



## TABLE OF CONTENTS

1 - FURLERS P4/15	
KF - RANGE INTRODUCTION	P4/6
KF - NEW PRODUCTS : KF0.9 & KTS	P6/7
KF - FURLERSKSF - TOP DOWN SPINNAKER FURLERS	L P8/9
KFX - STRUCTURAL FURLERS	P17/13
KF OPTIONS	
	1 17/13
2 - LOCKS P16/23	
KMH – INTERNAL LOCKS	P18
KHL – EXTERNAL LOCKS	P19
KFH – EXTERNAL FURLING LOCKS	P20/21
KHR – REEF LOCKS	P22
KMS – MAINSAIL LOCKS	P23
3 - BLOCKS & SHEAVES P24/37	
	500/07
KBO – UNIVERSAL LASHING BLOCKS KBO – SPECIAL BLOCKS & SOFT SHACKLES	L P26/2/
KB – ROUND BLOCKS & SUFT SHACKLES	
KBR C – HIGH LOAD CARBON BLOCKS	P37/33
KBR SPECIALS — HIGH LOAD EXTRA LARGE, LEATHER, WOODS	P33
KBR A — HIGH LOAD ALUMINUM & SNATCH BLOCKS	P34
KBR M – HIGH LOAD STAINLESS STEEL BLOCKS	
KDS & KDSB — SHEAVES & SHEAVE BOXES	
KRTI – TITANIUM RINGS	P3/
4 - DECK EQUIPMENTS/JAMMERS P.	38/45
KJ – HIGH LOAD JAMMERS	
KW – WINCHLESS	P42
KJ2/3 & KSC – CAM CLEATS & BASES	P42/43
KJH – JAWS HANDLES	
KORG – HIGH LOAD ORGANIZERS	
KOMINO & KSO – ORGANIZERS	P45
5 - WINCHES P46/51	
KSW - WINCHES SPEED RANGE	D/IΩ
KPW - WINCHES SI ELD NAINGE	
KCW - WINCHES COMPACT RANGE	
KWH - CARBON WINCH HANDLES	
6 - MAST TRACKS & CARS P52/64	
	- DE 0-
KGL (GAFF LOCK)	P56
KMS 30	P58

The information and data published in this catalog may differ from actual data.

#### **OUR MARKETS**







RACING

**PRODUCT LINES** 













FURLERS

BLOCKS

JAMMERS

WINCHES

TRACKS & CARS

#### **OBSESSIONS**

navigators technology boaters

innovation sailing development design

Performance durability service passion sailors

custom safety

research development developm

#### **MESSAGE FROM CEO**

80% of the boats in the last Transat Jacques Vabre are fitted with Karver equipments, reliability and lightness are still the choice of the great navigators, we are close to the full fleet and it is the natural target for the coming year!

Our new high performance winches are available and are now used with a new carbon fiber winch handle. Sailboats continue to evolve towards performance, we carry on our research to develop products to reduce efforts while simplifying sails tuning.

In order to be even closer to our customers, we have just opened an office and commercial showroom in Brittany in Lorient. All our latest innovations are presented and we will be happy to guide you to the best choice that will make your sailing more enjoyable.

Fair Winds.

Marin

Furlers make handling the sail easier thus improving your boat's performance



#### WHY CHOOSE A FLYING FURLER?

- The furler is a light and removable system that quickly launches the foresails on your sailboat.
   Free flying sails come as an addition to your genoa so you always fly the best sail depending on the wind and boat direction.
- A furled sail is easier to handle and can be readily stored below out of the way.
- The same furler can usually be used for several types of sails: gennakers, stormsails, staysails and more recently on asymetrical spinnakers.
- The choice to design our furler with a composite spool around the drum was made to protect fingers from getting caught when operating the unit and prevent the furling line from jamming out.

  Yet, it was also designed to enable the furling line to eject when not under tension.

#### 8 reasons to choose a Karver furler



#### SUPER LOW FRICTION BEARINGS

KF range low friction bearings have been specifically designed for our furlers with high tech materials.

Furling has never been easier.



#### **►** CUSTOM

One of our strengths is our capacity to customize our product in a short time frame at a reasonable cost to suit your specific needs.



#### DRUM LOCKING MECHANISM

The mechanism is reliable and installed with a fuse. If the maximum load is exceeded, the mechanism unlocks automatically. The drum then works like a traditional continuous line furler.

The locking mechanism can be removed at anytime if the lock is not required.



#### ► UNIQUE DRUM LOCKING MECHANISM

FURLING: Pull on the endless line to furl (If you accidentally release the furling line the mechanism locks automatically).

UNFURLING: To unlock the drum, just tug a little on the line in the same direction that the sail was furled which releases the lock and enables the sail to unfurl.



#### EXTREMELY LIGHT AND COMPACT

Our range is 35% lighter and more compact than the competition. Light weight swivels lower the impact on the mast.

More compact means more sail area!



#### OUICK USE CAPTIVE PINS

A new quick fit mechanisms makes the maneuver still easier and faster. The pins are captive.

HR shackle is standard on the swivel up to and including KF5.



### CONTINUOUS LINE INSTALLATION

Easy and quick engagement of the continuous line requires no tools.

Karver invented the concept where the endless line is installed within seconds and stays secured on the drum.



#### COMPOSITE SPOOL

Unlike metallic or carbon drums, the composite spool around the drum is shock absorbent and protects the drum, the sail and the deck from impact.

## A NEW FURLER GENERATION FROM KARVER: LEADING THE WAY!

The KF V3 furler range\* sums up 18 years of offshore racing and cruising experience.

Now available and optimized in 4 versions:

Standard

Racing

Classic

Structural



A unique combination of Performance, Reliability, Innovation, Price & Aesthetics.

Everything is here to ensure that this new furler quickly becomes the global sailing market benchmark.

### 4 PRE-DEFINED VERSIONS... OR A LA CARTE



Options included for each version	Standard	Racing	Classic	Structural
Carbon and Kevlar® continuous line wheel				$\bigcirc$
Anti return drum locking mechanism				$\oslash$
K Krok swivel protection				$\oslash$
K Krok drum protection				$\otimes$
3:1 friction sheave with captive fast pin				
K Snap 2-in-1 snap shackle				
Carbon drum				
Natural wood veneer of the continuous line wheel				
Stainless steel fork				$\bigcirc$
Secured & bolted structural pins				$\otimes$

A range of accessories and options to make your furler the lightest, the most compact, the most beautiful, the most innovative, ...

...The choice is yours to make your furler your best team member.

**SCHEDULED LAUNCH: NOVEMBER 2020** 

### **Furler recommendation for cruising yachts**

Furler model depends on boat size or weight, sail area, navigation programs. For further information or in case of doubt, please contact us.

BOAT LENGTH	STRUCTURAL	STAYSAIL	CODE 0	GENNAKER	ASY SPINNAKER		
< 32'	KFX1/KFX2	KF1 or KFH1 +	KF0.9	KF0.9	KSF1 or KTS1		
Max 32'	KFX1/KFX2	KF1 or KFH1 +	KF1	KF1	KSF1 or KTS1		
Max 42'	KFX2/KFX5	KF2 or KFH2 +	KF2	KF2	KSF2 or KTS2		
Max 52'	KFX5/KFX8	KF5 or KFH5 +	KF5	KF2	KSF5 or KTS5		
Max 65'	KFX1/KFX12	KF8 or KFH8 +	KF8	KF5	KSF8 or KTS8		
Max 95'	Call us	KF12 or KFH12 +	KF12	KF8	KSF12 or KTS12		
> 95'		Call us					

### **Online support**

Find on our website (Downloads / Library) a list of more than 800 sailboats with our furler recommendations.

#### WHICH KARVER FURLER FOR WHICH MODEL

NIDE AU CHOIX EMMAGASINEURS KARVER PAH MODELE

G5 39	39
GS 43	43
GS 47	47
GS 50	50
G\$ 54	54
65.59	50

Staysail straight		Downwind straight luff sail	5pinnaker
Trinquette	Code 0	Gennaker	Spinnaker
KF2/KFH2+	KF2	KF2	KSF5
KF5/KFH5+	KF5	KF2	KSFS
KF5/KFH5+	KF5	XF5	KSF5
KF5/KFHS+	KF5	KF5	K5FS
KFS/KFHS+	KFS	KF5	KSFS
KF8/KFH8+	KF8	KF5	KSF8

I fits all*	
1 pour toutes*	
KSF5	ı
KSFS	ı
KSFS	ı
KSF5	ı
KSP8	ı
K5F8	١



## THE SMALLEST FURLER EVER DESIGNED BY KARVER









# KTS Karver Tack Swivel

The KTS (Karver Tack Swivel) is a top down adaptor that enable to convert a bottom-up furler into a top-down unit.

The KTS can also remain on the sail to be easily plugged in or stored, which is another major benefit of this product.

The furler can then remain on the bow to be used for other sails, or be stored.

Our quick release and captive pin mechanism makes it easy and safe to operate the swap in and out.

#### KF + KTS = KSF







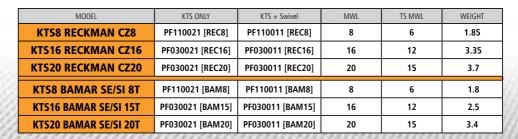
MODEL	PART NUMBER	MWL (T)	TACK SWIVEL MWL (T)	WEIGHT (Kg)
KTS1	PF100021	1.5	0.5	0.15
KTS2	PF090021	2.5	1	0.41
KTS5	PF080021	5	1,5	0.68
KTS8	PF110021	8	3	1.24
KTS8 Reinforced	PF110021 [R]	8	6	1.49
KTS10	PF030021 [10]	10	6	1.5
KTS12	PF030021	12	10	2.12
KTS16	PF030021 [16]	16	12	2.60
KTS20	PF030021 [20]	20	15	3.20
KTS30	PF030021 [30]	30	20	3.5

#### **KTS for hydraulic ram:**

Many Super Yachts feature hydraulic rams (Bamar, Reckmann...).

We have designed the fittings to the specs of these hydraulic rams and supply with a package KTS + top swivel.

We can supply top down adaptor for other manufacturers and models upon request. Please contact us with your inquiry.







# FURLERS PURE SIMPLICITY!

Whether you're cruising or racing, Karver KF Furlers will make handling the sails easier for you!



#### +PERFORMANCE

- Extremely light.
- Unequally compact.
- Low friction bearings.

#### +ERGONOMICS

- Composite spool around the drum to protect the drum, the sail and the deck from impact.
- Closed structure of the drum prevents fingers from getting caught during the process.

#### **+EFFICIENCY**

- Quick fitting mechanism for the sail.
- Quick fitting mechanism to the deck and halyard.
- Fast and captive pins.
- Quick engagement of the continuous line

#### +SAFETY FEATURES

- Drum locking mechanism control from the cockpit (Patented).
- Breaking load over twice the safe working load.
- Swivel lightness decreases impact on the mast when hoisting/lowering the sail.



We provide our furlers for more than 15 years on performance sailing yachts. Available for 20 feet cruisers up to 150 feet Super Yachts.

KF furlers feature Karver's unique drum locking mechanism which operates from the safety of the cockpit.



## EXTREME RACING OR PEACEFUL CRUISING, YOU CAN NOW MAKE HANDLING SAILS SAFER!





© Wally - Wally Nano

© Karver system

	MODEL	PART NUMBER*	MWL (T)	WEIGHT (Kg)	DRUM DIAMETER (mm)	CUTTING LENGTH (mm)	
	YACHTS						
N	KF0.9	PF350000	0.9	0.348	85	106.8	
	KF1	PF100000	1.5	0.648	110	157.5	
	KF2	PF090000	2.5	1.061	150	194.3	
	KF5	PF080000	5	2.146	175	252.3	
	KF8	PF110000	8	2.672	210	206.9	
	KF10	PF030000 [10]	10	3.933	210/300**	222.1	
	KF12	PF030000	12	3.885	210/300**	243.2	
			SU	PER YACHTS			
	KF16	PF030000 [16]	16	-	-	-	
	KF20	PF010000	20	-	-	-	
	KF25	PF270000	25	-	-	-	
	KF30	PF880000	30	-	-	-	

\* Each reference includes a drum and a swivel. \*\* Upgrade. See the OPTIONS pages for other characteristics & other available configurations We custom build our products on a regular basis (fork width, pin diameter, fittings...). Please contact us to discuss your expectations.

#### In the box







Swivel











with its fitting

Swivel protection ► Lock (KF1 to KF5)

and spare lock

User manual Storage bag

Not in the box: thimble, furling line, anti torsion cable,...and sail!



# SPINNAKER FURLERS FURL YOUR SPINNAKER!

KSF top down furler is READY TO HOIST IN SECONDS!



