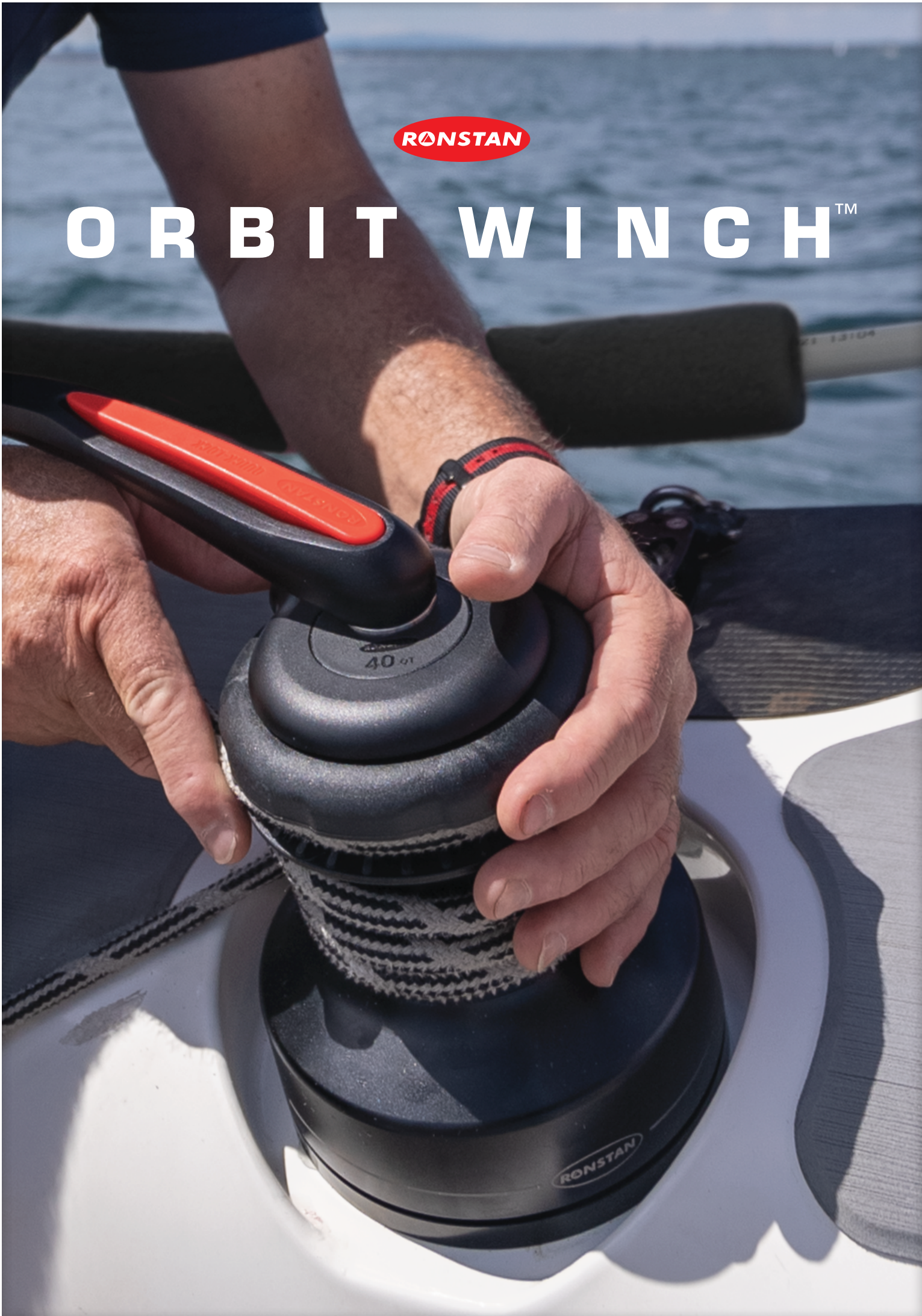


**RONSTAN**

# ORBIT WINCH™





# INTRODUCING RONSTAN ORBIT WINCHES™

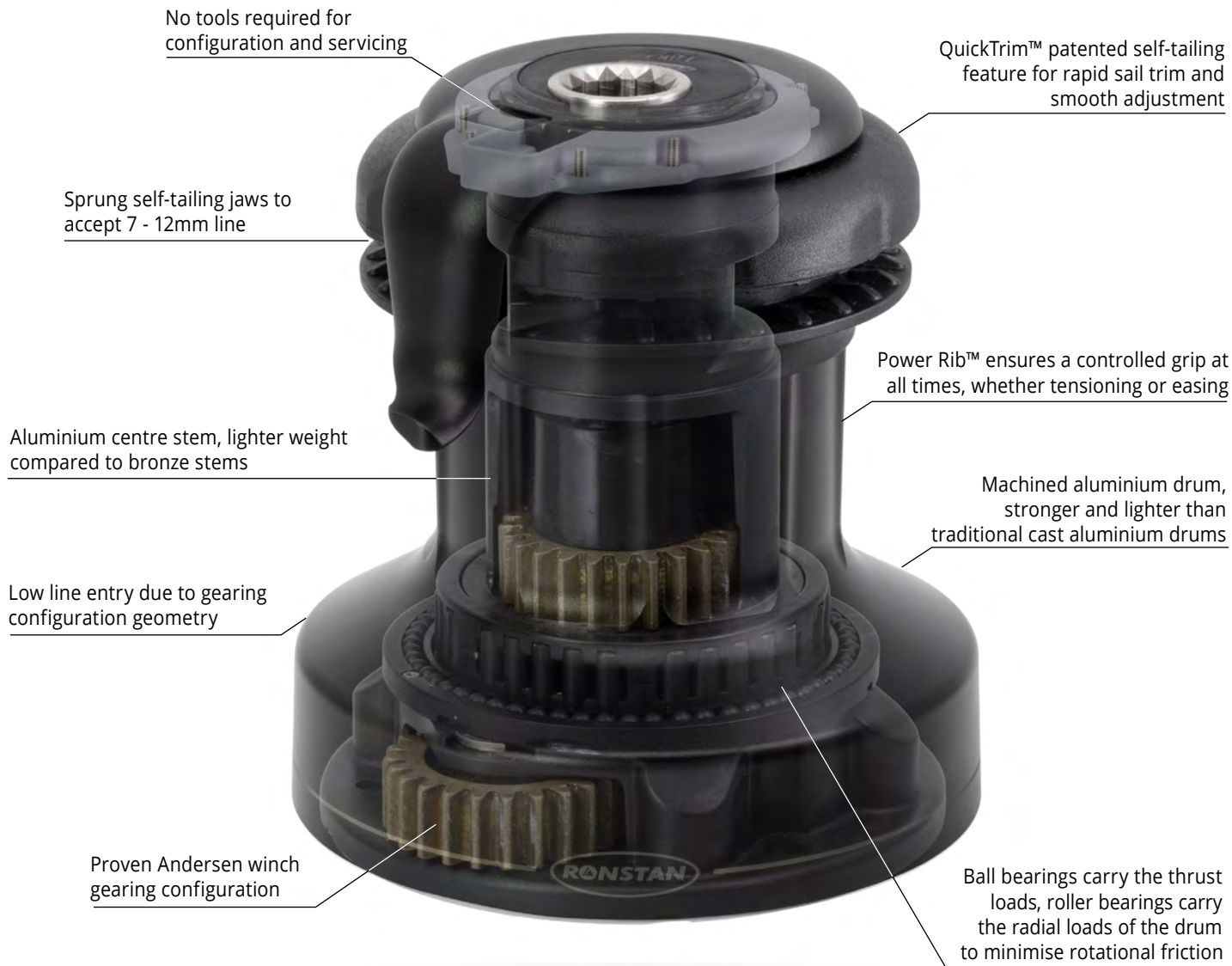
## THE ORBIT WINCH™ STORY

Laying the foundation for a new range of aluminium winches, Ronstan was able to draw on years of experience manufacturing Andersen Stainless Steel Winches® within our own operations in Denmark. This experience was invaluable, setting the standard for reliability, mechanical efficiency and an unparalleled user experience. For everything else, the new winches were developed from the deck up with different priorities determining material selection, weight optimisation, dimensions, gear and power ratios, manufacturing processes, surface finish, and performance.

