clutch	81500	133	38	68	343
2	Double DO 550 clutch	81501	133	65	68	544
3	Triple DO 550 clutch	81502	133	91	68	754

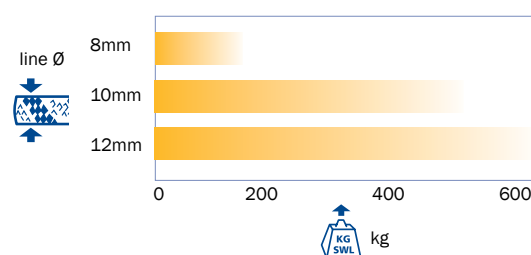
Important fitting notes: rope clutches

- When fitting ensure a fair lead straight through the clutch to prevent wear to side plates and/or reduced load capabilities.
- For best performance site clutch approximately 1ft (300mm) forward of the winch to ensure a fair lead both vertically and horizontally.
- Use Barton deck organisers forward of the clutch to gain perfect alignment.
- Always use a bolt-through fastening with a suitable sealant.
- A drilling template is provided on our packaging for your convenience.



No.	Part number
Printed handle inserts	
4 'Cruiser' handle insert pack (7 inserts)	81540
5 'Racer' handle insert pack (12 inserts)	81541
Spare parts	
Handle	81545
Cam	81546
Base	81547
Set of 4 x panhead machine screws and nuts	81548

DO 550 clutches - holding power



Winch handles and accessories

A range of light duty winch handles and accessories, manufactured from quality modern materials.

All designed to fit international star sockets and standard deck filler caps.

Extruded aluminium handles

Light duty, inexpensive handles in two lengths and either plain or locking. Both styles have easy-grip roller handle and 'Spectro' grey anodised finish.

Important note:

These handles should not be used on large, two-speed winches as they are not designed for high loads in an anti-clockwise direction. SWL 40kg.



Floating handles

Featuring a moulded body with an integral moulded handle shaft. Locking mechanism is with a positive, easy action thumb switch. Handle floats in salt and freshwater.

Important note:

Floating winch handles have a SWL of 40kg and are intended for lightweight use only.



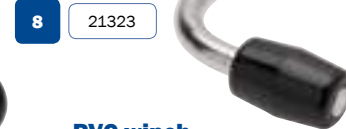
Chrome handle

For use with the now-discontinued '602' bottom handle winch.



Reefing gear handle

For use with the now-discontinued '323' roller reefing gear.



Fabric winch handle pocket

Manufactured from hard wearing synthetic fabric.



PVC winch handle pocket

Manufactured from flexible dip moulded PVC to enable a wide range of handle types to be stored quickly and securely. Includes drainage hole at base.



No.	Description:	Part number	Length (mm)	Weight (g)
Aluminium winch handles				
1	8" Aluminium handle	21001	225	290
2	8" Aluminium handle - locking	21011	225	302
3	10" Aluminium handle	21002	280	335
4	10" Aluminium handle - locking	21022	280	347
Floating winch handles				
5	10" Floating handle - locking	21033	290	306
6	8" Floating handle - locking	21034	235	267
Special handles				
7	Handle for 602 winch	21000	250	420
8	Reefing gear handle	21323	-	160
Winch handle pocket				
9	Fabric winch handle pocket	21050	300	70
10	Moulded PVC winch handle pocket	21053	320	237

Barton composite winches



Barton composite winches

A versatile alternative to conventional aluminium winches, the Barton range of composite winches offer significant cost and weight savings and are truly low maintenance.

Virtually self-lubricating, friction-free and corrosion resistant, the ingenious use of advanced materials ensure consistent performance and reliability.

- Three models available - a single-speed 8:1 and two twin-speeds; 16:1 and 23:1
- Suitable as primaries for yachts up to 10m (30ft) or as spinnaker/halyard winches on larger craft
- Red, blue and green coloured top rings are included, giving you the ability to colour-code winches to control lines, port or starboard, or just to match the colour scheme of your boat
- Comprehensive spares kits available.

(see page 6 for setup options).

See page 77 for our suggested boat size table designed to help you clarify the correct size of winch for your application.

Snubbing winch

Neat, lightweight unit which is ideal for use on larger dinghies and dayboats. Manufactured from glass fibre reinforced nylon with anodised aluminium ribs.



No.	Description:	Part number	Base Ø (mm)	Drum Ø (mm)	Weight (g)
Sheet winches					
1	Single speed 8:1	21200	101.6	66.7	835
2	Twin speed 16:1	21201	114.3	66.7	1264
3	Twin speed 23:1	21202	114.3	66.7	1600
Snubbing winch					
4	Snubbing winch	21101	75	50	230
Spares kit					
	Single speed 8:1	21210	-	-	-
	Twin speed 16:1	21211	-	-	-
	Twin speed 23:1	21212	-	-	-

THE BARTON 'WINCHER'

The Barton 'Wincher'

A specially designed rubber moulding which fits over the top of standard winches, converting them to self-tailing.

This simple operation works when the line is sheeted under load, which means the coils climb up the winch drum and then become gripped by the underside of the Winchers rubber body.

Cleating is achieved by locking the sheet into the Winchers ribbed central groove.


The Barton Winchers are easy to fit and available in four sizes to suit a wide range of popular winches.

Full fitting instructions are included.




Fitting instructions

1



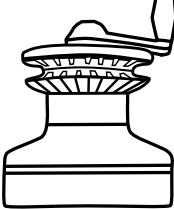
Immerse in hot soapy water for 5 mins until supple.

2




Stretch over top of winch with ribs facing downwards.

3



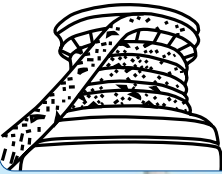
Entire 'Wincher' fits over winch – ribs face downwards & flange sits on winch lip.

4



For self-tailing, entire winch must be stacked with line.

5



To cleat, lock sheet into ribbed groove.



No.	Description:	Part number	Max drum Ø (mm)	Max rope Ø (mm)	Weight (g)
Barton 'Winchers'					
	Wincher small (pair)	21641	64-70	8-10	202
	Wincher medium (pair)	21642	70-80	10-14	223
1	Wincher large (pair)	21643	80-90	12-14	278
	Wincher extra large (pair)	21644	90-100	12-16	387

Wear pads and rubbing strakes

Designed to help sailors and power boaters protect key areas of a boat's deck and superstructure from abrasion, chips, scuffs and wear, our range of wear pads can be applied wherever there is a need to protect a boat's finish without compromising its appearance. Barton produces three wear pad options:

- The PUR (polyurethane) clear
- Kevlar fibre
- Carbon fibre

Offering a choice of performance characteristics, the PUR clear and Kevlar provide the highest protection for extreme use, while the carbon fibre is ideal for everyday levels of use and to protect carbon spars. Wear pads can be customised and cut to size to fit both curved and flat surfaces. The pads are easy to fit and are produced with a UV resistant high bond 3M pressure sensitive backing. Wear pads exhibit excellent resistance to edge lifting, immersion and exposure to salt water.

How to fit wear pads and discs

Ensure that the surface is perfectly clean; remove all traces of dirt, salt, moisture and grease. For rough surfaces, ie. non slip deck surfaces, lightly sand the surface with sandpaper for better adhesion. Align the pad or disc and trim to size with scissors if necessary. Press down firmly with a hard edged plastic tool which is the full width of the pad or disc to provide the necessary pressure at the point of lamination.



No.		Part number
Wear pads and discs		
1	PUR clear wear pads (rectangular pack of 2)	67170
2	PUR clear pad width 100mm (sold per metre on 6m roll)	67171
3	Carbon fibre rectangular wear pads (rectangular pack of 2)	67150
4	Carbon fibre wear disc	67151
5	Kevlar fibre rectangular wear pads (rectangular pack of 2)	67160
6	Kevlar fibre wear disc	67161



Stainless steel rubbing strakes

By popular demand Barton Marine introduces a range of stainless steel rubbing strakes, to help prevent rope wear to deck edges and coamings. Available in three lengths these attractive strakes are easy to fit and will last a lifetime. Part numbers and sizing information is as follows:

No.		Part number
Stainless steel rubbing strakes		
7	203 x 19mm	67100
8	305 x 19mm	67101
9	457 x 19mm	67102



Lazy jack kits

Allow mainsails to be reefed or dropped with ease, by retaining the sail between lines running from the mast (near the hounds) to the boom. These lines can be slackened whilst sailing to avoid restricting sail shape.

Ideal for use with fully battened or conventional mainsails, these complete kits contain stainless steel, plastic-coated wires with blocks and fixing eyes attached. High quality braided line, all fixings and comprehensive fitting instructions are also included.

A unique feature of Barton lazy jack kits is the soft plastic block covers which prevent sail chafe and enhance appearance.

Lightweight lazy jack kits

These all-rope kits still feature our unique block covers but are intended for smaller yachts or lightweight use.

