



### News



# OFFSHORE and AQUATERRA: the new range of Wichard knives

Offshore range: stays sharp in all conditions.

Offshore models offer corrosion resistance, high cutting quality, dedicated sailing features like shackle key and spike.

Aquaterra range: your sport knife for all conditions.

Aquaterra models offer high cutting quality, plain blade, serrated blade or blade with corkscrew. Aquaterra is THE must-have knife for outdoor and water sports.

More details on pages 54-57



### Proline range:

The Proline tethers offer increased safety, outstanding ergonomics and lightweight. The Proline tethers are compliant with ISO 12401:2009 and available in 4 models.

More details on pages 50-51



### New products:

- New range of folding pad eyes: page 13
- New safety snap hook: page 20
- MXEvo: new range of one piece blocks: page 35

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## Wichard, a standard in the Sailing world



Highlights

Company founded by Henri Wichard 1919

Subcontractor for drop forging 1919-

Second factory and installation of an automatic forging line

Development of range of stainless steel and titanium fittings created by Michel Boissonnet and tested by Bernard Moitessier, Eric Tabarly, Alain Colas and Philippe Jeantot; establishment of international distribution network

Company acquired by Jean-Loup Becquevort

1973-

1988

2006

2010

Acquisition of Maillard (Saint-Malo) and launch of the first range of blocks

Acquisition of Forginox, a cutlery forge in Thiers

Consolidation of activities at one single location in an industrial zone and installation of a new forging press Installation of a high speed machining

facility for tooling production

Wichard celebrates its 90 years 2009

Company purchased by a group of shareholders and Deck Developpement holding company created

The Wichard Group acquires the brands Facnor and Sparcraft The company has evolved over the years from its origins as a forge in 1919 to the group it is today: establishment of two subsidiaries and a distribution network, as well as the acquisition of Profurl (specialised in sail furlers).

The global leader in marine fittings and top ranking player for industrial customers, the group has remained true to its original specialty and ethic.

### ⇒ Commitment

Working at Wichard means combining the demands of the business with a passion for the job. Our production teams are united by a "quality first" attitude and their commitment to the company's objectives. Marketing, engineering, sales and after-sales service departments: all the staff in Pornichet share the same passion for sailing. Their expertise stems from their experience.

### ⇒ Responsibility

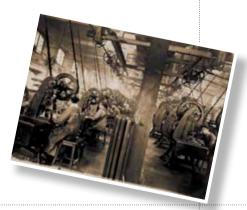
Wichard designs, manufactures and markets its products. Even before the production phase, the company designs its own manufacturing tools. All safety products are manufactured in France by our teams using Wichard equipment. Wichard maintains control over its products all along the production chain, with the philosophy: to be a force in the sailing market through the inherent qualities of its products.

### ⇒ Openness

The company rapidly developed its export and industrial business. Encounters with other markets stimulated Wichard's open-mindedness, curiosity and responsiveness, and fostered its creativeness.

### Wichard in figures

- ➤ Over 700 referenced products in the marine catalogue
- Over 500 industrial clients
- ➤ 2,000 sales outlets in France, 40 distributors worldwide







Wichard folding pad eye

### 5 good reasons to choose

### **Wichard**

- Guaranteed reliability
- Superior mechanical resistance
- Proven resistance to corrosion
- **4** Certified production process
- **6** Wide range of products



### **ENVIRONMENT PROTECTION**

Wichard is an ISO 14001 certified company. In this context Wichard, represented by its director, promises to:

- Respect all applicable environmental requirements
- Take active measures to prevent pollution.
- Design products that preserve environment and are recyclable.
- > Reducing the manufacturing of sub-standard items, especially waste.
- > Producing no more than required.
- Minimize the environmental impact of its sites by:
- > limiting the consumption of raw materials and energy;
- > using clean manufacturing processes;
- > avoiding the discharge of any material that may pollute the soil, air or waterways and treating its waste effectively.
- Involve its partners and collaborators in its improvement process.





Our expertise: between tradition and innovation



## Forged products

## a guarantee of safety

#### Why choose a forged product?

Safety provides comfort and performance: forging enables tough parts to be designed by deforming heated metal. Wichard forges its parts by drop forging, using a forge hammer: an operation which involves forming a heated slug under pressure between two dies. This technique makes the structure of the metal homogenous and gives the part strength and elasticity. The parts are then finished and tested prior to being sold.

In a foundry, the structure of the parts produced is random or heterogeneous: gas bubbles can become embedded in the metal, which reduces its strength. A machined product is shaped by removal of material: the structure of the metal is weakened locally.

Forging guarantees the elasticity of the product, its resistance to corrosion and strength, while optimising the size of the parts.

### From mastery of forging techniques...

Our skills come from age-old knowledge, but our specialty is no longer a craft industry.

Depending on the part being made, drop forging is either carried out by a specialist technician, for complex deck fittings, or using an automatic drop hammer, for simple parts.

At the same time, our plant can meet numerous demands in terms of product feasibility.

From our staff's experience to training apprentices: our knowledge is passed on within the company.

#### ... to cutting edge technologies

Wichard is a bridge between the traditions of the forge and the performance requirements of modern sailing. Our St. Malo site, specialising in plastics technology, uses composite materials to produce our range of blocks, sticks and deck fittings. Plastics are not only stronger, but also combine good design, comfort and lightness.

With a focus on innovative markets, always attentive to yachtsmen and in touch with great skippers, Wichard is THE standard for marine deck fittings.



### In the race for innovation

### For nearly 40 years Wichard has been following the development of techniques and regularly designing new products.

When the company was taken over in 2002, the management team made innovation one of the key focus areas of its development. In Pornichet, an engineering department 100% devoted to marine applications designs new products in collaboration with the marketing, sales and after sales service departments. This method has been proven time and again to design efficient parts by taking every aspect of the final product into account:

- ▶ identifying and analysing the requirement: drafting of initial specifications
- ▶ translating the requirement into technical terms, then prioritising the product's functions: approval of the specifications by the departments involved
- seeking the best technical solutions with the aim of bringing a new approach to product design (e.g.: the Gyb'Easy boom brake, naturally more functional and easier to produce)
- using information technology to control risks (e.g.: using 3D software to visualise constraints the product will undergo to optimise its shape)
- manufacturing prototypes and assessing their performance: tests on machines and at sea
- moving to the mass production after approval by the departments involved.

### Creation and innovation make headlines

We protect every new idea or concept and register one to four patents each year: our 90 patents represent real wealth for the company. As a responsible manufacturer, Wichard monitors the materials used and applies quality control procedures. From idea to final product, this is a means of optimally controlling our parts design. We regularly receive awards:



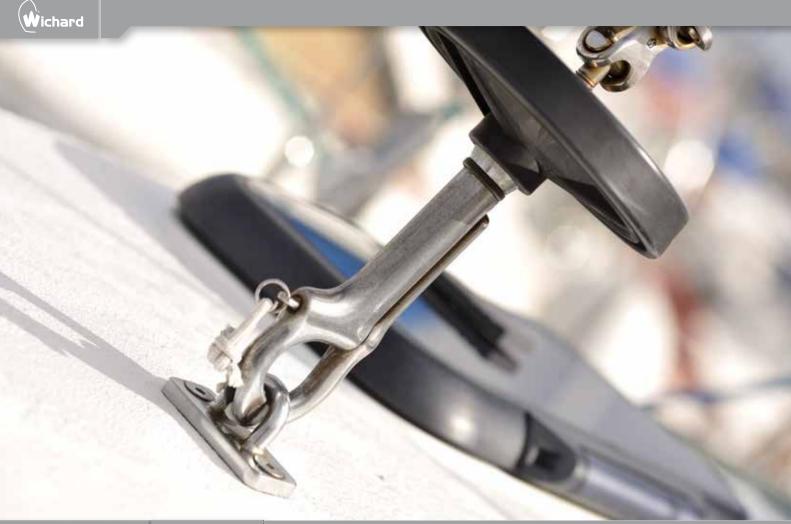
### **Partnerships**

For many years, Wichard has been supporting some of the best French sailors:

- Mini 6.50: Tanguy Leturquais, Ian Lipinski, Julien Pulvé, Olivier Taillard etc...
- Figaro 2: Adrien Hardy / Agir Recouvrement

Mini transat 2015 - the series' first threes were equipped by wichard







# Stainless steel products

### I WICHARD OFFERS A COMPLETE RANGE OF STAINLESS STEEL PRODUCTS INCLUDING:

- ▶ Babystay adjusters, backstay adjusters.
- ▶ Wire accessories: lifeline hooks.
- ▶ Fastenings: folding pad eyes, watertight U-bolts.
- ▶ Eye straps, eye nuts and eye bolts.
- ▶ Snap hooks and swivels.
- ▶ Shackles.

### **I MAINTENANCE: GREENOX - WICHINOX**

(see page 61)







### **Benefits**

- ▶ Large range of babystay adjusters
- ▶ Available with wheel, handle or ratchet
- Ergonomic and comfortable to use
- ▶ Easy to install and dismantle
- ▶ Forged body and snap hook
- ▶ Resistant to high loads
- ▶ Perfect for setting a flying sail (solent jib or storm jib)
- ▶ Optimizes yacht performance
- ▶ Long travel model available

### |Babystay | adjusters

For fitting a jib, setting up a genoa or a solent jib... Both for safety and performance reasons, fitting a removable inner forestay is strongly recommended when there is a roller furling system. Wichard offers a whole range of babystay adjusters.

The table below will allow you to determine the best suitable product for your boat.

N°	Part #	Length pin to pin closed /open mm	Togglelength x width mm	Ø pin mm	Handling Kg	W.L. Kg	B.L. Kg	Ø stud mm	For wire Ø mm	Weight Kg				
W	With wheel (delivered with shackle part # 1206)													
1	5546	250 / 310	15 x 20	12	1200	2800	5300	12	5/6/7	1.090				
W	ith ha	ndle												
2	5554	310 / 450	10 x 10	8	800	960	2400	8	4/5	0.802				
3	5556	450 / 510	15 x 20	12	1200	2800	5100	12	5/6/7	1.268				
4	5566	370 / 540	15 x 20	12	1200	2800	5000	12	5/6/7	1.390				
W	ith rat	chet												
5	5585	360 / 520	17 x 22	12	2500	3200	6000	14	7/8/9	1.848				
	5587	360 / 520	17 x 22	14	2500	3200	6700	14	7/8/9	1.856				
	5588	415 / 615	18 x 25	16	3300	3200	9000	16	9/10	2.862				









Selection	chart of b	abystay ad	ljusters pe	r size of boa	at				
Lengt	h in m	6 to 7.60	7.60 to 9.00	9.00 to 10.00	10.00 to 10.70	10.70 to 11.15	11.50 to 12.00	12.00 to 13.60	13.60 to 14.50
Lengt	h in ft	20 to 25	25 to 30	30 to 33	33 to 35	35 to 38	38 to 40	40 to 45	45 to 48
Head stay	Removable stay								
5 mm	4 mm	5554	5554						
6 mm	5 mm	5554	5546/5556 5566	5546/5556 5566					
7 mm	6 mm	5546/5556	5556/5566	5556/5566	5566				
8 mm	7 mm	5546/5556	5566/5587 5585	5587/5585	5587/5585	5587/5585	5587/5585	5587/5585	5587/5585
9 mm	8 mm		5587/5585	5587/5585	5587/5585	5587/5585	5587/5585	5587/5585	5587/5585
10 mm	9 mm		5587/5585	5587/5585	5587/5585	5587/5585	5587/5588	5588	5588
12 mm	10 mm			5588	5588	5588	5588	5588	5588

These indications are not contractual, as each boat is different, we recommend checking with a professional.





## Accessories for babystay attachment







Wichard offers a comprehensive range of fixing points for babystay attachment. Double pad eye allows a single attachment point for both the babystay pelican adjuster and the jib tack point, fits all sizes of

N°	Part #	Description	Weight kg
1	9150	Babystay tang , to be fitted to the mast	0.306
2	6564	Double folding pad eye dia 6 (see page 13)	0.126
	6565	Double folding pad eye dia 8 (see page 13)	0.252
	6566	Double folding pad eye dia 10 (see page 13)	0.494
3	9204	Eye strap, used as a backing plate for double pad eye part #6564 & 6565 (see page 13)	0.038
	9205	Eye strap, used as a backing plate for double pad eye part #6566 (see page 13)	0.075
4	6435	Threaded eye hook for tensioning. Breaking load 1000 kg (small yachts). Length: 450 mm - M10	0.254

## |Backstay | adjusters









### **Benefits**

- Available with wheel, handle or ratchet
- ▶ Ergonomic and comfortable to use
- Optimizes rigging performanceCompact size
- ▶ Forged body
- ▶ Resistant to high loads

N°	Part #	Length pin to pin Closed/open mm	Togglelength x width mm	Ø pin mm	Handling mm	W.L. Kg	B.L. Kg	Ø Stud mm	For wire Ø mm	Weight Kg
W	ith wh	eel								
5	5526	350 / 520	15 x 20	12	1200	2800	5300	12	5/6/7	1.128
W	ith ha	ndle								
6	5536	350 / 520	15 x 20	12	1200	2800	5300	12	5/6/7	1.306
W	ith rat	chet								
7	5565	440 / 660	17 x 22	12	2500	3200	5000	14	7/8/9	2.052
	5567	440 / 660	17 x 22	14	2500	4400	6700	14	7/8/9	2.088
	5568	505 / 755	18 x 25	16	3300	5600	9000	16	9/10	3.264



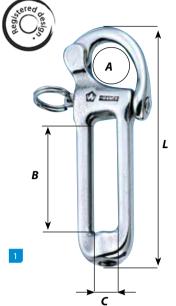
#### Length Weight mm (L) Lifeline hook «patented» **1** 2833 95 1500 0.076 M8x125 640 Length Pelican hooks «patented» 170 20 18 M12 x 175 28 2400 6500 0.558 170 20 18 M14 x 200 28 3200 6500 0.534 100 48 M8 x 125 22 640 2300 0.106 16 **Part** For wire Weight Swage studs (for part # 2831 et 2833) 7,5 40 4,3 M8 x 125 40 4 0.036 0.042 9 40 5,3 M8 x 125 48 5 0.056 M8 x 125 56 6 P mm Weight $\emptyset$ mm mm mm (min/max) Wire grips 2/9 0.009 3-5 4 x 70 5 x 90 4/13 0.020 5-6 7-8 9 6 x 100 6/17 0.039 10 8/21 0.083 8 x 125 12 10/26 0.102 8 x 125

This two part ring which is suitable for clipping on to 6 to 10 mm diameter wires, protects sails and facilitates manoeuvring whilst minimising snagging

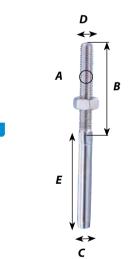
▶ Off-centre shape allows the wires to be

tensioned easily

|Lifeline |hooks









## Sail chafe protector



risks: Overall diameter 70 mm



The Wichard range intended for safety fixing of deck and rigging components, provides an elegant and effective solution.

The range has applications that extend beyond the maritime sector, and they are also used in the industrial sector, as well as for architectural purposes and interior decorating.

### I WICHARD OFFERS A WIDE RANGE OF PADEYES:

- ▶ Folding padeyes in stainless steel or titanium.
- ▶ Toe rail padeyes.
- U-bolts.
- ▶ Watertight U-bolts.

Wichard folding pad eyes are compliant with ISO 15085 and are highly recommended for lifeline and tether fastening points.

### **Benefits**

- ▶ Made in France
- ▶ Hot forged
- Available in single and double models
- Available in 316L s/s or Titanium
- ▶ Outstanding working loads in all positions
- Compact, can be folded
- Silicon pad to reduce noise and vibrations
- ▶ Aesthetic
- ▶ Multi-use: fastening, shrouds, blocks, jackstays etc...

N°	Part #	Ø D mm	A mm	B mm	C mm	Ø d mm	E mm	W.L. Kg	B.L. Kg	Weight Kg			
U	Universal folding pad eye - incl. silicon pad - ISO 15085												
1	6684	6	40	23,4	min 15	7	40	750	1600	0.056			

N°	Part #	Ø D mm	A mm	B mm	C mm	Ø d mm	D mm	E mm	F mm	W.L. Kg	B.L. Kg	Weight Kg
Fo	olding	pad e	e <b>ye</b> - i	ncl si	licon	pad -	ISO 1	5085				
2	6504	6	45	27	14	6,4	44	41	27	1440	2700	0.067
2	6505	8	59	35	17	8,5	59	51	35	2400	4500	0.136
2	6506	10	75	45	23	10.5	80	68	45	4080	8000	0.286

N°	Part #	Ø D mm	A mm	B mm	C mm	Ø d mm	E mm	W.L. Kg	B.L. Kg	Weight Kg
Ti	taniun	n foldir	ng pad	eye «p	atente	d»				
2	56504	6	45	27	14	6,4	40	1600	3000	0.040
2	56505	8	59	35	17	8,5	50	2720	5000	0.080
2	56506	10	75	45	23	10.5	65	4560	8500	0.174

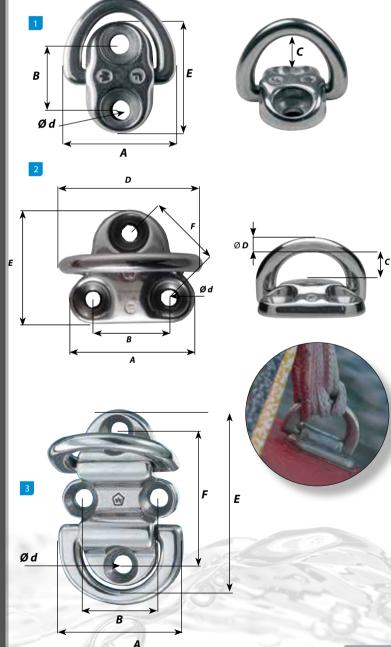
The Wichard double folding pad eyes have been designed to attach several shrouds or a removable stay.