#### +SAFETY

- Furling can be safely done single handed from the cockpit!

#### +PERFORMANCE

- The integrated tack line swivel makes this furler really compact.

#### +UNIVERSAL

-The same furler can be interchanged to use with the full inventory of sails: code sail, staysail, or asymmetrical spinnaker.

#### **+LIGHT WEIGHT**

- The difference from a standard KF drum is the addition of an independent swivel on the top which helps keep the system light.



Unlike traditional code sail furling, spinnaker furling starts from the top of the sail. The tack swivel on KSF furler makes sure the furling is safe and does not damage the spinnaker.

MODEL	PART NUMBER*	MWL (T)	TACK SWIVEL MWL (T)	WEIGHT (Kg)	DRUM DIAMETER (mm)	CUTTING LENGTH (mm)	ANTI TORSION (mm)
	YACHTS						
KSF1	PF100000 [SPI]	1,5	0,5	0.736	110	170.8	9
KSF2	PF090000 [SPI]	2,5	1	1.251	150	211.4	13
KSF5	PF080000 [SPI]	5	1,5	2.146	175	264.3	15
KSF8	PF110000 [SPI]	8	3	3.356	210	217.5	х
KSF8 R	PF110000 [SPIRE]	8	6	3.547	210	217.5	х
KSF10	PF030000 [SPI10]	10	6	4.879	210/300**	236.4	х
KSF12	PF030000 [SPI]	12	10	4.486	210/300**	250.8	х

We custom build our products on a regular basis (fork width, pin diameter, fittings...). Please contact us to discuss your expectations.

<sup>\*</sup> Each reference includes a drum and a swivel. \*\* Option. See the OPTIONS pages for other characteristics & other available configurations.

MODEL	PART NUMBER	MWL (T)
	SUPER YACHTS	
KSF16	PF030000 [SPI16]	16
KSF20	PF030000 [SPI20]	20
KSF25	PF270000 [SPI]	25
KSF30	PF880000 [SPI]	30



**PACKS SPI:** Ordering one of our pack, you will receive all equipments to furl your spinnaker: a KSF drum with its swivel or a KTS adaptor (if you already own a furler) + a furling line equipped with a block + an anti torsion rope with the clamps to adjust the length.

MODEL	PACK WITH <b>KSF</b> (DRUM + SWIVEL)	PACK WITH <b>KTS</b> (KTS ONLY - NO SWIVEL)	MAX WORKING LOAD (T)	TACK SWIVEL MWL (T)	AT DIAMETER (mm)	AT LENGTH (m)	CLAMPS QTIES	FURLING LINE (m)
PACK SPI1	PF100000 [SPIPAC]	PF100021 [SPIPAC]	1.5	0.5	9	16	2	2 x 8 m
PACK SPI2	PF090000 [SPIPAC]	PF090021 [SPIPAC]	2.5	1.0	13	20	2	2 x 10 m
PACK SPI5	PF080000 [SPIPAC]	PF080021 [SPIPAC]	5	1.5	15	26	2	2 x 13 m

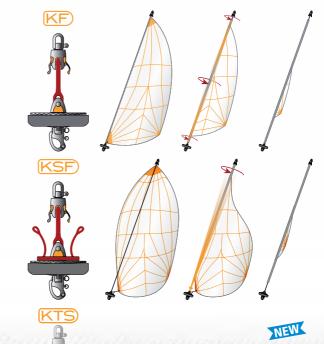
### HOW DOES IT WORK?

### Free flying sail furler

- Anti-torsion cable is sewn inside the sail luff
- The tack and the head of the sail are attached with a lashing to the antitorsion cable (thimbles).
- The sail starts furling from the bottom (like a jib furler).

### **Top down furlers**

- KF standard furler, features a tack swivel on top of the drum.
- The tack of the spinnaker is attached to the tack swivel. The head of the sail is attached to the anti-torsion cable (thimbles).
- The anti-torsion cable is separated from the sail luff
- The anti-torsion cable transfers the torque from the drum to the top swivel.
   This is an essential part of a good furling process.
- The sail starts furling from the top downward.





## STRUCTURAL FURLERS HIGH TECHNOLOGY!

Underneath its sleek exterior lies a wealth of technology.



## +KARVER ADVANTAGES

- Most compact system.
- Lightweight.
- Locking mechanism from the cockpit.
- Low friction bearing.
- Carbon fibre spool available.





Installed for 10 years on ocean racing yachts. KFx structural furlers are the perfect balance of performance and safety.

Installed with a structural anti-torsion stay, it replaces a traditional forestay or inner stay.

The latest Karver furling showcases:

- 8 months of Research & Development.
- Hundreds of numerical simulations.
- Dozens of prototypes.
- Many tests on various bearing types (ceramic, titanium, beryllium bronze, HR steel, etc.).

The result is a line of furling units that are compact, light and offer the best performance and ease of use. Karver is proud to be the benchmark in this category and is still unmatched by its competitors.

Our range of furling systems fit boats from 6 to 90 meters. References: Ultim Macif, Prince de Bretagne, Actual, HH, APC78, Imoca, Class 40, Swan50...







Karver System

	KFX Packages						
MODEL	MWL (T)	PART NUMBER					
KFX1	1,5	PF100000 [STRUCT]					
KFX2	2,5	PF090000 [STRUCT]					
KFX5	5	PF080000 [STRUCT]					

Halyard swivel option						
PART NUMBER	MAX STAY DIAMETER (mm)					
PF100020 [ETARQ]	6.5					
PF090020 [ETARQ]	10.5					
PF080020 [ETARQ]	15.5					

	KFX without fitting										
MODEL MWL (T) KFX STD CONTINUOUS LIN		KFX STD CONTINUOUS LINE	KFX KFX CONT. FOR SINGLE LINE SCREW STAY		SINGLE LINE FOR SCREW STAY	KHL LINK OPTION					
	YACHTS										
KFX2	2.5	X	N/A	N/A	N/A	PF094026					
KFX5	5	PF080000 [XCL]	PF080000 [XSL]	PF080000 [XCLN]	PF080000 [XSLN]	PF084428					
KFX8	KFX8 8 PF110000 [XCL] P		PF110000 [XSL]	PF110000 [XCLN]	PF110000 [XSLN]	PF110600					
KFX10	10	PF030000 [X10CL]	PF030000 [X10SL]	PF030000 [X10CLN]	PF030000 [X10SLN]	PF030600					
KFX12	12	PF030000 [X12CL]	PF030000 [X12SL]	PF030000 [X12CLN]	PF030000 [X12SLN]	PF030600					
			SUPER YA	CHTS							
KFX16	16	PF030000 [X16CL]	PF030000 [X16SL]	PF030000 [X16CLN]	PF030000 [X16SLN]	PF033962					
KFX20	20	PF030000 [X20CL]	PF030000 [X20SL]	PF030000 [X20CLN]	PF030000 [X20SLN]	PF034850					
KFX25	25	PF270000 [X25CL]	PF270000 [X25SL]	PF270000 [X25CLN]	PF270000 [X25SLN]	PF273762					
KFX30	30	PF013000 [X30CL]	PF013000 [X30SL]	PF013000 [X30CLN]	PF013000 [X30SLN]	PF273762					

We have developed two ways to hoist and lower the genoa on a structural furler: a halyard swivel sliding on your stay or a halyard lock connected to the top swivel.





► Halyard swivel



► KHL swivel link



Compared to a reefing furler, a structural continuous line furler is about 8 times lighter!

Description	KF0.9	KF1	KF2	KF5	KF8	KF10	KF12				
	STANDARD PRODUCT INFORMATION										
Swivel fitting	Lashing eye	Shackle	Shackle	Shackle	Lashing eye	Lashing eye	Lashing eye				
Drum fitting	Snap shackle 2:1	Snap shackle	Snap shackle	Snap shackle	Lashing eye	Lashing eye	Lashing eye				
Furler drum diameter (mm)	87	110	150	175	210	210	210				
Furling line diameter (mm)	6	6	8	10	10	10	10				
Drum lock provided (1 + 1 spare)	N/A	PF090050	PF090050	PF080070	PF080070	PF080070	PF080070				
Swivel protection	N/A	PL105529	PL095649	PL115874	PL035875	PL035876	PL035876				
Storage bag	N/A	PL604047	PL604047	PL604047	PL604131	PL604131	PL604131				
Fork pin diameter (mm)	6	8	10	12	14	18	20				
Fork pin width (mm)	10,2	11	18	20	24	22	22				
		CON	IMON OPTIO	NS							
Thimble (x 1)	PF355705	PF103776	PF090410	PF080050	PF110050	PF034742 [18]	PF034742				
Cableless thimbles (x2)	N/A	PF106460 [T&D]	PF096461 [T&D]	PF086462 [T&D]	PF116463 [T&D]	PF036460 [18T&D]	PF036460 [20T&D]				
3:1 friction sheave with captive & fast pin	N/A	PF104699	PF094395	PF084227	PF114226	PF034787	PF034787				
2:1 removable block	N/A	PF100030	PF090030	PF080030	PF110030 [ALU]	Custom	Custom				
2:1 fixed block	-	-	-	-	PF110030	PF110030	PF030030				
Spinnaker top down adaptor KTS	N/A	PF100021	PF090021	PF080021	PF110021	PF030021 [10]	PF030021				
Ready to use furling line [Diameter Length]	PF101231 [D6L12]	PF101231 [D6L16]	PF091232 [D8L20]	PF081233 [D10L26]	PF081233 [D10L32]	PF081233 [D10L42]	PF081233 [D10L50]				
Custom length furling line	MP101231	MP101231	MP091232	MP081233	MP081233	MP081233	MP081233				
Anti torsion line (ready to use at your length)	CABLE [KSF09]	CABLE [KSF1]	CABLE [KSF2]	CABLE [KSF5]	-						
Anti torsion line only	CABLE [M7]	CABLE [M9]	CABLE [M13]	CABLE [M15]	-	-	•				
KRE / Clamp KSF	N/A	N/A	PF094806	PF084921	N/A	N/A	N/A				

#### KF/KSF/KFX OPTIONS: CUSTOMIZE YOUR FURLER!















NEW

► THIMBLES & CABLELESS THIMBLES

► 3 :1/2:1 FRICTION SHEAVES

► SPINNAKER TOP DOWN ADAPTOR



FURLING LINES



ANTI TORSION LINE
WITH OR WITHOUT CLAMPS



KARVER CLAMP = 2 IN 1 CLAMP + THIMBLE

Description	KF1	KF2	KF5	KF8	KF10	KF12
		OTHER (	OPTIONS			
300 mm drum	N/A	N/A	N/A	PF114816	PF114816	PF114816
Carbon furler wheel (despite aluminum)	N/A	PF094140	N/A	N/A	N/A	N/A
Continous line carbon drum	N/A	N/A	N/A	PL032579	PL032579	PL032579
Carbon drum modification for drum locking	N/A	N/A	N/A	PF030050	PF030050	PF030050
Single line drum option	N/A	PF091484 [SLC]	PF080000 [SLC]	PF030000 [SL]	PF030000 [SL]	PF030000 [SL]
Inversed fixed fork + captive fast pin	N/A	N/A	PF084852	PF114825	PF034824	PF034752
Tack straping thimble (tack)	N/A	N/A	PL084855	PL114818	PL033563 [10]	PL033563
3:1 friction sheave HR design	Custom	PF091592	PF081095	PF110452	PF030396	PF030396
Removable Tylaska snap shackle	N/A	N/A	PF082055	PF114525	N/A	N/A
Lashing pin (forks)	N/A	N/A	PF081569	PF114436	PF033065	PF030053
MX shackle	MP104043	MP094044	MP084045	N/A	N/A	N/A
2:1 High Load friction sheave	Custom	PF091590	PF080812	PF110995	Custom	Custom
Lashing eye	Custom	Custom	PL084329	STD	STD	STD
Fixed Tylaska snap shackle	N/A	N/A	PF080040 [TY]	PF110040 [TY]	-	-
High Load strope	N/A	N/A	PF084853 [SS]	PF110040 [SS]	PF030040 [SS]	PF030040 [SS]
Leather upgrade	PF104940	PF094941	PF084942	PF114943	PF114943	PF114943







CARBON WHEEL



LEATHER DRUM







► SINGLE LINE

► STRAPING TACK THIMBLE

▶ 3 :1 WIDE HR







TYLASKA



HIGH LOAD STROP



#### **KARVER: THE LOCKING SPECIALIST**

## KARVERPEDIA

Choosing the right sailing hardware can improve your boat's performance. The latest equipment is lighter, takes less room and is more efficient — it is now able to block and hook heavy loads.

