

Rigging Screws

Often called straining screws, turnbuckles, or bottle screws. The open body rigging screw is the preferred type for theatre flying as the thread engagement can be clearly seen. However, British Standard BS 7905-1:2001 "Lifting Equipment for Performance, Broadcast and similar applications" states:

"Rigging Screws shall be constructed of welded or seamless steel tube. The full length of the thread in the tapped holes shall not be less than 1.5 times the diameter of the screwed shank. A tommy bar hole shall be drilled through both walls of the body at the centre of its length, central to and at right angles to its axis. A probe hole shall be provided to check the thread of the shank is fully engaged."

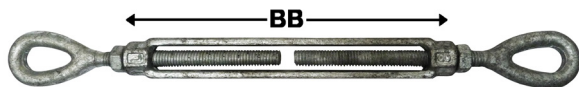
We are not sure who writes these standards but it looks suspiciously like a "cut and paste" job from BS 4429:1987 by someone unfamiliar with theatre rigging. We have never seen a closed-body rigging screw with a probe hole and if you decided to drill your own "probe holes" it would not pass a visual lifting examination due to the design being compromised. The rigging screws shown with the "Hook Symbol" will be supplied with a Report of Thorough Examination of Lifting Equipment or an EC Declaration of Conformity. For handrailing and display applications closed-body screws, especially stainless steel ones, are often more suitable as the smooth surface prevents snagging and gives a more pleasing appearance. Rigging screws should be secured once they are adjusted with Monel Seizing Wire [next page] or with lock nuts if they are provided. If the rigging screws are being used outside we would recommend smearing the threads with Anhydrous Lanolin. Rigging screws must always be free to move into the direction of the load.

US FEDERAL SPECIFICATION STRAINING SCREWS

These good value rigging screws come from a long established ISO9001:2000-registered German company. They are supplied fitted with locking nuts to avoid accidental unwinding.

Straining Screw Eye to Eye

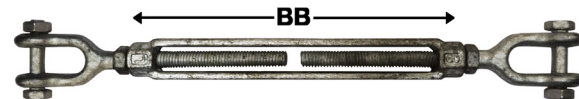
Meets the performance requirements of USA Federal Specification FF-T-791b. Straining screws should be used for a straight or in-line pull only. The eye diameters are 13 and 18 mm.



code	thread \emptyset	length BB	WLL	price
WIR2263	3/8"	6"	540kg	£13.57
WIR2264	1/2"	6"	1000kg	£20.86

Straining Screw Jaw to Jaw

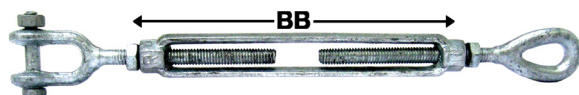
Meets the performance requirements of USA Federal Specification FF-T-791b. Straining screws should be used for a straight or in-line pull only. The width between forks are 12 and 16 mm.



code	thread \emptyset	length BB	WLL	price
WIR2283	3/8"	6"	540kg	£16.54
WIR2285	1/2"	9"	1000kg	£28.96

Straining Screw Jaw to Eye

Meets the performance requirements of USA Federal Specification FF-T-791b. Straining screws should be used for a straight or in-line pull only. The eye diameters are 13 and 18 mm and width between forks are 12 and 16 mm.



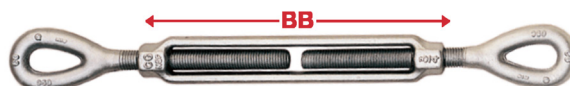
code	thread \emptyset	length BB	WLL	price
WIR2273	3/8"	6"	540kg	£15.40
WIR2274	1/2"	6"	1000kg	£23.26

CROSBY STRAINING SCREWS



Crosby Straining Screw Eye to Eye HG226

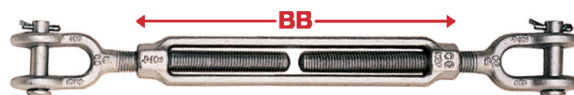
To USA Federal Specification FF-T-791b Type 1 Form 1 Class 4. Straining screws should be used for a straight or in-line pull only.



code	thread \emptyset	length BB	WLL	price
CRO2262	5/16"	4 1/2"	360kg	£45.10
CRO2263	3/8"	6"	540kg	£54.10
CRO2264	1/2"	6"	1000kg	£55.50