Not recommended for large yachts or fully battened mains. We also recommend that the use of a topping lift is retained.

Cascade lazy jack kits

Available in standard and lightweight format. For use with longer boom lengths or where more sail control is required.

No.		Part number
Lightweight lazy jack kits		
1	For yachts up to 9m (30ft)	41140
2	Cascade system for yachts up to 10.5m (35ft)	41143
Lazy jack kits		
3	For yachts up to 9m (30ft)	41150
	For yachts up to 12m (40ft)	41151
	For yachts up to 12m (40ft)	41152
	Cascade system for larger yachts	41153



1 41140



2 41143



3 41150



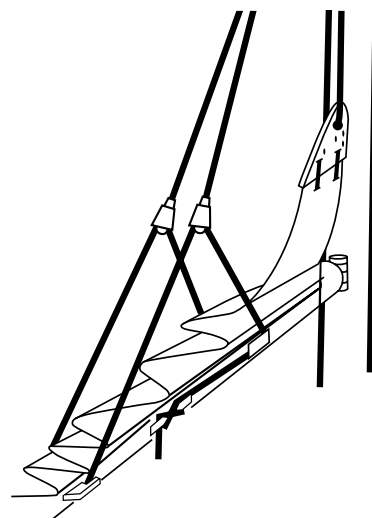
4 60750

No.		Part number
	Mast step	
4	Mast step (stainless steel)	60750

Standard lazy jack kits

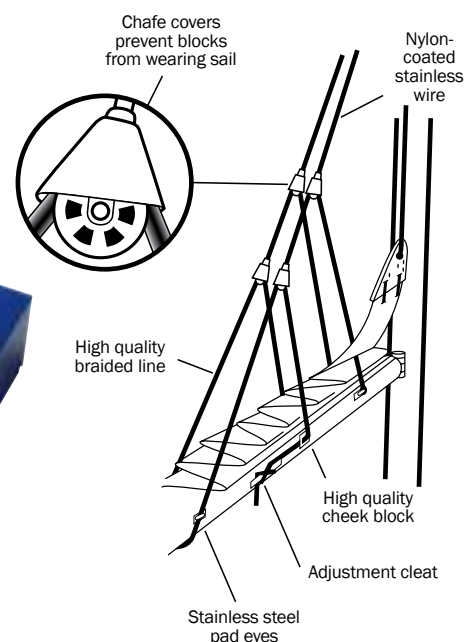
No modifications to sail, mast or boom required.

Blocks, cleats, mounting eyes and fixings included in the kit.



Cascade lazy jack kits

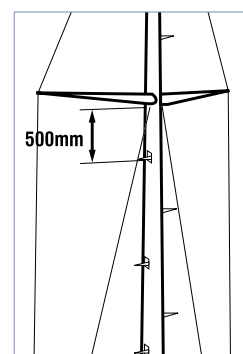
Blocks, cleats, mounting eyes and fixings included in the kit.



Mast step

Low profile, lightweight hinged mast step, manufactured from bright polished stainless steel. Featuring a secure and positive hinge action to ensure that the product is rattle-free. The foot hold area has a toothed non-slip surface and the profile turns up at the outboard end for a firm and secure foothold.

Secure using 4 x 5mm pop rivets and fit at 500mm spacing (as shown in the adjacent diagram).



Important note: mast steps

Mast steps should always be used in conjunction with a bosun's chair.

Always have a crew member at hand to control the halyard.

Do not go aloft barefoot and always put safety first when going aloft.

Reefing kits & hooks

Single line reefing kit

A boxed complete single-line reefing kit that allows reefing lines to be led aft to the safety of the cockpit.

This system makes reefing your mainsail a quick and easy operation - just lower the main to a predetermined mark on the halyard, tension the reefing line and re-trim the sail.

Supplied as a complete set with all the parts and fixings required, together with full fitting instructions. All you need to provide is a line and a cleat or stopper.

Slab reefing kits

Supplied with sliding blocks which are held in place with spring-loaded plungers. Manufactured from stainless steel and 'Spectro' anodised aluminium. Available in two sizes and complete with sufficient length of 'T' track and end stops.

Specifications

41483 supplied with 60cm of 25mm anodised 'T' track

41496 supplied with 100cm of 32mm anodised 'T' track

No.		Part number
Single line reefing kit		
3	For yachts up to 9m (30ft)	41130
Slab reefing kits		
4	For yachts up to 8.5m (28ft)	41483
	Spare slider for above	41484
5	For yachts up to 12m (40ft)	41496
	Spare slider for above	41497



Stanchion lead blocks

Mainly used for leading headsail furling lines aft, Barton stanchion blocks are available in three sizes to suit most applications.

Double blocks are designed for use with endless line systems and can easily be taken apart to accept pre-spliced lines.

A larger size 4 block should be used for final take off, especially if the furling line is to be lead to a winch.

All stanchion blocks are available with either plain or ball-bearing sheave.

Reefing/gooseneck hooks

Manufactured in stainless steel, both these types of hook are used in conjunction with slab reefing kits for securing the mainsail tack.

Type **41517** is supplied in pairs and is intended for mounting either side of the boom at gooseneck level.

Type **41518** can be mounted above the gooseneck or can be used at the stemhead to accept a jib tack.

No.		Part number
Reefing hooks		
1	Boom fitting (pair)	41517
2	Gooseneck or stemhead fitting	41518

No.	Description:	Part number		Sheave Ø (mm)	Max line Ø (mm)	Max tube Ø (mm)
		Plain sheave	Ball bearing sheave			
Stanchion lead blocks						
6	Single stanchion - size 2	02190	12190	35	8	25
7	Double stanchion - size 2	02290	12290	30	10	25
8	Single stanchion - size 3	03190	13190	45	10	25
9	Single stanchion - size 4	04190	14190	58	12	25
Stanchion bullseye						
10	Stanchion bullseye	60142		Bullseye internal diameter 17mm		



BARTON

Boomstrut

Six sizes to suit yachts up to 12m/40ft LOA

Patented flexing spring provides fast response and a constant force for vang efficiency

The boomstrut's lightweight, low-profile design features two flexible coated fibreglass rods which provide the force to support the boom. Pulling the boom down with a conventional kicker causes the Boomstrut to flex upwards; releasing straightens the rods, thereby lifting and supporting the boom.

Maintenance-free, durable design

Eliminates friction and sliding parts.

Improved performance

Less weight and windage.

Easy installation

There's no need to replace your existing hardware - the Boomstrut mounts independently inside the existing kicking strap tackle.

Simple-to-follow instructions

The Boomstrut is supplied with complete fitting instructions.

Mast fitting can use existing luff groove

To eliminate drilling, the Boomstrut's mast bracket can be slotted into your mast's luff groove.

Contoured boom fitting

The Boomstrut's boom bracket is contoured to fit both round and flat boom profiles.

Carefully designed & constructed

The Barton Boomstrut has been carefully designed and constructed to eliminate sharp edges, minimise parts and provide trouble-free installation and use.

All parts are from high-grade stainless steel and 'Spectro' grey anodised aluminium for good looks and durability.

Boomstrut extended

You'll find many reasons to appreciate the Barton Boomstrut

- No more topping lift hassles.
- No adjustments and no hang-ups.
- Never again will your boom fall accidentally.

Boomstrut compressed



The Dinghy Boomstrut

Maintenance free | Fits in minutes | No drilling required

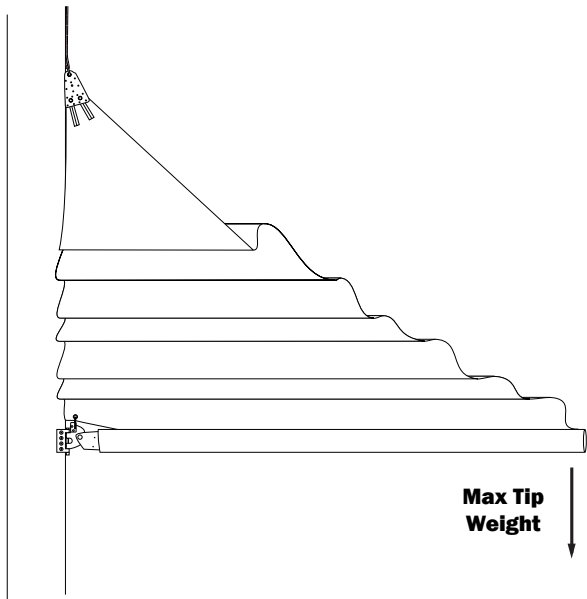
With no extra parts or drilling required, the Dinghy Boomstrut is simply tied off at the mast to secure in place, negating the need for drilling. At the top of the rods, a fully adjustable webbing cradle supports the boom and as the cradle is not directly attached to the boom, it does not restrict the boom from rolling around its central axis to follow the sail when reefing.

Ideal for:

- Sailing schools.
- Training boats.
- Trailer sailors.
- Cruising dayboats.



