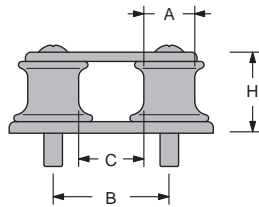


Organizers

DOUBLE SHEAVE ORGANIZER



MOD. 522.031



This solution has been designed for the new double and triple Cam 611: mounted at the back of the clutch battery guiding the line towards the winch.

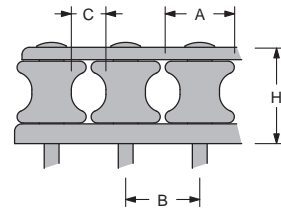
MODEL (for CAM 611)	522.031
SHEAVES NUMBER	2
SHEAVES MATERIAL	resin
LENGTH mm	88
WEIGHT kg	0.16
SWL* kg	1000 kg
A mm	22
B mm	50
C mm	28
H mm	36
SCREWS N x Ø mm	2 x Ø8

V-GRIP ORGANIZER

This solution allows manoeuvres to be guided from the clutches to the winch.



MOD. 525.052



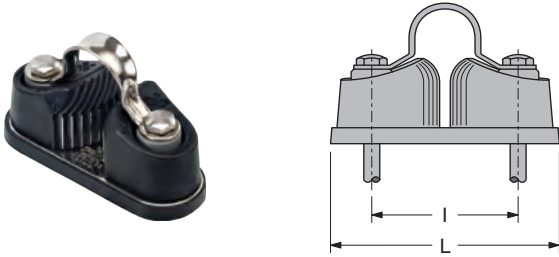
→	MODEL	SHEAVES		LENGTH mm	WEIGHT mm	SWL* kg	A mm	B mm	C mm	H mm	SCREWS N x Ø mm
		N	MATERIAL								
V-CAM R814 V-CAM 814	513.032	3	resin	90	0.18	500	28	30	14	39	3 x Ø6
	514.032	4		120	0.22						4 x Ø6
	515.032	5		150	0.27						5 x Ø6
	516.032	6		180	0.32						6 x Ø6
	517.032	7		210	0.37						7 x Ø6
V-GRIP PLUS	523.042	3	aluminium	125	0.43	1000	38	39	16	46	3 x Ø8
	524.042	4		165	0.57						4 x Ø8
	525.042	5		205	0.71						5 x Ø8
	526.042	6		245	0.85						6 x Ø8
V-GRIP MAXI	523.052	3	aluminium	138	0.50	1000	43	44	20	46	3 x Ø8
	524.052	4		182	0.65						4 x Ø8
	525.052	5		226	0.83						5 x Ø8
	526.052	6		270	1.00						6 x Ø8
V-GRIP	533.032	3	resin	100	0.19	500	28	35	19	38	3 x Ø6
	534.032	4		135	0.24						4 x Ø6
	535.032	5		170	0.30						5 x Ø6
	536.032	6		205	0.35						6 x Ø6

* SWL refers to the single sheave.

Swivelling cam-cleats

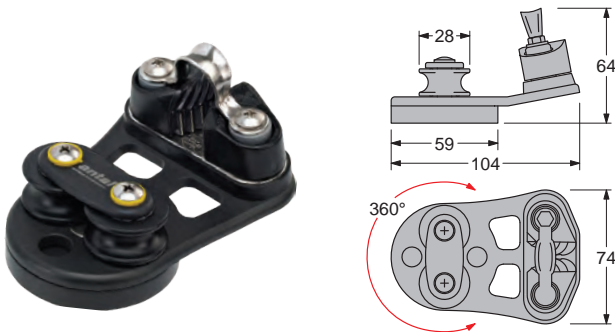
SERVO CLEAT

The particular stainless and plastic cam teeth conformation is designed to make line inserting between cams easy. Made of plastic with s.steel "ribs". Screws are **included**.



MODEL	Ø LINE mm	l mm	L mm	SCREWS N x Ø mm
502.011	3 / 7	27	48	2 × Ø4
502.22/37	6 / 10	37	64	2 × Ø5
502.022	6 / 12	42	70	2 × Ø5
502.033	10 / 14	52	86	2 × Ø6

SWIVELLING CLEAT



The aluminium base swivels through 360° on single races of Torlon ball bearings. The system is fitted with 2 × 28 mm sheaves for lines up to 10 mm.