N°	Part #	Ø D mm	A mm	B mm	C mm	Ø d mm	E mm	F mm	W.L. Kg	B.L. Kg	Weight Kg		
D	Double folding pad eye												
3	6564	6	45	27	14	6,4	75	59	1440	2500	0.126		
3	6565	8	59	35	17	8,5	81	59	2400	4300	0.252		
3	6566	10	75	45	23	10.5	104	78	4560	9000	0.494		

## Folding pad eyes

### Wichard padeyes: Choose the original!

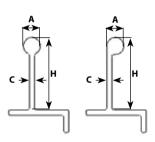
Only Wichard padeyes are completely forged. They are 100% safe, highly resistant to corrosion and their design is suitable for all types of boats.





## Toe rail







Using these sliding padeyes, the toe rail can be used without any risk of damage, for a wide range of applications, such as attaching running rigging, barber hauler, boom brake, kicking strap, or mooring/fender line guide when docked.

N°	Part #	Toe rail		Ø A mini - maxi mm	H mini mm	C mini - maxi mm	D mm	W.L Kg		Weight Kg
To	oe rail	pad ey	es «p	atente	d»					
1	16613	Standa	rd	9-13	40	2-4	14	960	3000	0186
	16614	Asymetric		9-13	40	2-5 14		960	3000	0.186
	16615	Standa	rd	12-15	45	4-6	18	120	0 3800	0.280
N°	Part #	Ø mm	L mm	A mm	B mm	C mm	W.L. Kg	B.L. Kg	Max tightening torque Nm	Weight Kg
U-	-Bolts									
2	6511	4	50	24	21	27	480	1000	2,3	0.022
	6512	5	60	28	24	30	640	2000	4,5	0.035
	6513	6	70	32	27	35	1280	3000	7,5	0.060
	6523	6	90	32	27	55	1280	3000	7,5	0.067
	6514	8	80	36	30	40	2400	4800	18	0.114
	6524	8	100	36	30	60	2400	4800	18	0.127
	6515	10	90	40	32	45	3600	7000	36	0.200
	6525	10	110	40	32	65	3600	7000	36	0.222
	6516	12	110	44	34	50	6400	10000	60	0.319
	6526	12	130	44	34	70	6400	10000	60	0.349

### **Benefits**

- ▶ Registered design Made in France
- Outstanding working loads
   UV-resistant rubber collar
- ► Complete watertightness guaranteed ► Available in black and white
- ▶ Eliminates need to install watertight seal
- ▶ Aesthetically pleasing solution
   ▶ Delivered with nuts and counterplate



N°	Part # black	Part # white	Ø mm	L mm	A mm	B mm	C mm	W.L. Kg	B.L. Kg	Max tightening torque Nm	Weight Kg
W	aterti	ght U-I	Bolts	«pate	nted»						
3	65321	65322	5	60	28	21	30	640	2000	4,5	0.035
	65331	65332	6	70	32	24	35	1280	3000	7,5	0.060
	65431	65432	6	90	32	24	55	1280	3000	7,5	0.068
	65341	65342	8	80	36	25	40	2400	4800	18	0.123
	65441	65442	8	100	36	25	60	2400	4800	18	0.136
	65351	65352	10	90	40	26	45	3600	7000	36	0.219
	65451	65452	10	110	40	26	65	3600	7000	36	0.238
	65361	65362	12	110	44	27	50	6400	10000	60	0.345
	65461	65462	12	130	44	27	70	6400	10000	60	0.375

WL: working load - BL: breaking load

### **Benefits**

- ▶ Hot forged with 316L stainless steel
- ▶ High resistance
   ▶ Round shape to prevent wear to straps, lines
- ▶ Multi-use

N°	Part #	ØD	Α	В	i		B.L.	Weight				
		mm	mm	mm	m	m	Kg	Kg				
Sa	addles											
1	9201	4	8	10	3	2	650	0.004				
	9202	5	10	14	37	',5	1800	0.009				
	9203	6	12	16	4	5	2400	0.016				
	9204	8	16	21	6	0	3500	0.038				
	9205	10	20	26	7	78 7000		0.075				
N°	Part #	ØD	A		В		E	Weight				
		mm	mm		mm		nm	Kg				
_		g eye Stra	-									
2	9211	4	28		5		56	0.007				
	9212	5	34		10		65	0.013				
	9222	5	50		12		86	0.018				
N°	Part #	ØD	Α		В		F	Weight				
l'i	· are ii	mm	mm		mm	ı	nm	Kg				
R	eefing	eye strap	)									
M	any pur	ooses like re	efing appl	ications								
3	9412	6	10		35		15	0.019				
N°	Part #	ØD	А		В		Е	Weight				
	mm mm mm Kg											
FI	at eye	strap: to	tension n	nultihul	tramp	oline						
4	9413	7	12		50		18	0.033				

Wichard eye nuts and eye bolts are single-piece forged components that guarantee you excellent safety standards for your fastenings. They come in a broad range of sizes, enabling you to find the solutions best suited to your circumstances. Should you wish to order large quantities with specific lengths or diameters, Wichard can also manufacture custom-made items.

tightening Weight

0.024

0.027

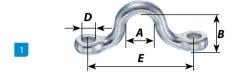
0.056

0.061 0.098

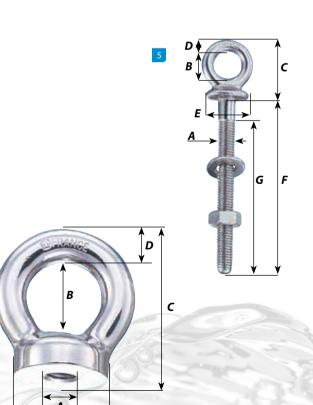
0.163

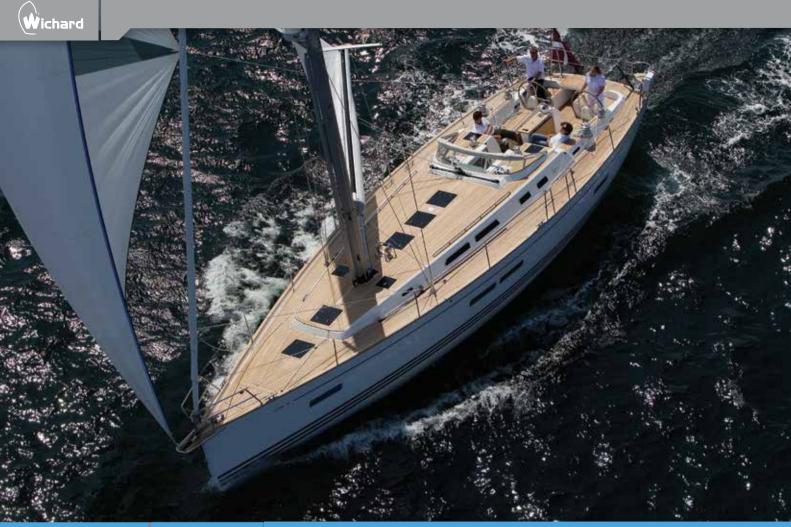
N°	Part #	Α	В	C	D	Е	F	G	W.L.	B.L.	Max tightening	y W
		mm	mm	mm	mm	mm	mm	mr	n Kg	Kg	torque Nm	
Ey	e Bolt	ts										
5	6490	M6 x 100	12	25	5	17	40	34	560	900	7,5	0
	6491	M6 x 100	12	25	5	17	60	54	560	900	7,5	0
	6492	M8 x 125	14	30	6	20	80	70	960	1500	18	0
	6493	M8 x 125	14	30	6	20	100	90	960	1500	18	0
	6495	M10 x 150	16	36	7	25	100	88	1600	2700	36	0
	6497	M12 x 175	18	41	8	28	120	10	5 2400	3500	60	0
N°	Part #	Α	В		С	D	Е		*B.L.	Weigh		
IN	Part #	mm	mm		nm	mm	mn	n	Kg	Kg		
Εν	e nut	5					_					
6	6333	M6 x 100	13		27	6	17	-	1500	0.022		
	6334	M8 x 125	13		27	6	17		2200	0.020	_	
П	6344	M8 x 125	17		36	8	22		3000	0.051	_	
	6345	M10 x 150	17		36	8	22		4500	0.049	_	
П	6355	M10 x 150	22		46	10	28		4800	0.099		
	6356	M12 x 175	22		46	10	28		5200	0.095		
	6366	M12 x 175	27		56	12	34		7000	0.175		
	6367	M14 x 200	27		56	12	34		9000	0.171		
	6368	M16 x 200	27		56	12	34		10000	0.165		
	* The streng	gth figures given a	re an indic	ation only	y and chai	nge accord	ng to spec	ificatio	n of the end f	itting		

## Eye straps, eye nuts, eye bolts













## Snap hooks

Whatever your application is, you will always find the appropriate Wichard snap hook.

### I WICHARD OFFERS A COMPLETE RANGE OF SNAPS HOOKS:

- ▶ «HR» snap shackles.
- Trigger snap shackles.
- ▶ Quick release snap shackles.
- ▶ Snap hooks.
- ▶ Carbine hooks.
- ▶ Mooring hooks.

The Wichard snap hooks will never break suddenly! They show signs of deformation well before reaching the breaking point.

### **Benefits**

- Forged in HR stainless steelDesigned and made in France

- Designed and made in France
  High resistance
  Captive plunger pin
  Large range
  Easy opening
  Multi-use: halyards, tethers etc...

						~ 5	_			
N°	Part #	Length mm	A mm	B mm	C mm	Ø D mm	E mm	W.L. Kg	B.L. Kg	Weight Kg
-			111111	111111	111111	1111111	111111	Rg	ку	Ng
1	xed ey 2470*	<b>3</b> 5	8	6				160	400	0.012
Ľ	2470"	50	16	10				960	2000	0.012
Н		70	21	13				1280	3000	0.042
	2472	70	21	13				1280	3000	0.090
C	evis p	in								
2	2293	52	16	8	13	6	8,1	960	2000	0.054
	2295	70	21	11,5	16	8	11,5	1280	3850	0.130
	2297	86	26	14	21	10	14	2800	7000	0,257
N°	Part	Length	Α	Metri	thread (	Iso) R		W.L.	B.L.	Weight
l''	#	mm	mm		· ····································	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Kg	Kg	Kg
W	ithout	t swive	with f	emale 1	thread					
3	72473	45	16		M7 x 75					0.042
	72475	60	21		M9 x 75					0.096
	72477	80	26	1	M12 x 10	0				0.222
N°	Part	Length	Α	В	С	ØD	Е	W.L.	B.L.	Weight
IN	#	mm	mm	mm	mm	mm	mm	Kg	Kg	Kg
S	wivel e	eve								
4	2473	70	16	11				960	2000	0.065
	2475	90	21	14				1280	3700	0.136
	52475*	90	Titar	nium				1200	2800	0.094
	2477	120	26	21				2800	7000	0.353
W	ith thi	imble e	VΑ							
5	2493	95	16	12				960	2000	0.076
ř	2495	110	21	14				1280	2400	0.150
		-								
_	arge b									
6	2373	80	16	19				960	2000	0.070
	2375	105	21	26				1280	3600	0.160
	2377	140	26	35				2800	7500	0.398
W	ebbin	g swive	el							
7	2374	80	16	30				960	2000	0.085
	2376	100	21	40				1280	3850	0.170
W	ith cle	vis pin	swivel							
8	2474	70	16	15	12	6		800	1600	0.071
9	2476	90	21	17	11	7		1280	3800	0.154
9	2478	120	26	27	18	11		2400	7000	0.417
	24/0	120	20	21	10			2400	7000	0.417

## «HR» snap shackles

























### Speedlink the new trigger snap shackle



Universal eye: Halyard - Spinnaker - Peeling

### **Benefits**

- ▶ Universal eye version
- For halyards, spinnaker sheets...
- Can handle 2 sheets or 1 sheet and 1 snap hook/shackle
- ▶ Forged in HR s/s
- ▶ Designed and made in France



Webbing eye: Tack point

### **Benefits**

- ▶ Webbing eye version
- ▶ For foresail tack points
- Optimized design for fitting to webbing
- Forged in HR s/s
- ▶ Designed and made in France



You Tube to

Download the Speedlink a video



#### LIGHTWEIGHT:

Speedlink was developed using finite element analysis software and has an optimised design. Its shape, cut-outs and ribs make it extremely light and give it one of the best strength/weight ratios on the market.

#### A MODERN DESIGN...

Speedlink's ultra-technical lines make it one of the most modern and efficient snap shackles available.

- The special load-bearing surface of the swivel eye avoids excessive rope wear.
- Its overall design prevents adjacent lines from jamming.

### ... FOR EFFICIENT OPERATIONS

- Easy opening: opening under load, by using the release fid, is easy and effortless thanks to the generous passage diameter and its optimised slopes.
- Secure locking: the special shape of the latch reduces inertia and avoids unintentional opening, especially under impact, while the distribution of stresses limits the effort needed to open it under load.

#### **STURDY:**

Speedlink is forged in HR stainless steel and can bear exceptional working and breaking loads for a minimum weight.

N°	Part	Length	Α	В	С	W.L.	B.L.	Weight					
	#	mm	mm	mm	mm	Kg	Kg	Kg					
U	Universal eye: for halyard, spinnaker and peeling												
1	2650	74	14	11,5		1100	2300	0,059					
	2652	87	17	15,5		1440	3400	0,097					
	2654	108	21	22		2320	5400	0,173					
	2656	134	25	26		4300	8700	0,326					
Ey	e for y	webbin	g: for t	ack po	int app	licatio	ns						
2	2750	72	14	11	23	1100	2000	0,058					
	2752	83	17	13	26	1440	3400	0,095					
	2754	102	21	17	35	2320	5400	0,174					
	2756	128	25	21	59	4300	8700	0,337					

Release fid - anodised aluminium - Length: 15 cm - Part # 10302



### | Trigger | snap shackles

N°	Part #	Length mm	A mm	B mm	C mm	D mm	E mm	W.L. Kg	B.L. Kg	Weight Kg			
S۱	Swivel shackle (HR stainless steel)												
4	2852	105	22	13	11	7	18	1440	3400	0.110			
	2856	135	27	19	18	11	26	4100	8700	0.360			

#### **PERFORMANCE**

Before re-hoisting, the bowman doesn't need to remove the headsail from the luff grove, he just has to open the prefeeder and close it around the luff tape. No need to remove the headsail anymore!

#### **EASE OF USE**

To open it simply push the spring with your thumb, the jaws will open automatically. To close, squeeze the jaws together between your thumb and fingers, until the spring reengages.

#### **EASY TO INSTALL**

The prefeeder can be easily installed below any headsail foil or headsail reefing configuration. In the closed position, it ensures a smooth and easy sail hoist.

### **Features:**

- ▶ Single handed operation by pushing on the spring
- Easy to install with a lashing or fixed to the forestay
- ▶ Stainless steel product benefiting from the Wichard know-how to offer the highest reliability
- ▶ Weight: 0.050 kg
- Part # 7485

### **Benefits**

- ▶ Forged in HR stainless steel
- Designed and made in France
- ▶ Available with swivel eye, large eye and tack snap configuration
- ▶ Ideal for sheets (genoa, spinnaker)
- ▶ Outstanding working loads
- ▶ Control line for easy to release
- ▶ Aesthetic

N°	Part #	Length mm	A mm	B mm	W.L. Kg	B.L. Kg	Weight Kg
W	ith swi	vel eye					
1	2673	70	14	11	880	1500	0.059
	2674	80	16	12	1280	2300	0.088
	2675	90	20	13,5	1600	3200	0.136
	2676	110	25	16	2400	4200	0.233
	2677	130	30	20	3200	6300	0.371
	2678	150	34	24	5200	9000	0.548
W	ith lar	ge bail					
2	2773	80	14	19	880	1300	0.054
	2774	90	16	23	1280	2000	0.100
	2775	110	20	26,5	1600	3000	0.160
	2776	120	25	31	2400	4000	0.271
	2777	145	30	35,5	2800	6300	0.396
	2778	160	34	41	5200	8000	0.618
Ta	ck sna	p shackle					
3	2575	70	20	25	1280	2300	0.095

### Opening luff Rope Prefeeder

for racing foils and furling systems



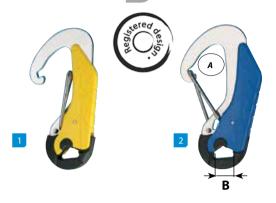
### Quick release snap shackles

« patented »





## Double action Safety hooks





### Safety snap hooks





- ▶ Registered design Made in France
- ▶ Forged in 316L stainless steel
- ▶ Torsion spring
- Dens with one hand
- No risk of accidental opening
- Integrated into the Wichard tethers

N°	Part #	Colour	Length mm	A mm	B mm	W.L. Kg	B.L. Kg	Weight Kg				
D	Double action safety hook «patented»											
1	2454	Yellow	115	18	19 x 10	1200	2800	0.126				
2	2455	Blue	115	18	19 x 10	1200	2800	0.126				
3	2452	Fluorescent	115	18	19 x 10	1200	2800	0.126				



### **Benefits**

- ▶ Registered design Made in France
- ▶ Forged in 316L or HR stainless steel
- ▶ Outstanding working loads
- ▶ Aesthetic design
- ▶ Multi-use on board

N°	Part	Length	Α	В	W.L.	B.L.	Weight				
	#	mm	mm	mm	Kg	Kg	Kg				
St	nap ho	oks «pate	nted»								
4	2479	35	6	4	80	150	0.010				
	2480	50	8	6	200	300	0.023				
	2481	75	12	10	480	700	0.067				
	2482	100	16	13	1120	1500	0.186				
Safety snap hook «HR»											
Models forged in 17.4 Ph (HR stainless steel)											
5	2381	75	12	10	880	1600	0.064				
	2382	100	17	14	1680	4000	0.167				
S۱	wivel s	nap hooks	;								
6	2384	70	8	13	200	300	0.036				
	2385	100	12	19	480	750	0.102				
W	Vebbir	ng snap ho	ok								
7	2284	60	8	30	200	300	0.035				
S	nap h	ook with fi	xed eye a	nd for 20	mm wel	bbing					
8	2270	44	8	3	160	400	0.014				



### **Benefits**

- ▶ Designed and made in France
- Available with eye to attach strap, or without eye
- ▶ Symmetric or asymmetric shape
- ▶ Perfect for fast operations
- Standard on Wichard tethers (part # 7001, 7002, 7011)

### **CARBINE HOOKS**

« patented »