Suggested boat length (m)	Part number	Pin-to-pin length (mm)	Max rods can be reduced by * (mm)	Max initial full adjustment ** (mm)	Max stroke at full adjustment (mm)	Force *** (kg)
Barton Boomstrut						
Dinghy	44001	762	125	130	150	45
Up to 6m	44010	960	150	300	150	90
6m to 7.5m	44020	1070	150	300	150	140
7.5m to 9m	44030	1180	150	300	150	185
9m to 10.5m	44035	1320	150	400	200	230
10.5m to 12m	44040	1450	150	400	200	270



Pre fitting sizing check chart

Part number	Max tip weight before installing the Boomstrut (kg)
44001	5
44010	6.3
44020	9.5
44030	15
44035	19
44040	23

*The maximum amount the Boomstrut rods can be shortened to fit inside the vang area.
** The maximum amount of available pin-to-pin travel when flexed.
*** The downward force the Boomstrut will support at the point of the boom fitting attachment.
These are approximate measurements which may vary depending on boat type.

TILLER EXTENSIONS

Tiller extensions

Manufactured from 15mm diameter aluminium and available in a wide variety of lengths.

All Barton tiller extensions feature our flexible joint which can easily be removed from the tiller when required.

- Aluminium extensions in ‘Spectro’ grey anodised material.
- Available with either foam or plain button end options.

Flexible tiller joints

Manufactured from high-tech polymers to withstand countless tiller flexings. The joint can easily be removed from the tiller assembly by popping off the snap-on cover.

Two versions are available - the smaller diameter giving a softer action for shorter extensions.

No.	Description	Part number
Ali extensions - plain button		
1	Tiller extension - ali - plain button 600mm	43101
2	Tiller extension - ali - plain button 700mm	43102
3	Tiller extension - ali - plain button 800mm	43103
4	Tiller extension - ali - plain button 900mm	43104
	Tiller extension - ali - plain button 1050mm	43105
	Tiller extension - ali - plain button 1200mm	43106
Ali extensions - foam grip		
5	Tiller extension - ali - foam grip 600mm	43201
6	Tiller extension - ali - foam grip 700mm	43202
7	Tiller extension - ali - foam grip 800mm	43203
8	Tiller extension - ali - foam grip 900mm	43204
	Tiller extension - ali - foam grip 1050mm	43205
	Tiller extension - ali - foam grip 1200mm	43206

No.	Description	Part number	Length (mm)	Tube int Ø (mm)	Weight (g)
Flexible tiller joints					
9	Light flexible tiller joint	43600	58	13	20
	Flexible tiller joint	43601	58	13	20
Tiller clip					
10	Tiller clip	43605	-	-	-

9
43600



10
43605



Carbon tiller extensions

Features the latest in uni-directional 16mm carbon fibre tube which incorporates an additional pullwound spiral layer for optimum strength. Making it stronger than conventional carbon fibre tube and with our custom designed foam grip handle to reduce fatigue during long periods of use. Includes tiller clip.

No.	Description	Part number
Carbon tiller extensions		
1	Length 0.6m	43500
2	Length 0.7m	43501
	Length 0.8m	43502
3	Length 0.9m	43503
4	Length 1m	43504
5	Length 1.2m	43506
6	Length 1.5m	43509
7	Length 2m	43514
8	Length 2.1m	43515



Dinghy and dayboat

Bullseye swivels with cam cleat

Swivel bullseye accepts lines up to 12mm Ø and features a stainless steel insert and 'K' cam cleat with top fairlead.

Fairleads

Fairleads with plunger and cam cleat for use on 20mm 'T' track (see page 46 for complete range of 20mm 'T' track fittings). Sold in handed pairs. Includes budget cam cleat fixed on stainless steel plate.

Sheet fairlead - a moulded plastic fixed fairlead.

Spinnaker fairlead - a moulded plastic sheet fairlead with snap in/out hook design.

Drain bungs and sockets

This screw-type drain bung and socket is still among the best available. Supplied with rubber 'O' ring for a watertight seal. Available in black or white.

Rudder and transom fittings

Manufactured from stainless steel with tough nylon surrounds. A wide range of rudder fitting widths are available.

Rigging adjuster

Manufactured from 16mm stainless steel plate - allows for total 50mm adjustment in 10mm steps. Clevis pin 5mm Ø. Overall length 91mm.

No.	Description:	Part number	Length (mm)	Fastenings Ø (mm)	Max line Ø (mm)	Weight (g)
Foot blocks						
1	Fairlead + cam (handed pair) *	42102	90	5	12	732
2	Sheet fairlead	42200	65	5	14	16
3	Spinnaker fairlead	42201	75	4	8	8

No.	Description:	Part number	Bore Ø (mm)	Cutting Ø (mm)	Fastenings Ø (mm)	Weight (g)
Drain bungs and sockets						
4	Bung and socket - black	42356	15	22	4	11
5	Bung only - black	42357	15	-	-	7
6	Bung and socket - white	42358	15	22	4	11
7	Bung only - white	42359	15	-	-	7

No.	Description:	Part number	Strap width (mm)	Pintle Ø (mm)	Fastenings Ø (mm)	Weight (g)
Rudder and transom fittings						
8	Rudder pintle	42419	19	9.5	5	91
	Rudder pintle	42422	22	9.5	5	95
	Rudder pintle	42435	35	9.5	5	104
	Rudder pintle	42450	50	9.5	5	114
9	Rudder gudgeon	42519	19	-	5	81
	Rudder gudgeon	42522	22	-	5	82
	Rudder gudgeon	42535	35	-	5	91
	Rudder gudgeon	42550	50	-	5	101
10	Transom pintle	42400	-	9.5	5	70
11	Transom gudgeon	42500	-	-	5	30

No.	Description:	Part number	Max line Ø (mm)	Base Ø (mm)	Fastenings Ø (mm)	Weight (g)
Bullseye swivels with cam						
12	Bullseye swivel with cam	42601	12	58	5	172
Rigging adjuster						
13	Rigging adjuster	42700	-	-	-	-

* Fits on 400mm lengths of 20mm 'T' track.



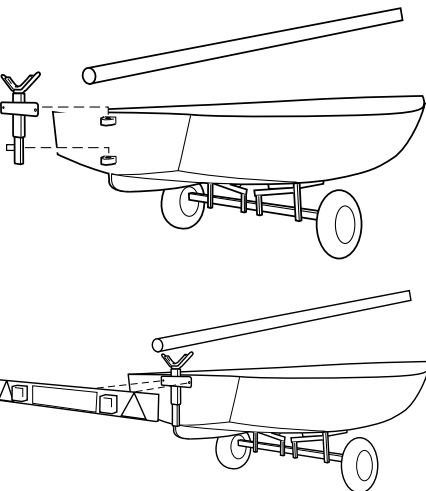
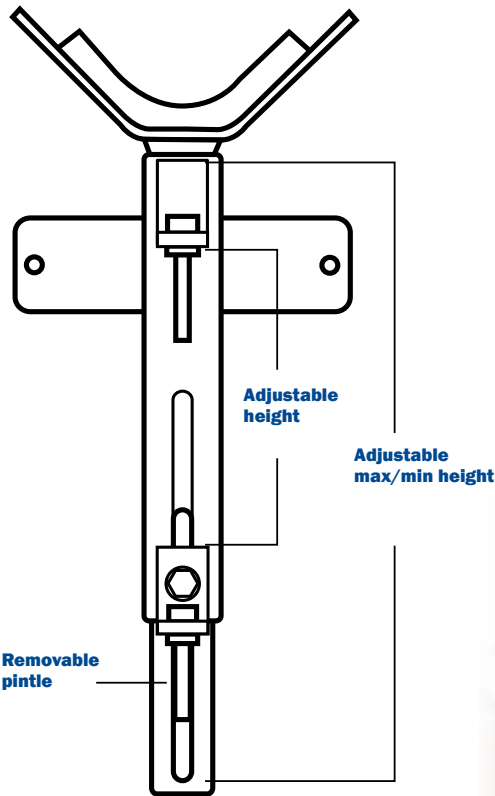
Dinghy mast support

Designed to support the aft end of a dinghy mast when towing. Simply fits onto standard transom fittings and is instantly ready for use. Fully adjustable for different transom heights and features a removable pintle to accommodate different transom layouts.

The yoke features a soft neoprene pad to protect the mast, shrouds and lines. Generous eyelets in the yoke allow for a securing line to be easily attached. A trailer board can be fitted to the cross plate with 2 x 6mm screws (not supplied).

- Easy to fit
- No fastenings required
- Fully and easily adjustable
- Increases towing safety
- Prevents damage to mast and deck.

No.	Part number
Dinghy mast support	
1 Dinghy mast support	42300



1 42300

Adjust bottom fitting and height of yoke to suit transom fittings and transom height, then tighten the locking nut.

Remove bottom pintle if transom has 2 gudgeons.

Attach trailer lighting board with 2 x 6mm fastenings.