Every lock mechanism aims to incorporate these benefits by replacing ropes with mechanical devices.

Today's fabrics are more and more advanced (3DL, Titanium, Laminated...) to help reduce the overall weight of the sail and maintain its shape thus minimising power loss due to its distortion. To benefit from the power of this type of sail, it is important to minimize the possible stretch of the lines. Installing a lock, regardless of the brand and technology, makes it possible to avoid a halyard stretch thus releasing the full power of the sails.

Besides this mechanical concept, the diameter of the halyard can be reduced as it no longer carries the load of the sail when sailing. For example, a 12mm halyard in Dyneema® could be replaced by a 6mm halyard.

The difference from a standard KF drum is the addition of an independent swivel on the top which helps keep the system light.

The installation of a halyard lock reduces the compression in the mast, as the halyard is no longer strained. For high performance sailing yachts, locks may help reduce the weight aloft as rigs can be designed to bear minimal compression. Every kilo saved in the rigging can allow the removal of several tens kilos in the bulb.

It would be a mistake to think that these advantages are only for the racing scene. A reduction in weight aloft results in better boat stability by decreasing the pitching and rolling in heavy weather conditions in all types of boats. Wouldn't you appreciate getting ashore a few hours or days earlier, without worrying about damage to the halyards?

### **Our locking solutions:**





## REMOVABLE LOCKING MECHANISM

Easy maintenance.



#### +KARVER

#### **ADVANTAGES**

- Reliability : Same lock as our proven at sea KFH.
- Security: Easy access. The locking mechanism can be removed from the bracket without tools.
- No trip line.
- No lock strop bullet.
- Choose the cap color!





The KMH internal halyard lock is a locking device for headsails installed by mast manufacturers.

This mechanism is integrated into the mast and allows maximum luff length

	MODEL	PART NUMBER	MWL (T)	WEIGHT (kg)	MAX SPACE* (mm)	BEST LINE** (mm)	MAST CUT (mm)
	NA CONTRACTOR OF THE PARTY OF T			YACHTS			
NE	KMH2	PF370002	2	0.370	6.4	6	83 x 26
	KMH5	PF370005	5	1.230	9.5	6	44 x 125
	KMH8	PF370008	8	2.070	10.5	8	56 x 156
	KMH10	PF370010	10	2.800	10.5	8	75 x 175
Ţ			16 1 3	SUPER YACHTS	BELL IN		
	KMH15	PF370015	15	3.670	14.5	10	83 x 204
	KMH20	PF370020	20	4.750	14.5	10	215 x 94
	КМН30	PF370030	30	-	-	•	-
Α,	KMH40	PF370040	40	-	-	•	-
	KMH50	PF370050	50	-	-	-	-



## EXTERNAL HALYARD LOCK (NO SWIVELLING FEATURE)

### **MULTIPLE APPLICATIONS**

The KHL external lock is an easy to install lock for headsails.



#### +KARVER

#### **ADVANTAGES**

- Compact & Light.
- Essential for Racing yachts, Super Yachts AND cruising yachts.
- No trip line, no lock strop bullet.
- Perfect to lock a spinnaker snuffer during a long navigation.



No more tension in the halyard, avoids wear and stretch for improved safety, reduced weight and better performance.

MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	HEIGHT (mm)	MAX SPACE* (mm)	BEST LINE** (mm)
			YACHTS			
KHL2	PF480020 [KHL]	2	0.435	117.7	7.5	6
W KHL3	PF485859	3	0.475	173.0	7.5	6
KHL5	PF470020 [KHL]	5	0.850	172.2	9.5	6
KHL8	PF410020 [KHL]	8	0.620	166.3	9.5	6
KHL10	PF400020 [KHL]	10	2.090	217.7	11.0	8
KHL12	PF400020 [KHL12]	12	1.550	217.7	11.0	8
			SUPER YACHTS			
KHL16	PF400020 [KHL16]	16	-	•	•	-
KHL20	PF400020 [KHL20]	20	-	-	•	-
KHL25	PF570020 [KHL25]	25	-	-	-	-
KHL30	PF440030	30	-	-	-	-
	KHL2  KHL3  KHL5  KHL8  KHL10  KHL12  KHL12  KHL12  KHL16  KHL20  KHL25	KHL2 PF480020 [KHL]  N KHL3 PF485859  KHL5 PF470020 [KHL]  KHL8 PF410020 [KHL]  KHL10 PF400020 [KHL]  KHL12 PF400020 [KHL12]  KHL14 PF400020 [KHL16]  KHL15 PF400020 [KHL16]  KHL26 PF400020 [KHL26]  KHL27 PF570020 [KHL25]	KHL2       PF480020 [KHL]       2         N       KHL3       PF485859       3         KHL5       PF470020 [KHL]       5         KHL8       PF410020 [KHL]       10         KHL10       PF400020 [KHL]       10         KHL12       PF400020 [KHL12]       12         KHL16       PF400020 [KHL16]       16         KHL20       PF400020 [KHL20]       20         KHL25       PF570020 [KHL25]       25	KHL2         PF480020 [KHL]         2         0.435           N KHL3         PF485859         3         0.475           KHL5         PF470020 [KHL]         5         0.850           KHL8         PF410020 [KHL]         8         0.620           KHL10         PF400020 [KHL]         10         2.090           KHL12         PF400020 [KHL12]         12         1.550           SUPER YACHTS           KHL16         PF400020 [KHL16]         16         -           KHL20         PF400020 [KHL20]         20         -           KHL25         PF570020 [KHL25]         25         -	YACHTS         KHL2       PF480020 [KHL]       2       0.435       117.7         N KHL3       PF485859       3       0.475       173.0         KHL5       PF470020 [KHL]       5       0.850       172.2         KHL8       PF410020 [KHL]       8       0.620       166.3         KHL10       PF400020 [KHL]       10       2.090       217.7         KHL12       PF400020 [KHL12]       12       1.550       217.7         SUPER YACHTS         KHL16       PF400020 [KHL16]       16       -       -         KHL20       PF400020 [KHL20]       20       -       -         KHL25       PF570020 [KHL25]       25       -       -	YACHTS           KHL2         PF480020 [KHL]         2         0.435         117.7         7.5           NV         KHL3         PF485859         3         0.475         173.0         7.5           KHL5         PF470020 [KHL]         5         0.850         172.2         9.5           KHL8         PF410020 [KHL]         8         0.620         166.3         9.5           KHL10         PF400020 [KHL]         10         2.090         217.7         11.0           KHL12         PF400020 [KHL12]         12         1.550         217.7         11.0           SUPER YACHTS           KHL16         PF400020 [KHL16]         16         -         -         -           KHL20         PF400020 [KHL20]         20         -         -         -           KHL25         PF570020 [KHL25]         25         -         -         -

<sup>\*</sup> Maximum available space.

<sup>\*\*</sup> Best halyard diameter before splicing



## FURLING LOCKS SWIVEL

### IMPROVE PERFORMANCE

The KFH halyard locks have been tried and tested for many years in the world's toughest oceans.

78% of the last Vendee Globe yachts have used this lock!



#### +SAFETY

 Once locked the halyard is no longer under tension.
 The compression in the mast is halved and halyard wear is minimised.

#### **+LIGHTWEIGHT**

- The luff is pulled from the bottom of the drum with a block, eliminating the need for a 2:1 halyard set up. It is also possible to use a smaller and lighter halyard as it carries only the weight of the sail.

#### +SIMPLICITY

- Once unlocked only the lightest part of the mechanism stays on the top of the mast, the furlinglock is on deck leaving no moving parts aloft, making it easy to maintain.



The KFH eliminates stretch and creep ensuring your halyard is at perfect hoist everytime and also reduces mast compression.

The KFH combines a lock and a swivel to be used with a furling drum.



### **Application examples**

CODE SAILS/LIGHT GENOA:

As most standard sailing yachts do not include a mast equipped with 2:1 halyard purchase for foresails, it is easier to have a powerful code sail or light genoa using an accurate setting.

STAYSAIL:

A better solution than a fixed furler. The sail can be furled and easily stored, leaving the foredeck uncluttered and the genoa free to tack. Upwind performance is unaffected.

#### 1 To lock:

pull the halyard to max hoist. The furling-lock becomes a standard top swivel: Just unfurl and enjoy your sail.

#### 2 To unlock:

simply pull on the halyard again to max hoist. The sail can now be lowered.



MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	HEIGHT (mm)	MAX SPACE* (mm)	BEST LINE** (mm)					
	YACHTS										
KFH1	<b>KFH1</b> PF550020 [KFH] 1.5 0.167 108 5										
KFH2	PF480020 [KFH]	2.5	0.877	158	7.5	6					
KFH5	PF470020	5	0.920	166.8	9.5	6					
KFH6	PF410020 [KFH6]	6	0.896	166.2	9.5	6					
KFH8	PF410020	8	1.046	172.5	9.5	6					
KFH10	PF390020	10	2.230	218.4	11	8					
KFH12	PF400020	12	2.230	218.4	11	8					

	SUPER YACHTS								
KFH14	KFH14 PF400020 [14]								
KFH16	PF400020 [16]	16							
KFH20	PF440020	20							
KFH25	PF1060020 [25]	25							
KFH30	PF1060020	30							

The KFH+ or the KSFH+ packages include a drum

- + a 3:1 friction sheave
- + a KFH furling lock instead of the standard swivel.

KTSH+ = KFH+ with a KTS.

MODEL	RÉf. KFH+	RÉf. KSFH+	RÉf. KTSH+
KFH1	PF550000	PF550000 [KSF]	PF550000 [KTS]
KFH2	PF480000	PF480000 [KSF]	PF480000 [KTS]
KFH5	PF470000	PF470000 [KSF]	PF470000 [KTS]
KFH8	PF410000	PF410000 [KSF]	PF410000 [KTS]
KFH10 PF400000 [10]		PF400000 [KSF10]	PF400000 [KTS10]
KFH12	PF400000	PF400000 [KSF]	PF400000 [KTS]



<sup>\*\*</sup> Best halyard diameter before splicing.





# REEF LOCK NO MORE BREAKING REEF LINES

A complete line of reefing locks for cruising, racing and Super Yachts.







Originally designed and installed onboard the Orma's, reef locks have become popular in the cruising and Super Yacht scene to solve common problems (overload, many friction points, or slipping jammers).

These locks make it lighter due to a reduction in strapping and avoid reef line stretch.

	MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	MAX SPACE (mm)	BEST LINE (mm)	MAX LOOP* (mm)	MATERIAL		
	YACHTS									
NE	<b> KHR1</b>	PF0265276	1	0.067	5.5	5	13	ALU		
	KHR2	PF0263125	2	0.188	6.2	5.50	19	ALU		
	KHR4	PF0263440	4	0.299	9	7	20	ALU		
	KHR5	PF0263414	5	0.488	10	6	24	ALU		
	KHR8	PF0264562	8	0.660	11.2	7	24	ALU		
	KHR10	PF0263222	10	0.834	10	6	20	ALU		
	KHR6+	PF0263440 [INOX]	6	0.884	9	7	20	STAIN. STEEL		
	KHR8+	PF0263414 [INOX]	8	1.442	10	8	24	STAIN. STEEL		
7	KHR12+	PF0264022 [INOX]	12	2.200	10	8	28	STAIN. STEEL		
: 3				SUPER '	YACHTS			1100		
A)	KHR15+	PF0263388	15	-	-	-	-	STAIN. STEEL		
40	KHR20+	PF0264856 [INOX]	20	-	-	-	-	STAIN. STEEL		
ä,	KHR25+	PF0264857 [INOX]	25	-	-	-	-	STAIN. STEEL		
	KHR30+	PF0264858 [INOX]	30	-	-	-	-	STAIN. STEEL		



# KMS MAINSAIL LOCKING HEADBOARD CAR USED BY RACERS FOR OVER FIFTEEN YEARS



#### +KARVER

#### **ADVANTAGES**

- Compact & Light.
- External and /or internal remote.



Locking a mainsail is a common solution on many racing yachts, Super Yachts, and offshore cruising yachts.

#### LOCKING TECNOLOGIES

We supply a headboard car featuring a lock for the whole KMS product line. Depending on the load requirements and the yacht size, the "locking system" would be activated with one or two inserts (in red) into the track or with two hooks on the side for the bigger units.

References and characteristics available in the KMS section (P58/64).



Lashing blocks fast attachment for performance and safety! ROPE LASHING BLOCKS SATILE BLOCKS - BLOCKS & SHEAVES

#### WHY CHOOSE KARVER'S LASHING BLOCKS?



#### ► SAFETY FEATURE

Modern rope technologies have enabled sailors to replace metal connections with soft lashings allowing higher working loads.