MOD. 522.022

Fixing – 3 × Ø5 mm screws (**included**)

Weight – 0.23 kg

SWL on the cam cleat – 150 kg

BLOCK AND SERVO CLEAT



The aluminium base swivels through 360° on double races of Torlon ball bearings. The system is completed with a 60 mm block for lines up to 12 mm.

MOD. 522.140

Fixing – 4 × Ø6 mm screws (**included**)

Weight – 0.82 kg

SWL on the cam cleat – 200 kg

Stopper deck-blocks

The sheaves are made of high strength resin, fitted with composite fibre bush and side ball-bearings. No maintenance or lubrication is required.

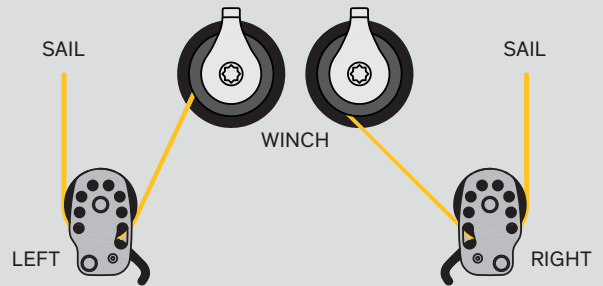
The machined side plates are made of high strength alloy, hard black anodized for wear and corrosion proofing and with all the edges smoothed off.

The aluminium locking cam is fitted on an automatic opening spring: relaxing the sheet is sufficient to open the jammer.

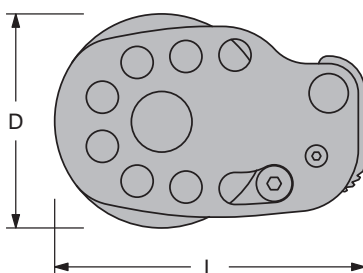
Compact design with the lever fully concealed within the side plates and with recessed fasteners.

The cam cannot be locked under high loads. It's intended to hold the line temporarily and not under heavy loads.

Left and right versions are available.



Mounting screws, nuts and washers are included.



Left and right versions are available, just add **LEFT** or **RIGHT** to the model code when ordering.

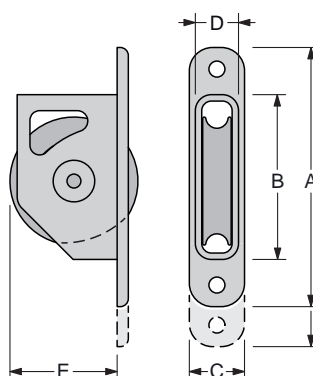
MODEL	Ø LINE mm	D mm	L mm	SWL kg	WEIGHT kg	SCREWS N x Ø mm
↓ SINGLE						
851.065*	6 / 12	65	116	800	0.23	2 x Ø8
851.080	6 / 14	80	131	1000	0.33	2 x Ø8
851.100	6 / 16	100	152	2000	0.65	2 x Ø10
851.125	10 / 18	125	174	3500	1.10	4 x Ø10
↓ DOUBLE						
852.065*	6 / 12	65	116	800	0.38	2 x Ø8
852.080	6 / 14	80	131	1000	0.56	2 x Ø8
852.100	8 / 16	100	152	2000	1.50	2 x Ø10
852.125	10 / 18	125	174	3500	1.85	4 x Ø10

* In the smallest model (D = 65) there is no spring for the cam opening.

Mast blocks

MAST BLOCKS

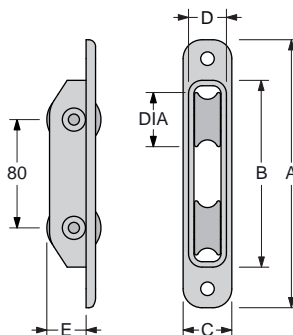
12 different sizes with diameters from 40 to 140 mm for working loads (SWL) up to 9000 kg. Hard black anodized aluminium frame with insulating washers for corrosion protection. Resin sheaves (aluminium sheaves for 100, 120 and 140 mm only) with composite fibre main bearing (not on size 40) and double side self-captive ball bearing.



