

MARINE
EQUIPMENT
GUIDE | 08
09



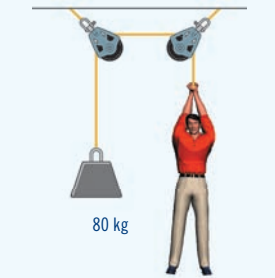
Lewmar Hardware – Power, ease and control all in one.

By using the latest materials and design technology developed in the racing arena, Lewmar has completely transformed the sailing experience. Each hardware component is designed to work in perfect harmony with rope action, placing sail control squarely in your fingertips. The result? Smooth yet powerful deck-to-sail movement that you can feel confident about.



Technical Reference

Blocks and purchases: choosing the right system.

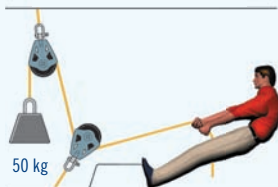


How hard can you pull?

As a guide, the average person can:

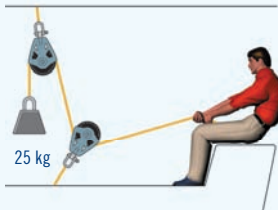
Pull vertically down a force equivalent to his body weight (for a short period!).

When fully braced, pull intermittently sideways with one hand 25 kg, and with two hands, 50kg.



In a normal sailing environment, adjust control lines frequently loaded to 25 kg.

Or exert 15kg single-handed, or 25 kg double handed, on the handle of a winch.



To enable safe and accurate trimming of sails, this human force can be multiplied through a purchase, made up of block systems and/or winches. The purchase means that human power can comfortably achieve the higher forces required for most sailboat controls. As

an example, a 4:1 purchase requires 4 times as much rope to be pulled, but achieves 4 times as much force.

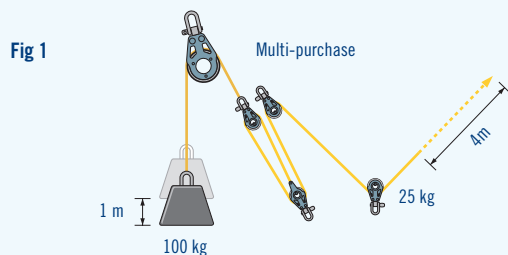


Fig 1

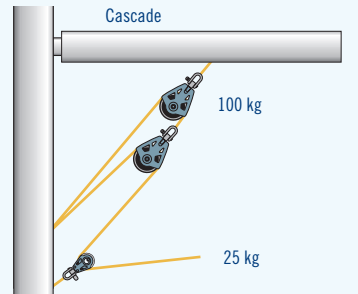
Lewmar manufactures a diverse range of blocks to suit all marine applications. This guide aims to help you to choose the best purchase system, and the appropriate Lewmar products, to suit your application.

Which purchase system?

Figs 1 and 2 show two different configurations for a 4:1 purchase system. The multi-purchase system is used where the full range of adjustment is required, for example a mainsheet traveller system.

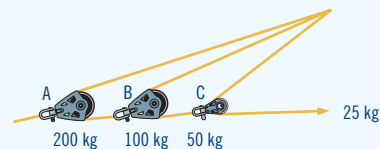
The cascade system can achieve a high purchase with fewer blocks, and diameter and type of line can be specified in line with the load on each part of the system, but it achieves a much smaller range of adjustment. A typical application is a vang system. Cascade systems also enable controls to be led conveniently to either side of the boat, for example with a backstay adjuster.

Fig 2



When specifying a cascade, it's important to ensure that each block in the system has sufficient travel to give the range required. Block B travels twice as far, and block C four times as far, as block A (fig 3). All blocks must be free to travel their full working length without danger of hooking or catching.

Fig 3



Frequently, a combination of cascade and multi-purchase achieves the best compromise between power and range. Fig 4 shows a variety of examples of combination systems with typical applications, the genoa system showing a satellite purchase remote from the car.

Fig 4.1

48:1 cascade
on Backstay

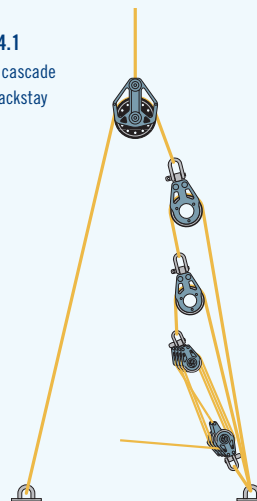


Fig 4.2

8:1 combi
on Jib system

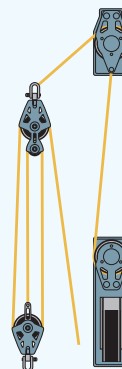
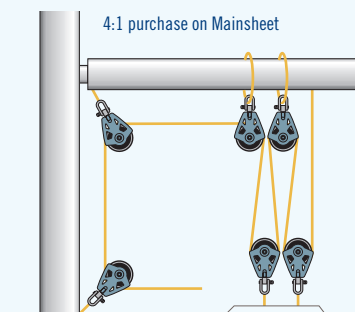


Fig 4.3



Coarse/fine tune. Racing mainsheet systems often comprise a coarse system, used for moving large amounts of unloaded mainsheet (for example at the windward or leeward mark), combined with a fine tune system, which is led to each side of the boat and used for playing the mainsail while beating. Fig 5 shows a typical configuration.

Reverse purchase. Occasionally, on a lightly loaded system, a reverse purchase system can achieve greater range or faster movement than the human input. Fig 6 shows an example of a 1:2 asymmetric pole launch system.

Pulling one meter on the control moves the pole out two meters. Note that the load on the control line is now twice that on the pole launch rope. For this reason, in this system the cleat is located on the launch rope, not the control line.

Fig 6



How much purchase power?

If we know the approximate sailing (output) force required we can calculate the purchase required by dividing the output force by the input from control line or winch. To achieve 200kg tension on a system, for example, would require $200\text{kg}/25\text{kg} = 8:1$ purchase.

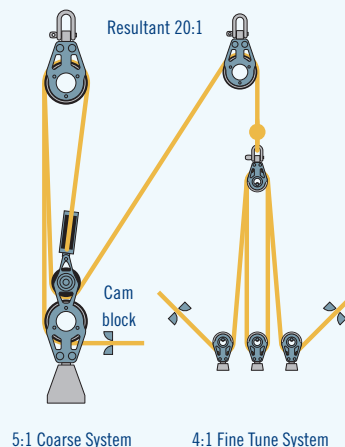
The table (Fig 7) gives some typical examples of purchases used by Lewmar customers.

Fig 7

Typical purchase systems

	Boat size						
	4m/ 13ft	6m/ 20ft	8m/ 26ft	10m/ 33ft	12m/ 39ft	14m/ 45ft	16m/ 53ft
Mainsheet - Hand	3:1	4:1	4:1	5:1– 10:1	8:1– 24:1	-	-
Mainsheet - Winched	-	-	-	3:1	4:1	4:1	4:1
Vang - Cruising	4:1	4:1	4:1	6:1	8:1	10:1	10:1
Vang Racing	5:1	6:1	8:1	12:1	24:1	36:1	48:1
Car tow - Cruising	-	-	2:1	2:1	2:1	3:1	3:1
Car tow - Racing	-	2:1	3:1	6:1	10:1	2:1 (winch)	2:1 (winch)

Fig 5



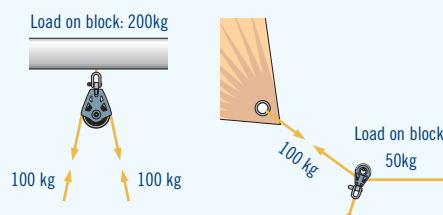
Winched purchases.

To decide the purchase required in a system controlled by a winch, calculate the winch output by multiplying 15kg for a single handed, or 25kg for a double handed winch, by the winch model no. (44, 48, etc.) On Lewmar and most other brands, the winch number is also the highest power ratio the winch can provide when using a 250mm/10" winch handle. The following table suggests the pulling power that can be generated.

Typical winch output loads

	Winch size						
	30	40	44	48	50	54	58
One handed input - 15 kg on handle = Winch output load	450kg	600kg	660kg	720kg	750kg	-	-
Two handed input - 25 kg on handle = Winch output load	-	-	1100kg	1200kg	1250kg	1350kg	1450kg

Fig 8



Some typical systems in use on current boats.

	Backstay	Mainsheet	Mainsheet Traveller	Extra purchase coarse tune fine tune	Jib Traveller for Mainsheet	Vang	Cunningham
Racing dayboat (e.g. Etchells 22)	16:1 Cascade	2:1	2:1	4:1 Multi-purchase	Plunger	8:1 Combination	4:1 Cascade
Small cruiser (e.g. Hunter 32)	Fixed	2:1	4:1 Multi-purchase	-	Plunger	4:1 Multi-purchase	N/A
Small racing yacht (e.g. Mumm 30)	16:1 Combination	8:1 Multi-purchase	6:1 Multi-purchase	4:1 Multi-purchase	8:1 Combination	20:1 Combination	4:1 Cascade
Medium cruiser (e.g. Oceanis 393)	Fixed	4:1	4:1	N/A	2:1 with	5:1	N/A
Medium racing yacht (e.g. Farr 40)	Hydraulic	12:1 Combination	2:1 Winched	N/A	12:1 Combination	36:1 Combination	6:1 Combination
Large cruiser (e.g. HR 53)	Hydraulic	6:1	4:1 Winched	N/A	2:1 with Plungers	8:1	4:1
Large racing yacht (e.g. IP 52)	Hydraulic	2:1 Winched	2:1 Winched	N/A	2:1 Winched	Hydraulic	6:1 Combination



Technical Reference

Which bearing?

Lewmar's Control Blocks fitted with ball bearing sheaves are designed for frequently adjusted applications that need free, fast running systems, such as sheets, or control lines—which are controlled by hand and parked in cleats.

The Synchro Blocks use free spin bearings and are designed for applications that have high static loadings, but are adjusted less frequently, tending to be cleated for periods of time in the same position. Examples are mainsail halyard or runners controls.

Racing Blocks are fitted with Torlon roller bearing sheaves to combine the qualities of both the Synchro Blocks and Control Blocks, and are the ultimate choice for any performance system.

Which size/load block?

Every Lewmar block has a specified Safe Working Load, seen in the specification tables on the relevant page. From the force exerted by human or winch power, it is possible to calculate approximate load requirements of each block within a system (see “How hard can you pull?”), and match the forces and the products’ Safe Working Load.

Deflection loads. The actual load exerted on a block also depends on the line's angle of deflection around the sheave. A small deflection results in a lower load; maximum deflection (180°) gives maximum load. (Fig 8)

The table (Fig 9) enables a quick check of the block load as a percentage of the line load for the range of deflection angles.

Genoa cars. This principle has some interesting effects on genoa cars and genoa car tow loadings.

The sheet car on a high-clewed no.3 jib deflects the sheet far more than that on a large overlapping genoa. The no.1 genoa may therefore create less load on the car than the no.3, which has a larger deflection angle.

Similarly, the force required to move the car forward is much higher when there is a large deflection than when there is a small one. (Fig 10)

Efficiency. Always choose a sheave diameter at least 7x the line diameter. With smaller sheaves, energy is wasted in forcing the line to bend around the sheave, with a resulting loss in efficiency.

Ensure that blocks are fitted so they always align with the lines passing through them. Pay particular attention to multiple blocks and the leading lines that periodically go slack.

All Lewmar products have been designed, tested and developed to achieve best possible efficiency; however, no purchase system is 100% efficient. Therefore the force achieved at the working end of the purchase will be slightly less than the human load multiplied by the purchase. When calculating the purchase required to achieve a known load, we'd therefore recommend allowing a factor of 1.05 per block multiplied by the number of 180° turns in the rope required to be certain of “fingertip control.”

Fig 9

Change of Angle	Block Load as % of line load	Change of Angle	Block Load as % of line load
180°	200%	90°	141%
170°	199%	80°	129%
160°	197%	70°	115%
150°	193%	60°	100%
140°	187%	50°	84%
135°	184%	45°	76%
130°	181%	40°	68%
120°	173%	30°	52%
110°	164%	20°	35%
100°	153%	10°	17%
		0°	0%

Fig 9

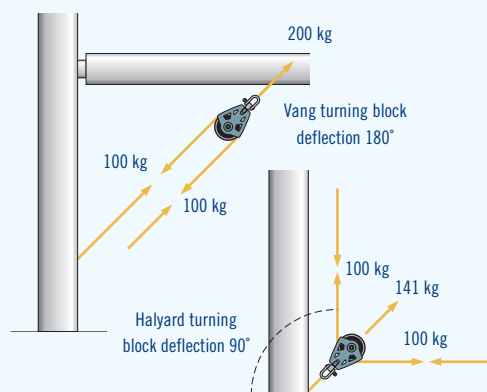


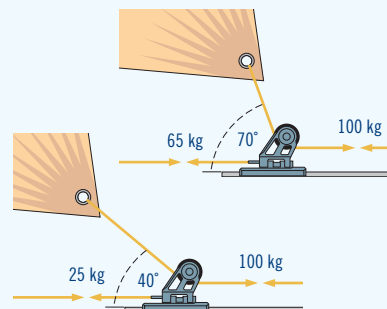
Fig 10

Vertical genoa sheet angle	Tow load as % of sheet load
70°	65%
60°	50%
50°	35%
40°	25%

Mainsheet traveller towing load

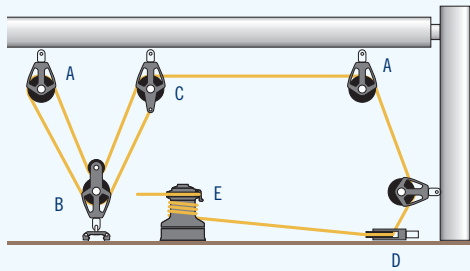
Guide % of mainsheet load	25%
---------------------------	-----

Fig 10

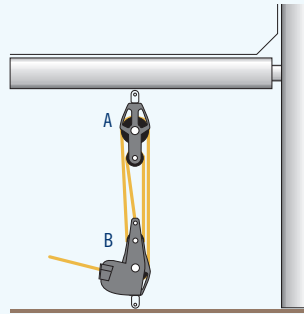


Mainsheet Systems

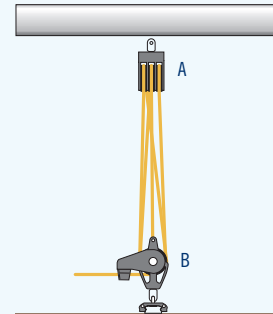
4:1 Dedicated Winch



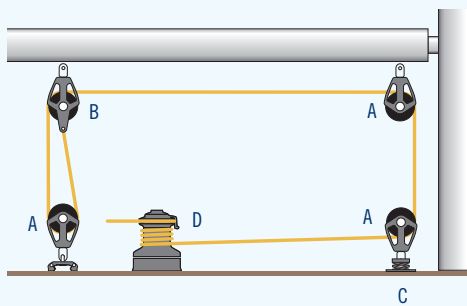
4:1 Fiddle



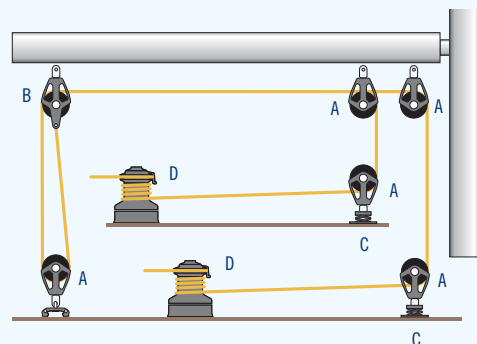
6:1 Triple



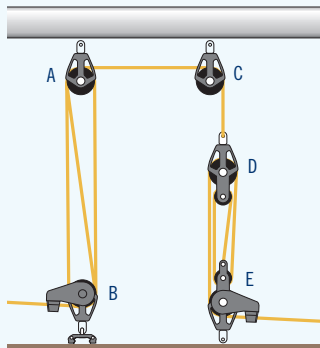
Half German



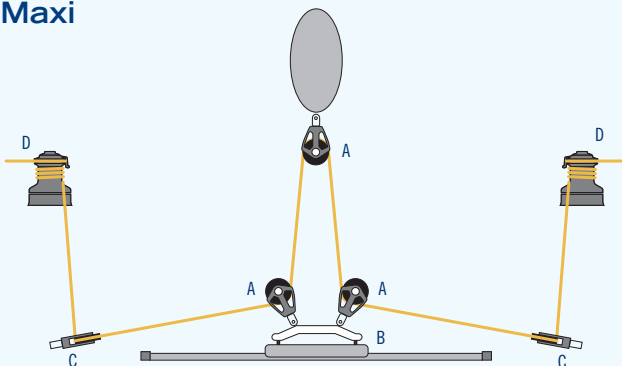
Double German



6:1 / 24:1



Maxi



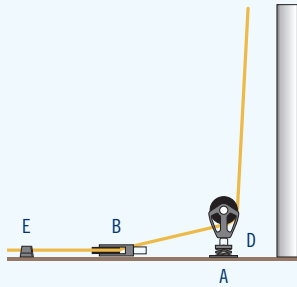
Title	Ref	Desc.	Size 0	Size 1	Size 2	Size 3
4:1 with dedicated winch	A	single			29927201	29929001
	B	fiddle			29927231	29929031
	C	single w becket			29927204	29929004
	D	footblock			29927261	29929061
	E	winch			490440**	490048**
4:1 Fiddle	A	fiddle	29905031	29926031	29927231	29929031
	B	fiddle	29925037	29926037	29927237	29929039
6:1 Triple	A	triple		29906003	29907203	
	B	triple		29926010	29927210	
Half German	A	single				29929001
	B	single becket				29909004
	C	upstand				19831000
	D	winch				490480**
Double German	A	single				29929001
	B	double				29929002
	C	upstand				29393000
	D	winch				490480**
6:1/24:1	A	double		29926002	29927202	
	B	triple		29926010	29927210	
	C	single		29925001	29926001	
	D	fiddle		29925031	29926031	
	E	fiddle		29925039	29926039	
Maxi	A	single				29929001
	B	car				29433682
	C	footblock				29929061
	D	winch				490480**

** Last 2 digits determine the finish of the winch



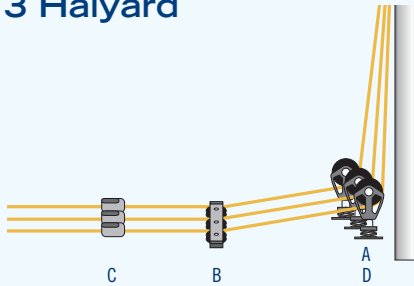
Halyards

Single Halyard



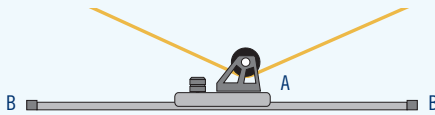
Title	Ref	Desc.	Size 0	Size 1	Size 2	Size 3
Single Halyard	A	mastbase block	29925021			
	B	footblock	29901460			
	D	cam	29104100			
3 Halyard	A	mastbase block		29906021	29927221	
	B	organizer		29916060	29916060	
	C	clutch		29101410	29101412	
	D	upstand		19811000	19821000	

3 Halyard



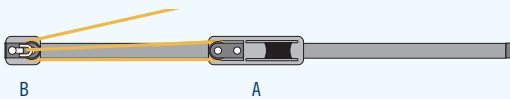
Genoa System

Plunger Car

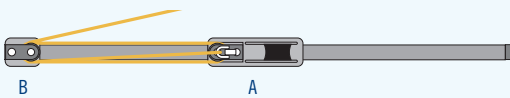


Title	Ref	Desc.	Size 0	Size 1	Size 2	Size 3
Plunger Car	A	car	29040600	29441700	29442412	29443700
	B	endstop	29170040	29171040	29172040	39443040
2:1	A	car	29040100	29441311		29443311
	B	endstop	29170030	29471035		29473135
3:1	A	car		29441345	29442345	
	B	endstop		29471032	29472035	
8:1 sat.	A	car			29442321	29443311
	B	endstop			29472035	29473035
	C	pad eye			29904040	29904040
	D	cleat			29104110	29104110
	E	fairlead			29104114	29104114
	F	single becket			29925004	29926004
	G	single fiddle			29925031	29926031

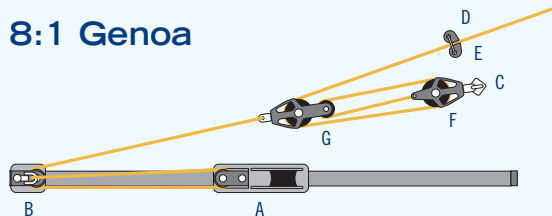
2:1 Genoa



3:1 Genoa

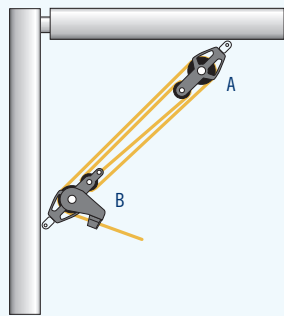


8:1 Genoa

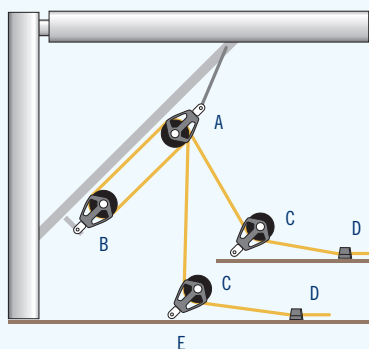


Boom Vang

4:1 Fiddle



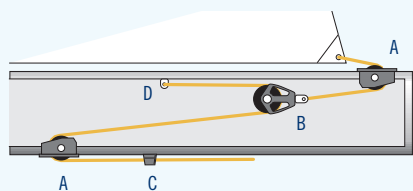
6:1 Double Ended



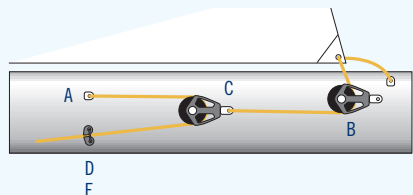
Title	Ref	Desc.	Size 0	Size 1	Size 2	Size 3
4:1 fiddle	A	fiddle		29906031		
	B	fiddle and cam		29906039		
6:1 double ended cascade	A	triple				29909003
	B	double				29929002
	C	single				29909001
	D	cam cleat				29104110
	E	eye strap				29104113

Outhaul

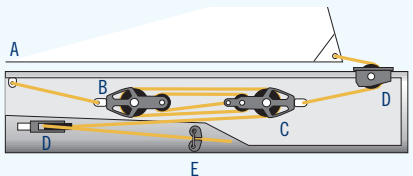
2:1 Internal



4:1 Cascaded



4:1 Cascaded

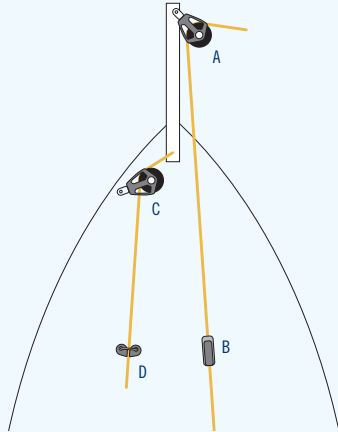


Title	Ref	Desc.	Size 0	Size 1	Size 2	Size 3
2:1 Internal	A	through deck	29901361			
	B	single	29901421			
	C	cam cleat	29104100			
	D	eye strap	29104103			
4:1 External Cascade	A	eye strap		29104113		
	B	footblock		29901460		
	C	single		29905001		
	D	cam cleat		29104110		
	E	feeder loop		29104116		
4:1 Internal	A	eye strap			29104113	
	B	fiddle		29927231		
	C	fiddle with becket		29927234		
	D	through deck		29901361		
	E	cam cleat			29104110	



Asymmetric Spinnaker

Asymmetric Spinnaker

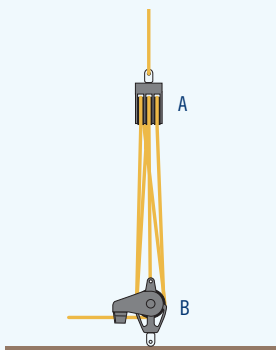


Title	Ref	Desc.	Size 0	Size 1	Size 2	Size 3
Asymmetric Spinnaker	A	single			29927201	
	B	jammer			29101112	
	C	footblock			29927264	
	D	cam			29104110	



Various

6:1 Right Angle Backstay



Title	Ref	Desc.	Size 0	Size 1	Size 2	Size 3
6:1 right angle	A	Triple		29926003		
	B	triple cam becket		29906010		

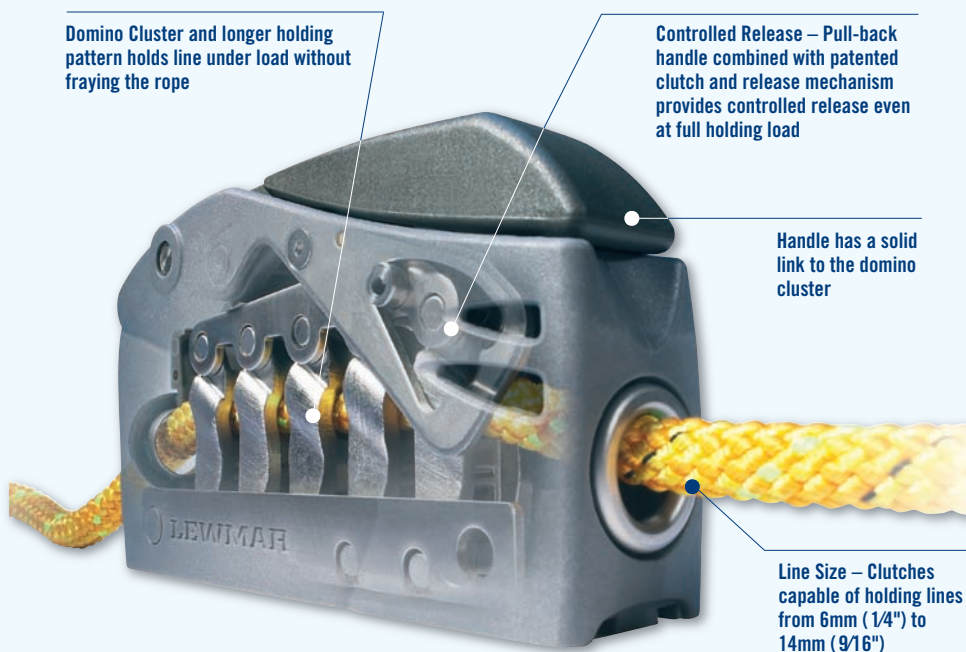


Don't get caught in the fray – get a new Rope Clutch.

