

PULLEYS

This page was updated 13/04/12

SAFETY

General Pulley Information

The breaking load of pulleys is normally determined by attaching the head fixing of the block to one end of a testing machine while both legs of a U bolt [or a loop of rope] are placed over the sheave and attached to the other end of the machine. The machine then pulls apart the head and the sheave until it fails. If the pulley fails at 1000kg then that is generally the manufacturers stated breaking load. **However**, if you attach the head of the pulley to your theatre grid and reeve a rope through it and attach one end to a **1000kg weight** on the floor you will need to **exert 2000kg headload** to lift the weight because it will require a 1000kg pull while still suspending a 1000kg weight. Therefore, to determine a safe working load, Flints would recommend that the breaking load is immediately halved and then divided by eight [which is the ABTT code for wire rope]. For example: For our popular Opera Web Block, which would fail at 2500kg on a test bed, we give a safe LIFTING load of 156kg. ($2500/2=1250/8=156$ kg). The SWL is more than you would want to hand haul but considerably below the breaking load.

Marine equipment tends to state the safe working load as half the breaking load, other suppliers use different calculations. We have tried to clarify the situation in this catalogue by giving the information as clearly and boldly as we can in the special safety boxes.

Choosing the correct pulley size

To obtain maximum working life, strength and the least friction the pulley sheave diameter should be at least 8 times the diameter of the rope. In the case of wire ropes the sheave diameter should ideally be 30 times the diameter of the wire. However there are many applications where these large diameter sheaves would be completely impractical in which case choose a pulley that fits the job but take into account a shorter working life and regularly inspect the rope or wire for signs of wear. Be careful when choosing pulleys to fit fibre ropes. Rope diameters can vary, three strand ropes often reduce in diameter when under load but can exceed their stated diameter when not under tension.

It is important that any equipment purchased for lifting purposes is selected by a person competent to do so.

TRADITIONAL ASH BLOCKS



new



Double with becket

As used on Treasure Island

Traditional Ash Blocks These blocks are strong, simple and functional. They are often used for period set dressings. Bindings are heavy gauge stainless steel with a fixed eye head. Sheaves are a generous size made from Tufnol running on a stainless spindle. The shell is high quality ash formed into a smooth oval shape and varnished. These blocks suit rope sizes 10-12mm and have 50mm Ø sheave. Other sizes for ropes up to 26mm diameter are available to order.

SAFETY

Safety factor 2 to 1

Ash Blocks [Type AH088]	breaking load	SWL	code	each
Single	3500kg	1750kg	PULO610	£48.89
Single with becket	3500kg	1750kg	PULO611	£53.78
Double	4000kg	2000kg	PULO612	£70.89
Double with becket	4000kg	2000kg	PULO613	£77.61

MINI PULLEYS FOR ROPE OR CORD



HA4078



HA4081

SAFETY

Breaking Load
275kg

Single and Double Mini Pulleys

Invaluable as guides for small trip lines. The pulleys can be secured with a small shackle [4mm pin], dyneema or polyester cord or even cable ties for light loads. The axles are hollow so they can be fixed with a screw for side mounting purposes. Made from 316 grade stainless steel with acetal sheaves, they weigh just 5g or 10g for the double.

Mini Pulleys	rope size	sheave Ø	code	each
Single	2-5mm	16mm	PUL530	£2.77
Double	2-5mm	16mm	PUL533	£5.50

MINI PULLEYS FOR WIRE ROPE OR CORD

new



16mm High Tension Blocks This High Tension range is made from 316 grade stainless steel throughout giving incredible strength to weight ratios. The ball race is machined using the latest CNC technology which ensures absolute consistency in production. Ideal for use with 4mm Dyneema Pro [page 2.34] or flexible wire ropes. Shackle pin Ø 4mm.

- ✓ Maximum sheave efficiency.
- ✓ Minimum friction for all high load applications.

SAFETY

Breaking Load
400kg

High Tension 16	rope size	sheave Ø	wt	code	each
Single	2-4mm	16mm	11g	HA4568	£11.85
Double	2-4mm	16mm	25g	HA4569	£25.32
Triple	2-4mm	16mm	36g	HA4570	£37.98

new



25mm High Tension Blocks A larger and stronger version of the 16mm blocks listed above. These incredible lightweight blocks are perfect for use with highly technical lines such as Dyneema Pro [page 2.34] or flexible wire ropes. Shackle pin Ø 5mm.

SAFETY

Breaking Load
750kg

✓ Amazing strength with virtually no weight.

High Tension 25	rope size	sheave Ø	wt	code	each
Single	2-5mm	25mm	25g	HA4379	£14.05
Double	2-5mm	25mm	54g	HA4679	£30.58
Triple	2-5mm	25mm	78g	HA4593	£45.43

2.39

SECTION TWO



Mini Upright Block A small stainless block with 25mm diameter chromed brass sheave designed for small wire ropes or high tech ropes such as dyneema. Useful for model theatre grids and working props. Maximum wire size 4mm [although the ABTT would have something to say about running a 4mm wire around a 25mm sheave!] Weight 35g. The manufacturers only state the breaking load of a similar pulley in the range which is 950kg. The breaking load of this pulley is dependent on the fixings through the lugs.

Mini Upright Block	code	each
	PULSS0108	£7.35



Brass Sheave Block A small stainless steel and brass block which can be mounted by means of a pad eye [page 2.27] or shackle. Useful for guiding small wire ropes or can be used inverted to act as bobbins along catenary wires. The axle is a removeable clevis pin so the pulley can be dismantled and inserted into wires.

SAFETY	Breaking load	Safety factor	Safe working load
	750kg	2 to 1	375kg

Brass Sheave Block	code	each
Sheave diameter	max rope size	wt
45mm	5mm	106g
	BAR91300	£12.29



new



High Load Wire Rope Block Side cheeks are made from 316 grade stainless steel. The brass sheave runs on a stainless centre bush. A useful pulley for unobtrusive guiding of small wire ropes, such as awning rigging etc.

