

# FASTER OR EASIER? GO TO KARVER WINCH

WINCHES

6



**KCW**

Compact range



**KSW**

Speed range



**KPW**

Power range

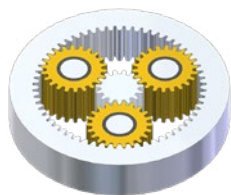


**KWH**

Carbon winch handles

# THE GREATEST INNOVATION ON WINCHES FOR OVER 40 YEARS!

Karver winches are fitted 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). Wow effect guaranteed!



► Planetary or Epicyclic gear



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 fitted 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.

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 successfully tested in extreme conditions and proven in the toughest races like the Route du Rhum, 20% of Class 40s have adopted it.

Find testimonials from many customers on our website (product page).

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



© Vincent Riou sur PRB, crédit Benoit Stichelbaut

# KSW WINCH-RANGE SPEED

6 TIMES FASTER THAN A TRADITIONAL WINCH



© Nicolas Troussel, Jean-Marie Liot

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

The extra speeds of the KSW provide the ability to trim much faster than standard winches. In first gear, a single handle turn embeds times the length of rope of a two-speed winch. The gear change is simple.

The simplicity and speed of the operations 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 handle with a traditional winch against 29 turns with a Speed Karver!

## + 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.

## + Safety feature

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

## + Simple

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

	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				8.2 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

# KPW WINCH-RANGE POWER

3 TIMES MORE POWERFUL = 3 TIMES LESS EFFORT



© Gustus 1<sup>er</sup> sur Maeva

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

What delights KPW users is the multiplication ratio that converts minimal effort on the handle into maximum effort on the line. The operation 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 2 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!

## + Performance

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

## + Economic

- A real alternative to electric winches.

## + Convenient

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

	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	1 000 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

# KCW WINCH COMPACT

THE BEST OF KARVER TECHNOLOGY

DECK EQUIPMENT, SAILS AND RIGGING  
**DAME**  
CATEGORY WINNER  
2019  
KARVER KCW COMPACT WINCH



© Karver Systems

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

**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.

## + Performance

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



► Size with equivalent power.



► Multiple rope angle entries. Replace all winches up to size 40.

PART NUMBER	PF1205836	
BASE	130 mm	
HEIGHT	142 mm	
ROPE ENTRY HEIGHT	58 mm	
ROPE DIAMETER	8-11 mm	
WEIGHT	3.2 Kg	
MAX LOAD	850 Kg	
SPEED	1	2
POWER RATIO	6,05 Kg	45 Kg
TAILING LENGTH	26.4 cm	3.5 cm

# KWH CARBON WINCH HANDLES

EFFICIENCY, PERFORMANCE, DURABILITY & AESTHETICS

DECK EQUIPMENT, SAILS AND RIGGING  
**DAME**  
 CATEGORY WINNER  
 2019  
 KWH WINCH HANDLE



© Karver Systems

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

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

Add the extension code [W] to order the wooden version.

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

## + 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.
- The weight gained by the carbon allows the use of stainless steel more resistant than aluminum on the handle and the footprint.
- Our racing customers say that the use of carbon makes the handle more "dynamic and efficient".
- Very competitive price.

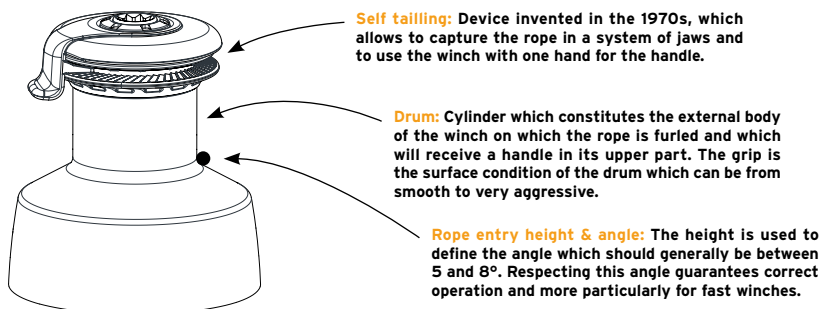


© Karver Systems

## ONLINE SUPPORT: UNDERSTANDING THE CHARACTERISTICS OF A WINCH

# KARVERPEDIA

The significant efforts on sailboats forced sailors to find technical solutions to pull loads that exceeded their own strength. Since antiquity, until today, many techniques have been used (capstan, winch, etc.), to finally arrive today at the generalized use of modern winches.