Lewmar has redefined rope clutch technology with a variable geometry handle and unique grip pattern of dominos that prevents rope fray. This revolutionary new system has been independently tested time and again and has won awards for its innovative framework.

Features

- Full range
- Easy installation
- High holding power
- Supplied with decals
- Domino mechanism



X Instead of just jamming the rope...



✓ ... Lewmar's Domino mechanism flexes it for better grip and less rope wear. Dominos also allow for multiple holding points.



Lewmar's award-winning Rope Clutch can now be clearly marked and identified with our range of info-graphics specially designed to suit all sailing applications.



Choose the right Rope Clutch.

Selection Guide

Application	m ft	Boat Length Overall											
		7.6 25	8.8 29	10.1 33	10.7 35	11.3 37	11.9 39	12.5 41	14.6 48	16.8 55	18.9 62	21.6 70	
Halyards	Main												
	Genoa												
	Spinnaker												
Gooseneck	Reef Lines												
	Outhaul												
	Flattener												
Pole/Boom Lift	Spin Pole Uphaul												
	Spin Pole Down Haul												
	Heel Lift												
	Main Boom Topping Lift												
Furling Lines	Genoa												
	Main												
Sheets	Mainsheet 4:1 Purchase												
	Mainsheet Car (2:1 Purchase)												
Control Lines	Genoa Car (2:1 Purchase)												
	Pole Outhaul												
	Kicking Strap/Vang												



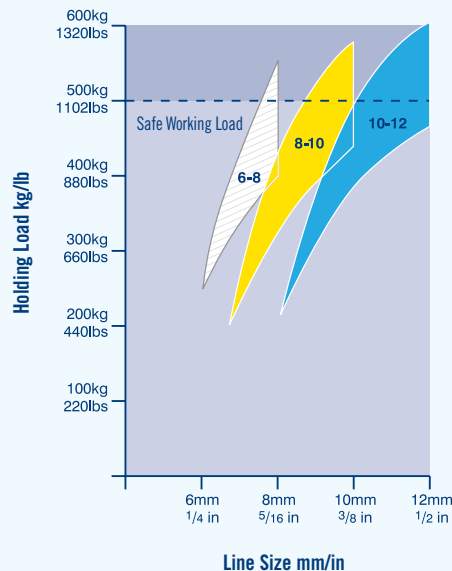
Holding Loads

The holding load of each clutch is listed for the two main line sizes the clutch was designed to hold; the maximum and minimum listed are dependent on the line type used.

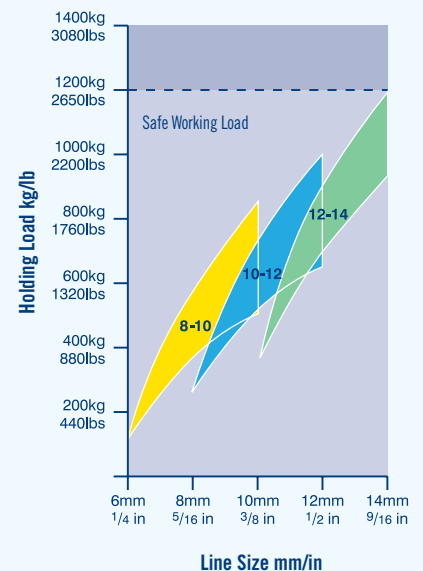
Rope clutches can handle one line size below the nominal range but at a reduced holding load. This can be useful for more lightly loaded applications such as control lines and down hauls. In virtually all cases the larger the line, the better the holding capacity, so where the ultimate load is required the larger of the designated line should be used.

This graph shows the range of holding loads that can be achieved; a good quality hard-cored line will hold better than a softer line. In some cases this may be higher than the rated Safe Working Load of the clutch, but in all cases the line will slip before the Breaking Load is reached.

D1 Rope Clutch



D2 Rope Clutch



D1 Rope Clutch

- High load applications on boats up to 9.7m (32ft), low load and control line applications on larger boats.
- Line sizes from 6mm (1/4") to 12mm (1/2"). (Safe working load 500kg/1100lb.)
- Minimum Holding loads shown in table, for maximum loads see page 123.
- Fixings and position as industry standard.



D1 Single

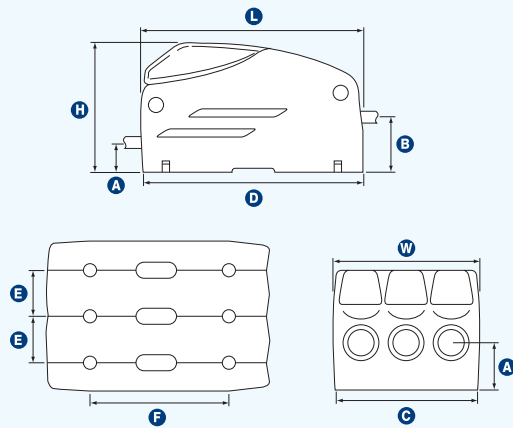


D1 Double



D1 Triple

Dimensions



Use Pan head M6 - 1/4" fixings - do not tighten beyond 10N.m Torque

Specifications

Part Number	Size	Description	Line Size		Minimum Holding Load	
			mm	in	kg	lb
29101108	D1	Single	6 - 8	1/4 - 5/16	300	661
29101110	D1	Single	8 - 10	5/16 - 3/8	400	880
29101112	D1	Single	10 - 12	3/8 - 7/16	500	1100
29101208	D1	Double	6 - 8	1/4 - 5/16	300	661
29101210	D1	Double	8 - 10	5/16 - 3/8	400	880
29101212	D1	Double	10 - 12	3/8 - 7/16	500	1100
29101308	D1	Triple	6 - 8	1/4 - 5/16	300	661
29101310	D1	Triple	8 - 10	5/16 - 3/8	400	880
29101312	D1	Triple	10 - 12	3/8 - 7/16	500	1100
29100010	D1	Handle Kit	N/A		N/A	

Dimensions

	L Length		W Width		H Height		A Line Entry		B Line Exit		C		D		E		F	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
Single	126	5	32.0	1 5/16	72	2 13/16	27	1 1/8	29	1 3/16	29	1 3/16	125	4 7/8	-	-	79	1 1/8
Double	126	5	57.85	2 5/16	72	2 13/16	27	1 1/8	29	1 3/16	54.85	2 3/16	125	4 7/8	26	1	79	1 1/8
Triple	126	5	83.7	3 5/16	72	2 13/16	27	1 1/8	29	1 3/16	80.7	3 3/16	125	4 7/8	26	1	79	1 1/8

D2 Rope Clutch

- High load applications on boats up to 16.8m (55ft), low load and control line applications on larger boats.
- Line sizes from 8mm (5/16") to 14mm (9/16"). (Safe working load 1200kg/2650lb.)
- Minimum Holding loads shown in table, for maximum loads see page 123. Safe working load 1200kg/2650lb.
- Fixings and position as industry standard



D2 Single



D2 Double

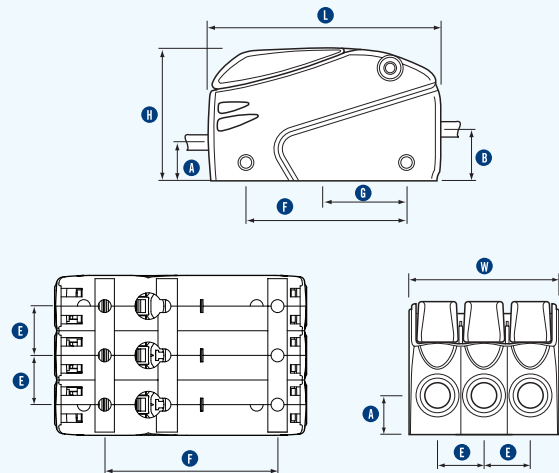


D2 Triple

Specifications

Part Number	Size	Description	Line Size		Minimum Holding Load	
			mm	in	kg	lb
29101410	D2	Single	8 - 10	5/16 - 3/8	500	1102
29101412	D2	Single	10 - 12	3/8 - 7/16	700	1550
29101414	D2	Single	12 - 14	1/2 - 9/16	1000	2204
29102410	D2	Double	8 - 10	5/16 - 3/8	500	1102
29102412	D2	Double	10 - 12	3/8 - 7/16	700	1550
29102414	D2	Double	12 - 14	1/2 - 9/16	1000	2204
29103410	D2	Triple	8 - 10	5/16 - 3/8	500	1102
29103412	D2	Triple	10 - 12	3/8 - 7/16	700	1550
29103414	D2	Triple	12 - 14	1/2 - 9/16	1000	2204
29101501	D2	Handle Kit	N/A		N/A	

Dimensions



Use Pan head M8 - 5/16" fixings - do not tighten beyond 22 N.m Torque

Dimensions

	L Length		W Width		H Height		A Line Entry		B Line Exit		E Fixing Points		F Fixing Points		G Fixing Points	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
Single	156	6 1/8	38	1 1/2	88	3 3/8	26	1	32	1 5/16	-	-	107	4 1/4	70	2 11/16
Double	156	6 1/8	68.5	2 11/16	88	3 3/8	26	1	32	1 5/16	30.5	1 3/16	107	4 1/4	70	2 11/16
Triple	156	6 1/8	99	3 7/8	88	3 3/8	26	1	32	1 5/16	30.5	1 3/16	107	4 1/4	70	2 11/16



Organizers

All organizers have space to pass two lines between each sheave.

Synchro Organizers

Features

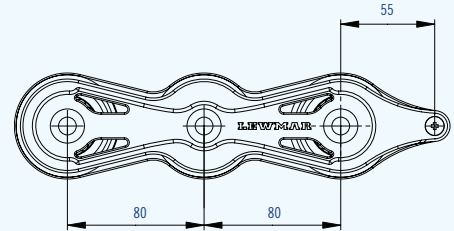
- Flush fixings
- Bushed sheaves with side thrust ball bearing
- Wide rope entry



29916060
Synchro Three-Sheave
Single



29916042
Synchro Six-Sheave
Double Stacked



Specifications

Part Number	Sheave Dia.		No. of Sheaves	Safe Working Load		Max Working Load of Sheave		Breaking Load		Max Breaking Load of Sheave		Max Line Size		Length		Weight		Fixings (Not included)	
	mm	in		kg	lb	kg	lb	kg	lb	kg	lb	mm	in	mm	in	g	oz	mm	in
29916042	60	2 3/8	3	3700	8156	1100	2424	7400	16312	2200	4849	12	1/2	256	10 1/16	602	21.2	M10	3/8
29916060	60	2 3/8	6	2550	5500	1100	2420	5000	11000	1100	2424	12	1/2	256	10 1/16	329	12.9	M10	3/8

Ocean Organizers

Features

- Bushed sheaves
- Tough interchangeable acetal or alloy sheaves (40mm only)
- Stackable



29139103
Ocean 40mm Three-Sheave



29139114
Ocean 60mm Four-Sheave

Specifications

Part Number	Sheave Dia.		No. of Sheaves	Safe Working Load		Max Working Load of Sheave		Breaking Load		Max Breaking Load of Sheave		Max Line Size		Length		Weight		Fixings (Not included)		Sheave Centers	
	mm	in		kg	lb	kg	lb	kg	lb	kg	lb	mm	in	mm	in	g	oz	mm	in	mm	in
29139102	40	1 5/8	2	1005	2215	610	1345	2010	4431	1220	2689	16	5/8	123	4 7/8	183	6.45	M8	5/16	47	1 7/8
29139103	40	1 5/8	3	1507	3322	610	1345	3015	6646	1220	2689	16	5/8	170	6 3/4	256	9.03	M8	5/16	47	1 7/8
29139104	40	1 5/8	4	2010	4431	610	1345	4020	8861	1220	2689	16	5/8	217	8 1/2	325	11.4	M8	5/16	47	1 7/8
29139105	40	1 5/8	5	2512	5537	610	1345	5025	11076	1220	2689	16	5/8	264	10 3/8	402	14.18	M8	5/16	47	1 7/8
29139106	40	1 5/8	6	3015	6646	610	1345	6030	13292	1220	2689	16	5/8	311	12 1/4	475	16.75	M8	5/16	47	1 7/8
29139112	60	2 3/8	2	2400	5290	1200	2645	4800	10580	2400	5290	14	9/16	231	9 1/8	325	11.46	M10	3/8	72	2 7/32
29139113	60	2 3/8	3	3000	6613	1200	2645	6000	13226	2400	5290	14	9/16	303	12	435	15.34	M10	3/8	72	2 7/32
29139114	60	2 3/8	4	3600	7935	1200	2645	7200	15871	2400	5290	14	9/16	375	14 3/4	551	19.43	M10	3/8	72	2 7/32
29139115	60	2 3/8	5	4200	9258	1200	2645	8400	18516	2400	5290	14	9/16	447	17 5/8	637	22.46	M10	3/8	72	2 7/32
29139116	60	2 3/8	6	4800	10580	1200	2645	9600	21161	2400	5290	14	9/16	519	20 1/2	775	27.33	M10	3/8	72	2 7/32

40mm organizers are available with alloy sheaves. To order, use same part number as acetal sheave but change 6th digit to 2 ie. 29139206.

Racing Organizers

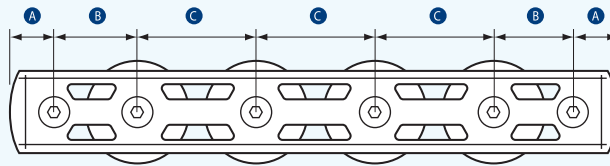
Racing Organizers run on impregnated composite bearings and dual delrin ball side thrust races.



Fixing Details

Features

- 40mm sheaves run on Synchro free-spin bearings
- Alloy 60mm sheaves with side thrust ball bearing
- Fixings included



Sheave Size	A		B		C		Max Deck Thickness	
	mm	in	mm	in	mm	in	mm	in
40	15.30	19/32	35.70	1 13/32	52	2 1/32	44	2 23/32
60	25.7	1	52	2 1/32	72	2 7/32	38	1 1/2

Specifications

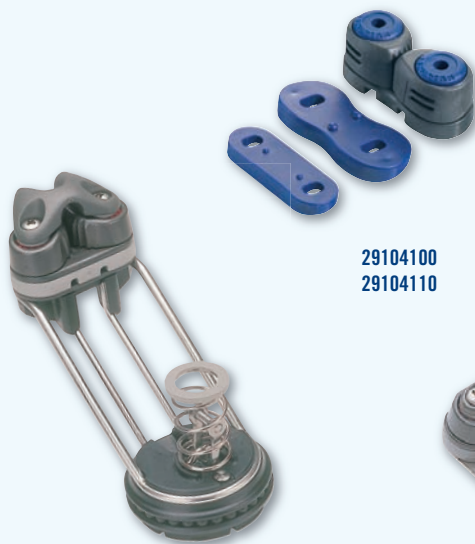
Part Number	Sheave Dia.		No. of Sheaves	Safe Working Load		Max Working Load of Sheave		Breaking Load		Max Breaking Load of Sheave		Max Line Size		Length		Weight		Fixings (Included)
	mm	in		kg	lb	kg	lb	kg	lb	kg	lb	mm	in	mm	in	g	oz	
29906452	40	1 5/8	2	500	1102	350	771	1000	2205	700	1543	10	5/16	154	6 1/8	127	4.5	M5
29906453	40	1 5/8	3	625	1378	350	771	1250	2756	700	1543	10	5/16	206	8 1/8	161	5.7	M5
29906454	40	1 5/8	4	750	1653	350	771	1500	3307	700	1543	10	5/16	258	10 1/8	199	7	M5
29906455	40	1 5/8	5	875	1929	350	771	1750	3858	700	1543	10	5/16	310	12 1/8	233	8.2	M5
29906456	40	1 5/8	6	1000	2204	350	771	2000	4409	700	1543	10	5/16	362	14 1/4	269	9.5	M5
29906457	40	1 5/8	2 double	500	1102	350	771	1000	2205	700	1543	10	5/16	154	6 1/8	207	7.3	M5
29906458	40	1 5/8	3 double	625	1378	350	771	1250	2756	700	1543	10	5/16	206	8 1/8	264	9.3	M5
29906652	60	2 3/8	2	2400	5290	1200	2645	4800	10580	2400	5290	14	9/16	231	9 1/8	596	21	M10
29906653	60	2 3/8	3	3000	6613	1200	2645	6000	13228	2400	5290	14	9/16	303	11 7/8	788	27.8	M10
29906654	60	2 3/8	4	3600	7935	1200	2645	7200	15873	2400	5290	14	9/16	357	14 1/8	987	34.8	M10
29906655	60	2 3/8	5	4200	9258	1200	2645	8400	18519	2400	5290	14	9/16	447	17 5/8	1185	41.8	M10
29906656	60	2 3/8	6	4800	10580	1200	2645	9600	21164	2400	5290	14	9/16	519	18 3/8	1383	48.8	M10

Note: Maximum deck thickness for supplied fastenings for size 40 is 45mm and size 60 is 35mm



Cleats

Made from state-of-the-art materials developed by the automotive industry and refined for the marine market, Lewmar cleats enhance performance in durability, strength and lubrication.



29904126



29104100
29104110



29104101
29904111



Angle wedges included in packaging of 29104100 29104110



29904105
29904115



29104104
29104114



29904104
29904114



29104115
29104116



29104103
29104113



29904117



29904118

Features

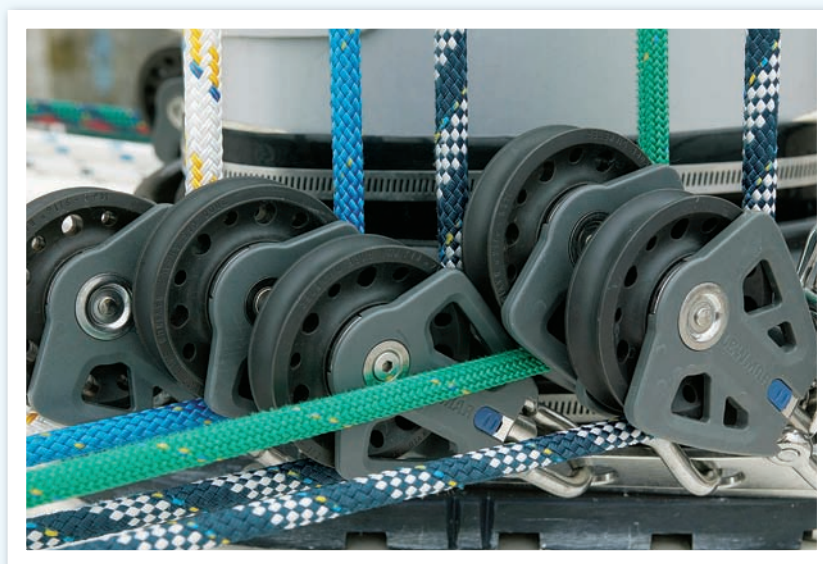
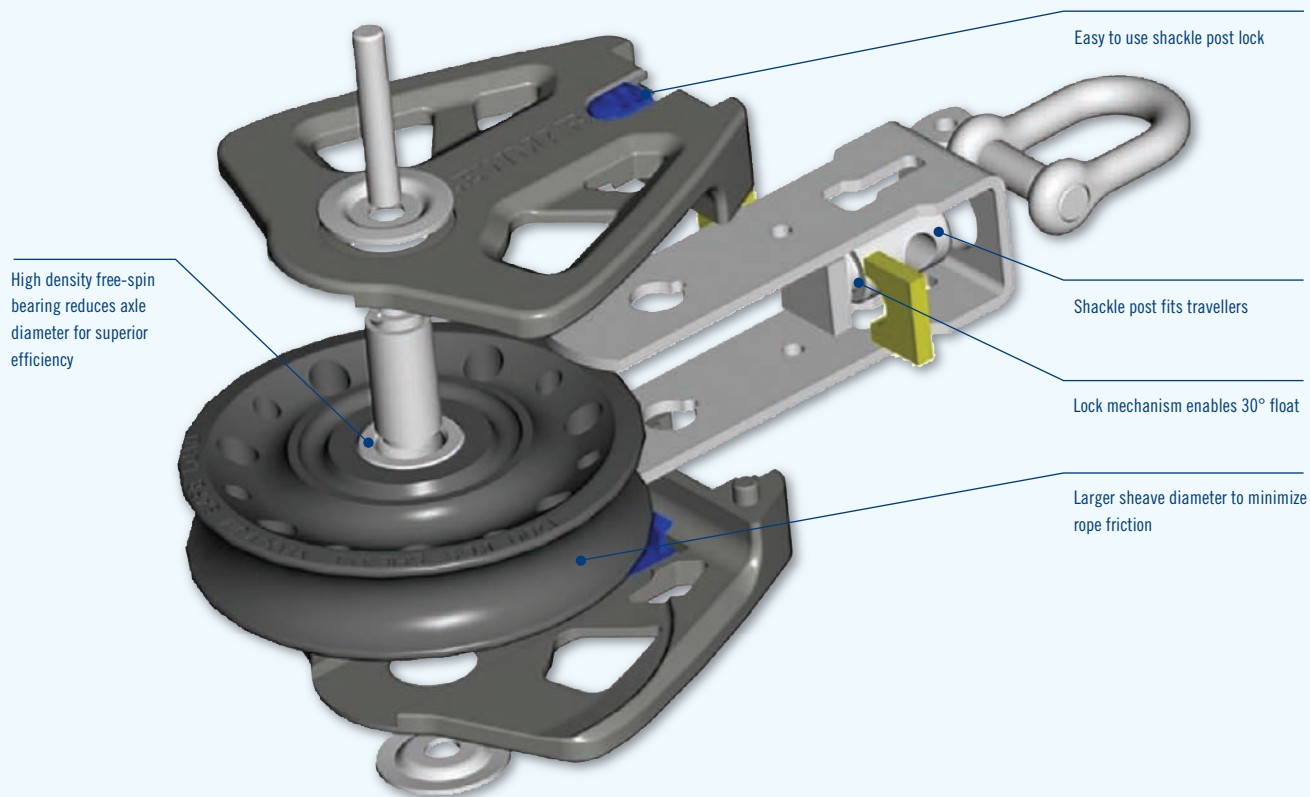
- Low line entry load
- High holding load
- Constant tension springs
- Wash-out bearing slots
- Split-base fairlead to facilitate continuous line installations

Specifications

Part No	Description	Safe working load		Line size		Fixing Pitch		Fixing size		Weight	
		Kg	lbs	mm	in	mm	in	mm	in	g	oz
29104100	Small Composite Cleat	120	264	2-8	5/64-5/16	27	1 1/16	M4	5/32	17.5	0.6
29904101	Small Alloy Cleat	140	309	2-6	3/32-1/4	28	1 7/64	M4	5/32	29	1.0
29104110	Medium Composite Cleat	180	396	4-12	5/32-1/2	38	1 1/2	M5	3/16	48.5	1.7
29904111	Medium Alloy Cleat	200	441	4-10	5/32-7/16	38	1 1/2	M5	3/16	63	2.2
29904105	Small Swivel Cam with Bull's Eye	140	309	2-6	3/32-1/4	3x27	3x1 1/16	M5	3/16	114	4.0
29904115	Medium Swivel Cam with Bull's Eye	200	441	4-10	5/32-7/16	3x27	3x1 1/16	M5	3/16	168	5.9
29904126	Swivel Cam Base for 60/80mm blocks	300	661	4-10	5/32-7/16	4x19	4x3/4	M5	3/16	302	10.7
29104104	Fairlead to fit 29104100			2-8	5/64-5/16					6	0.2
29104114	Fairlead to fit 29104110			4-12	5/32-1/2					14	0.5
29904104	Fairlead to fit 29904101			2-6	3/32-1/4					14	0.5
29904114	Fairlead to fit 29904111			4-10	5/32-7/16					28	1.0
29104115	Small Feeder Loop			2-8	5/64-5/16					6	0.2
29104116	Medium Feeder Loop			4-12	5/32-1/2					10	0.35
29104103	Small Eye Strap (Pair)			2-8	5/64-5/16	27	1 1/16	M4	5/32	6	0.2
29104113	Medium Eye Strap (Pair)			4-12	5/32-1/2	38	1 1/2	M5	3/16	18	0.6
29904117	Medium Bull's Eye (Pair)			12	1/2	25	1	M4	5/32	12	0.4
29904118	Large Bull's Eye			18	3/4	32	1 1/4	M5	3/16	32	1.1

Synchro Blocks – smooth deck-to-sail power.

A complete rethink of block design, Lewmar Synchro blocks are engineered for speed, efficiency and superior handling. We use a combination of scientifically optimized block geometry, a Free-Spin bearing and self-aligning head to reduce friction and increase efficiency by up to 40% over conventional mainsheet systems. Which means each component is perfectly synchronized with the movement of the rope, providing you with an easier, smoother transfer of power from deck to sail and less wear on your rope.



Features

- Wide range – available in single, double, triple, fiddle and snatch blocks
- Unique free-spin, self-lubricating bearing
- Optimized sheave-to-rope ratio
- Swivel lock self-aligning head
- Adjustable cams
- Compatible with Ocean Pad Eyes and upstands



Choose the right Synchro Block.

Selection Guide

Application	Synchro Size mm	Boat Length Overall						
		m ft	7.3 24	8.5 28	10.3 34	11.5 38	13.4 44	14.6 48
Mainsheet Blocks End Boom	50							
	60							
	72							
	90							
Mainsheet Blocks Mid Boom	50							
	60							
	72							
	90							
	105							
Main & Genoa Halyard Block & Padeye at Mast Base	60							
	72							
	90							
	105							
Spinnaker Mast Top Block	50							
	60							
	72							
	90							
	105							
Spinnaker Sheet Blocks	50							
	60							
	72							
	90							
Spinnaker Guy Blocks	50							
	60							
	72							
	90							
	105							
Spinnaker Downhaul	50							
	60							
	72							
	90							
Boom Vangs	50							
	60							
	72							
Backstay Tensioners	50							
	60							
	72							

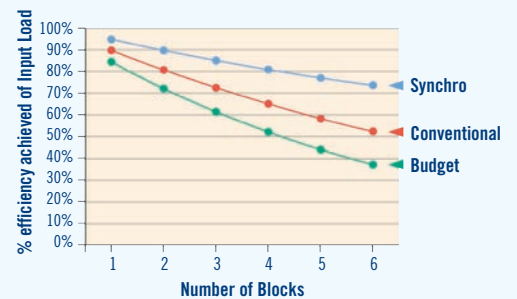
Head can be positioned for use in line or at 90 degrees – or left to rotate freely when in unlocked position. When locked allows for 30° “float” on shackle post to improve alignment of block.