SAFETY	Breaking load	Safety factor	Safe working load
	1300kg	2 to 1	650kg

High Load Wire Rope Block	code	each
sheave diameter	max rope size	wt
Fixed eye 45mm	5mm	163g
Swivel eye 45mm	5mm	212g
	BAR91301	£18.88
	BAR91302	£23.72



new



Aluminium Wire Rope Cheek Block Side cheeks are made from marine grade aluminium grey anodised for durability. The sheaves are precision turned from solid aluminium bar silver anodised and running on nylon bearings to reduce friction under load. Rivets are 316 grade stainless steel. A similar pulley in this range has a break load of 1750kg

but the strength of this block will depend on its fixings. For maximum strength fixings should pass through the hollow centres of the rivets. Fastening diameter: 5mm. Base size: 103x53mm.

Aluminium Wire Rope Cheek Block	code	each
sheave diameter	max wire size	wt
51mm	4mm	155g
	BAR91650	£39.60

For a full range of rope cheek blocks see also pages 2.41, 2.44, 2.45,

BARTON PULLEYS

Barton Pulleys

This range of tough lightweight blocks is made from the highest quality materials to ensure ultimate efficiency and long working life. The plain brass bearing ensures free running even under high loads. They are available with a swivel head or a reverse shackle which allows the block to be fixed in parallel or at right angles. Blocks can also be supplied with ball bearing sheaves to order. I can personally vouch for the reliability of these Barton blocks as I have used them in demanding applications on my yacht for well over 20,000 nautical miles over the last 18 years with no failures or even signs of wear.

Made in Whitstable!

See
flints.co.uk for
Bartons brand new
20mm block range!

MEDIUM DUTY YACHT BLOCKS



UP TO 1260KG BREAKING LOAD



Size 1 Blocks Hugely popular general purpose blocks. Flints hold very large stocks of these pulleys. Sheave size: 30x11mm. Maximum rope diameter: 8mm. See also page 2.42 for cloth stretching runners [BARS1].

SAFETY	Breaking load	Safety factor	Safe working load
	700kg	2 to 1	350kg

Size 1 Blocks	code	each
Single Swivel	BARSS1	£7.92
Single Reverse Shackle	BARSQ1	£6.76
Double Swivel	BARD1	£11.67
Double Reverse Shackle	BARDQ1	£10.09
Triple Swivel	BART1	£15.10
Triple Reverse Shackle	BARTQ1	£13.20



Size 2 Blocks

Sheave size: 35x12mm. Maximum rope diameter: 8mm.

SAFETY	Breaking load	Safety factor	Safe working load
	740kg	2 to 1	370kg

Size 2 Blocks	code	each
Single Swivel	BARSS2	£9.13
Single Reverse Shackle	BARSQ2	£7.68
Double Swivel	BARD2	£13.68
Double Reverse Shackle	BARDQ2	£11.50
Triple Swivel	BART2	£19.58
Triple Reverse Shackle	BARTQ2	£15.72

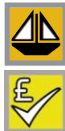


Size 3 Blocks

Sheave size: 45x14mm. Maximum rope diameter: 10mm.

SAFETY	Breaking load	Safety factor	Safe working load
	770kg	2 to 1	385kg

Size 3 Blocks	code	each
Single Swivel	BARSS3	£10.35
Single Reverse Shackle	BARSQ3	£8.89
Double Swivel	BARD3	£16.09
Double Reverse Shackle	BARDQ3	£14.11
Triple Swivel	BART3	£23.14
Triple Reverse Shackle	BARTQ3	£19.28



Size 4 Blocks Great value range of blocks capable of handling up to 12mm ropes.
Sheave size: 58x17mm. Maximum rope diameter: 12mm.

SAFETY	Breaking load	Safety factor	Safe working load
	1260kg	2 to 1	630kg

Size 4 Blocks	code	each
Single Swivel	BARSS4	£15.51
Single Reverse Shackle	BARSQ4	£13.86
Double Swivel	BARD4	£23.03
Double Reverse Shackle	BARDQ4	£21.49
Triple Swivel	BART4	£30.80
Triple Reverse Shackle	BARTQ4	£25.96

HEAVY DUTY YACHT BLOCKS



UP TO 2500KG BREAKING LOAD



This range of rugged quiet high load blocks are made from injection moulded side plates with all load bearing components in 316 grade stainless steel. The acetal sheaves run smoothly under extremely high loads on a stainless steel centre pin with a brass bush. Ball bearing versions are available to order.



Size 6 Blocks

Sheave size: 60x17mm. Maximum rope diameter: 12mm

SAFETY	Breaking load	Safety factor	Safe working load
	2000kg	2 to 1	1000kg

Size 6 Blocks	code	each
Single Swivel	BARSS6	£32.79
Single Reverse Shackle	BARSQ6	£23.38
Double Reverse Shackle	BARDQ6	£30.08
Triple Reverse Shackle	BARTQ6	£36.14



Size 7 Blocks The toughest yacht pulleys that we hold in stock. Capable of demanding work.

Sheave size: 70x20mm. Maximum rope diameter: 14mm

SAFETY	Breaking load	Safety factor	Safe working load
	2500kg	2 to 1	1250kg

Size 7 Blocks	code	each
Single Swivel	BARSS7	£37.02
Single Reverse Shackle	BARSQ7	£28.54
Double Reverse Shackle	BARDQ7	£35.49
Triple Reverse Shackle	BARTQ7	£42.60

For Stage Rigging Handbooks see pages 3.71-3.72

UPRIGHT YACHT BLOCKS



Upright Yacht Blocks A range of well made, quiet, upright blocks which are competitively priced and will give years of reliable service. Please note that the breaking loads given below will depend on the strength of the fixings.