#### ► LOW FRICTION

High working load and low friction ratio (titanium and ceramic roller bearings) Karver blocks are the lightest and the most efficient on the market.



#### **▶** DESIGN

Karver block design has been simplified to the max so it can be used by everyone from the hard core racer to the weekend cruiser



#### **► UNIVERSAL**

Karver now offers the widest range of lashing blocks for boats from 2 to 70 meters

#### **Features and benefits**

Description	КВО	КВ	KBR
SIDE PLATES	KBO1 to 8: Plastic + fibers KBO10 to 50: Aluminium alloy	KB6 and KB8: Plastic +fibers KB10 to KB12: Aluminium alloy	Carbon/Aluminum/Stainless steel
SIDE BALL BEARINGS	POM from KBO8	N/A	Ceramic
CENTRE ROLLER BEARINGS	PEEK®	PEEK®	Titanium
ROPE SHACKLE INCLUDED	Up to KBO30	Optional	Optional
LEATHER OR WOOD OPTION	N/A	N/A	YES
FRICTION RATIO	5 to 7%	5 to 7%	2%
INSTALLATION	Easy	Rope-work required	Rope-work required
DOUBLE AND TRIPLE OPTION	Up to KBO8	With link	N/A
WEIGHT TO MWL RATIO	WEIGHT TO MWL RATIO **		***
COST TO MWL RATIO	**	***	*



# ROPE LASHING BLOCKS SAIL LIGHTER!

The rope shackle will never break due to the load or rust over the years.



#### +FAST ATTACHMENT

- The rope shackle is included with the block up to KBO30.

#### +SIMPLICITY

- Easy fitting from the lashing guide and rope shackle attachment simplifies the use of the KBO block.

#### +LIGHTWEIGHT

- The design and material optimisation make the block extremely light.

#### +PERFORMANCE

- The KBO block features a two stage bearing system from the KBO8 to enhance low friction.



KBO lashing blocks have the best size to weight ratio on the market. KBO rope lashing makes fitting easier and quicker than standard shackles.



#### **KBO1 to KBO8** > Composite plastic sides















MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	MAX LINE (mm)	BEST LINE (mm)	SHEAVE (mm)	SOFT SHACKLE
KBO1 SINGLE	PF830030	0.15	0.010	6	5	22.5	MP551865
KBO2 SINGLE	PF790030	0.22	0.026	8	7	32	MP551701
KBO4 SINGLE	PF650030	0.40	0.028	8	7	32	MP551701
KBO6 SINGLE	PF800030	0.60	0.047	10	9	38	MP551148
KBO8 SINGLE	PF890030	0.85	0.080	12	11	47	MP551148
KBO1 DOUBLE	PF830030 [D]	0.25	0.018	6	5	22.5	MP553117
KBO2 DOUBLE	PF790030 [D]	0.35	0.050	8	7	32	MP553119
KBO4 DOUBLE	PF650030 [D]	0.65	0.066	8	7	32	MP553319
KBO6 DOUBLE	PF800030 [D]	0.95	0.103	10	9	38	MP553121
KBO8 DOUBLE	PF890030 [D]	1.30	0.148	12	11	47	MP553123
KBO1 TRIPLE	PF830030 [T]	0.35	0.025	6	5	22.5	MP553118
KBO2 TRIPLE	PF790030 [T]	0.45	0.072	8	7	32	MP553120
KBO4 TRIPLE	PF650030 [T]	0.90	0.084	8	7	32	MP553120
KBO6 TRIPLE	PF800030 [T]	1.30	0.148	10	9	38	MP553122
KBO8 TRIPLE	PF890030 [T]	1.80	0.213	12	11	47	MP553124

**KBO10 to KBO50** > Aluminum sides









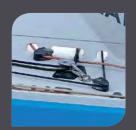


KBO10	PF660030	1.2	0.083	12	11	52	MP551148
KB015	PF670030	1.8	0.143	14	13	63	MP551149
KBO20	PF680030	2.6	0.186	14	13	74	MP551149
KBO20 WIDE	PF680030 [L]	2.6	0.244	16	2 x 10	74	MP551150
KBO30	PF690030	3.5	0.334	16	15	97	MP551150
KB050	PF810030	5	0.610	18	15	123	Х

From KBO10 to KBO50, it's now possible to order them as a snatch block version.

-								
	KBO10 SNATCH	PF660030 [OP]	1.2	0.083	12	11	52	MP551148
	KBO15 SNATCH	PF670030 [OP]	1.8	0.143	14	13	63	MP551149
j	KBO20 SNATCH	PF680030 [OP]	2.6	0.186	14	13	74	MP551149
	KBO30 SNATCH	PF690030 [OP]	3.5	0.334	16	15	97	MP551150
	KBO50 SNATCH	PF810030 [OP]	5	0.610	18	17	123	Х





# FOOT BLOCK MINIMUM DIMENSIONS

Karver technology is screwed to the deck!



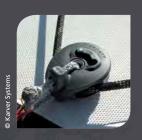


MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	MAX LINE (mm)	BEST LINE (mm)	SHEAVE (mm)
KBO2FB	PF790030 [FB]	0.22	0.025	8	7	32
KBO4FB	PF650030 [FB]	0.40	0.027	8	7	32
KBO6FB	PF800030 [FB]	0.60	0.046	10	9	38
KBO8FB	PF890030 [FB]	0.80	0.080	12	11	47
* Installation screws ar	e provided.					
KBO10FB	PF660030 [FB]	1.20	0.114	12	11	52
KBO15FB	PF670030 [FB]	1.80	0.196	14	13	63
KBO20FB	PF680030 [FB]	2.60	0.261	14	13	74
KBO30FB	PF690030 [FB]	3.50	0.482	16	15	97



# RATCHET BLOCK REVERSIBLE

It doesn't matter which way you pass the line through the block!





Attached through the centre, the Karver ratchet block is the only block in which the ratchet can work in either direction.

MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	MAX LINE (mm)	SHEAVE (mm)
KBOW RATCHET BLOCK	PF760030	0.3	0.073	10	55

## KBOJ



# TRIPLE BLOCK + CAM CLEAT LIGHTER PURCHASE SYSTEMS

The first triple block featuring the unmatched KJ3 cam cleat by Karver.



Delivered with or without the triple block

MODEL	PART NUMBER	MWL (T)	WEIGHT (KG)	MAX LINE (mm)	SHEAVE (mm)
KBO6J TRIPLE + CAM CLEAT	PF800030 [TKJ3]	0.8	0.348	10	38
KBO6J + KBO6T	PF800030 [TKJ3T]	0.8	0,496	10	38

### (KRS)



## SOFT SHACKLES





MODEL	PART NUMBER	MWL (T)	
ROPE SHACKLE 0.5T	MP551701	0.5	
ROPE SHACKLE 1T	MP551148	1	
ROPE SHACKLE 2T	MP551149	2	
ROPE SHACKLE 4T	MP551150	4	
HIGH LOAD STROP + T-BONE	PF084853 [SS]	5	
HIGH LOAD STROP + T-BONE	PF110040 [SS]	8	
HIGH LOAD STROP + T-BONE	PF030040 [SS]	12	
HIGH LOAD STROP + T-BONE	PF034854 [SS]	16	



## VERSATILITY SIMPLICITY AND DESIGN

Simple, reliable and efficient the Karver KB block combines both freedom of attachment and extreme safety.



#### **+LIGHTWEIGHT**

 Compared to traditional blocks (at equal working load), the use of a soft attachment through the centre of the block reduces weight up to 50%.

#### +VERSATILITY

- With the use of lashing materials, multiple attachments are possible when installing the block (e.g Backstay sytems), or even just to tie it up (eg. to prevent capsizing).

#### **+SAFETY FEATURES**

- Attachment through the centre prevents the running line from becoming disconnected from the lashing line if the block fails under an extreme load.



#### **Multiple possibilities**

KB: Roller bearings adapted for general usage.

KBc: Self-lubricating plain bearings, KBc blocks are ideal for applications when the line is required to run under a very high load for a short distance (backstay, cunningham, boom vang, outhaul, etc).



























MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	MAX LINE (mm)	SHEAVE (mm)	LINK REF
KB6	PF190030 [GREY]	0.22	0.020	6	30	PL191142
KB8	PF040030 [GREY]	0.6	0.051	10	35	PL040774
KB10	PF020030	1	0.086	10	46	PL021143
KB12	PF180030	1.4	0.119	12	54	PL181094
187 ° 7			AT SECTION			A 2 TO S
KB8C	PF040031	0.8	0.044	8	33	PL041089
KB10C	PF020031	1.9	0.096	10	46	PL022210
KB12C	PF180031	3	0.167	12	56	PL182211

## KBR HIGH LOAD BLOCKS RANGE

The KBR range features our high load lashing blocks (from 1.5T and up to over 40T). Built with our low friction technology, it is dedicated to racers and Super Yachts. Available in 3 different materials: carbon, aluminum, and stainless steel. The carbon version can be covered with a thin layer of wood or leather. No matter which one you choose, your block will always feature:

- A reliable and resistant block design to handle high loads.
- A very low friction bearing mechanism under load.
- Titanium sheaves, a two-stage bearing technology with rollers in titanium and balls in ceramic.
- An anti-capsizing design.
- An enlarged inner diameter to enable multiple attachments through the center.





# HIGH LOAD BLOCKS THE HIGHEST PERFORMING BLOCK ON THE MARKET

2% friction, carbon fibre, ceramic and titanium.



#### +PERFORMANCE

- Low friction ratio even under very high load (Titanium bearings).

#### +LIGHTWEIGHT

- Design optimisation and high tech component use make the KBr the lightest roller bearing block on the market.

#### +COMPACT

- The Titanium bearing system (Karver patent) ensures that the blocks hold high loads on smaller diameter sheaves.



The new design avoids any possible block capsizing. The closed structure prevents the block from being crushed.

MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	MAX LINE (mm)	SHEAVE (mm)		
		YAC	ACHTS				
W KBRC10	PF330000 [C]	1	0.076	12	45		
KBRC15	PF330001 [C]	1.5	0.090	12	49		
KBRC30	PF330002 [C]	3	0.097	12	49		
KBRC50	PF330003 [C]	5	0.175	14	64		
KBRC65	PF330005 [C]	6.5	0.280	16	75		
KBRC80	PF330007 [C]	8	0.385	18	89		
		SUPER '	YACHTS				
KBRC105	PF330009 [C]	10.5	0.557	18	102		
KBRC130	PF330012 [C]	13	0.800	20	115		
KBRC160	PF330016 [C]	16	1.080	20	135		
KBRC180	PF330018 [C]	18	1.350	22	147		
KBRC250	PF330025 [C]	25	2.017	30	160		
KBRC300	PF330030 [C]	30	3.620	35	180		
KBRC400	PF330040 [C]	40	4.980	40	206		
	KBRC10 KBRC30 KBRC50 KBRC65 KBRC80  KBRC105 KBRC105 KBRC130 KBRC130 KBRC160 KBRC250 KBRC250 KBRC300	N	VAC           N KBRC10         PF330000 [C]         1           KBRC15         PF330001 [C]         1.5           KBRC30         PF330002 [C]         3           KBRC50         PF330003 [C]         5           KBRC65         PF330005 [C]         6.5           KBRC80         PF330007 [C]         8           SUPER         KBRC105         PF330009 [C]         10.5           KBRC130         PF330012 [C]         13           KBRC160         PF330016 [C]         16           KBRC180         PF330018 [C]         18           KBRC250         PF330025 [C]         25           KBRC300         PF330030 [C]         30	VACHTS           N KBRC10         PF330000 [C]         1         0.076           KBRC15         PF330001 [C]         1.5         0.090           KBRC30         PF330002 [C]         3         0.097           KBRC50         PF330003 [C]         5         0.175           KBRC65         PF330005 [C]         6.5         0.280           KBRC80         PF330007 [C]         8         0.385           SUPER YACHTS           KBRC105         PF330009 [C]         10.5         0.557           KBRC130         PF330012 [C]         13         0.800           KBRC160         PF330016 [C]         16         1.080           KBRC180         PF330018 [C]         18         1.350           KBRC250         PF330025 [C]         25         2.017           KBRC300         PF330030 [C]         30         3.620	VACHTS           KBRC15         PF330001 [C]         1.5         0.090         12           KBRC30         PF330002 [C]         3         0.097         12           KBRC50         PF330003 [C]         6.5         0.175         14           KBRC65         PF330005 [C]         6.5         0.280         16           KBRC80         PF330007 [C]         8         0.385         18           SUPER YACHTS           KBRC105         PF330009 [C]         10.5         0.557         18           KBRC130         PF330012 [C]         13         0.800         20           KBRC160         PF330016 [C]         16         1.080         20           KBRC180         PF330018 [C]         18         1.350         22           KBRC250         PF330025 [C]         25         2.017         30           KBRC300         PF330030 [C]         30         3.620         35		



### KBRc SPECIALS

### **ONE CONCEPT-SEVERAL VARIATIONS**

Because our clients always ask for more, here are few variations of our famous KBRC. This should satisfy yachties in the quest of beauty and special solutions.