Higher efficiency – less effort and better performance.

Independent tests show Synchro blocks offer increased efficiency over conventional designs. Calculation over a 6-block mainsheet system indicates Synchro blocks can deliver up to 40% greater efficiency than conventional products – resulting in better responsiveness and improved sailing performance.

Efficiency improvements in multi-block systems



Synchro Blocks 50 and 60mm

Specifications

Part Number	Size	Description	Safe Working Load		Optimum Line Size		Maximum Line Size		Weight	
			kg	lb	mm	in	mm	in	g	oz
29925001	50	Single	450	990	6	1/4	10	3/8	67	2.36
29925002	50	Double	450	990	6	1/4	10	3/8	142	5.01
29925003	50	Triple	450	990	6	1/4	10	3/8	226	7.96
29925004	50	Single Becket	450	990	6	1/4	10	3/8	81	2.85
29925005	50	Double Becket	450	990	6	1/4	10	3/8	164	5.77
29925009	50	Single & Becket & Cam	450	990	6	1/4	10	3/8	123	4.3
29925010	50	Triple Becket Cam	450	990	6	1/4	10	3/8	282	9.93
29925021	50	Toggle Head	See page 133							
29925031	50	Fiddle	450	990	6	1/4	10	3/8	94	3.31
29925034	50	Fiddle Becket	450	990	6	1/4	10	3/8	98	3.45
29925037	50	Fiddle Cam	450	990	6	1/4	10	3/8	139	4.89
29925039	50	Fiddle Becket Cam	450	990	6	1/4	10	3/8	145	5.1
29926001	60	Single	800	1760	8	5/16	10	3/8	115	4.06
29926002	60	Double	800	1760	8	5/16	10	3/8	251	8.84
29926003	60	Triple	800	1760	8	5/16	10	3/8	371	13.06
29926004	60	Single Becket	800	1760	8	5/16	10	3/8	127	4.48
29926005	60	Double Becket	800	1760	8	5/16	10	3/8	261	9.19
29926010	60	Triple Becket Cam	800	1760	8	5/16	10	3/8	447	15.73
29926021	60	Toggle head	See page 133							
29926029	60	Single Alloy Sheave	800	1760	8	5/16	10	3/8	165	5.82
29926031	60	Fiddle	800	1760	8	5/16	10	3/8	156	5.5
29926034	60	Fiddle Becket	800	1760	8	5/16	10	3/8	166	5.85
29926037	60	Fiddle Cam	800	1760	8	5/16	10	3/8	221	7.78
29926039	60	Fiddle Becket Cam	800	1760	8	5/16	10	3/8	234	8.24



For information about Synchro Snap Shackles, please refer to page 159.

Additional Information

	50mm Synchro Blocks	60mm Synchro Blocks
Post Diameter	7.9mm (5/16")	9.4mm (3/8")
Shackle Pin Dia.	4mm (5/32")	5mm (3/16")
Fit Traveller Upstand	N/A	Sz1 NTR
Fit Block Upstand	29904050 (see p.158)	19811000 (see p.158)
Fit Snap Shackle	29925040 (see p.159)	29926040 (see p.159)
Use Cleat	29104100 (see p.128)	29104110 (see p.128)



29925001
29926001



29925002
29926002



29925003
29926003



29925004
29926004



29925005
29926005



29925009



29925010
29926010



29925031
29926031



29925034
29926034



29925037
29926037



29925039
29926039



Synchro Blocks 72 and 90mm

Specifications

Part Number	Size	Description	Safe Working Load		Optimum Line Size		Maximum Line Size		Weight	
			kg	lb	mm	in	mm	in	g	oz
29927201	72	Single	1100	2420	10	3/8	12	1/2	190	6.69
29927202	72	Double	1100	2420	10	3/8	12	1/2	406	14.29
29927203	72	Triple	1100	2420	10	3/8	12	1/2	618	21.75
29927204	72	Single Becket	1100	2420	10	3/8	12	1/2	210	7.41
29927205	72	Double Becket	1100	2420	10	3/8	12	1/2	415	14.61
29927210	72	Triple Becket Cam	1100	2420	10	3/8	12	1/2	820	28.86
29927221	72	Toggle head	See page 133							
29927231	72	Fiddle	1100	2420	10	3/8	12	1/2	250	8.8
29927234	72	Fiddle Becket	1100	2420	10	3/8	12	1/2	275	9.7
29927237	72	Fiddle Cam	1100	2420	10	3/8	12	1/2	339	11.93
29927239	72	Fiddle Becket Cam	1100	2420	10	3/8	12	1/2	356	12.53
29929001	90	Single	2000	4400	12	1/2	14	9/16	413	14.57
29929002	90	Double	2000	4400	12	1/2	14	9/16	966	34
29929003	90	Triple	2000	4400	12	1/2	14	9/16	1389	48.89
29929004	90	Single Becket	2000	4400	12	1/2	14	9/16	458	16.15
29929021	90	Toggle head	See page 133							
29929031	90	Fiddle	2000	4400	12	1/2	14	9/16	544	19.19
29929034	90	Fiddle Becket	2000	4400	12	1/2	14	9/16	589	20.77
29929039	90	Fiddle Becket Cam	2000	4400	12	1/2	12	1/2	879	27.12

Additional Information

	72mm Synchro Blocks	90mm Synchro Blocks
Post Diameter	11.9mm (15/32")	16.5mm (21/32")
Shackle Pin Dia.	6mm (1/4")	9.8mm (3/8")
Fit Traveller Upstand	Sz 2 NTR	Sz 3 NTR
Fit Block Upstand	1982 1000 (see p.158)	2939 3000 (see p.158)
Fit Snap Shackle	2992 7240 (see p.159)	2992 9040 (see p.159)
Use Cleat	2910 4110 (see p.128)	Spinlock PX



29927201
29929001



29927202
29929002



29927203
29929003



29927204
29929004



29927205



29927210



29927231
29929031



29927234
29929034



29927237



29927239



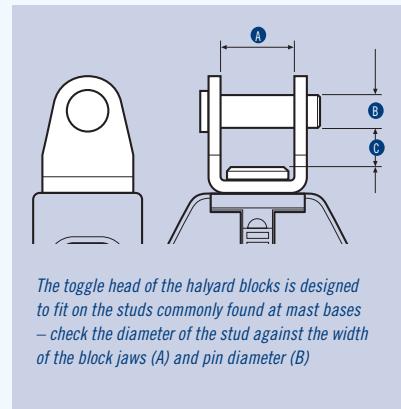
29929001



Synchro Halyard Blocks



29925021 Sync Block. Toggle Head
 29926021 Sync Block. Toggle Head
 29927221 Sync Block. Toggle Head
 29929021 Sync Block. Toggle Head



Specifications

Part Number	Sheave Dia. mm	Safe Working Load		Max Line Size		Sheave Details Optimum Line Size		Weight		Head Details					
		kg	lb	mm	in	mm	in	g	oz	A Width mm in	B Pin mm in	C Space to Pin mm in			
29925021	50	450	990	10	3/8	6	1/4	73	2.57	13	1/2	5	3/16	8.2	5/16
29926021	60	800	1760	10	3/8	8	5/16	122	4.29	15	37/64	6	7/32	6.9	9/32
29927221	72	1100	2420	12	1/2	10	3/8	198	6.98	18	45/64	8	5/16	9.6	3/8
29929021	90	2000	4400	14	9/16	12	1/2	414	14.57	23	29/32	10	25/64	13.9	17/32

Synchro Blocks 105mm

Specifications

Part Number	Size	Description	Safe Working Load		Optimum Line Size		Maximum Line Size		Weight	
			kg	lb	mm	in	mm	in	g	oz
29921050	105	Single Stand Up	3500	7700	16	5/8	14	9/16	1535	54.2
29921056	105	Single Becket Stand Up	3500	7700	16	5/8	14	9/16	1623	57
29921051	105	Single	3500	7700	16	5/8	14	9/16	786	27.72
29921054	105	Single & Becket	3500	7700	16	5/8	14	9/16	874	30.76
29921052	105	Single Fiddle	3500	7700	16	5/8	14	9/16	1005	35.38
29921055	105	Single Fiddle & Becket	3500	7700	16	5/8	14	9/16	1134	40
29921059	105	Single with Head for Size 3 Low Load 2.5T NTR Upstand	2350	5170	16	5/8	14	9/16	698	24.6

Additional Information

	105mm Synchro Blocks except 29921059	29921059
Post Diameter	19.75mm (7/9")	16.5mm (21/32")
Shackle Pin Dia.	10mm (3/8")	shackle not supplied
Fit Traveller Upstand	Sz3 HL 3.5T NTR	Sz3 NTR

Stand up blocks fitting details

Use pad eye 29904060. For base dimension and fixing details refer to p.158



29921050
Single Stand Up



29921051
Single



29921052
Single Fiddle



29921054
Single & Becket



29921055
Single Fiddle & Becket



Versatile Synchro Footblocks

Lewmar's Synchro Footblocks use Alloy cheeks, fixing isolators and, to prevent sealant from getting into the sheave, a molded base plate.

You'll find all three sizes in both standard and jamming formats – they can easily be stacked to form a double footblock.



A smaller, 40mm control line footblock comes with a stainless steel base plate and can be used as a miniature organizer or deflector for lines returning to the cockpit.

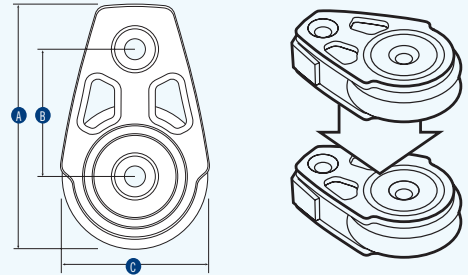


Synchro Footblocks



Synchro Jamming Footblock

Footprint Description	A		B		C	
	mm	in	mm	in	mm	in
40mm footblock	63.2	2 5/16	34.5	1 5/16	40	1 9/16
60mm footblock	98	3 7/8	51	2	59	2 5/16
72mm footblock	110.6	4 5/16	58	2 5/16	71	2 13/16
90mm footblock	134	5 4/16	69	2 11/16	89	3 1/2



Choose the right Synchro Footblock.

Selection Guide

Footblock	Sheet Deflection	Winch Size						
		8	16	30	40	46	48	50
60mm 800kg SWL	90°							
	180°							
72mm 1100kg SWL	90°							
	180°							
90mm 2000kg SWL	90°							
	180°							

Specifications

Part Number	Size	Description	Safe Working Load		Breaking Load		Weight		Fixings (Not Included)		
			kg	lb	kg	lb	g	oz			
29924061	40	Control Line Footblock	750	1653	1500	3307	66	2.33	M8	5/16	Button Head
29924062	40	Double Control Line Footblock	750	1653	1500	3307	121	4.27	M8	5/16	Button Head
29926061	60	Synchro Footblock	800	1764	1600	3527	162	5.7	M8	5/16	Counter Sunk
29926064	60	Synchro Jamming Footblock	800	1764	1600	3527	190	6.7	M8	5/16	Counter Sunk
29927261	72	Synchro Footblock	1200	2645	2400	5291	229	8.1	M8	5/16	Counter Sunk
29927264	72	Synchro Jamming Footblock	1200	2645	2400	5291	250	8.8	M8	5/16	Counter Sunk
29929061	90	Synchro Footblock	2000	4409	4000	8818	430	15.2	M10	3/8	Counter Sunk
29929064	90	Synchro Jamming Footblock	2000	4409	4000	8818	480	16.9	M10	3/8	Counter Sunk

Features

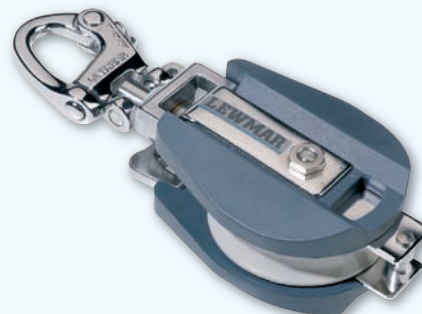
- Standard and jammer options can be double stacked
- Two-step jammer action keeps lever close to side of the block
- SS hollow cast jammer holds fast without tearing the line
- Optimized jammer shape holds line central on the sheave
- Tough alloy cheeks
- Synchro sheave loads match the same sized blocks
- Twin fixings with inserts
- Wide head for a solid base, block will not "roll" on the deck
- Molded base plate with recess to hold sealant around fixing screws and prevent ingress onto the bearing and sheave

Ocean Snatch Blocks

For general spinnaker use. Soft cheeks on sizes 1–3 snatch blocks feature soft synthetic rubber cheeks to handle rough treatment, and the new Synchro snap shackle. Nylon dipped anodized aluminum cheeks on size 5.



19810600
Size 1 Snatch Block



19820600
Size 2 Snatch Block



19830500
Size 3 Snatch Block



19850500
Size 5 Snatch Block

Specifications

Part Number	Size	Bearing	Sheave Dia Material	Safe Working Load		Breaking Load		Sheave Dia.		Sheave Width		Line Size		Weight	
				kg	lb	kg	lb	mm	in	mm	in	mm	in	g	oz
19810600	1	Stainless Steel	Delrin	1135	2500	2270	5000	66	2 5/8	20	3/4	14	9/16	480	17
19820600	2	Stainless Steel	Delrin	1590	3500	3180	7000	80	3 1/8	20	3/4	16	5/8	880	31
19830500	3	Needle Roller	Aluminum	2155	4750	4310	9500	80	3 1/8	20	3/4	16	5/8	1040	36.5
19850500*	5	Needle Roller	Aluminum	4000	8817	8000	17637	125	5	33	1 1/4	22	7/8	2900	102.25

Part No's marked with a * are made to order.



Ball Racing Blocks

Choose the right Control Block.

Application	Size	m ft	Boat Length Overall				
			3.6 12	5.4 18	7.3 24	8.5 28	10.3 34
Main sheet - end boom: Single / fiddle blocks	30mm						
	40mm						
	60mm						
Mainsheet - end boom: Double / triple Blocks	30mm						
	40mm						
	60mm						
Halyard blocks	30mm						
	40mm						
	60mm						
Mast base and general control blocks	30mm						
	40mm						
	60mm						
Spinnaker sheet/ halyard blocks	30mm						
	40mm						
	60mm						

Choose the right Racing Block.

Application & Sheeting Position	Size	Description	m ft	Boat Length Overall					
				7.3 24	8.5 28	10.3 34	11.5 38	13.4 44	14.6 48
Mainsheet Blocks End Boom Singles	60	HL Singles							
	80	Singles & Fiddles							
	80	HL Singles							
Mainsheet Blocks End Boom Doubles & Triples	60	HL Doubles & Triples							
	80	Doubles & Triples							
	80	HL Doubles & Triples							
Mainsheet Blocks Mid Boom Singles	60	HL Singles							
	80	Singles & Fiddles							
	80	HL Singles							
Mainsheet Blocks Mid Boom Doubles & Triples	60	HL Doubles & Triples							
	80	Doubles & Triples							
	80	HL Doubles & Triples							
Main & Genoa Halyard (Block & Padeye at Mast Base)	60	HL Single Shackle							
	80	Single Shackle							
	80	HL Single Shackle							
Spinnaker Mast Top Blocks	60	HL Single							
	80	Single							
	80	HL Single							
Spinnaker Sheet Blocks/Guy Blocks	60	HL Single							
	80	Single/Fiddle/Ratchet							
	80	HL Single							
Spinnaker Genoa Footblock 90° Deflection	60	HL Single							
	80	Single							
	80	HL Single							
Boom Vang (First Block in Cascade)	60	HL Single							
	80	HL Single							

Control Blocks – A revolution in handling and weight advantage.

Lewmar's high-performance Control Blocks are extremely lightweight and have unprecedented load bearing capacity.

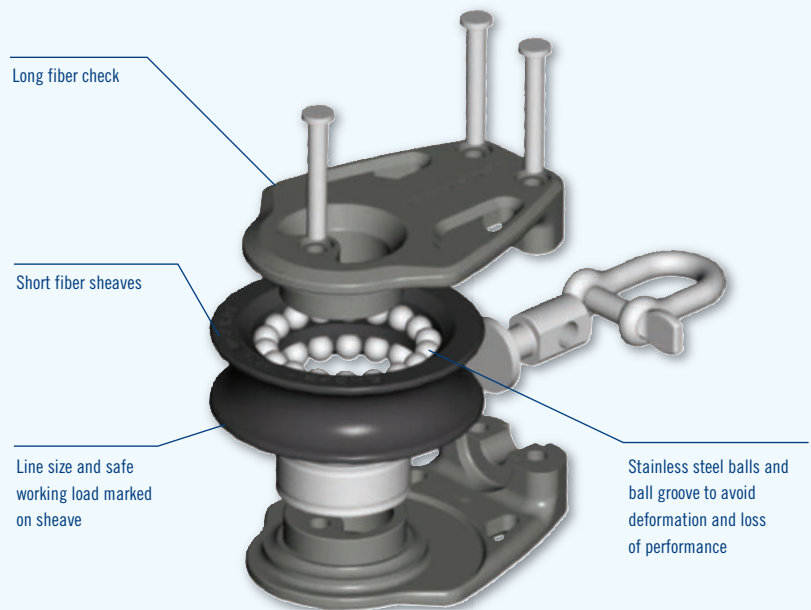
The weight advantage comes from a combination of MRT (Metal Replacement Technology) and stainless steel central race and balls.

Long Fiber Technology provides you with exceptional strength and durability. Plus, the open design allows you to easily flush out sand and salt, which keeps maintenance simple and your entire operation running a lot smoother.

Features

- Lightweight
- Very High Strength
- Impact Resistant
- Reduced Friction
- Easy Maintenance
- Optimized for hand control

These blocks are specifically designed for hand held loads; they achieve maximum efficiency at maximum hand load.



30mm Control Blocks

Specifications

Part Number	Description	Safe Working Load		Breaking Load		Length		Weight		Shackle Post Dia.		Shackle Pin Dia.	
		kg	lb	kg	lb	mm	in	g	oz	mm	in	mm	in
29900240	Tweezer Block	120	265	240	529	53	2 3/16	28	1	-	-	-	-
29901301	Single SS Sheave	240	528	480	1056	54	2 1/8	6.1	0.2	-	-	-	-
29901311	Linked Blocks	200	440	480	1056	108	4 1/4	52	1.84	-	-	-	-
29901314	Fixed Head with Becket	200	440	480	1056	68	2 43/64	31	1.09	-	-	-	-
29901320	Single Stand Up	200	440	480	1056	58	2 9/32	30	1	-	-	-	-
29901321	Single	200	440	480	1056	68	2 43/64	28	1	7.1	2/7	4	1/6
29901322	Double	300	660	600	1320	68	2 43/64	47	1.65	7.1	2/7	4	1/6
29901323	Triple	500	1100	1000	2200	76	3	85	3	9.25	3/8	5	1/5
29901324	Single with Becket	200	440	480	1056	81	3 3/16	33	1.16	7.1	2/7	4	1/6
29901325	Double with Becket	300	660	600	1320	81	3 3/16	50	1.76	7.1	2/7	4	1/6
29901326	Triple with Becket	500	1100	1000	2200	90	3 35/64	90	3.17	9.25	3/8	5	1/5
29901328	Triple with Cleat	250	550	1000	2200	76	3	135	4.76	9.25	3/8	5	1/5
29901330	Triple with Becket & Cleat	300	660	1000	2200	90	3 35/64	140	5	9.25	3/8	5	1/5
29901341	Single, Fixed Head	200	440	480	1056	54	2 1/8	2.6	0.92	-	-	-	-
29901360	Cheekblock	200	440	480	1056	50	2	18.5	0.65	-	-	-	-
29901361	Through Deck Single	200	440	480	1056	76	3	26	0.92	-	-	-	-
29901362	Through Deck Tandem	200	440	480	1056	99	3 1/2	45	1.59	-	-	-	-
29901363	Vertical Lead Block	200	440	480	1056	45	1 1/2	48	1.69	-	-	-	-
29901365	Pivoting Exit Block	200	440	480	1056	68	2 43/64	80	2.82	-	-	-	-

Note: Cleats are designed to hold only the load that can be applied manually.



29901341
29901441



29901321
29901421



29901320
29901420



29901322
29901422



29901326
29901426



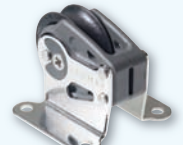
29901328
29901429



29901360
29901460



29901447



29901363
29901463



29901311
29901411



29901412



29900240
29900340

Triple block fits block upstand 29904046 (see p.158)

Use cleat 29104100 (see p.128)

Max line size 8mm (5/16in)

Compatible with snap shackle (see p.159)



29904046



29902024
29902034



29902035

Wire Blocks

Part No	Size	Description	Safe Working Load		Breaking Load		Line Size		Weight	Length		Sheave Dia.		
			kg	lb	kg	lb	mm	in		mm	in	mm	in	
29902024	25	Single HL/Wire	250	551	750	1653	5	3/16	25	0.9	41	1 5/8	25	1
29902034	38	Single HL/Wire	500	1102	1000	2205	6	1/4	80	2.8	62	2 1/16	38	1 1/2
29902035	38	Single HL Becket Wire	500	1102	1000	2205	6	1/4	77	2.7	77	3	38	1 1/2

40mm Control Blocks

Specifications

Maximum Line Size 10mm / 3/8"

Part Number	Description	Safe Working Load		Breaking Load		Length		Weight		Shackle Post Dia.		Shackle Pin Dia.	
		kg	lb	kg	lb	mm	in	g	oz	mm	in	mm	in
29901411	Linked Blocks	240	528	800	1760	140	5 1/2	88	3.1	-	-	-	-
29901412	30/40mm Linked Blocks	200	440	480	1056	124	4 7/8	70	2.47	-	-	-	-
29901420	Single, Stand Up	240	528	800	1760	74	2 29/32	54	1.9	-	-	-	-
29901421	Single	240	528	800	1760	80	3 9/64	52	1.83	8	5/16	4	1/8
29901422	Double	480	1056	1200	2640	95	3 47/64	112.5	3.97	-	-	4	1/8
29901423	Triple	720	1584	1800	3960	102	4 1/64	187.5	6.61	11.5	7/16	6	1/4
29901424	Single, Becket	240	528	800	1760	98	3 55/64	56.5	1.99	8	5/16	4	1/8
29901425	Double, Becket	480	1056	1200	2640	111	4 23/64	116.5	4.11	-	-	4	1/8
29901426	Triple, Becket	720	1584	1800	3960	119	4 43/64	192.5	6.79	11.5	7/16	6	1/4
29901428	Single, Becket, Cleat	240	528	800	1760	98	3 55/64	56.5	1.99	8	5/16	4	1/8
29901429	Triple, Cleat	720	1584	1800	3960	102	4 1/64	247.5	8.73	11.5	7/16	6	1/4
29901430	Triple, Becket, Cleat	720	1584	1800	3960	119	4 43/64	252.5	8.91	11.5	7/16	6	1/4
29901441	Single, Fixed Head	240	528	800	1760	70	2 3/4	44	1.55	-	-	-	-
29901447	Single, Web	240	528	800	1760	57	2 1/4	39.5	1.39	-	-	-	-
29901448	40mm 10:1 Top Block	800	1760	1600	3520	125	4 7/8	400	14.1	-	-	-	-
29901449	40/60mm 10:1 Base Block	600	1320	1200	2640	156	6 1/4	450	15.9	9.5	3/8	5	3/16
29901460	Cheekblock	240	528	900	1980	67	2 5/8	43	1.52	-	-	-	-
29901463	Vertical Lead Block	240	528	900	1980	57	2 15/64	70	2.4	-	-	-	-
29900340	Tweaker Block	140	309	475	1047	76	3	170	5.9	-	-	-	-



29901324
29901424



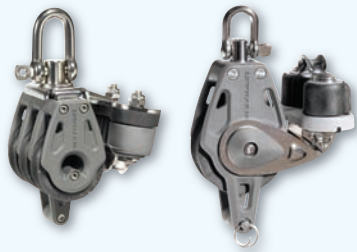
29901314



29901323
29901423



29901325
29901425



29901330
29901430



29901428



29901361

29901362

29901365



29901448

29901449



Triple block fits block upstand 2990 4046 (see p.158)

Use cleat 29104100 (see p.128)

Max line size 10mm (3/8in)

Compatible with snap shackle (see p.159)



29904046

60mm Control Blocks

Specifications

Sheave Diameter 60mm / 2 3/8"

Part Number	Description	Safe Working Load		Breaking Load		Length		Weight		Shackle Post Dia.		Shackle Pin Dia.	
		kg	lb	kg	lb	mm	in	g	oz	mm	in	mm	in
29901651	Single Block	400	882	800	1764	124	4 7/8	108	3.7	9.5	3/8	5	3/16
29901652	Double Block	750	1653	1500	3306	138	5 7/16	220	7.2	10	6/16	6	1/4
29901653	Triple Block	1000	2204	2000	4409	144	5 3/4	333	10.9	10	6/16	6	1/4
29901654	Single Block & Becket	400	882	800	1764	147	5 25/32	120	4.1	9.5	3/8	5	3/16
29901655	Double Block & Becket	750	1653	1500	3306	160	6 3/8	235	7.8	10	6/16	6	1/4
29901656	Triple Block & Becket	1000	2204	2000	4409	166	6 17/32	348	11.5	10	6/16	6	1/4
29901659	Single, Becket & Cleat	400	882	800	1764	147	5 25/32	279	9.8	9.5	3/8	5	3/16
29901660	Triple, Becket & Cleat	1000	2204	2000	4409	166	6 17/32	514	17.3	10	6/16	6	1/4
29901661	Single Block - Ratchet	400	882	800	1764	124	4 7/8	126	4.3	9.5	3/8	5	3/16
29901665	Single Block - Ratchet & Becket	400	882	800	1764	147	5 25/32	141	4.8	9.5	3/8	5	3/16
29901667	Single Block - Ratchet & Cleat	400	882	800	1764	124	4 7/8	288	10.1	9.5	3/8	5	3/16
29901668	Triple Block - Ratchet, Cleat & Eye	1000	2204	2000	4409	144	5 3/4	524	17.7	10	6/16	6	1/4
29901670	Triple Block - Ratchet, Becket, Cleat & Eye	1000	2204	2000	4409	166	6 17/32	538	18.2	10	6/16	6	1/4
29901677	Web Block	400	882	800	1764	90	3 1/2	76	2.5	-	-	-	-
29904042	Single Cam Kit												
29904043	Triple Cam Kit												