Fastenings: 4 off 5mm Ø on all sizes.

Upright Blocks	sheave Ø	max rope size	breaking load	code	each
Single Size 1	30mm	8mm	700kg	BAR01150	£10.60
Double Size 1	30mm	8mm	700kg	BAR01250	£13.24
Single Size 3	45mm	10mm	770kg	BAR03150	£13.79
Double Size 3	45mm	10mm	770kg	BAR03250	£18.30
Single Size 4	58mm	12mm	1260kg	BAR04150	£18.06
Double Size 4	58mm	12mm	1260kg	BAR04250	£24.90

Further upright blocks can be found on pages 2.44-2.46

SIDE MOUNTING CHEEK BLOCKS [single and double]



BAR01160

All the others

Side Mounting Turning Blocks or Cheek Blocks

These economical quiet and tough blocks can be mounted directly to timber, steel or alloy battens. Supplied with

shield to isolate dissimilar metals [necessary in salt water environments]. Flints have some of these blocks specially made for us as doubles. Fastenings: 5mm Ø on all sizes except size 4 which requires 6mm Ø.

Side Mounting Turning Block or Cheek Blocks	code	each
rope base plate breaking load no of sheaves		
8mm 55x35mm 700kg single	BAR01160	£4.85
8mm 79x43mm 740kg single	BARCH2	£9.53
8mm 79x43mm 740kg double	BARDCH2	£9.52
10mm 92x52mm 770kg single	BARCH3	£11.25
10mm 92x52mm 770kg double	BARDCH3	£14.08
12mm 106x66mm 1260kg single	BARCH4	£14.82
12mm 106x66mm 1260kg double	BARDCH4	£22.56

Further cheek blocks can be found on pages 2.40 and 2.44-2.47

SNATCH BLOCKS



Snatch Blocks The sides of these blocks hinge open allowing them to be inserted in rigged lines making them useful for brailing purposes. The rugged blocks that we supply are excellent value. See also the Petzl Rescue pulley on page 2.43.

SAFETY

Safety factor 2 to 1

Snatch Blocks	breaking load	SWL	code	each
Fitted with a bronze snap shackle	900kg	450kg	BARCW1450	£54.08
Fitted with a stainless D shackle	1300kg	650kg	BARCW1451	£46.00
Fitted with a stainless snap shackle	1100kg	550kg	BARCW1452	£75.81

ROPE ORGANISERS



Rope Organisers Useful for tidying up complicated rope arrangements and for guiding ropes into clutches. Fixings are through the axle of the sheaves with 6mm machine screws [not supplied]. Takes rope up to 12mm diameter and the sheaves are grooved to accept wire as well.

Rope Organisers	code	each
4 way	BAR584	£35.45
6 way	BAR586	£45.10

TACKLE



Quadruple Purchase Tackle



Fiddle swivel becket with cams

Fiddle swivel

Tackles can solve many lifting problems. They are much faster than hand winches and more economical. This tackle arrangement will give a quadruple purchase. The sheaves we have selected are fitted with ball races to reduce friction. They can be supplied with or without adjustable angle camlocks to temporarily hold the load. A useful general purchase tackle.

Sheave Size: 44mm and 70mmx17mm.
Maximum rope diameter: 14mm [10 or 12mm preferred].
For braided polyester rope see page 2.33.

✓ Faster, cheaper and quieter than winches.

SAFETY	Breaking load	Safety factor	Safe working load
	2000kg	2 to 1	1000kg

Tackle with rope lock	code	each
Fiddle Swivel Becket Cam	BARR977	£76.76
Fiddle Swivel	BARRFS6	£49.85
Total excluding rope		£115.74
Tackle without rope lock	code	each
Fiddle Swivel Becket	BARRFB6	£55.52
Fiddle Swivel	BARRFS6	£53.39
Total excluding rope		£96.85

BLOCKS WITH BECKETS



Blocks with Beckets To make up a simple purchase system it is best to use blocks fitted with a becket. The becket provides the most effective anchorage position for the line to be tied onto. All these pulleys are fitted with swivel

heads. Other sizes are available to order. See also Traditional Ash Blocks on page 2.39.

Becket blocks	Max rope Ø	breaking load	code	each
Size 2 single	8mm	740kg	BAR02131	£11.10
Size 2 double	8mm	740kg	BAR02231	£15.28
Size 4 single	12mm	1260kg	BAR04131	£17.50
Size 4 double	12mm	1260kg	BAR04231	£24.97

CLOTH STRETCHING PULLEYS



Cloth Stretching Pulleys Occasionally when stretching a cloth or gauze between two vertical wires it is preferable to use pulleys to run along the wires rather than gauze hanks [see page 1.89]. This quiet smooth running pulley has a removeable clevis pin so it can be inserted onto made up wires. Its weight and lack of friction helps the cloth fly in.

Cloth Stretching Pulley	code	each	per 50
	BARS1	£4.11	£200.00

TRANSPORT PULLEYS



Tandem



Tandem Speed

Tandem In-line double pulleys for use as transport pulleys on ropes or cables. The Tandem is designed for fibre ropes up to 13mm Ø with a working efficiency of 71%. The Tandem Speed has stainless steel sheaves with sealed ball bearings and can be used on wire ropes up to 12mm Ø [or fibre ropes up to 13mm Ø] with a maximum working efficiency of 95%. They can operate at speeds of up to 10m/s. Great for adventure parks. Individually tested CE EN 12278.