'K' CAM

'K' cam cleats

Manufactured from a composite Kevlar/Zytal material and available in 3 sizes to accept lines up to 14mm in diameter. This advanced material offers performance advantages over carbon fibre and conventional glass-reinforced resins; 'K' cams are very strong, lightweight and have excellent wear-resistance. A progressive tooth design ensures maximum holding power on all types of line, whilst maintaining minimum wear to both cam and line.

'K' cam bases feature a stainless steel wear bar for prolonged life.

Cams utilise stainless steel leaf springs which give a smooth but positive action. They are also stronger and have a longer life than conventional wire springs.

'K' cam cleats are supplied as cleat only plus separate accessories in grey, green, red or yellow where appropriate, to allow colour co-ordination for port, starboard etc.

Wire front fairleads

From stainless steel.

Pillar fairleads

These add-ons enable the cam cleat to be engaged from a variety of angles. Cams can be fitted either way around to achieve a lead from in front or behind. Stainless steel pillars add strength and wear resistance.

Top fairleads






Incorporating stainless steel reinforcing for added strength and wear resistance.

Wedge mounts

Angled wedge mounts to suit the 3 sizes of 'K' cam cleat.

Cam top caps

Supplied in packs containing 2 each of red, green and yellow cam top caps.

Specifications	'K' cam mini	'K' cam midi	'K' cam maxi
 Max line Ø	10mm	6-12mm	10-14mm
 Fastenings Ø	4mm	5mm	5mm
 Fastening centres	30mm (1 3/16")	40mm (1 9/16")	50mm (2")
 Holding power	190kg	230kg	260kg
 Weight	17g	34g	50g





5 70206 **6** 70216 **7** 70226 **8** 70236



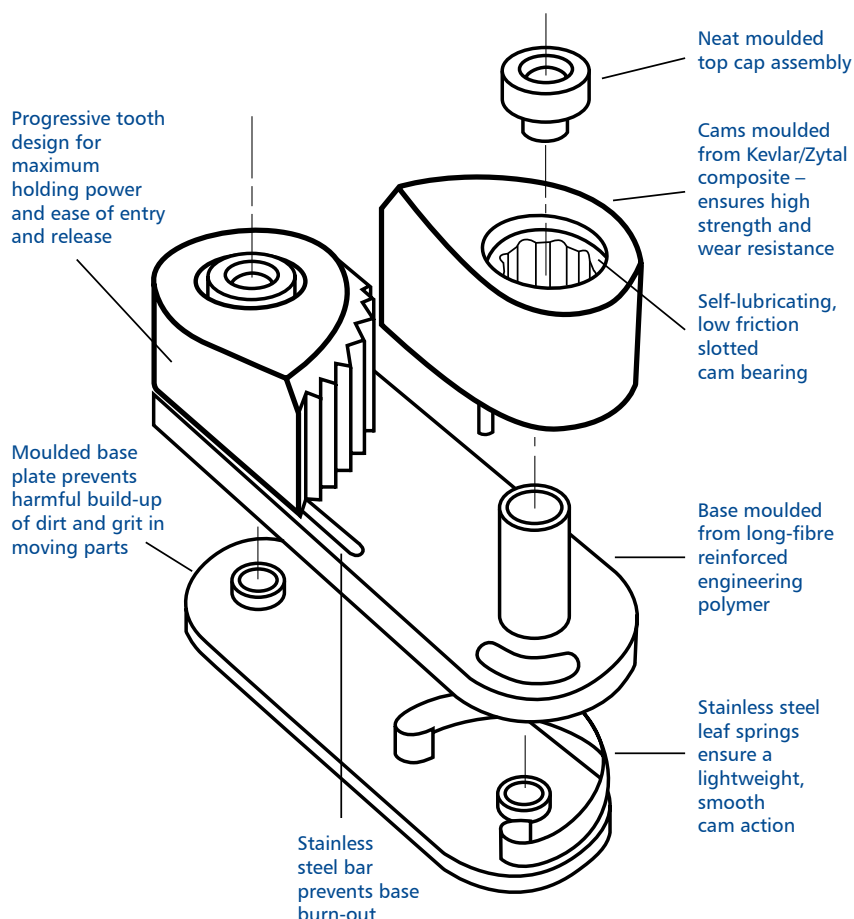
10 70241



11 42601



12 70600 **13** 70601 **14** 70602



No.	Description:	'K' cam mini	'K' cam midi	'K' cam maxi
'K' cam cleat only				
1	'K' cam cleat only	70100	70200	70300
'K' cam cleat with wire front fairlead				
2	'K' cam cleat with wire front fairlead	70101	70201	70301
Wire front fairlead only				
3	Wire front fairlead, stainless steel	70104	70204	70304
Pillar fairlead only				
4	Pillar fairlead - grey	70105	70205	70305
Top fairlead only				
5	Top fairlead - grey	70106	70206	70306
6	Top fairlead - green	70116	70216	70316
7	Top fairlead - red	70126	70226	70326
8	Top fairlead - yellow	70136	70236	70336
Wedge mount				
9	Wedge mount	70140	70240	70340
Cam top caps				
10	Pack of top caps, 2 x red, green, yellow	70141	70241	70341

No.	Description:	Part number	Max rope Ø (mm)	Fastening centres (mm)	Fastenings Ø (mm)	Holding power (kg)	Base Ø (mm)	Weight (g)
Bullseye swivel with cam								
11	Bullseye swivel with cam	42601	12	-	5	-	58	172
Budget cam cleats								
12	Budget cam cleat mini	70600	10	30	4	-	-	-
13	Budget cam cleat midi	70601	6-12	40	5	-	-	-
14	Budget cam cleat maxi	70602	10-14	50	5	-	-	-

INSPECTION COVERS

Inspection covers

Barton offer a wide range of inspection covers in screw, push-fit, and locking versions. Round and rectangular covers are available.

Screw inspection covers

Manufactured from high-impact polycarbonate, these covers feature a coarse, easy-start thread and a built-in ‘O’ ring seal.

Available in four diameters in white, black and clear window.



‘T’ lock round hatch covers

- Easy locking design.
- Low Profile.
- Integral seal for excellent water resistance.
- UV and weather resistant Saralon resin.



No.	Description:	Part number white	Part number black	Part number clear	Aperture Ø (mm)	Cutting Ø (mm)	Overall Ø (mm)	Fastenings Ø (mm)	Weight (g)
Screw inspection covers - round									
1	Screw inspection covers - round	40040	40041	40042	103	114	145	4	84
2	Screw inspection covers - round	40050	40051	40052	130	139	170	4	107
3	Screw inspection covers - round	40060	40061	40062	155	165	215	4	172
4	Screw inspection covers - round	40080	40081	40082	200	215	260	4	400

Hinged rectangular inspection covers

Hinged on the top edge, these covers feature the 'T' lock system and a soft rubber seal.

Available in white only. UV and acetone-resistant.

'T' lock hatch covers

- Easy lock design.
- Hidden fasteners.
- Stainless Steel hinges.
- Integral seal for excellent water resistance.
- UV and weather resistant Saralon resin.



7

40510

8

40511



9

40512



10

40513



11

40514



12

40515

No.	Description:	Part number	Colour	Aperture Ø (mm)	Cutting Ø (mm)	Overall Ø (mm)	Fastenings Ø (mm)	Weight (g)
'T' lock hatch covers								
5	223mm (8.75") deck plate locking	40500	Polar white	131	159	223	6 x 5	331
6	273mm (10.75") deck plate locking	40502	Polar white	181	210	273	6 x 5	484
7	248 x 330mm (9.75 x 13") 'T' lock hinged rectangle hatch cover	40510	Polar white	162 x 238	191 x 267	248 x 330	8 x 5	873
8	280 x 388mm (11 x 15.25") 'T' lock hinged rectangle hatch cover	40511	Polar white	191 x 292	223 x 321	280 x 388	8 x 5	1123
9	280 x 483mm (11 x 19") 'T' lock hinged rectangle hatch cover	40512	Polar white	191 x 394	223 x 423	280 x 483	10 x 5	1458
10	330 x 451mm (13 x 17.75") 'T' lock hinged rectangle hatch cover	40513	Polar white	242 x 356	270 x 385	330 x 451	10 x 5	1528
11	330 x 502mm (13 x 19.75") 'T' lock hinged rectangle hatch cover	40514	Polar white	242 x 413	270 x 442	330 x 502	10 x 5	1702
12	330 x 610mm (13 x 24") 'T' lock hinged rectangle hatch cover	40515	Polar white	242 x 515	270 x 543	330 x 610	12 x 5	2124

Furling gear

Single line operation for dinghies, dayboats and light cruising yachts - two drum sizes work with a common top head swivel. All have stainless steel ball races for smooth operation.

Drums are moulded from glass fibre reinforced nylon with stainless steel swivel and ball bearing assemblies.

Top head swivel is from machine-turned solid aluminium with stainless steel ball bearings.