29901651



29901652



29901653



29901654



29901655



29901656



29901659



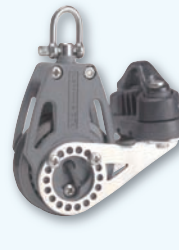
29901660



29901661



29901665



29901667



29901668



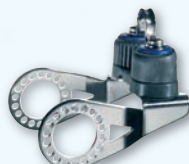
29901670



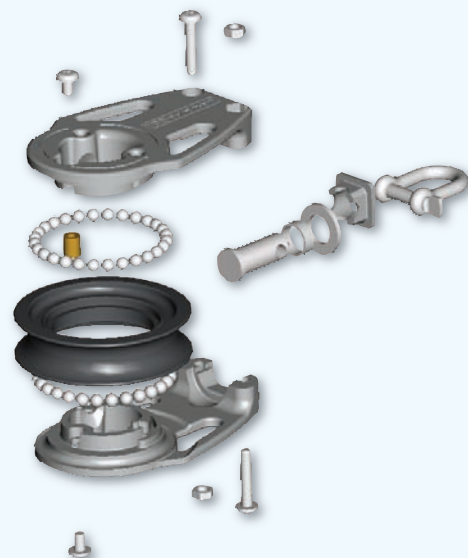
29901677



29904042



29904043



Fit block upstand:

Singles 29810000

Doubles and triples 29904050 (see p.158)

Use cleat 29104110 (see p.128)

Max line size 12mm (1/2in)

Max line size for ratchet blocks: 10mm (3/8in)

Compatible with snap shackle (see p.159)

Singles fit Sz1 traveller upstand

Double & Triple fit Sz2 traveller upstand

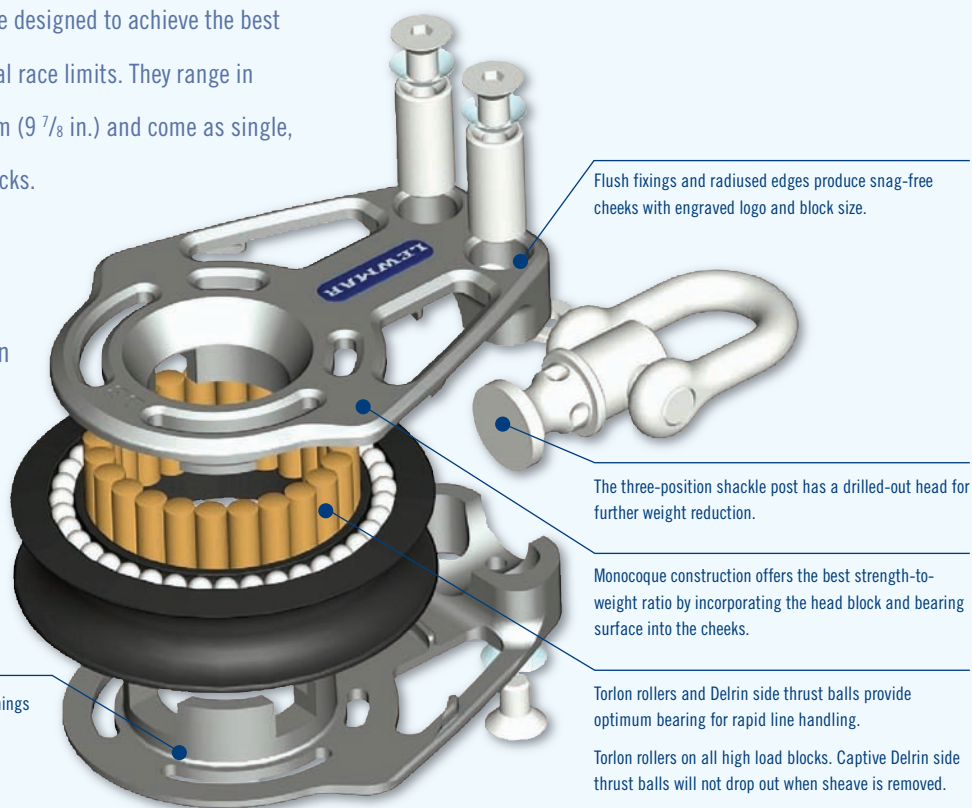
Racing Blocks – Strong and lightweight

Lewmar Racing Blocks and Cars are designed to achieve the best strength-to-weight ratio within legal race limits. They range in size from 60mm (2 3/8 in.) to 250mm (9 7/8 in.) and come as single, becket, triples, doubles and footblocks.

Features

- Monocoque bayonet construction
- 3-in-1 Head
- Torlon Rollers
- Delrin Thrust Balls

Patented bayonet fixing means that central fastenings are not required, and only two locating screws are needed in the head, further reducing weight and improving performance.



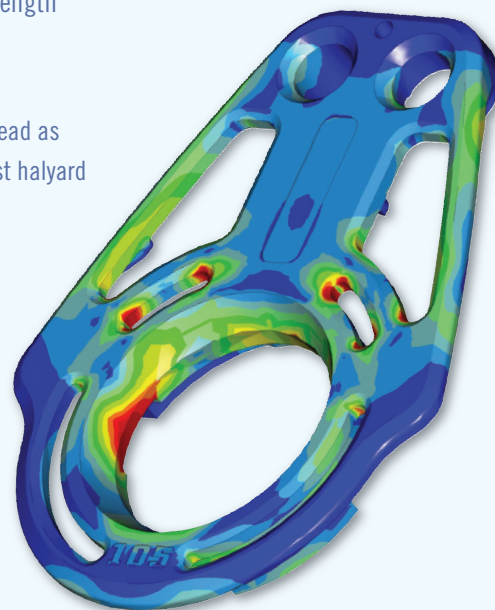
Web blocks Features

- High loads
- Extremely high strength-to-weight ratios
- Sheaves designed to maximize the Torlon roller's strength
- Can be webbed in place in both planes

60mm Web block now features the same becket-shaped head as the runner and halyard blocks – so it can be used as a fast halyard block or the floating block on a transverse jib system.

Second generation racing blocks, up to 50% higher loads for less than 3% weight increase. Using Finite Element Analysis (FEA) to minimize material where it's not needed and reinforce the load paths, we have moved this new generation of racing blocks to a new level.

Blocks are compatible with mainsheet upstands – see table on each page of blocks.



Racing Blocks 60mm

Specifications

Part No	Description	Safe Working Load		Breaking Load		Max Line Size		Weight		Length		Shackle Post Dia		Shackle Pin Dia	
		kg	lb	kg	lb	mm	in	g	oz	mm	in	mm	in	mm	in
29901600	60mm Single Stand Up	800	1763	1600	3527	12	1/2	283	10.0	123	4 3/4	-	-	-	-
29901611	60mm Single	800	1763	1600	3527	12	1/2	162	5.7	123	4 3/4	11	3/8	6	1/4
29901612	60mm Double	1440	3175	2880	6349	12	1/2	291	10.3	132	5 1/8	13.8	1/2	8	5/16
29901613	60mm Triple	2000	4409	4000	8818	12	1/2	395	13.9	134	5 1/4	13.8	1/2	8	5/16
29901614	60mm Single Becket	800	1763	1600	3527	12	1/2	170	6.0	141	5 5/8	11	3/8	6	1/4
29901615	60mm Double Becket	1440	3175	2880	6349	12	1/2	299	10.5	150	5 7/8	13.8	1/2	8	5/16

Stand up blocks fitting details

Base diameter: 58mm (2 5/16 in)
Fixings: 4 x M6 (1/4in)



29901600



29901613



29901611



29901615



29901612



29901614

New Racing High Load Blocks 60mm

Sheaves run on Torlon rollers with Delrin ball side thrust races. Alloy sheaves, alloy cheeks.

Specifications

Part No	Description	Safe Working Load		Breaking Load		Max Line Size		Weight		Length		Shackle Post Dia		Shackle Pin Dia	
		kg	lb	kg	lb	mm	in	g	oz	mm	in	mm	in	mm	in
29941600	60mm HL Single Stand Up	1200	2640	2400	5280	12	1/2	281	9.9	123	4 3/4	-	-	-	-
29941611	60mm HL Single	1200	2640	2400	5280	12	1/2	158	5.6	123	4 3/4	11	3/8	6	1/4
29941612	60mm HL Double	2000	4400	4000	8800	12	1/2	320	11.3	132	5 1/8	13.8	1/2	8	5/16
29941613	60mm HL Triple	2500	5500	5000	11000	12	1/2	428	15.1	134	5 1/4	13.8	1/2	8	5/16
29941614	60mm HL Single Becket	1200	2640	2400	5280	12	1/2	174	6.1	141	5 5/8	11	3/8	6	1/4
29941615	60mm HL Double Becket	2000	4400	4000	8800	12	1/2	343	12.1	150	5 7/8	13.8	1/2	8	5/16
29901647	60mm Web Block	1400	3086	2800	6172	12	1/2	120	4.2	94	3 3/5	-	-	-	-

Stand up blocks fitting details

Base diameter: 58mm (2 5/16 in)
Fixings: 4 x M6 (1/4in)



29941611



Web Block

Racing Fiddle Blocks 60mm

60mm/2 3/8 in., 40mm/1 5/8 in. sheaves run on dual Delrin ball races. Features alloy cheeks and composite sheaves. Ratchet fiddle blocks feature alloy ratchet sheaves and recessed ratchet lever.

60mm blocks fit Synchro Snap Shackle 29926040.



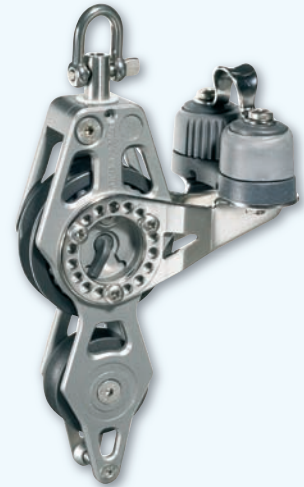
29901631
Single Fiddle



29901634
Single Fiddle & Becket



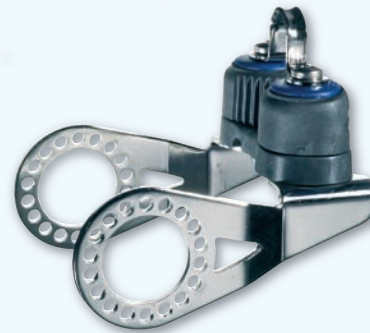
29901639
Single Fiddle & Becket & Cam



29901624
Single Fiddle Ratchet & Becket & Cam



29904042
Cam Kit Single



29904043
Cam Kit Triple

Specifications

Part No	Description	Safe Working Load		Breaking Load		Max Line Size		Weight		Length		Shackle Post Dia		Shackle Pin Dia	
		kg	lb	kg	lb	mm	in	g	oz	mm	in	mm	in	mm	in
29901631	Single Fiddle	400	882	800	1764	10	3/8	174	6.1	169	6 5/8	10	3/8	5	3/16
29901634	Single Fiddle & Becket	400	882	800	1764	10	3/8	186	6.5	189	7 1/2	10	3/8	5	3/16
29901639	Single Fiddle, Becket & Cam	400	882	800	1764	10	3/8	353	12	189	7 1/2	10	3/8	5	3/16
29901624	Single Fiddle Ratchet, Becket & Cam	400	882	800	1764	10	3/8	362	13	189	7 1/2	10	3/8	5	3/16

Racing Blocks 80mm

Sheaves run on dual Delrin ball races. Features alloy cheeks and composite sheaves. Single blocks fit Synchro Snap Shackle 29927240.

Specifications

Part No	Description	Safe Working Load		Breaking Load		Max Line Size		Weight		Length		Shackle Post Dia		Shackle Pin Dia	
		kg	lb	kg	lb	mm	in	g	oz	mm	in	mm	in	mm	in
29901811	80mm Single	1000	2204	2000	4408	12	1/2	251	8.8	152	6	12.5	1/2	6	1/4
29901812	80mm Double	1800	3968	3600	7936	12	1/2	487	17.2	160	6 3/8	14	9/16	8	5/16
29901813	80mm Triple	2200	4849	4400	9698	12	1/2	724	25.5	160	6 3/8	14	9/16	8	5/16
29901814	80mm Single & Becket	1000	2204	2000	4408	12	1/2	278	9.8	177	7	12.5	1/2	6	1/4
29901815	80mm Double & Becket	1800	3968	3600	7936	12	1/2	514	18.1	185	7 1/4	14	9/16	8	5/16
29901816	80mm Triple & Becket	2200	4849	4400	9698	12	1/2	751	26.5	185	7 1/4	14	9/16	8	5/16



New Racing High Load Blocks 80mm

Sheaves run on Torlon rollers with Delrin ball side thrust races. Alloy sheaves, alloy cheeks.

Specifications

Part No	Description	Safe Working Load		Breaking Load		Max Line Size		Weight		Length		Shackle Post Dia		Shackle Pin Dia	
		kg	lb	kg	lb	mm	in	g	oz	mm	in	mm	in	mm	in
29941800	80mm Single Stand Up	2400	5280	4800	10560	14	9/16	518	18	155	6 1/8	-	-	-	-
29941801	80mm HL Single	2400	5280	4800	10560	14	9/16	337	12	160	6 1/4	15	9/16	8	5/16
29941802	80mm HL Double	3400	7480	6800	14960	14	9/16	655	23	174	6 3/4	19.8	3/4	10	3/8
29941804	80mm HL Single Becket	2400	5280	4800	10560	14	9/16	358	13	185	7 1/4	15	9/16	8	5/16
29941805	80mm HL Double Becket	3400	7480	6800	14960	14	9/16	685	24	199	7 3/4	19.8	3/4	10	3/8
29901807	80mm Web Block	2400	5280	4800	10560	14	9/16	242	8.6	117	4 5/8	-	-	-	-
29941808	80mm HL Single with Snap Shackle	2000	4400	4000	8800	14	9/16	496	18	171	6 3/4	-	-	-	-

Stand up blocks fitting details

Use pad eye 29904060. For base dimension and fixing details refer to p.158



Racing Fiddle Blocks 80mm

80mm/3 1/8", 60mm/2 3/8", sheaves run on dual Delrin ball races. Features alloy cheeks and composite sheaves. Ratchet fiddle blocks feature alloy ratchet sheaves and recessed ratchet lever. 80mm blocks fit Synchro Snap Shackle 29927240.



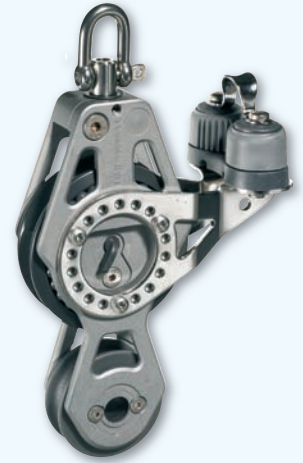
29901831
Single Fiddle



29901834
Single Fiddle & Becket



29901839
Single Fiddle & Becket & Cam



29901822
Single Fiddle, Ratchet & Cam



29901824
Single Fiddle, Ratchet, Becket & Cam



29901831
HL Fiddle



29901834
HL Fiddle & Becket

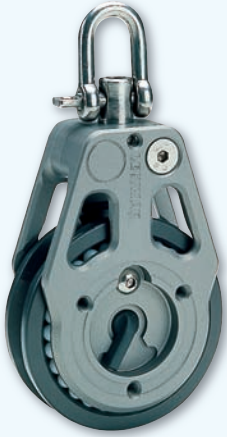


Specifications

Part No	Description	Safe Working Load		Breaking Load		Max Line Size		Weight		Length		Shackle Post Dia		Shackle Pin Dia	
		kg	lb	kg	lb	mm	in	g	oz	mm	in	mm	in	mm	in
29901831	80mm Single Fiddle	1000	2204	2000	4409	12	1/2	356	12.6	217	8 9/16	12.5	1/2	6	1/4
29901834	80mm Single Fiddle & Becket	1000	2204	2000	4409	12	1/2	382	13.5	240	9 1/2	12.5	1/2	6	1/4
29901839	80mm Fiddle, Becket & Cam	1000	2204	2000	4409	12	1/2	575	20	240	9 1/2	12.5	1/2	6	1/4
29901822	80mm Fiddle, Ratchet & Cam	1000	2204	2000	4409	12	1/2	567	20	217	8 9/16	12.5	1/2	6	1/4
29901824	80mm Fiddle, Ratchet, Becket & Cam	1000	2204	2000	4409	12	1/2	593	21	240	9 1/2	12.5	1/2	6	1/4
29941831	80mm HL Fiddle	2400	5280	4800	10560	12	1/2	441	16	220	8 3/4	15	9/16	8	5/16
29941834	80mm HL Fiddle & Becket	2400	5280	4800	10560	12	1/2	471	17	245	9 3/4	15	9/16	8	5/16

Racing Ratchet Blocks 80mm

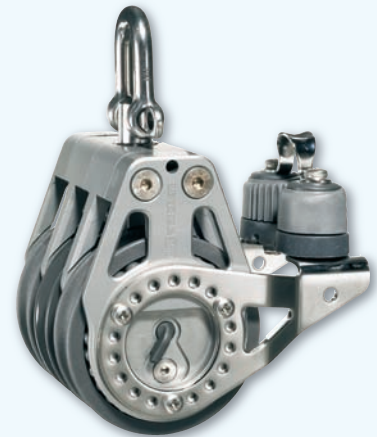
Sheaves run on dual Delrin ball races. Features alloy cheeks, alloy ratchet sheaves and recessed ratchet lever.



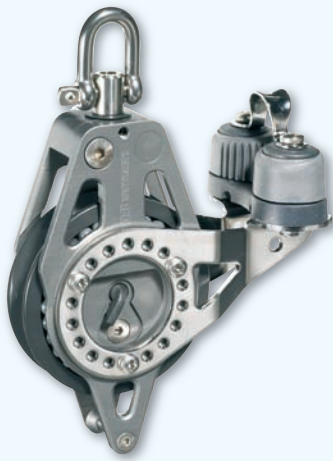
29901821
Single Ratchet



29901825
Single Ratchet & Becket



29901828
Triple Ratchet & Cam



29901829
Single Ratchet & Becket & Cam



29901830
Triple Ratchet & Becket & Cam

Specifications

Part No	Description	Safe Working Load		Breaking Load		Max Line Size		Weight		Length		Shackle Post Dia		Shackle Pin Dia	
		kg	lb	kg	lb	mm	in	g	oz	mm	in	mm	in	mm	in
29901821	80mm Single Ratchet	800	1764	1600	3527	12	1/2	291	10.3	152	6	12.5	1/2	6	1/4
29901825	80mm Single Ratchet & Becket	800	1764	1600	3527	12	1/2	318	11.2	160	6 3/8	12.5	1/2	6	1/4
29901828	80mm Triple Ratchet & Cam	2200	4849	4400	9698	12	1/2	949	33.5	160	6 3/8	14	9/16	8	5/16
29901829	80mm Single Ratchet, Becket & Cam	800	1764	1600	3527	12	1/2	503	17.7	177	7	12.5	1/2	6	1/4
29901830	80mm Triple Ratchet, Becket & Cam	2200	4849	4400	9698	12	1/2	976	34.4	185	7 1/4	14	9/16	8	5/16

New Racing High-Load Blocks 105, 130 and 155mm

Sheaves run on Teflon rollers with Delrin ball side thrust races.

Alloy sheaves, alloy cheeks.



Web Block

Single



© Mark Lloyd



Specifications

Part No	Size	Description	Safe Working Load		Breaking Load		Max Line Size		Weight		Length		Shackle Post Dia		Shackle Pin Dia	
			tonne	lb	tonne	lb	mm	in	g	oz	mm	in	mm	in	mm	in
29941100	105	Single Stand Up	3.75	8250	7.5	16500	14	9/16	727	25.7	205	8 1/8	-	-	-	-
29941101	105	Single	3.75	8250	7.5	16500	14	9/16	605	21.4	219	8 5/13	19.8	3/4	10	3/8
29941102	105	Double	4.5	9900	9	19800	14	9/16	1088	38.4	221	8 3/4	21.8	7/8	12	1/2
29941104	105	Single Becket	3.75	8250	7.5	16500	14	9/16	640	22.6	247	9 3/4	19.8	3/4	10	3/8
29901107	105	Web Block	3.75	8250	7.5	16500	14	9/16	417	14.7	150	5 7/8	-	-	-	-
29941130	130	Single Stand Up	5	11000	10	22000	16	5/8	1404	49.6	246	9 3/4	-	-	-	-
29941131	130	Single	5	11000	10	22000	16	5/8	952	33.6	245	10	21.8	7/8	12	1/2
29941134	130	Single Becket	5	11000	10	22000	16	5/8	986	34.8	293	11 1/2	21.8	7/8	12	1/2
29901137	130	Web Block	5	11000	10	22000	16	5/8	665	23.5	185	7 1/4	-	-	-	-
29941150	155	Single Stand Up	7.5	16500	15	33000	18	11/16	2396	84.7	246	11 5/8	-	-	-	-
29941151	155	Single	7.5	16500	15	33000	18	11/16	1810	64	287	11 1/4	25.8	1	14	9/16
29941154	155	Single Becket	7.5	16500	15	33000	18	11/16	1737	61.4	333	13 1/8	25.8	1	14	9/16
29901157	155	Web Block	7.5	16500	15	33000	18	11/16	1470	51.8	216	5 1/2	-	-	-	-

Stand up blocks fitting details

Block size	See pad eye	
105	29904060	
130	29904053	For base dimension and fixing details refer to p.158
155	29904054	

Racing Blocks 175 to 250mm

Torlon rollers with Delrin ball side thrust races. Alloy cheeks, alloy sheaves.

Stand up blocks fitting details

Base diameter: 130mm

Fixings: 4 x M16



29901171
175mm Single



29901174
175mm Single & Becket



29901170
175mm Single Stand Up

Specifications

Part No	Size	Description	Safe Working Load		Breaking Load		Max Line Size		Weight		Length		Shackle Post Dia		Shackle Pin Dia	
			tonne	lb	tonne	lb	mm	in	g	oz	mm	in	mm	in	mm	in
29901171	175	Single	7.5	16532	15	33069	22	7/8	2472	87.2	353	13 7/8	31.8	1 1/4	16	5/8
29901174	175	Single & Becket	7.5	16532	15	33069	22	7/8	2750	97	404	15 7/8	31.8	1 1/4	16	5/8
29901170	175	Single Block Stand Up	7.5	16532	15	33069	22	7/8	3679	128	334	13 1/4	-	-	-	-
29901201	200	Single	9.5	20940	19	41888	22	7/8	3891	137.3	387	15 1/8	34.7	1 3/8	16	5/8
29901204	200	Single & Becket	9.5	20940	19	41888	22	7/8	4175	147.3	440	17 1/4	34.7	1 3/8	16	5/8
29901221	225	Single	12.5	27553	25	55116	24	15/16	4980	175.5	438	17 3/8	38	1 1/2	20	3/4
29901224	225	Single & Becket	12.5	27553	25	55116	24	15/16	5341	188.4	507	20	38	1 1/2	20	3/4
29901251	250	Single	15	33064	30	66139	26	1	6372	224.8	485	19 1/8	46	1 3/4	24.5	1
29901254	250	Single & Becket	15	33064	30	66139	26	1	6835	241.1	570	22 3/8	46	1 3/4	24.5	1



Racing Footblocks – Designed for strength.

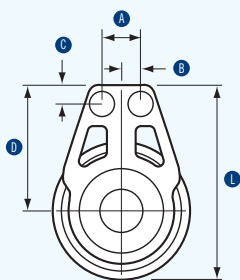
For low-load footblocks, you'll want composite sheaves and friction cams. For high load, alloy sheaves and spring cams. The jammer holding load is no more than 300kg/660 lbs. You'll find safe working loads in the chart below. Be sure you don't load the upper sheave beyond 60% of the safe working load.