MODEL	DIA mm	Ø LINE mm	A mm	B mm	C mm	D mm	E mm	SWL* kg	WEIGHT kg	BOLTS N x Ø mm
00418	40	8	107	58	24.2	18.2	31.5	400	0.07	2 x Ø6
00518	50	12	118	69.5	29.5	22.5	37	800	0.12	2 x Ø6
00618	60	12	130	81.5	29.5	22.5	49	800	0.15	2 x Ø6
00718	70	12	140	91.5	29.5	22.5	53.5	1300	0.16	2 x Ø6
00718Z			158					2000	0.23	3 x Ø6
00818	80	14	162	103	34.5	27	62.5	2200	0.24	2 x Ø8
00818Z			187					3000	0.34	3 x Ø8
01018	100	16	198	126	39	31	81.5	3500	0.44	2 x Ø10
01018Z			226					4500	0.62	3 x Ø10
01218	120	18	251	151	47	37	103	5000	0.97	3 x Ø10
01218Z			263					7000	1.08	3 x Ø12
01418Z	140	20	286	174	49	39	120	9000	1.55	3 x Ø12

DUAL SHEAVE MAST BLOCKS

The Dual sheave mast block solves the problem of the wear of the halyards coming out of the mast. This solution is also suitable for running a line from above to below deck. Two sizes with 34/40 mm sheaves for 12/16 mm lines.



MODEL	DIA mm	Ø LINE mm	A mm	B mm	C mm	D mm	E mm	SWL* kg	WEIGHT kg	BOLTS N x Ø mm
NEW 00318D	2 x 34	12	158	110	29	22	24	1500	0.14	2 x Ø6
00418D	2 x 40	16	198	138	36	28	29	2500	0.26	2 x Ø8

* Safe working load for the sheave

Organizers

Double version also available, just add **D** to the model number.



ORGANIZERS (Ø = 40, 50, 60 AND 70 mm)

Groups of 2 to 6 sheaves in 4 diameters of 40, 50, 60 and 70 mm. The 40 and 50 mm sheaves are manufactured in high-strength resin with a double side ball bearing. The 60 and 70 mm sheaves are manufactured in aluminium, hard black anodized, with a main composite fibre bearing and 2 side ball bearings. Mounting screws, nuts and washers are included. These new organizers do not disassemble after tacking off the screws.



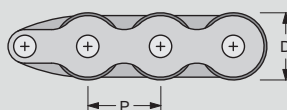
MOD. D550



MOD. D540



MOD. D530



SHEAVE SWL
The maximum Safe Working Load on the single sheave.

ORGANIZER SWL
The maximum Safe Working Load on the organizer.

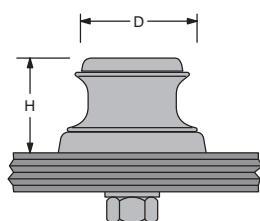
D mm	Ø LINE mm	N° SHEAVES	MODEL	LENGTH mm	P mm	WEIGHT* kg	SHEAVE SWL kg	ORGANIZER SWL kg	BOLTS N x Ø mm
40	14	2	D420	111	44	0.13	800	800	3 x Ø6
		3	D430	155		0.19		1200	4 x Ø6
		4	D440	199		0.24		1600	5 x Ø6
		5	D450	243		0.30		2000	6 x Ø6
		6	D460	287		0.35		2400	7 x Ø6
50	16	2	D520	133	52	0.20	1200	1200	3 x Ø8
		3	D530	185		0.29		1800	4 x Ø8
		4	D540	237		0.37		2400	5 x Ø8
		5	D550	289		0.46		3000	6 x Ø8
		6	D560	341		0.54		3600	7 x Ø8
60	18	2	D620	163	65	0.48	2200	2200	3 x Ø10
		3	D630	228		0.69		3300	4 x Ø10
		4	D640	293		0.91		4400	5 x Ø10
		5	D650	358		1.13		5500	6 x Ø10
		6	D660	423		1.35		6600	7 x Ø10
70	20	2	D720	190	76	0.74	3200	3200	3 x Ø12
		3	D730	266		1.07		4800	4 x Ø12
		4	D740	342		1.40		6400	5 x Ø12
		5	D750	418		1.74		8000	6 x Ø12
		6	D760	494		2.07		9600	7 x Ø12

* Weight **without** screws, washers and nuts

TURNING SHEAVES



MOD. 821.062



Mounted aft of a set of rope clutches, the turning sheave redirects each line to the most suitable winch. Mounting screws, nuts and washers are included.