N°	Part #	Ø mm	Length mm	A mm	B mm	W.L. Kg	B.L. Kg	Weight Kg
Sı	/mmet					119	i tig	i i i
1	2313	6	60	10	7	360	600	0.030
	2315	8	80	13	11	880	1300	0.072
	2316	10	100	15	13	1200	2500	0.132
	2317	12	120	21	16	1360	3600	0.229
Δ	symmo	atric						
2	2323	6	60	11	7	400	800	0.031
_	2325	8	80	15	11	960	1500	0.031
	2325	10	100	18	13	1320	2500	0.073
_	2327	12	120	24	16	1440	4500	0.130
	2328	12	170	30	20	1440	4500	0.336
	2320		., .	50		1110	1500	0.550
W	ithout	eye						
3	2333	6	60	10	8	360	600	0.028
	2335	8	80	13	13	880	1600	0.062
	2336	10	100	15	14	1200	2500	0.124
	2337	12	120	21	16	1360	3800	0.200



### **Benefits**

- ▶ Ideal for setting a headsail
- ▶ One hand operation
- ▶ Available in 316L stainless steel or brass
- ▶ Efficient operation : does not jam

N°	Part #		Length mm	A mm	B mm	W.L. Kg	B.L. Kg	Weight Kg				
«C	«One hand» sail snaps											
4/5	2486	stainless steel	50	7,5	6,5	160	300	0.022				
	2483	stainless steel	55	9	8	240	400	0.037				
	2487	stainless steel	65	11	10	400	550	0.059				
	2489	stainless steel	80	13	11,5	560	800	0.100				
	2488	stainless steel	90	17	13	800	1050	0.143				
	2490	stainless steel	110	24	15	960	1300	0.244				
	72486	brass	50	7,5	6,5	80	100	0.030				
	72483	brass	55	9	8	120	180	0.036				
	72487	brass	65	11	10	200	250	0.056				

N°	Part #	Ø mm	Length mm	A mm	B mm	W.L. Kg	B.L. Kg	Weight Kg
D	elta ho	ooks						
6	2345	8	80	13	40	720	1200	0.075
	2346	10	100	16	50	1120	2200	0.140

## |Carbine



## «One hand» sail snaps



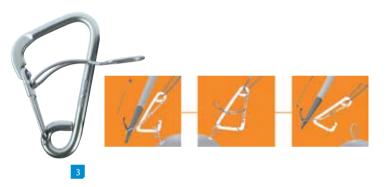




## |Mooring







## IChain grip



### **Benefits**

- ▶ 2 models available: simple or automatic
- Can be used on most boat hooks
- ▶ Perfect for mooring buoys

N°	Part #	Ø mm	Length mm	A mm	B mm	Weight Kg				
Si	mple ı	nooring h			hment fittir					
1	92326	10	100	18	13	0.176				
	92327	12	120	24	16	0.280				
	92328	12	170	30	20	0.378				
S	oare at	tachmen	achment fitting for mooring hooks							
2	72326	For part #	For part # 92326 - Weight: 0.025 Kg							
	72327	For parts #	92327 and	92328 - Wei	ght: 0.035 l	(g				

N°	Part		Ø	Length	Α	В	Weight					
	#		mm	mm	mm	mm	Kg					
A	Automatic mooring hooks											
3	2329	Automatic	12	170	30	20	0,380					



### **Benefits**

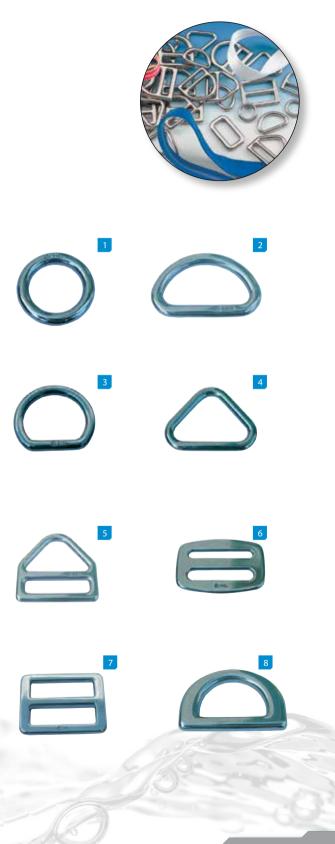
- ▶ Ensure safer anchoring by easing the tension on the chain
- ▶ Protects the boat from chafing
- Installed between two links
   The locking pin keeps it in position
- ▶ Made in 316L stainless steel
- For 8, 10 and 12 mm chain

N°	Part #		Length mm	Rope diame- ter mm	W.L. Kg	B.L. Kg	Weight Kg			
Chain Grip										
4	2984	For 8 mm chain	82	16	480	1600	0.084			
	2985	For 10 mm chain	103	20	720	2400	0.156			
	2986	For 12 mm chain	122	23	960	3000	0.304			

## Wichard stainless steel rings and adjusters are hot drop forged from 316L stainless steel in a single piece, not just bent and welded. Forging is a far superior process, because it maintains the structural integrity of the metal and increases working load limits in real world applications. Each part is polished and passivated to create a beautiful, yet durable surface that is highly resistant to corrosion. The "W" pentagon (plus 316L) mark stamped into each part is your Wichard quality assurance.

Part #	N°	Description	Stock Ø mm	Inside dimensions mm	B.L. Kg	Weight Kg
Ring	and	d adjusters				
6782		Ring	5	21,5	2000	0.014
6783	1	Ring	5	33	2000	0.018
6784		Ring	7,3	45	4000	0.057
6711		D Ring	6	40	3000	0.029
6712	2	D Ring	6	50	3000	0.035
6721	3	D Ring	5	30	2000	0.019
		3				
6731		Triangle	4	30	1200	0.010
6732	4	Triangle	6	50	3000	0.037
6751	5	Triangle with bar	6	45	3000	0.058
6771	6	Double adjuster	4	42	1200	0.051
6772	7	Double adjuster	5-8	45	3000	0.078
"HR"	Dr	ings				
16504		D Ring	6	27,5	2700	0.026
16505	8	D Ring	8	35,5	4500	0.058
16506		D Ring	10	45,5	9000	0.120

## IRings and adjusters





## **Swivels**

The Wichard swivels are used to link two parts which may have different rotation directions. Wichard offers a complete range of swivels forged either with HR stainless steel or grade 316L stainless steel.

### **I WICHARD OFFERS A COMPLETE RANGE OF SWIVELS:**

- ▶ With clevis pin or pin with allen head.
- ▶ With large bail.
- ▶ For webbing applications.
- ▶ For mooring applications.



### **SWIVELS « HR »**



### **Benefits**

- Full range of products
   Forged in 17.4 Ph HR stainless steel
   Outstanding working and breaking loads
   ▶ Ball bearing models available
- ▶ Multi-use on board

									_
N°	Part	Length	Α	В	С	ØD	W.L.	B.L.	Weight
	#	mm	mm	mm	mm	mm	Kg	Kg	Kg
W	ith cle	vis pin							
1	2464	70	14	21	11	7	1600	2800	0.087
	82464	70	sa	me with b	all bearin	gs	1600	2800	0.087
	2465	105	19	31	18	11	3200	6000	0.280
	82465	105	sa	me with ball bearings		3200	6000	0.280	
Di	n with	allen h	oad		_				
2	2364	70	14	21	11	8	1440	2800	0.084
_	2365	105	19	31	18	10	3200	5500	0.265
	2303	103	12	31	10	10	3200	3300	0.203
Lā	arge b	ail							
3	2467	80	26	14			1600	3000	0.096
	82467	80	sa	me with b	all bearin	gs	1600	3000	0.096
	2468	115	35	19			3200	6500	0.263
	82468	115	sa	me with b	all bearin	gs	3200	6500	0.268
	2466	125	41	21			5200	8500	0.368
W	ebbin	g swivel	ı						
4	2367	60	11	30			960	1500	0.580
	2368	80	14	40			1600	3200	0.110
F	ork - Fo	ork (SS c	ambere	d Plate	١				
5	2461*	45	9	10	10	5	480	1000	0.026
	2462*	60	15	13	12	6	720	1400	0.052
* Pc		and 2462 are n							
C.	elf-loc	ring							
6	2463	80	20	17	11	8	1440	2800	0.102
U	2469	120	30	27	18	10	2000	5000	0.102
	2409	120	30	21	10	10	2000	5000	0.522
A		ad pin							
7	2363	80	20	17	11	8	1440	2800	0.099
	2369	120	31	27	18	10	2000	5000	0.312

### **MOORING SWIVELS**



### **Benefits**

- ▶ Forged in specific grade of stainless steel
- ▶ Designed and made in France
- ► Excellent corrosion resistance ► To be used with shackles # 1206, 1207, 1246, 1247 and 1248

N°	Part #	Length mm	A mm	B mm	W.L. Kg	B.L. Kg	Weight kg				
М	Mooring swivel										
8	2442	130	38	35	1760	4000	0.290				
	2443	150	44	41	2960	5500	0.415				

## **Swivels**

















WL: working load - BL: breaking load



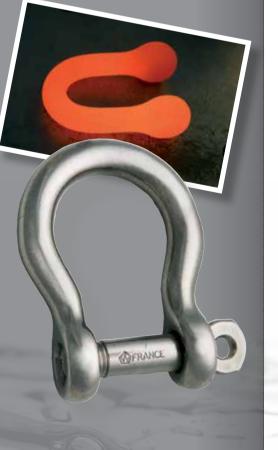
## Shackles

### Why choose a Wichard shackle?

- Remarkably strong
- 2 Optimal size and weight
- **3** Proven resistance to corrosion
- Quality manufacturing
- **5** A wide range of products

The quality of our products, and in particular our shackles, has proven its worth in many applications and especially in extreme sports.

For the Highline world record attempt in the Gorges of the Tarn in 2013, the organizers chose Wichard shackles.



ichard





### A wide choice available:

Rope diameter: 4 mm to 24 mm Breaking load: 700 kg to 35 tonnes



### **Various materials:**

316L stainless steel, 17.4 PH (HR) stainless steel or titanium; it's your choice:

316L stainless steel: the right compromise between strength and resistance to corrosion.17.4 PH (HR) stainless steel: for greater mechanical strength.

**Titanium (Ta6V):** when weight saving is the priority



### **Various functions:**

Self-locking pin, captive pin, quick-release pin, allen head pin... Wichard makes different versions for different applications.



### **Various shapes**

Our shackles come in various shapes to ensure they do a proper job, in the right conditions, and last for a long, long time.







## A WIDE RANGE OF PRODUCTS

Wichard provides the most complete range of shackles on the market. You'll find the right Wichard shackle for your boat or other applications.









## Self-locking

« patented »

### **Benefits**

- Large range of self-locking shacklesHead of shackle pin locked into one of the notches

  Avoids accidental release due to vibrations
- ▶ Available in various versions to suit many applications
- ▶ Forged in 316L stainless steel
- ▶ Designed and made in France