Choose the right Racing Footblock. Selection Guide

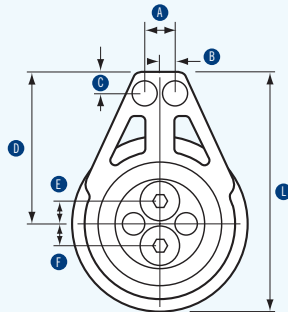
Application & Sheeting Position		Size	Description	Winch Size								
				Hand Load	16	30	46	48	58	68	77	
Genoa Footblock (Assumes 180° Line Deflection)	60	Footblock										
	60	HL Footblock										
	80	Footblock										
	80	HL Footblock										
	105	Footblock										
	130	Footblock										
	155	Footblock										

Size	L		A		B		C		D		E		F		G	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
60mm	85	3 1/3	20	4/5	10	2/5	16	5/8	55	2 1/6	-	-	-	-	-	-
80mm	111	4 3/8	26	1	13	1/2	20	4/5	71	2 4/5	-	-	-	-	-	-
105mm	148	5 5/8	35	1 3/8	17.5	2/3	26.7	1	95	3 3/4	13.6	1/2	13.6	1/2	-	-
130mm	181	7 1/8	40	1 1/2	20	4/5	32.5	1 2/7	110.5	4 1/3	18	5/7	18	5/7	-	-
155mm	216	8 1/2	54	2 1/8	27	1	50	2	138	5 3/7	20	4/5	20	4/5	-	-
175mm	243	9 4/7	33	1 2/7	16.5	2/3	23	1	152	6	25	1	12.5	1/2	26	1
250mm	348	13 5/7	44	1 3/4	22	6/7	29	1 1/7	210	8 1/4	28	1 1/9	28	1 1/9	28	1 1/9

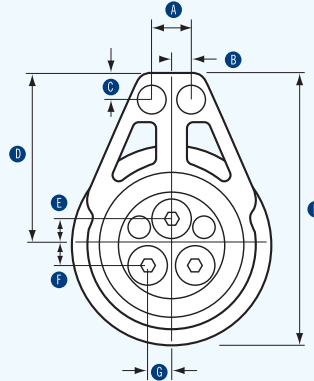
60mm–80mm Footblock



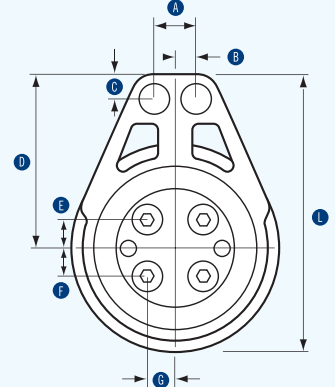
105mm–155mm Footblock



175mm Footblock



250mm Footblock



Footblocks 60 & 80mm

Specifications

Part No	Size	Description	Safe Working Load		Breaking Load		Max Line Size		Weight		Fixings included
			kg	lb	kg	lb	mm	in	g	oz	Maximum deck thickness 35mm
29906601	60	Single	400	882	800	1764	12	1/2	160	5.6	2xM6 / 1xM6
29906602	60	Double	400	882	800	1764	12	1/2	258	9.1	2xM6 / 1xM6
29906604	60	Single Jamming Left Hand	400	882	800	1764	12	1/2	181	6.3	2xM6 / 1xM6
29906606	60	Single Jamming Right Hand	400	882	800	1764	12	1/2	181	6.3	2xM6 / 1xM6
29906605	60	Double Jamming Left Hand	400	882	800	1764	12	1/2	285	9.9	2xM6 / 1xM6
29906607	60	Double Jamming Right Hand	400	882	800	1764	12	1/2	285	9.9	2xM6 / 1xM6
29906621	60	Left Hand (Counter-Clockwise) Ratchet	400	882	800	1764	10	3/8	160	5.6	2xM6 / 1xM10
29906622	60	Right Hand (Clockwise) Ratchet	400	882	800	1764	10	3/8	160	5.6	2xM6 / 1xM10
29906811	80	Single	1000	2204	2000	4404	14	9/16	279	9.8	2xM6 / 1xM6
29906812	80	Double	1000	2204	2000	4404	14	9/16	415	15	2xM6 / 1xM6
29906814	80	Single Jamming Left Hand	1000	2204	2000	4404	14	9/16	299	11	2xM6 / 1xM6
29906816	80	Single Jamming Right Hand	1000	2204	2000	4404	14	9/16	299	11	2xM6 / 1xM6
29906815	80	Double Jamming Left Hand	1000	2204	2000	4404	14	9/16	456	16	2xM6 / 1xM6
29906817	80	Double Jamming Right Hand	1000	2204	2000	4404	14	9/16	456	16	2xM6 / 1xM6
29906821	80	Left Hand (Counter-Clockwise) Ratchet	1000	2204	2000	4404	12	1/2	341	12	2xM8 / 1xM12
29906822	80	Right Hand (Clockwise) Ratchet	1000	2204	2000	4404	12	1/2	341	12	2xM8 / 1xM12



29906601
29906811



29906602
29906812



29906604/06
29906814/16



29906605/07
29906815/17



29906622
STBD (Clockwise)

29906621
PORT (Counter-Clockwise)



29906822
STBD (Clockwise)

29906821
PORT (Counter-Clockwise)



HL Racing Footblocks 60 to 155mm

Sheaves run on Torlon rollers with dual Delrin ball side thrust races. Alloy sheaves, alloy bayonet cheeks for simple servicing. Safe working loads are quoted for the whole assembly. The upper sheave should not be loaded beyond 60% of the Safe Working Load.

New Second Generation Racing blocks features:

- New lighter form with smoother edges
- Uses standard, off-the-shelf fixing bolts
- Remove single screw-in head to disassemble for servicing



Single



Double

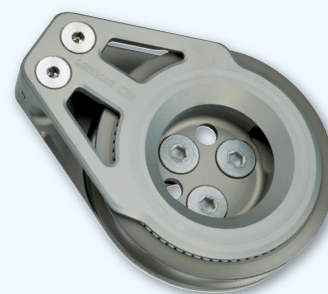
Specifications

Part No	Size	Description	Safe Working Load		Breaking Load		Max Line Size		Weight		Fixings (Not included)
			kg	lb	kg	lb	mm	in	g	oz	
29946611	60	High Load Single	1400	3080	2800	6160	12	1/2	132	4.7	2 x M6 / 1 x M10
29946612	60	HL Double	1400	3080	2800	6160	12	1/2	252	8.9	2 x M6 / 1 x M10
29946801	80	HL Single	2400	5280	4800	10560	14	9/16	268	9.5	2 x M8 / 1 x M12
29946802	80	HL Double	2400	5280	4800	10560	14	9/16	500	17.7	2 x M8 / 1 x M12
29946101	105	Single	3750	8250	7500	16500	14	9/16	490	17.3	2 x M10 / 2 x M12
29946102	105	Double	3750	8250	7500	16500	14	9/16	873	30.8	2 x M10 / 2 x M12
29946131	130	Single	5500	12100	11000	24200	16	5/16	732	25.9	4 x M12
29946132	130	Double	5500	12100	11000	24200	16	5/16	1301	46.0	4 x M12
29946151	155	Single	7500	16500	15000	33000	18	11/16	1476	52.2	2 x M12 / 2 x M16
29946152	155	Double	7500	16500	15000	33000	18	11/16	2675	94.5	2 x M12 / 2 x M16

Racing Footblocks 175 to 250mm

Specifications

Part No	Size	Description	Safe Working Load		Breaking Load		Max Line Size		Weight		Fixings Included Maximum deck thickness 35mm
			kg	lb	kg	lb	mm	in	g	oz	
2990 6171	175	Single	10000	22043	20000	44092	22	7/8	2634	92.9	2xM12 / 2xM16
2990 6172	175	Double	10000	22043	20000	44092	22	7/8	4288	151.3	2xM12 / 2xM16
2990 6251	250	Single	19000	41881	38000	83776	26	1	6855	241.8	2xM16 / 3xM20
2990 6252	250	Double	19000	41881	38000	83776	26	1	11271	397.6	2xM16 / 3xM20



29906171



Racing Halyard Blocks 60 to 155mm

Impregnated composite bearings with dual Delrin side thrust races, ideal for high static loads. Low-profile head fits into pad eye for lowest lead to the winch. Alloy sheave profile for H.M.P.E. line such as Spectra, Dyneema or Vectran.

60 and 80mm Halyard blocks come in two new versions:

NEW Low Load with pin to suit mast base posts



29942802

Part No	Size	Safe working Load		Breaking Load		Max Line Size		Weight		Length		Head Details					
		kg	lb	kg	lb	mm	in	g	oz	mm	in	A	B	C	D		
29942602	60	750	1650	1500	3300	12	1/2	136	4.8	95	3 3/4	12.8	1/2	6	1/4	26.5	1 1/16
29942802	80	1400	3080	2800	6160	14	9/16	249	8.8	120	4 3/4	14.4	9/16	8	5/16	29.5	1 1/4

Traditional High Load



29942601

60mm High Load Halyard



29942801

80mm High Load Halyard



29902101

105mm Halyard



29902131

130mm Halyard



29902151

155mm Halyard



29902800

80mm Fixed Halyard



29902100

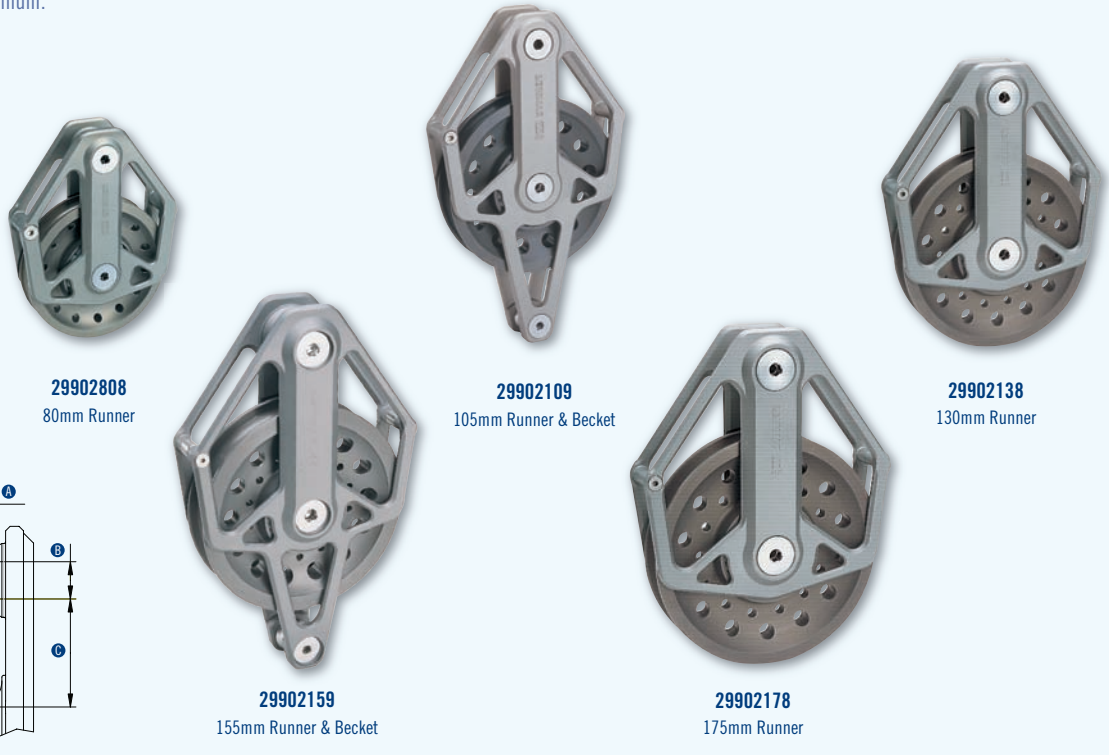
105mm Fixed Halyard

Part no	Size	Description	Safe working Load		Breaking Load		Max Line Size		Weight		Length		Head Details							
			kg	lb	kg	lb	mm	in	g	oz	mm	in	A	B	C	D				
29942601	60	High-Load Halyard	1400	3080	2800	6160	12	1/2	146	5.2	95	3 3/4	12.8	1/2	8.5	21/64	25.3	1	24	15/16
29902800	80	Fixed Halyard	2500	5511	5000	11023	14	9/16	300	10.6	120	4 3/4	-	-	-	-	-	-	-	-
29942801	80	High-Load Halyard	2500	5500	5000	11000	14	9/16	274	9.7	120	4 3/4	14.4	9/16	11	7/16	28	1 1/8	27.4	1 3/32
29902100	105	Fixed Halyard	4000	8817	8000	17637	16	5/16	629	22.2	149	5 7/8	-	-	-	-	-	-	-	-
29902101	105	Halyard	3200	7054	6400	14110	16	5/16	457	16.1	154	6 1/8	13	1/2	12.9	1/2	35	1 3/8	32	1 1/4
29902131	130	Halyard	5000	11021	10000	22046	18	11/16	839	29.6	188	7 3/4	17	2/3	16	5/8	39	1 17/32	37	1 7/16
29902151	155	Halyard	7500	16532	15000	33069	20	3/4	1545	54.5	227	8 7/8	19	3/4	18.5	5/7	46	1 13/16	43	1 11/16

Racing Runner Blocks

Sheaves run on an impregnated composite bearing with dual side thrust bearings for free running at low initial load. Computer designed cheeks with non-sag baits.

Also available in Titanium.



29902808
80mm Runner

29902109
105mm Runner & Becket

29902138
130mm Runner

29902159
155mm Runner & Becket

29902178
175mm Runner



Specifications

Part No	Size	Description	Safe working Load		Breaking Load		Max Line Size		Weight		Length		Head Details							
			kg	lb	kg	lb	mm	in	g	oz	mm	in	A	B	C	D				
29902808	80	Runner	2000	4409	5000	11023	14	9/16	256	9	120	4 3/8	11	7/16	11	7/16	28.6	1 9/64	27.8	1 3/32
29902809	80	Runner & Becket	2000	4409	5000	11023	14	9/16	265	9.4	148	5 3/8	11	7/16	11	7/16	28.6	1 9/64	27.8	1 3/32
29902108	105	Runner	2560	5643	6400	14110	16	5/16	448	15.8	154	6 1/8	13	33/64	13	33/64	34	1 11/32	32	1 1/4
29902109	105	Runner & Becket	2560	5643	6400	14110	16	5/16	474	16.7	187	7 3/8	13	33/64	13	33/64	34	1 11/32	32	1 1/4
29902138	130	Runner	4000	8817	10000	22046	18	11/16	776	27.4	188	7 3/4	16	5/8	16	5/8	39	1 17/32	37	1 29/64
29902139	130	Runner & Becket	4000	8817	10000	22046	18	11/16	842	29.7	231	9 1/8	16	5/8	16	5/8	39	1 17/32	37	1 29/64
29902158	155	Runner	6000	13226	15000	33069	20	3/4	1418	50	227	8 7/8	19	22/32	18.5	22/32	46	1 13/16	43	1 11/16
29902159	155	Runner & Becket	6000	13226	15000	33069	20	3/4	1569	55.3	277	10 7/8	19	22/32	18.5	22/32	46	1 13/16	43	1 11/16
29902178	175	Runner	8400	18516	21000	46297	18	11/16	2074	73.2	257	10 1/8	23	29/32	22.3	29/32	48.6	1 29/32	45.7	1 13/16
29902179	175	Runner & Becket	8400	18516	21000	46297	18	11/16	2544	89.7	313	12 1/4	23	29/32	22.3	29/32	48.6	1 29/32	45.7	1 13/16
29902208	200	Runner	10000	22043	25000	55116	20	3/4	4003	141	293	11 1/2	25.6	1	22.6	57/64	56.6	2 15/64	52	2 3/64
29902209	200	Runner & Becket	10000	22043	25000	55116	20	3/4	4620	163	357	14 1/8	25.6	1	22.6	57/64	56.6	2 15/64	52	2 3/64

Shackle Posts

Shackle Posts fit Racing Halyard and Runner blocks. Can be used in-line or at 90°.

Part No	Description	Post Dia		Pin Dia		Breaking Load	
		mm	in	mm	in	kg	lb
29942606	60mm Shackle Post	17.5	11/16	8	5/16	2800	6170
29942806	80mm Shackle Post	23.75	7/8	10	3/8	5000	11000
29942106	105mm Shackle Post	24	1	10	3/8	6400	14100
29942136	130mm Shackle Post	28	1 1/8	12	1/2	10000	22050
29942156	155mm Shackle Post	36	1 3/8	16	5/8	15000	33050



Sheave Packages

Sheave packages are designed to cover a variety of applications:

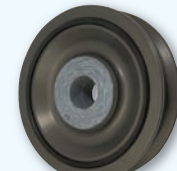
- Alloy plain bearing sheaves for use in spars or in under-deck applications where maintenance is not always easy.
- Alloy Torlon roller sheaves for Genoa sheet cars and deflecting lines where entry and exit angle can vary.
- Composite Synchro sheaves for general applications where loads are not excessive but a low-friction sheave is required.
- Ball bearing sheave for hand held control line applications; will replace all Sz 2 NTR control line sheaves to further reduce friction; will also fit on Sz 3, 2.5T on NTR mainsheet cars.



29912056



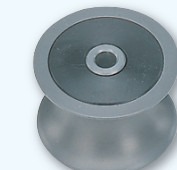
29912059



29912097



29912115



29912027



29472970

Alloy - plain bearing with side thrust balls

Part No	Description	Diameter		Width		Weight		Max line		Center Pin		Safe Working Load	
		mm	in	mm	in	g	oz	mm	in	mm	in	kg	lb
29912056	60mm Halyard Sheave	60	2 3/8	20	13/16	59	2	12	1/2	19.8	3/4	2500	5512
29912057	80mm Halyard Sheave	80	3 1/8	22	7/8	105	4	14	9/16	19.8	3/4	3000	6614
29912058	105mm Halyard Sheave	105	4 1/8	26	1	240	8	16	5/8	24.8	1	5000	11023
29912059	130mm Halyard Sheave	130	5 1/8	29	1 1/8	383	14	18	11/16	27.8	1 1/8	6500	14330
29912060	155mm Halyard Sheave	155	6 1/8	34.5	1 3/8	825	29	20	13/16	29.8	1 9/16	7500	16535
29902061	175mm Halyard Sheave	175	6 7/8	37.5	1 1/2	1150	41	22	7/8	39.8	1 5/16	11500	25353
29912074	200mm Halyard Sheave	200	7 7/8	42	1 5/8	1680	59	26	1	49.8	1 15/16	14000	30865
29912084	225mm Halyard Sheave	225	8 7/8	47	1 7/8	2260	80	30	1 3/16	59.8	2 3/8	15000	33069
29912115	55mm HL Sheave	55	2 3/16	21.5	7/8	46	2	12	1/2	19.8	3/4	2500	5512
29912108	80mm HL Sheave	80	3 1/8	33.5	1 5/16	180	6	20	13/16	27.8	1 1/8	4500	9921
29912095	155mm HL Sheave	155	6 1/8	42	1 5/8	904	32	26	1	49.8	1 15/16	12500	27558
29383119	130mm VHL Sheave	130	5 1/8	42	1 5/8	656	23	24	15/16	49.8	1 15/16	12000	26455
29912092	155mm VHL Sheave	155	6 1/8	60	2 3/8	1530	54	24	15/16	38	1 1/2	22500	49604
29912097	206mm VHL Sheave	206	8 1/8	50.4	2	2320	82	26	1	38	1 1/2	28500	62832
29912104	225mm VHL sheave	225	8 7/8	51	2	2730	96	30	1 3/16	38	1 1/2	30000	66139

Alloy - Torlon Roller - wide / genoa car sheave

29172027	Sz 2 Roller Bearing Wide sheave	55	2 3/16	36.5	1 7/16	91	3	20	13/16	8	5/16	1500	3307
29173021	Sz 3 Roller Bearing Wide Sheave	70	2 3/4	50	1 15/16	345	12	28	1 1/8	12	1/2	3000	6614
29324033	Sz 4 Roller Bearing Wide Sheave	94	3 11/16	48	1 7/8	734	26	30	1 3/16	16	5/8	4500	9921

Alloy - Plain Bearing wide / genoa sheave

29912110	105mm / SZ3 HL Genoa Sheave	105	4 1/8	51	2	601	21	26	1	27.8	1 1/8	5000	11023
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Composite wide / genoa sheave

28003642	Sz 2 Synchro Genoa Sheave	72	2 13/16	48	1 7/8	143	5	28	1 1/8	19.8	3/4	2250	4960
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Composite - Synchro sheaves (packs of)

29925050	50mm Synchro Sheaves (50 sheaves)	50	1 15/16	14.5	9/16	21	1	10	3/8	6	1/4	450	992
29926050	60mm Synchro Sheaves (30 sheaves)	60	2 3/8	15.5	5/8	30	1	10	3/8	8	5/16	800	1764
29927250	72mm Synchro Sheaves (20 sheaves)	72	2 13/16	18.5	3/4	57	2	12	1/2	10	3/8	1100	2425
29929050	90mm Synchro Sheaves (10 sheaves)	90	3 9/16	23	7/8	104	4	14	9/16	12.7	1/2	2000	4409

Composite - ball bearing sheave (packs of)

29472970	40mm Control Line Sheaves (4 sheaves)	40	1 9/16	16	5/8	23	1	10	3/8	8	5/16	240	529
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Stainless Steel Blocks



29315139
130mm Single Shackle



29315169
130mm Single Eye



29315339
130mm Single Becket with Shackle



29315369
130mm Single Becket with Eye



29317659
175mm Halyard Block



29316749
155mm Runner



29317849
175mm Runner & Becket



29319949
Custom Pivoting Hinged Stirrup and Base



Specifications

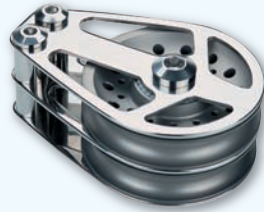
Part Number	Size	Description	Safe Working Load		Breaking Load		Sheave Diameter		Line Size		Length	
			kg	lb	kg	lb	mm	in	mm	in	mm	in
29314139	105	Single Shackle	3000	6613	6000	13226	105	4 1/8	16	5/8	220	8 7/8
29314169	105	Single Eye	3000	6613	6000	13226	105	4 1/8	16	5/8	192	7 1/2
29314339	105	Single Becket with Shackle	3000	6613	6000	13226	105	4 1/8	16	5/8	250	9 7/8
29314369	105	Single Becket with Eye	3000	6613	6000	13226	105	4 1/8	16	5/8	222	8 3/4
29315139	130	Single Shackle	5000	11021	10000	22043	130	5 1/8	18	1 1/16	266	10 1/2
29315169	130	Single Eye	5000	11021	10000	22043	130	5 1/8	18	1 1/16	227	9
29315339	130	Single Becket with Shackle	5000	11021	10000	22043	130	5 1/8	18	1 1/16	302	11 7/8
29315369	130	Single Becket with Eye	5000	11021	10000	22043	130	5 1/8	18	1 1/16	254	10 3/8
29316139	155	Single Shackle	7500	16532	15000	33064	155	6 1/8	20	3/4	333	13 1/4
29316169	155	Single Eye	7500	16532	15000	33064	155	6 1/8	20	3/4	275	10 7/8
29316339	155	Single Becket with Shackle	7500	16532	15000	33064	155	6 1/8	20	3/4	376	14 7/8
29316369	155	Single Becket with Eye	7500	16532	15000	33064	155	6 1/8	20	3/4	318	12 1/2
29317139	175	Single Shackle	9500	20940	19000	41881	175	6 7/8	22	7/8	363	14 1/4
29318139	200	Single Shackle	12500	27553	25000	55107	200	7 7/8	26	1	422	16 5/8
29317659	175	Halyard Block	10000	22043	20000	44085	175	6 7/8	22	7/8	199	7 7/8
29316749	155	Runner	6000	13226	12000	26451	155	6 1/8	20	3/4	225	8 3/8
29317849	175	Runner & Becket	10000	22043	20000	44092	175	6 7/8	22	7/8	310	12 1/8
29319949	225	Custom Pivoting Hinged Stirrup and Base	20000	44080	40000	88160	225	8 5/8	30	1 1/8	486	19 1/2
29319139	225	Single Block	24000	52896	48000	105792	225	8 5/8	30	1 1/8	382	15 1/16

These blocks are made to order.

Stainless Steel Footblocks



29385139
130mm Single Footblock



29385169
130mm Double Footblock



29386149
155mm Single Footblock
with Wide Sheave



29388169
200mm Double Footblock

Specifications

Part Number	Size	Description	Safe Working Load		Breaking Load		Sheave Diameter		Line Size		Length	
			kg	lb	kg	lb	mm	in	mm	in	mm	in
29384139	105	Single Footblock	3200	7054	6400	14107	105	4 1/8	16	5/8	154	6 1/8
29384169	105	Double Footblock	3200	7054	6400	14107	105	4 1/8	16	5/8	154	6 1/8
29385139	130	Single Footblock	5000	11021	10000	22043	130	5 1/8	18	11/16	190	7 1/2
29385169	130	Double Footblock	5000	11021	10000	22043	130	5 1/8	18	11/16	190	7 1/2
29386139	155	Single Footblock	7500	16532	15000	33064	155	6 1/8	20	3/4	217	8 5/8
29386149	155	Single Footblock with Wide Sheave	7500	16532	15000	33064	155	6 1/8	30	1 1/8	217	8 5/8
29386169	155	Double Footblock	7500	16532	15000	33064	155	6 1/8	20	3/4	217	8 5/8
29387139	175	Single Footblock	10000	22043	20000	44085	175	6 3/8	22	7/8	285	11 1/4
29387169	175	Double Footblock	10000	22043	20000	44085	175	6 3/8	22	7/8	285	11 1/4
29388139	200	Single Footblock	14000	30860	28000	61719	200	7 1/8	26	1	307	12
29388169	200	Double Footblock	14000	30860	28000	61719	200	7 1/8	26	1	307	12
29389139	225	Single Footblock	24000	52896	48000	105792	225	8 5/8	30	1 1/8	390	15 3/8
29389169	225	Double Footblock	24000	52896	48000	105792	225	8 5/8	30	1 1/8	390	15 3/8

These blocks are made to order



Stainless Steel Pad Eye



Removable Pad Eye



Removable Screw In
Deck Eye & Base



Removable Screw In Base



Removable Screw In
Pad Eye & Base

Specifications

Part No	Size	Description	Safe Working Load		Breaking Load		Base Dia		Removable Screw-In Top only
			kg	lb	kg	lb	mm	in	
29394016	105	Stainless Steel Pad Eye	3500	7700	7000	15400	72	2 7/8	
19861100	130	Stainless Steel Pad Eye	5000	11000	10000	22000	89	3 1/4	
29390013	155	Stainless Steel Pad Eye	7000	15400	14000	30800	137	5 7/16	
29390014	175	Stainless Steel Pad Eye	10000	22000	20000	44000	165	6 17/32	
29396019	130	Removable Pad Eye	5000	11000	10000	22000	100	4	
29397013	155	Removable Pad Eye	7000	15400	14000	30800	135	5 1/4	
29399013	175	Removable Pad Eye	10000	22000	20000	44000	160	6 1/4	
29394052	105	Removable Screw-in Pad Eye & Base	3000	6600	6000	13200	80	3 1/2	29394054
29396050	130	Removable Screw-in Deck Eye & Base	5000	11000	10000	22000	99	3 7/8	29396053
29396051	130	Removable Screw-in Base	5000	11000	10000	22000	99	3 7/8	
29396052	130	Removable Screw-in Pad Eye & Base	5000	11000	10000	22000	99	3 7/8	29396054
29399051	155/175	Removable Screw-in Base	9500	20940	19000	41800	135	5 1/4	
29399052	155/175	Removable Screw-in Pad Eye & Base	9500	20940	19000	41800	135	5 1/4	29399054

Custom Racing Blocks

Lewmar's block development continues at a rapid pace. Our original custom web blocks are now part of the standard range.