SAFETY	Breaking load	Safety factor	Safe working load
	2446kg	2.4 to 1	1019kg

Tandem	code	price
Tandem for fibre ropes	PETP21	£30.00
new Tandem Speed for wire ropes [stainless steel sheaves]	PETP21SPE	£45.00

SELF JAMMING PULLEYS FOR HAULING



Pro Traxion For effective and comfortable haulage of heavy loads, the rope grab provides temporary relief for the operator. Fitted with a large diameter 38mm sheave with ball bearings and a side opening plate for insertion onto ropes from 8-13mm Ø. The rope gripping cam has inclined teeth which operate on even icy ropes. If you are working onstage and your ropes get icy then I reckon you have cause to moan. Individually tested CE EN 567, EN 12278. See also the Harken Hexaratchet. ⚡

SAFETY	B.L. as pulley head load only	Safety factor	Safe working headload
	2240kg	3.6 to 1	610kg

SAFETY	B.L. used as self jammer	Safety factor	Safe working load of grab
	407kg	1.6 to 1	254kg

Pro Traxion	code	price
	PETP51	£69.17



Mini Traxion A more compact and lightweight version of the Pro Traxion, ideal for work and rescue kits. Can be used to ascend a rope. Aluminium sheave mounted on self lubricating bushing. Takes ropes from 8-13mm Ø. CE EN 567, EN 12278#. See also the Harken Hexaratchet. ⚡

SAFETY	Working headload Limit
	509kg

SAFETY	Working load Limit of grab
	254kg

Mini Traxion	code	price
	PETP07	£44.17

For further information on headloads please refer to page 2.39.

RATCHET BLOCKS FOR HAULING



The Riggers Favourite!



Harken Hexaratchets These ratchet blocks will grip loaded hauling lines to relieve the operator of much of the strain. The design of the sheave is such that when the rope is eased off it will slide around the sheave without the sheave turning. Hence a hefty lantern can be lifted and held in place without having to hold the full weight. It gives an 8 to 1 advantage with a 180° wrap. These blocks do NOT lock the rope so the load can be lowered against the fixed sheave. Flints now stock this very robust version as we found the previous Ratchamatic version was not up to the rigorous duty we expect. ✓ Very popular with professional riggers.

SAFETY	Breaking load	Safety factor	Safe working load
	2268kg	2.77 to 1	816kg

Hexaratchet Blocks	sheave Ø	max rope size	turns	code	each
Single	76mm	14mm	clockwise	HARI549	£124.46

RESCUE PULLEYS



PPE



Rescue - P50 Pulley with pivoting side plates so it can be inserted anywhere along a rope [see also snatch blocks page 2.41]. The most advanced rescue pulley made. It will accept three karabiners and the sealed ball bearing yields maximum efficiency. Designed for heavy loads and intensive use. The side plates are clearly marked showing both the WLL for the head (8kN) and the WLL for the individual lines (4kN). Efficiency 95%. Wt 185g Individually tested. CE EN12278, NFPA 1983 General Use.

SAFETY	Breaking Head load	Safety factor	Working Headload Limit
	3669kg	4.5 to 1	815kg

Rescue - P50	sheave Ø	rope Ø	code	each
	38mm	7-13mm	PETP50A	£37.50

OSCILLANTE SIDE SWING PULLEYS

new



PPE



Oscillante Side Swing Pulley. A useful pulley for emergency use. Designed for occasional use when hauling or in a pulley system. Good strength to weight ratio. Nylon sheave and aluminium side plates. Working Load: 4kN (2kN on one rope end) Breaking Strength: 15kN. CE EN 12278, UIAA. Efficiency 71%. Weight 42g.

SAFETY	Working headload Limit
	407kg

Oscillante side swing	sheave Ø	rope Ø	code	each
	25mm	7-13mm	PETP02A	£9.17

FIXE PULLEY

new

PPE



Fixe Pulley A pulley with fixed side plates to allow very quick installation onto a rope and karabiner. High working efficiency. Compact and lightweight. Working Load: 5kN. CE EN 12278, UIAA. Efficiency 71%. Weight 90g.

SAFETY	Working headload Limit
	509kg

Fixe Pulley	sheave Ø	rope Ø	code	each
	21mm	7-13mm	PETP05WN	£15.83

OPERA WEB BLOCK



Hugely popular and great value!

Opera Web Block Flints designed this block to meet the need for a pulley which can be quickly rigged to flying bars for the purpose of hoisting lanterns and sound equipment into position before their final fixing. It is not acceptable under current health and safety legislation to carry items up a Tallescope, ladder or tower. By rigging this quick block, items can be raised into position by a crew member at stage level. The pulley is simply passed through its own tested CE marked web [EN566] and it is ready to use. The sheave is fitted with a Delrin ball race for low friction even at high loads. There is a becket underneath so that purchase arrangements can be made. It will take 14mm rope but we would recommend hauling with 10 or 12mm matt braided polyester rope [see page 2.33]. A very useful and popular bit of kit at a competitive price.

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SAFETY	Breaking load	Safety factor	Safe working load
	2500kg	16 to 1	156kg

Opera Web Block	max rope Ø	sheave Ø	code	each
	14mm	70mm	PUL99002	£22.92

See also Sewn Slings and web links on page 2.14.

SASH WINDOW AND THROUGH DECK PULLEYS



Sash Window Pulleys Designed for raising and lowering window sashes but have hosts of other uses. 45mm Ø cast iron sheave mounted a a steel housing. Face plate size 25x111mm. Face - back 46mm.

Sash Window Pulleys	code	each
Sash Size No6	DOR066	£3.75

new



Plain Bearing Alloy Sheave Boxes Pressure die cast from high grade aluminium with acetal sheaves. Suitable for 6mm Ø ropes. Slot size 43x17mm single. 43x38mm double. Sheave diameter 26mm. Weights 26g and 48g. Useful for diverting small ropes understage or through flattage.

Sheave boxes	code	each
single	HA4	£6.45
double	HA7	£9.63

Still can't find the pulley you want!

