



# Lewmar Block Range





### Page 131 Control Blocks - Control lines & hand loads

■ Long glass-fibre reinforced composite cheeks ■ Stainless steel ball bearings





### Page 135 Synchro Cruising blocks

- Stainless steel straps and glass-fibre reinforced cheeks
- High density, free-spin plain bearing
- Easy to use, patented shackle post lock
- Sheave / bearing / pin & line size optimised for efficiency





### Page 139 HTX Range - Racing and Cruising Blocks

- Alloy cheeks
- Side thrust ball bearings
- Head design inspired by racing blocks

■ High load capacities





#### Page 143 Racing Range – Racer and Grand Prix

- Monocoque alloy construction
- Ball and roller bearings
- Light weight High strength to weight ratio
- High level of type optimisation webbing, runner. Halyard blocks etc





### Page 150 Special Application Blocks

Snatch Blocks

■ Pivoting Lead Blocks



# Page 153 Custom Hardware for Superyacht Projects

- Performance hardware suitable for high loads 

  Customised to blend with overall generated on superyachts
- Designed to meet individual functional specification
- design aesthetic

Note: Lewmar blocks are intended for sail control line handling on sail boats only.

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 uses.

# **TotalCot**€

Part Number: 19701700 (retail carton of 12 cans) Individual cans available in retail outlets



Formulated solely from naturally occurring products, TotalCote is incredibly effective yet safe to the environment and sensitive marine eco-systems. TotalCote protects, displaces, cleans, seals, penetrates and lubricates. Use it on everything from seized bolts to your block and traveller car ball bearings to your luff groove. TotalCote will reduce friction and offer a long-term barrier against rust and corrosion.



# Technical Reference - Choosing the right purchase system

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.

### Why do we need purchase systems?

As a guide, the average person can:

- Pull vertically down a force equivalent to their body weight (for a short period)
- When fully braced, pull intermittently sideways with one hand to 25kg and with two hands to 50kg
- Adjust control lines frequently loaded to 25kg
- Exert 15kg single-handed and 25kg double-handed on a winch handle





Human force can be multiplied through a purchase system made up of block systems and/or winches, enabling comfortable operation of high-loaded sailboat controls.

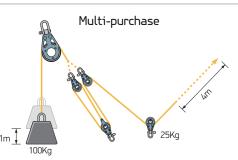
### Which purchase system?

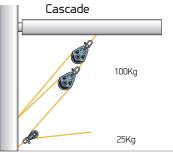
#### Multi-Purchase System

- Ideal for mainsheet traveller systems
- Provides full range of adjustment

#### Cascade System

- Ideal for a vang system
- Achieves a smaller range of adjustment
- Provides high purchase with minimum blocks
- Line type and diameter can be specified in line with load on each part of system
- Enables control lines to be led to either side of the boat, for example, with a backstay adjustor
- All blocks must be free to travel their full working length without danger of catching





#### Some typical systems in use on current boats

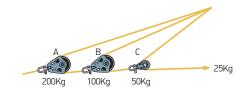
	BACKSTAY	MAINSHEET TRAVELLER	MAINSHEET COARSE TUNE	EXTRA PURCHASE FOR MAINSHEET FINE TUNE	JIB TRAVELLER	VANG	CUNNINGHAM
Racing dayboat	16:1 cascade	2:1	2:1	4:1 multi-purchase	Plunger	8:1 combination	4:1 cascade
Small cruiser	Fixed	2:1	4:1 multi-purchase	-	Plunger	4:1 multi-purchase	N/A
Small racing yacht	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	Fixed	4:1	4:1	N/A	2:1 with plunger	5:1	N/A
Medium racing yacht	Hydraulic	12:1 combination	2:1 Winched	N/A	12:1 combination	36:1 combination	6:1 combination
Large cruiser	Hydraulic	6:1	4:1 Winched	N/A	2:1 with plungers	8:1	4:1
Large racing yacht	Hydraulic	2:1 Winched	2:1 Winched	N/A	2:1 Winched	Hydraulic	6:1 combination

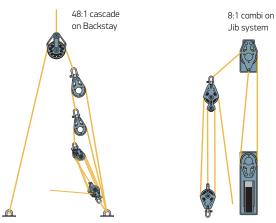
#### 7. Hardware



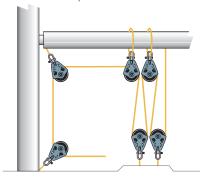
#### Combination Cascade / Multi Purpose System

- Achieves compromise between power and range requirements
- Ideal for use on backstay, jib, and mainsheet controls



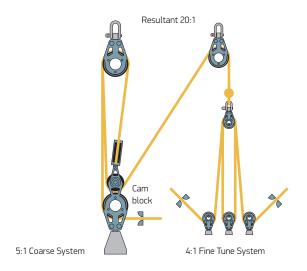


4:1 purchase on Mainsheet



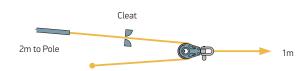
### Coarse/Fine Tune System

- Coarse purchase ideal for racing mainsheet systems
- Used for moving large amounts of unloaded mainsheet during mark rounding
- Combination fine purchase perfect for playing the mainsheet when beating



#### Reverse Purchase

- Ideal for an asymmetric pole launch system
- Offers fast movement and a greater range on lightly-loaded systems
- Cleat is located on control line, which is loaded to twice the pole launch rope



### How much purchase power is needed?

To identify the amount of purchase power required, carry out the following calculation:

$$\frac{\text{Output Force}}{\text{Input from Control Line/Winch}} = \text{Purchase Required} \qquad \frac{200 \text{kg}}{25 \text{kg}} = 8:1$$

The table gives some examples of typical purchases used by Lewmar customers.

### 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)

### Winched purchases

To identify the amount of purchase power required in winched purchase, first calculate the winch output:

Minala Madal Ni walan	x 15kg (single-handed operation)		Winch
Winch Model Number	x 25kg (double-handed operation)		Output
Output Force	Purchase Required		
Winch Output	Pui chase Required		

The table suggests the pulling power that can be generated.

### Typical winch output loads

WINCH SIZE	30	40	45	50	55
One handed input – 15 Kg on handle = Winch output load	450kg	600kg	660kg	720kg	-
Two handed input – 25 Kg on handle = Winch output load	-	-	1100kg	1200kg	1350kg

### Which Bearing?

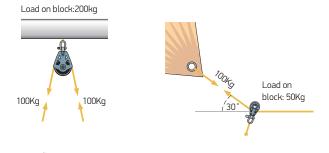
APPLICATION	BEARING	RECOMMENDED LEWMAR RANGE
Frequently adjusted, free, fast-running systems such as sheets or control lines	Ball Bearing Sheave	Control Block
High-static loadings, adjusted less frequently and mainly cleated, such as halyards	Free Spin Bearing	Synchro Block
Frequently adjusted, high loaded systems, using modern line technology with high load on reduced line diameters.	Free spin bearing with ball bearing side thrust.	HTX Block
A combination of the above	Torlon Roller Bearing	Racing Block

#### Which Size/Load Block?

- Each Lewmar block has a specified Working Load Limit (WLL), listed in the product specification table
- Match the input from Control Line/Winch to the WLL of the block

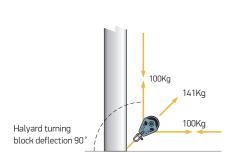
 Note that the line's angle of deflection around the sheave affects the load exerted on the block (see table below)

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%



200Kg

Vang turning block deflection 180°



	100Kg
<b>©</b>	
65Kg / 70°	100Kg 25Kg / 40° 100Kg

100Kg

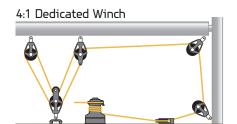
VERTICAL GENOA SHEET ANGLE	TOW LOAD AS % OF SHEET LOAD
70°	65%
60°	50%
50°	35%
40°	25%
Mainsheet trave	ller towing load
Guide % of mainsheet load	25%

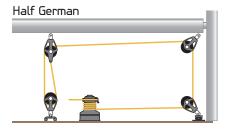
### Additional Recommendations

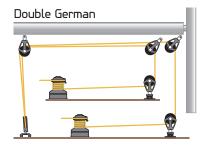
- Always choose a sheave diameter at least 7x the line diameter.
- Ensure that blocks are always fitted so they align with the lines passing through them, particularly on multiple blocks and where lines are periodically slack.
- All Lewmar products have been designed, tested, and developed to achieve best possible efficiency; however, no purchase system is 100% efficient. 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 would recommend allowing a factor of 1.05 per block. Multiply by the number of 180° turns in the rope make in a system to be certain of 'fingertip' control.

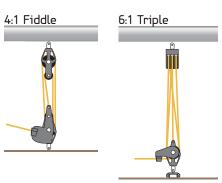


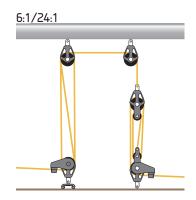
# Mainsheet Systems - Typical Arrangement





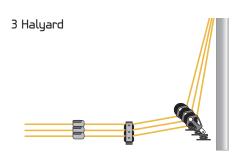




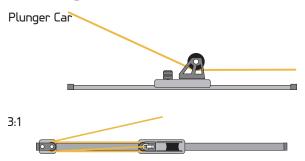


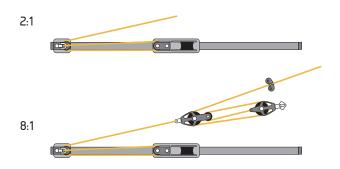
# Halyards



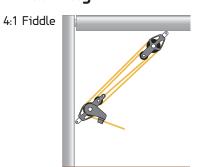


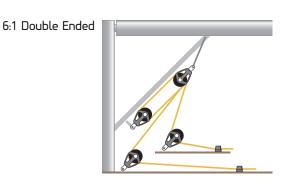
# Genoa Systems



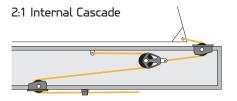


# Boom Vang

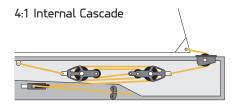




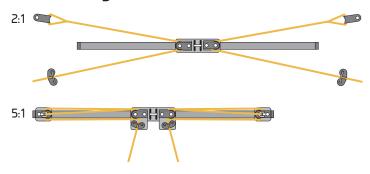
# **Outhaul**

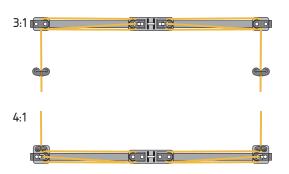






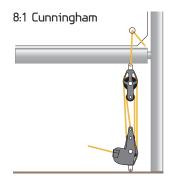
# Traveller Systems



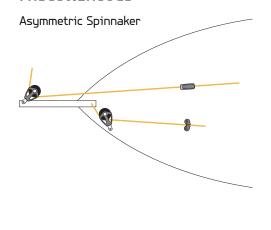


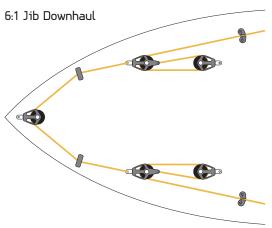
# Cunningham





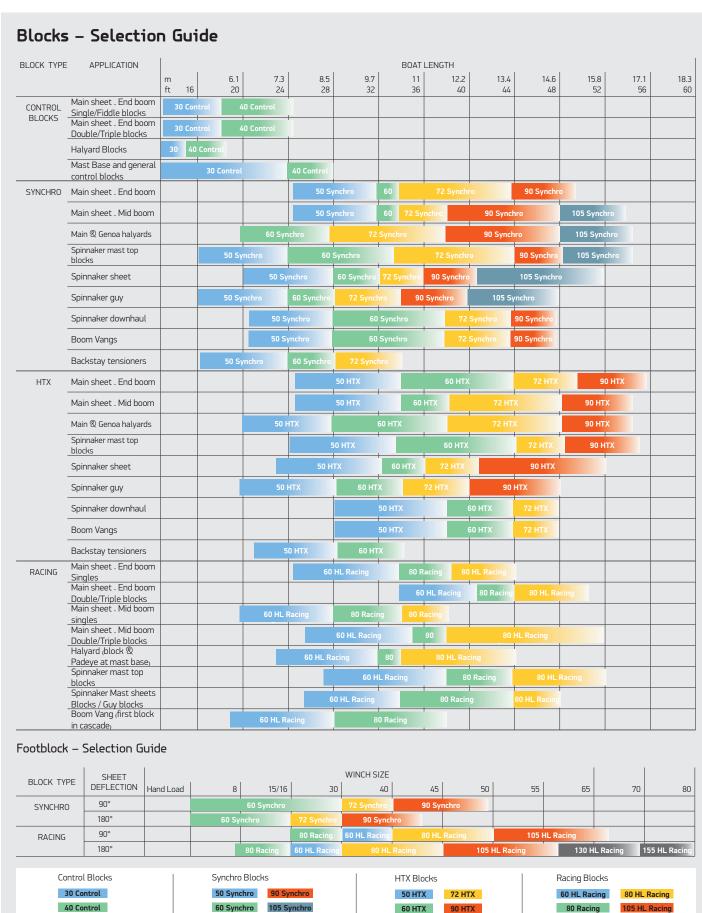
# Miscellaneous











72 Synchro

# Control Blocks

Ideal for use with hand-held loads, Lewmar's Control Blocks feature lightweight, performance load-bearing capacity. MRT (Metal Replacement Technology) and a stainless steel central race and balls provide a weight advantage, while Long Fibre Technology offers exceptional strength and durability. The open design allows sand and salt to be flushed out easily, keeping maintenance simple.

- Lightweight
- Very High Strength
- Impact Resistant
- Reduced Friction
- Easy Maintenance
- Optimised for hand control
- A Long fiber cheek
- B High strength glass-filled sheave
- C Marked sheave Showing line size and safe working load
- Stainless Steel balls and ball groove Avoids deformation and loss of performance

## **Applications**

Ball bearing blocks are typically used for medium and dynamic loads in :

- Control line applications
- Mainsheets for dinghies and keelboats
- Spinnaker sheets, barber haulers
- Genoa sheets
- Dinghy applications



Single Stand Up



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT		
		Kg	lb	g	oz		
29901320BK	30	200	440	30	1		
29901420BK	/ <sub>1</sub> ∩	240	528	54	19		

Single



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29901321BK	30	200	440	28	1
29901421BK	40	240	528	52	1.83

Double



SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT		
	Kg	lb	g	oz		
30	300	660	47	1.65		
40	480	1056	112.5	3.97		
	Ø 30	Ø LOAD Kg 30 300	<ul> <li>Ø LOAD LIMIT</li> <li>Kg lb</li> <li>30 300 660</li> </ul>	<ul> <li>Ø LOAD LIMIT</li> <li>Kg lb g</li> <li>30 300 660 47</li> </ul>		

Triple



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	OZ
29901323BK	30	500	1100	85	3
29901423BK	40	720	1584	187.5	6.61

Single & Becket



	PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
			Kg	lb	g	oz
2	29901324BK	30	200	440	33	1.16
7	29901424BK	40	240	528	56.5	1.99

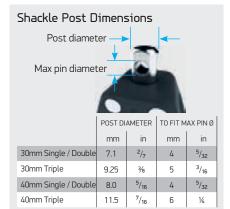
Double & Becket



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29901325BK	30	300	660	50	1.76
29901425BK	40	480	1056	116.5	4.11



# **Control Blocks**

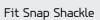


#### Line Size

The same of the sa	MAX LINE SIZE		
	mm	in	
30mm Control	8	5/16	
40mm Control	10	3/8	

### Suitable Block Upstand

30 and 40mm Control blocks fit block upstand part no 29904046 For more info refer to p. 151





	FIT SNAP SHACKLE
30mm Control Single / Double	29925040
30mm Control Triple	29926040
40mm Control Single / Double	29925040
40mm Control Triple	29927240

For more info refer to p. 151

### Cleat Used

Control blocks with cam use the following cleats



30 / 40mm control **29104100BK** For more info refer to page 180

### Pad Eyes



Wide range of pad eyes available, refer to page 152 for more information

Triple & Becket



PART NO	SHEAVE Ø	WORKING LOAD LIMIT				GHT	
		Kg	lb	g	oz		
29901326BK	30	500	1100	90	3.17		
29901426BK	40	720	1584	192.5	6.79		

#### Single Fixed Strap



PART NO	SHEAVE Ø	WORKING LOAD LIMIT				GHT	
		Kg	lb	g	oz		
29901341BK	30	200	440	26	0.92		
29901441BK	40	240	528	44	1.55		

### Single Fixed Strap - St. Steel Sheave



Designed for use with wire. 30mm suits max 3mm ( $^{1}/_{8}$ ") wire

40mm suits max 6mm  $(^{1}/_{4}")$  wire

PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT	
		Kg	lb	g	oz	
29901301BK	30	240	528	36	1.2	
29901401BK	40	400	890	76	2.5	

Single Fixed Strap & Becket



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT	
		Kg	lb	g	oz
29901314BK	30	200	440	31	1.09

Triple & Cleat



PART NO	SHEAVE Ø	WORKING LOAD LIMIT*				GHT
		Kg	lb	g	oz	
29901328BK	30	500	1100	135	4.76	
29901429BK	40	720	1584	247.5	8.73	

<sup>\*</sup> Block WLL, cleat WLL 120kg

### Single with Becket & Cleat



PART NO	SHEAVE Ø	WORKING LOAD LIMIT*				GHT
		Kg	lb	g	oz	
29901428BK	40	240	528	56.5	1.99	

<sup>\*</sup> Block WLL, cleat WLL 120kg

# **Control Blocks**

# Triple with Becket & Cleat



PART NO	SHEAVE Ø	WORKING LOAD LIMIT*		WEI	GHT
		Kg	lb	g	oz
29901330BK	30	500	1100	140	5
29901430BK	40	720	1584	252.5	8.91

<sup>\*</sup> Block WLL, cleat WLL 120kg

# Single Web



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT	
		Kg	lb	g	oz
29901447BK	40	240	528	39.5	1.39

# Thru-Deck Block



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29901361BK	30 single	200	440	26	0.92
29901362BK	30 tandem	200	440	45	1.59

#### Cheekblock



PART NO	SHEAVE Ø	WOR LOAD		WEI	GHT
		Kg	lb	g	oz
29901360BK	30	200	440	18.5	0.65
29901460BK	40	240	528	43	1.52

#### Vertical Lead Block



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29901363BK	30	200	440	48	1.69
29901463BK	40	240	528	70	2.4

### Pivoting Exit Block



PART NO	SHEAVE Ø	WORKING LOAD LIMIT*		WEI	GHT
		Kg	lb	g	oz
29901365BK	30	200	440	80	2.82

<sup>\*</sup> Block WLL, cleat WLL 120kg

# Linked Blocks



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT	
		Kg	lb	g	oz
29901311BK	30	200	440	52	1.84
29901411BK	40	240	528	88	3.1
29901412BK	30 / 40	200	440	70	2.47

# Footblock



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	OZ
29194061	40	750	1653	66	2.33

Comes with a stainless steel base plate and can be used as miniature organisers or deflectors for lines being returned to the cockpit. Use M8 (5/16) fixings - Not included

# Double Footblock



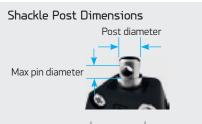
PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	IGHT	
		Kg	lb	g	oz	
29194062	40	750	1653	121	4.27	

Comes with a stainless steel base plate and can be used as miniature organisers or deflectors for lines being returned to the cockpit. Use M8 (5/16) fixings - Not included



# 60mm Ratchet Blocks

Only suitable to use with hand loads. For winched loads, refer to the Synchro, HTX or Racing ranges.