29911121
130mm Titanium Snatch Block



29911123
175mm High-Load Titanium Strop Block



Webbing blocks come in many sizes from 60mm to 225mm



29911131
105mm High-Load Wide Mouth Web Block



29911089
105mm High-Load Web Block



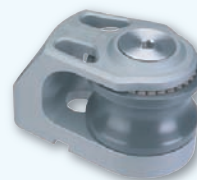
29911098
105mm Wide Floating Siamese Block



29912088
Siamese Runner Block



29911091
105mm Floating Block with 90° Lower Sheave & Becket



29916041
80mm Wide Footblock

Specifications

Part Number	Size	Description	Safe Working Load		Breaking Load		Line Size		Weight		Length		Sheave Dia	
			kg	lb	kg	lb	mm	in	g	oz	mm	in	mm	in
29911121	130	Titanium Snatch Strop Block	12000	26448	24000	52896	24	1	3000	106	218	8 5/16	130	5 1/8
29911120	130	Titanium Strop Block	12000	26448	24000	52896	24	1	2600	92	218	8 5/16	130	5 1/8
29911123	175	Titanium Strop Block	22500	49590	45000	99180	24	1	-	-	294	11 1/2	175	6 7/8
29911131	105	High-Load Web Block	6000	13225	14000	30860	14	9/16	786	27.5	191	7 1/2	105	4 1/8
29911089	105	HL Web Block	5000	11020	10000	22040	14	9/16	429	14.9	156	6 1/4	105	4 1/8
29911098	105	Wide Floating Siamese Block	3500	7714	7000	15428	14	9/16	797	28.3	190	7 1/2	105	4 1/8
29912088	105	Siamese Runner Block	8500	18700	1700	3740	16	5/16	1.64	3.6	275	10 13/16	105	4 1/8
29911091	105	Floating Block with 90° Lower Sheave & Becket	3500	7714	7000	15428	14	9/16	780	27.6	275	7	105	4 1/8
29916041	80	Wide Footblock	6000	13224	12000	26448	16	5/16	996	32.3	134	5 1/4	80	3 1/8

These blocks are made to order.



Block Accessories

Block Upstands – Specifications

Part Number	To Suit Block Size	Safe Working Load		Weight		Base Dia	
		kg	lb	g	oz	mm	in
29904046	30 & 40mm Control	400	990	24	0.8	30	1 3/16
29904050	60mm Control 60mm Synchro	400	990	24	0.8	45	1 3/4
19811000	60mm Control Singles / Fiddles 72mm Synchro 80mm Low-Load Racing Singles / Fiddles	800	1760	120	4	69	2 1/4
19821000	60mm Low-Load Singles	1100	2420	130	4.5	69	2 1/4
29393000	90mm Synchro	2000	4400	310	11	66	2 1/2



29904046



29904050



19811000
19821000



29393000

Pad Eyes



60/80mm Halyard Pad Eye



29904040
Gibb Diamond Pad Eye



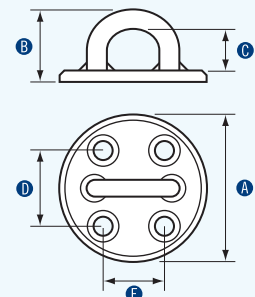
29904041
Gibb Square Pad Eye

Specifications

Part Number	Size	Description	Safe Working Load		Breaking Load		Weight		Bar Dia		Base Dia	
			kg	lb	kg	lb	g	oz	mm	in	mm	in
29904060	60/80	Halyard Pad Eye	3200	7055	6400	14110	154	5.4	10	3/8	66	2 5/8
29904053	105	Halyard Pad Eye	5000	11023	10000	22046	435	15.3	12.7	1/2	98	3 7/8
29904054	130	Halyard Pad Eye	7500	16535	15000	33069	787	27.8	15.8	5/8	115	4 1/2
29904040		Gibb Diamond Pad Eye	1135	2502	2270	5004	45	1.6	6	7/32	60 x 38	2 3/8 x 1 1/2
29904041		Gibb Square Pad Eye	3180	7011	6360	14021	227	8	9	5/16	70 x 70	2 3/4 x 2 3/4

Fixings and Dimensions

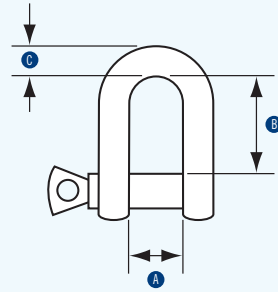
Pad Eye Part Number	A		B		C		D		E		Fixings	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
29904060	66	2 19/32	33	1 1/16	18	2 3/32	34	1 11/32	28	1 3/32	4xM8	4x 5/16
29904053	98	3 27/32	47.7	1 7/8	28	1 3/32	50	2 31/32	42	1 21/32	4xM12	4x 7/16
29904054	115	4 17/32	58.3	2 3/16	33.5	1 3/16	60	2 11/32	48	1 7/8	4xM12	4x 7/16
29914040	38	1 1/2	24	1 1/16	14	9/16	23	1 5/16	46	1 13/16	4xM5	4x 3/16
29914041	70	2 3/4	37	1 7/16	21	7/8	38	1 1/2	38	1 1/2	4xM8	4x 5/16



Forged D Shackles



19500100
Size 1 Forged D Shackle



Specifications

Part Number	To Suit Block Size	Description	Safe Working Load		Breaking Load		Pin Dia		A		B		C	
			kg	lb	kg	lb	mm	in	mm	in	mm	in	mm	in
19500000	50	Forged D Shackle	475	1050	950	2100	4	1/8	8	5/16	18	11/16	4	1/8
19500100	60	Forged D Shackle	775	1700	1550	3400	5	3/16	10	3/16	20	3/4	5	3/16
19500200	72	Forged D Shackle	1130	2500	2260	5000	6	1/4	13	1/4	25	1	6	1/4
19500300	90	Forged D Shackle	2050	4500	4100	9000	9.5	3/8	19	3/8	38	1	1/2	9.5
19500400		Forged D Shackle	3180	7080	6360	14159	12.7	1/2	27.7	1/2	52	2 1/16	12.7	1/2
19500500	105	Forged D Shackle	3500	7700	7000	15400	10	3/8	20	13/16	33	1 5/16	10	3/8



Nab Shackles – Pairs

Part Number	Size	Breaking Load	
		Kg	lb
29111000	Small	275	600
29113000	Large	275	600



29111000

Synchro Snap Shackles



29925040



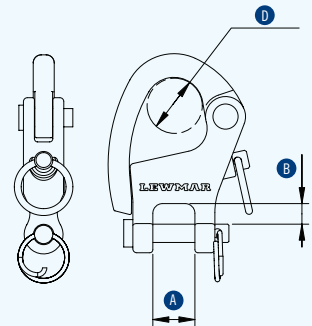
29926040



29927240



29929040

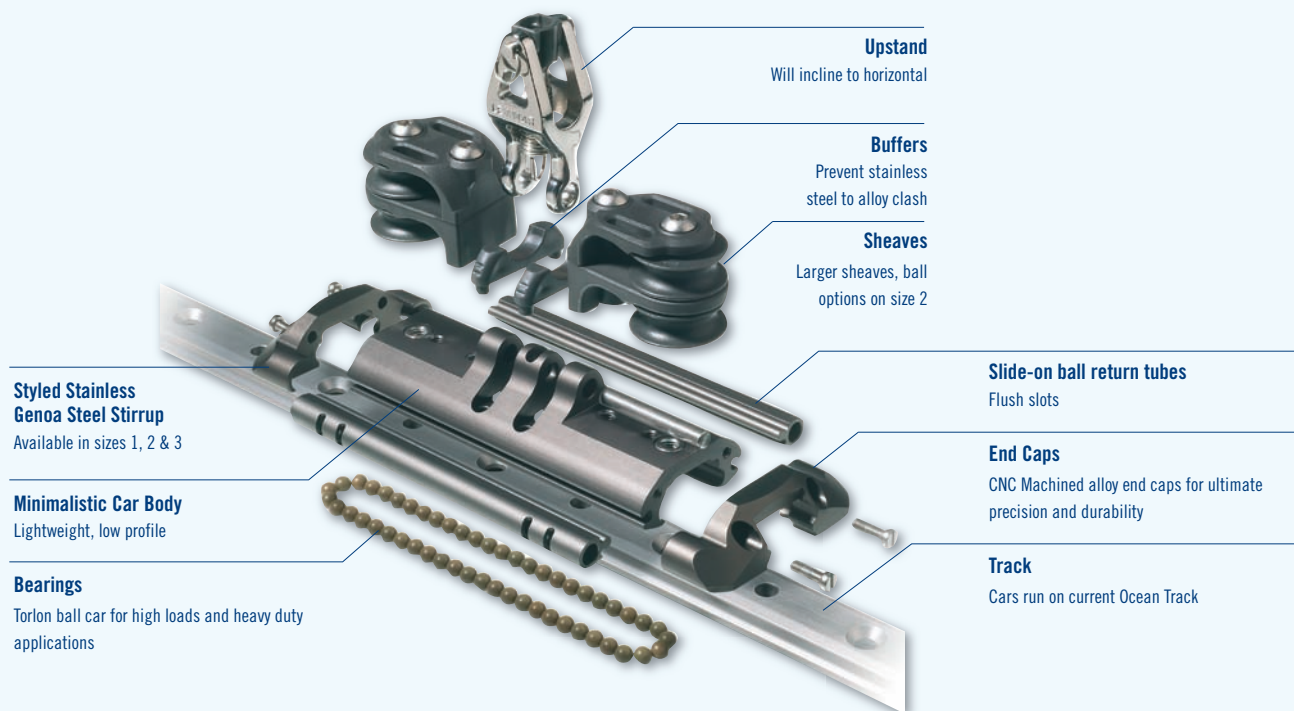


Specifications

Part Number	Size	Description	Safe Working Load		Breaking Load		Pin Diameter		A		B		D	
			kg	lb	kg	lb	mm	in	mm	in	mm	in	mm	in
29925040	50	Synchro Snap Shackle	450	990	900	1980	4	1/8	9	3/8	4.5	3/16	12	1/2
29926040	60	Synchro Snap Shackle	800	1760	1600	3520	5	3/16	12	1/2	6	1/4	14	9/16
29927240	72	Synchro Snap Shackle	1100	2420	2200	4840	6	1/4	13	1/2	6.5	1/4	18	11/16
29929040	90	Synchro Snap Shackle	2000	4400	4000	8800	9.5	3/8	17.5	11/16	7.5	5/16	22	7/8

Our Mainsheet Systems make sail control easy.

Lewmar's integrated range of mainsheet travelers and Genoa cars are fast, functional and attractive – perfect for everything from day boats to offshore cruisers and Grand Prix racers.



Uprand

Will incline to horizontal

Buffers

Prevent stainless steel to alloy clash

Sheaves

Larger sheaves, ball options on size 2

Styled Stainless Genoa Steel Stirrup

Available in sizes 1, 2 & 3

Minimalistic Car Body

Lightweight, low profile

Bearings

Torlon ball car for high loads and heavy duty applications

Slide-on ball return tubes

Flush slots

End Caps

CNC Machined alloy end caps for ultimate precision and durability

Track

Cars run on current Ocean Track



Car Upgrade

To optimize a car's maneuverability, sizes 0–3 can be upgraded from slide rods to recirculating balls.

Features

- Broad range – suitable for craft from 6m (20ft) – 30m (100ft)
- Re-circulating ball bearing cars and slide rod car options
- Short cars for radiused tracks and long cars for compact multiple block attachment
- 2 styles of car links for short and standard length cars
- Modular system creates multiple options and creative solutions
- Ball bearing control line options on size 2 and 3
- Lock-on alloy cam plate extrusions on size 1 and 2 end stops
- Cam cleat on car available in size 1 and 2
- Surface mounted end stops eliminate leakage
- Mainsheet kits provide a complete system in one package

Mainsheet Systems

For a complete mainsheet system, Lewmar offers system kits available in sizes 0, 1 and 2. Parts List: 1 x mainsheet car, 2 x control line end stops, control line sheaves, double sheave & cleat (on car) and length of Sliding Bolt track.

Selection Guide – Mainsheet & Genoa Cars

This selection guide is designed to be used as a quick reference only. For more detailed product information visit www.lewmar.com. Calculations are based on the average modern cruising yacht. Sail area, different rigs, heavy or light displacement, multihull or monohull, are all factors that affect a yacht's specifications. Loadings should be obtained from the designer and matched to the safe working load of the hardware. Please contact your Lewmar agent if you have any questions regarding the correct hardware for your boat.

Application & Sheeting Position	Size	Towing Purchase		Boat Length Overall										
		(Max. Available Purchase)	m ft	7.3 24	8.5 28	10.3 34	11.5 38	13.4 44	14.6 48	16.4 54	18.2 60	21.3 70	21+ 70+	
Genoa	0	2:1												
End Boom Mainsheet	0	2:1												
Mid Boom or Multihull	0	2:1												
Genoa	1	4:1 or 2:1 to winch												
End Boom Mainsheet	1	4:1												
Mid Boom or Multihull	1	4:1												
Genoa	2	4:1 or 2:1 to winch												
End Boom Mainsheet	2	5:1												
Mid Boom or Multihull	2	5:1												
Genoa	3	5:1 or 2:1 to winch												
End Boom Mainsheet	3	5:1 or 2:1 to winch												
Mid Boom or Multihull	3	5:1 or 2:1 to winch												

Note: Size 3 also includes High Load options.

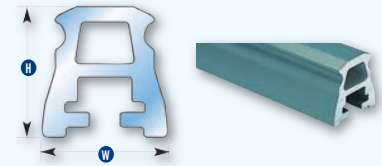


Track Selection Guide

Beam Track Specifications and Fixing Details

Some beam tracks can only use metric fasteners; see table for details. The moment of inertia is used to calculate the stiffness of material section. All track is extruded from Aluminum 6068T6.

Beam track is available from size 0 to 3 and is used when spanning cockpits and across companion way hatches. Three fixing bolts should always be used on either side of the span and washers fitted under the head of the bolt and between track and deck.



Part Number	Track Size	Length		Height		Width		Weight (Per Meter)		Max Safe Working Load of Car		Max Span Between Fixings		Moment of Inertia mm ⁴	Fixings	
		m	ft	mm	in	mm	in	g	oz	kg	lb	mm	in		Metric	Imperial
29160310	0	1	3'3"	24.7	1	24	15/16	954	33.65	450	1000	400	16	14806	Hex Hd M6	1/4"
29160315	0	1.5	4'11"													
29161310	1	1	3'3"													
29161315	1	1.5	4'11"	30	1 3/16	30	1 3/16	1084	38.27	900	1980	700	27	34157	Hex Hd M8	5/16"
29161320	1	2	6'7"													
2916 2310	2	1	3'3"													
29162315	2	1.5	4'11"	35	1 3/8	35	1 3/8	1560	54.91	1500	3300	800	31	68574	Hex Hd M10	-
29162320	2	2	6'7"													
29163310	3	1	3'3"													
29163315	3	1.5	4'11"	50	2	55	2 3/16	3640	128.13	2350	5180	900	35	343124	Hex Hd M12	-
29163320	3	2	6'7"													
29163330	3	3	9'10"													

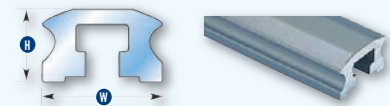
Heavy Duty Beam Track Specifications and Fixing Details

Used for greater span width.

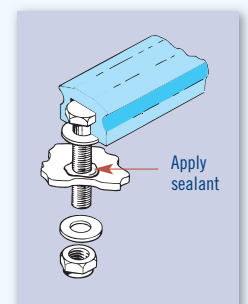
Part Number	Track Size	Length		Height		Width		Weight (Per Meter)		Max Safe Working Load of Car		Max Span Between Fixings		Moment of Inertia mm ⁴	Fixings	
		m	ft	mm	in	mm	in	g	oz	kg	lb	mm	in		Metric	Imperial
29161510	1	1	3'3"													
29161515	1	1.5	4'11"	42	1 3/4	32	1 1/4	1770	62.4	900	1980	900	35	101253	Hex Hd M8	5/16"
29161520	1	2	6'7"													
29162510	2	1	3'3"													
29162515	2	1.5	4'11"	51	2	51	2	3000	105.82	1500	3300	900	35	249505	Hex Hd M12	-
29162520	2	2	6'7"													

Sliding Bolt Track Specifications and Fixing Details

Sliding bolt track is available in sizes 1 & 2 and has two significant features – a smooth, clean profile with no visible fixings and the ability to retrofit new track to the deck using original bolt holes – no need to worry about old track pattern holes matching up with a new track. The track is designed to permit a washer to fit on each bolt between the track and deck to ensure a secure seal.

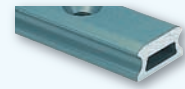


Part Number	Track Size	Length		Height		Width		Weight (Per Meter)		Max Safe Working Load of Car		Max Span Between Fixings		Moment of Inertia mm ⁴	Fixings	
		m	ft	mm	in	mm	in	g	oz	kg	lb	mm	in		Metric	Imperial
29161110	1	1	3'3"													
29161115	1	1.5	4'11"													
29161120	1	2	6'7"	14	9/16	23	14/16	520	18.30	900	1980	100	4	10071	Hex Hd M6	1/4"
29161130	1	3	9'10"													
29162110	2	1	3'3"													
29162115	2	1.5	4'11"	18	11/16	30	1 3/16	839	29.56	1500	3300	100	4	22188	Hex Hd M8	5/16"
29162120	2	2	6'7"													
29162130	2	3	9'10"													



Drilled Plunger Track Specifications and Fixing Details

Drilled track is commonly used and particularly useful where through deck fixing is not possible. An example would be double-skinned boats, where fixing bolts are trapped into a plate in the deck. Available from size 0 to 4.



Part Number	Track Size	Length		Height (H)		Width (W)		Weight (Per Meter)		Max Safe Working Load of Car		Max Span Between Fixings		Moment of Inertia mm ⁴	Fixings	
		m	ft	mm	in	mm	in	g	oz	kg	lb	mm	in		Metric	Imperial
29160410	0	1	3'3"													
29160415	0	1.5	4'11"	11	3/8	19	3/4	342	12.06	450	1000	80	3 1/8	4394	CSK M5	-
29160420	0	2	6'7"													
29161410	1	1	3'3"													
29161415	1	1.5	4'11"	13	1/2	23	7/8	530	18.65	900	1980	100	4	9407	CSK M6	1/4"
29161420	1	2	6'7"													
29161430	1	3	9'10"													
29162410	2	1	3'3"													
29162415	2	1.5	4'11"	15	9/16	30	1 1/8	764	26.95	2000	4400	100	4	22541	CSK M8	5/16"
29162420	2	2	6'7"													
29162430	2	3	9'10"													
29163610	3	1	3'3"													
29163615	3	1.5	4'11"	21	13/16	35	1 3/8	968	33.88	5000	11000	100	4	43788	CSK M10	3/8"
29163620	3	2	6'7"													
29163630	3	3	9'10"													
29917420	4	2	6'7"													
29917430	4	3	9'10"	29	1 1/8	50	2	2228	78.6	8000	17634	100	4	220297	CSK M12	1/2"
29917440	4	4	13'1"													
29917450	4	5	16'5"													

32mm T-Track Specifications and Fixing Details

Part Number	Track Size	Length		Height (H)		Width (W)		Weight (Per Meter)		Max Safe Working Load of Car		Max Span Between Fixings		Moment of Inertia mm ⁴	Fixings	
		m	ft	mm	in	mm	in	g	oz	kg	lb	mm	in		Metric	Imperial
29166215	T	1.5	4'11"													
29166225	T	2.5	8'2"	15	5/8	32	1 1/4	865	30.5	2350	5170	100	4	19899	CSK M8	CSK 5/16"
29166230	T	3	9'10"													

Size 2 Double Ball Racing Drilled Plunger Track - Specifications

Part Number	Track Size	Length		Height (H)		Width (W)		Weight (Per Meter)		Max Safe Working Load of Car		Max Span Between Fixings		Moment of Inertia mm ⁴	Fixings	
		m	ft	mm	in	mm	in	g	oz	tonne	lb	mm	in		Metric	Imperial
29162610	2	1	3'3"													
29162620	2	2	6'7"	27	1 1/16	30	1 3/16	1210	42.6	6	13226	75	3	42453	CSK M10	3/8"
29162630	2	3	9'10"													

Tracks can be bent to suit customer's requirements, please contact your local supplier for more information.

Stainless Steel track is available on request in 40mm T-Track, Size 3 and Size 4

Size 0 Ocean Cars, End Stops & Track

For boats up to 8.5m/28ft. Use Synchro 50mm/60mm blocks. Suitable for 6mm (1/4") control line.



29020701



29030100



29030600



29330105



29330107



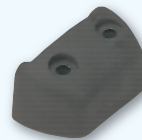
29040100



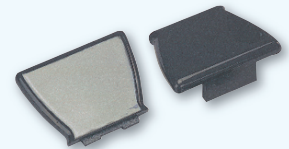
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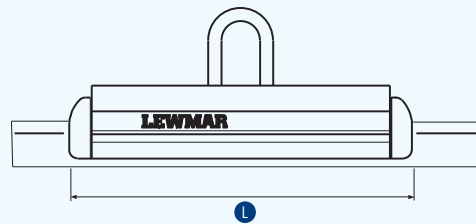
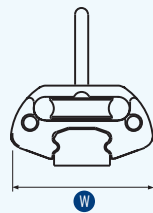
29170033



29170040



29170041



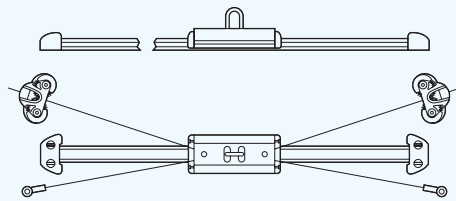
Size 0 Car – Specifications

Part Number	Description	Safe Working Load		Breaking Load		Length		Width		Weight	
		kg	lb	kg	lb	mm	in	mm	in	g	oz
29020701	Short Car with Delrin Balls & Shackle	200	440	460	1010	71	2.79	51	2	142	5.59
29330105	Short Car with Delrin Balls & Loops, 2 Double CL Sheaves	200	400	460	1010	73	2.87	51	2	150	6
29030100	Mainsheet Car with Delrin Balls & Shackle	450	990	900	1980	123	4.83	51	2	210	7.39
29030600	Mainsheet Car with Slide Rods, Shackle & Plunger	450	990	900	1980	123	4.83	51	2	225	7.92
29330107	Mainsheet car with Delrin Balls, Pivoting Loop, 2 Double CL Sheaves	450	990	900	1980	124	4.88	51	2	250	8.5
29040100	Genoa Car with Delrin Balls	450	990	900	1980	123	4.83	51	2	368	14.57
29040600	Genoa Car with Slide Rods & Plunger	600	1325	1200	2650	123	4.83	51	2	427	15.03
29170030	Control Line End Stop with Sheave	200	440	460	1010	58	2.3	51	2	78	2.75
29170033	Control Line End Stop, Becket, Sheave & Cleat	280	620	565	1243	65	2.56	51	2	397	13.97
29170040	Simple End Stop									10	0.35
29170041	Beam Track End Cover										

Size 0 Mainsheet System

Lewmar makes selecting your mainsheet system simple – with complete Mainsheet System Kits.

Lewmar's Size 0 Ocean Mainsheet System is a complete kit made specifically for yachts up to 28 feet (8.5m) long.



Size 0 Ocean Traveler Kit – 2:1 Purchase System

29060152	Size 0 Traveler System
Comprised of:	
29030100	1 x - Mainsheet Car
29170040	2 x - End Stop
29160112	1 x - 1.2m Sliding Bolt Track
29171010	1 x - Size 1 Dead Eye
29904100	2 x - Small Composite Cleat
29904104	2 x - Small Cam Fairlead

Boat Size:	Up to 8.5m	Up to 28ft
Track:	Sliding Bolt	
Max. Mainsail Area:		
End Boom:	16m ²	170 ft ²
Mid Boom:	12m ²	130 ft ²
Safe Working Load:	400kg	990 lbs

2906 0152
Mainsheet
Traveler
Kit - Size 0

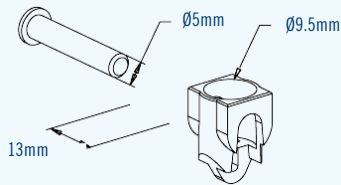


Size 1 & 2 Traveler Range Systems Products

Size 1

For boats up to 11m (36ft) upstands for 60mm blocks, option on 29431712 to fit 72mm. Suitable for 8mm (5/16") control line. Fits all Ocean size 1 tracks.

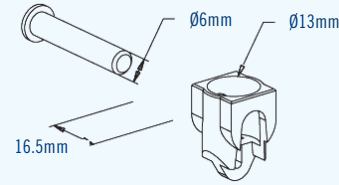
Size 1 Upstand Cup Detail



Size 2

For boats up to 15m (49ft). Upstands for 72mm blocks, option on 29432424 to fit 90mm. Suitable for 10mm (3/8") control line. Fits all Ocean size 2 tracks.