- Redesigned to enhance style and increase performance.
- 3 point line retention.
- Invisible easy furling line attachment.
- Multi position line exit at 30, 90, 150, 215, 270 and 335 degree angles (bow facing).
- Furling line guides to eliminate line drop.

3

42336



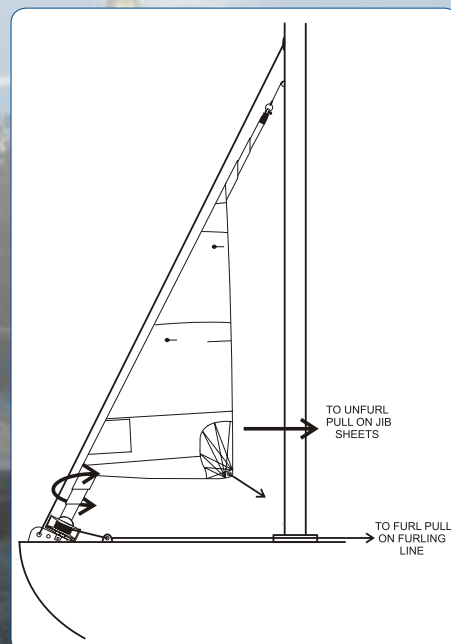
2

42335



1

42334



No.	Description:	Part number	Drum Ø (mm)	Sail area (sq ft)	Break load (kg)	SWL (kg)	Weight (g)
Furling gear							
1	Furling drum	42334	76	60	1108	554	218
2	Furling drum	42335	95	100	1108	554	281
3	Top swivel	42336	25	100	1108	554	55

Bullseyes, pad eyes and deck eyes

Bullseyes

A range of four bullseyes for through-deck or on-deck screw mounting. All feature a strong, moulded plastic eye, reinforced with a stainless steel bar. Two models also feature a stainless steel eye insert to limit wear to the line. All accept lines up to 16mm Ø.

Bullseye swivel with cam cleat

Swivel bullseye accepts lines up to 12mm Ø and features a stainless steel insert and “K” cam cleat with top fairlead. Fastening 4 x 5mm.

Pad eyes

A wide range of attachment eyes/fairleads manufactured from stainless steel. Featuring a solid stainless steel bar welded for extra security.

Folding pad eye - stainless steel pad eye with anti-vibration rubber pad. Folds flat to deck when not in use.

Double folding pad eye - with anti-vibration rubber pads and two fixing eyes which fold flat when not in use.

Deck eyes (stainless steel)

Two sizes of stainless steel deck eyes with generous eye capacity.



13

42601



1

60304



2

60305



3

60306



4

60307



5

60308



6

60309



7

60410



8

60411



9

60420



10

60421



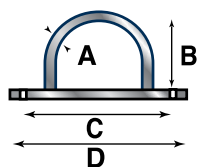
11

60422

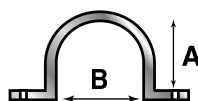


12

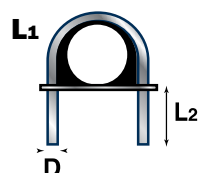
60423



No.	Description:	Part number	Dia Ø 'A' (mm)	Height 'B' (mm)	Hole centre 'C' (mm)	Width 'D' (mm)	Fastenings Ø (mm)
Pad eyes							
2	Pad eye - fixed	60305	4	16	30	40	5
3	Pad eye - fixed	60306	6	24	44	60	5
4	Pad eye - fixed	60307	8	28	55	80	6
5	Pad eye - fixed	60308	10	35	60	95	8
6	Pad eye - folding	60309	6	42	36	54	6
1	Pad eye - double folding	60304	6	42	-	-	6



No.	Description:	Part number	Height 'A' (mm)	Width 'B' (mm)	Fastenings Ø (mm)
Deck eyes					
7	Deck eye - S/S	60410	14	14	5
8	Deck eye - S/S	60411	18	16	6



No.	Description:	Part number	Insert	Max line Ø (sq ft)	'D' (mm)	'L1' (mm)	'L2' (mm)
Bullseyes							
9	Through-deck	60420		16	6	57	18
10	Through-deck	60421		16	6	77	35
11	Through-deck	60422		16	6	105	60
12	Screw-to-deck	60423		16	6	40	-
13	Bullseye swivel with cam	42601		12	-	-	-

Clevis pins, split pins, springs and sheaves

Clevis pins

A comprehensive selection of clevis pins manufactured from 316 stainless steel - as used throughout the Barton range of blocks. Supplied in packs of two.

Stand-up springs

Ideal for mounting blocks on decks to prevent tumbling or causing rope snags and deck damage. Either in stainless steel or soft plastic.

Split rings

Easy-fit stainless steel split rings for use with our clevis pins. Supplied in two sizes and in packs of 10.

Sheaves

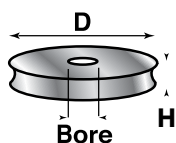
A comprehensive range of plain and ball bearing sheaves as used throughout the complete Barton block range. Moulded from Acetal resin, our unique, super-low friction ball race system features Delrin balls running on a large diameter centre boss, which ensures an extremely low friction performance.



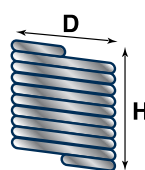
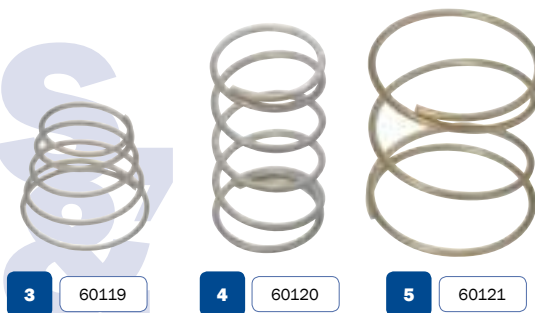
1 64801



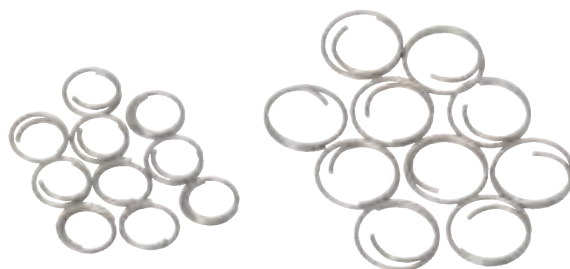
2 64901



No.	Description:	Part number	Dia Ø 'D' (mm)	Height 'H' (mm)	Bore (mm)
Sheaves - plain bearing					
1	Plain bearing sheave	64801	30	12	8
	Plain bearing sheave	64802	32	14	8
	Plain bearing sheave	64803	32	17	11
	Plain bearing sheave	64804	35	12	8
	Plain bearing sheave	64805	35	18	13
	Plain bearing sheave	64806	38	17	13
	Plain bearing sheave	64807	44	18	13
	Plain bearing sheave	64808	44	20	13
	Plain bearing sheave	64809	45	11	8
	Plain bearing sheave	64810	45	14	8
	Plain bearing sheave	64811	48	20	13
	Plain bearing sheave	64812	58	14	8
	Plain bearing sheave	64813	58	17	11
	Plain bearing sheave	64814	64	18	13
	Plain bearing sheave	64815	72	18	13
	Plain bearing sheave	64816	72	20	13
Sheaves - ball bearing					
2	Ball bearing sheave	64901	30	12	5
	Ball bearing sheave	64902	32	14	5
	Ball bearing sheave	64903	32	17	6
	Ball bearing sheave	64904	35	13	5
	Ball bearing sheave	64906	38	18	6
	Ball bearing sheave	64907	44	18	6
	Ball bearing sheave	64908	44	20	6
	Ball bearing sheave	64909	45	12	5
	Ball bearing sheave	64910	45	14	5
	Ball bearing sheave	64912	58	15	5
	Ball bearing sheave	64913	58	18	6
	Ball bearing sheave	64914	64	18	6
	Ball bearing sheave	64915	72	18	6
	Ball bearing sheave	64916	72	21	6

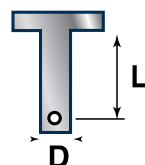


No.	Description:	Part number	Dia Ø 'D' (mm)	Height 'H' (mm)
Stand-up springs				
3	Spring - S/S (tapered)	60119	16/24	20
4	Spring - S/S	60120	20	35
5	Spring - S/S	60121	30	30
6	Spring - plastic	60122	40	50
7	Spring - plastic	60123	48	55



8 60190 9 60191

No.	Description:	Part number
Split rings		
8	Split rings - 10mm Ø - pack of 10	60190
9	Split rings - 14mm Ø - pack of 10	60191



No.	Description:	Part number	Dia Ø 'D' (mm)	Length 'L' (mm)
Clevis pins				
10	Clevis pins - pack of 2	60203	5	15
	Clevis pins - pack of 2	60204	5	18
11	Clevis pins - pack of 2	60207	5	24
	Clevis pins - pack of 2	60208	5	33
	Clevis pins - pack of 2	60209	5	39
12	Clevis pins - pack of 2	60210	6	10
	Clevis pins - pack of 2	60212	6	23

Shackles and 'S' hooks

Shackles

A range of screw pin strip and forged bar shackles in stainless steel - as used throughout the Barton range.