Please give us a ring. We often get divertor blocks and drop blocks made up to suit the customers exact requirements. Flints can supply large size traditional wooden blocks. We also have many manufacturers catalogues so we may be able to source your exact requirements from one of our many suppliers.

HALLS PULLEYS

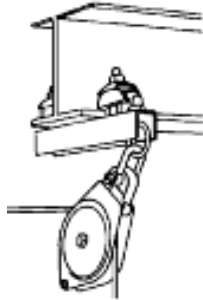
This page was updated 15/07/11

Halls New Dynaline and Old Style Pulleys

Halls recently introduced their Dynaline range of pulleys for wire and fibre ropes. This range of pulleys is marked with a safe working load and replaces the old style blocks on all sizes above 100mm diameter. The familiar old style fibre rope blocks are still available in the smaller sizes and they remain popular for lighter applications.

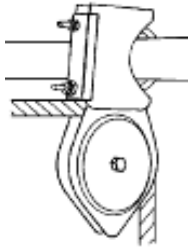
- A 38mm diameter sheave takes lines up to 6mm.
- A 50mm diameter sheave takes lines up to 10mm.
- A 75mm diameter sheave takes lines up to 14mm.

HALLS OLD STYLE BLOCKS



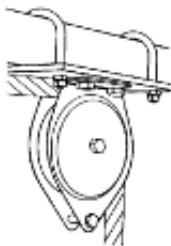
Awning Pulleys 245 Capable of being mounted to a variety of fixing points, this pulley type solves a variety of problems. It can be fixed via a shackle to eyebolts, girder clamps or chain, and always self adjusts to find the correct pulling angle, regardless of irregular fixing points. Shown here with an adjustable girder clip [not included].

Awning Pulleys	1 way	2 way	3 way	4 way			
code	code	code	code	code			
38mm HAL235	£18.81	HAL236	£26.34	HAL237	£37.30	HAL238	£49.49
50mm HAL240	£21.32	HAL241	£33.11	HAL242	£46.16	HAL243	£57.96
75mm HAL245	£44.59	HAL246	£68.53	HAL247	£99.59	HAL248	£137.30



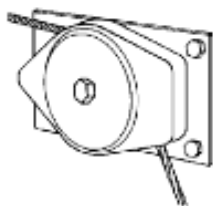
Fit Up Pulley Across 307 Connects the pulley sheave at right angles to the support bar, useful in studio theatres that have fixed lighting grids, and in any situation where the lines need to cross over a bar.

Pulley type 307	1 way	2 way	3 way		
75mm HAL100	£57.73	HAL101	£81.67	HAL102	£112.73



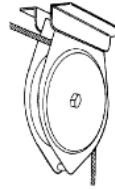
Fit Up Pulley Parallel 308 Connects the pulley sheave parallel to the support bar, useful in all theatres, and in any situation where the lines need to run along a bar.

Fit Up Pulley Parallel 308	1 way	2 way	3 way		
75mm HAL110	£57.73	HAL111	£81.67	HAL112	£112.73



Side Fixing Pulley 244 A useful pulley with a variety of uses. Fixed to the wall it is used for curtain tracks, safety curtain releases and scenery track lines. It can be used on the floor to divert ropes or it can be fixed to scenery for effect lines.

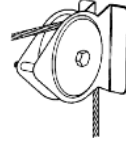
Side Fixing Pulley 244	1 way	2 way	3 way		
38mm HAL220	£18.81	HAL221	£26.34	HAL222	£37.30
50mm HAL225	£21.32	HAL226	£33.11	HAL227	£46.16
75mm HAL230	£43.32	HAL231	£67.26	HAL232	£98.32



Ceiling Fixing Pulley 183

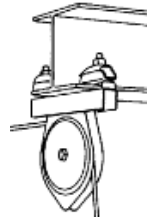
Intended for use either as a ceiling, wall or timber fixing pulley. These pulleys have bolted angle iron supports which are more substantial than the upright pulleys listed below.

C.F.Pulley 183	1 way	2 way	3 way	4 way			
75mm HAL170	£55.69	HAL171	£79.63	HAL172	£110.69	HAL173	£141.12



Upright Guide Pulley 243 A general purpose pulley with a variety of uses. Used principally for curtain track diverts and release or operating cables.

U.G.Pulley 243	1 way	2 way	3 way	4 way			
38mm HAL200	£18.81	HAL201	£26.34	HAL202	£37.30	HAL203	£49.49
50mm HAL205	£21.32	HAL206	£33.11	HAL207	£46.16	HAL208	£57.96
75mm HAL215	£43.32	HAL216	£67.26	HAL217	£98.32	HAL218	£128.75



Girder Fixing Pulley 184 Fixes to I beam girders via a girder clamp, with girder dogs that fit over the flanges of steel joists up to 150mm wide.

G.F.Pulley 184	1 way	2 way	3 way	4 way			
75mm HAL350	£65.61	HAL351	£89.55	HAL352	£120.61	HAL353	£151.04

DYNALINE PULLEYS



Dynaline Pulleys A range of pulleys in three diameters with wire profiles for 4mm or 6mm wire ropes or hemp profiles for 12mm, 18mm and 24mm. Dynaline pulleys have a comprehensive choice of mounting options [shown ▶▶]. Select the number and size of sheaves, then choose your mounting option and the pulleys will be supplied assembled.

Basic Blocks The basic building block of the Dynaline range. The nylon sheaves are fitted with sealed precision bearings. Larger multiples are also available.