	POST DIAMETER		TO FIT MAX PIN Ø	
	mm	in	mm	in
60mm Ratchet Single	9.5	3/8	5	<sup>3</sup> / <sub>16</sub>
60mm Ratchet Triple	10.0	2/5	6	1/4

### Line Size



# Fit Snap Shackle

	FIT SNAP SHACKLE
60mm Ratchet single	29926040
60mm Ratchet Triple	29927240

For more info refer to p. 151

### Fit Traveller Upstand



	FIT TRAVELLER UPSTAND
60mm Single Ratchet	Size 1 NTR
60mm Triple Ratchet	Size 2 NTR ® HTX

### Suitable Block Upstand

60mm triple ratchet blocks fit upstand part no 29904050 For more info refer to p. 151



#### Cleat Used

		-	9	
	USE CLEAT	WORKING LOAD LIMI		
		kg	lb	
60mm control block	29104110BK	180	396	

For more info refer to p. 180

### Pad Eyes



Wide range of pad eyes available, refer to page 152 for more information



Single Ratchet & Becket



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29901665BK	60	400	882	141	4.8

Triple Ratchet & Cleat



PART NO	SHEAVE Ø	WORKING LOAD LIMIT*		WEIGHT	
		Kg	lb	g	oz
29901668BK	60	1000	2204	524	17.7

<sup>\*</sup> Refers to block WLL, cleat WLL 180kg

Single Ratchet



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT		
		Kg	lb	g	oz	ı
29901661BK	60	400	882	126	4.3	

### Single Ratchet & Cleat



PART NO	SHEAVE Ø	WORKING LOAD LIMIT*		WEIGHT		
		Kg	lb	g	oz	
29901667BK	60	400	882	288	10.1	

<sup>\*</sup> Refers to block WLL, cleat WLL 180kg

### Triple Ratchet, Becket & Cleat



PART NO	SHEAVE Ø	WORKING LOAD LIMIT*		WEIGHT	
		Kg	lb	g	oz
29901670BK	60	1000	2204	538	18.2

<sup>\*</sup> Refers to block WLL, cleat WLL 180kg

# Synchro Blocks

Lewmar Synchro blocks are engineered for speed, efficiency and superior handling. We use a combination of scientifically optimised block geometry, a Free-Spin bearing and self-aligning head to reduce friction and increase efficiency by up to 40% over budget blocks on mainsheet systems.

Each component is perfectly synchronised 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.

- Stainless steel strap for improved strength and longer service life
- Stiff glass fibre reinforced cheeks to prevent lines from wedging
- Innovative design with "tool-free" sliding swivel locking mechanism
- Simple switch to change from swivelling to fixed shackle
- A Easy to use shackle post lock
- B Shackle post Fits travellers
- C Lock mechanism enables 30° float
- D Larger sheave diameter Minimises rope friction
- High density free-spin bearing reduces axle diameter for superior efficiency

### **Applications**

Plain bearing blocks are typically used for heavy and static loads in:

- Halyard tuning
- Mainsheet systems
- Mast foot blocks
- Mast head blocks
- Boom vang



Single



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT	
		Kg	lb	g	OZ
29925001BK	50	450	990	67	2.36
29926001BK	60	800	1760	115	4.06
29927201BK	72	1100	2420	190	6.69
29929001BK	90	2000	4400	413	14.57

Double



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT	
		Kg	lb	g	oz
29925002BK	50	450	990	142	5.01
29926002BK	60	800	1760	251	8.84
29927202BK	72	1100	2420	406	14.29
29929002BK	90	2000	4400	966	34.00





PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT	
		Kg	lb	g	oz
29925003BK	50	450	990	226	7.96
29926003BK	60	800	1760	371	13.06
29927203BK	72	1100	2420	618	21.75
29929003BK	90	2000	4400	1389	48.89



# Synchro Blocks

### Head Design

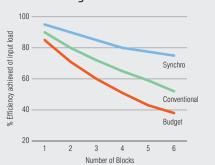
Head can be positioned for use in line or at 90 degrees – or left to rotate freely when in unlocked position. When locked allows 30° "float" on shackle post to improve alignment of block.



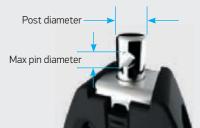
# Higher efficiency – for faster sail handling and less rope wear.

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

# Efficiency improvements in multi block systems



#### Shackle Post Dimensions



	POST DI	AMETER	TO FIT MAX PIN Ø		
	mm	in	mm	in	
50mm Synchro	7.9	5/16	4	5/32	
60mm Synchro	9.4	3/8	5	3/16	
72mm Synchro	11.9	<sup>15</sup> / <sub>32</sub>	6	1/4	
90mm Synchro	16.5	<sup>21</sup> / <sub>32</sub>	9.8	3/8	

### Suitable Block Upstands



Spring upstand 29904050 fits 50mm Synchro



Rubber boot upstand kit 29195065 fits 60mm Synchro 29196065 fits 72mm Synchro 29197265 fits 90mm Synchro

For information about block upstand refer to p.151

#### Suitable Traveller Upstand



	FIT TRAVELLER UPSTAND
50mm Synchro	
60mm Synchro	Size 1 NTR
72mm Synchro	Size 1 HTX/ Size 2 NTR
90mm Synchro	Size 2 HTX/ Size 3 NTR

### Cleat Used



For more info refer to page 180

### Line Size

1					
No. of Lines	OPTIMUM	LINE SIZE	MAX LINE SIZE		
	mm	in	mm	in	
50mm Synchro	6	1/4	10	3/8	
60mm Synchro	8	5/16	10	3/8	
72mm Synchro	10	3/8	12	1/2	
90mm Synchro	12	1/2	14	9/16	

### Suitable Snap Shackles



	FIT SNAP SHACKLE
50mm Synchro	29925040
60mm Synchro	29926040
72mm Synchro	29927240
90mm Synchro	29929040

For more info refer to page 151

### Pad Eyes





Wide range of pad eyes available, refer to page 152 for more information

#### Single & Becket



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT	
		Kg	lb	g	oz
29925004BK	50	450	990	81	2.85
29926004BK	60	800	1760	127	4.48
29927204BK	72	1100	2420	210	7.41
29929004BK	90	2000	4400	458	16.15

# Double & Becket



PART NO	SHEAVE Ø	WOR LOAD	KING LIMIT	WEIGHT		
		Kg	lb	g	oz	
29925005BK	50	450	990	164	5.77	
29926005BK	60	800	1760	261	9.19	
29927205BK	72	1100	2420	415	14.61	

### Single Becket & Cam



PART NO	SHEAVE Ø	WOR LOAD		WEIGHT	
		Kg lb		g	oz
29925009BK	50	450 990		123	4.30

<sup>\*</sup> Block WLL, cleat WLL 120kg

### Triple, Becket & Cam



PART NO	SHEAVE Ø	WORKING LOAD LIMIT *		WEIGHT	
		Kg lb		g	oz
29925010BK	50	450	990	282	9.93
29926010BK	60	800	1760	447	15.73
29927210BK	72	1100 2420		820	28.86

<sup>\*</sup> Block WLL, cleat WLL shown p.136

# Single Fiddle



PART NO	SHEAVE Ø	WOR LOAD	KING LIMIT	WEIGHT	
		Kg lb		g	oz
29925031BK	50	450	990	94	3.31
29926031BK	60	800	1760	156	5.50
29927231BK	72	1100	2420	250	8.80
29929031BK	90	2000	4400	544	19.19

### Single Fiddle & Becket



PART NO	SHEAVE Ø	WOR LOAD		WEIGHT	
		Kg lb		g	oz
29925034BK	50	450	990	98	3.45
29926034BK	60	800	1760	166	5.85
29927234BK	72	1100	2420	275	9.70
29929034BK	90	2000	4400	589	20.77

Single Fiddle & Cam



PART NO	SHEAVE Ø	WORKING LOAD LIMIT*		WEIGHT	
		Kg lb		g	oz
29925037BK	50	450	990	139	4.89
29926037BK	60	800	1760	221	7.78
29927237BK	72	1100 2420		339	11.93

<sup>\*</sup> Block WLL, cleat WLL shown p.136

Single Fiddle, Becket & Cam



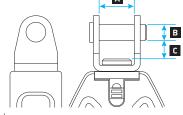
PART NO	SHEAVE Ø		KING LIMIT*	WEIGHT	
		Kg	Kg lb		oz
29925039BK	50	450	990	145	5.10
29926039BK	60	800	1760	234	8.24
29927239BK	72	1100	2420	356	12.53
29929039BK	90	2000	4400	879	27.12

<sup>\*</sup> Block WLL, cleat WLL shown p.136

### Halyard Block



The toggle head of the halyard blocks is designed to fit on the studs commonly found at mast bases – check the diameter of the stud against the width of the block jaws (A) and pin diameter (B)



								HEAD D	ETAILS		
PART NO	SHEAVE DIAMETER	WORKIN LIN		WEI	GHT	WIE		E Pi	<b>B</b>	SPACE	TO PIN
	mm	Kg	lb	g	OZ	mm	in	mm	in	mm	in
29925021BK	50	450	990	73	2.57	13	1/2	5	3/16	8.2	5/16
29926021BK	60	800	1760	122	4.29	15	<sup>37</sup> / <sub>64</sub>	6	7/32	6.9	9/32
29927221BK	72	1100	2420	198	6.98	18	45/64	8	5/16	9.6	3/8
29929021BK	90	2000	4400	414	14.57	23	29/32	10	<sup>25</sup> / <sub>64</sub>	13.9	17/32



# Synchro Footblocks

Synchro Footblocks feature alloy cheeks, fixing isolators, and a moulded base plate to prevent sealant ingress into the sheave.

- Standard and jammer options can be double stacked
- Two-step jammer action keeps lever close to side of the block
- Optimised jammer shape holds line central on the sheave
- Tough alloy cheeks
- Synchro sheave loads match the same sized blocks

Jamming footblocks are designed to hold light hand loads onlu.

- Twin fixings with inserts
- Wide head for a solid base, block will not "roll" on the deck
- Moulded base plate with recess to hold sealant around fixing screws and prevent ingress onto the bearing and sheave

#### Aluminium Footblock



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT	
		Kg lb		g	oz
29926061BK	60	800	1764	162	5.70
29927261BK	72	1200 2645		229	8.10
29929061BK	90	2000 4409		430	15.20

Use M8 (5/16) fixings for the 60/72mm sheaves and M10 for the 90mm sheaves - Not included

Also available in grey (remove BK)

#### Aluminium Footblock with Jammer

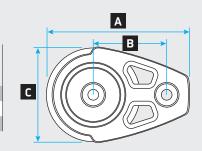


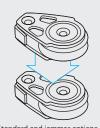
PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT	
		Kg lb		g	OZ
29926064BK	60	800	1764	190	6.70
29927264BK	72	1200	2645	250	8.80
29929064BK	90	2000	4409	480	16.90

Use M8 (5/16) fixings for the 60/72mm sheaves and M10 for the 90mm sheaves - Not included

### Synchro Footblock Footprint

PART NO	4	A.	E	3	(	
	mm	in	mm	in	mm	in
60mm Footblock	98.0	31/8	51.0	2	59	25/16
72mm Footblock	110.6	45/16	58.0	25/16	71	213/16
90mm Footblock	134.0	51/16	69.0	211/16	89	3½





Standard and jammer options can be double stacked The upper sheave should not be loaded beyond 60% of WLL



### HTX Blocks

Years of design and manufacturing experience, combined with collaboration with boat builders, designers, and sailors, has resulted in the Lewmar HTX Hardware Range. Drawing upon the design of the racing range, the HTX blocks are constructed simply from high quality materials, providing enhanced reliability. Ideal for frequently adjusted, highly loaded systems using modern line technology and reduced line diameters.

- Strong aluminium side cheeks
- Central plain bearing for efficiency at high loads
- Side thrust Delrin ball bearings
- Head design inspired by Lewmar Racing Range, complete with grub screw swivel head locking mechanism



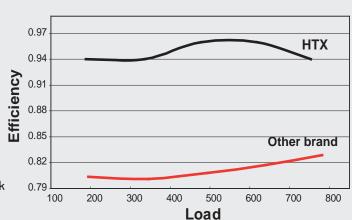


- Alloy cheeks
- B Side thrust ball bearings
- C Central plain bearing
- D Head pin design inspired by Lewmar Racing series block
- E High Load capacity and large line size

# Higher efficiency - for faster sail handling and less rope wear.

HTX blocks are more efficient than alternative brand using similar material due to machined bearing pin surface.

HTX block efficiency improves above 450kg as acetal sheaves become self-lubricating at this point.







Single



PART NO	SHEAVE Ø	WOR LOAD		WEIGHT	
		Kg lb		g	oz
29195001	50	800	1762	135	4.7
29196001	60	1100	2422	215	7.5
29197201	72	2000	4405	445	15.6
29199001	90	3500	7709	735	25.8

Double



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29195002	50	800	1762	217	7.6
29196002	60	1100	2422	331	11.6
29197202	72	2000	4405	552	19.3

Triple



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29195003	50	800	1762	305	10.7
29196003	60	1100	2422	426	14.9

Single & Becket



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT	
		Kg	lb	g	oz
29195004	50	800	1762	150	5.3
29196004	60	1100	2422	226	7.9
29197204	72	2000	4405	482	16.9
29199004	90	3500	7709	936	32.8

Double & Becket



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29195005	50	800	1762	232	8.1
29196005	60	1100	2422	319	11.2

Single Becket & Cam



PART NO	SHEAVE Ø	WORKING LOAD LIMIT*				GHT
		Kg	lb	g	oz	
29195009	50	800	1762	320	11.2	
29196009	60	1100	2422	414	14.5	

<sup>\*</sup> Block WLL, cleat WLL shown p.141

Triple, Becket & Cam



PART NO	SHEAVE Ø	WORKING LOAD LIMIT *		WEIGHT	
		Kg	lb	g	oz
29195010	50	800	1762	511	17.9
29196010	60	1100	2422	710	24.9

<sup>\*</sup> Block WLL, cleat WLL shown p.141

Web Single



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29195047	50	800	1762	80	2.8
29196047	60	1100	2422	148	5.2
29197247	72	2000	4405	283	9.9

# HTX Blocks

Fiddle



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29195031	50	800	1762	165	5.8
29196031	60	1100	2422	257	9.0
29197231	72	2000	4405	530	18.5

Fiddle & Becket



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29195034	50	800	1762	175	6.1
29196034	60	1100	2422	269	9.4
29197234	72	2000	4405	560	19.6

Shackle Post Dimensions Post diameter Max pin diameter TO FIT MAX PIN Ø POST DIAMETER mm mm 50mm HTX 9.4 60mm HTX 11.9  $^{15}/_{32}$  $^{1}/_{4}$ 21/32 72mm HTX 16.5 9.8 3/8

Line Size	MAX LINE SIZE		
STEERS	mm	in	
50mm HTX	10	3/8	
60mm HTX	12	1/2	
72mm HTX	14	9/16	
90mm HTX	16	5/8	

19.8

 $^{25}/_{32}$ 

10

<sup>25</sup>/<sub>64</sub>

# Cleat Used

90mm HTX

9	USE CLEAT		RKING LIMIT lb
50mm HTX	29104100BK	120	264
60mm HTX	29104110BK	180	396
72mm HTX	-	230	507

For more info refer to page 180

# Suitable Traveller Upstand



	FIT TRAVELLER UPSTAND
50mm HTX	Size 1 NTR
60mm HTX	Size 1 HTX
72mm HTX	Size 2 NTR and Size 2 HTX
90mm HTX	Size 3 NTR



Fiddle & Cam



PART NO	SHEAVE Ø		KING LIMIT *	WEI g	GHT oz
29195037	50	800	1762	335	11.7
29197237	72	2000	4405	748	26.2

\* Block WLL, cleat WLL shown on the right

Fiddle, Becket & Cam



PART NO	SHEAVE Ø	WORKING LOAD LIMIT *		WEI	GHT
		Kg	lb	g	oz
29195039	50	800	1762	346	12.1
29196039	60	1100	2422	460	16.1
29197239	72	2000	4405	776	27.2

\* Block WWL, cleat WLL shown on the right



# HTX Blocks

# Suitable Block Upstand



Rubber boot upstand kit:

29195065 fits 50mm HTX 29196065 fits 60mm HTX 29197265 fits 72mm HTX

For more info refer to page 151

### Fit Snap Shackle



	FIT SNAP SHACKLE
50mm HTX	29926040
60mm HTX	29927240
72mm HTX	29929040
90mm HTX	-

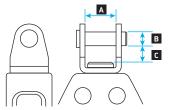
For more info refer to page 151

### Halyard Block



The toggle head is designed to fit on the studs commonly found at mast bases.