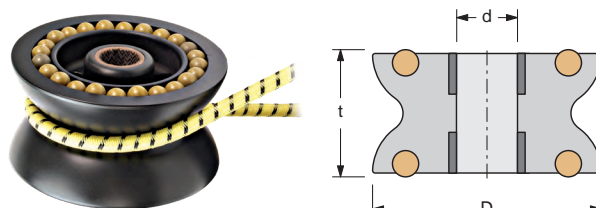
MODEL	D mm	H mm	SWL kg	WEIGHT* kg	BOLTS N x Ø mm
821.052	50	33	800	0.10	1 x Ø10
821.062	60	38	1200	0.18	1 x Ø12
821.074	70	44	1800	0.38	4 x Ø8

Tulip series

TULIP SERIES SHEAVES

The Tulip sheaves are fixed sheaves that do not turn in the direction of manoeuvres since they accept quite different lead angles. The choice of a Tulip sheave instead of a revolving block comes from the need to reduce bulk and weight.

The sheave, with an axial bearing in composite fibre and large round bearings (self-captive) in Torlon for side loads, is in anodized and Teflon coated aluminium and can handle very high loads.

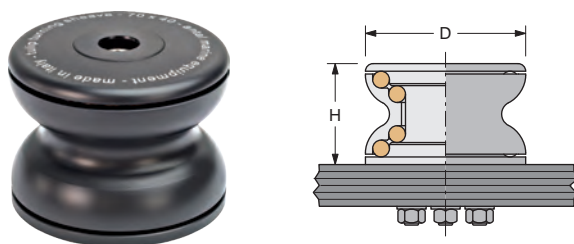


MODEL	D mm	Ø LINE mm	d mm	t mm	SWL kg	WEIGHT mm
801.045*	45	12	12	31	1000	0.04
801.060	60	14	15	38	2200	0.16
801.071	70	14	15	38	3000	0.19
801.090	90	14	20	50	5000	0.45
801.110	110	16	30	60	9000	0.83

* The D = 45 mm sheave is resin made with Delrin side ball bearings

TURNING TULIP SHEAVE

This sheave is fitted with 4 wide Torlon ball bearings, this is the best solution when it is necessary to redirect the line to any angle. Mounting screws, nuts and washers are **included**.



MODEL	D mm	Ø LINE mm	H mm	SWL kg	WEIGHT* kg	SCREWS N x Ø mm
821.050	50	10	40	1000	0.14	1 x Ø10
821.070	70	12	52	1400	0.35	1 x Ø12
821.100	100	14	66	3000	0.90	4 x Ø8

* Weight **without** screws, washers and nuts



Maxi Dolphin 75, Karma – Ph. F. Ferri

Tulip organizers

HORIZONTAL TULIP ORGANIZERS

With Tulip sheaves organizers can also be made. Batteries from 2 to 6 sheaves are available, with diameters 45 and 60 mm.

The 45 mm sheaves are in high resistance resin, with a “self-captive” double side ball bearing. The 60 mm sheave, with an axial bearing in composite fibre and large round bearings (self-captive) in Torlon for side loads, is in anodized and Teflon-coated aluminium and can handle very high loads.

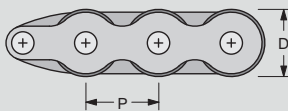
Mounting screws, nuts and washers are **included**.



MOD. T540



MOD. T530



SHEAVE SWL

The maximum Safe Working Load on the single sheave.

ORGANIZER SWL

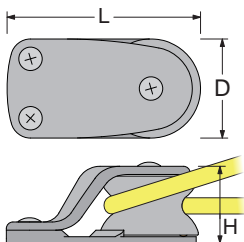
The maximum Safe Working Load on the organizer.