	Diameter	Breaking Head load	Safety factor	Safe working load
SAFETY	100mm	375kg	3 to 1	125kg
	150mm	750kg		250kg
	200mm	1500kg		500kg

Pulley Blocks	no of sheaves	code/fibre	code wire	price		
Diameter	Suits rope/wire Ø					
100mm	12mm/4mm	One	DYNL8242	£55.11	DYNL8221	£52.49
100mm	12mm/4mm	Two	DYNL8243	£59.45	DYNL8222	£56.62
100mm	12mm/4mm	Three	DYNL8244	£78.04	DYNL8223	76.00
100mm	12mm/4mm	Four	DYNL8245	£99.35	DYNL8224	£99.75
150mm	18mm/6mm	One	DYNL8249	£60.25	DYNL8228	£60.25
150mm	18mm/6mm	Two	DYNL8250	£88.28	DYNL8229	£76.45
150mm	18mm/6mm	Three	DYNL8251	£126.77	DYNL8230	£112.98
150mm	18mm/6mm	Four	DYNL8252	£170.00	DYNL8231	£148.97
200mm	24mm/6mm	One	DYNL8256	£82.70	DYNL8235	£80.34
200mm	24mm/6mm	Two	DYNL8257	£122.04	DYNL8236	£106.68
200mm	24mm/6mm	Three	DYNL8258	£181.19	DYNL8237	£158.15
200mm	24mm/6mm	Four	DYNL8259	£237.18	DYNL8238	£192.08

DYNALINE MOUNTING OPTIONS



Angle Iron Flanges A range of options to convert your Dynaline pulleys into grid blocks. Strangely, despite requests, the angles are not pre-drilled with a series holes ready for fixing so they either need drilling on site or we can arrange for them to be pre-drilled if you supply hole

centres. The brackets will be fitted to your pulleys unless requested otherwise.

Angle Iron Adaptors	code	pair
181 kit 425mm angles	DYNL8263	£31.28
182 kit as above but with 4 hook bolts	DYNL8264	£32.16
183 kit 250mm angles	DYNL8265	£28.78
184 kit 150mm angles with girder clamps.	DYNL8266	£37.31



Side Mounting Plates Converts your Dynaline pulley into a side mounted pulley to act as a winch return or wall mounted block. These plates require countersunk bolts to fit the block so it is best to ask for the side plates to be assembled to your choice of pulley.

Side Mounting Plates	code	each
To fit 100mm	DYNL8267100	£11.65
To fit 150mm	DYNL8267150	£11.65
To fit 200mm	DYNL8267200	£11.65



Awning Block Kit 245 Converts your Dynaline pulley to an awning pulley which can be secured with a shackle to an eyebolt or suitable ring. Awning blocks will cant to the correct position regardless of the pulling angle. The side plates on this block are slightly different to those listed on page 2.44 so these blocks must be ordered as made up units. They can be priced by adding the cost of the Awning Block Kit to the pulley units listed on page 2.44

Awning Block Kit	code	each
To fit Dynaline pulleys	DYNL8268	£24.66



Across Mounting Kit 307 Converts your Dynaline pulley so that it can be attached to a bar at right angles.

Across Mounting Kit	to fit 38mm Ø	to fit 48mm Ø	to fit 60mm Ø	each
	DYNL8269	DYNL8270	DYNL8271	£23.14



Parallel Mounting Kit 308 Converts your Dynaline pulley so that it can be attached parallel to a bar.

Parallel Mounting Kit	to fit 38mm Ø	to fit 48mm Ø	to fit 60mm Ø	each
	DYNL8272	DYNL8273	DYNL8274	£26.65

DOUGHTY PULLEYS

Doughty have now introduced an updated heavy duty range of pulleys. Both the Doughty pulley systems are of modular construction. Sheaves can be ordered for fibre or wire rope and various fixing arrangements can be supplied fitted to your block. Flints hold large stocks of all the components so we can assemble items quickly to order. Doughty pulleys can be issued with a certificate of conformity if required.

DOUGHTY MEDIUM DUTY PULLEYS

Doughty's recommended sheave sizes

16mm fibre rope or 4mm wire rope = 100mm diameter sheave.
18mm fibre rope or 6mm wire rope = 150mm diameter sheave.
18mm fibre rope or 6mm wire rope = 180mm diameter sheave.
[However ABTT stipulate diameters not less than 30x for wire rope and 8x for fibre rope].

SAFETY	Breaking Head load	Safety factor	Safe working load
	450kg	3 to 1	150kg



Basic Pulley Blocks

Choose your basic block from the list below and add your preferred brackets which will be supplied fitted to your block. The sheaves are plain bearing lubricated nylon and are profiled grooved for either wire or fibre rope.

Basic Pulley Blocks	no of sheaves	code fibre	code wire	price
Diameter				
100mm	One	DOUT42836	DOUT42800	£30.05
100mm	Two	DOUT42837	DOUT42801	£56.88
100mm	Three	DOUT42838	DOUT42812	£83.69
100mm	Four	DOUT42839	DOUT42813	£110.52
150mm	One	DOUT42846	DOUT42820	£51.61
150mm	Two	DOUT42847	DOUT42821	£96.75
150mm	Three	DOUT42848	DOUT42822	£143.02
150mm	Four	DOUT42849	DOUT42823	£188.68
180mm	One	DOUT42855	DOUT42830	£69.34
180mm	Two	DOUT42856	DOUT42831	£131.02
180mm	Three	DOUT42857	DOUT42832	£192.71
180mm	Four	DOUT42858	DOUT42833	£254.46



Multibeam Girder

Brackets 50x50x5mm angle brackets universally drilled and suitable for mounting your pulleys to grids with hook bolts or coach screws. Brackets will be supplied fitted to the pulleys of your choice.

Multibeam Girder Brackets	code	price
270mm long	DOUT42885	£32.13/pair
450mm long	DOUT42886	£37.30/pair



Girder Brackets A drilled and slotted pressed channel supplied with M12 Lindapters to fit RSJ's. [Do not come assembled but can be fitted to the pulleys of your choice on request].