		KBRC L	KBRC W	KBRC X
MWL (T)	SHEAVE DIAMETER (mm)	LEATHER	WOOD	EXTRA LARGE
		YACHTS		
1.5	49	PF330001 [CL]	PF330001 [CW]	NO
3	49	PF330002 [CL]	PF330002 [CW]	PF330002 [CX]
5	64	PF330003 [CL]	PF330003 [CW]	PF330003 [CX]
6.5	75	PF330005 [CL]	PF330005 [CW]	PF330005 [CX]
8	89	PF330007 [CL]	PF330007 [CW]	PF330007 [CX]
Appelled the second		SUPER YACHTS		
10.5	102	PF330009 [CL]	PF330009 [CW]	PF330009 [CX]
13	115	PF330012 [CL]	PF330012 [CW]	PF330012 [CX]
16	135	PF330016 [CL]	PF330016 [CW]	PF330016 [CX]
18	147	PF330018 [CL]	PF330018 [CW]	PF330018 [CX]
25	160	PF330025 [CL]	PF330025 [CW]	PF330025 [CX]
30	180	PF330030 [CL]	PF330030 [CW]	PF330030 [CX]
40	206	PF330040 [CL]	PF330040 [CW]	PF330040 [CX]



#### **HIGH LOAD ALUMINUM BLOCKS**

More traditional than its sister ship, the KBRa block feature side plates made of aluminum and a two stage bearing mechanism with titanium rollers and Torlon® ball bearing for very low friction.

MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	MAX LINE (mm)	SHEAVE (mm)			
YACHTS								
KBRA30	PF330002 [AL]	3	0.139	12	49			
KBRA50	PF330003 [AL]	5	0.227	14	64			
KBRA65	PF330005 [AL]	6.5	0.323	16	75			
KBRA80	PF330007 [AL]	8	0.494	18	89			
	SUPER YACHTS							
KBRA105	PF330009 [AL]	10.5	0.660	18	102			
KBRA130	PF330012 [AL]	13	0.994	20	115			
KBRA160	PF330016 [AL]	16	1.321	20	135			
KBRA180	PF330018 [AL]	18	1.667	22	147			
KBRA250	PF330025 [AL]	25	2.522	30	160			
KBRA300	PF330030 [AL]	30	4.480	35	180			
KBRA400	PF330040 [AL]	40	6.152	40	206			



#### **HIGH LOAD ALUMINUM SNATCH BLOCKS**

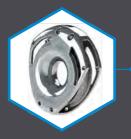
The entire KBRa range is available as a snatch block.

One of the side plates pivots from the centre to open.

A self-gripping strap keeps the block closed.

Operating the block takes only a few seconds with the soft shackle.

MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	MAX LINE (mm)	SHEAVE (mm)			
YACHTS								
KBRA65 SNATCH	PF330005 [OP]	6.5	0.330	16	75			
KBRA80 SNATCH	PF330007 [OP]	8	0.476	18	89			
SUPER YACHTS								
KBRA105 SNATCH	PF330009 [OP]	10.5	0.630	18	102			
KBRA130 SNATCH	PF330012 [OP]	13	0.964	20	115			
KBRA160 SNATCH	PF330016 [OP]	16	1.291	20	135			
KBRA180 SNATCH	PF330018 [OP]	18	1.637	22	147			
KBRA250 SNATCH	PF330025 [OP]	25	2.492	30	160			
KBRA300 SNATCH	PF330030 [OP]	30	4.450	35	180			
KBRA400 SNATCH	PF330040 [OP]	40	6.122	40	206			



## **KBRm**

## MIX OF BEAUTY AND PERFORMANCE

The KBRm blocks feature the same low friction bearing technology as the KBR carbon.

The side plates are made of polished stainless steel.



### +KARVER

## **ADVANTAGES**

- All the benefits of the modern KBR block in a classic version.
- Reliability with minimum wearing and maintenance.
- Compact & light.
- Long life bearing.



				10000					
MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	MAX LINE (mm)	SHEAVE (mm)				
		YAC	HTS						
KBRM15	PF330001 [M]	1.5	0.205	12	49				
KBRM30	PF330002 [M]	3.0	0.223	12	49				
KBRM50*	PF330003 [M]	5.0	0.405	14	64				
KBRM65	PF330005 [M]	6.5	0.644	16	75				
KBRM80*	PF330007 [M]	8.0	0.897	18	89				
SUPER YACHTS									
KBRM105	PF330009 [M]	10.5	1.264	18	102				
KBRM130*	PF330012 [M]	13.0	1.830	20	115				
KBRM160	PF330016 [M]	16.0	2.490	20	135				
KBRM180	PF330018 [M]	18.0	3.105	22	147				
KBRM250	PF330025 [M]	25.0	4.600	30	160				
KBRM300	PF330030 [M]	30.0	8.300	35	180				
KBRM400	PF330040 [M]	40.0	11.450	40	206				

<sup>\*</sup>Available in 2019.



## SHEAVES HIGH LOAD & LOW FRICTION



KDS sheaves feature a plain bearing for high working loads and ball bearings for lateral loads. The Karver sheave range offers a very low weight to working load ratio.

MODEL	PART NUMBER	PART NUMBER	MWL (T)	WEIGHT (Kg)	MAX LINE (mm)	SHEAVE (mm)	PIN (mm)
KDS25	O PF980025 [FP]	O PF980025	2.5	0.098	12	65	12
KDS40	O PF980040 [FP]	O PF980040	4	0.266	18	80	16
KDS60	O PF980060 [FP]	O PF980060	6	0.419	24	100	26
KDS100	O PF980100 [FP]	O PF980100	10	0.703	26	113	32
KDS150	O PF980150 [FP]	O PF980150	15	1.382	28	160	60



NEW

The KDSTi is a combo between our KDS and KBR range.

The KDSTi is perfect for applications where friction should remain to the minimum.

Every parts is machined in titanium.

The bearing mechanism is the same as the one featured for our KBR blocks (2% friction only, made possible by high precision machining and design of the titanium rollers).

MODEL	PART NUMBER	PART NUMBER	MWL (T)	WEIGHT (Kg)	MAX LINE (mm)	SHEAVE (mm)	PIN (mm)
KDSTi15	O PF985253 [FP]	O PF985253	1.5	105	12	50	12
KDSTi30	O PF985254 [FP]	O PF985254	3	120	12	50	12
KDSTi50	O PF985255 [FP]	O PF985255	5	261	14	64	16
KDSTi65	O PF985256 [FP]	O PF985256	6.5	388	16	75	20
KDSTi80	O PF985257 [FP]	O PF985257	8	536	18	89	26
KDSTi105	O PF985258 [FP]	O PF985258	10.5	858	18	102	30
KDSTi130	O PF985259 [FP]	O PF985259	13	1130	20	112	34
KDSTi160	O PF985260 [FP]	O PF985260	16	1646	20	130	38
KDSTi180	O PF985261 [FP]	O PF985261	18	2496	22	145	40
KDSTi250	O PF985262 [FP]	O PF985262	25	3672	30	160	46







Our sheaves and sheave boxes are manufactured in aluminum alloy (6000 series), hard anodised, and they enable main, staysail and ORC halyards to go through with minimum friction.

MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	MAX LINE (mm)	SHEAVE (mm)	PIN (mm)
OKDSB25	PF970025	2.5	0.279	12	65	12
OKDSB40	PF970040	4	0.519	18	80	16
OKDSB60	PF970060	6	0.967	24	100	26
OKDSB100	PF970100	10	1.465	26	113	32
OKDSB150	PF970150	15	2.904	28	160	60

Contact us for custom sheaves or sheave boxes



#### +KARVER

## **ADVANTAGES**

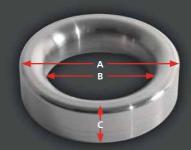
 A complete product line is now available. We can also produce custom rings per your specs.

## TITANIUM RINGS

## **STRENGTH AND LIGHT WEIGHT**

Titanium is one of the preferred materials in our manufacturing process.

Rings are a natural addition to our catalogue.



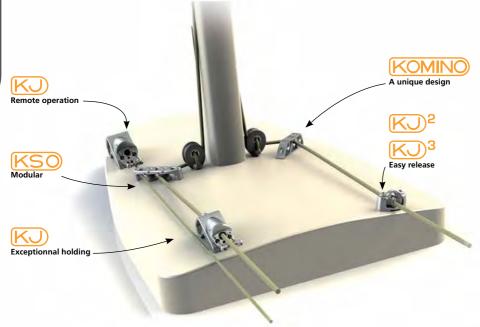
MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	OUTTER DIAM (A mm)	INNER DIAM. (B mm)	WIDTH (C mm)
KRTi35	PL1024601	3.5	0.06	50	30	12
KRTi45	PL1024602	4.5	0.127	65	40	16
KRTi60	PL1024603	6	0.236	80	50	20
KRTi70	PL1024604	7	0.312	90	55	20
KRTi150	PL1024605	15	0.87	120	70	30
KRTi250	PL1024606	25	1.1	130	75	32
KRTi400	PL1024607	40	1.971	150	80	40

The jammer that won't give up!



## **KARVER: THE ROPE HOLDING SPECIALIST**

Not everything can be locked all of the time which is why as rope specialists we needed to innovate in terms of holding and deck organization.



From the mast to the cockpit, organize and efficiently hold your lines.





## HIGH LOAD JAMMER

## THE JAMMER THAT WON'T GIVE UP!

Unlike traditional jammers that squeeze lines between 2 jaws, Karver KJ jammer secures the line evenly around its cover with 3 jaws.



### **+ROPE HOLDING**

- No slipping when under high load. No rope wear.

## +PERFORMANCE

- Up to 50% lighter than the competition.
- Up to 3 different rope diameters can be used on the same jammer

## +SPECIAL FEATURES

- Remote control possible.
- Easy maintenance.

**KJ10** 



The conical KJ can be removed from its base and bonded into a casing on the deck or in the mast.



		© Reichel Pugh/Baltic					
MODEL	PART NUMBER	MWL (T)	MIN / MAX (mm)	BEST LINE (mm)	WEIGHT (Kg)	WEIGHT WITHOUT BASE	LENGTH X WIDTH X HEIGHT (mm)

L	KJID	PF840130	0.6 - 1.5	6-	12	10	0.340	0.186		111 X 49,2 X 57,8
	KJ25	PF840250	1.1 - 2.5	8 -	14	12	0.600	0.330		135 x 57,2 x 64,5
	KJ50	PF840500	2 - 5	12 -	20	18	1.050	0.560		160,5 x 70,4 x 81
	KJ100	PF841000	6 - 10	20 -	32	28	2.980	1.640		245,2 x 102,1 x 114,5
									10.0	
м	MODEL	ALU C	ONE ONLY			CARBON CC	ON CONE ONLY		IMPRINT	
1	KJ10	PF840100 [CONE]				N/A	4		N/A	
	KJ15	PF8401	50 [CONE]			PF840150 [CONEC]			PL843800	
ı	KJ25	PF8402	50 [CONE]			PF840250 [CONEC]			PL843801	
	KJ50	PF840500 [CONE]				PF840500 [CONEC]			PL843802	
	KJ100	PF841000 [CONE]				PF841000 [CONEC]			PL843803	

### A SIMPLE AND EFFICIENT CONCEPT

All the KJ jammers have been designed with the same philosophy:

3 concentric jaws that can be separated from their base and have the ability to be operated remotely.





#### **► UNIQUE CONCEPT**

KJ jammer envelops the entire rope using the 3 jaws.

Jaw surface area has been maximized to prevent rope wear.

Unrivalled holding power.

#### **▶** OPERATION

The trip line (above) allows the jammer to open after to have released the tension of the rope with your winch.

The red line closes the jammer.

These 2 operations can be carried out remotely

#### ► SPECIAL FEATURES

The conical body of the jammer is inserted in an alloy base and screwed onto the deck or mast.

The KJ jammer can be dismantled in 30 seconds for maintenance or servicing.

Custom carbon conical part possible.

#### ► INSTALLATION

The conical jammer is held in place by a single screw in its base.

The version ready for bonding into the boat is integrated into a conical

Weight is kept to a minimum.

The KJ Jammer can be ordered without the bracket and be installed in a carbon socket.