Pin diameters up to 8mm available.

Rigging links

Pressed stainless steel rigging links with clevis pin and ring in pin.

Sizes up to 6mm pin diameter.

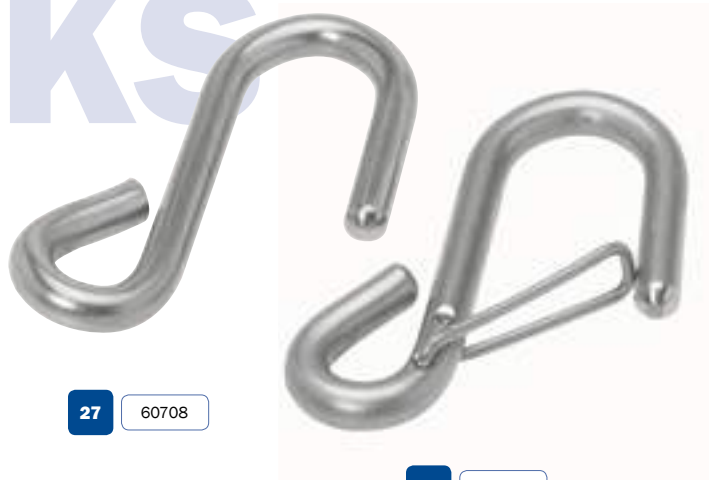
Swivels

Stainless steel swivels as used throughout our blocks.

Four sizes available.

'S' hooks

A handy fitting with a multitude of uses. Manufactured from stainless steel. Supplied as either a plain hook or with spring latch fitted.

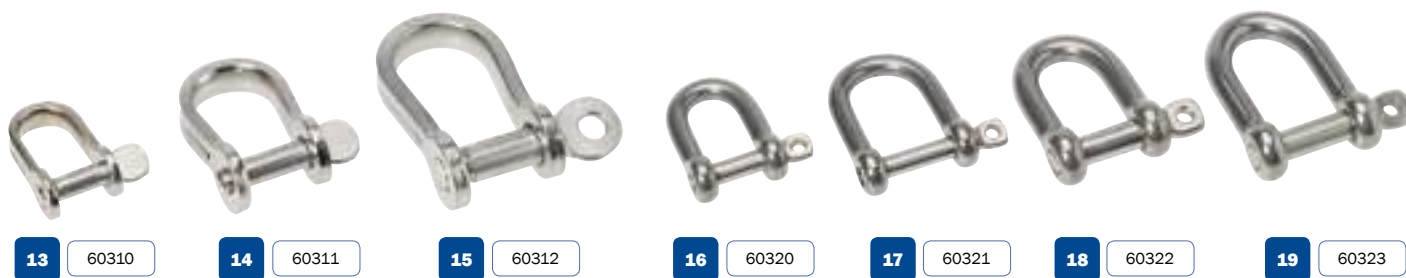


27

60708

28

60709



13

60310

14

60311

15

60312

16

60320

17

60321

18

60322

19

60323



20

60343

21

60344

22

60350

23

60700

24

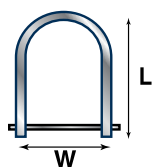
60701

25

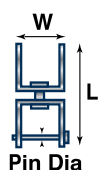
60702

26

60703



No.	Description:	Part number	Pin Ø 'D' (mm)	Length 'L' (mm)	Width 'W' (mm)
Screw pin shackles (strip)					
13	Strip shackle	60310	5	27	10
14	Strip shackle	60311	6	38	13
15	Strip shackle	60312	8	50	16
Screw pin shackles (bar)					
16	Bar shackle	60320	6	38	13
17	Bar shackle	60321	6	44	20
18	Bar shackle	60322	8	49	16
19	Bar shackle	60323	8	55	20
Rigging links					
20	Rigging link	60343	5	30	14
21	Rigging link	60344	6	37	18
22	Rigging link	60350	6	50	19
Swivels					
23	Swivel	60700	5	33	8
24	Swivel	60701	5	33	9
25	Swivel	60702	5	33	11
26	Swivel	60703	6	45	14



No.	Description:	Part number	Bar Ø (mm)	Length 'L' (mm)	Width 'W' (mm)
'S' hooks					
27	'S' hook plain	60708	6	73	19
28	'S' hook with latch	60709	6	73	19

Replica laser kit

1 Laser Replica 15:1 Kicking strap assembly (98075)

The Barton kicking strap assembly gives all the advantages of systems costing twice the price. 15:1 purchase is achieved through clever design of the base plate, fitted with the unique Barton swivelling triple cam block. It is simple to fit and easy to use.

Contains:

Barton base plate, Spectro anodised aluminium with three fixing bolts.

00930 Series 0 triple, swivel, cam block attached to base plate by shackle.

00110 Series 0 single fixed eye block attached to base plate by shackle.

00211 Series 0 double block with becket.

01091 Series 1 single tang block with becket and curved kicker key for boom.

1.2m x 4mm dyneema for primary red control line.

3m x 4mm line for secondary red control line.

2 Laser Replica Outhaul assembly (98076)

The Barton outhaul assembly is class legal offering the same purchase as standard systems fitted. Our outhaul is simple, lightweight, strong and comes with a simple toggle release for the mainsail clew.

Contains:

00110 Series 0 single fixed eye (fitted to short red strop).

00111 Series 0 single fixed eye becket (fitted to primary red line).

00110 Series 0 single fixed eye, (attaches to gooseneck by twist shackle or line – not supplied).

Primary line 2m x 4mm red dyneema, Short strop 0.24m x 4mm red dyneema.

Secondary line 4m x 4mm blue line, Elastic 1.5m x 4mm.

3 Laser Replica Mast base assembly (98077)

Comprises two size 0 fixed eye blocks built into the stainless steel mount for added security and no risk of twisting.

Contains:

Stainless steel mast base plate with two loops.

00110 Series 0 blocks x 2.

4 Laser Replica Cleat base assembly (98078)

The replica cleat mount comes fitted with two mini K Cams and our new pillar fairlead design for ease of adjustment from all angles.

Contains:

Cleat base with two fixing holes.

70100 K Cam mini cleats x 2.

70105 K Cam pillar fairleads x 2.

5 Laser Replica Cunningham assembly (98079)

The Barton Cunningham assembly comes with 8:1 purchase for those who find the standard system a struggle. It is simple to fit and easy to use. Components can be configured to be class legal.

Contains:

00110 Series 0 single fixed eye (attached to primary red line through sail eye).

00110 Series 0 single fixed eye (attached to secondary yellow line short tail).

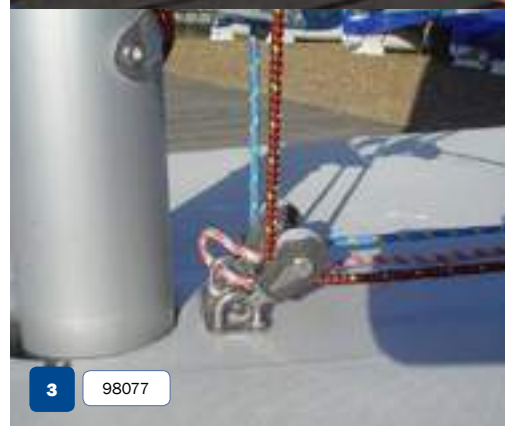
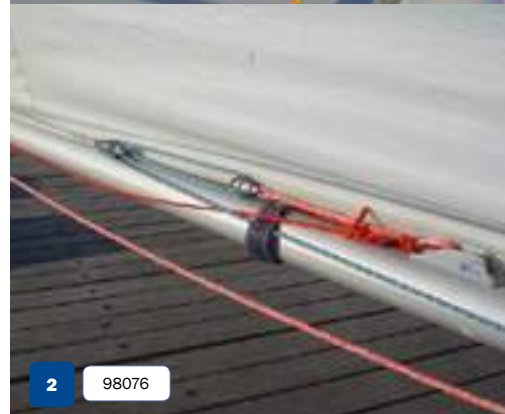
Primary line 0.44m x 4mm red dyneema (with long and short loops).

Secondary line 3.5m x 4mm yellow line (large loop provided with long and short tails).

Disclaimer:

Barton fittings are high quality replacements that perform the same function as the original part. They should not be confused with official parts bearing the Laser® registered trademark. They cannot be used if you are sailing at an Association event. However, they are perfect for social sailing, sailing schools, club sailing or training. Laser® is a registered trademark owned by Velum Limited and currently licensed for use in Europe to Laser Performance (Europe) Limited.


Barton Marine Equipment Limited is fully independent of both Laser Performance (Europe) Limited and Velum Limited.