Check the diameter of the stud against the width of the block jaws (A) and pin diameter (B)  $\,$ 



								HEAD D	ETAILS		
PART NO	SHEAVE Ø	WORKIN LIN	IG LOAD VIT	WEI	GHT	WIE	A DTH	_	<b>B</b>	SPACE	TO PIN
	mm	Kg	lb	g	oz	mm	in	mm	in	mm	in
29195021	50	800	1762	160	5.6	15	37/64	6	7/32	8	5/16
29196021	60	1100	2422	227	7.9	18	<sup>45</sup> / <sub>64</sub>	8	5/16	10	<sup>37</sup> / <sub>94</sub>
29197221	72	2000	4405	410	14.4	23	<sup>67</sup> / <sub>74</sub>	10	<sup>37</sup> / <sub>94</sub>	9.5	3/8

# Single Stand-Up Block



								BASE D	ETAILS	
PART NO	SHEAVE Ø	WORKING L	OAD LIMIT	WEI	GHT	OVERALL	DIAMETER	FIXINGS [	DIAMETER	FIXINGS TYPE
	mm	Kg	lb	g	oz	mm	in	mm	in	
29195011	50	800	1762	280	10	58	2 <sup>5</sup> / <sub>16</sub>	40	1 <sup>37</sup> / <sub>64</sub>	4 x M6 (1/4")
29196011	60	1100	2422	350	12.4	58	2 5/16	40	1 <sup>37</sup> / <sub>64</sub>	4 x M6 (1/4")
29197211	72	2000	4405	645	22.8	73	2 7/8	50	1 <sup>31</sup> / <sub>32</sub>	4 x M8 (5/16")
29199011	90	3500	7709	1115	39.3	76	3"	55	2 11/64	4 x M8 (5/16")

#### HTX Footblock



Utilizzare perni M8 per i rinvii da 60 e 72mm e perni M10 per i rinvii da 90mm (non forniti).

PART NO	SHEAVE Ø	WOR LOAD		WEI	GHT
		Kg	lb	g	OZ
29195061	50	800	1762	145	5.1
29196061	60	1100	2422	158	5.5
29197261	72	2000	4405	283	9.9
29199061	90	3500	7709	672	23.5

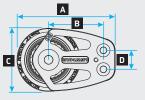
#### HTX Footblock With Jammer



\* lo stopper va utilizzato solo per carichi leggeri e breve utilizzo Utilizzare perni M8 per i rinvii da 60 e 72mm e perni M10 per i rinvii da 90mm (non forniti).

PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29195064	50	800	1762	107	3.7
29196064	60	1100	2422	170	6.0
29197264	72	2000	4405	320	11.2

# HTX Footblock Footprint





Standard and jammer options can be double stacked The upper sheave should not be loaded beyond 60% of Working Load Limit (WLL)

SHEAVE Ø	Α	В	С	D
	mm	mm	mm	mm
50	78.7	44	50	16
60	93.2	52	60	18
72	111.2	62	72	22
90	140.5	78	90	24

Lewmar Racing Blocks represent the pinnacle of Lewmar's standard block range. Manufactured from the best materials, they offer incredible strength to weight ratios.

- Lockable head pin
- Highly efficient central bearing
- Delrin thrust balls
- Ratchet fiddle blocks feature alloy ratchet sheaves and recessed ratchet lever



Single



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	OZ
29901611BK	60	800	1763	162	5.7
29901811BK	80	1000	2204	251	8.8
29901171BK	175	7500	16532	2472	87.2
29901201BK	200	9500	20940	3891	137.3
29901221BK	225	12500	27553	4980	175.5
29901251BK	250	15000	33064	6372	224.8

Single & Becket



PART NO	SHEAVE Ø	WOR LOAD	KING LIMIT	WEI	GHT
		Kg	lb	g	oz
29901614BK	60	800	1763	170	6.0
29901814BK	80	1000	2204	278	9.8
29901774BK	175	7500	16532	2750	97
29901204BK	200	9500	20940	4175	147.3
29901224BK	225	12500	27553	5341	188.4
29901254BK	250	15000	33064	6835	241.1

Single Stand Up



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29901600BK	60	800	1763	283	10.0
29941800BK	80	2400	5280	518	18.0
29901170BK	175	7500	16532	3679	128

For fixing details refer to the website

Cleat Used



WORKING LOAD LIMIT		
Kg	lb	
180	396	

For more info refer to page 180

# Snap Shackles



For more info refer to page 151

### Suitable Block Upstand



Rubber boot upstand 29196065 fits 60mm Racing single

For more info refer to page 151

# Pad Eyes







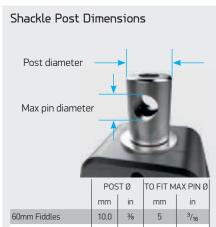
Wide range of pad eyes available, refer to page 152 for more information

### Suitable Traveller Upstand :



	FIT TRAVELLER UPSTAND
60mm Racing	NTR 2 / HTX 1
60mm HL Racing	NTR 2 / HTX 1
80mm Racing	NTR 2 / HTX 1
80mm HL Racing	NTR 3 / HTX 2





60mm Fiddles	10.0	3/8	5	3/16
60mm Singles	11.0	3/8	6	1/4
60mm Doubles	13.8	1/2	8	5/16
80mm Singles/ Fiddles	12.5	1/2	6	1/4
80mm Double/ Triple	14	9/16	8	5/16
175mm	31.8	1 1/4	16	5/8
200mm	34.7	1 <sup>3</sup> / <sub>8</sub>	16	5/8
225mm	38	1 <sup>1</sup> / <sub>2</sub>	20	3/4
250mm	46	1 3/4	24.5	1

Line Size

THE REAL PROPERTY.	MAX LII	NE SIZE
	mm	in
60mm Fiddle	10	3/8
60/80mm	12	1/2
175mm	22	7/8
200mm	22	7/8
225mm	24	<sup>15</sup> / <sub>16</sub>
250mm	26	1
250mm	26	1

Single Ratchet



PART NO	SHEAVE Ø	WORKING LOAD LIMIT				WEI	GHT	
		Kg	lb	g	oz			
29901821BK	80	800	1764	291	10.3			

Single Ratchet, Becket & Cam



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29901829BK	80	800	1764	503	17.7

Single Ratchet & Becket



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29901825BK	80	800	1764	318	11.2

Double



PART NO	SHEAVE Ø	LOAD LIMIT		WEI	
		Kg	lb	g	OZ
29901612BK	60	1440	3175	291	10.3
29901812BK	80	1800	3968	487	17.2

Double & Becket



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29901615BK	60	1440	3175	299	10.5
29901815BK	80	1800	3968	514	18.1

Triple



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29901813BK	80	2200	4849	724	25.5

Triple Ratchet & Cam



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29901828BK	80	2200	4849	949	33.5

Triple & Becket



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEI	GHT
		Kg	lb	g	oz
29901816BK	80	2200	4849	751	26.5

Triple Ratchet, Becket & Cam



PART NO	SHEAVE Ø	WORKING LOAD LIMIT				WEI	GHT
		Kg	lb	g	OZ		
29901830BK	80	2200	4849	976	34.4		

Fiddle



PART NO	SHEAVE Ø	WOR LOAD		WEIGHT		
		Kg	lb	g	oz	
29901631BK	60	400	882	174	6.1	
29901831BK	80	1000	2204	356	12.6	

Fiddle Ratchet & Cam



PART NO	SHEAVE Ø	WOR LOAD	KING LIMIT	WEIGHT		
		Kg lb		g	oz	
29901822BK	80	1000	2204	567	20.0	

Fiddle Becket



PART NO	SHEAVE Ø	VE WORKING WEIGHT LOAD LIMIT			
		Kg	lb	g	oz
29901634BK	60	400	882	190	
29901834BK	80	1000	2204	382	13.5

Fiddle, Becket & Cam



PART NO	SHEAVE Ø	WOR LOAD	KING LIMIT	WEIGHT		
		Kg	lb	g	oz	
29901639BK	60	400	882	353	12	
29901839BK	80	1000	2204	567	20	

Fiddle Ratchet, Becket & Cam

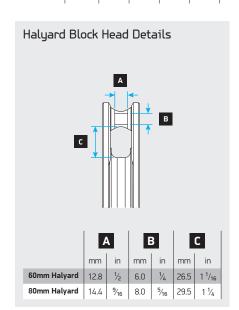


PART NO	SHEAVE Ø	WOR LOAD		WEIGHT		
		Kg	lb	g	oz	
29901624BK	60	400	882	362	13.0	
29901824BK	80	1000	2204	356	21.0	

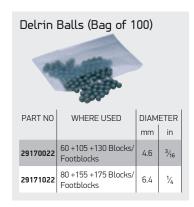
Halyard Block



PART NO	SHEAVE Ø	WOR LOAD	KING LIMIT	WEIGHT		
		Kg	lb	g	oz	
29942601BK	60	1400	3080	146	5.2	
29942801BK	80	2500 5500		274	9.7	







#### Footblock Single



Fixings supplied (max 35mm deck thickness): Size 60 : 3xM6, Size 80 : 3xM8 Size175 : 2xM12/3xM16, Size 250 : 4xM16/2xM20

PART NO	SHEAVE Ø	W	LL	WEIGHT		
		Kg	lb	g	oz	
29906601BK	60	400	882	160	5.6	
29906801BK	80	1000	2204	279	9.8	
29906171BK	175	10000	22043	2634	92.9	
29906251BK	250	19000	41881	11271	397.6	

#### Footblock Single With Jammer



Fixings supplied (max 35mm deck thickness): Size 60 : 3xM6, Size 80 : 3xM6 \*Jammer working load limit: 300 Kg / 661lb

PART NO	SHEAVE Ø	WLL*		WEIGHT		
		Kg	lb	g	oz	
29906604BK	60 Left Hand	400	882	181	6.3	
29906606BK	60 Right Hand	400	882	181	6.3	
29906814BK	80 Left Hand	1000	2204	299	11.0	
29906816BK	80 Right Hand	1000	2204	299	11.0	

### Footblock Single With Ratchet



Fixings supplied (max 35mm deck thickness): Size 60 : 2xM6/1xM10, Size 80 : 2xM8/1xM12

PART NO	SHEAVE Ø /	W	LL	WEIGHT		
	RATCH. DIR.	Kg	lb	g	oz	
29906621BK	60 CCW (Port)	400	882	160	5.6	
29906622BK	60 CW (Stbd)	400	882	160	5.6	
29906821BK	80 CCW (Port)	1000	2204	341	12	
29906822BK	80 CW (Stbd)	1000	2204	341	12	

### Footblock Double



Fixings supplied (max 35mm deck thickness):
Size 60 : 3xM6, Size 80 : 3xM8
Size 175 : 2xM12/3xM16, Size 250 : 4xM16/2xM20
\*Top sheave should not be loaded above 60% of WLL

PART NO	SHEAVE Ø	WL	_L*	WEIGHT			
		Kg	lb	g	oz		
29906602BK	60	400	882	258	9.1		
29906802BK	80	1000	2204	415	15.0		
29906172BK	175	10000	22043	11271	397.6		
29906252BK	250	19000	41881	11271	397.6		

### Footblock Double With Jammer

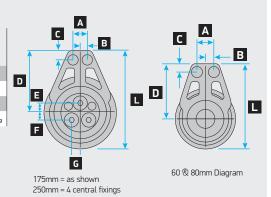


Fixings supplied (max 35mm deck thickness): SIZE 60: 3xM6, SIZE 80: 3xM8 SIZE 175: 2xM12/3xM16, SIZE 250: 4xM16/2xM20 \*Jammer designed to hold hand loads only. Top sheave should not be loaded above 60% of WLL

PART NO	SHEAVE Ø	W	LL*	WEI	GHT
		Kg	lb	g	oz
29906605BK	60 Left Hand	400	882	258	9.1
29906607BK	60 Right Hand	1000	2204	415	15.0
29906815BK	80 Left Hand	10000	22043	11271	397.6
29906817BK	80 Right Hand	19000	41881	11271	397.6

# Racing Footblock Footprint Details

SIZE		L		A	E	3		2		ס		3		=	0	3
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
60mm	85	3 1/3	20	4/5	10.0	2/5	16	5/8	55	2 1/6						
80mm	111	4 3/8	26	1	13.0	1/2	20	4/5	71	2 1/5						
175mm	243	9 4/7	33	1 <sup>2</sup> / <sub>7</sub>	16.5	2/3	23	1	152	6	25	1	12.5	1/2	26	1
250mm	348	13 <sup>5</sup> / <sub>7</sub>	44	1 <sup>3</sup> / <sub>4</sub>	22	6/7	29	1 <sup>1</sup> / <sub>7</sub>	210	8 <sup>1</sup> / <sub>4</sub>	28	1 <sup>1</sup> / <sub>9</sub>	28	1 <sup>1</sup> / <sub>9</sub>	28	1 <sup>1</sup> / <sub>9</sub>





Single



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT	
		Kg	lb	g	oz
29941611BK	60	1200	2640	281	9.9
29941801BK	80	2400	5280	337	12
29941101BK	105	3750	8250	605	21.4
29941131BK	130	5000	11000	952	33.6
29941151BK	155	7500	16500	1810	64

Single Stand Up



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT	
		Kg	lb	g	OZ
29941600BK	60	1200	2640	281	9.9
29941800BK	80	2400	5280	518	18
29941100BK	105	3750	8250	727	25.7
29941130BK	130	5000	11000	1404	49.6
29941150BK	155	7500	16500	2396	84.7

Single & Becket



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT	
		Kg	lb	g	oz
29941614BK	60	1200	2640	174	6.1
29941804BK	80	2400	5280	358	13
29941104BK	105	3750	8250	640	22.6
29941134BK	130	5000	11000	986	34.8
29941154BK	155	7500	16500	1737	61.4



BLOCKS	POST DIAMETER		TO FIT MAX PIN Ø		
	mm	in	mm	in	
60mm Single	11	3/8	6	1/4	
60mm Other	13.8	1/2	8	5/16	
80mm Single	15	9/16	8	5/16	
80mm Other	19.8	3/4	10	3/8	
105mm Single	19.8	3/4	10	3/8	
105mm Other	21.8	7/8	12	1/2	
130mm Blocks	21.8	7/8	12	1/2	
155mm Blocks	25.8	1	14	9/16	

Line Size		
THE REAL PROPERTY.	MAX LII	NE SIZE
	mm	in
60mm Blocks	12	1/2
80mm Blocks	14	9/16
80mm Fiddles	12	1/2
105mm Blocks	14	9/16
130mm Blocks	16	5/8
155mm Blocks	18	11/16



# High Load Racing Blocks

Single with Snap Shackle



PART NO	SHEAVE Ø	WORKING LOAD LIMIT			
		Kg	lb	g	oz
29941808BK	80	2000	4400	496	18

Double



PART NO	SHEAVE WORKING WEIGHT				GHT
		Kg	lb	g	oz
29941612BK	60	2000	4400	320	11.3
29941802BK	80	3400	7480	655	23

Double & Becket



PART NO	SHEAVE Ø	WORKING LOAD LIMIT				GHT
		Kg	lb	g	OZ	
29941615BK	60	2000	4400	343	12.1	
29941805BK	80	3400	7480	685	24	

Triple



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT	
		Kg	lb	g	oz
29941613BK	60	2500	5500	428	15.1

Fiddle



PART NO	SHEAVE WORKING W LOAD LIMIT				GHT
		Kg	lb	g	oz
29941831BK	80	2400	5280	441	16

Fiddle & Becket



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT		
		Kg	lb	g	oz	
29941834BK	80	2400	5280	471	17	

Web Block



PART NO	SHEAVE Ø	WORKING LOAD LIMIT		WEIGHT	
		Kg	lb	g	OZ
29901647BK	60	1400	3086	120	4.2
29901807BK	80	2400	5280	242	8.6
29901107BK	105	3750	8250	417	14.7
29901337BK	130	5000	11000	665	23.5
29901157BK	155	7500	16500	1470	51.8