Crosby Straining Screw Jaw to Jaw HG228

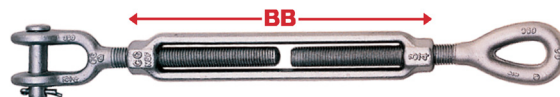
To USA Federal Specification FF-T-791b Type 1 Form 1 Class 7. Straining screws should be used for a straight or in-line pull only.



code	thread \emptyset	length BB	WLL	price
CRO2282	5/16"	4 1/2"	360kg	£54.30
CRO2283	3/8"	6"	540kg	£58.60
CRO2285	1/2"	6"	1000kg	£71.40

Crosby Straining Screw Jaw to Eye HG227

To USA Federal Specification FF-T-791b Type 1 Form 1 Class 8. Straining screws should be used for a straight or in-line pull only.



code	thread \emptyset	length BB	WLL	price
CRO2272	5/16"	4 1/2"	360kg	£49.20

Lock Nuts for Crosby Rigging Screws

Crosby rigging screws are, sadly, not fitted with locking nuts. They can be seized with Monel Seizing Wire [see next page] or lock nuts can be purchased separately.



code	thread \emptyset	hand	price
CRO1075516	5/16"	Left	£2.19
CRO1075534	3/8"	Left	£2.86
CRO10755701	1/2"	Left	£4.36
CRO1075133	5/16"	Right	£1.67
CRO1075151	3/8"	Right	£1.92
CRO1075197	1/2"	Right	£2.13

VAN BEEST GREEN PIN TURNBUCKLES

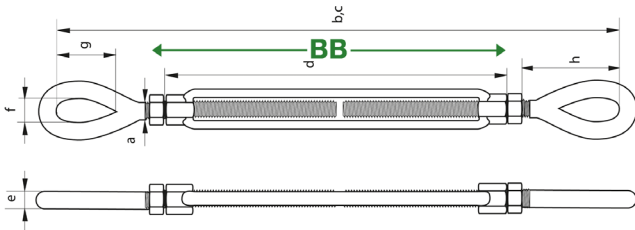


Since stocking their shackles, we've been highly impressed with the quality of Green Pin® products - especially with the clean finish and clear batch marking. Made from drop forged high tensile steel, with a hot-dipped galvanised finish for long-term durability.

Eyes are elongated to facilitate fitting. The length specified for straining screws is the maximum take up of the item shown in the illustration below. The Minimum Break Load is five times the stated WLL. All of these are supplied with the locking nuts in place. Table below details the full spec of each type/size according to the provided diagrams.

Green Pin® Turnbuckle Eye to Eye G-6311

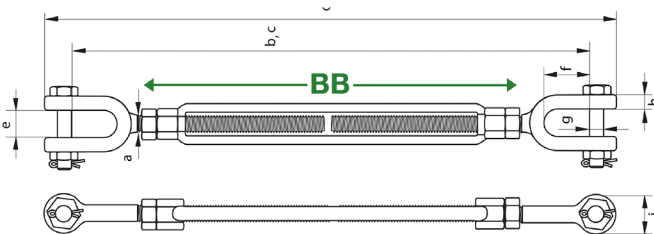
To ASTM F1145-92, formerly U.S. Federal Specification FF-T-791b Straining screws should be used for a straight or in-line pull only.



code	thread ø	length BB	WLL	price
WIR2263GP	3/8"	6"	0.54t	£22.51
WIR2264GP	1/2"	6"	1t	£27.85

Green Pin® Turnbuckle Jaw to Jaw G-6323

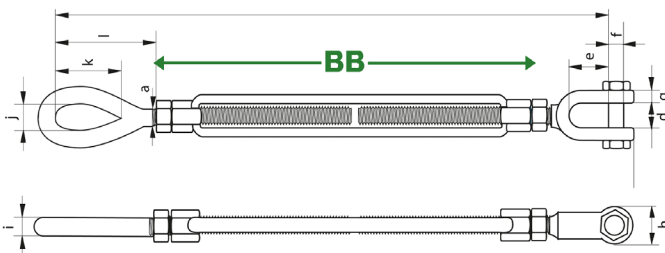
To ASTM F1145-92, formerly U.S. Federal Specification FF-T-791b Straining screws should be used for a straight or in-line pull only.