D mm	Ø LINE mm	N° SHEAVES	MODEL	LENGTH mm	P mm	WEIGHT* kg	SHEAVE SWL kg	ORGANIZER SWL kg	BOLTS N x Ø mm
45	12	2	T520	132	52	0.23	1000	1200	3 x Ø8
		3	T530	184		0.33		1800	4 x Ø8
		4	T540	236		0.42		2400	5 x Ø8
		5	T550	288		0.52		3000	6 x Ø8
		6	T560	340		0.61		3600	7 x Ø8
60	14	2	T620	160	65	0.48	2200	2200	3 x Ø10
		3	T630	225		0.69		3300	4 x Ø10
		4	T640	290		0.91		4400	5 x Ø10
		5	T650	355		1.13		5500	6 x Ø10
		6	T660	420		1.35		6600	7 x Ø10

* Weight **without** screws, washers and nuts

TULIP FOOTBLOCK

Base and cover in hard black aluminium. Mounting screws, nuts and washers are included.



MODEL	D mm	Ø LINE mm	L mm	H mm	SWL kg	WEIGHT* kg	SCREWS N x Ø mm
819.045	45	12	92	42	1000	0.19	1xØ8 + 2xØ6
819.060	60	14	116	51	1600	0.43	1xØ10 + 2xØ8
819.070	70	14	132	51	2200	0.60	1xØ10 + 2xØ8
819.090	90	14	163	63	3000	1.10	1xØ12 + 2xØ10

* Weight **without** screws, washers and nuts

Vertical Tulip blocks

VERTICAL TULIP BLOCKS

These vertical blocks are fitted with Tulip sheaves that accept very different lead angles. This is a small and light solution that replaces traditional adjustable blocks. The 60 and 70 are aluminium made with Torlon side ball bearings. Mounting screws, nuts and washers included.

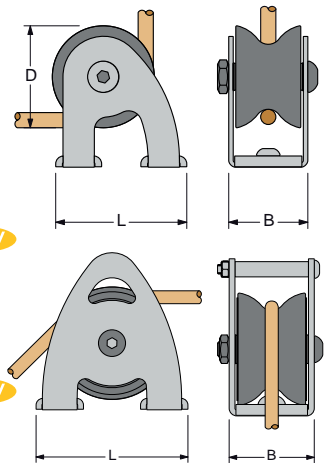


MOD. 817.050 - VERTICAL



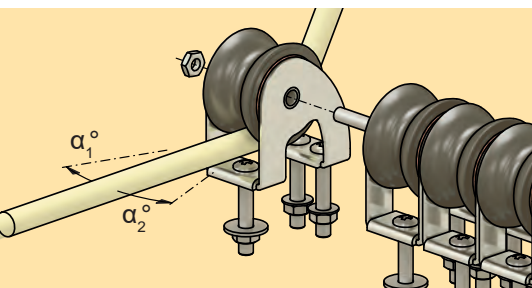
MOD. 818.050 - OVER THE TOP

MODEL	D mm	LINE Ø mm	L / B mm	SWL kg	WEIGHT kg	SCREWS N x Ø mm
↓ VERTICAL						
817.050	45**	12	58.5 / 35	1000	0.16	2 x Ø6
817.060	60	14	74.5 / 44	2200	0.39	3 x Ø8
817.070	70	14	90 / 44	3000	0.90	2 x Ø12
↓ OVER THE TOP						
818.050	45**	12	62.3 / 35	1000	0.16	2 x Ø6
818.060	60	14	78.5 / 44	2200	0.39	2 x Ø8
818.070	70	14	92 / 44	3000	0.88	2 x Ø10



* Weight **without** screws, washers and nuts

** The D = 45 mm sheave is resin made with Delrin side ball bearings



More vertical blocks can be joined to form a set.

For example: for a battery of 5 x **817.060**, just order **817.060/5**.

↓ **Max recommended side deviation**

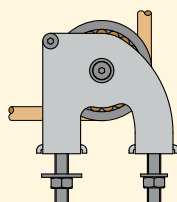
$$\alpha_1, \alpha_2 = \pm 20^\circ$$

MAXI VERTICAL TULIP

NEW



MOD. 817.090
SHEAVE Ø - 90 mm
SWL - 5000 mm
FASTENERS - 3xØ12 mm
WEIGHT - 1.40 kg
LINE MAX Ø - 14 mm

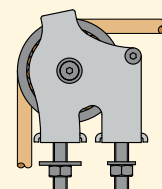


MAXI OVER THE TOP TULIP

NEW



MOD. 818.090
SHEAVE Ø - 90 mm
SWL - 5000 mm
FASTENERS - 3xØ12 mm
WEIGHT - 1.30 kg
LINE MAX Ø - 14 mm



Mainsail blocks

CLEW BLOCKS

Solution designed to solve the connection of a sheave to the furling mainsail clew efficiently.