Suggested boat size

Blocks


Mainsheet blocks end beam

Boat size * 	5.5m	7m	10m	11.5m	13m	14m
Series 1 - 30mm sheave						
Series 2 - 35mm sheave						
Series 3 - 45mm sheave						
Series 4 - 54mm sheave						
Series 5 - 58mm sheave						
Series 6 - 64mm sheave						
Series 7 - 70mm sheave						


Spinnaker sheet / guy blocks

Boat size * 	5m	6m	7m	10m	11.5m	13m	14m
Series 0 - 20mm sheave							
Series 1 - 30mm sheave							
Series 2 - 35mm sheave							
Series 3 - 45mm sheave							
Series 4 - 54mm sheave							
Series 5 - 58mm sheave							
Series 6 - 64mm sheave							
Series 7 - 70mm sheave							

Mast base / halyard blocks


Boat size * 	6m	9m	10m	11.5m	13m	14m
Series 0 - 20mm sheave						
Series 1 - 30mm sheave						
Series 2 - 35mm sheave						
Series 3 - 45mm sheave						
Series 4 - 54mm sheave						
Series 5 - 58mm sheave						
Series 6 - 64mm sheave						
Series 7 - 70mm sheave						

Kicker blocks


Boat size * 	6m	7m	8m	8.5m	11m	11.5m	13m	14m
Series 0 - 20mm sheave								
Series 1 - 30mm sheave								
Series 2 - 35mm sheave								
Series 3 - 45mm sheave								
Series 4 - 54mm sheave								
Series 5 - 58mm sheave								
Series 6 - 64mm sheave								
Series 7 - 70mm sheave								

Systems


Traveller systems

Boat size * 	5.5m	8.5m	11m	14m
Series 0 - 16mm				
Series 1 - 20mm				
Series 2 - 26mm				
Series 3 - 30mm				


Recirculating genoa cars

Boat size * 	8.5m	11m	13m
Series 1 - 20mm			
Series 2 - 26mm			
Series 3 - 30mm			


Pin stop genoa cars

Boat size * 	7m	8.5m	11.5m	14.5m
20mm 'T' track				
25mm 'T' track				
32mm 'T' track				
32mm 'T' track HIGH LOAD				


Primary genoa winch

Boat size * 	7m	8m	9.5m	10m	11.5m
Single speed 8:1					
Twin speed 16:1					
Twin speed 23:1					


DO 550 rope clutches

Boat size * 	8m	9.5m	10m	11m
DO 550 rope clutch				

Secondary halyard winch

Boat size * 	7m	8m	9.5m	10m	11.5m
Single speed 8:1					
Twin speed 16:1					
Twin speed 23:1					

Deck organisers

Boat size * 	8m	9.5m	10m	14.5m
Size 1 - 28mm				
Size 2 - 38mm				

Part No	Page	Part No	Page	Part No	Page	Part No	Page	Part No	Page	Part No	Page	Part No	Page	Part No	Page
00110	8	02410	13	04160	16	06141	20	11091	10	13130	14	14431	17	16930	21
00111	8	02411	13	04170	16	06170	20	11110	10	13131	14	14440	17	16931	21
00130	8	02420	13	04171	16	06171	20	11111	10	13140	14	14441	17	17090	22
00131	8	02421	13	04180	16	06180	20	11120	10	13141	14	14480	17	17110	22
00160	8	02430	13	04181	16	06181	20	11121	10	13150	14	14481	17	17111	22
00170	8	02431	13	04190	16	06220	20	11130	10	13151	14	14531	17	17120	22
00190	8	02440	13	04210	16	06221	20	11131	10	13160	14	14541	17	17121	22
00191	8	02441	13	04211	16	06320	20	11150	10	13170	14	14571	17	17130	22
00210	8	02531	13	04220	16	06321	21	11151	10	13171	14	14631	17	17131	22
00211	9	02541	13	04221	16	06330	21	11160	10	13180	14	14641	17	17140	22
00230	9	02571	13	04230	16	06331	21	11170	10	13181	14	14681	17	17141	22
00231	9	02631	13	04231	16	06420	21	11180	11	13190	14	14731	17	17170	22
00310	9	02641	13	04250	17	06421	21	11190	11	13210	14	14931	17	17171	22
00311	9	02731	13	04320	17	06430	21	11210	11	13211	14	15090	18	17180	22
00330	9	02740	28	04321	17	06431	21	11211	11	13220	14	15110	18	17181	22
00331	9	03090	14	04330	17	06440	21	11220	11	13221	14	15111	18	17220	22
00511	9	03091	14	04331	17	06441	21	11221	11	13230	14	15120	18	17221	22
00931	9	03110	14	04410	17	06480	21	11230	11	13231	15	15121	18	17320	22
01090	10	03111	14	04411	17	06481	21	11231	11	13250	15	15130	18	17321	23
01091	10	03120	14	04420	17	06631	21	11250	11	13320	15	15131	18	17330	23
01110	10	03121	14	04421	17	06641	21	11280	11	13321	15	15140	18	17331	23
01111	10	03130	14	04430	17	06681	21	11320	11	13330	15	15141	18	17420	23
01120	10	03131	14	04431	17	06930	21	11321	11	13331	15	15170	18	17421	23
01121	10	03140	14	04440	17	06931	21	11330	11	13410	15	15171	18	17430	23
01130	10	03141	14	04441	17	07090	22	11331	11	13411	15	15180	18	17431	23
01131	10	03150	14	04480	17	07110	22	12090	12	13420	15	15181	18	17440	23
01150	10	03151	14	04481	17	07111	22	12091	12	13421	15	15220	18	17441	23
01151	10	03160	14	04531	17	07120	22	12110	12	13430	15	15221	18	17480	23
01160	10	03161	14	04541	17	07121	22	12111	12	13431	15	15320	18	17481	23
01170	10	03170	14	04571	17	07130	22	12120	12	13440	15	15321	19	17631	23
01180	11	03171	14	04631	17	07131	22	12121	12	13441	15	15330	19	17641	23
01190	11	03180	14	04641	17	07140	22	12130	12	13480	15	15331	19	17681	23
01210	11	03181	14	04681	17	07141	22	12131	12	13481	15	15420	19	17930	23
01211	11	03190	14	04731	17	07170	22	12140	12	13511	15	15421	19	17931	23
01220	11	03210	14	04931	17	07171	22	12141	12	13531	15	15430	19	18000	34
01221	11	03211	14	05090	18	07180	22	12150	12	13541	15	15431	19	18001	34
01230	11	03220	14	05110	18	07181	22	12151	12	13571	15	15440	19	18010	34
01231	11	03221	14	05111	18	07220	22	12160	12	13631	15	15441	19	18020	34
01250	11	03230	14	05120	18	07221	22	12170	12	13641	15	15480	19	18030	34
01280	11	03231	15	05121	18	07320	22	12171	12	13681	15	15481	19	18040	34
01320	11	03250	15	05130	18	07321	23	12180	12	13731	15	15631	19	18050	34
01321	11	03320	15	05131	18	07330	23	12190	12	14090	16	15641	19	18060	34
01330	11	03321	15	05140	18	07331	23	12210	12	14091	16	15681	19	18101	34
01331	11	03330	15	05141	18	07420	23	12211	12	14110	16	15930	19	18105	34
02090	12	03331	15	05170	18	07421	23	12220	12	14111	16	15931	19	18110	34
02091	12	03410	15	05171	18	07430	23	12221	12	14120	16	16090	20	18111	34
02110	12	03411	15	05180	18	07431	23	12230	12	14121	16	16110	20	18112	34
02111	12	03420	15	05181	18	07440	23	12231	13	14130	16	16111	20	19000	42
02120	12	03421	15	05220	18	07441	23	12250	13	14131	16	16120	20	19010	42
02121	12	03430	15	05221	18	07480	23	12280	13	14140	16	16121	20	19020	42
02130	12	03431	15	05320	18	07481	23	12290	13	14141	16	16130	20	19030	42
02131	12	03440	15	05321	19	07631	23	12320	13	14150	16	16131	20	19040	42
02140	12	03441	15	05330	19	07641	23	12321	13	14151	16	16140	20	19050	42
02141	12	03480	15	05331	19	07681	23	12330	13	14160	16	16141	20	19060	42
02150	12	03481	15	05420	19	07930	23	12331	13	14170	16	16170	20	19100	42
02151	12	03511	15	05421	19	07931	23	12410	13	14171	16	16171	20	19103	42
02160	12	03531	15	05430	19	10110	8	12411	13	14180	16	16180	20	19900	42
02161	12	03541	15	05431	19	10111	8	12420	13	14181	16	16181	20	19901	42
02170	12	03571	15	05440	19	10130	8	12421	13	14190	16	16220	20	19902	42
02171	12	03631	15	05441	19	10131	8	12430	13	14210	16	16221	20	20000	41
02180	12	03641	15	05480	19	10160	8	12431	13	14211	16	16320	20	20001	41
02190	12	03681	15	05481	19	10170	8	12440	13	14220	16	16321	21	20002	41
02210	12	03731	15	05631	19	10190	8	12441	13	14221	16	16330	21	20003	41
02211	12	04090	16	05641	19	10191	8	12531	13	14230	16	16331	21	20010	41
02220	12	04091	16	05681	19	10210	8	12541	13	14231	16	16420	21	20012	41
02221	12	04110	16	05930	19	10211	9	12571	13	14250	17	16421	21	20013	41
02230	12	04111	16	05931	19	10230	9	12631	13	14320	17	16430	21	20020	41
02231	13	04120	16	06090	20	10231	9	12641	13	14321	17	16431	21	20022	41
02250	13	04121	16	06110	20	10310	9	12731	13	14330	17	16440	21	20023	41
02280	13	04130	16	06111	20	10311	9	13090	14	14331	17	16441	21	20030	41
02290	13	04131	16	06120	20	10330	9	13091	14	14410	17	16480	21	20032	41
02320	13	04140	16	06121	20	10331	9	13110	14	14411	17	16481	21	20033	41
02321	13	04141	16	06130	20	10511	9	13111	14	14420	17	16631	21	20040	41
02330	13	04150	16	06131	20	10931	9	13120	14	14421	17	16641	21	20042	41
02331	13	04151	16	06140	20	11090	10	13121	14	14430	17	16681	21	20043	41