code	thread ø	length BB	WLL	price
WIR2283GP	3/8"	6"	0.54t	£17.33
WIR2285GP	1/2"	6"	1t	£20.92

Green Pin® Turnbuckle Jaw to Eye G-6315

To ASTM F1145-92, formerly U.S. Federal Specification FF-T-791b Straining screws should be used for a straight or in-line pull only.



code	thread ø	length BB	WLL	price
WIR2273GP	3/8"	6"	0.54t	£24.08
WIR2274GP	1/2"	6"	1t	£29.62

STAINLESS RIGGING SCREWS

Closed-Body Rigging Screws

The rigging screws below are made from marine-grade 316 stainless steel. Closed-body adjusters are ideal for handrail wires, small tension wires and for display and exhibition purposes. The smooth sleek appearance is less likely to snag on clothing and blends in with modern settings. The fork ends can be attached directly onto small Pad Eyes [see next page] without the need for extra shackles. They are all fitted with lock nuts. The given lengths are from centre of pin to centre of pin.

Handrailing

If you are considering using wire rope assemblies for handrailing purposes be sure to check with your local authority regarding the regulations. Normally, the maximum width between the wires must not exceed 100 mm - tested with a 100 mm sphere to represent a child's head. Any horizontal wires should lean inwards to prevent children from climbing the wires. Best to check first!

Machined Fork Rigging Screws

These machined fork rigging screws offer the smartest appearance for prestigious installations.



code	size	length closed	length open	min BL KN	min BL KGF	price
WIR2514SS	M4	115mm	175mm	4.1kN	417kg	£4.75
WIR2515SS	M5	135mm	195mm	4.6kN	468kg	£4.65
WIR2516SS	M6	160mm	230mm	9.1kN	927kg	£6.95

Welded Fork Rigging Screws

These rigging screws represent fantastic value for a marine-grade 316 stainless steel product.

Flints can order larger sizes up to M20.



code	size	length closed	length open	min BL KN	min BL KGF	price
WIR2714SS	M4	110mm	170mm	3.4kN	346kg	£3.65
WIR2715SS	M5	130mm	190mm	5.6kN	570kg	£3.77
WIR2716SS	M6	150mm	220mm	7.7kN	784kg	£4.68
WIR2718SS	M8	165mm	240mm	13.9kN	1416kg	£6.00
WIR27110SS	M10	190mm	280mm	21.8kN	2222kg	£7.95
WIR27112SS	M12	245mm	360mm	32kN	3261kg	£12.06

MONEL SEIZING WIRE

Monel Seizing Wire

Seizing wire for seizing up rigging screws and shackles to prevent them from accidentally coming undone. Many of our rigging screws are supplied with locking nuts.



code	description	spool length	wire ø	price
WIR080	Spool	10m	0.9mm	£11.03

RIGGING SCREWS / RINGS & SWIVELS

PELICAN HOOKS

Pelican Hooks

A convenient means of quickly releasing tensioned wire ropes. They can be very useful for clearing gauze guide wires during scene changes. To use the threaded version we will need to roll-swage an M8 right-hand thread to the end of your wire which will need to be stainless steel. Please phone and ask for the Rigging Manager. Safety factor 4:1.



code	description	min BL KN	min BL KGF	price
WIR3548SS	Type 354 [M8 right-hand thread]	16.3kN	1661kg	£4.95

WIRE STRAP EYES

Wire Strap Eyes – Lacing Eyes

A simple and very useful neat and economical fixing typically used to anchor small wire-rope assemblies or as a lacing eye for cords or small ropes.



code	width	height	bar Ø	fixing	price
WIR97815SS	50mm	18mm	5mm	4mm csk	£0.36
WIR97826SS	60mm	22mm	6mm	4.5mm csk	£0.46
WIR97838SS	63mm	24mm	8mm	5mm csk	£0.75

PAD EYES

Pad Eyes and Pad Eyes with Rings

Marine-grade stainless steel eyes to provide a really neat fixing. Ideal for use with our Stainless Rigging Screws [page 209]. We now also stock these pad eyes complete with ring.