N°	Part	Ø	Α	В	W.L.	B.L.	Weight
	#	mm	mm	mm	Kg	Kg	Kg
Se	lf-lock	ing D sha	ckles				
1	1201	4	13	8	320	700	0.007
	1202	5	16	10	400	1000	0.013
	1203	6	20	12	600	1600	0.022
	1204	8	26	16	1000	2700	0.055
	1205	10	33	20	1520	4300	0.098
	1206	12	39	24	2080	6000	0.193
	1207*	14	47	28	2400	8000	0.312
Se	lf-lock	ing long	shackles				
2	1211	4	22	8	320	700	0.008
	1212	5	29	10	400	1000	0.017
	1213	6	33	12	600	1600	0.027
	1214	8	45	16	1000	2700	0.066
	1215	10	55	20	1520	4300	0.128
Se	lf-lock	ing twiste	d shackle				
3	1222	5	26	10	480	1100	0.016
	1223	6	30	12	600	1500	0.027
	1224	8	40	16	1000	3000	0.067
	1225	10	50	20	1440	4500	0.127
	IZES	10	30	20	1110	1500	0.127
Se	lf-lock	ing bow s	hackles				
4	1241	4	18	8	320	700	0.009
	1242	5	23	10	400	1000	0.017
	1243	6	28	12	600	1500	0.030
	1244	8	37	16	1000	2700	0.068
	1245	10	47	20	1520	4300	0.137
	1246	12	55	24	2080	6000	0.233
	1247*	16	70	32	3200	10000	0.540
	1248*	20	80	40	4000	15000	1.056
So	lf lock	ing large	ononina c	hacklo			
Je	III-IUCK						
					256	1100	0.016
5	1262	5	36	20	256	1100	0.016
	1262 1263	5 6	36 42	20 25,5	320	1500	0.027
	1262 1263 1264	5 6 8	36 42 57	20 25,5 32	320 768	1500 2700	0.027 0.067
	1262 1263	5 6	36 42	20 25,5	320	1500	0.027
5	1262 1263 1264 1265	5 6 8	36 42 57 72	20 25,5 32	320 768	1500 2700	0.027 0.067
AI Th	1262 1263 1264 1265 <b>len he</b> e	5 6 8 10 ad pin sha of the pin c	36 42 57 72 ckles «D»	20 25,5 32 40	320 768 1280	1500 2700 4000	0.027 0.067 0.127
Al Th na	1262 1263 1264 1265 <b>len he</b> e e head ting an	5 6 8 10 ad pin sha of the pin c y risk of sna	36 42 57 72 ckles «D» does not sti	20 25,5 32 40 ck out from	320 768 1280 the shackl	1500 2700 4000 e's body, th	0.027 0.067 0.127 us elimi-
AI Th	1262 1263 1264 1265 <b>len he</b> e head ting an	5 6 8 10 ad pin sha of the pin o y risk of sna 6	36 42 57 72 ckles «D» does not sti gging.	20 25,5 32 40 ck out from	320 768 1280 the shackl	1500 2700 4000 e's body, th	0.027 0.067 0.127 us elimi-
Al Th na	1262 1263 1264 1265 <b>len he</b> e head ting an 1303 1304	5 6 8 10 <b>ad pin sha</b> of the pin o y risk of sna 6 8	36 42 57 72 ckles «D» does not sti gging. 19 26	20 25,5 32 40 ck out from	320 768 1280 the shackl 600 960	1500 2700 4000 e's body, th 1600 2700	0.027 0.067 0.127 us elimi- 0.022 0.053
Al Th na	1262 1263 1264 1265 <b>Jen he</b> e head ting an 1303 1304 1305	5 6 8 10 <b>ad pin sha</b> of the pin o y risk of sna 6 8 10	36 42 57 72 **Ckles «D» does not sti gging. 19 26 33	20 25,5 32 40 ck out from 12 16 20	320 768 1280 the shackl 600 960 1440	1500 2700 4000 e's body, th 1600 2700 4300	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099
Al Th na	1262 1263 1264 1265 <b>len he</b> e head ting an 1303 1304 1305 1306	5 6 8 10 <b>ad pin sha</b> of the pin o y risk of sna 6 8 10	36 42 57 72 **Ckles «D» does not sti gging. 19 26 33 39	20 25,5 32 40 ck out from 12 16 20 24	320 768 1280 the shackl 600 960 1440 2080	1500 2700 4000 e's body, th 1600 2700 4300 5500	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187
AI Th na 6	1262 1263 1264 1265 <b>len he</b> e head ting an 1303 1304 1305 1306 1363	5 6 8 10 <b>ad pin sha</b> of the pin o y risk of sna 6 8 10 12 6	36 42 57 72 does not sti gging. 19 26 33 39 42	20 25,5 32 40 ck out from 12 16 20 24 25,5	320 768 1280 the shackl 600 960 1440	1500 2700 4000 e's body, th 1600 2700 4300	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099
AI Th na 6	1262 1263 1264 1265 <b>len he</b> e head ting an 1303 1304 1305 1306 1363	5 6 8 10 <b>ad pin sha</b> of the pin o y risk of sna 6 8 10	36 42 57 72 does not sti gging. 19 26 33 39 42	20 25,5 32 40 ck out from 12 16 20 24 25,5	320 768 1280 the shackl 600 960 1440 2080	1500 2700 4000 e's body, th 1600 2700 4300 5500	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187
AI Th na 6	1262 1263 1264 1265 <b>Jen he</b> e head ting an 1303 1304 1305 1306 1363 <i>ecially</i>	5 6 8 10 <b>ad pin sha</b> of the pin o y risk of sna 6 8 10 12 6	36 42 57 72 ckles «D» does not sti gging. 19 26 33 39 42 r batten car	20 25,5 32 40 ck out from 12 16 20 24 25,5	320 768 1280 the shackl 600 960 1440 2080	1500 2700 4000 e's body, th 1600 2700 4300 5500	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187
AI Th na 6	1262 1263 1264 1265 <b>Jen he</b> e head ting an 1303 1304 1305 1306 1363 <i>ecially</i>	5 6 8 10 ad pin sha of the pin o y risk of sna 6 8 10 12 6 designed fo	36 42 57 72 ckles «D» does not sti gging. 19 26 33 39 42 r batten car	20 25,5 32 40 ck out from 12 16 20 24 25,5	320 768 1280 the shackl 600 960 1440 2080	1500 2700 4000 e's body, th 1600 2700 4300 5500	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187
All The name of the state of th	1262 1263 1264 1265 <b>len he</b> e head ting an 1303 1304 1305 1306 1363 <i>recially</i>	5 6 8 10 ad pin sha of the pin o y risk of sna 6 8 10 12 6 designed for	36 42 57 72  ckles «D» does not sti gging. 19 26 33 39 42 r batten car	20 25,5 32 40 ck out from 12 16 20 24 25,5	320 768 1280 the shackl 600 960 1440 2080 320	1500 2700 4000 e's body, th 1600 2700 4300 5500 1500	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187 0.044
Al Th na 6	1262 1263 1264 1265 <b>len he</b> e head ting an 1303 1304 1305 1306 1363 <i>ecially</i> <b>len he</b> e	5 6 8 10 ad pin sha of the pin o y risk of sna 6 8 10 12 6 designed for ad pin lon 6 8	36 42 57 72  ckles «D» does not sti gging. 19 26 33 39 42 r batten car g shackles 33 45	20 25,5 32 40 ck out from 12 16 20 24 25,5 s)	320 768 1280 the shackl 600 960 1440 2080 320	1500 2700 4000 e's body, th 1600 2700 4300 5500 1500	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187 0.044
Al Th na 6	1262 1263 1264 1265 <b>len he</b> e head ting an 1303 1304 1305 1366 1363 <i>ecially</i> <b>len he</b> e	5 6 8 10 ad pin sha of the pin of y risk of sna 6 8 10 12 6 designed for ad pin lon 6 8 ad pin sha	36 42 57 72 ckles «D» does not sti gging. 19 26 33 39 42 r batten car g shackles 33 45	20 25,5 32 40 ck out from 12 16 20 24 25,5 s)	320 768 1280 the shackl 600 960 1440 2080 320	1500 2700 4000 e's body, th 1600 2700 4300 5500 1500	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187 0.044
AI Th na 6	1262 1263 1264 1265 len hee e head ting an 1303 1304 1305 1306 1363 secially len hee e head	5 6 8 10 ad pin sha of the pin o y risk of sna 6 8 10 12 6 designed for ad pin lon 6 8	36 42 57 72 does not stigging. 19 26 33 39 42 r batten car g shackles 33 45 ckles «bootloes not sti	20 25,5 32 40 ck out from 12 16 20 24 25,5 s)	320 768 1280 the shackl 600 960 1440 2080 320	1500 2700 4000 e's body, th 1600 2700 4300 5500 1500	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187 0.044
All The All Th	1262 1263 1264 1265 len hee e head ting an 1303 1304 1305 1306 1363 secially len hee e head	5 6 8 10 ad pin sha of the pin of y risk of sna 6 8 10 12 6 designed for ad pin lon 6 8 ad pin sha of the pin of	36 42 57 72 does not stigging. 19 26 33 39 42 r batten car g shackles 33 45 ckles «bootloes not sti	20 25,5 32 40 ck out from 12 16 20 24 25,5 s)	320 768 1280 the shackl 600 960 1440 2080 320	1500 2700 4000 e's body, th 1600 2700 4300 5500 1500	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187 0.044
All Th na 6 (sp	1262 1263 1264 1265 len hee e head ting an 1303 1304 1305 1306 1363 secially len hee e head ting an	5 6 8 10 ad pin sha of the pin of y risk of sna 6 8 10 12 6 designed for ad pin lon 6 8 ad pin sha of the pin of y risk of sna	36 42 57 72 does not stigging. 19 26 33 39 42 r batten car g shackles 33 45 does not stigging.	20 25,5 32 40 ck out from 12 16 20 24 25,5 s) 12 16 W** ck out from	320 768 1280 the shackl 600 960 1440 2080 320 600 1000	1500 2700 4000 e's body, th 1600 2700 4300 5500 1500	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187 0.044 0.027 0.066
All Th na 6 (sp	1262 1263 1264 1265 len hee e head ting an 1303 1304 1305 1306 1363 secially len hee e head ting an 1314	5 6 8 10 ad pin sha of the pin of y risk of sna 6 8 10 12 6 designed for ad pin lon 6 8 ad pin sha of the pin of y risk of sna	36 42 57 72 does not stigging. 19 26 33 39 42 r batten car g shackles 33 45 ckles «booldoes not stigging. 27	20 25,5 32 40 ck out from 12 16 20 24 25,5 s) 12 16 W** ck out from	320 768 1280 the shackl 600 960 1440 2080 320 600 1000	1500 2700 4000 e's body, th 1600 2700 4300 5500 1500	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187 0.044 0.027 0.066 us elimi- 0.029
All Th na 6 (sp	1262 1263 1264 1265 len hee e head ting an 1303 1304 1305 1306 1363 secially len hee e head ting an 1314 len hee e head ting an 1313 1314	5 6 8 10 ad pin sha of the pin of y risk of sna 6 8 10 12 6 designed for ad pin lon 6 8 ad pin sha of the pin of y risk of sna 6 8	36 42 57 72 does not stigging. 19 26 33 39 42 r batten car g shackles 33 45 does not stigging. 27 37	20 25,5 32 40 ck out from 12 16 20 24 25,5 s) 12 16 W» ck out from	320 768 1280 the shackl 600 960 1440 2080 320 600 1000 the shackl	1500 2700 4000 e's body, th 1600 2700 4300 5500 1500 1600 2700 e's body, th	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187 0.044 0.027 0.066 us elimi- 0.029 0.067
AII Th na 6 AII Th na 8	1262 1263 1264 1265 <b>len he.</b> e head ting an 1303 1304 1305 1306 1363 <i>eccially</i> <b>len he.</b> e head ting an 1313 1314 <b>len he.</b> e head	5 6 8 10 ad pin sha of the pin of y risk of sna 6 8 10 12 6 designed for ad pin lon 6 8 ad pin sha of the pin of y risk of sna 6 8 10 12 12 12 10 12 10 12 10 12 10 12 10 12 10 12 10 12 10 12	36 42 57 72 does not stigging. 19 26 33 39 42 r batten car g shackles 33 45 does not stigging. 27 37 47	20 25,5 32 40 ck out from 12 16 20 24 25,5 s) 5 12 16 W** ck out from	320 768 1280 1 the shackl 600 960 1440 2080 320 600 1000 1 the shackl 600 960 1440	1500 2700 4000 e's body, th 1600 2700 4300 5500 1500 1600 2700 e's body, th	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187 0.044 0.027 0.066 us elimi- 0.029 0.067 0.133
All The name of the second sec	1262 1263 1264 1265 len he e head ting an 1303 1304 1305 1306 1363 recially len he e head ting an 1343 1344 1345 1346 ck sha	5 6 8 10 ad pin sha of the pin of yrisk of sna 6 8 10 12 6 designed for ad pin lon 6 8 ad pin sha of the pin of yrisk of sna 6 8 10 12 ckles	36 42 57 72  ckles «D» does not sti gging. 19 26 33 39 42 r batten car g shackles 33 45  ckles «boo does not sti gging. 27 37 47 55	20 25,5 32 40 ck out from 12 16 20 24 25,5 s) s 12 16 w» ck out from	320 768 1280 the shackl 600 960 1440 2080 320 600 1000	1500 2700 4000 e's body, th 1600 2700 4300 5500 1500 1600 2700 e's body, th 1500 2700 4300 6000	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187 0.044 0.027 0.066 us elimi- 0.029 0.067 0.133 0.222
All Th na 8	1262 1263 1264 1265 len he e head ting an 1303 1304 1305 1306 1363 recially len he e head ting an 1343 1344 1345 1346 ck sha	5 6 8 10 ad pin sha of the pin of yrisk of sna 6 8 10 12 6 designed for ad pin lon 6 8 ad pin sha of the pin of yrisk of sna 6 8 10 12 ckles ockles ockles	36 42 57 72  ckles «D» does not sti gging. 19 26 33 39 42 r batten car g shackles 33 45  ckles «boo does not sti gging. 27 37 47 55	20 25,5 32 40 ck out from 12 16 20 24 25,5 s) s 12 16 w» ck out from	320 768 1280 the shackl 600 960 1440 2080 320 600 1000	1500 2700 4000 e's body, th 1600 2700 4300 5500 1500 1600 2700 e's body, th 1500 2700 4300 6000	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187 0.044 0.027 0.066 us elimi- 0.029 0.067 0.133 0.222
All Th na 8	1262 1263 1264 1265 len hee e head ting an 1303 1304 1305 1306 1363 recially len hee e head ting an 1313 1314 len hee e head ting an 1343 1344 1345 1346 ck sha ese sha	5 6 8 10 ad pin sha of the pin of yrisk of sna 6 8 10 12 6 designed for ad pin lon 6 8 ad pin sha of the pin of yrisk of sna 6 8 10 12 ckles ockles ockles	36 42 57 72  ckles «D» does not sti gging. 19 26 33 39 42 r batten car g shackles 33 45  ckles «boo does not sti gging. 27 37 47 55	20 25,5 32 40 ck out from 12 16 20 24 25,5 s) s 12 16 w» ck out from	320 768 1280 the shackl 600 960 1440 2080 320 600 1000	1500 2700 4000 e's body, th 1600 2700 4300 5500 1500 1600 2700 e's body, th 1500 2700 4300 6000	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187 0.044 0.027 0.066 us elimi- 0.029 0.067 0.133 0.222
All Th na 6 SP All Th na 8 Ta Th go	1262 1263 1264 1265 len he e head ting an 1303 1304 1305 1306 1363 recially len he e head ting an 1343 1344 1345 1346 ck sha esse sha osened	5 6 8 10 ad pin sha of the pin of yrisk of sna 6 8 10 12 6 designed for ad pin lon 6 8 ad pin sha of the pin of yrisk of sna 6 8 10 12 ckles ckles are spiks.	36 42 57 72 ckles «D» does not sti gging. 19 26 33 39 42 r batten car g shackles 33 45 ckles «boo does not sti gging. 27 37 47 55	20 25,5 32 40 ck out from 12 16 20 24 25,5 s) s 12 16 w» ck out from 12 16 20 24 25,5 s)	320 768 1280 I the shackl 600 960 1440 2080 320 600 1000 I the shackl 600 960 1440 2080	1500 2700 4000 e's body, th 1600 2700 4300 5500 1500 1600 2700 e's body, th 1500 2700 4300 6000	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187 0.044 0.027 0.066 us elimi- 0.029 0.067 0.133 0.222
All Th na 6 SP All Th na 8 Ta Th go	1262 1263 1264 1265 len he e head ting an 1303 1304 1305 1306 1363 1313 1314 len he e head ting an 1343 1344 1345 1346 ck sha esse sha osened	5 6 8 10 ad pin sha of the pin of yrisk of sna 6 8 10 12 designed for ad pin lon 6 8 ad pin sha of the pin of yrisk of sna 6 8 10 12 ckles ckles are spicks. 6	36 42 57 72 ckles «D» does not sti gging. 19 26 33 39 42 r batten car g shackles 33 45 ckles «boo does not sti gging. 27 37 47 55 cecially des	20 25,5 32 40 ck out from 12 16 20 24 25,5 s) s 12 16 w» ck out from 12 16 20 24 25,5 s)	320 768 1280 1the shackl 600 960 1440 2080 320 600 1000 1the shackl 600 960 1440 2080	1500 2700 4000 e's body, th 1600 2700 4300 5500 1500 1600 2700 e's body, th 1500 2700 4300 6000	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187 0.044 0.027 0.066 us elimi- 0.029 0.067 0.133 0.222
All Th na 6 SP All Th na 8 Ta Th go	1262 1263 1264 1265 len he e head ting an 1303 1304 1305 1306 1363 1313 1314 len he e head ting an 1343 1344 1345 1346 ck sha esse sha osened	5 6 8 10 ad pin sha of the pin of yrisk of sna 6 8 10 12 designed for ad pin lon 6 8 ad pin sha of the pin of yrisk of sna 6 8 10 12 ckles ckles are spicks. 6	36 42 57 72 ckles «D» does not sti gging. 19 26 33 39 42 r batten car g shackles 33 45 ckles «boo does not sti gging. 27 37 47 55 cecially des	20 25,5 32 40 ck out from 12 16 20 24 25,5 s) s 12 16 w» ck out from 12 16 20 24 25,5 s)	320 768 1280 1the shackl 600 960 1440 2080 320 600 1000 1the shackl 600 960 1440 2080	1500 2700 4000 e's body, th 1600 2700 4300 5500 1500 1600 2700 e's body, th 1500 2700 4300 6000	0.027 0.067 0.127 us elimi- 0.022 0.053 0.099 0.187 0.044 0.027 0.066 us elimi- 0.029 0.067 0.133 0.222

_											
N°	Part	Ø	Α	В	C	W.L.	B.L.	Weight			
	#	mm	mm	mm	mm	Kg	Kg	Kg			
Ca	ptive	pin «D» s	shackles								
1	1401	4	13	8	5	320	1000	0.009			
	1402	5	16	10	6	480	1500	0.016			
	1403	6	20	12	7	680	2200	0.028			
	1404	8	26	16	9	1000	3600	0.061			
	1405	10	33	20	11	1520	5200	0.114			
	1406	12	39	24	13	2080	7000	0.188			
Ca	Captive long «D» shackles										
2	1411	4	31	8	5	320	1000	0.012			
	1412	5	39	10	6	480	1500	0.024			
	1413	6	46	12	7	680	2200	0.040			
	1414	8	62	16	9	1000	3600	0.092			
	1415	10	78	20	11	1520	5200	0.176			
C-	ntivo	twisted :	hacklos								
3	1422	5	37	10	6	480	1500	0.023			
ľ	1423	6	44	12	7	600	2100	0.023			
	1424	8	59	16	9	1000	3700	0.090			
	1425	10	74	20	11	1520	5200	0.170			
Ca	ptive	pin bow	shackles	5							
4	1441	4	18	8	5	320	1000	0.010			
	1442	5	23	10	6	480	1500	0.019			
	1443	6	27	12	7	600	2200	0.033			
	1444	8	37	16	9	1000	3700	0.075			
	1445	10	46	20	11	1520	5200	0.139			

### **Benefits**

- ▶ Patented design

- Opening by half turn
   Easy to install with one hand
   Forged in 316L stainless steel
- ▶ Designed and made in France

N°	Part #	Ø mm	A mm	B mm	D mm	W.L. Kg	B.L. Kg	Weight Kg			
Ke	Key pin shackles										
5	1432	5	37	13		400	1000	0.031			
	1433	6	45	16		520	1500	0.048			
	1434	8	59	21		800	2300	0.121			
Ke	y pin	shackles	with ba	r							
6	81432	5	37	13	12	400	1200	0.031			
	81433	6	45	16	15	520	1700	0.052			
	81434	8	59	21	20	800	2500	0.123			

### **Benefits**

- ▶ Forged in 316L stainless steel
- Allows splicing on head of shackle
   No additional stainless steel cringles
- ▶ Designed and made in France

N°	Part	Ø	Α	В	Ø rope max.	W.L.	B.L.	Weight		
	#	mm	mm	mm	mm	Kg	Kg	Kg		
Cā	Captive pin									
7	1494	8	41	16	12	1000	3000	0.078		
	1495	10	51	20	16	1520	5000	0.146		
Al	len he	ad pin								
8	1394	8	41	16	12	1000	3000	0.076		
	1395	10	51	20	16	1520	5000	0.142		

## Captive pin shackles

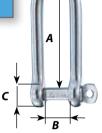
« patented »

### **Benefits**

- ▶ Self-locking pin cannot be dropped when opened
- No risk of losing the pinWide range to meet all needs
- ▶ Forged in 316L stainless steel
- Designed and made in France









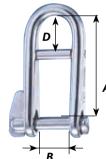




« patented »







« patented »





### |Ti shackles



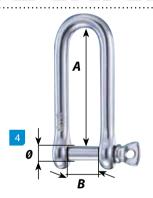




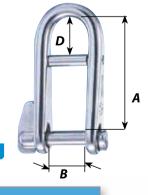
1 titanium shackle is up to 45% lighter than a standard 316L shackle.

### IHR shackles











1 shackle forged in HR 17.4 Ph stainless steel can be up to 60% more resistant than a shackle in 316L stainless steel.

### **TITANIUM SHACKLES (Ti)**



### **Benefits**

- ▶ Forged in Titanium TA6V
- ▶ Important weight saving: 40%
- Available in D and bow models
- ▶ Designed and made in France

N°	Part #	Ø mm	A mm	B mm	WL Kg	BL Kg	Weight Kg			
Ti	Titanium shackles									
1	51203	6	20	12	880	1700	0.014			
	51204	8	26	16	1440	3000	0.034			
Ti	tanium l	bow shack	cles							
2	51245	10	47	20	2160	6000	0.082			
	51246	12	55	24	2800	8000	0.136			

### HIGH RESISTANCE SHACKLES



### Benefits

- Forged in HR (High resistance) stainless steel
- ▶ Designed and made in France
- ▶ Outstanding working loads
- Available in D, long, bow and key pin models

0.123

Part #	Ø mm	A mm	B mn					Weight Kg	
R «D» sh	ackles								
11203	6	20	12	1	040	230	00	0.024	
11204	8	26	16	1	760	410	00	0.052	
11205	10	33	20	2	640	600	00	0.102	
11206	12	39	24	3	600	100	00	0.192	
11207	14	49	28	5	120	120	00	0.304	
11208	16	56	32	6	800	190	00	0.464	
11209	20	70	40	8	800	280	00	0.860	
P long cl	nackles								
		70	20		640	600	20	0.164	
11213	10	70	20	2	040	000	J0	0.104	
R bow sh	nackles								
11244	8	37	16	1	760	410	00	0.068	
11245	10	47	20	2	2640		00	0.136	
11246	12	55	24	3	600	100	00	0.224	
11240	14	63	28	5	120	120	00	0.364	
11247	16	70	32	6	800	190	00	0.526	
11248	20	80	40	8	800	280	00	1.011	
11249	24	108	48	12	2800	350	00	1.706	
Part #	Ø	Α	В	D	WL		BL	Weight	
	mm	mm	mm	mm	Kg		Kg	Kg	
HR Key pin shackles with bar									
R Key piı	n shackle:	s with ba	ır						
<b>R Key pi</b> i 91432	n shackle: 5	37	13	12	480		1500	0.031	
	R «D» sh 11203 11204 11205 11206 11207 11208 11209 R long sl 11215 R bow sh 11244 11245 11246 11240 11247 11248 11249 Part #	mm  R «D» shackles  11203 6  11204 8  11205 10  11206 12  11207 14  11208 16  11209 20  R long shackles  11215 10  R bow shackles  11244 8  11245 10  11246 12  11240 14  11247 16  11248 20  11249 24  Part # Ø mm	mm	mm	mm   mm   mm   mm   mm   mm   mm   m	mm   mm   mm   Kg   R «D» shackles   11203   6	mm   mm   mm   kg   kg   kg   R «D» shackles	mm   mm   mm   kg   kg   R	

WL: working load - BL: breaking load

### THE SOFT SHACKLE FOR ALL!



### **Benefits**

- ▶No knowledge of ropework required
- ▶Replaces shackles and snap hooks
- ▶Easy to fit and easy to open
- ▶Remarkably light and strong
- ▶Re-usable
- ▶3 sizes available
- Materials: stainless steel and Dyneema SK 78

N°	Part #	B.L. Kg	0 loop mm	Loop Lenght mm	Weight Kg				
So	ftLink 3.	.0 - soft sh	ackle						
1	21223	2400	3	70	0.012				
So	ftLink 4	.0 - soft sh	ackle						
2	21224	3300	4	80	0.023				
So	SoftLink 5.0 - soft shackle								
3	21225	5000	5	90	0.047				



For the same strength, SoftLink is 4 or 5 times lighter than a 316L stainless steel shackle.