It is possible to order the KJ jammer mould to facilitate the installation process.



It is possible and very easy to "remove" the mechanism that makes it possible to keep the KJ jammer in the "unlocked" position.

By doing such, it makes it easier to operate the jammer remotely with only 1 line.

A cam cleat can retain the line to have the jammer in the "unlocked" position.





# WINCHLESS AN AUTOMATIC PURCHASE INSTEAD OF A WINCH!

Based on the Karver KJ jammer design, it's possible to sheet-in with just a purchase system using the Karver Winchless.



### **+ADVANTAGES**

- Can replace a winch on small sailboats.
- Enables user to operate the line from a distance (when hiking for instance).



MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	LENGTH X WIDTH X HEIGHT (mm)	MIN / MAX (mm)	BEST LINE (mm)
WINCHLESS	PF840040	0.3	0.24	100 x 72 x 53	5 - 10	8
KMS40 Adaptor	PF845329	0.3	0.24	100 x 72 x 53	5 - 10	8





## HIGH PERFORMANCE

High strength and reliability.





MODEL	PART NUMBER	BODY MATERIAL	MWL (T)	WEIGHT (Kg)	MAX LINE (mm)	FASTENER SPACING (mm)
KJ2 CAM CLEAT	PF840050	Fiber	0.200	0.045	10	38
KJ3 CAM CLEAT	PF840010	Aluminum	0.310	0.069	10	38
KJ3 CAM CLEAT	PF840010 [INOX]	Stainless	0.310	0.107	10	38
FAIRLEAD	SF842531	-	-	0.009	10	38
FAIRLEAD	SF842531 [INOX]	-	-	0.015	10	38



## CAM BASES UNIVERSAL

Assembled with the KJ cam cleat, compact and weight optimized.





Swivel cleat bases with eye\*\*

MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	MAX LINE (mm)	ARM LENGTH (mm)
KSC SHORT - EYE & KJ3	PF840030	0.2	0.195	10	72
KSC SHORT - LASHING & KJ3	PF840031	0.2	0.179	10	72
KSC LONG - EYE & KJ3	PF840033	0.2	0.199	10	93
KSC LONG - LASHING & KJ3	PF840032	0.2	0.19	10	93

<sup>\*</sup>Sold without block. - \*\*Same parts for different applications



## JAWS HANDLE UNIQUE TO THE MARKET!

The KJH "Jaws Handle" is the ideal system to tighten up a sheet without hurting your hands!



#### APPLICATION

- An efficient trimmer tool which pulls hard on a small diameter line.
- Free up a winch when striking a new sail
- Flying stopper
- Hold a halyard that is stuck



MODEL	PART NUMBER	MWL (T)	WEIGHT (Kg)	MAX LINE (mm)
KJH YELLOW	PF840020	0.110	0.130	10
KJH GREY	PF840020 [GRIS]	0.110	0.130	10



## KORG READY FOR HIGH LOADS

Light, attractive machinery!



© Karver Systems

This low friction organizer is lightweight and designed to handle high loads.

MODEL	PART NUMBER	MWL 60° (T)	WEIGHT (Kg)	MAX DIAM (mm)	HOLES
KORG18-1	PL781679	1.000	0.085	18	1
KORG18-1W	PL781678	1.000	0.111	18	1
KORG18-2	PL781440	1.000	0.147	18	2
KORG18-3	PL781043	1.000	0.205	18	3
KORG18-4	PL781265	1.000	0.328	18	4
KORG18 CUSTOM	PL781180	-	-	18	-
KORG22-1	PL784859	2.000	0.092	22	1
KORG22-1W	PL784860	2.000	0.186	22	1
KORG22-2	PL784861	2.000	0.222	22	2
KORG22-3	PL784862	2.000	0.280	22	3
KORG22-4	PL784863	2.000	0.403	22	4
KORG22 CUSTOM	PL784865	-	-	22	-
KORG30-1	PL784866	3.000	0.289	30	1
KORG30-1W	PL784867	3.000	0.383	30	1
KORG30-2	PL784868	3.000	0.418	30	2
KORG30-3	PL784869	3.000	0.478	30	3
KORG30-4	PL784870	3.000	0.601	30	4
KORG30-CUSTOM	PL784871	-	-	30	



## ORGANIZERS WELL DESIGNED AND LIGHT!

The Komino fairleads simply assemble together.





Low friction deck organizer for low angles.

MODEL	PART NUMBER	MWL 60° (T)	WEIGHT (Kg)	MAX LINE (mm)	
KOMINO SIMPLE	PL843946	0.380	0.033	12	
KOMINO INTER	PL843945	0.380	0.038	12	



## ORGANIZERS YOU CAN STACK THEM UP!







Low friction deck organizer featuring a plain bearing sheave, each component can fit into another and be installed as a curve. The fastening pattern makes it possible to install a KJ2 or KJ3 cam cleat on top of it. Shipyards will appreciate to be able to realize any configuration with only 3 references.

MODEL	PART NUMBER	MWL 60° (T)	WEIGHT (Kg)	MAX LINE (mm)	SHEAVE (mm)	SHEAVE
KSO8 - FIRST (INCLUDE 1 SHEAVE)	PF784531	0.85	0.045	14	30	1
KSO8 - ADDITIONAL SHEAVE	PF784533	0.85	0.036	14	30	1
KSO8 - LAST (NO SHEAVE)	PF784532	0.85	0.031	14	-	0

To order a complete KSO: PF784533 [3] for a KSO8 3 sheaves.

Forget the others and switch to Karver winches!



## THE GREATEST WINCH INNOVATION **IN OVER 40 YEARS!**

Karver winches are equipped with a double gear mechanism, a classic first stage identical to current winch design and a second consisting of an epicyclic gear. This patented technology is used for the first time on a winch and has the effect of multiplying efforts. Thus and according to its original set up, our winches are either 6 times faster than any other winch on the market (Speed Range), or 3 times more powerful (Power Range).











The Pontos company was the originator of this major innovation in sheet winches. It sought a way to drastically reduce the physical effort to operate on a sailboat and make the practice of sailing accessible to the greatest number of people. Bought by Karver in 2018 and taking advantage of their 15 years of boating experience, these winches have evolved into even more performance and reliability.

Apart from the Compact (2 speeds), all winches are equipped with 4 automatic speeds. As soon as the efforts are too much, simply operate the handle in the opposite direction. Speeds pass instinctively from one to the other without activating any extra mechanism. Once the tension on the rope is released, the winch will return to the initial speed. It's very fast and efficient.

Designed to last: Aluminum hard anodized drum, 17-4PH stainless steel gearboxes and clutch, triple polyoxymethylene needle bearing cage, plus full 5 year warranty.

Karver winches have been tested successfully in extreme conditions and proven their efficiency in the toughest races like the Route du Rhum, 20% of Class 40 have already adopted it.

Make your own opinion and contact your nearest dealer to find out where to try it.



## WINCH-RANGE SPEED

## 6 TIMES FASTER THAN A TRADITIONAL WINCH

"Be careful, it's going to be fast! Very very very fast!"

IP53



#### +PERFORMANCE

- 6 times faster: Trim in faster.

  Trim for extraspeed and acceleration out of the tack.
- 4 automatic speeds:2 standard speeds+ 2 extra fast speeds .
- The sails are not blowing free longer in the tack and end up less damaged.

### +SECURITY

- No need to take the slack by hand. Use the handle from A to 7

#### +SIMPLE

- Instinctive shift in gears. No mechanism to operate.
- Dimensioned to replace most standard winches





© Loick Peyron on Happy, credit Jean

The extra speeds of the KSW provide the ability to trim much faster than standard winches. In first gear, a single handle turn embeds 6 times the length of rope of a two-speed winch. The gear change is simple. When the load on the handle becomes too much, simply reverse the direction to change gears automatically.

The simplicity and speed of the maneuvers will certainly make you save accurate seconds for the overall leader board.

To hoist a main sail with a 20m halyard requires 142 turns of crank with a traditional winch against 29 turns with a Speed Karver!

4 SPEEDS 4 FIRST PLACES - THE WINCH THAT WINS!

MODEL	KSW 40			KSW 46			KSW 52					
PART NUMBER	PF1205830			PF1205831			PF1205832					
BASE	171 mm			206 mm			220 mm					
ROPE DIAMETER	8-12 mm			8-14 mm			8-14 mm					
WEIGHT	5,3 Kg			7,6 Kg			8,6 Kg					
MAX LOAD		850	Kg		1 300 Kg			1 500 Kg				
SPEED	1	2	3	4	1	2	3	4	1	2	3	4
POWER RATIO	2,3	8	11,6	40	2,3	9,3	11,7	46,6	2,3	10,6	11,6	52,8
TAILING LENGTH	70 cm	20 cm	14 cm	4 cm	68 cm	17 cm	14 cm	3,5 cm	69 cm	15 cm	14 cm	3 cm

## WINCH-RANGE POWER

## 3 TIMES MORE POWERFUL = 3 TIMES LESS EFFORT

Re-discover the pleasure of setting a sail without effort!

IP53



#### +PERFORMANCE

- 3 times more powerful: Trim at your fingertips and save your strength..
- 4 automatic speeds:
   2 standard speeds + 2 extra ultra-powerful speeds.
- Our superior working load capacity makes it possible to use a smaller size.



- A real alternative to electric winches.

### +CONVENIENT

 KWPs are so powerful that you can use a shorter handle, useful for winches under roof cover.





© GUSTUS I" ON MAE

What delights KPW users is the multiplication ratio that converts minimal effort on the handle into maximum effort on the line. The maneuvers become accessible to the whole family.

This winch is really dedicated to cruisers but racers will also have noted that at similar sizes our winches are 20% stronger than the others. This allows you to come down in winch size if needed.

On a 38-foot, with a 40 m<sup>2</sup> genoa, in 25 knots of wind, a standard winch will require 13 kg to tuck the sail. The effort required with a KARVER Power will be only 4.7 Kg!

MAKE SAILING EASY - THE END OF HUGE EFFORT

MODEL	KPW 110			KPW 130			KPW 150					
PART NUMBER	PF1205833			PF1205834			PF1205835					
BASE	171 mm			206 mm			220 mm					
ROPE DIAMETER	8-12 mm			8-14 mm			8-14 mm					
WEIGHT	5,2 Kg			7,4 Kg			8,6 Kg					
MAX LOAD		1 00	0 Kg		1 500 Kg			1 800 Kg				
SPEED	1	2	3	4	1	2	3	4	1	2	3	4
POWER RATIO	11,6 40 112,9 32,7		11,7	46,6	131,3	33	11,6	52,8	148,7	32,7		
TAILING LENGTH	14 cm	4 cm	1,4 cm	5 cm	14 cm	3,5 cm	1,2 cm	5 cm	14 cm	3 cm	1,1 cm	5 cm



## WINCH COMPACT

## THE BEST OF KARVER TECHNOLOGY

Two speeds: The first ultra fast and the second ultra powerful!



#### +PERFORMANCE

- Ultra Compact (size of a Winch 20).
- 2 times faster(24 cm per handle round).
- Unbeatable weight / power ratio and dimensions / power ratio.





© Claude to the mane

KARVER'S

Size with equivalent power.

Total concentrated innovation in a two-speed self-tailing winch. By transposing the technology of its 4-speed winches, Karver invented the most powerful small winch.

The winch Compact has the size of a winch 20 but the power of a winch 45. In first gear, you enjoy a tailing speed twice the speed of a conventional winch, and in second gear, you benefit from the power of a winch 45.

The unique combination of a small size and a workload of 850 Kg makes the Compact an extremely versatile winch.

The Compact winch can replace any winch up to and including size 40 and accepts 8 to 11 mm ropes, providing increased comfort and improved performance.



to size 40

PART NUMBER	PF120	)5836		
BASE	130 mm			
HEIGHT	142	mm		
ROPE ENTRY HEIGHT	58 mm			
ROPE DIAMETER	8-11 mm			
WEIGHT	2,9	Kg		
MAX LOAD	850	Kg		
SPEED	1	2		
POWER RATIO	6,05 Kg 45 Kg			
TAILING LENGTH	26,4 cm 3,5 cm			



## +BENEFITS

- Body structure: 100% Carbon: Lighter, stiffer.
- Double stainless steel low friction ball bearings. Extended life.
- User friendly locking system, left and right hand users.
- Customized Design and cover finish.







CUSTOMIZED VERSION

Available in wood veneer finish with the name of your boat or its owner.

## **CARBON WINCH HANDLES PERFORMANCE AND DESIGN**

The winch handle is an iconic tool for all sailors. This is why it feels natural to propose a KARVER one reflecting our own ADN: Performance - Innovation - Design.