No Ring	fixing Ø	length	width	height	bar Ø	price
WIR9815SS	M4 [4.5]	45mm	15mm	20mm	5mm	£0.89
WIR9816SS	M4 [4.5]	60mm	20mm	26mm	6mm	£1.25
WIR9818SS	M6 [6.2]	80mm	26mm	32mm	8mm	£1.50
WIR9819SS	M6 [6.2]	100mm	36mm	39mm	9mm	£2.50
With Ring	fixing Ø	length	width	int ring Ø	bar Ø	price
WIR9895SS	M4 [4.5]	45mm	15mm	30mm	5mm	£1.29
WIR9896SS	M4 [4.5]	60mm	20mm	35mm	6mm	£2.25
WIR9898SS	M6 [6.2]	80mm	26mm	45mm	8mm	£2.85
WIR9899SS	M6 [6.2]	100mm	36mm	50mm	9mm	£4.35

Folding Pad Eye

Drop-forged with no welding to offer remarkable strength. In addition, by aligning the D-ring to the direction of the force they can handle higher operating loads. Often used to secure trapeze tension wires. A small silicone pad included can be used when folded flat. Also available in titanium.



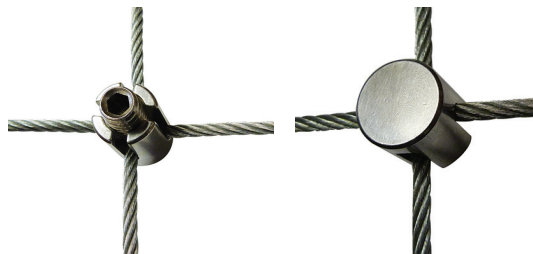
SAFETY	MANUFACTURER STATED		
	Breaking Load	Safety Factor	WLL
	5,000kgf	2.1 to 1	2,400kgf

code	width of d-ring	fixing Ø	weight	price
WIR6605	59mm	8mm	165g	£36.95

CROSSOVER CLAMPS

Crossover Clamps

These 316- grade stainless steel clamps will hold wire ropes at right angles. They are often used to form large wire-netting structures to help plants to grow up the sides of buildings. We're sure you will dream up all sorts of odd things to do with them. They are all 20 mm Ø. For Wire Rope Stoppers see page 198.



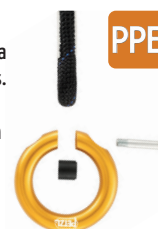
code	description	length	price
WIR4103SS	To fit 3 mm wire rope	19mm	£1.38
WIR4104SS	To fit 4 mm wire rope	21mm	£1.65
WIR4105SS	To fit 5 mm wire rope	23mm	£1.80
WIR4106SS	To fit 6 mm wire rope	25mm	£1.95

RINGS & SWIVELS

RINGS

Petzl Ring Open

An aluminium manual locking attachment with massive scope as a semi-permanent connection for PPE, or for joining wires or ropes. The plastic spacer unfastens using the supplied 3 mm Allen key and leaves an 11 mm opening wide enough to take rope with sewn terminations. Tighten the pin following maker's instructions for 23 kN on all axes. Conformity: CE EN 362: 2004/M



code	opening	external Ø	internal Ø	min BL on all axes	price
PETP28	11mm	70mm	45mm	23kN	£18.00

Steel Welded Rings [self-colour]

Useful for a multitude of purposes including lightweight multi-legged suspension, heavyduty curtain rings and useful securing points when used with Grummets [page 168]. They are supplied self-colour so they can be welded directly to steel work or cut open and re-welded. For lifting purposes use Rated Shackles [page 200] or Masterlinks [page 215].



code	mat Ø	internal Ø	price
WIR465	6mm	32mm	£1.14
WIR466	5mm	38mm	£0.81
WIR462	8mm	50mm	£1.19
WIR467	9.5mm	63.5mm	£1.98

Bright Nickel-Plated Rings

A lighter weight ring ideal for curtains.



code	mat Ø	internal Ø	price	100+
WIR600	3.24mm	19mm	£0.29	£0.26
WIR602	4.06mm	25mm	£0.31	£0.28
WIR604	4.06mm	32mm	£0.35	£0.32
WIR606	4.06mm	50mm	£0.50	£0.44