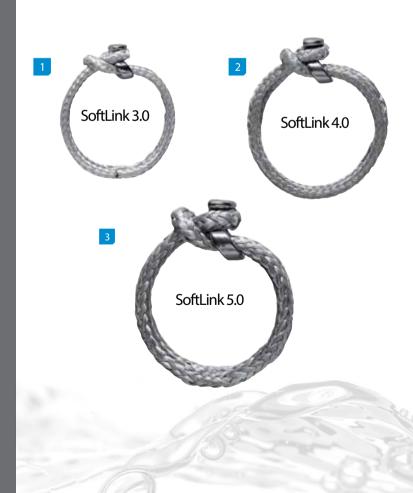


## |SoftLink |Soft Shackle

SoftLink is a soft shackle developed by Wichard for recreational sailors looking for performance and ease of use. Thanks to its stainless steel connector, SoftLink can be used without any particular knowledge of ropework. It can be fitted and removed with ease, after being tensioned. SoftLink easily replaces all types of shackles and snap hooks while offering lightness, strength and, therefore, great performance. Even if the loop has to be changed, the stainless steel connector can be re-used.



Download the Softlink video









### **I A COMPLETE RANGE OF BLOCKS:**

Our blocks, wholly designed and manufactured in our factories, feature high-performance materials and are subjected to rigorous manufacturing and quality assurance processes. For whatever type of block, ball bearing, plain bearing, the shape of the sheave suits all modern ropes. They are also very easy to install thanks to the various types of fastening options.

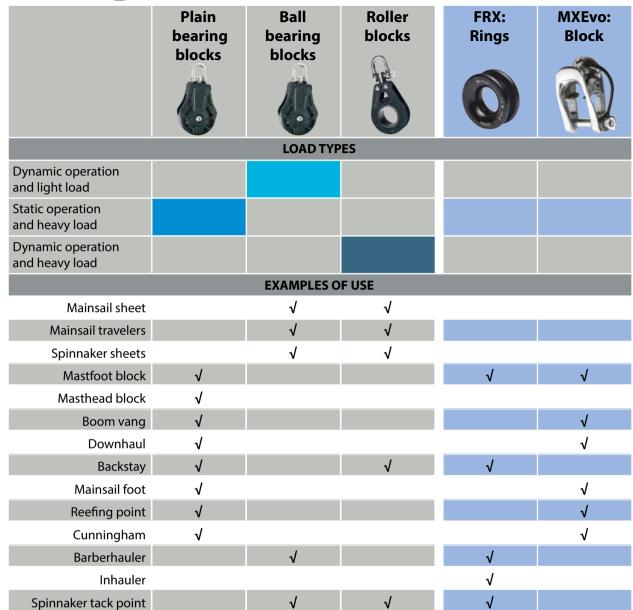
### I WICHARD OFFERS A COMPREHENSIVE RANGE OF BLOCKS INCLUDING:

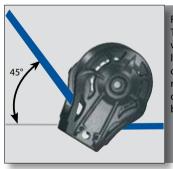
- **▶** Rings
- ▶ Ball bearing and plain bearing blocks
- ▶ Ratchet blocks
- ▶ Snatch blocks
- ▶ Stainless steel blocks
- ▶ Deck accessories
- ▶ Roller blocks



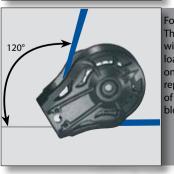


### |Selection guide - blocks





For a 45° angle: The load factor will be 75%. A load of 100 Kg on the line will represent a load of 75 Kg on the block



For a 120° angle: The load factor will be 180%. A load of 100 Kg on the line will represent a load of 180 Kg on the block.



180°

For a 90° angle: The load factor will be 140%. A load of 100 Kg on the line will represent a load of 140 Kg on the block.

Deflection angle	Load factor
180°	200%
160°	197%
140°	187%
120°	180%
100°	153%
90°	140%
80°	129%
60°	100%
45°	75%
20°	35%
0°	0%



### FRX:RINGS





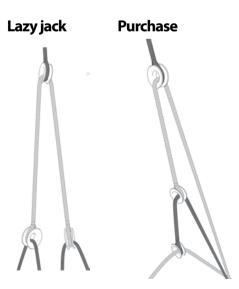
### **Efficient and light**

FRX Wichard thimbles are efficient, light and reliable. Very strong, they can be used for heavy loads and semi-static lines.

FRX thimbles are designed to make your lines run smoothly with minimum wear. They are hard anodized (50 microns) for a longer lifespan.

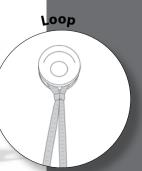
### **Applications**

Mast-foot block, barber-hauler, inhauler, loop, thimble, lazy jack, running backstay, tackle, and more.







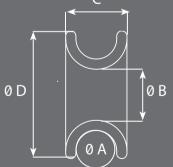




### **Benefits**

- ▶5 sizes available
- ▶ Very strong
- ▶Very light
- Diverse applications: mast-foot block, inhauler, barber-hauler and more.
- ▶ Suitable for all types of rope (Dyneema®, etc.)
- Materials: hard anodized aluminium for greater lifespan

N°	Part #	ØA mm	ØB mm	C mm	Ø D mm	W.L Kg	Weight Kg				
FRX6											
1	20705	5.5	7	9	18	400	0.002				
FRX10											
2	21008	8	10	12	25	800	0.005				
FRX15											
3	21510	10	15	15	35	1600	0.012				
FRX20											
4	22014	14	20	21	47	3200	0.031				
FRX25											
5	22517	17	25	25	60	5000	0.057				



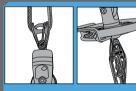


### **Benefits**

#### ▶2 versions available

- •Captive pin version: 3 models
- •Allen head pin version: 3 models
- ▶ Perfect for taking on the heavy loads of flying sail furler terminals and 2:1 purchase mainsail halyards, mastfoot deflection
- ▶ Becket feature for purchase
- ▶ Outstanding working and breaking loads
- ▶ Optimised dimensions and weight
- ▶ Easy to install and use
- ▶ Reliable and maintenance free
- ▶ Helps to prevent excessive rope wear





### **MXEvo: captive pin version**

This version is used for static lines:

- Flying sail furler terminal -
- 2:1 mainsail halyard







### MXEvo: allen head pin version

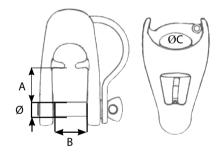
This version of the MXEvo has been specifically designed for mast-foot fairleads, running backstays and all other applications that are not handled frequently.

## IMXEvo: BLOCK



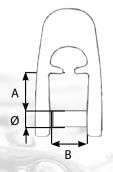
### MXEVO: Captive pin version

N°	Part # Captive pin version	Length mm	Width mm	Ø mm	A mm	B mm	Ø C mm	W.L. Kg	B.L. Kg	Weight Kg	
N	IXEvo dia 6	mm : ca	ptive pi	n - for	max r	ope si	ze 8 m	m			
1	11603	53	26	6	18	13	7	1040	2300	0,053	
MXEvo dia 8 mm : captive pin - for max rope size 10 mm											
2	11604	62	36	8	18	18	9	1760	4100	0,109	
N	MXEvo dia 10 mm: captive pin - for max rope size 14 mm										
3	11605	77	44	10	22	22	11	2640	6000	0.222	



MXEVO: Allen head pin version

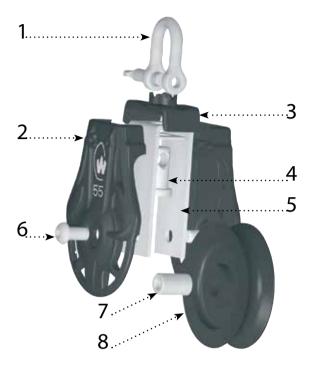
Allen nead pin version										
N°	Part # Allen head pin version	Length mm	Width mm	Ø mm	A mm	B mm	Ø C mm	W.L. Kg	B.L. Kg	Weight Kg
MXEvo dia 6 mm : allen head pin - for max rope size 8 mm										
4	11613	53	26	6	18	13	7	720	1700	0,048
MXEvo dia 8 mm : allen head pin - for max rope size 10 mm										
5	11614	62	36	8	18	18	9	1300	3500	0,100
MXEvo dia 10 mm: allen head pin - for max rope size 14 mm										
6	11615	77	44	10	22	22	11	1760	5000	0,204



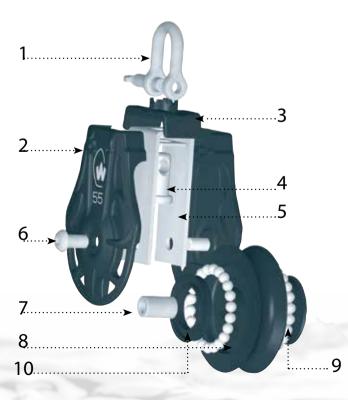


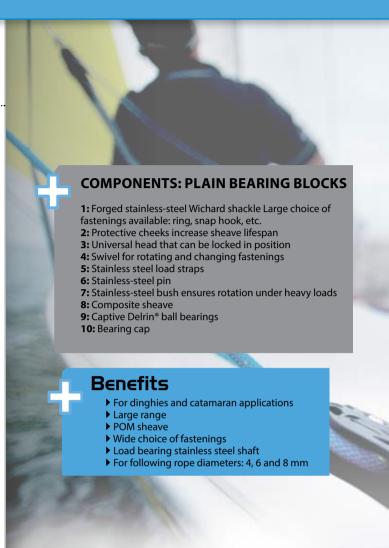


## Plain bearing



## Ball bearing







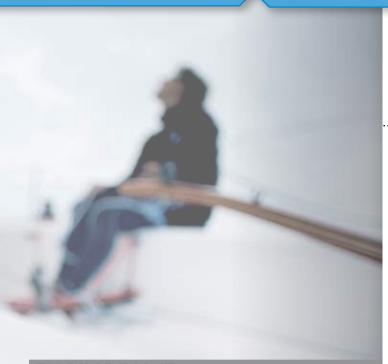
### **COMPONENTS: BALL BEARING BLOCKS**

- 1: Forged stainless-steel Wichard shackle Large choice of fastenings available: ring, snap hook, etc.
- 2: Protective cheeks increase sheave lifespan
- 3: Universal head that can be locked in position 4: Swivel for rotating and changing fastenings
- 5: Stainless steel load straps
- 6: Stainless-steel pin
  7: Stainless-steel bush ensures rotation under heavy loads
- 8: Composite sheave
- 9: Captive Delrin® ball bearings
- 10: Bearing cap



### **Benefits**

- For dinghies and small boats
- ▶ Large range
- Available in single, double and triple models
- ▶ Delrin® ball bearings
- ▶ POM sheave
- ▶ Wide choice of fastenings
- Load bearing stainless steel shaft
- For following rope diameters: 4, 6 and 8 mm



# Blocks plain bearing and ball bearing

### SHEAVE DIA 12 (stainless steel sheave)

mini block - rope size 4 mm

N°	Part plain bear.		Height mm		Thick.			Weight Kg
1	60600	Fixed eye	33	16	11	120	300	0.011

### RÉA 18

3	ro	pe sızı	2 4 to	6 mm						
٦	N°	Part plain bear.	Part ball bear.	Description	Height mm	Width	Thick.	W.L. Kg	B.L. Kg	Weight Kg
	Si	ngle b	locks							
Ì	3	60113	70113	Fixed eye	35	18	14	240	500	0.011
	4	60114	70114	Fixed eye with becket	45	18	14	240	500	0.015
	6	60120	70120	Cheek block	36	18	14	240	500	0.010
	D	ouble	blocks	i						
ı	8	60213	70213	Fixed eye	45	18	28	320	700	0.041
	9	60214	70214	Fixed eye with becket	55	18	28	320	700	0.044
	Tr	iple b	locks							
	10	60313	70313	Fixed eye	45	18	42	480	900	0.055
	11	60314	70314	Fixed eye with becket	55	18	42	480	900	0.057

### RÉA 25

rope size 6 to 8 mm

N°	Part plain bear.	Part ball bear.	Description	Height mm	Width mm	Thick.	W.L. Kg	B.L. Kg	Weight Kg
Si	ingle b	locks							
2	61105	71105	Swivel head	64	25	18	200	500	0.027
3	61113	71113	113 Fixed eye		25	18	320	600	0.019
4	61114	71114	Fixed eye with becket	62	25	18	320	600	0.024
5	61353	71353	Opposite in line	75	25	18	320	600	0.037
6	61120	71120	Cheek block	52	25	18	320	600	0.021
7	61121	71121	Upright lead block	39	32	42	320	600	0.032
D	ouble	blocks	i						
8	61213	71213	Fixed eye	64	25	34	400	800	0.059
9	61214	71214	Fixed eye with becket	78	25	34	400	800	0.062
Triple blocks									
10	61313	71313	Fixed eye	60	25	51	480	1000	0.081
11	61314	71314	Fixed eye with becket	74	25	51	480	1000	0.087

















### ocks bearing

**SHEAVE DIA 35** 



































13





### **Benefits**

- Large range
  Universal head allows wide choice of fastenings
  High resistance under high loads
  Modern design
  Sheave protected by cheeks
  Load bearing stainless steel shaft
  Adjustable cam cleats
  For following rope diameters: 8, 9, 10, 12 and 14 mm

- and 14 mm

rope size 8 to 9 mm. foraed shackle 5 mm

10	Tope size 6 to 9 min, forged shackle 3 min												
N°	Part plain bear.	Part ball bear.	Description	Height mm	Width mm	Thick. mm	W.L. Kg	B.L. Kg	Weight Kg				
Si	ingle b	locks											
1	62105	72105	Swivel head	84	37	23	320	900	0.071				
2	62106	72106	Swivel head with becket	101	37	23	320	900	0.079				
3	62108	72108	Swivel head with becket and cam	101	64	45	200	900	0.118				
4	62117	72117	Fixed head with clevis	72	37	23	320	500	0.055				
5	62113	72113	Fixed eye	65	37	23	320	900	0.051				
6	62120	72120	Cheek block, bolts 6 mm dia	52	37	20	320	900	0.044				
9	62121	72121	Upright block	42	46	40	320	900	0.053				
10	62122		Reefing block	60	58	40	320	900	0.103				
7	62131	72131	Swivel snap hook	102	37	23	200	400	0.076				
D	ouble	blocks		_	_		_	_					
11	62205	72205	Swivel head	84	37	40	480	900	0.119				
12	62206	72206	Swivel head with becket	101	37	40	480	900	0.128				
Ti	riple b	locks											
14	62305	72305	Swivel head	84	37	58	560	1000	0.149				
15	62306	72306	Swivel head with becket	101	37	58	560	1000	0.157				
16	62308	72308	Swivel head with becket and cam	101	66	60	200	1000	0.208				
Fi	iddle b	locks											
17	62405	72405	Swivel head	107	37	23	320	900	0.086				

124

900 0.138

200

WL: working load - BL: breaking load

**19** 62408 72408

Swivel head with becket and cam



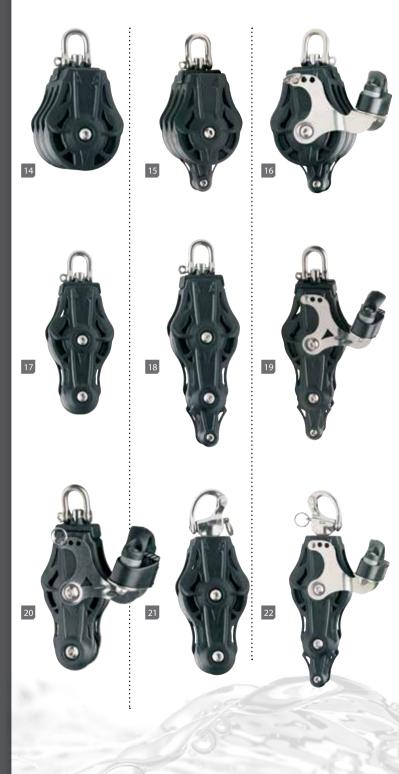
### **SHEAVE DIA 45**

rope size 10 mm, forged shackle 5 mm

N°	Part plain bear.	Part ball bear.	Description	Height mm	Width mm	Thick.	W.L. Kg	B.L. Kg	Weight Kg
-				1111111	111111	111111	Ng	Rg	Ng
Si	ngle b	locks							
1	63105	73105	Swivel head	97	49	26	400	900	0.105
2	63106	73106	Swivel head with becket	117	49	26	400	900	0.120
3	63108	73108	Swivel head with becket and cam	117	86	61	280	900	0.211
4	63117	73117	Fixed head with clevis	87	49	26	400	700	0.089
5	63113	73113	Fixed eye	78	49	26	400	900	0.083
8	63118	73118	Webbing D ring	93	49	26	400	900	0.108
6	63120	73120	Cheek block, bolts 6 mm dia	65	49	23	400	900	0.073
D	ouble		ocks						
11	63205	73205	Swivel head	97	49	46	480	1000	0.184
12	63206	73206	Swivel head with becket	117	49	46	480	1000	0.199
13	63207	73207	Swivel snap shackle	110	49	46	480	1000	0,208
Tr	iple bl	ocks							
14	63305	73305	Swivel head	97	49	67	560	1000	0.243
15	63306	73306	Swivel head with becket	117	49	67	560	1000	0.257
16	63308	73308	Swivel head with becket and cam	117	87	72	360	1000	0.357
Fi	ddle b	locks			_	_		_	
17	63405	73405	Swivel head	130	49	26	560	1000	0.147
18	63406	73406	Swivel head with becket	150	49	26	560	1000	0.156
20	63407	73407	Swivel head with cam	130	86	61	360	1000	0.240
19	63408	73408	Swivel head with becket and cam	150	86	61	360	1000	0.249
21	63435	73435	Swivel snap shackle	143	49	26	560	1000	0.171
22	63438	73438	Swivelling snap shackle with becket and cam	163	86	61	360	1000	0.273