The block is contained within the size of the sail, thus allowing a larger surface of the mainsail to be used.

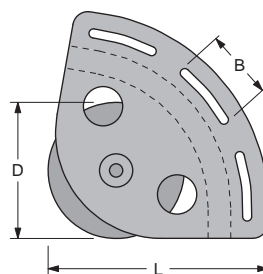
The choice of materials guarantees the least weight as well as a very good mechanical resistance to the environment. Particular care has been taken over the ease of connection which is obtained by normal “webbing”. This ensures moreover a very good distribution of the load on the sail.

MATERIALS – Cheek plates are made of anodized aluminium. Also polished s. steel solutions are available on request.



MOD. 991.073

MODEL	Ø LINE mm	D mm	L mm	B mm	SWL kg	WEIGHT kg
991.073	14	70	112	3 × 36	1000	0.23
991.093	16	90	145	3 × 46	2000	0.45
991.124	18	120	190	4 × 46	3000	1.04
991.154	20	150	225	4 × 52	4000	2.05
991.184	24	180	265	5 × 52	8000	2.65



REEF BLOCKS

The blocks are connected to the leech of the mainsail with webbing, and reduce point loading on the mainsail when reefing. The small diameter sheaves are suitable to very high loads.

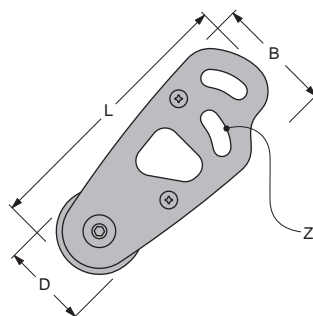
The center hole can be used as a safety connection to the boom when reefed. The small version (D = 50 mm) is for boats to 50 ft, larger (D = 120 mm) for boats to 100 ft.

If a larger sheave is required and if higher weight and larger sizes are acceptable, then the clew blocks described above can be considered.



MOD. 994.075

MODEL	Ø LINE mm	D mm	L mm	B mm	Z mm	SWL kg	WEIGHT kg
994.055	14	50	143	65	20	1500	0.22
994.065	16	60	178	79	20	3000	0.37
994.075	18	70	204	88	25	4500	0.70
994.085	20	80	238	112	35	5500	0.90
994.095	24	100	292	140	45	8000	1.30
994.125	28	120	357	170	60	10000	2.90



Special blocks

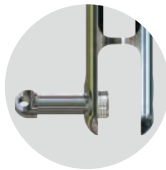
TWIN HALYARD BLOCKS

THB

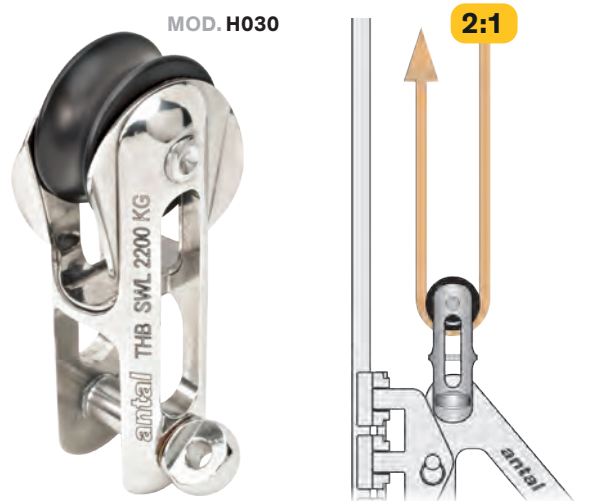
The Twin halyard block is specially made for a 2 to 1 main halyard. The very small sheave is aluminium made with a Composite Fibre bushing. The body is completely made in "High-resistance" stainless steel Nitronic 50. 4 sizes for breaking loads from 2600 to 10000 kg, for boats up to 70 ft.