Blocks			
PART NO	BAG QTY	BLOCK SIZE	
29900010	22	60	
29900011	24	80	
29900012	35	105	
29900013	47	130	
29900014	50	155	
29900015	59	175	
29900016	68	200	
29900017	78	225	



in mm

4/5

1

1 3/8 17.5

10.0  $\frac{2}{5}$  16

13.0 ½ 20 ½ 71

mm

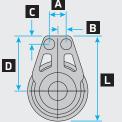
20

26

35

40 | 1 1/7 | 20.0

**155mm** 216 8 ½ 54 2 ½ 27.0 1



in

2/3 27

4/5

mm in mm in mm

33 | 12/7 | 111 | 41/3

50 2

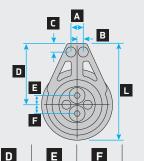
5/8

55 2 1/6

95 3 3/4

2 1/5

138 5 <sup>3</sup>/<sub>7</sub>



mm

20 | 4/5

5/7

Halyard and Runner	→ A ←
Block Head Details	
	A B
	D

BLOCK	A	A	E	3		С	D		
	mm	in	mm	in	mm	in	mm	in	
60mm HL Halyard	12.8	1/2	8.5	21/64	25.3	1	24.0	<sup>15</sup> / <sub>16</sub>	
80mm HL Halyard	14.4	9/16	11.0	7/16	28.0	1 3/4	27.4	1 <sup>3</sup> / <sub>32</sub>	
80mm Runner	11	7/16	11	7/16	28.6	1 %4	27.8	1 <sup>3</sup> / <sub>32</sub>	
105mm Runner	13	<sup>33</sup> / <sub>64</sub>	13	<sup>33</sup> / <sub>64</sub>	34.0	1 <sup>11</sup> / <sub>32</sub>	32.0	1 1/4	
130mm Runner	16	5/8	16	5/8	34.0	1 11/32	32.0	1 1/4	

### Single Footblock

181

7 1/8

SIZE

60mm

80mm 111 4 3/8

105mm

130mm



Fixings NOT supplied: SIZE 60mm 2xM6 / 1xM10 SIZE 80mm 2xM8 / 1xM12 SIZE 105mm 2xM10 / 1xM12 SIZE 130mm 4xM12 SIZE 155mm 2xM12 / 2xM16

PART NO	SHEAVE Ø	WOR LOAD	KING LIMIT	WEIGHT		
		Kg	lb	g	oz	
29946611BK	60	1400	3080	132	4.7	
29946801BK	80	2400	5280	268	9.5	
29946101BK	105	3750	8250	490	17.3	
29946131BK	130	5500	12100	732	25.9	
29946151BK	155	7500	16500	1476	52.2	

### Double Footblock

20 4/5



Fixings NOT supplied: SIZE 60mm 2xM6 / 1xM10 SIZE 80mm 2xM8 / 1xM12 SIZE 105mm 2xM10 / 1xM12 SIZE 130mm 4xM12 SIZE 155mm 2xM12 / 2xM16

PART NO	SHEAVE Ø	WOR LOAD		WEIGHT		
		Kg	lb	g	oz	
29946612BK	60	1400	3080	252	8.9	
29946802BK	80	2400	5280	500	17.7	
29946102BK	105	3750	8250	873	30.8	
29946132BK	130	5500	12100	1301	46.0	
29946151BK	155	7500	16500	2675	94.5	

<sup>\*</sup>Top sheave should not be loaded above 60% of WLL

# Shackle Posts

Designed to fit Racing halyard and runner blocks.

Can be used with shackle in-line or at 90° to sheave.



PART NO.	SUITS	POST	DIA.	DIA. PIN I		BREAKING LOAD	
		mm	in	mm	in	kg	lb
29942606	60mm	17.5	<sup>11</sup> / <sub>16</sub>	8	<sup>5</sup> / <sub>16</sub>	2800	6170
29942806	80mm	23.75	7/8	10	3/8	5000	11000
29942106	105mm	24	1	10	3/8	6400	14100
29942136	130mm	28	1 <sup>1</sup> / <sub>8</sub>	12	1/2	10000	22050
29942156	155mm	36	1 <sup>3</sup> / <sub>8</sub>	16	5/8	15000	33050

### Fixed Halyard Block



PART NO	SHEAVE Ø	W	LL	WEI	GHT
	Kg		lb	g	oz
29902800BK	80	2500	5500	300	10.6
29902100BK	105	4000	8817	629	22.2

### Halyard Block



PART NO	SHEAVE Ø	WOR LOAD		WEIGHT				
		Kg	lb	g	oz			
29946612BK	60	1400	3080	252	8.9			
29946802BK	80	2400	5280	500	17.7			
29902101BK	105	3200	3200 7054		16.1			
29902131BK	130	5000	11021	839	29.6			
29902151BK	155	7500	16500	1545	54.5			



# High Load Racing Runner Blocks

- Sheaves run on an impregnated composite bearing with dual side thrust bearings for free-running at initial load.
- Optimised cheek design with non-snag bails.

- Also available in Titanium contact your dealer.
- Breaking load of runner blocks is 2.5 x WLL

#### Runner Block



PART NO	SHEAVE Ø	WOR LOAD		WEI	GHT
		Kg	lb	g	oz
29902808BK	80	2000	4409	256	9
29902108BK	105	2560	5643	448	15.8
29902138BK	130	4000	8817	776	27.4
29902158BK	155	6000	13226	1418	50
29902178BK	175	8400	18516	2074	73.2
29902208BK	200	10000	22043	4003	141

#### Runner Block & Becket



PART NO	SHEAVE Ø	WOR LOAD	KING LIMIT	WEIGHT		
		Kg	lb	g	oz	
29902809BK	80	2000	4409	265	9.4	
29902109BK	105	2560	5643	474	16.7	
29902139BK	130	4000	8817	842	29.7	
29902159BK	155	6000	13226	1569	55.3	
29902179BK	175	8400	18516	2544	89.7	
29902209BK	200	10000	22043	4620	163	

## **Snatch Blocks**

Ideal for general spinnaker use, the Snatch Block features the Lewmar snap shackle and soft, synthetic rubber cheeks to handle rough treatment. Where a snatch block is attached in a situation which does not permit full movement, such as through some toe rails, a shackle must be used to ensure full articulation.

Designed for line handling on sail boats only.



19810600 Size 1 Snatch Block

19820600 Size 2 Snatch Block

19830500 Size 3 Snatch Block

PART NO	SIZE	BEARING	SHEAVE MATERIAL	WORKING L	OAD LIMIT	BREAKING LOAD		SHEAVE Ø		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	17.0
19820600	2	Stainless Steel	Delrin	1590	3500	3180	7000	80	3 1/8	20	3/4	16	5/8	880	31.0
19830500	3	Needle Roller	Aluminium	2155	4750	4310	9500	80	3 1/8	20	3/4	16	5/8	1040	36.5

# **Pivoting Lead Blocks**

Lead blocks are a low profile solution for leading halyards or other rig sail controls back to cleats or jammers. Maintains alignment with a variable line entry-angle. The line passes through the centre of the pivot support, remaining as close to the deck as possible.

- Alloy sheave / Alloy cheeks
- Black carbon Acetal ball bearings
- Torlon® rachet pawl



Pivoting low lead



Pivoting low lead ratchet



Pivoting low lead ratchet with cleat

PART NO	DESCRIPTION	SHEAVE Ø	MAX ROPE Ø		WORKING LOAD LIMIT		WEIGHT		FASTENER Ø		FASTENING CENTRE WIDTH		FASTENING CENTRE LENGTH	
			mm	in	Kg	lb	g	oz	mm	in	mm	in	mm	in
29196012	Pivoting low lead High Load	60	14	<sup>9</sup> / <sub>16</sub>	1500	3310	341	12.0	6.0	3/16	45	1 3/4	112.5	4 7/16
29196014	Pivoting low lead ratchet	60	10	3/8	250	550	147	5.2	5.0	3/16	35	1 3/8	105.5	4 <sup>5</sup> / <sub>32</sub>
29196013	Pivoting low lead ratchet with cleat	60	10	3/8	250	550	285	10.1	5.0	3/16	35	1 3/8	105.5	4 5/32

# **Block Upstands**

Lewmar block upstands are designed to hold a block to the deck in a vertical direction for sail control in leisure marine application only.

Their performance depends heavily on the specific application and suitability of

Care must be taken during installation that the block upstand is suitably aligned to the expected load.

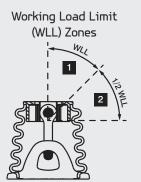




The load direction should be as close to perpendicular with the base as possible (as shown on the Alignment illustration. This will maximise the working load of the pad eye.

In addition, the load should be as close to parallel with the bail as possible.

The Working Load Limit (WLL) Zones illustration shows the recommended WLL relatives to the applied force.





### Spring Block Upstand

PART NO	TO SUIT BLOCK	WORKING L ZON			LOAD LIMIT NE 2	WEI	GHT	BASE	E DIA
		Kg	lb	Kg	lb	Kg	lb	mm	in
29904046	30 & 40mm Control	400	990	200	495	24	0.8	1 <sup>3</sup> / <sub>16</sub>	1/8
29904050	60mm Ratchet Triple & 60mm Synchro	400	990	200	495	24	0.8	1 3/4	3/16

### Rubber-Boot Block Upstand with Pad Eye



PART NO	TO SUIT BLOCK	WORKING L		WORKING L		WEI	GHT	BASE	E DIA
		Kg	lb	Kg	lb	g	oz	mm	in
29195065	50mm HTX 60mm Synchro 60mm Ratchet Single / Fiddle	800	1760	400	990	105	3.7	58	2 1/4
29196065	60mm HTX 72mm Synchro 60mm Racing Low Load Single	1100	2420	550	1211	105	3.7	58	2 1/4
29197265	72mm HTX 90mm Synchro	2000	4400	1000	2200	210	7.4	73	2 %

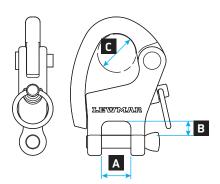






29927240





29925040 29926040 FIT BLOCKS PART NO WORKING LOAD LIMIT Kg

	AKING DAD	PIN	DIA	A	1	E	3	
Kg	lb	mm	in	mm	in	mm	in	mm
900	1980	4	1/8	9.0	3/8	4.5	3/16	12
1600	3520	5	3/	12.0	1/2	6.0	1/.	1/4

29929040

29925040	50 Synchro / 30 & 40 Control Single / Double	450	990	900	1980	4	1/8	9.0	3/8	4.5	3/16	12	1/2
29926040	60 Synchro / 50 HTX / 30 Control Triple	800	1760	1600	3520	5	3/16	12.0	1/2	6.0	1/4	14	9/16
29927240	72 Synchro / 60 HTX / 40 Control Triple	1100	2420	2200	4840	6	1/4	13.0	1/2	6.5	1/4	18	11/16
29929040	90 Synchro / 72 HTX	2000	4400	4000	8800	9.5	3/8	17.5	11/16	7.5	5/16	22	7/8

С



# Pad Eyes

Lewmar pad-eyes are designed for leisure marine use and for fixing blocks or similar equipment to the deck.

Their performance depends heavily on the specific application and suitability of installation.

Care must be taken during installation that the pad eye is suitably aligned to the expected load.

### Alignment



The load direction should be as close to perpendicular with the base as possible. This will maximise the working load of the pad eye.

In addition, the load should be as close to parallel with the bail as possible.

For more information on the deflection effect on force applied refer to the product manuals.



29192060



29192105



29192130



29904040



29904041



25005083



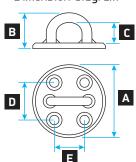
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1

Working Load Limit (WLL) Zones

2

Dimension diagram



Pad Eye Specifications

PART NO	DESCRIPTION	W ZON	NE 1	W ZON	NE 2	WEI	GHT	BAR	DIA	1	_	E	_	0		0	<b>ס</b>	E	i	FIXII NOT SU	
		Kg	lb	Kg	lb	g	oz	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
29192060	60/80mm Pad Eye	3200	7055	1600	3527	154	5.4	10.0	3/8	66	2 19/32	33	<sup>15</sup> / <sub>16</sub>	18	23/32	34	111/32	28	1 <sup>3</sup> / <sub>32</sub>	4xM8	4x <sup>5</sup> / <sub>16</sub>
29192105	105mm Pad Eye	5000	11023	2500	5512	435	15.3	12.7	1/2	98	3 <sup>27</sup> / <sub>32</sub>	48	17/8	28	13/32	50	231/32	42	1 <sup>21</sup> / <sub>32</sub>	4xM12	4x <sup>7</sup> / <sub>16</sub>
29192130	130mm Pad Eye	7500	16535	3750	8267	787	27.8	15.8	5/8	115	417/32	58	2 1/16	34	15/16	60	211/32	48	1 1/8	4xM12	4x <sup>7</sup> / <sub>16</sub>
25005083	Small Cast Pad Eye	2500	5511	1250	2756	104	3.7	8.0	5/16	58	2 <sup>9</sup> / <sub>32</sub>	27	1 <sup>1</sup> / <sub>16</sub>	14	9/16	40	1 <sup>37</sup> / <sub>64</sub>	40	1 <sup>37</sup> / <sub>64</sub>	4xM6	4x <sup>1</sup> / <sub>4</sub>
25005088	Medium Cast Pad Eye	4500	9921	2250	4960	212	7.5	10.0	3/8	73	27/8	35	1 <sup>3</sup> / <sub>8</sub>	17	<sup>43</sup> / <sub>64</sub>	50	1 <sup>31</sup> / <sub>32</sub>	50	1 <sup>31</sup> / <sub>32</sub>	4xM8	4x <sup>5</sup> / <sub>16</sub>
29904040	Gibb Diamond Pad Eye	1135	2502	567	1250	45	1.6	6.0	7/32	38	1 ½	24	15/16	14	9/16	23	15/16	46	1 <sup>13</sup> / <sub>16</sub>	4xM5	4x <sup>3</sup> / <sub>16</sub>
29904041	Gibb Square Pad Eye	3180	7011	1590	3505	227	8.0	9.0	5/16	70	23/4	37	17/16	21	7/8	38	11/2	38	11/2	4xM8	4x <sup>5</sup> / <sub>16</sub>

# Custom Skeletal Block Range

Drawing upon the latest cutting-edge design and material advances, the Skeletal Block offers strength and Grand Prix performance combined with a sleek, on-trend, minimalist look. The structural loads typically found in the head of a block have been re-routed through the cheeks of the Skeletal Block while any non-load bearing material is sculpted out. An evolution of the Lewmar Racing Range, the head is constructed from minimal parts and, with no requirement to support load, is super light. Featured in many configurations, the Skeletal Block is more compact than an equivalent typical block. Available in aluminium, stainless steel, or titanium finish and in a range of sizes.





# Custom Pad Eyes



For detailed information, consult our Custom Component Guide

Featuring a single, through-deck base fixing, the Lewmar Pad Eye offers a smaller, more compact footprint than an equivalent multiple-fixed model. The interchangeable tops provide a choice of configuration that can be customised for each specific requirement, from a fixed eye for a web block to a removable loop. Each Pad Eye is compatible with the Skeletal Block Range, complementing the styling and finish to provide a seamless control solution.



Contact custom@lewmar.com to discuss your custom hardware requirements



# Traveller Systems - Make sail control easy!



### Page 156 Ocean Size 0

- Ideal for cruising yachts up to 8.5 m (28ft)
- Internal control sheave prevents snagging
- Proven performance

- Ocean Car can be adapted to run on curved track
- Now available in black



### Page 158 NTR Size 1, 2 & 3

- Popular choice for cruising and racing yachts
- Modular system suits any configuration
- Compatible with Ocean Range Track
- Larger sheaves results in efficient rope handling



### Page 169 HTX Size 1 & 2

- Ideal for cruiser/racer yachts
- Complements HTX Block Range
- Unique triple ball race for reduced friction
- Minimal parts enhance performance and reliability
- Captive Ball



# Page 174 T-Track

- Specialised genoa systems
- Recently restyled to enhance strength and performance
- Available in 25mm through to 65mm
- Choice of wide range of end stops



#### Page 175 Size 4 track and cars

- High load control line sheaves
- Torlon balls running in fully machined ball races.
- Machined weight reducing slots
- End stops fixed through deck and track



# Page 176 Custom/Racing

- Custom hardware for yachts up to 67m (220ft)
- Ideal for high-performance racing yachts
- Features patented double ball race
- Carries high load with low friction
- Tailored to specific applications
- Choice of finishes to suit individual requirements

# Traveller Systems - Selection Guide

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 which effect 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.