Size 2 Upstand Cup Detail



Mainsheet Cars – Specifications

Part No	Description	Safe Working Load		Breaking Load		Length		Width		Weight	
		kg	lb	kg	lb	mm	in	mm	in	g	oz
Size 1 Torlon Ball (TB) Mainsheet Car											
29421300	TB Short Car with Shackle	600	1329	1800	3960	107	4 3/16	71	2 3/4	228	8.00
29421400	TB Short Car with Upstand	600	1329	1800	3960	107	4 3/16	71	2 3/4	241	8.50
29431300	TB Car with Shackle	900	1980	1800	3960	162	6 3/8	71	2 3/4	313	11.0
29431311	TB Car with Shackle and 1 Pair CL Sheaves	900	1980	1800	3960	162	6 3/8	71	2 3/4	374	13.2
29431312	TB Car with Shackle and 2 Double CL Sheaves	900	1980	1800	3960	162	6 3/8	71	2 3/4	435	15.3
29431315	TB Car with Shackle, 1 Pair CL Sheaves and Becket	900	1980	1800	3960	162	6 3/8	71	2 3/4	378	13.2
29431316	TB Car with Shackle, 2 Double CL Sheaves and Becket	900	1980	1800	3960	162	6 3/8	71	2 3/4	390	13.7
29431337	TB Car Shackle and Plunger	900	1980	1800	3960	162	6 3/8	71	2 3/4	364	12.8
29431400	TB Car with Upstand	900	1980	1800	3960	162	6 3/8	71	2 3/4	364	12.8
29431411	TB Car with Upstand and 1 Pair CL Sheaves	900	1980	1800	3960	162	6 3/8	71	2 3/4	421	14.8
29431412	TB Car with Upstand and 2 Double CL Sheaves	900	1980	1800	3960	162	6 3/8	71	2 3/4	486	17.1
29431415	TB Car Upstand 1 Pair CL Sheaves and Becket	900	1980	1800	3960	162	6 3/8	71	2 3/4	472	16.6
29431416	TB Car Upstand 2 Double CL Sheaves and Becket	900	1980	1800	3960	162	6 3/8	71	2 3/4	540	19.0
29431712	TB Car Upstand for 72mm. 2 Double CL Sheaves	900	1980	1800	3960	162	6 3/8	71	2 3/4	486	17.1
29431814	TB Car Shackle, 2 Double CL Sheaves and Cam	900	1980	1800	3960	162	6 3/8	97	3 3/4	759	26.7
29431834	TB Car with Shackle, 2 Double CL Sheaves and Cam	900	1980	1800	3960	162	6 3/8	97	3 3/4		
29431916	TB Car Shackle, 2 Double CL Sheaves, Becket and Cam	900	1980	1800	3960	162	6 3/8	97	3 3/4	799	28.2
Size 1 Slide Rod (SR) Mainsheet Car											
29431500	SR Car with shackle	1000	2200	2000	4400	162	6 3/8	50	2	230	8.11
Size 2 Torlon Ball (TB) Mainsheet Car											
29422300	TB Short Car with Shackle	1100	2420	3000	6600	140	5 1/2	92	3 5/8	386	13.6
29422400	TB Short Car with Upstand	1100	2420	3000	6600	140	5 1/2	92	3 5/8	397	14
29432300	TB Car with Shackle	1500	3300	3000	6600	210	8 5/16	92	3 5/8	639	22.5
29432311	TB Car with Shackle and 1 Pair CL Sheaves	1500	3300	3000	6600	210	8 5/16	92	3 5/8	747	26.3
29432312	TB Car with Shackle and 2 Double CL Sheaves	1500	3300	3000	6600	210	8 5/16	92	3 5/8	871	30.7
29432315	TB Car with Shackle, 1 Pair CL Sheaves and Becket	1500	3300	3000	6600	210	8 5/16	92	3 5/8	867	34.1
29432316	TB Car with Shackle, 1 Pair CL Sheaves and Becket	1500	3300	3000	6600	210	8 5/16	92	3 5/8	991	39
29432372	TB Car with Shackle 2 Double Ball Bearing CL Sheaves	1500	3300	3000	6600	210	8 5/16	92	3 5/8	880	34.6
29432400	TB Car with Upstand	1500	3300	3000	6600	210	8 5/16	92	3 5/8	767	27
29432411	TB Car with Upstand and 1 Pair CL Sheaves	1500	3300	3000	6600	210	8 5/16	92	3 5/8	875	30.9
29432412	TB Car with Upstand and 2 Double CL Sheaves	1500	3300	3000	6600	210	8 5/16	92	3 5/8	997	35.1
29432415	TB Car Upstand 1 Pair CL Sheaves and Becket	1500	3300	3000	6600	210	8 5/16	92	3 5/8	993	35
29432416	TB Car Upstand 2 Double CL Sheaves and Becket	1500	3300	3000	6600	210	8 5/16	92	3 5/8	1117	39.4

Mainsheet Cars – Specifications (continued)

Part No	Description	Safe Working Load		Breaking Load		Length		Width		Weight	
		tonne	lb	tonne	lb	mm	in	mm	in	g	oz
Size 2 Torlon Ball (TB) Mainsheet Car (continued)											
29432420	TB Car with sz 3 Upstand	2	4400	4	8800	210	8 5/16	92	3 5/8	839	33
29432424	TB Car, sz 3 Upstand, 2 Double CL Sheaves	2	4400	4	8800	210	8 5/16	92	3 5/8	1050	37
29432426	TB Car, sz 3 Upstand, 2 Double CL Sheaves and Becket	2	4400	4	8800	210	8 5/16	92	3 5/8	1170	46
29432814	TB Car Upstand 1 Pair CL Sheaves and Cam (4:1)	1.5	3300	3	6600	210	8 5/16	120	4 3/4	1496	52.7
29432816	TB Car Upstand 2 Double CL Sheaves Becket and Cam (5:1)	1.5	3300	3	6600	210	8 5/16	120	4 3/4	1610	56.7
29432916	TB Car Shackle 2 Double CL Sheaves Becket and Cam (5:1)	1.5	3300	3	6600	210	8 5/16	120	4 3/4	1730	68.1
29432822	TB Car Long 2x sz2 Upstand, 2 Double CL Sheaves	1.8	3960	3.6	7920	307	12 1/16	92	3 5/8	1460	51.5
29432823	TB Car Long 3x sz2 Upstand, 2 Double CL Sheaves	3	6600	6	13200	307	12 1/16	92	3 5/8	1460	51.5
29432832	TB Car Long 2x sz3 Upstand 2 Double CL Sheaves	2.8	6160	5.6	12320	307	12 1/16	92	3 5/8	1560	55
29432833	TB Car Long 3x sz3 Upstand 2 Double CL Sheaves	3.5	7700	7	15400	307	12 1/16	92	3 5/8	1560	55
29432836	TB Car Long 2x sz3 Upstand, 2 Double CL Sheaves, Becket and Cam	2.8	6160	5.6	12320	307	12 1/16	120	4 3/4	2173	85.5
29432838	TB Car sz3 Upstand, 2 Double CL Sheaves, Becket and Cam	3.5	7700	7	15400	307	12 1/16	120	4 3/4	1786	70.3
Size 2 Slide Rod (SR) Mainsheet Car											
29432500	SR Car with Shackle	2	4400	4	8800	210	8 5/16	65	2 5/8	559	19.7
29432511	SR Car, Shackle, 1 Pair CL Sheaves	2	4400	4	8800	210	8 5/16	65	2 5/8	667	23.5
29432512	SR Car, Shackle, 2 Double CL Sheaves	2	4400	4	8800	210	8 5/16	65	2 5/8	791	27.9
29442412	SR Car, Upstand, 2 Double CL Sheaves	2	4400	4	8800	210	8 5/16	65	2 5/8	795	28
29442723	SR Car Shackle Plunger Stop	2	4400	4	8800	210	8 5/16	65	2 5/8	577	19.6



29421300
29422300



29421400
29422400



29431300
29432300



29431311
29432311



29431312
29432312



29431400
29432400



29431412
29432412



29431415
29432415



29431814
29432814



29432424



29432816



29432832

Mainsheet Cars (continued)



29431712



29432833



29431411
29432411



29431416
29432416



29431337



29431834



29432420



29432822



29432823



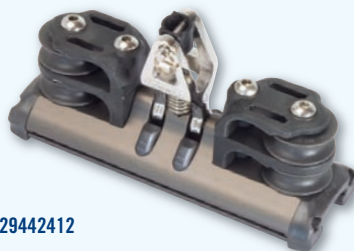
29432838



29431500
29432500



29432512



29442412





Traveller Systems

Traveller kits are made of all necessary components to assemble a standard system. Each one comes with Lewmar's sliding bolt track, which allows you to retrofit the new track to your deck using the original bolt holes.

Size 1 Mainsheet System

In the Size 1 kit, you'll find all the components necessary to assemble a standard system for yachts up to 36 feet (11m) long.

Size 2 Mainsheet System

Like the Size 1 system, the Size 2 Mainsheet system comes with everything you need for a complete standard system, including the sliding bolt track. A Size 2 can fit yachts up to 49 feet (15m) long.

Traveler Kit – 4:1 Purchase System

	Size 1	Size 2
Traveler System	29461354	29462354
Comprises of:		
1 x Mainsheet Car, Shackle, 2 Double Control Line Sheaves, Cleats and Becket	29431916	29432916
2 x End Stop with Double Control Line Sheaves	29471032	29472032
1 x Sliding Bolt Track	29161115 (1.5m)	29162118 (1.8m)
Boat Size	Up to 11m (36ft)	Up to 14.6m (48ft)
Max Mainsail Area		
End Boom:	34m ² (366 ft ²)	46m ² (495 ft ²)
Mid Boom:	21 m ² (226 ft ²)	38 m ² (410 ft ²)
Safe Working Load:	900kg (1980 lb)	1000kg (2000 lb)

Size 1 & 2 Genoa Cars



Size 1 & 2 Genoa Cars – Specifications

Part No	Description	Safe Working Load		Breaking Load		Length		Width		Weight	
		kg	lb	kg	lb	mm	in	mm	in	g	oz
Size 1											
Torlon Ball (TB) Genoa Cars											
29421366	*TB Short Genoa Tow Points Fore and Aft	600	1320	1800	3960	107	4 3/4	71	2 3/4	521	18.3
29441301	*TB Car Genoa Stirrup with Becket	900	1980	1800	3960	162	6 3/8	71	2 3/4	577	20.3
29441311	* TB Car Genoa Stirrup, 1 CL Sheave										
29441321	TB Car Genoa Stirrup 1 CL Sheave Port	900	1980	1800	3960	162	6 3/8	71	2 3/4	560	19.8
29441331	TB Car Genoa Stirrup 1 CL Sheave Starboard										
29441312	* TB Car Genoa Stirrup, Double CL Sheave										
29441322	TB Car Genoa Stirrup Double CL Sheave Port	900	1980	1800	3960	162	6 3/8	71	2 3/4	566	19.9
29441332	TB Car Genoa Stirrup Double CL Sheave Starboard										
29441345	*TB Car Genoa Stirrup 1 CL Sheave and Becket	900	1980	1800	3960	162	6 3/8	71	2 3/4	566	19.9
Slide Rod (SR) Genoa Cars											
29441500	*SR Car Genoa	1000	2200	2000	4400	162	6 3/8	50	2	480	16.8
29441513	*SR Car Genoa Stirrup, 1 CL Sheave	1000	2200	2000	4400	162	6 3/8	50	2	184	17
29441700	*SR Car Genoa Stirrup Plunger Stop										
29441720	SR Car Genoa Stirrup Plunger Stop Port	1000	2200	2000	4400	162	6 3/8	50	2	480	16.8
29441730	SR Car Genoa Stirrup Plunger Stop Starboard										
29441723	SR Car Shackle Plunger Stop	1000	2200	2000	4400	162	6 3/8	50	2	264	9.3
Size 2											
Torlon Ball (TB) Genoa Cars											
29442301	*TB Car Genoa Stirrup Becket point	1800	3960	3600	7920	210	8 5/16	120	4 3/4	1327	46.8
29442311	*TB Car Genoa Stirrup, 1 CL Sheave										
29442321	TB Car Genoa Stirrup 1 CL Sheave Port	1800	3960	3600	7920	210	8 5/16	120	4 3/4	1330	46.9
29442331	TB Car Genoa Stirrup 1 CL Sheave Stbd										
29442312	*TB Car Genoa Stirrup, Double CL Sheave										
29442322	TB Car Genoa Stirrup, Double CL Sheave Port	1800	3960	3600	7920	210	8 5/16	120	4 3/4	1354	47.7
29442332	TB Car Genoa Stirrup, Double CL Sheave Starboard										
29442345	*TB Car Genoa Stirrup, 1 CL Sheave and Becket	1800	3960	3600	7920	210	8 5/16	120	4 3/4	1359	47.9
Slide Rod (SR) Genoa Cars											
29442500	*SR Car Genoa	1800	3960	3600	7920	194	7 5/8	65	2 5/8	1100	38.8
29442700	*SR Car Genoa Stirrup Plunger Stop										
29442720	SR Car Genoa Stirrup Plunger Stop Port	1800	3960	3600	7920	194	7 5/8	65	2 5/8	1201	42.4
29442730	SR Car Genoa Stirrup Plunger Stop Stbd										

* Limiter supplied non-assembled for a port or starboard application.

Size 1 & 2 End Stops



29471030
29472030



29471031
29472031



29471032
29472032



29471035
29472035



29471836
29472836



29471037
29472037



29471036
29472036



29472535



29472501



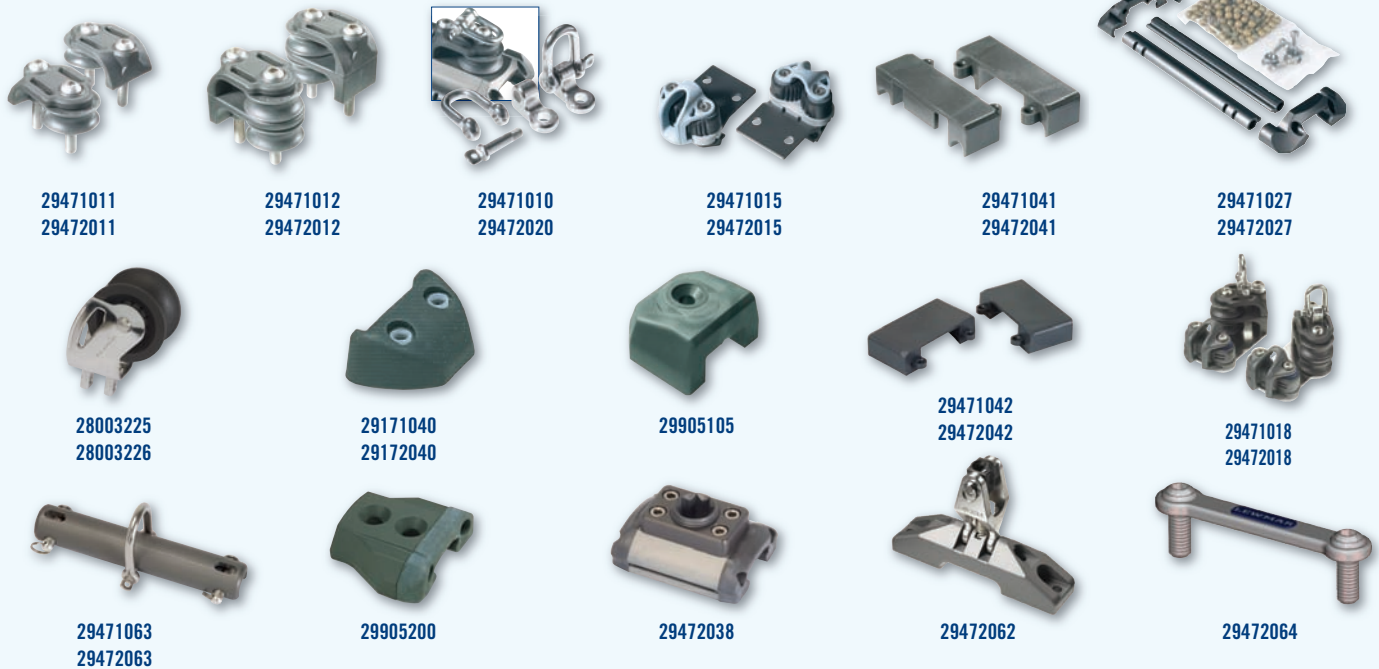
29472616



Size 1 & 2 End Stop – Specifications

Part No	Description	Safe Working Load		Breaking Load		Length		Width		Weight	
		kg	lb	kg	lb	mm	in	mm	in	g	oz
Size 1											
29471030	Bare End Stop	585	1287	1170	2574	47	1.9	29	1.1	99	3.5
29471031	End Stop with Single CL sheave	585	1287	1170	2574	75	2.9	50	2	140	4.9
29471032	End Stop with Double CL sheave	585	1287	1170	2574	75	2.9	50	2	172	6.1
29471035	End Stop with Single CL Sheave & Becket	585	1287	1170	2574	47	1.9	29	1.1	165	5.8
29471036	End Stop with Double CL Sheave and Becket	585	1287	1170	2574	47	1.9	29	1.1	185	6.5
29471037	Plunger Stop	650	1430	1300	2860	43	1.7	50	2	83	2.9
29471836	End Stop with Double CL Sheave, Becket and Cleat Assy (Pair)	585	1287	1170	2574	75	2.9	78	3.1	258	9.1
29441701	End Stop Sheet Lead	1000	2200	2000	4400	162	6 3/8	50	2	480	16.8
Size 2											
29472030	Bare End Stop	750	1650	1950	4290	105	4 1/8	65	2 5/8	238	8.4
29472031	End Stop with 1 CL Sheave	750	1650	1950	4290	105	4 1/8	65	2 5/8	301	10.6
29472032	End Stop with Double CL Sheave	750	1650	1950	4290	105	4 1/8	65	2 5/8	363	12.8
29472035	End Stop with 1 CL Sheave and Becket	750	1650	1950	4290	105	4 1/8	65	2 5/8	331	11.7
29472036	End Stop with Double CL Sheave and Becket	750	1650	1950	4290	105	4 1/8	65	2 5/8	393	13.8
29472037	Plunger Stop	975	2145	1950	4290	87	3 3/8	65	2 5/8	261	9.2
29472076	End Stop with Double Ball Bearing CL Sheave and Becket	750	1650	1950	4290	105	4 1/8	65	2 5/8	400	14.1
29472501	Mid Track End Stop	750	1650	1950	4290	105	4 1/8	65	2 5/8	238	8.4
29472535	Mid Track End Stop 1 CL and Becket	750	1650	1950	4290	105	4 1/8	65	2 5/8	338	11.9
29472616	End Stop with HD1 Double CL Assembly and Becket	750	1650	3800	8360	105	4 1/8	65	2 5/8	400	14.1
29472836	End Stop with Double CL Sheave, Becket and Cleat Assy (Pair)	750	1650	1950	4290	105	4 1/8	112	4 3/8	602	21.2
29442701	*End Stop Sheet Lead	1800	3960	3600	7920	194	7 5/8	65	2 5/8	1134	40

Size 1 & 2 Spares and Accessories



Size 1 & 2 Spares and Accessories – Specifications

Part No	Description	Safe Working Load		Breaking Load		Length		Width		Weight	
		kg	lb	kg	lb	mm	in	mm	in	g	oz
Size 1											
28003225	Genoa Stirrup Assembly	1000	2200	2000	2400	-	-	45	1 3/4	227	8
29171040	Track End Stop	250	550	500	1100	-	-	-	-	22	0.77
29905105	Impact End Stop	500	1100	560	1230	40	1 1/2	46	1 3/4	24	0.8
29471010	Becket Assy (Pair)	585	1287	900	1980	43	1 11/16	27	1 1/16	51	1.7
29471011	Single CL Sheave Assy (Pair) with Fixings for End Stop or Traveller	585	1287	1170	2574	47	1 7/8	29	1 1/8	82	2.9
29471012	Double CL Sheave Assy (Pair) with Fixings for End Stop or Traveller	585	1287	1170	2574	47	1 7/8	29	1 1/8	148	5.2
29471015	Cleat Assy for End stop (Pair)	180	396	360	792	47	1 7/8	59	2 5/16	123	4.3
29471041	Beam Track End Cover (Pair)	-	-	-	-	13	1/2	50	2	12	0.4
29471042	HD Beam Track End Cover (Pair)	-	-	-	-	13	1/2	50	2	18	6
29471018	Double Control Line Sheaves and Cleat Assy for Cars (4:1)	585	1287	1170	2574	-	-	-	-	180	6.3
29471027	Conversion Kit to Re-circulate Balls	-	-	-	-	-	-	-	-	-	-
29471063	Short Car Link	1150	2530	2300	5060	71	2 3/4	25	1	160	5.6
Size 2											
28003226	Genoa Stirrup Assembly	1800	3960	3600	7920	-	-	60	2 3/8	620	21.9
29172040	Track End Stop	-	-	-	-	-	-	-	-	30	1.1
29905200	HD Racing Impact end stop (needs extra drilling in track)	1250	2755	3300	7275	114	4 1/2	-	-	158	5.6
29472010	Becket Assembly (Pair)	750	1650	1950	4290	56	2 3/16	33	1 5/16	114	4.2
29472011	Single CL Sheave Assy (Pair) with Fixings for End Stop or Traveller	750	1650	1950	4290	40	1 5/8	63	2 1/2	137	4.8
29472012	Double CL Sheave Assy (Pair) with Fixings for End Stop or Traveller	750	1650	1950	4290	40	1 5/8	63	2 1/2	261	9.2
29472015	Cleat Assembly for End Stop (Pair)	180	396	360	792	69	2 3/4	97	3 3/4	368	12.9
29472018	Double Control Line Sheaves and Cleat Assembly for Cars (4:1)	360	790	720	1580	-	-	-	-	625	22
29472027	Conversion Kit to Re-circulate Balls	-	-	-	-	-	-	-	-	-	-
29472038	Friction Stop	975	2145	1950	4290	87	3 3/8	65	2 5/8	261	9.2
29472041	Beam Track End Cover (Pair)	-	-	-	-	22	7/8	65	2 5/8	26	0.9
29472042	HD Beam Track End Cover (Pair)	-	-	-	-	3.5	1/8	67	2 5/8	40	1.4
29472062	Car Link with Sz3 Upstand (90mm Synchro / 80mm 2G Racing)	1500	3300	3000	6600	-	-	-	-	639	22.5
29472063	Short Car Link (for 90mm Synchro or 80mm 2G Racing)	2200	4840	4400	9680	-	-	-	-	383	13.5
29472064	Dog Bone Car Link (Standard and Short Car Link)	1500	3300	3000	6600	-	-	-	-	110	3.8

Size 2 Double Ball Racing Cars

Lewmar patented double ball cars are designed to give strong car for their length. They provide maximum travel on the track while reducing the weight of the whole system. Designed originally for the America's Cup, this technology has been proven time and again and is now available for the Grand Prix Circuit.

Two double stacked 8mm (5/16") Torlon Balls races take the load, even on off-center loadings, as one race counter acts the other, stabilizing the car and making it exceptionally free running.



29452600



29452200



29452202



29452400



Size 2 Double Ball Racing Car – Specifications

Part Number	Description	Safe Working Load		Breaking Load		Length		Width		Weight	
		tonne	lb	tonne	lb	mm	in	mm	in	g	oz
Size 2 Double Ball Racing (DBR) Mainsheet Car											
29452200	Mainsheet Car 2.5T for Webbing Blocks	2.5	5500	5	11000	111	4 ½	80	3 ½	578	20.3
29452202	Mainsheet Car 3T Shackle	3	6600	6	13200	111	4 ½	80	3 ½	606	21.3
29452400	Mainsheet Car 4T for Twin or Single Webbing Blocks	4	8817	8	17637	180	7 ½	80	3 ½	871	30.7
29452600	Mainsheet Car 6T for Twin or Single Webbing Blocks	6	13226	12	26455	242	9 ½	80	3 ½	1280	45.15
Size 2 Double Ball Racing (DBR) Transverse jib cars											
29452201	Transverse Genoa Car with 1:1 Height Adjuster	2.5	5500	5	11000	116	4 ½	80	3 ½	670	23.6
29452401	Transverse Genoa Car, 4T 2:1 Height Adjuster	4	8817	8	17637	180	7 ½	80	3 ½	1490	52.5
29452601	Transverse Genoa Car, 6T 1:1 Height Adjuster	6	13226	12	26455	242	9 ½	80	3 ½	2180	76.9
Size 2 Double Ball Racing (DBR) End stop											
29472601	Impact End Stop	1.25	2755	3.3	7275	88	3 ½	80	3 ½	276	9



29452201



29472601

Size 3 New Traveler Range Mainsheet Cars

For boats up to 22m (72ft). Cars have fully machined ball races. Mainsheet cars up to 2.5T SWL use Size 2 control line sheaves; above this—HL Racing 60mm Footblocks. All cars fit original Size 3 track, but Genoa plunger stops need drilled plunger track ref 291636** (see p.163).