When the Orbit Winch™ project started to take shape, the initial focus of research and development was on three sizes specifically for boats up to about 12m, where Ronstan is renowned for its comprehensive and competitive deck hardware range. Within a year the first prototypes had commenced multiple rounds of design concept refinements and testing, so that in the second year of the project we could start on-the-water testing in various locations around Australia and Europe.

Attention then turned to the fine detail of tooling and manufacturing, and the results are remarkable. Introducing the new Ronstan range of lightweight alloy winches, featuring race-ready performance, impressive line grip, the convenience of disassembly without tools, and the introduction of the unique, patented QuickTrim™ self tailer\*.

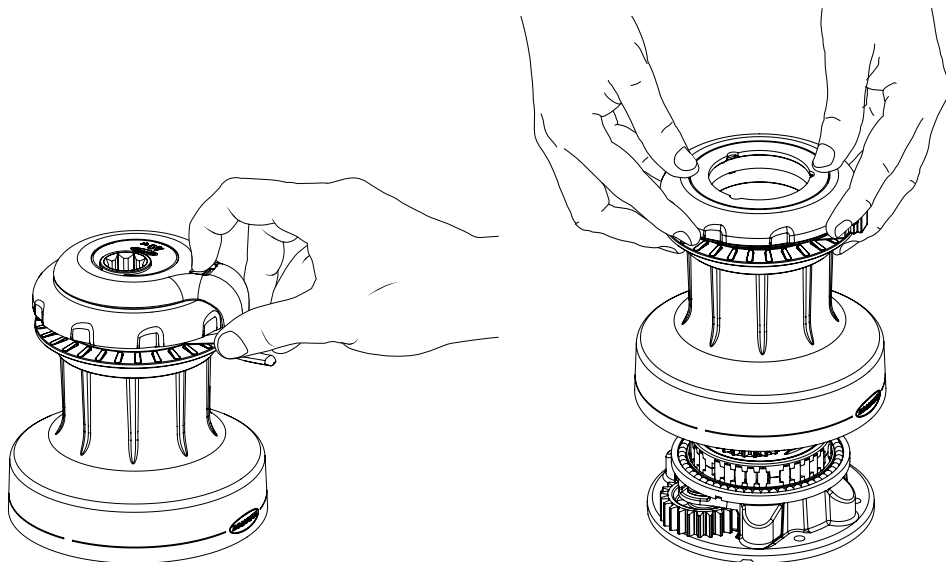
\*Available from size 30QT and up



## NO TOOLS REQUIRED

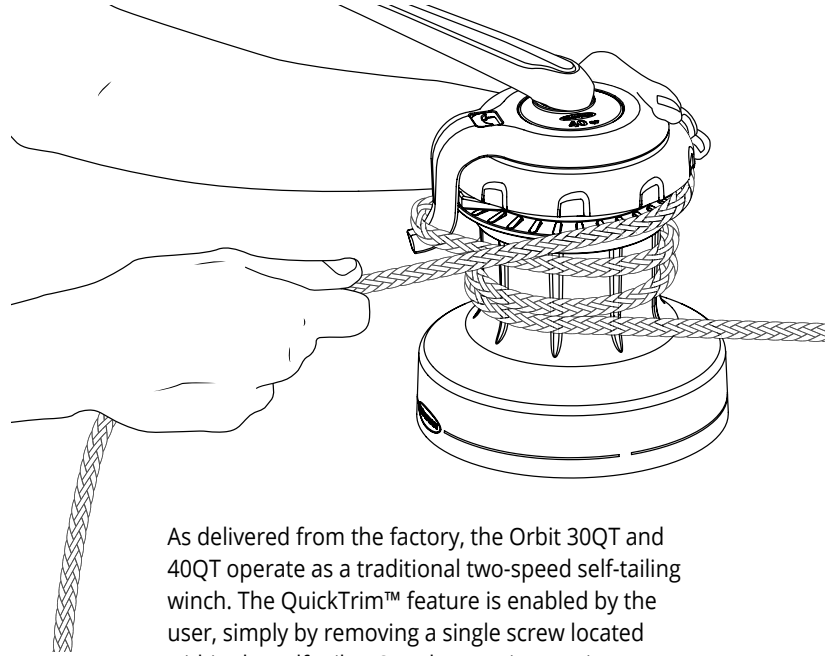
Full disassembly and reassembly can conveniently be performed without the need for any tools. To remove the drum, pull back the spring-loaded release latch and a slight anti-clockwise rotation will allow the self-tailing arm to be lifted from the winch. From there, the drum can be removed from the winch centre stem.