### Cars Selection Guide

APPLICATION ® SHEETING POSITION	SIZE	TOWING PURCHASE (MAXIMUM 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	
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											





# Size O Ocean Cars

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

### Short Car with Delrin Balls & Shackle



PART NO		KING LIMIT	LEN	GTH	WIE	DTH	WEI	GHT	
	kg	lb	mm	in	mm	in	g	oz	
29020701BK	200	440	71	2.79	51	2	142	5.59	

### Car with Delrin Balls, Shackle & Single Sheaves



PART NO	LOAD	KING LIMIT	LEN	i .		OTH	WEI	
	kg	lb	mm	in	mm	in	g	OZ
29030100BK	450	990	123	4.83	51	2	210	7.39

# Car with Slide Rods, Shackle & Plunger



PART NO		KING LIMIT	LEN	GTH	WIE	OTH	WEI	GHT
	kg	lb	mm	in	mm	in	g	oz
29030600BK	450	990	123	4.83	51	2	225	7.92

# Genoa Car with Delrin Balls & Single Sheave



PART NO	WOR LOAD	KING LIMIT	LEN	GTH	WIE	OTH	WEI	GHT
	kg	lb	mm	in	mm	in	g	oz
29040100BK	600	1325	123	4.83	51	2	427	15.03

# Short Car with Delrin Balls, Loop & Single Sheaves



PART NO		KING LIMIT	LEN	GTH	WIE	OTH	WEI	GHT
	kg	lb	mm	in	mm	in	g	oz
29330105BK	200	440	73	2.87	51	2	150	6

### Car with Delrin Balls, Pivoting Loop & Single Sheaves



PART NO	WOR LOAD	KING LIMIT	LEN	GTH	WI	)TH	WEIGHT		
	kg	lb	mm	in	mm	in	g	oz	
29330107BK	450	990	124	4.88	51	2	250	8.5	

### Genoa Car with Slide Rods & Plunger



PART NO	WORKING LOAD LIMIT		LENGTH		WIDTH		WEIGHT	
	kg	lb	mm	in	mm	in	g	oz
29040600BK	600	1325	123	4.83	51	2	427	15.03

# Size 0 Ocean End Stops

### Control Line End Stop with Single Sheave



PART NO	WORKING LOAD LIMIT		LEN	GTH	WIDTH		WEIGHT	
	kg	lb	mm	in	mm	in	g	OZ
29170030BK	200	440	58	2.3	51	2	78	2.75

### Control Line End Stop with Sheave, Becket & Cam



PART NO	WORKING LOAD LIMIT		LEN	GTH	WIDTH		WEIGHT	
	kg	lb	mm	in	mm	in	g	OZ
29170033BK	200	440	65	2.3	51	2	397	13.97

### Simple Track End

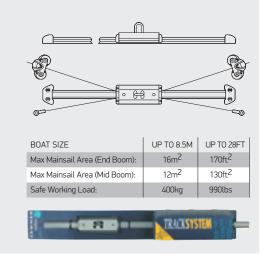


PART NO	WEIGHT				
	g	OZ			
29170040BK	10	.35			

# Size 0 Ocean Traveller Kit - 2:1 Purchase 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).

Size 0 Ocean Traveller System
1 x Mainsheet Car
2 x Simple End Stop
1 x 1.2m Sliding Bolt Track
1 x Size 1 Dead Eye
2 x Small Composite Cleat
2 x Small Cam Fairlead



# Size 0 Track Specifications and Fixing Details

#### **Drilled Track**

Commonly used and particularly useful where through deck fixing is not possible, such as in double skinned boats, where fixing bolts are trapped into a plate in the deck.



#### Beam track

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



Some beam tracks can only use metric fasteners

Made of Aluminium 6082T6 extrusion

PART NO	DESCRIPTION	LEN m	GTH ft	HEII mm		WIE mm		WEI (per n		FIXI	BETWEEN NGS/ LE DISTANCE in	FIXII (NOT INC Metric	
		111	11	111111	11.1	111111	111	y	UZ	111111	111	Metric	imperiat
29160315BK	Beam Track	1.5	4'11"	24.7	0.97	24	0.44	954	33.65	400	16	Hex Hd M6	1/4"
29160405BK		0.5	1'8"										
29160410BK	Drilled Plunger	1.0	3'3"	44.0	0.42	10	0.55	2/2	12.00	00	2.1	6   111145	
29160414BK	Track	1.4	4'7"	11.0	0.43	19	0.75	342	12.06	80	3.1	Csk Hd M5	-
29160415BK		1.5	4'11"										

Also available in grey (remove BK from part number)





### Size 1 Mainsheet System

In the Size 1 kit, you'll find all the components necessary to assemble a standard system.

- For boats up to 11m (36ft)
- Suitable for 8mm (5/16") control line

# Size 162 Traveller Kit 4:1 Purchase System

	SIZE 1	SIZE 2
Traveller System	29461354BK	29462354BK
Comprises:		
1 x Mainsheet Car Shackle with Double Control Line Sheaves, Cleats $\otimes$ Beckets	29431916BK	29432916BK
2 x End stop with Double Control Line Sheaves	29471032BK	29472032BK
1 x Sliding Bolt Track	29161115BK	29162118BK
Track Length	1.5m	1.8m

### Size 2 Mainsheet System

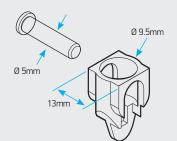
Like the size 1 system, the Size 2 Mainsheet system comes with everything you need for a complete standard system, including the sliding bolt track.

- For boats up to 15m (49ft).
- Suitable for 10mm (3/8") control line.

BOAT SIZE	UP TO 11M (36FT)	UP TO 14.6M (48FT)
Max. Mainsail Area:		
End Boom:	34m <sup>2</sup> (366ft <sup>2</sup> )	46m <sup>2</sup> (495ft <sup>2</sup> )
Mid Boom:	21m <sup>2</sup> (226ft <sup>2</sup> )	38m <sup>2</sup> (410ft <sup>2</sup> )
Safe Working Load:	900kg (1980 lb)	1000kg (2000 lb)

### NTR Cars Size 1 - 2 and 3

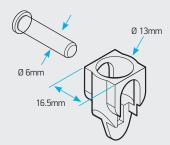
#### Size 1 Upstand Cup Detail



# Size 1 upstand fits the following blocks:

- 60 synchro blocks
- 50 HTX blocks

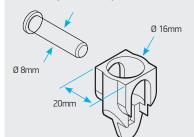
#### Size 2 Upstand Cup Detail



# Size 2 upstand fits the following blocks:

- 72 synchro blocks
- 60 HTX blocks
- 60 / 60HL and 80 Racing blocks

Size 3 Upstand Cup Detail



# Size 3 upstand fits the following blocks:

- 90 synchro blocks
- 72 HTX blocks
- 80HL Racing blocks

Size 3 HL Upstand Cup Detail



# Size 3 upstand fits the following blocks:

- 105 synchro blocks
- 90 HTX blocks
- 105 Racing blocks

# NTR Torlon Ball (TB) Mainsheet Cars Size 1, 2 and 3

TB Short Car with Shackle



PART NO	SIZE	WOR LOAD kg		LEN mm	GTH in	WIDTH mm in		WEIGHT g oz	
29421300BK	1	600	1329	107	4 3/16	71	23/4	228	8.00
29422300BK	2	1100	2420	140	5 <sup>1</sup> / <sub>2</sub>	92	3 <sup>5</sup> / <sub>8</sub>	386	13.6
29423301BK	3	2000	4400	150	5 <sup>15</sup> / <sub>16</sub>	88	3 ½	680	24.0

TB Short Car with Upstand



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WIDTH mm in		WEIGHT g oz	
29421400BK	1	600	1329	107	4 3/16	71	23/4	241	8.50
29422400BK	2	1100	2420	140	5 <sup>1</sup> / <sub>2</sub>	92	3 <sup>5</sup> / <sub>8</sub>	397	14
29423400BK	3	2000	4400	150	5 <sup>15</sup> / <sub>16</sub>	88	3 ½	781	27.3

TB Car with Shackle



PART NO	)	SIZE		WORKING LOAD LIMIT		LENGTH		WIDTH		WEIGHT	
			kg	lb	mm	in	mm	in	g	OZ	
29431300	3K	1	900	1980	162	6 ¾	71	2 3/4	313	11.0	
29432300	зк	2	1500	3300	210	8 <sup>5</sup> / <sub>16</sub>	92	3 5/8	639	22.5	
29433300	зк	3	2500	5500	215	8 ½	88	3 1/2	924	32.3	

TB Car with Upstand





\* 29432420 fitted with size 3 upstand

PART NO	SIZE	WOR LOAD kg		LEN mm	GTH in	WIE mm	OTH in	WEI g	GHT oz
29431400BK	1	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	71	2 3/4	364	12.8
29432400BK	2	1500	3300	210	8 <sup>5</sup> / <sub>16</sub>	92	3 <sup>5</sup> / <sub>8</sub>	767	27
29432420BK*	2*	2000	4400	210	8 <sup>5</sup> / <sub>16</sub>	92	3 <sup>5</sup> / <sub>8</sub>	839	33
29433400BK	3	2500	5500	215	8 ½	88	3 1/2	743	26.0



# NTR Torlon Ball (TB) Mainsheet Cars Size 1, 2 and 3 (Cont.)

#### TB Car with Shackle and Single Control Line Sheaves



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WI[ mm	OTH in	WEI g	GHT oz	
29431311BK	1	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	71	2 <sup>3</sup> / <sub>4</sub>	374	13.2	
29432311BK	2	1500	3300	210	8 <sup>5</sup> / <sub>16</sub>	92	3 <sup>5</sup> / <sub>8</sub>	747	26.3	

## TB Car with Upstand and Single Control Line Sheaves



PART NO	SIZE		WORKING LOAD LIMIT		LENGTH		WIDTH		GHT
		kg	lb	mm	in	mm	in	g	OZ
29431411BK	1	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	71	2 <sup>3</sup> / <sub>4</sub>	421	14.8
29432411BK	2	1500	3300	210	8 <sup>5</sup> / <sub>16</sub>	92	3 <sup>5</sup> / <sub>8</sub>	875	30.9
29433602BK	3*	3500	7700	270	10 5/8	88	3 1/2	1595	55.8

TB Car with Shackle, Single CL Sheaves & Becket



PART NO	SIZE	WOR LOAD kg	KING LIMIT	LEN mm	GTH in	WIE mm	OTH in	WEI g	GHT oz
29431315BK	1	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	71	2 <sup>3</sup> / <sub>4</sub>	378	13.2
29432315BK	2	1500	3300	210	8 <sup>5</sup> / <sub>16</sub>	92	3 <sup>5</sup> / <sub>8</sub>	867	34.1

TB Car with Upstand, Single CL Sheaves & Becket



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WIE	OTH in	WEI g	GHT oz
29431415BK	1	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	71	2 <sup>3</sup> / <sub>4</sub>	472	16.6
29432415BK	2	1500	3300	210	8 <sup>5</sup> / <sub>16</sub>	92	3 <sup>5</sup> / <sub>8</sub>	993	35

TB Car with Shackle and Double Control Line Sheaves





\* 29432372BK fitted with double ball bearing control line sheaves

	PART NO	SIZE	WOR LOAD kg		LEN mm	GTH in	WIE mm	DTH in	WEI g	GHT oz
2	29431312BK	1	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	71	23/4	435	15.3
2	29432312BK	2	1500	3300	210	8 <sup>5</sup> / <sub>16</sub>	92	3 <sup>5</sup> / <sub>8</sub>	871	30.7
2	29432372BK	2*	1500	3300	210	8 <sup>5</sup> / <sub>16</sub>	92	3 <sup>5</sup> / <sub>8</sub>	880	34.6
2	29433314BK	3	2500	5500	215	8 ½	88	3 1/2	993	34.8

#### TB Car with Upstand and Double Control Line Sheaves





\* 29431712BK fitted with size 2 fitted with size 3 upstand upstand

<sup>\* 29443604</sup>BK fitted with size 3 HL upstand

PART NO	SIZE		WORKING OAD LIMIT		LENGTH		DTH	WEIGHT	
		kg	lb	mm	in	mm	in	g	OZ
29431412BK	1	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	71	2 <sup>3</sup> / <sub>4</sub>	486	17.1
29431712BK	1*	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	71	2 <sup>3</sup> / <sub>4</sub>	486	17.1
29432412BK	2	1500	3300	210	8 <sup>5</sup> / <sub>16</sub>	92	3 <sup>5</sup> / <sub>8</sub>	997	35.1
29432424BK	2*	2000	4400	210	8 <sup>5</sup> / <sub>16</sub>	92	3 <sup>5</sup> / <sub>8</sub>	1050	37
29433414BK	3	2500	5500	215	8 ½	88	3 1/2	1200	42
29443604BK	3*	3500	7700	270	10 5/8	88	3 1/2	1610	56.8

# NTR Torlon Ball (TB) Mainsheet Cars Size 1, 2 and 3 (cont.)

TB Car with Shackle, Double CL Sheaves & Becket



PART NO	SIZE	LOAD	WORKING LOAD LIMIT		GTH	WIDTH		WEIGHT	
		kg	เม	mm	in	mm	in	g	OZ
29431316BK	1	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	71	2 <sup>3</sup> / <sub>4</sub>	390	13.7
29432316BK	2	1500	3300	210	8 <sup>5</sup> / <sub>16</sub>	92	3 <sup>5</sup> / <sub>8</sub>	991	39

#### TB Car with Upstand, Double CL Sheaves & Becket



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WIE mm	DTH in	WEI g	GHT oz
29431416BK	1	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	71	23/4	540	19.0
29432416BK	2	1500	3300	210	8 <sup>5</sup> / <sub>16</sub>	92	3 <sup>5</sup> / <sub>8</sub>	1117	39.4
29433416BK	3	2500	5500	215	8 ½	88	3 1/2	1790	62.6

TB Car with Shackle and Plunger



PART NO	SIZE	WORKING LOAD LIMIT		LEN	GTH	WIDTH		WEIGHT	
		kg	lb	mm	in	mm	in	g	oz
29431337BK	1	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	71	2 <sup>3</sup> / <sub>4</sub>	364	12.8

TB Car, 2 x Sz3 Upstand, Double CL Sheaves, Becket & Cam





fitted with size 3 upstand

PART NO	SIZE	WORKING LOAD LIMIT		LEN	LENGTH		WIDTH		WEIGHT	
		kg	lb	mm	in	mm	in	g	oz	
29432836BK	2*	2800	6160	307	12 <sup>1</sup> / <sub>16</sub>	120	4 3/4	2173	85.5	

#### TB Car with Shackle, Double CL Sheaves & Cam (4:1)



PART NO	SIZE	WOR LOAD	KING LIMIT	LEN	GTH	WIE	OTH	WEI	GHT
		kg	lb	mm	in	mm	in	g	oz
29431834BK	1	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	97	3 3/4		

#### TB Car with Upstand, Double CL Sheaves & Cam (4:1)



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WIE	OTH in	WEI g	GHT oz
29431814BK	1	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	97	3 <sup>3</sup> / <sub>4</sub>	759	26.7
29432814BK	2	1500	3300	210	8 <sup>5</sup> / <sub>16</sub>	120	4 3/4	1496	52.7

#### Radius Cars

Radius cars available upon request for all size 1, 2 and 3.

Please contact your Lewmar representative and specify your track Vertical or Horizontal radii.

#### **Spare Bearings:** Torlon Balls for Ocean ® NTR Cars

PART NO	DESCRIPTION	WHERE USED	DIAM	ETER
			mm	in
29171021	Torlon Balls (per 100)	SZ1 Ocean and NTR Cars	6.4	1/4
29172021	Torlon Balls (per 100)	SZ2 Ocean and NTR Cars	7.8	5/16





## NTR Torlon Ball (TB) Mainsheet Cars Size 1, 2 and 3 (cont.)

TB Car with Shackle, Double CL Sheaves, Becket & Cam (5:1)



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WII mm	OTH in	WEI g	GHT oz
29431916BK	1	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	97	3 3/4	799	28.2
29432916BK	2	1500	3300	210	8 <sup>5</sup> / <sub>16</sub>	120	4 3/4	1730	68.1

TB Car with Upstand, Double CL Sheaves, Becket & Cam (5:1)





\* 29432838BK fitted with size 3 upstand

PART NO	SIZE	WOR LOAD kg	KING LIMIT	LEN mm	GTH in	WIE mm	DTH in	WEI g	GHT oz	
29432816BK	2	1500	3300	210	8 <sup>5</sup> / <sub>16</sub>	120	43/4	1610	56.7	
29432838BK	2*	3500	7700	307	12 <sup>1</sup> / <sub>16</sub>	120	4 3/4	1786	70.3	

TB Car Long, 2x Upstand, Double CL Sheaves





\* 29432832BK fitted with size 3 upstand

PART NO	SIZE	LOAD			GTH	WIE		WEI	1	
		kg	lb	mm	in	mm	in	g	OZ	
29432822BK	2	1800	3960	307	12 <sup>1</sup> / <sub>16</sub>	92	3 5/8	1460	51.5	
29432832BK	2*	2800	6160	307	12 <sup>1</sup> / <sub>16</sub>	92	3 5/8	1560	55	
29433832BK	3	3500	7700	270	10 5/8	88	3 1/2	1810	63.8	l

TB Car Long, 3x Upstand, Double CL Sheaves





\* 29432833BK fitted with size 3 upstand

PART NO	SIZE	WOR LOAD kg		LEN mm	GTH in	WIE mm	OTH in	WEI g	GHT oz
29432823BK	2	3000	6600	307	12 <sup>1</sup> / <sub>16</sub>	92	3 5/8	1460	51.5
29432833BK	2*	3500	7700	307	12 <sup>1</sup> / <sub>16</sub>	92	3 5/8	1560	55
29433833BK	3	4000	8800	300	11 ¾	88	3 1/2	2190	77.2

# NTR Torlon Ball (TB) Genoa Cars Size 1, 2 and 3

TB Short Genoa Car with Tow Point



PART NO	SIZE		WORKING LOAD LIMIT		IGTH	WIE	DTH	WEI	GHT
		kg	lb	mm	in	mm	in	g	oz
29421366BK	1*	600	1320	107	4 3/4	71	23/4	521	18.3

<sup>\*</sup> Limiter supplied non-assembled for a port or starboard application

TB Genoa Car with Becket



PART NO	SIZE	WOR LOAD kg	KING LIMIT	LEN mm	GTH in	WI[ mm	DTH in	WEI g	GHT oz
29441301BK	1*	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	71	2 <sup>3</sup> / <sub>4</sub>	577	20.3
29442301BK	2*	1800	3960	210	8 <sup>5</sup> / <sub>16</sub>	120	43/4	1327	46.8

 $<sup>\</sup>ensuremath{^{\star}}$  Limiter supplied non-assembled for a port or starboard application