Girder Brackets with Lindapters	code	price
270mm long [for 3"-6" beams]	DOUT42870	£30.20
450mm long [for 6"-12" beams]	DOUT42872	£34.45



Multifix Brackets 30x30x3mm angle brackets 150mm long universally drilled and slotted. Supplied with or without 48mm diameter U bolts. Please note, if you require the pulleys to run parallel with the tube you will need the parallel tube version shown below.

Multifix Brackets	code	price
Brackets per pair	DOUT42860	£8.93
Brackets with U bolts [for across bar]	DOUT42861	£11.49



Multifix Brackets with Parallel Tube Plates

Consists of the brackets listed above but fitted with a plate so that the pulley can be mounted parallel to the bar.

Multifix Brackets with Parallel Tube Plates	code	price
Brackets with U bolts and plate [for parallel bar]	DOUT42890	£30.90



Side Plates Converts your chosen block to a side mounted version ideal for wall mounting.

Side Plates	code	price
To fit 100mm basic pulley	DOUT42897	£25.98
To fit 150mm basic pulley	DOUT42898	£30.04
To fit 180mm basic pulley	DOUT42899	£34.99



Awning Block A casting to convert basic pulleys to awning blocks. These castings have now been reduced in width to 16mm so that they will take a Crosby 1t dee or bow shackle. They can be fitted to singles, doubles or triples but will be positioned to one side on double blocks which makes the block cant over slightly when loaded.

Awning Block	code	price
	DOUT42865	£12.92

DOUGHTY HEAVY DUTY PULLEYS

2.46



Heavy Duty Pulleys

These heavy duty pulleys have been completely redesigned.

The sheaves are constructed of MOS 2 Nylon with ball races for smooth friction free operation. The side plates are 5mm thick steel to provide an immensely strong construction. The design has been tested to a stringent 10:1 ratio. As standard, the blocks are made up from single, double and triple sheaves with the quadruple being assembled from two doubles. Five way blocks are made from a triple and a double. Should you require your sheaves to operate in reverse directions please phone us and we will advise on a way of achieving your objective.

To order, firstly choose your basic block then select one of the fittings shown alongside for each of your basic blocks.

It is best to place your order like this:

Please supply: 2off DOUT42901 c/w DOU42990

The fittings will then be supplied fitted to the correct blocks. We can, of course, supply the fittings and blocks as separate items.

Never exceed the manufacturers safe working loads.

SAFETY		Breaking Load	Safety factor	Safe working load
	100mm Ø	2000kg	10 to 1	200kg
	150mm Ø	4000kg	10 to 1	400kg
	200mm Ø	6000kg	10 to 1	600kg

Basic Pulley Blocks		code fibre	code wire	price	
6mm wire 18mm fibre rope	diameter				
	no of sheaves				
	200mm	One	DOUT42951	DOUT42921	£121.39
	200mm	Two	DOUT42952	DOUT42922	£153.85
	200mm	Three	DOUT42953	DOUT42923	£186.31
	200mm	Four	DOUT42954	DOUT42924	£218.77
	200mm	Five	DOUT42955	DOUT42925	£257.48

Fittings for Heavy Duty Blocks



U bolt and saddle



Multi Beam Brackets 225mm [half of pair shown]



Block fitted to Side Mounting Plate



Block fitted with Awning Profile

Multibeam Brackets A pair of universal drilled [13mm Ø for M12] and slotted angle brackets. They can be used for upright wall or ceiling fixings or used with 48mm "U" bolts or half couplers to clamp to scaffold tubes. These brackets are tested to 600kg SWL using the worst case of bolts utilising the end holes only.

Side Mounting Plate Allows the blocks to be mounted against walls or on the floor to act as winch return pulleys.

Awning Profile For use on the single, double and triple blocks only. Provides a centralised fixing point for a shackle enabling the pulley to cant to the desired position.

U Bolt and Saddle For use on the Multibeam Brackets to attach pulleys at right angles to 50mm diameter tubes. 8mm material.

Basic Pulley Blocks		code fibre	code wire	price	
4mm wire 12mm fibre rope	diameter				
	no of sheaves				
	100mm	One	DOUT42931	DOUT42901	£56.47
	100mm	Two	DOUT42932	DOUT42902	£79.30
	100mm	Three	DOUT42933	DOUT42903	£102.17
	100mm	Four	DOUT42934	DOUT42904	£125.02
	100mm	Five	DOUT42935	DOUT42905	£147.87
6mm wire 18mm fibre rope	150mm	One	DOUT42941	DOUT42911	£88.93
	150mm	Two	DOUT42942	DOUT42912	£111.93
	150mm	Three	DOUT42943	DOUT42913	£139.93
	150mm	Four	DOUT42944	DOUT42914	£167.93
	150mm	Five	DOUT42945	DOUT42915	£201.05

Fitting type	length	fits beams	code	price
Multibeam Brackets	225mm	3-6"	DOUT42990	£36.30/pair
Multibeam Brackets	450mm	6-12"	DOUT42995	£35.80/pair
U bolt and saddle [see also page 2.29]			DOUT56900	£1.22
Side Mounting Plates for 100mmØ			DOUT42997	£15.00
Side Mounting Plates for 150mmØ			DOUT42998	£17.00
Side Mounting Plates for 200mmØ			DOUT42999	£19.00
Awning Profile for 100 and 150mm single			DOUT42984	£19.25
Awning Profile for 100 and 150mm double			DOUT42985	£20.50
Awning Profile for 100 and 150mm triple			DOUT42986	£22.40
Awning Profile for 200mm single			DOUT42987	£18.50
Awning Profile for 200mm double			DOUT42988	£19.25
Awning Profile for 200mm triple			DOUT42989	£22.20

SHEAVES

This page was updated 13/04/12

MINI CASSETTE



Mini Cassette A very small but high load stainless steel sheave with stainless balls in a polypropylene cage. These small free running sheaves are ideal for special effects using 1.5mm or 2mm stainless wire rope or nylon cords.