- **Maximum working load (MWL):** each winch must be able to withstand the loads present. Shipyards and yacht designers define these values. In the event of a winch replacement, you will find this information in the documentation for your current winch.
- **Power ratio:** represents the tensile force generated by the winch for 1 kg of force applied to a standard handle (254 mm). It generally defines the size of the winch: a size 40 = 40 kg of traction for 1 kg in the handle (1: 40). The larger this number is, the less force you will have to use on the handle. Thus a 40ST2A is a winch of max power 1:40 fitted with a self tailing (ST), with 2 speeds (2) and fitted with an aluminum drum (A)
- **Gear ratio:** defined the number of handle turns to be given to make 1 complete turn of the drum. Conversely, and depending on the diameter of the drum, this ratio will make it possible to define the length of strope engaged at each turn of the handle. Example: 6.28: 1 = 6.28 turns of the handle for one turn of the drum. A ratio less than 1 means that one turn of the handle turns the drum several times.
- **Output length (or speed):** this is more concrete than the speed ratio since it is the length of the rope engaged for one turn of the handle. This data is very rarely provided and it must therefore be calculated: speed ratio x  $\pi$  (3.14) x drum diameter.
- **Dimensions:** It is worth comparing winches of equivalent sizes (in addition to the load capacity). The reference values are generally the diameters of the base and the drum as well as the total height of the winch
- **Weight:** argument more sensitive for the racers than for the pleasure boaters
- **Number of speeds:** 95% of winches have 1 or 2 speeds. Like a car, a winch can have several possible gear ratios. The speed change is effected by reversing the direction of rotation of the handle.
- **Materials:** the drum can be in aluminum (A), in chrome-plated bronze (C), in stainless steel,... Aluminum drums are the most common and the lightest
- **Price:** an important criteria for most sailors but which must be put in relation with the technical elements above.

Karver winches have a very particular technical positioning since we are the only ones to use 4 fully automatic speeds and a planetary gear system that offers a rotation speed 5 to 6 times greater than our competitors (KSW models) or 3 times more power (KPW models).

FIND OTHER KARVERPEDIA ARTICLES ON OUR WEBSITE [WWW.KARVER-SYSTEMS.COM](http://WWW.KARVER-SYSTEMS.COM)



## OUR CLIENTS ARE OUR BEST AMBASSADORS... HERE ARE THEIR TESTIMONIES:

« This is the biggest winch innovation for a generation. I was amazed by the performance. A single transfer was enough to impress me! The jib was tacked even before I looked up to check its position. A pair of tack later I was definitely seduced... The power involved is so present that it is no longer necessary to install an electric winch. For me, this is the most incredible point of these winches.

The advantages are not only speed and power in regatta: it's even more about making life easier for boaters... The more I look at conventional two-speed winches, the more they seem to me unnecessarily slow, and laborious... Try these winches and you will find that it is difficult to go back. »

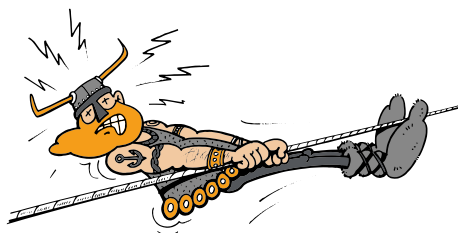
**Toby Hodges Journalist  
at Yachting Monthly**

"The Speed winch makes it possible to to sheet out so quickly that the sheet to the wind no longer leaves its self-tailing from the start to the final adjustment: Practical, Fast, Efficient!"

**Patrice Carpentier "Boats" magazine**

"Karver has reinvented the winch by working on points which seem to have been taken for granted but which are never definitively so. It's the same approach that we follow for the America's Cup. I found that Karver brought a plus, an ease which corresponded to the size and the problematic of my multihull. I also like to test new things. The principle of 4 speeds on a winch without button seduced me ! Karver has reinvented the winch by bringing real innovation. They made the revolution in the village."

**Loic Peyron aboard Happy**



"When we're in awe of something, we like to say it: Karver is bringing something new to boating, and it's no exaggeration to say that they make operation much easier."

**Paola Bertelli journalist  
to Sail Republic**

"The first thing I look for in a winch is its reliability. Karver achieved this goal. Then comes performance... Based on our recent experiences, we can confirm that Karver's four speed winches make a big difference on the water... a definite advantage. All the guys who have sailed with me are unanimous on this. These winches are great."

**Sébastien Rogues, (GC32/Class40),  
GDF Suez**

"The Speed winch is the ultimate weapon for quickly picking up slack in sheets, halyards, lines, etc..."

**Bertrand Castelnerac,  
Professional racer**

"Karver 4-speed winches are revolutionary."

**NW Yachting**

"The Karver winches played a key role in our victory by reducing our physical effort and therefore our fatigue when operating the A3 and Code spinnaker."

**Racing couple aboard a C&C 115**

"We have taken simplicity, performance and safety to the next level."

**Thibaut Vauchel-Camus  
Professional skipper  
Class 40 / Ocean Fifty**