# NTR Torlon Ball (TB) Genoa Cars Size 1, 2 and 3 Cont.

#### TB Genoa Car with Single Control Line Sheave



PART NO	SIZE	WOR LOAD kg		LEN mm	GTH in	WIE mm	DTH in	WEI g	GHT oz
29441311BK	1*								
29441321BK	1 port	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	71	2 <sup>3</sup> / <sub>4</sub>	560	19.8
29441331BK	1 stbd								
29442311BK	2*								
29442321BK	2 port	1800	3960	210	8 <sup>5</sup> / <sub>16</sub>	120	$4^{3}/_{4}$	1330	46.9
29442331BK	2 stbd								
29443311BK	3	3500	7700	215	8 ½	88	3 1/2	1565	54.8
29443611BK	3	5000	11000	320	12 5/8	88	3 1/2		

#### TB Car Genoa stirrup, single CL sheave and becket



PART NO	SIZE	WOR LOAD kg		LEN mm	GTH in	WIE	DTH in	WEI g	GHT oz
29441345BK	1*	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	71	23/4	566	19.9
29442345BK	2*	1800	3960	210	8 <sup>5</sup> / <sub>16</sub>	120	4 3/4	1359	47.9

 $<sup>^{\</sup>star}$  Limiter supplied non-assembled for a port or starboard application

# NTR Slide Rod (SR) Cars Size 1, 2 and 3

#### SR Car with Shackle



PART NO	SIZE	LOAD	KING LIMIT		GTH	WII		WEI	1
		kg	ເມ	mm	in	mm	in	g	OZ
29431500BK	1	1000	2200	162	6 <sup>3</sup> / <sub>8</sub>	50	2	230	8.11
29432500BK	2	2000	4400	210	8 <sup>5</sup> / <sub>16</sub>	65	2 <sup>5</sup> / <sub>8</sub>	559	19.7

#### TB Genoa Car with Double Control Line Sheaves



PART NO	SIZE		WORKING LOAD LIMIT kg lb		LENGTH mm in		DTH in	WEIGHT g oz	
29441312BK	1*								
29441322BK	1 port	900	1980	162	6 <sup>3</sup> / <sub>8</sub>	71	23/4	566	19.9
29441332BK	1 stbd								
29442312BK	2*								
29442322BK	2 port	1800	3960	210	8 <sup>5</sup> / <sub>16</sub>	120	$4^{3}/_{4}$	1354	47.7
29442332BK	2 stbd								

#### Spare Bearings: Torlon Balls for Ocean ® NTR Cars



	400 m				
PART NO	DESCRIPTION	WHERE USED	DIAM	ETER	
			mm	in	
29171021	Torlon Balls (per 100)	SZ1 Ocean and NTR Cars	6.4	1/4	
29172021	Torlon Balls (per 100)	SZ2 Ocean and NTR Cars	7.8	5/16	

#### Expert advice

Current track is NTR specification.

If retrofitting check your track

- Size 3 NTR tracks have 12mm Ø plunger holes
- Size 3 Ocean tracks have 9.5mm Ø plunger holes

#### SR Car with Shackle and Plunger Stop



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WIE mm	OTH in	WEI g	GHT oz
29441723BK	1	1000	2200	162	6 <sup>3</sup> / <sub>8</sub>	50	2	264	9.3
29442723BK	2	2000	4400	210	8 <sup>5</sup> / <sub>16</sub>	65 2 <sup>5</sup> / <sub>8</sub>		577 19.6	



# NTR Slide Rod (SR) Cars Size 1, 2 and 3

#### SR Car with Shackle and Single Control Line Sheaves



PART NO	s	SIZE	WOR LOAD kg		LEN mm	GTH in	WIE mm	DTH in	WEI g	GHT oz
294325118	зк	2	2000	4400	210	8 <sup>5</sup> / <sub>16</sub>	65	2 <sup>5</sup> / <sub>8</sub>	667	23.5

#### SR Car with Shackle and Double Control Line Sheaves



PART NO	SIZE	WOR LOAD	KING LIMIT	LEN	GTH	WIE	OTH	WEI	GHT	
		kg	lb	mm	in	mm	in	g	oz	
29432512BK	2	2000	4400	210	8 <sup>5</sup> / <sub>16</sub>	65	2 <sup>5</sup> / <sub>8</sub>	791	27.9	

#### SR Car with Upstand and Double Control Line Sheaves



PART NO	SIZE	WOR LOAD kg	KING LIMIT	LEN mm	GTH in	WIE mm	OTH   in	WEI g	GHT oz	
29442412BK	2	2000	4400	210	8 <sup>5</sup> / <sub>16</sub>	65	2 <sup>5</sup> / <sub>8</sub>	795	8	

SR Genoa Car



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WIE mm	DTH in	WEI g	GHT oz
29441500BK	1*	1000	2200	162	6 <sup>3</sup> / <sub>8</sub>	50	2	480	16.8
29442500BK	2*	1800	3960	194	7 <sup>5</sup> / <sub>8</sub>	65	2 <sup>5</sup> / <sub>8</sub>	1100	38.8

<sup>\*</sup> Limiter supplied non-assembled for a port or starboard application

#### SR Genoa Car with Plunger Stop



PART NO	SIZE / DESCRIPTION	WOR LOAD kg		LEN mm	GTH in	WII	DTH in	WEI	GHT oz
294417**BK	1	1000	2200	162	6 <sup>3</sup> / <sub>8</sub>	50	2	480	16.8
294427**BK	2	1800	3960	194	7 <sup>5</sup> / <sub>8</sub>	65	2 <sup>5</sup> / <sub>8</sub>	1201	42.4
29443700BK	3 (NTR track)	3500	7700	180	7 <sup>1</sup> / <sub>16</sub>	70	2 <sup>13</sup> / <sub>16</sub>	1410	49.4
29443700CBK	3 (Ocean track)	3500	7700	180	7 1/16	70	2 <sup>13</sup> / <sub>16</sub>	1410	49.4
29443702BK	3 (NTR composite sheave)	2250	4950	180	7 <sup>1</sup> / <sub>16</sub>	70	2 <sup>13</sup> / <sub>16</sub>	1079	37.8

<sup>\*\*</sup> Insert 00 for limiter non-assembled, 20 for port limiter and 30 for starboard limiter

#### SR Genoa Car with Single Control Line Sheaves



PART NO	SIZE		KING LIMIT	LEN mm	GTH in	WI[ mm	OTH in	WEI g	GHT oz	
29441513BK	1*	1000	2200	162	6 <sup>3</sup> / <sub>8</sub>	50	2	484	17	

 $<sup>\</sup>ensuremath{^{\star}}$  Limiter supplied non-assembled for a port or starboard application

# NTR End Stops Size 1, 2 and 3

#### Sz1 Impact End Stop



			KING						
PART NO	SIZE	LIN	AD ⁄IIT	LEN	GTH	WIE	DTH	WEI	GHT
		kg	lb	mm	in	mm	in	g	oz
29905105BK	1	500	1100	40	1 <sup>1</sup> / <sub>2</sub>	46	1 <sup>3</sup> / <sub>4</sub>	24	0.8

### Sz2 Impact End Stop



PART NO	SIZE	LO	KING AD MIT	LEN	GTH	WEIGHT		
		kg	lb	mm	in	g	OZ	
29905200BK	2	1250	2755	114	4 <sup>1</sup> / <sub>2</sub>	158	5.6	

Requires extra drilling in the track

### Sz3 Impact End Stop



PART NO	LO LIN			IGTH		IDTH	WEI	1	
	kg	ום	mm	in	mm	in	g	OZ	
29473030BK	2200	4840	93	3 <sup>11</sup> / <sub>16</sub>	70	2 <sup>13</sup> / <sub>16</sub>	247	8.7	

Bare End Stop



PART NO	SIZE		WORKING LOAD LIMIT		GTH	WI	DTH.	WEIGHT		
		kg	lb	mm	in	mm	in	g	oz	
29471030BK	1	585	1287	47	1 <sup>7</sup> / <sub>8</sub>	29	1 <sup>1</sup> / <sub>8</sub>	99	3.5	
29472030BK	2	750	1650	105	4 1/8	65	2 %	238	8.4	

Mid Track Stop



PART NO	SIZE		WORKING LOAD LIMIT		GTH	WIE	DTH	WEI	GHT
		kg	lb	mm	in	mm	in	g	oz
29472501BK	2	750	1650	105	4 1/8	65	2 <sup>5</sup> / <sub>8</sub>	238	8.4

Mid Track Stop with Single CL Sheave & Becket



PART NO	SIZE		KING LIMIT	LEN	GTH	WIE	DTH	WEI	GHT	
		kg	lb	mm	in	mm	in	g	oz	
29472535BK	2	750	1650	105	4 <sup>1</sup> / <sub>8</sub>	65	2 <sup>5</sup> / <sub>8</sub>	338	11.9	

Friction Stop



PART NO	SIZE		WORKING LOAD LIMIT		GTH	WIE	DTH	WEI	GHT	
		kg	lb	mm	in	mm	in	g	oz	
29472038BK	2	975	2145	87	3 <sup>3</sup> / <sub>8</sub>	65	2 <sup>5</sup> / <sub>8</sub>	261	9.2	

#### End Stop with Single CL Sheave



PART NO	SIZE		KING LIMIT	LEN	GTH	WIE	DTH	WEIGHT		
		kg	lb	mm	in	mm	in	g	oz	
29471031BK	1	585	1287	75	1 45/64	50	2	140	4.9	
29472031BK	2	750	1650	105	4 1/8	65	2 %	301	10.6	

#### End Stop with Single CL Sheave and Becket



				l					1
PART NO	WORKING SIZE LOAD LIMIT			LEN	GTH	WIE	DTH	WEIGHT	
		kg	lb	mm	in	mm	in	g	OZ
29471035BK	1	585	1287	47	1 <sup>55</sup> / <sub>64</sub>	29	1 <sup>9</sup> / <sub>64</sub>	165	5.8
29472035BK	2	750	1650	105	4 1/8	65	2 %	331	11.7
29473035BK	3	800	1760	93	3 11/16	70	2 <sup>13</sup> / <sub>16</sub>	381	13.3
29473135BK	3 (HL)	3000	6600	140	5 ½	70	2 <sup>13</sup> / <sub>16</sub>	537	18.8



## NTR End Stops Size 1, 2 and 3 Cont.

#### End Stop with Double CL Sheaves



PART NO	SIZE	WOR LOAD kg		LEN mm	GTH in	WII mm	OTH   in	WEI g	GHT oz
29471032BK	1	585	1287	75	1 45/64	50	2	172	6.1
29472032BK	2	750	1650	105	4 1/8	65	2 %	363	12.8
29473032BK	3	800	1760	93	3 11/16	70	2 <sup>13</sup> / <sub>16</sub>	390	13.7

#### End Stop with Double CL Sheaves and Becket







\* Fitted with ball bearing control line sheaves

\*\* Fitted with HD1 control line sheaves

PART NO	SIZE		WORKING LOAD LIMIT kg lb		GTH in	WI[ mm	DTH in	WEIGHT g oz	
29471036BK	1	585	1287	47	1 <sup>55</sup> / <sub>64</sub>	29	1 <sup>9</sup> / <sub>64</sub>	185	6.5
29472036BK	2	750	1650	105	4 1/8	65	2 %	393	13.8
29472076BK	2*	750	1650	105	4 1/8	65	2 %	400	14.1
29472616BK	2**	750	1650	105	4 1/8	65	2 %	400	14.1
29473036BK	3	800	1760	93	3 11/16	70	2 <sup>13</sup> / <sub>16</sub>	460	16.1
29473136BK	3 (HL)	3000	6600	140	5 ½	70	2 <sup>13</sup> / <sub>16</sub>	769	27.1

#### End Stop with Double CL Sheaves, Becket & Cam (pair)



PART NO	SIZE	WOR LOAD kg	KING LIMIT	LEN mm	GTH in	WI[ mm	DTH in	WEI g	GHT oz
29471836BK	1	585	1287	75	2 <sup>61</sup> / <sub>64</sub>	78	3 5/64	258	9.1
29472836BK	2	750	1650	105	4 <sup>1</sup> / <sub>8</sub>	112	4 <sup>5</sup> / <sub>8</sub>	602	21.2

#### End Stop Sheet Lead



PART NO	SIZE	WOR LOAD kg		LEN mm	GTH in	WII mm	OTH in	WEI g	GHT oz
29441701BK	1	1000	2200	162	6 <sup>3</sup> / <sub>8</sub>	50	2	480	16.8
29442701BK	2	1800	3960	194	7 <sup>5</sup> / <sub>8</sub>	65	2 <sup>5</sup> / <sub>8</sub>	1134	40
29443701BK	3	2000	4400	140	5 ½	70	2 <sup>13</sup> / <sub>16</sub>	885	31

#### Plunger Stop



#### \*Size 3 plunger stop:

If retrofitting check your track :

- 29473037BK fits size 3 NTR tracks (12mm Ø plunger holes)
- 29473037CBK fits size 3 Ocean tracks (9.5mm Ø plunger holes)

PART NO	SIZE	WORKING LOAD LIMIT		LENGTH		WIDTH		WEIGHT	
		kg	lb	mm	in	mm	in	g	OZ
29471037BK	1	650	1430	43	1 11/16	50	2	83	2.9
29472037BK	2	975	2145	87	$3^{3}/_{8}$	65	2 %	261	9.2
29473037BK	3*	2000	4400	80	3 <sup>3</sup> / <sub>16</sub>	70	2 <sup>13</sup> / <sub>16</sub>	298	10.4
29473037CBK	3*	2000	4400	80	3 <sup>3</sup> / <sub>16</sub>	70	2 <sup>13</sup> / <sub>16</sub>	298	10.4

#### Track End



PART NO	SIZE	WEI a	GHT oz
29171040BK	1	22	0.77
29172040BK	2	30	1.1
29173040BK	3	42	1.5

### NTR Car Links

Short Car Link



PART NO	SIZE
29471063BK	1
29472063BK	2
29473063BK	3

Car Link with Sz3 Upstand



PART NO	SIZE
29472062BK	2

For cup details refer to p.159

# NTR Spares and Accessories

#### Beam Track End Cover (Pair)



PART NO	SIZE	WEIGHT	
		g	OZ
29471041BK	1	12	0.4
29472041BK	2	26	0.9
29473041BK	3	42	1.5

#### HD Beam Track End Cover (Pair)



PART NO	SIZE	LENGTH		WIE	WIDTH		GHT
		mm	in	mm	in	g	oz
29471042BK	1	13	1/2	50	2	18	0.6
29472042BK	2	22	7/8	65	2 <sup>5</sup> / <sub>8</sub>	40	1.4

#### Single Control Line Sheaves (Pair)



PART NO	SIZE	SHEA	VE Ø	WEIGHT		
		mm	in	g	oz	
29471011BK	1	29	1 <sup>1</sup> / <sub>8</sub>	82	2.9	
29472011BK	2	63	2 1/2	137	4.8	

#### Double Control Line Sheaves (Pair)



PART NO	SIZE	SHEA	VE Ø	WEIGHT	
		mm	in	g	oz
29471012BK	1	29	1 <sup>1</sup> / <sub>8</sub>	148	5.2
29472012BK	2	63	2 1/2	261	9.2

Double Control Sheaves & Cleats (Pair)



PART NO	SIZE		WORKING LOAD LIMIT ka lb		GHT oz
29471018BK	1	180	396	180	6.3
29472018BK	2	180	396	625	22

Cleat Assembly for End Stop (Pair)



PART NO	SIZE	WORKING LOAD LIMIT kg lb		WEI g	GHT oz
29471015BK	1	180	396	123	4.3
29472015BK	2	180	396	368	12.9

Genoa Stirrup Assembly



PART NO	SIZE	WORKING LOAD LIMIT kg lb		WIDTH mm   in		WEIGHT	
28003225	1	1000	2200	45	1 <sup>3</sup> / <sub>4</sub>	227	8
28003226	2	1800	3960	60	2 <sup>3</sup> / <sub>8</sub>	620	21.9

Upstand Assembly



PART NO	SIZE
29171024	1
29172024	2
29473024	3

For upstand cup dims and block compatibility see P. 159

Becket Assembly (Pair)



PART NO	SIZE	WEI	GHT	
		g	oz	
29471010	1	51	1.7	
29472010	2	114	4.2	

#### Slide Rods



PART NO	SIZE
25002920	1
25003438	2
25003969	3

#### Rubber Buffer Kit

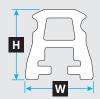


To fit end stops and slide rod cars



# Ocean/NTR Size 1, 2 and 3 Tracks

#### Beam track



Beam track is used when spanning cockpits and across companion way hatches. Three fixing bolts should always be used either side of the span and washers fitted under the head of the bolt and between track and deck. Some beam track can only use metric fasteners

Made of Aluminium 6082T6 extrusion

#### Sliding bolt Track



Sliding bolt track have a smooth clean profile with no visible fixings and can be retro-fitted 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.

Grey anodised finish

#### Drilled Plunger Track



Commonly used and particularly useful where through deck fixing is not possible, such as in double skinned boats, where fixing bolts are trapped into a plate in the deck.