# Blocks plain bearing and ball bearing

**SHEAVE DIA 45** 





# Blocks plain bearing and ball bearing

SHEAVE DIA 55

























Sheave dia 55



Sheave dia 70







SHEAVE DIA 55
---------------

rope size 12 mm, forged shackle 6 mm

, , , , , , , , , , , , , , , , , , , ,												
N°	Part plainbear.	Part ball bear.	Description	Height mm	Width mm	Thick. mm	W.L. Kg	B.L. Kg	Weight Kg			
Si	ngle b	locks										
1	64105	74105	Swivel head	119	63	29	720	1500	0.179			
2	64106	74106	Swivel head with becket	144	63	29	720	1500	0.200			
3	64108	74108	Swivel head with becket and cam	144	95	61	480	1500	0.302			
8	64109	74109	Swivel with clevis	113	63	29	640	1000	0.159			
9	64110	74110	Swivel with clevis and becket	138	63	29	640	1000	0.185			
4	64117	74117	Fixed head with clevis	107	63	29	720	1200	0.157			
5	64113	74113	Fixed eye	98	63	29	720	1500	0.138			
6	64118	74118	Webbing D ring	110	63	29	720	1500	0.166			
7	64130	74130	Swivelling snap shackle	126	63	29	720	1500	0.184			
10	0 64120 74120 Cheek block, bolts 6 mm dia				63	26	720	1500	0.123			
D	ouble	blocks	i									
11	64205	74205	Swivel head	119	63	52	800	1500	0.315			
12	64206	74206	Swivel head with becket	144	63	52	800	1500	0.337			
Tr	iple bl	locks										
13	64305	74305	Swivel head	119	63	75	880	1500	0.410			
14	64306	74306	Swivel head with becket	144	63	75	880	1500	0.429			
15	64308	74308	Swivel head with becket and cam	144	97	81	480	1500	0.550			
Fi	ddle b	locks										
16	64405	74405	Swivel head	160	63	29	800	1500	0.247			
17	64406	74406	Swivel head with becket	186	63	29	800	1500	0.270			
18	64408	74408	Swivel head with becket and cam	186	95	61	480	1500	0.374			
19	64435	74435	Swivelling snap shackle	167	63	29	800	1500	0.253			

193

61 480 1500 0.380

WL: working load - BL: breaking load

**20** 64438 74438

Swivelling snap shackle with becket and cam



### **SHEAVE DIA 70**

rope size 14 mm, forged shackle 8 mm

					_	-	-		
N°	Part	Part	Description	Height	Width	Thick.	W.L.	B.L.	Weight
	plain bear.	ball bear.		mm	mm	mm	Kg	Kg	Kg
Si	ingle b	olocks							
1	65105	75105	Swivel head	153	80	39	1200	2700	0.367
2	65106	75106	Swivel head with becket	183	80	39	1200	2700	0.416
3	65108	75108	Swivel head with becket and cam	183	120	80	480	2700	0.599
8	65109	75109	Swivel with clevis	137	80	39	800	1500	0.357
4	65117	75117	Fixed head with clevis	132	80	39	1200	2000	0.320
7	65130	75130	Swivelling snap shackle	162	80	39	1200	2700	0.395
10	65120	75120	Cheek block, bolts 8 mm dia	103	80	34	1200	2700	0.294
Double blocks									
11	65205	75205	Swivel head	153	80	68	1440	2700	0.653
12	65206	75206	Swivel head with becket	183	80	68	1440	2700	0.714
Ti	riple b	locks							
13	65305	75305	Swivel head	153	80	97	1600	2700	0.895
14	65306	75306	Swivel head with becket	183	80	97	1600	2700	0.941
15	65308	75308	Swivel head with becket and cam	183	123	101	480	2700	1.139
Fi	iddle b	olocks							
16	65405	75405	Swivel head	204	80	39	1440	2700	0.518
17	65406	75406	Swivel head with becket	236	80	39	1440	2700	0.570
18	65408	75408	Swivel head with becket and cam	236	120	80	480	2700	0.748
19	65435	75435	Swivelling snap shackle	213	80	39	1440	2700	0.570
20	65438	75438	Swivelling snap shackle with	245	120	80	480	2700	0.790

# Blocks plain bearing and ball bearing sheave DIA 70



















### Roller Blocks\*

SHEAVE 30, 40, 50

### Wichard roller blocks

Wichard roller bearing blocks are designed to be simple, reliable and long-lasting. They are ideal for dynamic running rigging that is subject to heavy loads (mainsail tackle, mastfoot block, etc.).































### Components: roller bearing blocks

- 1: Forged stainless-steel shackle (HR s-steel for HR models).
- 2: Stainless-steel swivel head
- 3: 316L stainless-steel bolt
- **4:** Aluminium cheeks (hard coat anodization)
- **5:** Delrin® roller bearings (Torlon® for HR models).
- **6:** Centring bush for lateral loads
- 7: Stainless-steel circlip
- **8:** Hard anodized aluminium sheave (+ Teflon for HR models).
- **9:** Hard anodized aluminium hollow pin (+ Teflon for HR models).

N°	Part #	Description	Height mm	Width mm	Thick mm	W.L. Kg	B.L. Kg	Weight Kg
Si	ngle b	locks: sheave 30 for rope s	ize 6 t	o 10 n	nm - s	hackl	e 4 m	m
1	90105	Swivel head	63	31	20	144	700	0,048
2	90106	Swivel head with becket	80	31	20	144	700	0,054
Si	ngle b	locks: sheave 40 for rope s	ize 8 t	o 10 n	nm - s	hackl	e 5 m	m
1		Swivel head	80	42	27	320	900	0,104
2	93106	Swivel head with becket	96	42	27	320	900	0,100
4	93120	Cheeks block - bolts M5	67	42	25	320	900	0,106
D	ouble	block: sheave 40 for rope s	ize 8 t	o 10 r	nm - s	hackl	e 5 m	m
5	93205	Swivel head	80	42	47	320	1000	0,128
Si	ngle b	locks: sheave 50 for rope s	ize 8 t	o 10 n	nm - s	hackl	e 6 m	m
1	94105	Swivel head	93	52	28	480	1500	0,138
2	94106	Swivel head with becket	113	52	28	480	1500	0,124
3	94108	Swivel head with becket and cam	113	102	60	480	1500	0,248
4	94120	Cheeks block - bolts M5	78	52	25	480	1500	0,152
D	ouble	blocks: sheave 50 for rope	size 8	to 10	mm -	shack	le 6 n	nm
5	94205	Swivel head	93	52	48	640	1600	0,210
6	94206	Swivel head with becket	113	52	48	640	1600	0,226
Ti	iple bl	ocks: sheave 50 for rope si	ze 8 te	o 10 m	ım - sl	nackle	e 6 mr	n
7	94305	Swivel head	93	52	68	640	1600	0,284
8	94306	Swivel head with becket	113	52	68	640	1600	0,292
9	94307	Swivel head and cam	93	102	60	480	1600	0,380
10	94308	Swivel head with becket and cam	113	102	60	480	1600	0,392
Fi	ddle b	locks: sheave 50 for rope s	ize 8 t	o 10 n	nm - s	hackl	e 6 m	m
11	94405	Swivel head	130	52	28	480	1500	0,174
12	94406	Swivel head with becket	150	52	28	480	1500	0,182
13	94407	Swivel head and cam	130	102	60	480	1500	0,278
14	94408	Swivel head with becket and cam	150	102	60	480	1500	0,284

\*: Specific parts: availability upon request

### Roller Blocks\* SHEAVE 65, 80

N°	Part #	Description	Height mm	Width mm	Thick mm	W.L. Kg	B.L Kg	Weight Kg
Si	ngle b	locks - sheave 65 for rope	size 8	to 12	mm - s	shack	le 8 m	m
1	95105	Swivel head	112	68	30	600	1800	0,218
2	95106	Swivel head with becket	134	68	30	600	1800	0,232
3		Swivel head with becket and cam	134	118	60	480	1800	0,338
4	95120	Cheeks block - bolts M5	94	68	26	600	1800	0,200
C	ouble	blocks - sheave 65 for rop	e size	8 to 1	2 mm	- sha	ckle 8	mm
5		Swivel head	112	68	50	720	1800	0,278
6	95206	Swivel head with becket	134	68	50	720	1800	0,282
7		Cheeks block - bolts M5	94	68	48	520	1800	0,314
Tı	iple b	locks - sheave 65 for rope s	size 8 t	to 12 r	nm - s	hackl	e 8 m	m
8	95305	Swivel head	112	68	70	720	1800	
9		Swivel head with becket	134	68	70	720	1800	0,422
10	95307	Swivel head and cam	112	118	60	480	1800	0,514
11		Swivel head with becket and cam	134	118	60	480	1800	0,534
		locks - sheave 65 for rope						
12	95405	Swivel head	158	68	30	600	1800	0,268
13	95406	Swivel head with becket	180	68	30	600	1800	0,280
14	95310	Swivel head triple sheave	158	68	70	600	1800	0,466
15	95407	Swivel head and cam	158	118	60	480	1800	0,374
16	95408	Swivel head with becket and cam	180	118	60	480	1800	0,382
S	ingle k	olocks - sheave 80 for rope			mm -	shack		
1		Swivel head	128	83	27	1000	2050	0,280
2	96106	Swivel head with becket	154	83	27	1000	2050	0,294
4		Cheeks block - bolts M5	110	83	25	1000	2050	
0	ouble	blocks - sheave 80 for rop	e size	8 to 1	2 mm	- sha	ckle 8	mm
5	96205	Swivel head	128	83	47	720	2050	0,374
7	96220	Cheeks block - bolts M5	110	83	44	800	2050	0,430





### HR Roller Blocks\*

SHEAVE 65, 80, 100, 125, 160, 200, 240











N°	Part #	Description	Ø shackle	Height	Width	Thick.	W.L.	B.L.	Weight
IN-	Part #	Description	mm	mm	mm	mm	Kg	Kg	Kg
Si	ngle b	locks: aluminium sheave	65 - rope	size 8	3 to 12	mm			
1	41105	Swivel head	6	106	67	31	1040	2700	0,198
2	41106	Swivel head with becket	8	132	67	31	1760	4200	0,280
D	ouble	block: aluminium sheave	65 - rop	e size	8 to 1	2 mm			
4		Swivel head	10	125	67	54	2640	7000	0,478
Si	ngle b	locks: aluminium sheave 8	30 - rope	size 1	2 to 1	4 mm			
1	42105	Swivel head	8	133	83	35	1680	4200	0,396
2	42106	Swivel head with becket	10	165	83	35	2640	7000	0,484
3	42120	Cheek block - bolts M5		112	83	33	2240	7000	
			-					7000	0,488
L	ouble	blocks: aluminium sheave	80 - ro	pe size	e 12 to	14 m	m		
4	42205	Swivel head	12	155	83	57	3600	9500	0,868
5	42220	Cheek block - bolts M8	-	112	83	55	2240	7000	0,728
S	ingle b	locks: aluminium sheave	100 - roj	oe size	16to	18 mı	m		
1	43105	Swivel head	10	165	104	39	2640	7000	0,692
2	43106	Swivel head with becket	12	200	104	39	3600	9500	0,904
3	43120	Cheek block - bolts M10	-	142	104	36	3200	9500	0,900
С	ouble	blocks: aluminium sheave	100 - re	ope si:	ze 16	to 18 i	nm		
4	43205	Swivel head	14	195	104	68	5120	13000	1,648
5	43220	Cheek block - bolts M10	-	142	104	65	3200	7500	1,386
S	inale b	olocks: aluminium sheave	125 - roi	oe size	18 to	20 m	m		
1	44105	Swivel head	12	204	130	45	3600	9500	1,314
2	44106	Swivel head with becket	14	250	130	45	5120	13000	1,514
3	44120	Cheek block - bolts M12	_	177	130	42	4240	13000	1,464
		block: aluminium sheave	125 40					.5000	1,101
5		Cheek block - bolts M12	123-10	pe 312 177	130	73	4240	13000	2 240
		olocks: aluminium sheave	160 - ro					13000	2,240
1	45105	Swivel head	14	255	165	51	5120	13000	2.768
2	45106	Swivel head with becket	16	315	165	51	6800	18000	2.940
3	45120	Cheek block - bolts M16	-	223	165	49	6400	18000	2.962
D	ouble	block: aluminium sheave	160 - roj	oe size	20 to	24 m	m		
5		Cheek block - bolts M16	-	223	165	84	6400	18000	4.516
S	ingle b	locks: aluminium sheave	200 - rop	oe size	24 to	26 m	m		
1	46105	Swivel head	20	325	209	61		25000	
2	46106	Swivel head with becket	20	410	209	61	8800	25000	
3	46120	Cheek block - bolts M16	-	280	209	58	8980	25000	4.722
		block: aluminium sheave	200 - roj					2525	7.75
5		Cheek block - bolts M16	-	280	209	99		25000	7.752
		locks: aluminium sheave							
1	47105	Swivel head	24	380	245	69		32000	
3	47120	Cheek block - bolts M20	240	325	240	65		32000	0.994
5	47220	block: aluminium sheave Cheek block - bolts M20	240 - ro	325	240		<b>m</b> 13600	32000	10.050
3	4/220	CHEEK DIOCK - DOITS IVIZU		323	240	130	13000	32000	10.950

# |Ratchet



### **Benefits**

- Different models available
- Anodised aluminium sheave
- ▶ Delrin® ball bearings
- ▶ Engagement and release by the slide button

### **SHEAVE DIA 55**

rope size 12 mm, forged shackle 6 mm

N°	Part #	Description	Height mm	Width mm	Thick.	W.L. Kg	B.L. Kg	Weight Kg
Si	ingle b	locks						
1	84101	Swivel head	125	59	36	720	1500	0.184
2	84103	Swivel head with becket and cam	147	105	36	480	1500	0.329
Ti	riple b	locks						
3	84303	Swivel head with becket and cam	147	105	80	480	1500	0.576







### Snatch blocks

### **SNATCH BLOCKS**

Fitted to a pad eye or toe rail Wichard snatch blocks are highly useful for taking up a rope that is already reeved. The elastomer moulded cheeks make them shock and scratch-resistant. Each one is fitted with a snap shackle which allows them to move freely in any position. With its forged high-resistance stainless steel arm, the closing system is very strong. It can be opened very easily by pulling on the central plunger pin, as you would do with a normal snap shackle.

N°	Part #	Description	Height mm	Width mm	Thick.	W.L. Kg	B.L. Kg	Weight Kg
Sı	Snatch blocks							
1	34500	Max. 12 mm diam. rope	145	59	43	720	1300	0.254
1	35500	Max. 18 mm diam. rope	155	59	49	1200	2500	0.414





WL: working load - BL: breaking load

wichard.com 44| 45



## tainless steel





### **Benefits**

- Large range covering all applications
   Lightness, reliability and good performance
   Wide choice of fastenings
   Perfect for dinghies and cruising yachts

N°	Part	Description	Height	Width	Thick.	W.L.	B.L.	Weight	
	#		mm	mm	mm	Kg	Kg	Kg	
SI	heave	dia 18 mm - rope size 6 to 8	mm						
1	30018	Single block	45	21	11	200	500	0.016	
2	30118	Single with becket	57	31	11	200	500	0.022	
SI	Sheave dia 19 mm - rope size 6 mm								
3	30019	Single with eye	38	19	8	200	500	0.012	
,	30019	Single with eye	50	13	0	200	300	0.012	
SI	heave	dia 24 mm - rope size 4 to 6	mm						
4	30024	Single with shackle	56	25	15	200	500	0.021	
5	31124	Single block	42	25	15	200	500	0.014	
6	30124	Single with becket and shackle	70	25	15	200	500	0.026	
7	31224	Single with becket	56	25	15	200	500	0.014	
8	30224	Single with V cleat, becket and shackle	70	33	15	200	500	0.034	
9	30324	Single with V cleat and becket	56	33	15	200	500	0.028	
10	30424	Double with shackle	56	25	19	200	500	0.030	
11	30524	Double with becket and shackle	70	25	19	200	500	0.037	
12	30624	Double with V cleat, becket and shackle	70	33	19	200	500	0.047	
13	30724	Triple with shackle	56	25	27	200	500	0.040	
14	30824	Triple with becket and shackle	70	25	27	200	500	0.060	
15	30924	Triple with V cleat, becket and shackle	70	33	27	200	500	0.060	
SI	neave	dia 25 mm - rope size 8 to 1	0mm						
16	30025	For 25 mm stanchion	65	53	21	280	400	0.049	
17	30125	For 25 mm stanchion, pivoting	95	53	21	280	400	0.070	
18	30425	Swivel with clevis	59	25	21	200	300	0.036	
Sı		hackle blocks							
19	30225	Flat 25 mm dia sheave	50	50	32	240	600	0.036	
	30325	Curved 25 mm dia sheave	50	50	40	240	600	0.036	
20	30136	Removable 36 mm dia sheave	36	65	58	800	2000	0.168	
W	ire blo	ock with aluminium sheave							
21	31024	24 mm dia sheave, for 3 mm wire	42	25	11	140	350	0.019	
	30036	36 mm dia sheave, for 4 mm wire	66	39	11	200	500	0.050	
	30050	50 mm dia sheave, for 5 mm wire	75	50	12	320	800	0.084	
	30070	70 mm dia sheave, for 7 mm wire	105	70	17	1200	2500	0.222	
22	30071	70 mm dia sheave, for 7 mm wire	150	70	17	1200	1790	0.298	
C		dia 45 mana 2000 aira 40							
31		dia 45 mm - rope size 10 mi	m						
22	_	tep blocks sheave dia 45 mm	75	FO	24	F60	1000	0.076	
23	30045 30145	Single with clevis pin Swivel with clevis	75 105	50	24 24	560 560	1000	0.076	
24		acht blocks (curved) sheave dia 5		50	24	300	1000	0.104	
25	31045	Single	85	50	24	320	800	0.104	
26			108	50	24	320	800	0.104	
20	31145	Single with becket	108	50	24	320	800	0.106	