MODEL	PART NUMBER	LENGHT	POMMEL	WEIGHT (g)
KWH20	PF1206312	199 mm/8′	NO	415
KWH20G	PF1206313	199 mm/8′	YES	486
KWH25	PF1206310	254 mm/10'	NO	456
KWH25G	PF1206311	254 mm/10'	YES	528

Our winch get dressed! It is now possible to get your winch coated with carbon finish or carbon and wood veneer, for modern classic version.



A winch choice is more complex than it seems. In order to make it as simple as possible, we have produced a dedicated report in our KARVERPEDIA, available on our website www.karver-systems.com



## TRACK AND CAR SYSTEMS: DESIGNED TO LAST!

Developed in relationship with the biggest offshore racing teams, the Karver batten cars and track systems are reliable, compact and lightweight.

## 4 reasons to choose a Karver mast system:

- An extremely optimized product line for greater performance
- Modern design and continual innovation
- Reliable and efficient locking solutions
- An unmatched capacity to produce custom systems in a short timeframe



© Karver Systems

CHARACTERISTICS	UNIT	KMS30	KMS40	KMS60	KMS80	KMS100
Yacht size	ft	< 35	35-50	50-70	70-110	100-140
Track upper width	mm	19.6	21	29	34	48
Base track width	mm	19.6	24	29	34	48
Track height	mm	11.4	12.2	14	16	22.5
Weight / m - Standard	g / m	250	304	488	664	1490
Weight / m - Lightened	g / m	Х	Х	418	564	1245
Length	m	2	3	3 & 6	3 & 6	3 & 6
Fastener	mm	6	5 or 6	6	8	10
Standard fastening space	mm	25	30	25	50	50
Headboard with lock	-	N/A	YES	YES	YES	YES
Batten cars - Standard pin	-	M10	M10	M14	M16	M18

## Our mast cars are designed to fit some competitor tracks.

MODEL	HARKEN	RONSTAN	ANTAL					
KMS30	AA	Serie 14	х					
KMS40	A, ST18	Series 19 &22	HS22					
KMS60	B, ST26	Series 22 &22	HS22, HS24, HS30					
KMS80	C, ST32	Serie 26	HS30					
KMS100	ST50	Series 30 &42	х					

- > A track section can be ordered with reinforced and enlighted sections
- > Batten car screw diameter & length can be modified
- > Our mast cars can be installed on many competitor tracks. Please ask us!
- > You can use ball bearing and friction cars on the same track
- > Batten receptacles can be ordered for other batten models

## **KARVER MAST SYSTEMS**



► Track joiner

► Standard track

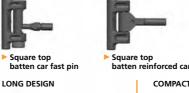
► Track joiner

Custom track reinforced + alighten zones

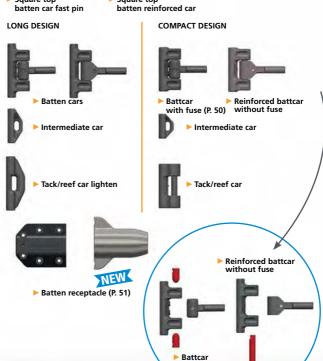
Car charger



> Automatic locking headboard car (P. 51)



Track endstop



with fuse (P. 50)

## FFATURES AND BENEFITS





- All our tracks are precision made
- Possibility to reinforce zones where reefs will be taken
- Possibility to lighten zones where loads will be minimized
- Possibility to mix reinforce, lighten & locking zones on the same track section
- Permanent stock of raw track to shorten lead time for custom machinery
- Ball bearing or sliders cars fitting on the standard track shape

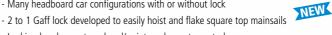


### GENERAL:

- Ultra compact, light & modern design
- Machined cars for better reliability & resistance
- Toggles on the cars are close to the mast aft face to limit tearing risks
- All cars are available with a short or long design to fit the right load
- All cars can be ordered with ball bearings but we recommend the friction
- Sliders made of self-lubricated material for lower friction & limited wear
- As every project is unique, custom cars are available on request (60% of our sales)
- We can shape our car sliders to fit competitor's track.

#### HEADBOARD CARS:

- Many headboard car configurations with or without lock



- Locking headcar: external and/or internal remote control with or without position sensor.

### TOP BATTEN CAR:

- Available with or without fast pin
- Optimized angular displacement for the batten box screw

#### BATTEN CARS:

- Our batten cars feature a fuse mechanism to prevent any damage to the cars or the track if overloaded
- Reinforced version available (without fuse)

#### INTERMEDIATE CARS:

Ultra compact design & light (machined in one piece)

#### REEF/TACK CARS:

- A reinforced car for the highest load

#### BATTEN RECEPTACLES:

- Many batten receptacle models available
- New "Rocket" design











## **GAFF LOCK**

## SIMPLE IS BEAUTIFUL!







The KGL Gaff Lock was design to facilitate the process of hoisting and flaking big square top mainsails.

The system is simple and reliable and can be feautred on existing tracks and cars (even from our competitors).

There is one restriction to it though, the KGL Gaff Lock would only work if the mainsail of the halyard can pass through a sheave the furthest aft of the masthead.

MODEL	MWL (T)	Best line (mm)	KGL ONLY	KGL + KMS HB CAR	HIGH LOAD STROPE
KGL30	0.25	7	PF1044813	PF1044813[CHRT]	MP1044826
KGL40	3	14	PF1404581	PF1404581 [CHRT]	MP1404478
KGL60	6	16	PF1604748	PF1604748 [CHRT]	MP1604479
KGL80	8	18	PF1804749	PF1804749 [CHRT]	MP1804828

Please contact us to custom made our KGL Gaff lock to your existing set of cars. Some references already available:

- Harken: AA, A, B, C, ST18, ST26, ST32
- Ronstan: Series 14, 19, 22, 26
- Antal : HS22, HS24, HS30



## BATTEN CAR FUSES

## **NEVER BREAK A BATTEN AGAIN!**

Racing yachts and big boats often have mainsails with long carbon battens that can be fragile and difficult to replace after a breakage.

Our KMS40 and KMS60 batten cars can feature an anti-breakage mechanism that will protect the battens.

If overloaded, after an accidental gybe for instance, the part will shear and free the batten pin before damaging the battens.

You would only have to change the fuse then.



## AUTOMATIC HEADBOARD CAR LOCK



Many sailboats feature our locking headboard cars for their mainsail. Many of the Imoca are doing so, for instance.

To ease the way to operate the system and make it more mainstream, we have designed an automated version of our headboard car lock to be reliable and easy to use: flippers are fitted around each locking area.

The locking mechanism of the headboard car automatically engages once it is in contact with the flippers. An external command remains on the car as a back up.

MODEL	PART NUMBER	NB OF INSERTS	SAFE WORKING LOAD	CAR LENGTH	WEIGHT
KMS40	PF1405533	1	3	140	0.284
KMS60 / 5T	PF1605442	1	5	200	0.589
KMS60 / 8T	PF1605431	2	8	350	2.400
KMS80 / 7T	PF1805431	1	7	200	1.100
KMS80 / 12 T	PF1804657	2	12	350	2.400
KMS100	PF1004957	2	20	400	3.100

CHARACTERISTICS	KMS40	KMS60 KMS80		KMS100
Flipper x 1	PF1405511	PF180	PF1005515	
Exit box with cam cleat for flipper command	PF1405512	PF1804554		PF1005516
Position sensor display	PF1405513	PF1804793		PF1005517
Installation tool for flipper and sensor	PF1405514	PF1604760 PF180476		PF1005518



## LASHING BATTEN RECEPTACLES

In partnership with one of the biggest sail loft in the world, we designed a new batten receptacle made of one-piece and fitted symmetrically within the sail to optimize the air laminar flow. The finished part is compact, light and can fit several sizes of carbon battens.

MODEL	MAX BATTEN	STD PIN	OPTIONS	MATERIAL	MONOBLOC REF.	ADJUSTABLE REF.
KMS60	14 x 30	M14	M10/M12	PA6	PF1614541	PF1615454
KMS60	14 x 30	M14	M10/M12	ALU	PF1614568	PF1615450
KMS80	20 x 40	M16	M12/M14	ALU	PF1815148	PF1815348
KMS100	26 x 39	M18	M14/M16	ALU	PF1015508	PF1015509



The lashing batten receptacles comes as complementary products to our line of standard batten receptacles.



The KMS 30 range is designed for yachts from 20 to 35 feet long. Minimal friction in a compact and lightweight range.



	MODEL	STD	PART NUMBER	WEIGHT (Kg)	HEIGHT (mm)	
	TRACKS					
	TRACK 22mm STANDARD (M6/25 mm)	STD	PF1042549	0.250 / m	2000	
	LOCKING AREA	-	PF1045086	0.150	300	
			HEADBOARD CARS			
Α	HEADBOARD CAR LASHING	-	PF1043734	0.073	81	
В	LOCKING HEADBOARD CAR	- ·	PF1045087	0.120	86	
		- ·	PF1044813 [CHRT]	0.860	88	
			BATTEN CARS			
c	BATTCAR M10	STD	PF1043362	0.043	40	
			TACK / REEF CARS			
D	TACK / INTERMEDIATE CAR	STD	PF1043735	0.023	40	
	INTERMEDIATE CARS					
D	TACK / INTERMEDIATE CAR	STD	PF1043735	0.023	40	
			ACCESSORIES			
	TRACK JOIGNER	STD	PL1044872	0.013	50	
i.	TRACK END STOP	STD	PL1044873	0.022	25	
-	CAR LOADER	-	PL1044874	0.040	150	
N	GAFF LOCK (ONLY)	-	PF1044813	0.045	62	
4	HR STROPE FOR GAFF LOCK	-	MP1044826	0.020	80	
			BATTEN RECEPTACLES	·		
H	BATTEN BOX M10	-	PF1043321	0.080	-	



The KMS40 range benefits from Karver's knowledge of mainsail track systems.

Available for boats from 35 to 50 feet long for unrivalled performance and reliability.



	MODEL	STD	PART NUMBER	WEIGHT (Kg)	HEIGHT (mm)		
	TRACKS						
	21MM STANDARD TRACK (M5 / 30 mm) 3M	STD	PF1402711 [M5]	0.304 g/m	3000		
	21MM STANDARD TRACK (M6 / 30 mm) 3M	STD	PF1402711	0.290 g/m	3000		
	REINFORCED TRACK (M5CSH / 30 mm) 3M	-	PF1404875	0.295 g/m	3000		
	LOCKING AREA	-	PF1403564	0.136	510		
			HEADBOARD CARS				
Α	HEADBOARD CAR - STANDARD	STD	PF1403035	0.388	140		
	HEADBOARD CAR - LASHING	-	PF1402992	0.279	140		
	HEADBOARD CAR - LOCK + LASHING	-	PF1403036	0.284	140		
	HEADBOARD CAR - GAFF LOCK	-	PF1404581 [CHRT]	0.842	153		
			SQUARE TOP BATTEN CA	ARS			
	SQUARE TOP BATTCAR FAST PIN M10	STD	PF1404876	0.220	70		
			BATTEN CARS				
В	BATTCAR REINFORCED M10 WITHOUT FUSE	STD	PF1402710 [R]	0.230	70		
С	BATTCAR M10 WITH FUSE	-	PF1402710	0.149	70		
	BATTCAR M10 WITH FAST FUSE	-	PF1403020	0.155	70		
	TACK / REEF CARS						
D	TACK / REEF CAR	STD	PF1403031	0.250	70		
			INTERMEDIATE CARS				
Ε	INTERMEDIATE CAR	STD	PL1403588	0.025	50		
			ACCESSORIES				
	REMOVABLE TRACK DOOR	STD	PF1403054	0.094	200		
Ę	TRACK DOOR - CAR CHARGER	STD	PF1404052	0.071	210		
٦	TRACK ENDSTOP (x1)	-	PL1403277	0.011	25		
	TRACK JOINER	-	PL1404013	0.007	50		
H	GAFF LOCK ONLY	-	PF1404581	0.473	127		
H	HL STROPE FOR GAFF LOCK	STD	MP1404478	0.400	80		

<sup>&</sup>gt; The standard batten car screw is M10 but can be ordered with M8 or M12.

<sup>&</sup>gt; Our mast cars can be installed on many competitor tracks. Please ask us!

<sup>&</sup>gt; A complete range of batten receptacles is available.