#### Ocean/NTR Size 1, 2 & 3 Track Specifications and Fixing Details

PART NO	DESCRIPTION	TRACK SIZE	LEN		HEI	GHT	V	DTH	WEI (per r	GHT netre)	FIXIN CENTRE I	HOLE DIM	FIXI	INGS
			m	ft	mm	in	mm	in	g	OZ	mm	in	Metric	Imperial
29162315BK 29162320BK	Beam Track	2	1.5 2	4'11" 6'7"	35	1.38	35	1.38	1560	54.91	800	31 ½	Hex Hd M10	-
29163315BK			1.5	4'11"										
29163320BK	Beam Track	3	2	6'7"	55	2.16	50	1.97	3640	128.13	900	35 <sup>7</sup> / <sub>16</sub>	Hex Hd M12	-
29163330BK			3	9'10"									Ha MTZ	
29161510BK			1	3'3"										
29161515BK	HD Beam Track	1	1.5	4'11"	42	1.75	32	1.25	1770	62.4	900	35 <sup>7</sup> / <sub>16</sub>	Hex Hd M8	5/16"
29161520BK			2	6'7"									на мв	
29162515BK			1.5	4'11"								_	Hex	
29162520BK	HD Beam Track	2	2	6'7"	51	2	51	2	3000	105.82	900	35 <sup>7</sup> / <sub>16</sub>	Hd M10	3/8"
29162115BK			1.5	4'11"										
29162120BK	Sliding Bolt Track	2	2	6'7"	18	0.71	30	1.18	839	29.56	800	31 ½	Hex Hd M8	<sup>5</sup> / <sub>16</sub> "
29162130BK			3	9'10"									пи мо	
29161415BK			1.526	5'										
29161420BK	Drilled Plunger Track	1	2.026	6'8"	13	0.5	23	0.9	530	18.65	100	3 <sup>15</sup> / <sub>16</sub>	Hex Hd M6	1/4"
29161430BK			3.026	9'11"									Hu Mo	
29162415BK			1.532	5'										
29162420BK	Drilled Plunger Track	2	2.032	6'3"	15	0.56	30	1.18	764	26.95	100	3 <sup>15</sup> / <sub>16</sub>	Hex Hd M8	5/16"
29162430BK			3.032	10'									i iu Mo	
29163615BK			1.548	5'1"										
29163620BK	Drilled Plunger Track	3	2.048	6'9"	21	0.84	35	1.38	968	33.88	100	3 <sup>15</sup> / <sub>16</sub>	Hex Hd M10	3/8"
29163630BK			3.048	10'1"									TIU MITO	

#### HTX Size 1 & 2 Cars

Lewmar introduces the HTX Traveller Range to complement the HTX Block Range. This range of travellers has come from many years of design and manufacturing experience and collaboration with boat builders, designers, and sailors. At the core of the HTX Traveller Range is the Captive Ball Traveller. Featuring the neat, stylish retention of the ball bearings within the car, the Captive Ball Traveller is simple to install and easy to remove for cleaning and maintenance without the risk of losing ball bearings.

- Ideal for boats up to 15 metres (49 foot)
- Minimalistic car body made of fewer parts
- Compact, one-piece aluminium body and composite end caps designed with smoother lines
- Available in multiple configurations, including single or double control line sheaves, becket, and cam cleat
- Compatible slide-rod Genoa car with stirrup
- Three individual ball races: the first two allow fast movement of the car under vertical load, and the third allows smooth running of the car under deflection
- Larger balls means more ball surface exposure, increasing overall efficiency
- Ball bearings circulate through an open structure allowing easy cleaning when installed
- New dowel mechanism provides smooth ball circulation
- Upstand receives shackle or lashed rope, removing need for a becket above the control line sheaves

#### HTX Size 1 & 2 Torlon Ball (TB) Mainsheet Cars

TB Short Car with Shackle



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WIE	OTH   in	WEI	GHT oz
291222301	2	1500	3300	140	5 <sup>1</sup> / <sub>2</sub>	85	3 <sup>3</sup> / <sub>8</sub>	525	18.5

TB Car with Shackle and Single Control Line Sheaves



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WIE mm	OTH in	WEI g	GHT oz
291213305	1	1100	2420	160	6 <sup>5</sup> / <sub>16</sub>	71	2 <sup>13</sup> / <sub>16</sub>	450	15.9
291223305	2	2200	4850	205	8 <sup>1</sup> / <sub>16</sub>	85	3 <sup>3</sup> / <sub>8</sub>	880	31.0

TB Car with Shackle



PART NO	SIZE	WORKING LOAD LIMIT		LENGTH		WIDTH		WEIGHT		
		kg	lb	mm	in	mm	in	g	oz	
291213301	1	1100	2420	160	6 <sup>5</sup> / <sub>16</sub>	71	2 <sup>13</sup> / <sub>16</sub>			
291223301	2	2200	4850	205	8 <sup>1</sup> / <sub>16</sub>	85	3 <sup>3</sup> / <sub>8</sub>			

TB Car with Shackle and Double Control Line Sheaves



PART NO	SIZE	WOR LOAD kg		LEN mm	GTH in	WIE mm	OTH   in	WEI g	GHT oz
291223306	2	2000	4400	205	8 <sup>1</sup> / <sub>16</sub>	85	3 <sup>3</sup> / <sub>8</sub>	980	34.6



#### Size 1 Traveller System

For boats up to 11m (36ft)

Suitable for 8mm (5/16") control line

#### Size 2 Traveller System

For boats up to 15m (49ft).

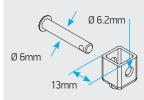
Suitable for 10mm (3/8") control line.

#### Mainsheet Car – Dimension Diagram





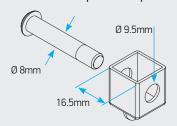
#### HTX Size 1 Upstand Cup Detail



# Size 1 upstand fit the following blocks:

- 72 Synchro blocks
- 60 HTX blocks
- 60 single Racing blocks Size

#### HTX Size 2 Upstand Cup Detail



# Size 2 upstand fit the following blocks:

- 90 Synchro blocks
- 72 HTX blocks
- 80 Triple Racing blocks

#### TB Car with Shackle, Single Control Sheaves & Becket



PART NO	SIZE	WORKING LOAD LIMIT		LEN	GTH	WI	DTH .	WEI	GHT
		kg	lb	mm	in	mm	in	g	oz
291213308	1	1100	2420	160	6 <sup>5</sup> / <sub>16</sub>	71	2 <sup>13</sup> / <sub>16</sub>	510	18.0
291223308	2	2200	4850	205	8 <sup>1</sup> / <sub>16</sub>	85	3 <sup>3</sup> / <sub>8</sub>		

TB Car with Upstand, Single Control Sheaves & Becket



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WIE	OTH in	WEI g	GHT oz
291213408	1	800	1764	160	6 <sup>5</sup> / <sub>16</sub>	71	2 <sup>13</sup> / <sub>16</sub>	545	19.2
291223408	2	2200	4850	205	8 <sup>1</sup> / <sub>16</sub>	85	3 <sup>3</sup> / <sub>8</sub>	1310	46.2

TB Car with Upstand, Double Control Sheaves & Cleat



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WIE mm	OTH   in	WEI g	GHT oz
291213412	1	800	1600	167	6 <sup>9</sup> / <sub>16</sub>	98	3 7/8	780	27.5
291223412	2	2200	4850	225	8 <sup>7</sup> / <sub>8</sub>	132	5 <sup>3</sup> / <sub>16</sub>		

TB Car with Upstand and Double Control Sheaves



			-							ı
PART NO	SIZE	WOR LOAD	KING LIMIT	LEN	LENGTH		DTH	WEIGHT		
		kg	lb	mm	in	mm	in	g	OZ	
291213406	1	800	1600	160	6 <sup>5</sup> / <sub>16</sub>	71	2 <sup>13</sup> / <sub>16</sub>			1
291223406	2	2200	4850	205	8 <sup>1</sup> / <sub>16</sub>	85	3 <sup>3</sup> / <sub>8</sub>	1250	44.1	1

TB Car with Shackle, Double Control Sheaves, Becket & Cleat



PART NO	SIZE	WOR LOAD kg		LEN mm	LENGTH mm in		DTH in	WEIGHT g oz	
291213315	1	1100	2420	167	6 <sup>9</sup> / <sub>16</sub>	98	3 7/8	750	26.5
291223315	2	2200	4850	225	8 <sup>7</sup> / <sub>8</sub>	132	5 <sup>3</sup> / <sub>16</sub>	1580	55.7

TB Car with Upstand, Double Control Sheaves, Becket & Cleat



PART NO	SIZE	LOAD	KING LIMIT		GTH   in	WII		WEI		
		kg	เม	mm	in	mm	in	g	OZ	
291223415	2	2000	4400	225	8 <sup>7</sup> / <sub>8</sub>	132	5 <sup>3</sup> / <sub>16</sub>	1880	66.3	

# HTX Size 2 Double Upstand Torlon Ball (TB) Mainsheet Cars

TB Car with Double Upstand



PART NO	SIZE	WORKIN LIN kg			GTH in	WIE mm	DTH in	WEI g	GHT oz	
291223601	2	2600	5732	305	12	85	3 <sup>3</sup> / <sub>8</sub>			

TB Car with Double Upstand and Double Control Sheaves



PART NO	SIZE	WORKIN LIN kg			GTH in	WII mm	OTH in	WEI g	GHT oz
291223606	2	2600	5732	305	12	85	3 <sup>3</sup> / <sub>8</sub>		

# HTX Size 1 & 2 Slide Rod (SR) Cars

SR Car with Shackle



PART NO	SIZE	WOR LOAD	KING LIMIT	LEN	GTH	WIE	тн	WEI	GHT
		kg	lb	mm	in	mm	in	g	OZ
291213501	1	1100	2420	160	6 <sup>5</sup> / <sub>16</sub>	71	2 <sup>13</sup> / <sub>16</sub>		
291223501	2	2200	4850	205	8 <sup>1</sup> / <sub>16</sub>	85	3 <sup>3</sup> / <sub>8</sub>		

SR Car with Shackle and Plunger



PART NO	SIZE	WORKING LOAD LIMIT		LENGTH		WIE	DTH	WEIGHT		
		kg	lb	mm	in	mm	in	g	oz	
291213537	1	1100	2420	160	6 <sup>5</sup> / <sub>16</sub>	71	2 <sup>13</sup> / <sub>16</sub>			
291223537	2	2200	4850	205	8 <sup>1</sup> / <sub>16</sub>	85	3 <sup>3</sup> / <sub>8</sub>			

### HTX Size 1 & 2 Genoa Cars

SR Genoa Car with Plunger



PART NO	SIZE	WOR LOAD kg		LEN mm	GTH in	WI[ mm	OTH in	WEI g	GHT oz
291214537 291215537	1 port 1 stbd	1100	2420	160	6 <sup>5</sup> / <sub>16</sub>	71	2 <sup>13</sup> / <sub>16</sub>	630	22.2
291224537 291225537	2 port 2 stbd	2200	4850	205	8 <sup>1</sup> / <sub>16</sub>	85	3 3/8	1500	52.9

TB Genoa Car with Single Control Line Sheave



PART NO	SIZE	WOR LOAD kg	KING LIMIT	LEN mm	GTH in	WI[ mm	DTH in	WEIGHT g oz		
291214305 291215305	1 port 1 stbd	1100	2420	160	6 <sup>5</sup> / <sub>16</sub>	71	2 <sup>13</sup> / <sub>16</sub>	650	22.9	
291224305 291225305	2 port 2 stbd	2200	4850	205	8 <sup>1</sup> / <sub>16</sub>	85	3 3/8	1600	56.4	

TB Genoa Car with Single Control Line Sheave & Becket



PART NO	SIZE	WOR LOAD kg		LEN mm	GTH in	WIDTH mm in		WEI	GHT oz
291214308 291215308	1 port 1 stbd	1100	2420	160	6 <sup>5</sup> / <sub>16</sub>	71	2 <sup>13</sup> / <sub>16</sub>	650	22.9
291224308 291225308	2 port 2 stbd	2200	4850	205	8 <sup>1</sup> / <sub>16</sub>	85	3 3/8	1600	56.4



# HTX Size 1 & 2 End Stops

#### Impact End Stop



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WIE mm	OTH in	WEI g	GHT oz
291218818	1	500	1100	83	3 1/4	71	2 <sup>13</sup> / <sub>16</sub>	190	6.7
291228818	2	1000	2200	103	4 <sup>1</sup> / <sub>16</sub>	85	3%	350	12.3

#### Plunger Stop



PART NO	SIZE	WORKING LOAD LIMIT		LEN	GTH		OTH I .	WEI	GHT	
		kg	lb	mm	in	mm	in	g	OZ	
291218837	1	500	1100	83	3 1/4	71	2 <sup>13</sup> / <sub>16</sub>			
291228837	2	1000	2200	103	4 <sup>1</sup> / <sub>16</sub>	85	3%			

End Stop with Single Control Line Sheave



PART NO	SIZE	WOR LOAD kg	KING LIMIT	LEN mm	GTH in	WI[ mm	DTH in	WEI g	GHT oz	
291218805	1	500	1100	83	3 1/4	71	2 <sup>13</sup> / <sub>16</sub>	210	7.4	
291228805	2	1000	2200	103	4 <sup>1</sup> / <sub>16</sub>	85	3%	400	14.1	

End Stop with Double Control Line Sheaves



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WII mm	OTH in	WEI g	GHT oz	
291218806	1	500	1100	83	3 1/4	71	2 <sup>13</sup> / <sub>16</sub>	240	8.5	
291228806	2	1000	2200	103	4 <sup>1</sup> / <sub>16</sub>	85	3%	450	15.9	

End Stop with Single Control Line Sheave & Becket



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WI[ mm	OTH in	WEI g	GHT oz
291218808	1	500	1100	83	3 1/4	71	2 <sup>13</sup> / <sub>16</sub>	240	8.5
291228808	2	1000	2200	103	4 <sup>1</sup> / <sub>16</sub>	85	3 ¾	450	15.9

End Stop with Double Control Line Sheaves & Becket



PΔ	ART NO	kg l		LEN mm	GTH in	WIE mm	DTH in	WEI g	GHT oz	
291	1218809	1	500	1100	83	3 1/4	71	2 <sup>13</sup> / <sub>16</sub>	270	9.5
291	1228809	2	1000	2200	103	4 <sup>1</sup> / <sub>16</sub>	85	3 ¾	500	17.6

End Stop with Double Control Line Sheaves, Becket & Cleat



PART NO	SIZE		WORKING LOAD LIMIT		LENGTH		OTH	WEIGHT		
	kg		lb	mm	in	mm	in	g	oz	
291214815 291215815	1 port	500	1100	83	3 1/4	98	3%	365	12.9	
291224815	2 port	1000	2200	400	, 1,	422	E 3/		20.4	
291225815	2 stbd	1000	2200	103	4 1/16	132	5 <sup>3</sup> / <sub>16</sub>	740	26.1	

End Stop Sheet Lead



PART NO	SIZE	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WII mm	OTH in	WEI g	GHT oz	
291218817	1	500	1100	160	6 <sup>5</sup> / <sub>16</sub>	71	2 <sup>13</sup> / <sub>16</sub>	600	21.2	
291228817	2	1000	2200	205	8 <sup>1</sup> / <sub>16</sub>	85	3 3/8	1400	49.3	

#### HTX Track End



PART NO	SIZE	LEN	GTH	WIE	DTH	WEI	GHT	
		mm	in	mm	in	g	oz	ı
291219907	1	40	1 %	57.5	2 1/4	20	0.7	ı
291229907	2	45	1 ¾	65	2 ½	40	1.4	ı

## Sz 1 G 2 HTX Spares and Accessories

#### Cleat Assembly for End stop (Pair)



PART NO	SIZE	WOR LOAD kg	
291219905	1	200	440
291229905	2	300	660

Spare Slide Rods Kit



PART NO	SIZE
291219910	1
291229910	2

Spare Rubber Buffer Kit



PART NO	SIZE
291219911	1
291229911	2

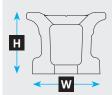
HTX Upstand Kit



PART NO	SIZE
291219901	1
291229901	2

# HTX Size 1 & 2 Tracks

#### Drilled Plunger Track



Commonly used and particularly useful where through deck fixing is not possible, such as in double skinned boats, where fixing bolts are trapped into a plate in the deck.

#### Beam Track



Beam track is used when spanning cockpits and across companion way hatches. Three fixing bolts should always be used either side of the span and washers fitted under the head of the bolt and between track and deck. Some beam track can only use metric fasteners

■ Made of Aluminium 6082T6 extrusion

#### HTX Track Specifications and Fixing Details

PART NO DESCRIPTION		TRACK SIZE			HEIGHT		WIDTH		WIE (ove	OTH erall)	WEI (per n		FIXIN	BETWEEN NGS / LE DISTANCE	FIXI	NGS							
			m	ft	mm	in	mm	in			g	OZ	mm	in	Metric	Imperial							
29181415			1.526	5'																			
29181420	Drilled Plunger Track	1	2.026	6'8"	20	0.78	22.0	0.86	25	0.98	658	23.21	100	3 <sup>15</sup> / <sub>16</sub>	M6	1/4"							
29181430	ITACK		3.026	9'11"																			
29182415	Drilled Plunger		1.532	5'																			
29182420								Drilled Plunger Track		2	2.032	6'3"	24	0.94	26.4	1.04	31	1.22	933	32.91	100	3 <sup>15</sup> / <sub>16</sub>	M8
29182430	riden		3.032	10'																			
29181315		1	1.5	4'11"	31	1 22	27.0	1.00			1000	20.52	700	25.87	M8	5/ "							
29181320	Beam Track	Beam Track	Beam Track	Beam Track	Beam Track	Beam Track	Track 1	2.0	6'7"	31	1.22	27.8	1.09			1092	38.52	700	27 <sup>9</sup> / <sub>16</sub>	IVI8	5/16"		
29182315	Beam Track		1.5	4'11"	/0	1 57	25.1	1 20			1007	E0.00	800	21.1/	1410	3/8"							
29182320		2	2.0	6'7"	40	1.57	35.1	1.38			1697	59.86	800	31 ½	M10	-7/8							



#### Genoa T-Track Cars

T-Track is widely used on cruising boats where car sheeting positions change frequently.