WL: working load - BL: breaking load

N°	Part	Description							Weight
	#								Kg
	wivel b								
1	30101	Mainsheet swivel ba		- rope	e size 1	2 mi	m		0.308
2	30103	Swivel cleat base - ro							0.160
3	30105	Swivel cleat base - rop	e size 12 mm					_	0.178
N°	Part #	For rope Ø / mm		Fas	tener s	рас	ing mm		Weight Kg
Ca	am cle	ats							
4	30006	8					26		0.017
	30012	12					38		0.044
	30016	16					52		0.068
C	Stand up springs								
5	32530		hout collar for ch	2021/0	c dia 10	o o. n	Emm		
3	32540	Stand up spring with							
	32550		Stand up spring with collar for sheaves dia 35 & 45 mm Stand up spring with collar for sheaves dia 55 & 70 mm						
	32330	Stand up spring with	T Collai 101 Silea	ves un	אטכנה	7011		_	_
N°	Part	Description			For		Clevis	Ø Pin	Weight
	#			k	olocks		Ømm	mm	Kg
		daptor							
6	32570	Swivel, clevis adapto			ive 358		8	5	0.024
	32571	Swivel, clevis adapto	or	Sh	eave 5	5	10	6	0.023
М	ast ste	ep adaptor							
7	32580	2580 Mast step adpator for Part # 63117 & 73117 - 0 drilling: 5.2 mm 0.034							
	32581					0.042			
N°	Dout					V au			
IN	Part #	Height mm	Fastener spacing mm		For ro			Weight	ĸg
Si	addles	stainless steel							
8	30026	11	26				8	0.0	003
ŭ	30038	15	38				12		10
	30052	21	52					16	
			52					0.0	
Sa	addles	POM							
9	30126	14,5	26				8	0.0	002
	30138	19	38				12	0.0	007
_	30152	22,5	52				16	0.0	009
N°	Part #	Description			neave nm	Ti	nickness mm	Ø Pin mm	Ø rope mm
PI	ain be	aring sheaves							
	60081	Sheave			18		8,5	6	4
	60082	Sheave		- 2	25		10.5	6	6
	60083	Sheave			35		11,5	10	8
	60084	Sheave		4	45		13	10	10
	60085	Sheave			55		15	10	12
	60086	Sheave		7	70		19	14	14
	60087	Sheave		8	30		22	17	18
c i		with continue b	alle						
		with captive b	alis		<b>\</b> F		11.5	10	0
11	80083	Captive balls			35		11,5	10	8
	80084	Captive balls			45 		13	10	10
	80085				55		15	10	12
	80086	Captive balls			70		19	14	14
	88008	Captive balls			32		15	10	10
	80089	Captive balls		4	12		19	14	18

### **Deck** accessories

For sport boats or dinghies, swivel bases enable the boat's fittings to be optimised. They are manufactured according to Wichard tradition of quality, and form part of the original equipment on many modern designs. Their dimensions and the adjustable orientation of the cam cleats, mean they can be installed on your boat without any modifications.





WL: working load - BL: breaking load



### |Boom brake Gyb'Easy



Gybing remains one of the most challenging operations on a sailing boat even for experienced sailors and can possibly generate injuries and material damage.

An efficient and safe solution: Gyb'Easy the Wichard boom brake.

#### CONCEPT

Thanks to the frictions of the specific line passing over the boom break, the boom is allowed to gybe smoothly. With Gyb'Easy, the gybe operations are safer, potential accidents reduced and without jerks.

### SETTINGS OF GYB'EASY

The adjusment of Gyb'Easy is made thanks to the tension of the specialized line. 3 different positions exist for a perfect adaptation to the mainsail and wind conditions (see pictures).

The more the line passes over the openings, the more the friction is increased and hence the brake efficiency.

### AN EASY INSTALLATION ON ALL KINDS OF BOATS

The installation only takes a few minutes: a shackle is attached onto one of the boom eye straps. In order to fit with all the deck configurations, two different fittings can be implemented. The boom brake can be installed either on modern boats or old gaffers.

### Features:

- Can be used on mainsail areas below 40 sqm.
- ▶ Material: aluminium with anodisation.
- ▶ Weight: 0.600 kg.
- ▶ Part #: 7150 (delivered with rope and shackle).

The Gyb'Flex rope is available separately in 2 lengths:

- ▶16 m (part # 7148)
- ▶ 25 m (part # 7149)









## Proline



### Tethers ISO 12401:2009

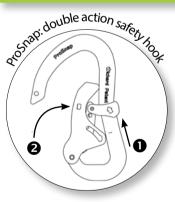
When it comes to safety, compromise is not an option. That is why Wichard has developed a new generation of tethers to ensure maximum safety and ease of use thanks to some innovative new features.

### > Maximum safety

- ErgoLockSystem (patented): automatically closes and locks the snap hook
- Locking indicator
- Retro-reflective webbing, visible at night
- Overload indicator (as per ISAF offshore special regulations)

### > Uniquely easy to use

- Easy opening snap hook
- V-Nose (patented): special tip makes hooking and unhooking easy with one hand
- Wide opening snap hook (26 mm)
- One of the most compact and light tethers on the market

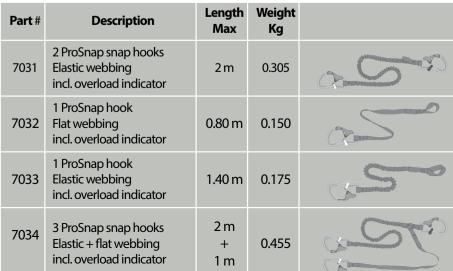




# COMPROM benefits ▶ 4 models available Compliance with ISO 12401:2009 and ISAF regulations (OSR) Overload indicator with shock absorber on all models **ProSnap** Safety snap hook **ErgoLockSystem EcoLogic SmartLoop**

**ProLine** 

Webbing



### **Exclusive feature: SmartLoop**

Product can adapt to suit all needs and users. SmartLoop lets you:

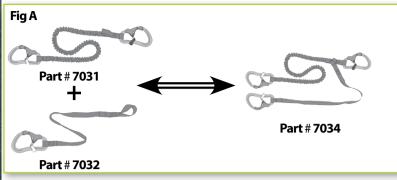
- turn a single webbing tether into a double webbing tether (see fig. A)
- turn a double webbing tether into two single webbing tethers (see fig. B)

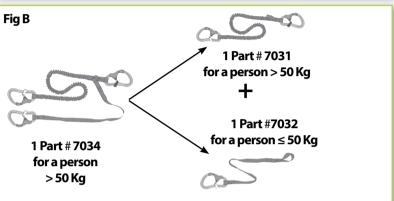
### **Exclusive feature: EcoLogic**

Removable snap hook lets you increase the lifespan of the product by replacing the webbing only. Our exclusive EcoLogic feature makes ProLine a budget-friendly range!



Choose your tether (as per ISO 12401:2009)		> 50 Kg	<b>S</b> i ≤ 50 Kg	≤ 50 Kg
ose r ISC	7031	√	√	x
Cho	7032	x	√	√
e e	7033	x	√	√
	7034	√	√	x





### **INFORMATION ABOUT THE ISO 12401:2009 STANDARD**

For the amateur sailor safety, the standard demands:

- Self-locking carbine hooks
- A possible unhooking from the harness side (for people above 50Kgs)
- An impossible unhooking from the harness side for people below 50Kgs (children)

### Special materials for less weight and greater performance

Wichard carefully selects materials (aluminium, carbon fibre, etc.)

- > ProSnap snap hooks are forged in special aluminium to ensure excellent rustproof qualities and minimum weight.
- > ProLine webbings are designed with materials that absorb very little water and dry quickly.



### **Tethers**



### **Benefits**

- Large range of tethers
   Complies with the CE EN1095 standard
   Available with double action safety hooks (phosphorescent) or carabiner hooks
   Available with flat or elastic tethers
- Ensures safety during movement on deck
   Designed and made in France

N°	Part #	Description	Weight kg
Te	ther v	vith double action safety hooks	
1	7005	Elastic harness tether from 1 to 2 m, with double action safety hooks.	0.398
2	7006	Elastic harness tether - 1 m fixed line, the other retracts from 2 to 1 m with three double action safety hooks.	0.582
3	7015	Harness tether, 2 meter long with two double action safety hooks.	0.392
4	7016	Harness tether, flat webbing (25mm), 2 meter long with one action safety hook.	0.210
Te	thers	with stainless steel carbine hooks	
5	7001	Elastic harness tether from 1 to 2 m, with two stainless steel carbine hooks.	0.418
6	7002	Elastic harness tether - 1 m fixed line, the other retracts from 2 to 1 m with three stainless steel carbine hooks.	
7	7011	Harness tether (flat webbing), 2 meter long with two stainless steel carbine hooks.	0.392

### **Benefits**

- ➤ Complies with the CEEN1095 standard
  ➤ Fitted with a quick opening snap shackle on the harness side
- With an overload indicator2 models available
- ▶ Designed and made in France

N°	Part #	Description	Weight kg		
Tethers with quick opening snap shackle					
8	7007	Elastic harness tether. Retracts from 2 to 1 meter, with overload indicator, one double action safety hook and one quick opening snap shackle.			
Elastic tether, 1 meter fixed line, the other retracts from 2 to 1 meter, with		overload indicator, two double action safety hooks and one quick opening	0.480		

### LYF'SAFE, THE WICHARD JACKLINE

UNIVERSAL, READY-TO-USE, REFLECTIVE

Either sailing solo or fully crewed, operating on the foredeck in most conditions require extra attention and safety precautions.

Lyf'Safe by Wichard is a complete jackline kit allowing safer operations and offering added value to the crew.

#### **ADAPTABLE AND UNIVERSAL**

Lyf'Safe can be tailored to the length of the boat (using the adjuster) and can be fitted on to most deck fastenings (padeyes, pulpit/pushpit, cleats).

#### **READY-TO-USE**

Easy to install, Lyf'Safe does not require additional fastening components such as shackles.

#### **REFLECTIVE**

Thanks to its reflective stripe and photoluminescent casing, Lyf'Safe can be easily identified when sailing at night.

#### **LOCKING SYSTEM OF THE WEBBING**

The adjuster casing prevents any accidental adjustment or release of the webbing.

### **RESISTANT AND ANTI-CHAFFING**

The anti-abrasion edges to the webbing prevent early wear and fraying, the soft elastomer casing isolates the deck, eliminating noise and vibrations.

#### **AESTHETIC**

Lyf'Safe is an elegant solution suiting most modern deck designs.

#### 4 models available:

- ▶ Part # 7051 : length 8,5m.
- ▶ Part # 7052 : length 11m.
- ▶ Part # 7053 : length 14m.
- ▶ Part # 7054 : length 16m.

### Components of Lyf'Safe:

- ▶ 2 reflective webbings.
- ▶ 2 forged adjusters.
- ▶ 2 photoluminescent casings.
- ▶ 1 set containing 8 screws.
- ▶ 1 installation manual.

### Jacklines Lyf'Safe



You Tube Watch the Lyf'Safe video Wichard Sailing









### THE NEW RANGE OF WICHARD KNIVES



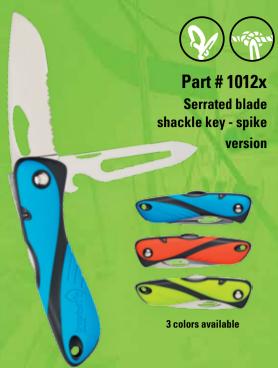
### **OFFSHORE**

### SAILING KNIFE STAYS SHARP IN ALL CONDITIONS

Designed for sailing and for highly demanding skippers, the «Offshore» knife offers a range of essential functions on-board a boat: Cutting quality, night visibility, locking blade, one-handed opening, corrosion resistance, mechanical resistance...

Its serrated blade enables you to easily cut all types of modern ropes including Dyneema®. The shackle opener - marlinspike version is also a vital tool on-board a sailing boat. Each Offshore knife is equipped with an adjustable wrist strap to avoid losing your knife when using it.





	OFFS	HORE
Range Part #	1011x	1012x
Part # Color fluorescent	10112	10122
Part # Color blue	10116	10126
Part # Color orange	10119	10129
	<b>V</b>	<b>V</b>
6	<b>V</b>	<b>√</b>
<b>(</b>	<b>√</b>	<b>✓</b>
Grip.I	<b>√</b>	<b>V</b>
	<b>V</b>	<b>√</b>
<b>W</b>	×	<b>√</b> (Ø12 mm)
	×	<b>✓</b>
<u>a</u>	×	<b>√</b>
	195 mm	ı / 115 mm
	8 cm ,	/ 4.5 cm
	****	****
	****	****
<b>©</b>	Part # 10112	Part # 10122
Stainless steel grade	12C27M modified	12C27M modified
(Kg)	66 g	66 g



### AQUATERRA

### YOUR SPORT KNIFE FOR ALL CONDITIONS

The AquaTerra knife is THE must-have knife for practising outdoor aquatic sports such as fishing, motor boating, kayaking or pleasure boating.

Equipped with a stainless steel blade it offers excellent cutting quality and optimal corrosion resistance.

Several versions available: smooth blade, serrated blade or smooth blade and corkscrew. This will quickly become an essential tool for all of your sporting activities.





	A	QUATERR	RA
Range Part #	1013x	1014x	1015x
Part # Color black	10133	10143	10153
Part # Color red	10134	10144	10154
Part # Color blue	10136	10146	10156
	<b>V</b>	×	V
	×	<b>V</b>	×
	<b>V</b>	V	<b>V</b>
Grip!	V	V	<b>V</b>
	×	×	<b>V</b>
	F-	195 mm / 115 mm	
	8 cm	8 cm	8 cm
	-	4,5 cm	
	★★★☆☆	★★★☆☆	★★★☆☆
-	★★★★☆	★★★★☆	****
Stainless steel grade	X40Cr13 modified	X40Cr13 modified	X40Cr13 modified
(Å)	60 g	60 g	68 g

### THE WICHARD SPIRIT

Ever since it was founded in 1919, Wichard has produced its knives in Thiers, the traditional home of knife-making in France

As manufacturers specialising in marine hardware, we have designed our new knife ranges to provide you with Wichard's proven strength and reliability in all circumstances during your nautical activities.

A Wichard knife is a must-have tool offering outstanding cutting performance as well as being easy to use, safe and long-lasting.



### RESEARCH & DEVELOPMENT

Ergonomic and corrosion resistant, offering specific functions with a selection of materials.

Our watchwords when developing our products are performance, innovation and quality. All of our products are tested to ensure they resist extreme temperatures.



Long k	Long knife with sheath					
N° <b>1</b>	N°1 Part# Fluorescent 10006 Length 20 cm, blade 10 cm					
N° <b>1</b>	Part # 10007	Fluorescent Length 24 cm, blade 13 cm	0.164 kg			
Floatin	ng knife,	fixed blade with sheath				
N° <b>2</b>	N°2 Part# 10009 Length 19 cm, blade 7 cm		0.096 kg			
Rigge	Rigger's sheath					
N°3	Part # 10005	Rigger's leather sheath for 20 cm fixed blade knife (part # 10006) and shackle key/marlin	0.026 kg			

spike (part # 10304)

### **USAGE**

All Offshore and Aquaterra knives are fitted with a locking blade.

The shackle opener - marlinspike on the Offshore model can also be locked in the open position for improved comfort during use.

- To unlock the blade, simply press the back of the knife.
- On the Offshore models, the cut-out section on the blade allows you to open the blade one-handed.

Do not use this cut-out for unshackling.



### **MAINTENANCE & STORAGE**

Here are a few handy tips to ensure optimal operation and a long life for your Wichard knife:

- Wipe your knife after each use or rinse it in clear water.
- Never put your knife in the dishwasher.
- Allow it to dry with the blade open to facilitate the evaporation of water.
- After several rinses, you can apply 3 in 1 oil to the mechanism.



### PROTECTING THE ENVIRONMENT

At Wichard, we don't simply pay lip service to environmental protection.

When manufacturing our knives, we do everything practical to contribute to protecting nature on a daily basis:

- Manufacturing our knives locally and nationally.
  - Sourcing materials nationally or in Europe.
    - Reducing components.
    - The use of recyclable materials (for example paper from sustainably managed forests).
  - Building awareness among our suppliers of the need to preserve the environment and verifying that suitable measures are being taken.



### I TILLER EXTENSIONS, KNIVES

Wichard designs products which aim at easing the operations and the life on board. They will quickly become essential tools.

The tiller extensions exist in different versions (telescopic or not) and use modern materials. As for knives, every sailor knows just how essential they can be for a whole range of uses. Wichard knives integrate useful tools as a shackle opener and a spike tool.

### |Tiller extensions

### **TILLER EXTENSIONS**



### **Benefits**

- Large range of tiller extensionsWith or without handle, telescopic or fixed models
- ▶ Telescopic models with ball-locking system
   ▶ Different joint systems available
   ▶ Ergonomic non-slip handles

N°	Part #	Description	Weight kg
-			kg
IE		oic tiller extensions	
1	7550	Adjustable from 70 to 100 cm	0.682
1	7551	Adjustable from 80 to 120 cm	0.716
2	7555	Adjustable from 70 to 100 cm, stand up rubber articulation	0.708
2	7556	Adjustable from 80 to 120 cm, stand up rubber articulation	0.798
Ti	ller ex	tensions	
3	7510	Length 70 cm - universal ball joint	0.310
3	7520	Length 95 cm - universal ball joint	0.406
Ti	ller ex	tensions with handle	
4	7540	Non retractable - length 58 cm	0.378
4	7541	Non retractable - length 70 cm	0.406
Re	etainir	ng clips	
5	7500	Retaining clips (tube dia. 20 mm)	0.015
6	7501	Retaining clips (tube dia. 30 mm)	0.012
Sp	oare a	rticulations	
7	7504	Spare articulation for parts # 7540, 7541	0,076
8	7505	Spare articulation for parts # 7555	0.146
8	7506	Spare articulation for parts # 7556	0.162
9	7507	Spare articulation for parts # 7550, 7551	0.168
10	7502	Spare articulation for parts # 7510, 7520	0.080





















# Shackler and spike tool



### IKey rings



N°	Part #	Description	Weight kg		
Sł	Shackler and spike tool				
1	10303	Forged shackler with bottle opener	0.033		
2	10304	Unique shackler / spike tool	0.109		

N°	Part #	Description	Weight kg	
Key rings				
3	9304	Key ring with pin shackle # 1441	0.017	
4	9305	Key ring with snap hook # 2480	0.029	
5	9306	Key ring with snap shackle # 2470	0.029	
6	9307	Key ring with block # 30019	0.019	



### **BIODEGRADABLE CLEANER**



### Benefits

- ▶ More than 90% biodegradable
- Cleans the surface condition and remove microscratches
- Can be applied to stainless steel, aluminium, brass and copper
- ▶ Suitable for stainless steel hardware, reefing-furling systems, knives, pullpits and pushpits etc.
- ▶ Efficient and easy to use
- ▶ Non-stick hydrophobic coating slows down the accumulation of dust
- ▶ Non-toxic product
- ▶ Perfect for regular maintenance or in case of light corrosion

\*: The surfactants of the product are biodegradable at more than 90% under 28 days (test OCDE 303A).