## A standard within the IMOCA 60 fleet, Karver KMS 60 range is designed for boats from 50 to 70 feet long.



	MODEL	STD	PART NUMBER	WEIGHT (Kg)	HEIGHT (mm)
			TRACKS		
	STANDARD 29MM TRACK (M6 / 25 mm) 3M	STD	PF1602744 [3M]	0.488 g/m	3000
	REINFORCED 29MM TRACK (M6CSH / 25 mm) 3M	-	PF1604883 [3M]	0.480 g/m	3000
	ENLIGHTED V1 29MM TRACK (M6 / 50 mm) 3M		PF1604882 [3M]	0.429 g/m	3000
	ENLIGHTED V2 29MM TRACK (M6 / 75 mm) 3M		PF1604881 [3M]	0.423 g/m	3000
	ENLIGHTED V3 29MM TRACK M6 / 100 mm) 3M	,	PF1604888 [3M]	0.418 g/m	3000
	LOCKING TRACK / 5T	-	PF1603545	0.480 g/m	600
	CUSTOM KMS60 TRACK	-	PF1602744 [CUST]	-	-
			HEADBOARD CARS	5	
	STANDARD HEADBOARD CAR	STD	PF1604050	0.496	200
	HEADBOARD CAR + 2:1 BLOCK + LASHING	-	PF1603271	0.827	200
	HEADBOARD CAR + LOCK + LASHING	-	PF1602999	0.589	200
	HEADBOARD CAR DOUBLE LASHING	-	PF1604321	0.496	180
NE	WHEADBOARD CAR + GAFF LOCK	-	PF1604748 [CHRT]	1.347	201
	CUSTOM KMS60 HEADBOARD CAR	-	PF1604050 [CUST]	-	-
			SQUARE TOP BATTEN O	CARS	
	SQUARE TOP BATTCAR L110 M14 + FAST PIN	STD	PF1604209	0.380	110
Α	BATTCAR REINFORCED L110 M14	-	PF1602778	0.423	110
			BATTCARS		
В	BATTCAR L90 M14 + FAST FUSE		PF1602878 [90]	0.302	90
H	BATTCAR L110 M14 + FAST FUSE		PF1602878	0.317	110
Ž.	BATTCAR REINFORCED L90 M14	STD	PF1602778 [90]	0.338	90
Α	BATTCAR REINFORCED L110 M14		PF1602778	0.423	110



	MODEL	STD	PART NUMBER	WEIGHT (Kg)	HEIGHT (mm)	
	BALL BEARING BATTCARS					
	BALL BEARING SQUARE TOP BATTCAR L113 M14 FAST PIN		PF1603507	0.410	113	
	BALL BEARING BATTCAR L93 M14 + FAST FUSE		PF1602939 [90]	0.390	93	
	BALL BEARING BATTCAR L113 M14 + FAST FUSE		PF1602939	0.557	116	
	BALL BEARING BATTCAR REINFORCED L93 M14		PF1604890 [90]	0.405	93	
	BALL BEARING BATTCAR REINFORCED L113 M14		PF1604890	0.560	113	
			TACK OR REEF CARS			
	TACK / REEF CAR L90	-	PF1602942	0.227	90	
c	TACK / REEF CAR L110	STD	PF1602944	0.260	110	
D	TACK / REEF ALIGHTEN MONOBLOC	•	PF1602943	0.189	110	
			INTERMEDIATE CARS			
	INTERMEDIATE CAR 50MM (PA6)	-	PF1602932	0.026	50	
Е	INTERMEDIATE CAR 50MM (ALU)	STD	PF1602881	0.062	50	
	INTERMEDIATE CAR 70MM (ALU)	-	PF1604433	0.095	70	
			ACCESSORIES			
	TRACK JOINER	STD	PF1603525	0.018	50	
	REINFORCED INSERT	-	PF1603528	0.018	50	
	TRACK ENDSTOP	STD	PF1604883	0.055	50	
	TRACK DOOR - CHARGER	STD	PF1604849	0.012	200	
	GAFF LOCK ONLY	-	PF1604748	0.907	148.60	
	HIGH LOAD STROP FOR GAFF LOCK	-	MP1604479	0.220	110	
			BATTEN RECEPTACLES			
	BATTEN RECEPTACLE 30x20 M14 (ALU)	-	PF1612889	0.348	-	
	BATTEN RECEPTACLE 30x20 M14 (PA6)	-	PF1612891	0.180	-	
	BATTEN RECEPTACLE 39x20 M14 (ALU) - LONG	-	PF1682883	0.465	-	
	BATTEN RECEPTACLE D22 M14 (ALU)	-	PF1613288	0.418	-	
	BATTEN RECEPTACLE D22 M14 (PA6)	-	PF1612890	0.206	-	
	BATTEN RECEPTACLE 30x20 FOR TOP BATTEN M14 (PA6)	-	PF1613257	0.196	-	
	BATTEN RECEPTACLE 30x20 FOR TOP BATTEN M14 (ALU)	-	PF1604920	0.348	-	
VE	ROCKET BATTEN RECEPTACLE			See page 51		

<sup>&</sup>gt; Track lengths are available in 3 or 6 meters or custom.

<sup>&</sup>gt; A track section can be ordered with reinforced and enlighted sections.

<sup>&</sup>gt; The standard batten car screw is M14 but can be ordered with M12 or M16.

<sup>&</sup>gt; Our mast cars can be installed on many competitor tracks. Please ask us!

<sup>&</sup>gt; You can use ball bearing and friction cars on the same track.

<sup>&</sup>gt; Batten receptacles can be ordered for others batten models.





	MODEL	STD	PART NUMBER	WEIGHT (Kg)	HEIGHT (mm)
			TRACKS		
	STANDARD 34MM TRACK (M8 / 25 mm) 3M	STD	PF1804542	0.664 / m	3000
	ENLIGHTED 34MM TRACK (M8 / 25 mm) 3M	ı	PF1804543	0.579 / m	3000
	REINFORCED 34 MM TRACK (M8CSH / 25 mm ) 3M	ı	PF1804544	0.664 / m	3000
	LOCKING AREA (DOUBLE) IN THE TRACK		PF1804548	1.22	800
	LOCK TRIGGER BOX (INTERNAL REMOTE CONTROL - AUTOLOCK)	ı	PF1804655	0.148	66
	CUSTOM KMS80 TRACK	-	PF1804542 [CUST]	х	х
			HEADBOARD CARS		
Α	HEADBOARD CAR STANDARD	STD	PF1804690	2.2	280
	HEADBOARD CAR 2:1 LASHING	STD	PF1805263	1.578	280
	HEADBOARD CAR AUTOLOCK / 12T	-	PF1804657	2.6	400
	HEADBOARD CAR + GAFF LOCK	-	PF1804749 [CHRT]	2.1	300
	HEADBOARD CAR CUSTOM	-	PF1804692	х	х
			SQUARE TOP BATTEN CA	ARS	
В	BATTCAR 140MM SQUARE TOP BATTEN M16	STD	PF1804677 [M16]	0.727	140
	BATTCAR 140MM REINFORCED M16	-	PF1804695 [M16]	0.65	140
			BATTEN CARS		
	BATTCAR L110 REINFORCED M16	-	PF1804694 [M16]	0.56	110
c	BATTCAR L140 REINFORCED M16	STD	PF1804695 [M16]	0.60	140
	No. 20 (10 to 10 t				A 20 S S S S S S S S S S S S S S S S S S



MODEL	STD	PART NUMBER	WEIGHT (Kg)	HEIGHT (mm)	
BALL BEARING BATTCARS					
HEADBOARD CAR (BALL BEARING)	-	PF1804690 [BB]	2.050	382	
SQUARE TOP BATTEN CAR (BALL BEARING)	-	PF1804898 [BBM16]	1.100	172	
BATTEN CAR 142MM (BALL BEARING)	-	PF1804896 [BBM16]	0.870	142	
BATTEN CAR 172 (BALL BEARING)		PF1805614 [BBM16]	0.950	172	
TACK / REEF CAR (BALL BEARING)	1	PF1804686 [BB]	0.810	172	
INTERMEDIATE CAR (BALL BEARING)	1	PF1804688 [BB]	0.510	102	
		TACK OR REEF CARS			
TACK / REEF CAR L140	STD	PF1804686	0.481	140	
		INTERMEDIATE CARS			
INTERMEDIATE CAR 70MM (PA6)	-	PF1803454	0.100	70	
INTERMEDIATE CAR 70MM	STD	PF1804688	0.204	70	
		ACCESSORIES			
TRACK JOINER 100MM	STD	PL1805477	0.06	100	
EXIT FLIPPER LINE	-	PF1804554	0.150	66	
KMS POSITION SENSOR + 90° PLUG	-	PF1804793	x	х	
POSITION SENSOR DISPLAY	-	MP1804795	x	х	
TRACK DOOR - CAR CHARGER	STD	PF1804547	0.298	500	
GAFF LOCK ONLY	-	PF1804749	1.100	197	
HIGH LOAD STROP FOR GAFF LOCK	-	MP1804828	0.500	200	
TRACK ENDSTOP x 1	•	PF1804763	0.099	60	
MAINSAIL HEAD PLATE 30°	•	PF1805369	2.550	х	
MAINSAIL HEAD PLATE 60°	-	PF1804750	2.700	х	
MAINSAIL HEAD PLATE 90°	-	PF1805534	2.900	х	
	BATTEN RECEPTACLES				
BATTEN RECEPTACLES 20x30 M16 (ALU)	-	PF1612889 [M16]	0.690	120	
BATTEN RECEPTACLES 26x39 M16 (ALU)	-	PF1812883 [M16]	0.735	120	
ROCKET BATTEN RECEPTACLE			See page 51	·	

N





The KMS100 range meets the extremely high expectations of Super Yachts without compromising performance or custom features.

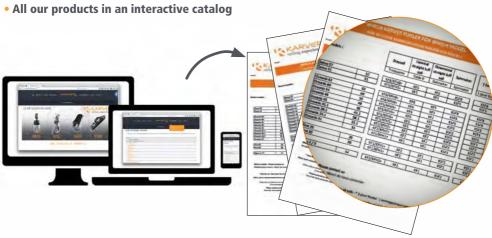


MODEL	PART NUMBER	WEIGHT (Kg)	HEIGHT (mm)				
TRACKS							
STANDARD 48MM TRACK 3M	PF1004550 [3M]	1.490	3000				
REINFORCED 48MM TRACK 3M	PF1004953	1.490	3000				
ENLIGHTED 48MM TRACK 3M	PF1004954	1.245	3000				
EXTRA ENLIGHTED 48MM TRACK 3M	PF1004955	1.050	3000				
LOCKING AREA	PF1004956	1.205	800				
	HEADBOARD CARS						
HEADBOARD CAR	PF1004912	2.500	280				
HEADBOARD CAR AUTOLOCK	PF1004957	2.800	400				
BATTEN CARS							
TOP BATTCAR FAST 140MM M18 (FAST PIN)	PF1004913	1.050	140				
BATTCAR REINFORCED 140 MM M18	PF1004914	0.850	140				
	INTERMEDIATE / REEF / TACK CARS						
INTERMEDIATE CAR 70MM	PF1004915	0.290	70				
INTERMEDIATE CAR 110MM	PF1004916	0.450	110				
TACK / REEF CAR 140MM	PF1004917	1.130	140				
ROCKET BATTEN RECEPTACLE		See page 51					

All cars are available with ball bearings. KMS100 is an ultra customizable range of tracks and cars. Call us to share your project.



## WWW.KARVER-SYSTEMS.COM



- Links to product videos
- The latest version of our catalog (The one you flip through may not be the latest version!)
- Access to most of our technical plans
- Intranet access for our customers with a Design Office (2D & 3D Plans)
- Our reseller network map
- "KarverPedia" articles (see pages 17 & 51)
   to understand better some technical aspects of our market
- Our furler recommendations for more than 80 brands and 890 models of sailboats
- The registration form of our products
- List of all boat shows in the world
- List of all nautical media in the world
- And much more...

Notes:	
	•••
	•••

## **Contact us**

Tanguy de LARMINAT - Commercial & Marketing Director

Jean Philippe CONNAN - Design Office Engineer / Racing Project Manager

Christophe QUESNEL / Cédric RAFIN - International sales

Alois KERDUEL - Sales manager France

Mélanie BOURDON - Sales coordinator France

## **Worldwide coverage**

16 years sailing the seas and oceans of the world



- Distribution network in 48 countries
- 70% sales income outside of France
- ► Karver Systems Headquarter: Avenue Marcel Liabastre 14600 Honfleur France
- ► Karver Systems Sales & showroom: 1 rue d'Estienne d'Orves 56100 Lorient France

Email: contact@karver-systems.com

Tel: + 33 (0)2 31 88 37 98 - Fax: + 33 (0)2 31 88 56 43

## Visit our new Website Follow us on Facebook, You Tube & Pinterest

INFO, VIDEOS AND DEALERS AT KARVER-SYSTEMS.COM