Part No	Page	Part No	Page	Part No	Page	Part No	Page	Part No	Page	Part No	Page	Part No	Page	Part No	Page
20050	41	24023	41	28101	42	40061	70	44020	63	60462	30	70340	68	95204	27
20052	41	24030	41	28102	42	40062	70	44030	63	60700	75	70341	69	95205	27
20053	41	24032	41	28110	42	40080	70	44035	63	60701	75	70600	69	95220	27
20060	41	24033	41	28112	42	40081	70	44040	63	60702	75	70601	69	95221	27
20062	41	24040	41	28900	42	40082	70	50030	24	60703	75	70602	69	95222	27
20063	41	24042	41	28901	42	40500	70	50031	24	60708	75	80500	54	95223	27
20090	36	24043	41	28902	34	40502	70	50045	24	60709	75	80501	54	95230	27
20100	36	24050	41	30000	41	40510	71	50046	24	60750	60	80502	54	95231	27
20101	37	24052	41	30001	41	40511	71	50060	24	64801	74	81500	55	95232	27
20103	37	24053	41	30002	41	40512	71	50061	24	64802	74	81501	55	95233	27
20105	37	24060	41	30003	41	40513	71	50080	24	64803	74	81502	55	95300	27
20107	37	24062	41	30010	41	40514	71	50081	24	64804	74	81540	55	95301	27
20110	37	24063	41	30012	41	40515	71	51253	49	64805	74	81541	55	95302	27
20112	37	24090	36	30013	41	41130	61	51254	49	64806	74	81545	55	95303	27
20113	37	24100	36	30020	41	41140	60	51322	51	64807	74	81546	55	95304	27
20114	37	24101	37	30022	41	41143	60	51323	51	64808	74	81547	55	95305	27
20117	37	24103	37	30023	41	41150	60	52000	44	64809	74	81548	55	95320	27
20200	40	24105	37	30030	41	41151	60	52001	44	64810	74	81550	54	95321	27
20201	40	24107	37	30032	41	41152	60	52100	44	64811	74	81582	53	95322	27
20202	39	24110	37	30033	41	41153	60	52110	44	64812	74	81583	53	95323	27
20300	37	24112	37	30040	41	41483	61	52111	44	64813	74	81584	53	95330	27
20310	40	24113	37	30042	41	41484	61	52120	44	64814	74	81585	53	95331	27
20900	35	24114	37	30043	41	41496	61	52121	44	64815	74	81586	53	95332	27
20901	35	24117	37	30050	41	41497	61	52140	44	64816	74	81682	53	95333	27
20902	35	24200	40	30052	41	41517	61	52141	44	64901	74	81683	53	95400	27
20910	36	24201	40	30053	41	41518	61	52142	44	64902	74	81684	53	95401	27
21000	56	24202	39	30060	41	42102	66	52143	44	64903	74	81685	53	95402	27
21001	56	24300	37	30062	41	42200	66	52144	44	64904	74	81686	53	95403	27
21002	56	24310	40	30063	41	42201	66	52145	44	64906	74	82100	29	95404	27
21011	56	24900	35	30100	41	42300	67	60001	45	64907	74	82200	29	95405	27
21022	56	24901	35	30101	37	42334	72	60119	74	64908	74	82300	29	95420	27
21033	56	24902	35	30103	37	42335	72	60120	74	64909	74	82995	29	95421	27
21034	56	24910	36	30105	37	42336	72	60121	74	64910	74	82996	29	95422	27
21050	56	25000	48	30107	37	42356	66	60122	74	64912	74	82997	29	95423	27
21053	56	25010	48	30110	37	42357	66	60123	74	64913	74	82998	29	95430	27
21101	57	25020	48	30112	37	42358	66	60142	61	64914	74	82999	29	95437	27
21200	57	25030	48	30113	37	42359	66	60190	74	64915	74	90100	26	95438	27
21201	57	25040	48	30114	37	42400	50	60191	74	64916	74	90101	26	95439	27
21202	57	25050	48	30117	37	42419	66	60203	74	67100	59	90200	26	95500	27
21210	57	25060	48	30200	40	42422	66	60204	74	67101	59	90201	26	95501	27
21211	57	25100	48	30201	40	42435	66	60207	74	67102	59	90300	26	95502	27
21212	57	25200	48	30202	39	42450	66	60208	74	67150	59	90301	26	95503	27
21323	56	25210	48	30300	37	42500	66	60209	74	67151	59	90400	26	95504	27
21641	58	25220	48	30310	40	42519	66	60210	74	67160	59	90401	26	95505	27
21642	58	25221	48	32000	50	42522	66	60212	74	67161	59	90402	26	95520	27
21643	58	25300	48	32010	50	42535	66	60304	73	67170	59	91020	28	95521	27
21644	58	25301	48	32020	50	42550	66	60305	73	67171	59	91040	28	95522	27
22000	47	25302	49	32030	50	42601	53	60306	73	70100	68	91200	28	95523	27
22010	47	25303	48	32040	50	42700	66	60307	73	70101	68	91300	28	95530	27
22020	47	25304	49	32050	50	43101	64	60308	73	70104	68	91301	28	95531	27
22030	47	25310	48	32060	50	43102	64	60309	73	70105	68	91302	28	95532	27
22040	47	25311	48	32100	50	43103	64	60310	75	70106	69	91400	28	95533	27
22050	47	25900	48	32101	50	43104	49	60311	75	70116	69	91500	28	95600	27
22060	47	25901	48	32200	50	43105	64	60312	75	70126	69	91600	28	95601	27
22100	46	26000	42	32201	50	43106	64	60320	75	70136	69	91650	28	95602	27
22200	46	26010	42	32210	50	43201	64	60321	75	70140	68	91700	28	95603	27
22210	46	26020	42	32211	50	43202	64	60322	75	70141	69	91750	28	95604	27
22220	46	26030	42	32220	50	43203	64	60323	75	70200	68	95100	27	95605	27
22221	46	26040	42	32221	50	43204	64	60343	75	70201	68	95101	27	95620	27
22300	46	26050	42	32300	50	43205	64	60344	75	70204	68	95102	27	95621	27
22301	46	26060	42	32301	51	43206	64	60350	75	70205	68	95103	27	95622	27
22310	46	26101	42	32302	51	43500	65	60410	73	70206	69	95104	27	95623	27
22311	47	26102	42	32304	51	43501	65	60411	73	70216	69	95105	27	95630	27
22312	47	26110	42	32310	51	43502	65	60420	73	70226	69	95120	27	95631	27
22900	47	26111	42	32311	50	43503	65	60421	73	70236	69	95121	27	95632	27
22901	47	26900	42	32312	50	43504	65	60422	73	70240	68	95122	27	95633	27
24000	41	26901	42	32900	50	43506	65	60423	54	70241	69	95123	27	98075	76
24001	41	26902	42	32901	50	43509	65	60449	30	70300	68	95130	27	98076	76
24002	41	28000	42	40040	70	43514	65	60450	30	70301	68	95137	27	98077	76
24003	41	28010	42	40041	70	43515	65	60451	30	70304	68	95138	27	98078	76
24010	41	28020	42	40042	70	43600	64	60452	30	70305	68	95139	27	98079	76
24012	41	28030	42	40050	70	43601	64	60453	30	70306	69	95200	27		
24013	41	28040	42	40051	70	43605	64	60454	30	70316	69	95201	27		
24020	41	28050	42	40052	70	44001	63	60460	30	70326	69	95202	27		
24022	41	28060	42	40060	70	44010	63	60461	30	70336	69	95203	27		

Control the power

Barton  **n**