### **CLEANING AND PASSIVATING**



### Benefits

- ▶ Contributes to restore the passive layer of stainless steel products
- ▶ Ensures a spotless appearance
- Extends product service life
- ▶ Neutral effect on plastics
- ▶ Easy to use
- ▶ To be used in case of important corrosion (pitting attack) and for occasional use
- ▶ Part #: 9601
- ▶ Vol: 150 ml

### Maintenance

### Greenox:

### biodegradable cleaner

#### For clean and shiny hardware

Greenox is a more than 90%\* biodegradable cleaner which cleans the surface condition of marine hardware parts. Greenox removes the microscratches. It has to be used in case of regular maintenance.

#### Multi-use

Greenox can be applied to stainless steel hardware, aluminium, brass and aslo copper. It is perfectly suitable for stainless steel hardware (shackles, snap hooks etc.), reefing-furling systems, pullpits and pushpits and also knives.

#### Easy to use and efficient

Greenox is effortless and can be applied by scrubing ligthly with a wet cloth. Leave for 5-10 minutes and then rinse and wipe with a clean and soft cloth. Thanks to its paste and packaging format, it is easy to use but also avoids waste (at the opposite of products made of water).

- More than 90% biodegradable under 28 days (OCDE 303A test)
- Part #: 9602
- Vol: 100 ml (1 tube)



# | Wichinox: cleaning and passivating







# SUPPLEMENTARY PRODUCTS

### Snap hooks -Plastic

N°	Part #	Description					
SNAP HOOKS - PLASTIC - POM							
1	MQ00372	Snap hook - size 1 - L: 37 mm - Breaking load: 40 Kg					
2	MQ00502	Snap hook - size 1 - L: 50 mm - Breaking load: 30 Kg					
3	MQ00752	Snap hook - size 1 - L: 75 mm - Breaking load: 50 Kg					
4	MQ1002	Snap hook - size 1 - L: 100 mm - Breaking load: 70 Kg					
5	MD00642	Snap hook - size 1 - L: 64 mm - Breaking load: 20 Kg					



Wichard products are also much sought-after for industrial applications: shows, events, theatre, military.

For further information, please contact us





# SUPPLEMENTARY PRODUCTS

### **FAIRLEAD**

Profurl offers now a complete range of fairleads dedicated to the deviation of furling lines such as ropes for manual-headsail or flying-sail furlers..



N°	Part #	Description			
1	20120	Stainless steel single fairlead For 25mm stanchion Maximum line diameter : 20mm			
2	21020	Stainless steel deck fairlead – M10 screw Maximum line diameter : 18 mm			
3	20220	Stainless steel double fairlead with Velcro stripe for continuous line For 25mm stanchion maximum Maximum line diameter: 20 mm			
3	21220	Stainless steel double fairlead with Velcro stripe for continuous line For 28mm stanchion maximum Maximum line diameter: 20 mm			
4	21120	Stainless steel articulated fairlead - For 25 & 28mm stanchion maximum Maximum line diameter : 20 mm			



### Technical information

### **CE MARKING**

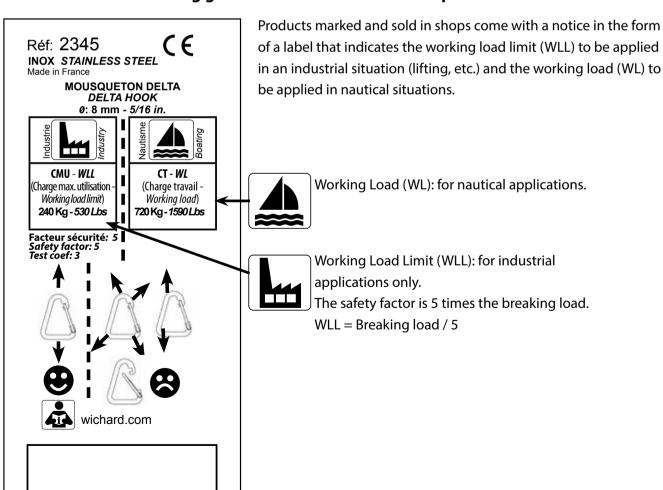
Some of our products can be used as lifting accessories and as such bear the CE marking (awarded under the auto-certification scheme in accordance with the Machines Directive 2006/42).

Each product displays the following information

- Working Load Limit (WLL)
- CE marking, product origin, manufacturer's logo
- Materials
- Manufacturing batch serial number



### Reading guide for CE labels on Wichard products



### Technical information

#### WARRANTY

All Wichard products are warranted to be free of defects in materials or workmanship for five (5) years from the date of purchase by the original end-user. Excluded from this warranty are:

- > Any product which has been improperly fitted.
- > Any product which has been improperly used or used in any application for which it was not intended.
- > Any product which has been improperly maintained.
- > Any product modified without a written approval from Wichard.
- > Any damage being a consequence from alteration, from ultraviolet light exposure or from the normal wear of products.

The useful life of any products is determined by its utilisation and an appropriate factor of safety (see page 61). It must be distinctly assessed in each application. Thus no guarantee can be provided for product life, dynamic capacities or any other factor due to the variability in usage.

Wichard's liability is limited to the repair or replacement of the defective goods exclusive of any other repair. Responsibility and costs of handling, transportation and any custom duties and tariffs linked to the warranty claim are in any case borne by Wichard.

#### **CORROSION IN MARINE ENVIRONMENT**

All Wichard products are passivated. Corrosion attacks stainless steel and is always visible in the form of black coloured roughness. Although this is dangerous, it is rarely seen in current use, except in cases where martensitic (HR) steel is in total, prolonged immersion. What many people erroneously call corrosion, is really rust, or oxidation. This is due to outside causes. In the marine environment, stainless steel is subject to considerable aggressive forces and is not totally corrosion free. Re-passivation can be accomplished with a passivator such as Wichinox (see page 55). All stainless steel products demand a minimum of upkeep.

#### **STAINLESS STEEL**

Wichard uses top-quality grades of stainless steel in its products (see chart). The first type is a low carbon austenitic steel (316L), which offers good mechanical characteristics. They are non-magnetic steels and most of Wichard products are manufactured in this grade. The second (17.4PH) is martensitic steel (magnetic), which is referred to as high-resistance steel (HR).

Туре	Austenitic	Martensitic	
Common name	18.12 Mo	17.4 PH	
European Standard	X2CrNiMo17-12-2	X5CrNiCuNb 16-4	
US AISI Standard	316 L	630	
Composition Carbon	< 0,03 %	< 0,07 %	
Chromium	18%	16,5 % 4 %	
Nickel	12%		
Molybdenum	3%		
Copper		4%	

### WHY A WICHARD SHACKLE?

A Wichard shackle is manufactured on a very old principal, forging. Wichard has perfected and machined this process down to the smallest detail.

#### **RELIABILITY AND HIGH QUALITY**

After the row metal bars are checked on chemical alloy and quality, the metal is heated to the right temperature to be forged. Then the metal is pressed in its new shape with great force by a hydraulic hammer. Due to this process the metal obtains an organized structure without any weakness. Because of this structure, called fibers, the metal object is not only very strong, but also has an "elastic" property. Casted metal objects of the same design are less strong, because the structure in the metal is not the same everywhere in the object. Next to this there is the chance that small air bubbles are enclosed during the casting. This causes a capital weakness in the casted object. Even objects machined from a block of metal can have weaknesses. Where the metal is machined into a curve the structure in the metal is broken and becomes a weak point in the object. When the object is overloaded it will break at this point.

#### PERFORMANCE AND SECURITY

Due to the technique of forging, every object of the same design and shape has the same properties with a small tolerance of deviation. By controlling all important factors, Wichard can guarantee an accurate breaking load and working load for each individual object. Wichard advises to respect carefully the Working Load (WL) indicated for each of its products. If a Wichard product is overloaded between the safe working load and breaking load the product will deform due to its "elastic" property. This gives the user an extra safety margin and shows when the product is overloaded. Deformed parts have to be replaced immediately preferably by a part in a larger size.



#### **DEFINITIONS**

Working Load (WL) indicates the value of static load at which the product will still function without excessive friction or wear or permanent deformation of components.

Breaking Load (BL) indicates the value of static load for which a major failure of one or some structural components or the complete destruction of the product can be expected when new. Plastic components may split, rivets may give way, shackles or any other connection parts break and other metallic components may fracture.

#### **UNITS OF LOAD**

Our resistance values are shown in kilogramme-force (symbol: kgf or more usually kg), which is the force due to gravity sustained by a mass of 1 kg situated at the latitude of Paris. This unit of force is obsolete, and is not part of the SI international system of units, which links concepts of mass and weight. The unit of force used in the SI system is the Newton (N).

To pass from the kilogramme-force to the Newton its value must be multiplied by g, the acceleration of gravity, which is 9.80665 m/s sec<sup>2</sup> at the latitude of Paris, or 9.80665 N (N = kg x m x s-2). In the fields where the kgf appears we should now use the decanewton (or dekanewton), daN: 1 kgf = 9.80665 N = 0.980665 daN (1 daN = 1.019716 kgf).

Our test equipment measures loads in daN, but bowing to custom and for reasons of simplicity and safety, we still give values in kgs in our brochures and on our products. Our measured values have simply been converted into kgs.

#### **FACTOR OF SAFETY**

Before choosing or specifying a particular product, an appropriate factor of safety should be applied to Breaking Loads (BL) to suit each application.

For many industrial and safety applications, and for some yachting application, a factor of safety greater than two (2) should be used or may be required by law or other regulations. It is the customer's responsibility to ensure that an appropriate factor of safety is used, and it should take into account safety implications, service life, fatigue (as may be caused by wave action, wind stress or repetitive cyclical loading), type of load, exposure to ultraviolet light, corrosion and stress corrosion (such as in high humidity or high chlorine environment). Even more attention is required when specifying blocks as other factors have to be taken into account such as rotary speed, deflection angle of the rope or the number of wire of the tackle (see page 31 of the present document). Note that a "Safe Working Load" is not specified as this is dependent on the factor of safety, which must be determined by the user relative to each application.

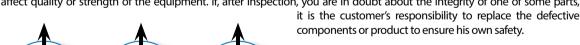
#### IN ANY CASE, NEVER USE THE PRODUCTS OVER THE WORKING LOAD!

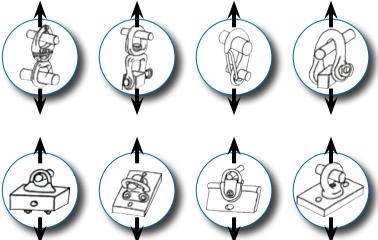
#### **USEFUL LIFE**

The useful life of any products is determined by the above factors and must be assessed in each application. Thus no guarantee can be provided for product life, dynamic capacities or any other factor due to the variability in usage. In some jurisdictions government regulations require the replacement of rigging components within certain periods of time, usually after three or five years. You must ascertain whether any such regulations affect you and take appropriate steps if you are affected.

#### **MAINTENANCE AND INSPECTION**

All your marine hardware, blocks and equipments must receive regular inspections to prevent any deformation, wear, cracks or corrosion. Even if your products have had little use, ultraviolet light exposure, wave action, humid or saline environment may cause damage that could affect quality or strength of the equipment. If, after inspection, you are in doubt about the integrity of one of some parts,





While every precaution is taken in the product design and manufacturing processes of our products to minimize the effects of corrosion or stress corrosion, appropriate preventive or corrective treatments must be carried out to the products after installation.



### Refer to the distributor list on our website: www.wichard.com

		i	1	i		1
Country	Company	Zip code	City	Area code	Phone	E-mail
Austria	Alltechnik	2362	Biedermannsdorf	43	2 23 664 676	office@allroundmarin.com
Austria	Robert Lindemann KG	20537	Hamburg	49	40 211 197-0	info@lindemann-kg.de
Belgium	Wichard Benelux	3280 HA	Numansdorp-NL	31	6 53 668862	sbarzilay@wichard.com
Belgium	Landtmeters & Co	2000	Antwerpen	32	32 333 131	info@landtmeters.com
Belgium	Plaisance Diffusion	1030	Brussels	32	022167934	info@plaisance.be
Belgium	Technique Voile	4432	Alleur	32	0 42 63 4041	info@technique-voile.be
Belgium	The Nautic Store	8620	Nieuwpoort	32	0 58 58 58 00	info@nauticstore.be
Belgium	West Diep Yachting Center	8620	Nieuwpoort	32	58 234 061	info@westdiep.com
Belgium	Wittevrongel Sails & Rigging	8370	Blankenberge	32	50 411 863	info@wittevrongel.be
Brazil	Bruschetta Supply	22.290250	Rio de Janeiro	55	2 194 003 660	contato@bruschetta-supply.com.br
Canada	WPG Canada	JOB 3G0	Stoke (Quebec)	1	819 878 30 18	info@wichard.ca
Canary Islands	Nordest	38370	La Matanza Tenerife	34	9 22 577 322	nordest@nordest-canarias.com
China	Sunrise Marineware Ltd		Shenzhen	86	755 866 50 101	sales@sunrisemw.com
Croatia	Aspar - Rigging	51 000	Rijeka	385	51 674 031	aspar-rigging@ri.t-com.hr
Denmark	Columbus Marine	2690	Karlslunde	45	46 19 11 66	columbus@columbus-marine.dk
Finland	Oy Maritim AB	211	Helsinki	358	20 76 51 81	maritim@maritim.fi
French Polynesia	Tahiti Sport/Nauti Sport	98713	Papeete	689	50 59 59	tahiti.sport@tahiti-sport.pf
Germany	Robert Lindemann KG	20537	Hambourg	49	40 211 197-0	info@lindemann-kg.de
Gibraltar	H. Sheppard & Co	PO box 899	Waterport	350	77183 / 75148	info@sheppard.gi
Greece	Tecrep Marine	18536	Piraeus	30	14 521 647	sales@tecrepmarine.gr
Greece	Theodosiadis Kiriakkos	18545	Piraeus	30	21 04 205 890	info@theodosiadis.gr
Greece	Nautilus	17455	Alimos / Athènes	30	21 09 854 238	info@nautilus.gr
Hong Kong	Storm Force Marine Ltd		Hong Kong	852	2866-0114	sales@stormforcemarine.com
Hungary	Marina Yacht Sport Kft	1078	Budapest	361	3 228 655	bolt@marina.hu
Italy	C-Marine S.r.l.	19031	Bocca di Magra - SP	39	0187 67 08 28	info@cmarine.it
Japan	Marine Service Kojima	238-0225	Kanagawa	81	4 57 903 581	info@mskojima.co.jp
Malta	Gauci Borda & Co Ltd	GZR03	Gzira	356	2131 3758/3748	info@gauciborda.com
Netherlands	Wichard Benelux	3280 HA	Numansdorp	31	71 5 898 898	sbarzilay@wichard.com
Netherlands	On Deck BV	2156 MX	Weteringbrug	31	71 331 33 66	allhands@on-deck.nl
New Caledonia	Marine Corail	98845	Nouméa	687	27 58 48	info@marine-corail.nc
New Caledonia	Boniface ACMA	98863	Nouméa	687	28 28 10	vente@acma.nc
New Zealand	Kiwi Yachting	90114	Auckland	64	93600300	sales@kiwiyachting.co.nz
Norway	Hovdan-Poly A/S	614	Oslo	47	23 14 12 60	post@hovdan.no
Poland	Mazuria	11-214	Galiny 2	48	8 97 612 165	mazuria@ol.onet.pl
Poland	Majer	01 - 541	Varsovie	48	(0) 22 869 93 60	sails2@majer.com.pl
Portugal	Luiz Godinho	1400-287	Lisbon	351	2 13 017 753	luizgodinho@iol.pt
Portugal	Lisnautica Lda	1300-340	Lisbon	351	213 639 084	lisnautica@gmail.com
Portugal	DND Lda	1300-598	Lisbon	351	351 213 619 530	dnd@dnd.pt
Portugal	Peter Keeping Unipessoal Lda	8800-166	Tavira	351	281 971 179	info@just-boats.net
Russia	Fordewind-Regatta Ltd	197110	St Petersburg	7	8 123 201 853	info@fordewind.spb.ru
Singapore	Intermarine Supply Co	639078	Jurong	65	68 633 966	ropes@intermarine.com.sg
South Corea	Corea Marine		Busan	82	517 962 486	manager@coreamarine.com
South Africa	Manex & Power Marine	7420	Paarden Eiland	27	021-511 7292	manex@manex.co.za
Spain	Flint Suministros S.L.	8038	Barcelona	34	9 32 895 202	info@flint.es
Sweden	Liros Skandinavia AB	427 23	Billdall	46	31 91 52 00	info@lirosropes.se
Switzerland	Bucher & Walt SA	2072	St Blaise	41	3 27 559 500	info@bucher-walt.ch
Thailand	Sail in Siam Co Ltd	2072	Chonburi	66	818 375 507	info@sailinsiam.com
Turkey	Marintek	34700	Istanbul	90	2 163 171 010	info@marintek.com.tr
United Arab Emirates						-
	Duboats  Dro Post Ltd	53793	Dubai  Russham On Crouch	971	043 99 45 54	c.vanek@duboats.com
United Kingdom	Pro-Boat Ltd	CM0 8TE	Burnham-On-Crouch	44	(0) 1621 78 54 55	sales@proboat.co.uk

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