Self-locking pin



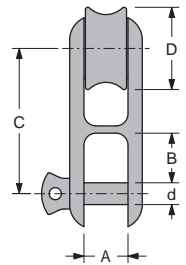
Captive pin



MOD. H030

2:1

MODEL	Ø LINE mm	D mm	d mm	A mm	B mm	C mm	SWL kg	WEIGHT kg
H020	8 / 10	28	8	16	15.5	53.5	1300	0.08
H030	10 / 12	34	10	18	20.5	65.0	2200	0.15
H040	12 / 14	42	12	21	24.5	80.0	3500	0.28
H050	14 / 16	49	14	21	34.0	89.0	5000	0.54



HIGH LOAD BLOCKS

HLB

These small and light blocks are the best solution for very high loads when sliding is not important.

The very small sheave is fitted with a Composite Fibre bushing. The one piece frame is made for line connection.

The 3 blocks (D = 30, 40 and 55 mm) give an 8 to 1 system. This system is specially designed for the backstay or the boom-vang.

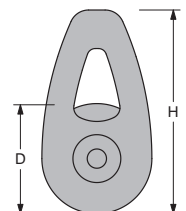


MOD. H140

8:1

Set of blocks,
8:1 system

MODEL	Ø LINE mm	D mm	H mm	SWL kg	WEIGHT kg
H130	6 / 8	30	59	600	0.05
H140	8 / 10	40	74	1200	0.08
H150	10 / 12	55	91	2400	0.18
H160	12 / 16	70	116	3500	0.33



Roller bearing sheaves

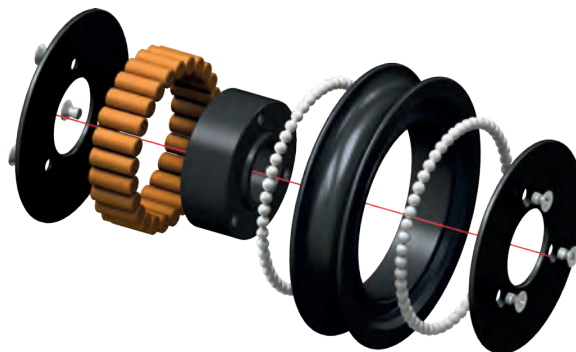
ROLLER BEARING SHEAVES

In some cases, it is important to reduce the friction of the blocks as much as possible, even if this leads to a reduction in the maximum loads. When compared with the composite fibre bushing version, the roller bearing sheaves offer a lower resistance but a greater smoothness.

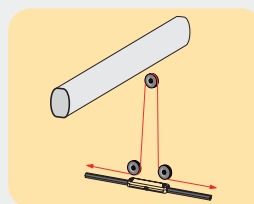
Antal offers a range of roller sheaves, which can replace the traditional sheaves on the OPF series blocks, and a range for the Looper series. The main characteristics of these sheaves are described in the following tables.

FRL is the Free Rolling Load: for good sliding (low friction), the FRL value must not be exceeded.

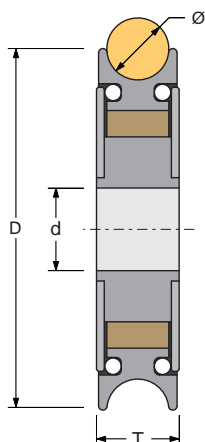
ML is the Maximum Load: loads higher than the ML cause permanent deformations of the rollers and therefore damage the bearing.



To order OPF or Looper blocks with roller bearing sheaves just add **R** in front of the model code.



A situation in which it is advisable to consider blocks with roller sheaves is that of the mainsail sheet with a T shape because, in this case, an excessive friction of the blocks makes the car movement very difficult.



↓ SHEAVES FOR OPF BLOCKS (page 62)

MODEL	D mm	d mm	T mm	Ø mm	WEIGHT g	FRL kg	ML kg
07016R	70	12	16	12	95	1000	1200
08019R	80	16	19	14	160	1600	2000
10021R	100	20	21	16	265	2400	3200

↓ SHEAVES FOR LOOPER BLOCKS (page 80)

MODEL	D mm	d mm	T mm	Ø mm	WEIGHT g	FRL kg	ML kg
07116R	70	16	16	12	90	1000	1200
08119R	80	21	19	14	150	1600	2000
10121R	100	25	21	16	255	2400	3200



RM 1370 – Ph. A. De Buyzer