Mini cassette			code	each
diameter	width	bore		
25mm	6mm	8mm	PUL531	£10.17

ACETAL RESIN SHEAVES



Acetal Sheaves An economical series of plain bearing sheaves ideally suited to polyester ropes.

Acetal Resin Sheaves				code	each
diameter	width	bore	max rope Ø		
25mm	12mm	8mm	8mm	BAR800	£0.53
35mm	12mm	8mm	8mm	BAR804	£0.94
45mm	12mm	8mm	10mm	BAR809	£1.27
64mm	18mm	13mm	12mm	BAR814	£4.16
72mm	18mm	13mm	14mm	BAR816	£5.85

NYLON ROLLERS AND SHEAVES FOR WIRE ROPES



Nylon Sheaves with Bearings

[Nylon with Molybdenum Disulphide]

These excellent nylon sheaves are designed for 5 and 6mm wire ropes. Nylon

has better impact and corrosion resistance and is much lighter than cast iron sheaves and they are excellent value. Fitted with bearings with side shields for free running. Widely used for the construction of stage machinery such as lift units etc. Type FHS068 and FHS069 will in future have 20mm bores and be supplied with top hat reducers.

Sheaves with bearings for Wire Ropes				code	each
diameter	width	bore	rope diam.		
50mm	18mm	12mm	5mm	FHS063	£24.90
75mm	18mm	12mm	5mm	FHS064	£25.50
100mm	18mm	12mm	6mm	FHS065	£26.00
150mm	18mm	12mm	6mm	FHS066	£31.50
230mm	18mm	12mm	6mm	FHS067	£43.00
230mm	28+6mm	12mm*	6mm	FHS068	£59.00
230mm	28+6mm	16mm*	6mm	FHS069	£59.00
230mm	28mm	20mm	6mm	FHS070	£58.00

Nylon Sheaves without Bearings. The lubricated nylon used in these sheaves allows them to run freely and quietly on a plain bore. More economical than sheaves with bearings but with slightly more resistance. On rare occasions a squeak may occur requiring a little lubrication to solve. Also available grooved for fibre ropes.

Sheaves without bearings for Wire Ropes				code	each
diameter	width	bore	wire Ø		
100mm	1mm	12mm	4mm	DOUWPUL100	£12.20
150mm	18mm	12mm	6mm	DOUWPUL150	£14.07
180mm	18mm	12mm	6mm	DOUWPUL180	£25.27

Sheaves without bearings for Fibre Ropes				code	each
diameter	width	bore	fibre rope Ø		
100mm	1mm	12mm	12mm	DOURPUL100	£12.20
150mm	18mm	12mm	18mm	DOURPUL150	£14.07
180mm	18mm	12mm	18mm	DOURPUL180	£25.27



Black Nylon Roller Useful for guiding large diameter ropes, tripes or hoses. See also p2.63.

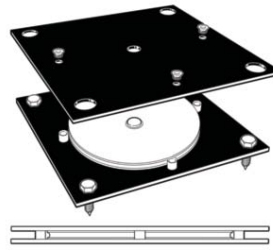
Nylon Rollers			code	each
diameter	width	bore		
75mm	79mm	12mm	PUL9186	£45.75

SPECIALIST PULLEYS

LOW LEVEL RETURN PULLEYS



HIRE



Low Level Return Pulley

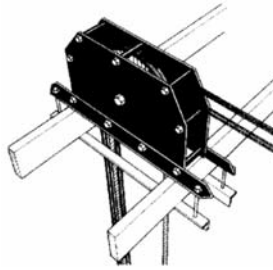
A 230mm diameter aluminium sheave grooved to take 6mm wire rope mounted in between two 300mm square plates so that the overall thickness is just 18mm. Fitted with an Oilite bush bearing and nylon side washers. These pulleys are

designed to act as return pulleys for our truck winches and can be mounted within the thickness of a 19mm ply floor. Fixings; four M10 coach screws which are accessed through large diameter holes in the top plate but are hidden within the 18mm depth when tightened down. May also be hired see page 3.76 [under winch hire].

Low Level Return Pulleys		code	each
Whole assembly		FHS503	£66.00
Sheave only		FHS504	£39.00

GRID BLOCKS

HIRE



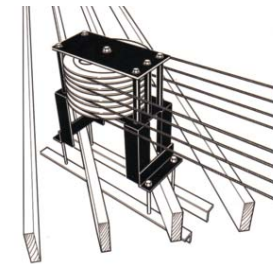
Header Block A four way block for 6mm wire rope with a groove for 22mm diameter hauling line. Fitted with good quality bearings. The finish is black powder coated.

Length: 750mm width: 205mm height: 325mm diameter: 225mm fixings: M12 studding and angle sold separately.

Header Block		code	each
Header block		FHS105	£238.00
Rope return sheave for 22mm Ø rope		FHS106	£65.00
Pair of angles for clamping		FHS100EA	£30.00

Fixings depend on grid thickness and are sold separately.

HIRE



Divertor Blocks A four way sheave for 6mm wire rope. Raised to clear lines running over drops. The finish is black powder coated.

Length: 410mm width: 108mm height: 365mm diameter: 225mm

Grid Divertor Pulley		code	each
Fixed 4 way		FHS102	£349.00
Pivoting 4 way		FHS102P	£450.00
Pair of angles for clamping		FHS100EA	£30.00

Fixings depend on grid thickness and are sold separately.

HIRE



Rope Lock Frame Rope lock frame with return block [excludes lock see below].

code	each
FHS107	£364.00

Lever Rope Lock See page 2.09 for full details.

code	each
HAL267	£125.00

Cradle Temporary Counterweight Cradle 250kg SWL.

Temporary Cradle	code	each
[with wire guides]	FHS113	£237.00