All Lewmar Track cars fit the industry standard 32mm (1 1/4"). The cars are available in three styles and cover three different loading levels to suit boats from 9m (30ft) up to 15.5m (50ft).

- Precision Workmanship
- Three Styles
- Simple to fit
- Low Maintenance



#### Genoa Plunger Car



PART NO	SIZE		WORKING LOAD LIMIT		LENGTH		WIDTH		WEIGHT	
	kg lb		lb	mm	in	mm	in	g	OZ	
29041700	1	900	1980	111	4 3/8	56	2 1/4	540	19.1	
29042700	<b>29042700</b> 2 1500		3300	120	4 11/16	56	2 1/4	719	25.3	
29043702	<b>702</b> 3 2350 5170		170	6 ¾	56	2 1/4	1199	47.3		



Tri-Roller Genoa Car



PART NO	SIZE		WORKING LOAD LIMIT		GTH	WIE	DTH	WEIGHT		
		kg	lb	mm	in	mm	in	g	OZ	
29442705	2	1500	3300	147	5 ¾	64	2 ½	767	27.1	

#### Track End Stop



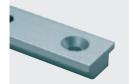
PART NO	WEI	GHT
	g	oz
29172016	19	0.7



#### Control Line End Stop









PART NO		IINAL IGTH	HEI	<b>-</b> GHT	WIE		WEI (PER M		CENTR	E HOLE	FIXI	NGS
	m	ft	mm	in	mm	in	mm	in	g	oz	Metric	Imperial
29166215	1.5	4'11"										
29166225	2.5	8'2"	15	5/8	32	1 1/4	865	30.5	100	3 <sup>15</sup> / <sub>16</sub>	CSK M8	5/16"
29166230	3.0	9'10"									1410	

#### Size 4 Cars and Accessories

For offshore yachts 60ft and over and the performance conscious yachtsman.

- $\blacksquare$  High load 80mm (3 %") control line sheaves for 14mm ( $^9/_{16}$ ") line.
- 12mm (½") 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
- Custom variants available contact custom@lewmar.com

#### Size 4 Racing Mainsheet car



PART NO	DESCRIPTION		KING LIMIT	LEN	GTH	WIE	)TH	WEI	GHT
		kg	lb	mm	in	mm	in	g	oz
29903401	Single upstand and single control line sheaves	8000	17634	465	18 ¾	113	4 <sup>7</sup> / <sub>16</sub>	5195	183.2
29903402	Twin upstand and single control line sheaves	8000	17634	465	18 ¾	113	4 <sup>7</sup> / <sub>16</sub>	5195	183.2

Size 4 Racing Genoa car



PART NO	DESCRIPTION	WOR LOAD kg	KING LIMIT lb	LEN mm	GTH in	WI[ mm	OTH in	LINE HEI		WEI g	GHT oz
29903451 29903452	Genoa stirrup $\otimes$ dead eye- Port Genoa stirrup $\otimes$ dead eye- Starboard	6000	13225	385	15 1/8	113	4 7/16	137	5 %	6740	236.5
29903453 29903454	Genoa stirrup with single CL sheave- Port Genoa stirrup with single CL sheave- Stbd	6000	13225	385	15 1/8	113	4 <sup>7</sup> / <sub>16</sub>	137	5 %	6740	236.5
29903457 29903458	Genoa stirrup with slide rod plunger- Port Genoa stirrup with slide rod plunger- Stbd	6000	13225	385	15 1/8	113	4 <sup>7</sup> / <sub>16</sub>	137	5 %	6740	236.5

Size 4 Racing End Stop







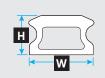


PART NO	DESCRIPTION	WORKING L	OAD LIMIT	LEN	GTH	WIE	DTH	WEI	GHT
		kg	lb	mm	in	mm	in	g	oz
29905400	High load impact end stop	4000	8817	185	7 1/4	113	4 <sup>7</sup> / <sub>16</sub>	1040	36.7
29905401	Track end	1000	2204	110	4 5/16	113	4 <sup>7</sup> / <sub>16</sub>	580	20.5
29905410	Control line end stop	6000	13225	185	7 1/4	113	4 <sup>7</sup> / <sub>16</sub>	1500	52.9
29905412	Plunger stop	3000	6613	110	4 5/16	113	4 7/16	897	31.6
29905414	Track plug							36	1.3

#### Size 4 Tracks

#### Size 4 Drilled plunger track Specifications & Fixing Details

PART NO	LEN	IGTH	HEI		V	<b>V</b> DTH	WEI (per n		MAX SPAN FIXIN CENTR			NGS
	m	ft	mm	in	mm	in	g	OZ	mm	in	Metric	Imperial
29917420BK	2.	6'7"										
29917430BK	3	9'10"	20	1/	F0.	2	2220	FO.6	400	0.157	6617.1413	1/
29917440BK	4	13'1"	29	1 1/6	50	2	2228	78.6	100	3 <sup>15</sup> / <sub>16</sub>	CSK M12	1/2
29917450BK	5	16'5"										





#### Lewmar Custom Yacht Systems

Custom yacht have individual requirements for sail control equipment, from application and loads to the profile of the deck on which the equipment will be installed. Each Lewmar track is designed with these specific requirements in mind.

Recent innovations included track that can be curved to bespoke dimensions, including multidirectional compound curves. The high load double ball race (DBR) profile offers a stronger, deeper section for use with high load cars, while T-track and DBR track feature machined track ends for a lightweight, low-profile car retention solution.

#### On Deck Control Systems

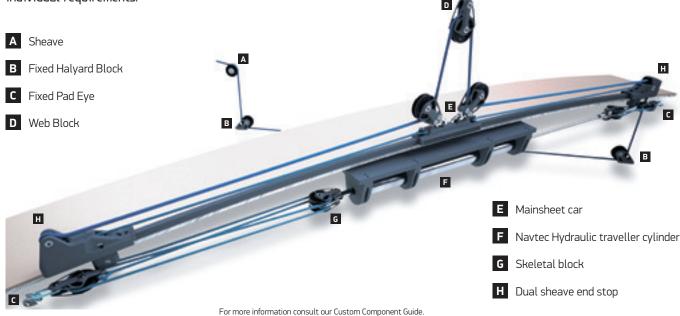
Lewmar Custom Mainsheet and Genoa systems are ideal for yachts from 21m (70ft) to 47m (140ft) in length. Each car is available with a choice of recirculating Torlon balls or the shorter, stronger Double Ball Race (DBR) configuration. Styled with snag-free soft edges, Lewmar cars are machined from solid to individual specifications. A full range of end stops are available, including high-load impact, plunger, and control line models.





#### Below Deck Sheeting System

Each element of the Lewmar Custom Hardware Range is compatible with its counterparts, resulting in the ability to supply a complete, bespoke sail control system. For example, an increasing emphasis on beautiful, sleek, minimalistic lines has resulted in the below-deck sheeting system, which offers a light-weight, fully-optimised system that does not clutter the clean lines of the deck. With a choice of configurations and finishes available, Lewmar can provide a system suited to your individual requirements.



#### Clutches - Features

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



Instead of just jamming the rope...



... Lewmar's Domino mechanism flexes it for better grip and less rope wear.

- A Domino Cluster and longer holding pattern holds line under load without fraying the rope
- B Controlled Release Pull back handle combined with patented clutch and release mechanism provides controlled release even at full holding load
- C Handle has a solid link to the domino cluster
- Line Size Clutches capable of holding lines from 6mm (1/4") to 14mm (9/16")



#### Clutch Selection Guide

Clutch Select	ion Guide				BOATI	_ENGTH OVE	RAI I				
APPLICATION	m ft	8.8 29	10.1 33	10.7 35	11.3 37	11.9 39		14.6 48	16.8 55	18.9 62	21.5 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										
CONTROL LINES	Mainsheet Car (2:1 Purchase)										
	Genoa Car (2:1 Purchase)										
	Pole Outhaul										
	Kicking Strap/Vang										



# DC Rope Clutches



DC1 Single



DC1 Double



DC1 Triple



DC2 Single



DC2 Double



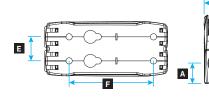
DC2 Triple

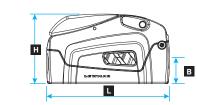
DC1 Rope Clutch Specifications

DC2 Rope Clutch Specifications

PART NO	DESCRIPTION	LINE	SIZE	MIN HO		APPI WEI		W	'LL	PART NO	DESCRIPTION	LINE	SIZE		DLDING AD	APP WEI		W	LL
		mm	in	kg	lb	g	oz	kg	lb			mm	in	kg	lb	g	OZ	kg	lb
29101108	6-8 mm DC1 Single					330	12	500	1100	29101410	8-10mm DC2 Single					650	23	1200	2650
29101208	6-8 mm DC1 Double	6–8	1/4-5/16	300	661	650	23	500	1100	29102410	8-10mm DC2 Double	8–10	5/16-3/8	500	1102	1216	43	1200	2650
29101308	6-8 mm DC1 Triple					850	30	500	1100	29103410	8-10mm DC2 Triple								
29101110	8-10 mm DC1 Single					330	12	500	1100	29101412	10-12mm DC2 Single					650	23	1200	2650
29101210	8-10 mm DC1 Double	8–10	5/16-3/8	400	880	650	23	500	1100	29102412	10-12mm DC2 Double	10-12	3/8-1/2	700	1550	1216	43	1200	2650
29101310	8-10 mm DC1 Triple					850	30	500	1100	29103412	10-12mm DC2 Triple								
29101112	10-12 mm DC1 Single					330	12	500	1100	29101414	12-14mm DC2 Single					650	23	1200	2650
29101212	10-12 mm DC1 Double	10–12	3/8-7/16	500	1100	650	23	500	1100	29102414	12-14mm DC2 Double	12-14	1/2-9/16	1000	2204	1216	43	1200	2650
29101312	10-12 mm DC1 Triple					850	30	500	1100	29103414	12-14mm DC2 Triple								
29100010	DC1 Handle Kit									29101501	DC2 Handle Kit								

#### DC1 & DC2 Rope Clutch Dimensions





#### Notes:

Line entry and exit angle should not exceed 15° from the rope clutch centre line  $\,$ 

DC1 :Use pan head M6 - 1/4" fixings - do not tighten beyond 10 Nm torque

DC2 : Use pan head M8 - 5/16" fixings - do not tighten beyond 22Nm torque

SIZE	LEN	<b>L</b> NGTH	v	<b>W</b> VIDTH	HI	<b>H</b> EIGHT	LINE E	A ENTRY	LINE	<b>S</b> EXIT	FIXINGS	S WIDTH	FIXINGS	LENGTH
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
D1 Single			32	1 <sup>5</sup> / <sub>16</sub>							-	-		
D1 Double	126	5	57.85	2 <sup>5</sup> / <sub>16</sub>	72	2 <sup>13</sup> / <sub>16</sub>	27	1 1/8	29	1 <sup>3</sup> / <sub>16</sub>	26	1	79	3 1/8
D1 Triple			83.7	3 <sup>5</sup> / <sub>16</sub>							26	1		
D2 Single			38.0	1 <sup>1</sup> / <sub>2</sub>							-	-		
D2 Double	156	6 <sup>1</sup> / <sub>8</sub>	68.5	2 <sup>1</sup> / <sub>16</sub>	88	3 3/8	26	1	32	1 <sup>5</sup> ⁄ <sub>16</sub>	30.5	1 <sup>3</sup> / <sub>16</sub>	107	4 1/4
D2 Triple			99	3 %							30.5	1 3/16		



Clutch can be clearly marked and identified with our range of info-graphics specially designed to suit all sailing applications.

Part No: 25002323

# Organisers

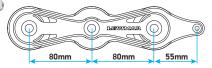
All organisers have space to pass two lines between each sheave

Flush fixings Synchro Organiser

- Bushed sheaves with side thrust ball bearings
- Wide rope entry



29916042 Synchro Six Sheave Double Stacked



PART NO	SHEA	AVE Ø	NO OF SHEAVES	WOR LOAD	KING LIMIT		ORKING SHEAVE	MAX LI	NE SIZE	LEN	GTH	WEI	GHT	FIXII (NOT SU	
	mm	in		Kg	lb	Kg	lb	mm	in	mm	in	g	OZ	mm	in
29916042	60	2 3/8	6	3700	8156	1100	2420	12	1/2	256	10 1/16	602	21.2	M10	3/8
29916060	60	2 3/8	3	2550	5500	1100	2420	12	1/2	256	10 1/16	329	12.9	M10	3/8

40 and 60mm Bushed Sheaves Organiser

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



#### 40mm Bushed Sheaves Organisers

PART NO	SHEA	AVE Ø	NO OF SHEAVES	WOR LOAD		MAX W	ORKING SHEAVE	MAX LII	NE SIZE	LEN	GTH	WEI	GHT	FIXII (NOT IN	NGS LUDED)		AVE TRES
	mm	in		Kg	lb	Kg	lb	mm	in	mm	in	g	oz	mm	in	mm	in
29139122	40	1 1 1/8	2	1005	2215	750	1654	10	3/8	142	5 %	123	271	M8	5/16	47	1 1/8
29139123	40	1 1 1/8	3	1507	3322	750	1654	10	3/8	189	7 3/ <sub>8</sub>	206	454	M8	5/16	47	1 1/8
29139124	40	1 1 1 1 1 1 1 1	4	2010	4431	750	1654	10	3/8	236	9 1/3	275	606	M8	5/16	47	1 1/8
29139125	40	1 1 1/8	5	2512	5537	750	1654	10	3/8	283	11 1/8	352	776	M8	5/16	47	1 1/8
29139126	40	1 1 1/8	6	3015	6646	750	1654	10	3/8	330	13	425	937	M8	5/16	47	1 1/8



#### 60mm Bushed Sheaves Organisers

PART NO	SHEA mm	AVE Ø	NO OF SHEAVES	WOR LOAD Kg	KING LIMIT lb		ORKING SHEAVE	MAX LII	NE SIZE	LEN mm	GTH in	WE	GHT oz	FIXII (NOT IN mm			TRES In
29139112	60	2 3/8	2	2400	5290	1200	2645	14	9/16	231	9 1/8	325	11.46	M10	3/8	72	2 27/32
29139113	60	2 3/8	3	3000	6613	1200	2645	14	9/16	303	12	435	15.34	M10	3/8	72	2 <sup>27</sup> / <sub>32</sub>
29139114	60	2 3/8	4	3600	7935	1200	2645	14	9/16	375	14 3/4	551	19.43	M10	3/8	72	2 27/32
29139115	60	2 3/8	5	4200	9258	1200	2645	14	9/16	447	17 %	637	22.46	M10	3/8	72	2 <sup>27</sup> / <sub>32</sub>
29139116	60	2 3/8	6	4800	10580	1200	2645	14	9/16	519	20 ½	775	27.33	M10	3/8	72	2 <sup>27</sup> / <sub>32</sub>



### 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.

#### **Features**

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

#### Cam Cleats



PART NO	DESCRIPTION	W	LL	LINE	SIZE	FIXING	PITCH	FIXIN	3 SIZE	WEI	GHT	
		Kg	lb	mm	in	mm	in	mm	in	g	OZ	
29104100BK	Small Composite Cleat	120	264	2–8	5/64-5/16	27	1 1/16	M4	5/32	17.5	0.6	
29104110BK	Medium Composite Cleat	180	396	4–12	5/32-1/2	38	1 ½	M5	3/16	48.5	1.7	

#### Fairlead



PART NO	DESCRIPTION	LINE		WEI	
		mm	in	g	OZ
29104104BK	to fit 29104100	2–8	5/64-5/16	6.0	0.2
29104114BK	to fit 29104110	4-12	5/32-1/2	14.0	0.5

#### Feeder Loop



PART NO	DESCRIPTION	LINE mm	SIZE in	WEI g	GHT oz
29104115	Small	2–8	5/64-5/16	6.0	0.2
29104116	Medium	4–12	5/32-1/2	10.0	0.35

#### Eye Strap (Pair)



PART NO	DESCRIPTION	LINE	SIZE in	FIXING mm	PITCH in	FIXIN(	i	WEI	GHT
29104103	Small		5/64-5/16		1 1/16		5/32	6.0	0.2
29104113	Medium	4–12	5/32-1/2	38	1 ½	M5	3/16	18.0	0.6

#### **Bulls-Eyes**



PART NO	DESCRIPTION	MAX LII	NE SIZE	FIXING	PITCH	FIXING	SIZE	WEI	GHT	
		mm	in	mm	in	mm	in	g	oz	l
29904117	Medium	12	1/2	25	1	M4	5/32	12.0	0.4	
29904118	Large	18	3/4	32	1 1/4	M5	3/16	32.0	1.1	

#### Swivel Cam Base for 60/80mm Blocks



PART NO	W	LL	LINE	SIZE	FIX PIT		FIXING	SIZE	WEI	GHT
	Kg	lb	mm	in	mm	in	mm	in	g	OZ
29904126	300	661	4-10	5/32-7/16	4x19	4x¾	M5	3/16	302	10.7

Grey cleat and fairlead also available

#### Swivel Small Cam with Bull's Eye



PART NO		LINE	SIZE	HOLE CI	ENTRES	WEI	GHT
		mm	in	mm	in	g	OZ
29904105	Small	2-6	5/64-1/4	3 x 27	3 x 1 <sup>1</sup> / <sub>16</sub>	114	4
29904115	Medium	4-10	5/32-3/8	3 x 27	3 x 1 <sup>1</sup> / <sub>16</sub>	168	5.9