Size 3 Mainsheet Car – Specifications

Part No	Description	Safe Working Load		Breaking Load		Length		Width		Weight	
		tonne	lb	tonne	lb	mm	in	mm	in	g	oz
Size 3 Mainsheet Torlon Ball (TB) Cars											
29423400	TB Car Short Sz 3 Upstand	2	4400	4	8800	150	5 15/16	88	3 1/2	781	27.3
29423301	TB Short Car with Shackle	2	4400	4	8800	150	5 15/16	88	3 1/2		
29423302	TB Short Car with 2 Shackles	2	4400	4	8800	150	5 15/16	88	3 1/2	700	24.5
29423900	TB Transverse Jib Car	2	4400	4	8800	150	5 15/16	88	3 1/2	646	22.6
29433400	TB Car Upstand	2.5	5500	5	11000	215	8 1/2	88	3 1/2	743	26
29433300	TB Car Shackle	2.5	5500	5	11000	215	8 1/2	88	3 1/2	924	32.3
29433314	TB Car Shackle, 2 Double CL Sheaves	2.5	5500	5	11000	215	8 1/2	88	3 1/2	993	34.8
29433414	TB Car Upstand, 2 Double CL Sheaves	2.5	5500	5	11000	215	8 1/2	88	3 1/2	1200	42
29433416	TB Car Upstand, 2 Double CL Sheaves & becket	2.5	5500	5	11000	215	8 1/2	88	3 1/2	1790	62.6
29433832	TB Car 2 Upstands, 2 Double CL Sheaves	3.5	7700	7	15400	270	10 5/8	88	3 1/2	1810	63.8
29433833	TB Car 3 Upstands, 2 Double CL Sheaves	4.0	8800	8	17600	300	11 3/4	88	3 1/2	2190	77.2
29433602	3.5T Car Upstand Single Pair CL Sheaves	3.5	7700	7	15400	270	10 5/8	88	3 1/2	1595	55.8
29443604	3.5T Car Upstand 2 Double CL Sheaves	3.5	7700	7	15400	270	10 5/8	88	3 1/2	1610	56.8
29433682	4.2T Double Upstand Car Single Pair CL Sheaves	4.2	9240	8.4	18480	340	13 3/8	88	3 1/2	2180	76.3
29433683	6T Triple Upstand Car Single Pair CL Sheaves	6.0	13200	12	26400	420	16 1/2	88	3 1/2	3120	110
Size 3 Mainsheet Torlon Ball (TB) cars - radiused (not shown)											
29333246	TB Car with Upstand, 2 Double CL Sheaves HR 4-6m	2.5	5500	5	11000	215	8 1/2	88	3 1/2	993	34.8
29333269	TB Car with Upstand, 2 Double CL Sheaves HR 6-9m	2.5	5500	5	11000	215	8 1/2	88	3 1/2	993	34.8
39333268	TB Car, 2 Upstands, 2 Double CL Sheaves HR 6-8m	3.5	7700	7	15400	270	10 5/8	88	3 1/2	1810	63.8
39333281	TB Car, 2 Upstands, 2 Double CL Sheaves HR 8-10m	3.5	7700	7	15400	270	10 5/8	88	3 1/2	1810	63.8
29333245	TB Car, 2 Upstands, 2 Double CL Sheaves VR 8m	3.5	7700	7	15400	270	10 5/8	88	3 1/2	1810	63.8
29333247	TB Car, 3 Upstands, 2 Double CL Sheaves VR 8.2m	4.0	8800	8	17600	300	11 3/4	88	3 1/2	2190	77.2
29333248	6T 3 Upstands, Single Pair CL Sheaves VR 14m	6.0	13200	12	26400	420	16 1/2	88	3 1/2	3120	110
29333250	6T 3 Upstands, Single Pair CL Sheaves HR 9.5-11m	6.0	13200	12	26400	420	16 1/2	88	3 1/2	3120	110



29423400



29423302



29423900



29433400

Size 3 Mainsheet Cars (continued)



29423301



29433383



29433300



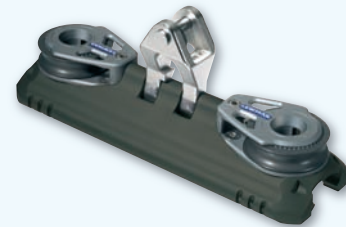
2943 3314



29433414



29433416



29433602



Size 3 Genoa Car – Specifications

Part No	Description	Safe Working Load		Breaking Load		Length		Width		Weight	
		tonne	lb	tonne	lb	mm	in	mm	in	g	oz
Size 3 Torlon Ball (TB) Genoa cars											
29443310	TB Genoa Car, Tow Eye	3.5	7700	7	15400	215	8 1/2	88	3 1/2	1790	63
29443311	TB Genoa Car with 1 CL Sheave	3.5	7700	7	15400	215	8 1/2	88	3 1/2	1565	54.8
29443611	5T Genoa Car with 1 CL Sheave	5	11000	10	22000						
Size 3 Slide Rod (SR) Genoa cars											
29443700	SR Genoa Car with Plunger	3.5	7700	7	15400	180	7 1/16	70	2 13/16	1410	49.4
29443700C	SR Genoa Car with Ocean Plunger	3.5	7700	7	15400	180	7 1/16	70	2 13/16	1410	49.4
29443702	SR Genoa Car with Plunger (Composite Sheave)	2.25	4950	4.5	9900	180	7 1/16	70	2 13/16	1079	37.8
29446700	5T Genoa Car with Plunger	5	11000	10	22000					3940	139



29443311



29443700

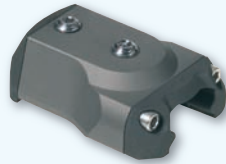


29443702

Size 3 New Traveller Range Car Accessories & Spares



29473024



29473030



29473032



29473035



29473036



29473037



29473037C



29473040



29473063



29473063



29443701

Size 3 NTR Car Accessories – Specifications

Part No	Description	Safe Working Load		Breaking Load		Length		Width		Weight	
		tonne	lb	tonne	lb	mm	in	mm	in	g	oz
End Stops											
29173040	Simple End Stop	-	-	-	-	-	-	-	-	42	1.5
29473032	Double CL End Stop	0.8	1760	1.6	3520	93	3 11/16	70	2 13/16	390	13.7
29473035	Single CL End Stop with Becket	0.8	1760	1.6	3520	93	3 11/16	70	2 13/16	381	13.3
29473036	Double CL End Stop with Becket	0.8	1760	1.6	3520	93	3 11/16	70	2 13/16	460	16.1
29473135	High Load, Single CL End Stop with Becket	3	6600	6	13200	140	5 1/2	70	2 13/16	537	18.8
29473136	High Load, Double CL End Stop with Becket	3	6600	6	13200	140	5 1/2	70	2 13/16	769	27.1
29473030	Impact End Stop	2.2	4840	4.4	9680	93	3 11/16	70	2 13/16	247	8.7
29473037	Plunger End Stop	2	4400	4	8800	80	3 3/16	70	2 13/16	298	10.4
29483037C	Plunger End Stop with Ocean Plunger	2	4400	4	8800	80	3 3/16	70	2 13/16	298	10.4
29443701	End Stop Sheet Lead	2	4400	4	8800	140	5 1/2	70	2 13/16	885	31
Accessories											
29473041	Beam Track End Cover	-	-	-	-	-	-	-	-	42	1.5
29473063	Short Car Link (for 105mm Synchro or Racing)	3.75	7700	7.5	15400	-	-	-	-	455	16
29473024	Upstand Kit NTR	2.5	5500	5	11000	-	-	-	-	274	9.7

Genoa T-Track Cars

Cars fit standard 32mm (1¼") T-Track. T-Track cars are available in three styles and cover three different loading levels to suit boats from 9m (30ft) up to 15.5m (50ft).



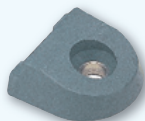
29041700



29042700



29172015



29172016



29442705

Features

- Precision workmanship
- Three styles
- Simple to fit
- Low maintenance

Genoa Cars and T-Track Accessories – Specifications

Part No	Size	Description	Safe Working Load		Breaking Load		Length		Width		Weight	
			tonne	lb	tonne	lb	mm	in	mm	in	g	oz
29041700	1	Plunger Car	0.9	1980	1.8	3960	111	4 3/8	56	2 1/4	540	19.1
29042700	2	Plunger Car	1.5	3300	3	6600	120	4 11/16	56	2 1/4	719	25.3
29042704	2	Control Line Sheave Car	1.5	3300	3	6600	128	5	56	2 1/4	719	25.3
29442705	2	Tri-Roller Genoa Car	1.5	3300	3	6600	147	5 3/4	64	2 1/2	767	27.1
29172117	2	Slider with Shackle and Plunger	1.5	3300	3	6600	120	4 11/16	56	2 1/4	480	17
29043702	3	SS Stirrup, Plunger Car	2.35	5170	4.7	10340	170	6 3/4	56	2 1/4	1199	47.3
29172015	-	Control Line End Stop	-	-	-	-	-	-	-	-	120	4.2
29172016	-	Track End Stop	-	-	-	-	-	-	-	-	19	0.7



32mm T-Track

32mm (1¼") wide T-Track is a universal track widely accepted and used on many boats up to 50ft. For details see beginning of travellers section.



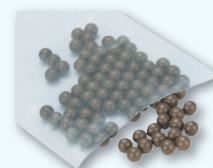
Accessories

Car Bearings For Ocean and NTR Cars – Torlon Balls

Part Number	Description	Where Used	Diameter	
			mm	in
29171021	Torlon Balls (Per 100)	SZ 1 Cars	6.4	1/4
29172021	Torlon Balls (Per 100)	SZ 2 Cars	7.8	5/16
29173021	Torlon Balls (Per 100)	SZ 3 Cars	9.5	3/8
29174021	Torlon Balls (Per 100)	SZ 4 Cars	12.7	1/2



Delrin Balls
(100)



Torlon Balls
(100)

Block Bearing Specification – Delrin Balls

Part Number	Description	Where Used	Diameter	
			mm	in
29175022	Delrin Balls (Per 100)	60HL Blocks	3.2	1/8
29170022	Delrin Balls (Per 100)	60LL+80HL+ 105+130 Blocks/ Footblocks	4.6	3/16
29171022	Delrin Balls (Per 100)	80LL+105+ 155+175 Blocks/ Footblocks	6.4	1/4

Torlon Rollers for Racing Blocks and Foot Control Line Sheaves

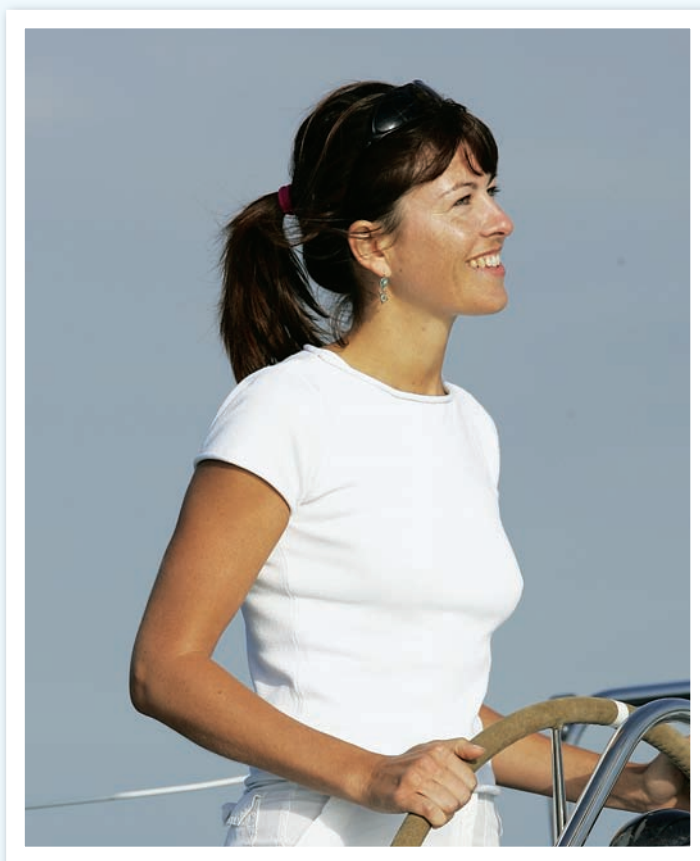
Part Number	Description	Block Size
29900010	Torlon Roller (per 22)	60mm
29900011	Torlon Roller (per 24)	80mm
29900012	Torlon Roller (per 35)	105mm
29900013	Torlon Roller (per 47)	130mm
29900014	Torlon Roller (per 50)	155mm
29900015	Torlon Roller (per 59)	175mm
29900016	Torlon Roller (per 68)	200mm
29900017	Torlon Roller (per 78)	225mm

Slide Rods For Ocean Cars

Part Number	Description	Where Used	Diameter	
			mm	in
29170026	Slide Rods (Per Pair)	SZ 0 Cars	6.4	1/4
29171026	Slide Rods (Per Pair)	SZ 1 Cars	7.8	5/16
29172026	Slide Rods (Per Pair)	SZ 2 Cars	9.5	3/8
29173026	Slide Rods (Per Pair)	SZ 3 Cars	12.7	1/2

Ocean Car Accessories

Part Number	Size	Description
29172044	2	Alloy End Cap Kit
29173044	3	Alloy End Cap Kit
29171020	1	Stainless Steel Cam Plate (Sizes 0 & 1 are the same size)
29172020	2	Stainless Steel Cam Plate
29173020	3	Stainless Steel Cam Plate
29170046	0	Rubber Buffer Kit
29171046	1	Rubber Buffer Kit
29172046	2	Rubber Buffer Kit
29173046	3	Rubber Buffer Kit



Slide Rods



Stainless Steel Cam Plate
Available in sizes 1-3



Rubber Buffer Kit
Available in sizes 2-3



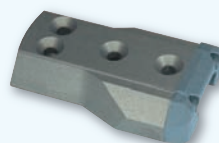
Alloy End Cap Kit
Available in sizes 2-3

Size 4 Racing Cars, Accessories & Track

Size 4 Racing cars for major offshore events and the performance-conscious yachtsman. High load 80mm / 3 1/8" control line sheaves for 14mm / 9/16" line. 12mm / 1/2" Torlon balls running in fully machined ball races. Additional weight reducing slots machined along the top of the return ball race. End stops fixed through deck and track.



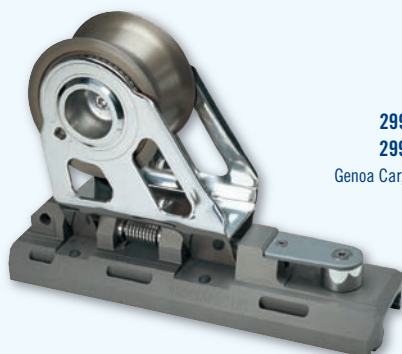
29903402
Mainsheet Car, Twin Upstand, 1 Control Line Sheave



29905400
High Load Impact End Stop



29905401
Track End



29903451 PORT
29903452 STBD
Genoa Car, Stirrup Torlon Ball & Dead Eye



29905412
Plunger Stop



29905414
Track Plug

Size 4 Racing Car – Specifications

Part No	Description	Safe Working Load		Breaking Load		Length		Width		Line Exit Height		Weight	
		tonne	lb	tonne	lb	mm	in	mm	in	mm	in	g	oz
Size 4 Racing Mainsheet Car													
29903401	Single Upstand and 1 Pair CL Sheaves	8	17634	16	35268	465	18 3/8	113	4 7/16			5195	183.2
29903402	Twin Upstand and 1 Pair CL Sheaves	8	17634	16	35268	465	18 3/8	113	4 7/16			5195	183.2
Size 4 Racing Genoa Cars													
29903451	TB Car Genoa Stirrup & Dead Eye - Port	6	13225	12	26450	385	15 1/8	113	4 7/16	137	5 3/8	6740	236.5
29903452	TB Car Genoa Stirrup & Dead Eye - Stbd	6	13225	12	26450	385	15 1/8	113	4 7/16	137	5 3/8	6740	236.5
29903453	TB Car Genoa Stirrup with 1 CL Sheave Port	6	13225	12	26450	385	15 1/8	113	4 7/16	137	5 3/8	6740	236.5
29903454	TB Car Genoa Stirrup with 1 CL Sheave Stbd	6	13225	12	26450	385	15 1/8	113	4 7/16	137	5 3/8	6740	236.5
29903457	TB Car Genoa Stirrup with Slide Rod Plunger - Port	6	13225	12	26450	385	15 1/8	113	4 7/16	137	5 3/8	6740	236.5
29903458	TB Car Genoa Stirrup with Slide Rod Plunger - Stbd	6	13225	12	26450	385	15 1/8	113	4 7/16	137	5 3/8	6740	236.5
Size 4 Racing End Stop													
29905400	High Load Impact End Stop	4	8817	8	17637	185	7 1/4	113	4 7/16			1040	36.7
29905401	Track End	1	2204	2	4409	110	4 5/16	113	4 7/16			580	20.5
29905410	Control Line End Stop	6	13225	12	26450	185	7 1/4	113	4 7/16			1500	52.9
29905412	Plunger Stop	3	6613	6	13225	110	4 5/16	113	4 7/16			897	31.6
29905414	Track Plug											36	1.3



A true reflection of quality.

Especially developed for today's super yachts and yesteryear's classics. They combine aesthetic beauty with design quality for yachts between 21m (70ft) and 36.5m (120ft).

The cars are complemented by Lewmar's range of stainless steel blocks.

Features

- Precision workmanship
- Stainless steel for ultimate corrosion resistance
- Polished and passivated to a high quality finish
- Recirculating ball system for free movement under load
- Main and genoa stops fitted with high-energy absorption buffers
- Low maintenance



Genoa Systems

- High load impact end stops available with sheet lead option.
- Recirculating Torlon ball or slide rod Genoa cars with fixed stirrups prevent damage to coach work on deck.
- Side rollers for fair lead of sheet onto sheaves.
- Screw-down plunger stops with option on car.
- Car length designed to fit snugly between plungers for passage making.
- Control line end stops for towing cars under load.

Mainsheet Systems

- Control line end stops with composite sheaves for low maintenance and free running.
- Recirculating ball mainsheet cars run on Torlon balls with padeyes to support block.
- Designed to fit snugly between plunger stops for passage making.
- End stops have high energy impact absorption buffers.
- Styled with snag-free soft edges; polished and passivated to a high quality finish.

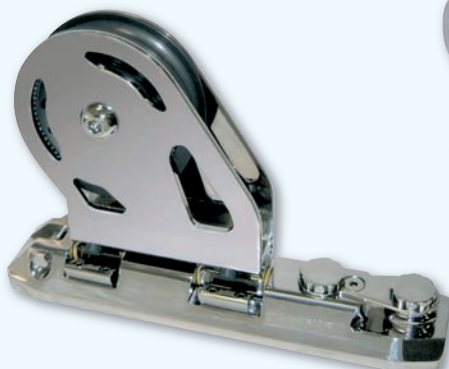
Stainless Steel Cars & End Stops

Highly polished stainless steel cars running on recirculating Torlon balls in fully machined ball races. Composite control line sheaves with composite bearings. Aluminum Genoa sheet sheaves with composite bearings. Slide rod genoa cars also available.



29034509

Stainless Steel Mainsheet Car, 1 Padeye, Torlon Balls, 2 Control Line Sheaves



29347029

Stainless Steel Genoa Car, Hinged Stirrup Slide Rod Plunger & Towing Eye Port



29044829

Stainless Steel Genoa Car, Fixed Stirrup, Torlon Balls, 1 Control Line Sheave



29334134

Stainless Steel Mainsheet Car 1 Upstand Torlon Balls & Control Line Eye



29044869

Stainless Steel Genoa Car, Fixed Stirrup, Torlon Balls, 1 Control Line Sheave & Plunger

Stainless Steel Car – Specifications

Part Number	Description	Safe Working Load		Breaking Load		Length		Width	
		kg	lb	kg	lb	mm	in	mm	in
29034509	Mainsheet Car, 1 Padeye, Torlon Balls, 2 Control Line Sheaves	6500	14326	1300	28652	385	15 1/8	120	4 3/4
29034709	Mainsheet Car, 2 Padeyes, Torlon Balls, 2 Control Line Sheaves*	10000	22040	20000	44080	485	19 1/8	120	4 3/4
29334134	Stainless Steel Mainsheet Car, 1 Upstand Torlon Balls & Control Line eye	13000	28652	26000	57200	782	30 3/4	120	4 3/4
29044829	Genoa Car, Fixed Stirrup, Torlon Balls, 1 Control Line Sheave	6500	14326	13000	28652	385	15 1/8	120	4 3/4
29044869	Genoa Car, Fixed Stirrup, Torlon Balls, 1 Control Line Sheave & Plunger	6500	14326	13000	28652	385	15 1/8	120	4 3/4
29347029	Stainless Steel Genoa Car, Hinged Stirrup, Slide Rod Plunger & Towing Eye Port	13000	28652	26000	57200	510	20	120	4 3/4
29347030	Stainless Steel Genoa Car, Hinged Stirrup, Slide Rod Plunger & Towing Eye Starboard*	13000	28652	26000	57200	510	20	120	4 3/4

End Stop Specifications

29174019	Simple End Stop					38	1 1/2	76	3
29174009	Impact End Stop	4500	9918	9000	19836	203	8	120	4 3/4
29174139	End Stop with 1 Control Line Sheave	4500	9918	9000	19836	203	8	120	4 3/4
29174049	End Stop with 1 Control Line Sheave & Becket	4500	9918	9000	19836	203	8	120	4 3/4
29174059	End Stop with 2 Control Line Sheaves	4500	9918	9000	19836	203	8	120	4 3/4
29174069	End Stop with 2 Control Line Sheaves & Becket	4500	9918	9000	19836	203	8	120	4 3/4
29174079	Impact End Stop with Sheet Lead	1500	3306	9000	19836	203	8	143	5 3/4
29174129	Plunger Stop	4500	9918	9000	19836	99	3 3/4	102	4



29174009

Stainless Steel Impact End Stop



29174079

Stainless Steel Impact End Stop with Sheet Lead



29174129

Stainless Steel Plunger Stop



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web: www.kaptandenizcilik.com



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fax: +971 2 6668154

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Duboats Trading Llc

PO Box 53793

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web: www.bainbridgeint.com

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17 Hollybank Lane,
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351 New Whitfield Street, Guilford, CT, 06437, USA

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For a complete list US distributors please visit:

<http://www.lewmar.com/usa/distributors.htm>



Venezuela

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Cruse Con C, La Arenera, Venezuela

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web: www.martinezmachine.com



29904042	143	29921059	133	29946131	151	39670070	52	48077209	87	49058000	85	589006	38
29904043	140	29924061	134	29946132	151	39677050	52	89300053	223	49058001	85	589006	40
29904043	143	29924062	134	29946611	151	39677070	52	49006010	81	49058002	85	589007	40
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29904046	139	29925002	131	29946801	151	39903030	48	19006190	81	49058004	85	589008	92
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29904050	158	29925004	131	30067300	48	399100303	48	49007031	81	49058040	109	589009	92
29904053	158	29925004	131	30069900	55	39918030	48	49007032	81	49058100	97	589010	40
29904054	158	29925005	131	30074000	55	39922030	48	49008030	81	49058101	97	589011	40
29904060	158	29925009	131	30133000	64	39930020	50	49008031	81	49058104	97	589012	40
29904100	128	29925010	131	30157900	58	39930030	48	49008032	81	49058103	97	589013	38
29904101	128	29925021	133	30158000	58	399300303	48	49014000	82	49058102	97	589013	40
29904104	128	29925021	131	30158100	58	39940020	50	49014001	82	49058200	86	589015	40
29904105	128	29925031	131	30158200	58	39940030	48	49016000	82	49058201	86	589016	40
29904111	128	29925034	131	30158300	59	399400303	48	49016001	82	49060000	107	589017	40
29904114	128	29925037	131	30158400	59	39941030	48	49016019	82	49060009	107	589018	40
29904115	128	29925039	131	30158500	59	39944020	50	49016002	82	49060014	109	589019	40
29904117	128	29925040	159	30160000	55	39944030	48	49016003	82	49062040	109	589020	40
29904118	128	29925050	159	30162600	58	399440303	48	49016030	81	49065000	85	589021	40
29904118	128	29926001	131	30162700	58	39950020	50	49016031	81	49065001	85	589025	40
29904126	128	29926002	131	30162800	58	39950030	48	49016032	81	49065002	85	589029	41
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29905400	179	29926005	131	30163100	59	39954020	50	49030002	82	49065019	85	589034	41
29905401	179	29926010	131	30163200	59	39954030	48	49030003	82	49065100	97	589035	41
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Limited Warranty and Key Terms of Supply by Lewmar

Lewmar warrants that in normal private pleasure boat usage and with proper maintenance its products will conform with their specification for a period of three years from the date of purchase by the end user, subject to the conditions, limitations and exceptions listed below. Any product, which proves to be defective in normal usage during that three-year period, will be repaired or, at Lewmar's option, replaced by Lewmar.

A CONDITIONS AND LIMITATIONS

- i Lewmar's liability shall be limited to the repair or replacement of any parts of the product which are defective in materials or workmanship.
- ii Responsibility for the selection of products appropriate for the use intended by the Buyer shall rest solely with the Buyer and Lewmar accepts no responsibility for any such selection.
- iii Lewmar shall not be liable in any way for Product failure, or any resulting loss or damage that arises from:
 - a. use of a product in an application for which it was not designed or intended;
 - b. corrosion, ultra violet degradation or wear and tear;
 - c. a failure to service or maintain the product in accordance with Lewmar's recommendations;
 - d. faulty or deficient installation of the product (unless conducted by Lewmar);
 - e. any modification or alteration of the product;
 - f. conditions that exceed the product's performance specifications or safe working loads.
 - g. Abuse
- iv Product subject to a warranty claim must be returned to the Lewmar outlet that supplied the product for examination unless otherwise approved by Lewmar in writing.
- v This warranty does not cover any incidental costs incurred for the investigation, removal, carriage, transport or installation of product.
- vi Service by anyone other than authorized Lewmar representatives shall void this warranty unless it accords with Lewmar guidelines and standards of workmanship.

vii Lewmar's products are intended for use only in the marine environment. Buyers intending to use them for any other purpose should seek independent professional advice as to their suitability. Lewmar accepts no liability arising from such other use.

B EXCEPTIONS

Cover under this Warranty is limited to a period of one year from the date of purchase by the end user in the case of any of the following products or parts of products:

- Electric motors and associated electrical equipment
- Electronic controls
- Hydraulic pumps, valves and actuators
- Hatch & Portlight weather seals
- Products used in "Grand Prix" racing applications
- Products used in commercial or charter applications
- Anchor rodes

C LIABILITY

- i Lewmar's liability under this warranty shall be to the exclusion of all other warranties or liabilities (to the extent permitted by law). In particular (but without limitation):
 - a. Lewmar shall not be liable for:
 - Any loss of anticipated turnover or profit or indirect, consequential or economic loss;
 - Damages, costs or expenses payable to any third party;
 - Any damage to yachts or equipment;
 - Death or personal Injury (unless caused by Lewmar's negligence).

Some states and countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

- b. Lewmar grants no other warranties regarding the fitness for purpose, use, nature or satisfactory quality of the products.
- ii Where applicable law does not permit a statutory or implied warranty to be excluded, then such warranty, if permitted by that state or country's law, shall be limited to a period of one year from

the date of purchase by the end user. Some states and countries do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you.

D PROCEDURE

Notice of a claim for service under this warranty shall be made promptly and in writing by the end user to the Lewmar outlet that supplied the product or to Lewmar Limited at Southmoor Lane, Havant, Hampshire PO9 1JJ, England.

E SEVERANCE CLAUSE

If any clause of this warranty is held by any court or other competent authority to be invalid or unenforceable in whole or in part, the validity of the remaining clauses of this warranty and the remainder of the clause in question shall not be affected.

F OTHER RIGHTS

This warranty gives you specific legal rights, and you may also have other legal rights, which vary from state to state and country to country.

In the case of European States a Consumer customer (as defined nationally) has legal rights under the applicable national law governing the sale of Consumer Goods; this Warranty does not affect those rights.

G LAW

This warranty shall be governed by and read in accordance with the laws of England or the state or country in which the first end user is domiciled at the time of purchase of the product.

H DISPUTES

Any dispute arising under this warranty may, at the option of the end-user, be referred to alternative dispute resolution under the rules of the British Marine Federation or to the Courts of the State whose law shall govern the warranty or to the Courts of England and Wales.

The British Marine Federation may be contacted at Marine House, Thorpe Lea Road, Egham, England, TW20 8BF

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