When completing reassembly in reverse order, an audible click confirms positive engagement between the self-tailing arm and bayonet notches on the centre stem. These notches allow the self-tailing arm to be locked in one of 8 positions at rotational increments of 45 degrees.



# INTRODUCING QUICKTRIM™

The innovative QuickTrim™ self tailer allows sailors to easily and safely ease line tension to make minor sail trim adjustments without having to remove the winch handle or take the line out of the self tailer. Racing sailors can react and respond instantly to minor changes in wind direction or steering, providing an unmatched advantage when frequent sail trim adjustments are required. It's also a nice convenience for cruising sailors.



On the water, using QuickTrim™ is intuitive and quickly becomes second nature. With one hand on the tail of the sheet, rotating the top cover of the winch anti-clockwise against spring pressure allows the self tailer to turn beneath it like a sheave as the rope is eased out, with smooth grip and control assured by the drum surface and Power Ribs™. When the top cover is allowed to spring back, the self tailer locks again and grips the line to resume normal use. This simple, reliable feature is a real advantage when making frequent minor adjustments to sheet and halyard tension.

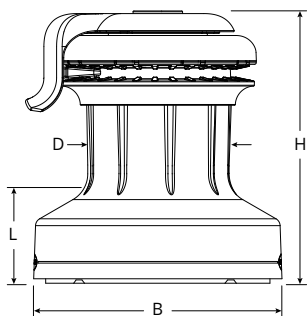
As delivered from the factory, the Orbit 30QT and 40QT operate as a traditional two-speed self-tailing winch. The QuickTrim™ feature is enabled by the user, simply by removing a single screw located within the self tailer. Step-by-step instructions are included in the Quick Reference Guide provided with the winch, and in the product manual available from the Ronstan website.

# POWER RIBS™

Inspired by the distinctive drum profile of Andersen winches, Power Ribs™ have been incorporated into the fully machined drums of Ronstan's Orbit Winches™ to deliver the same impressive line handling with maximum grip and minimal rope wear.

The exceptional grip provided by the Power Ribs™ offers a multitude of benefits: requiring fewer wraps around the drum, reducing the load held in the self tailer, and encouraging the line to slide easily upward on the drum to avoid riding turns. The non-abrasive drum surface extends the service life of running rigging and allows for smooth and controlled easing, even under high loads.





**RA6201**

Gear Ratio	2.7 : 1
Power Ratio	18.3 : 1
Line Size	6 - 10mm
Drum "D"	75mm
Base "B"	120mm
Height "H"	124mm
Line Entry "L"	42mm
Weight	1.7kg
Max Pulling Load	550kg

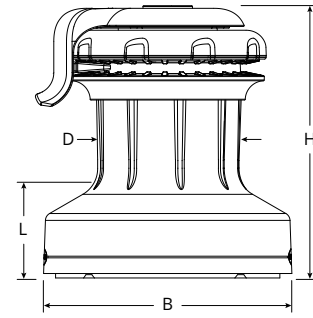


- ✔ Sprung self-tailing jaws to accept 6 - 10mm line.
- ✔ Proven Andersen winch gearing configuration.
- ✔ Power Rib™ ensures a controlled grip on the line at all times, whether trimming or easing. Minimal rope wear compared to more abrasive drum surface finishes.
- ✔ No tools required for configuration and servicing.

- ✔ Machined aluminium drum – stronger and lighter than traditional cast aluminium drums.
- ✔ Aluminium centre stem, lighter weight compared to bronze stems.
- ✔ Low line entry due to gearing configuration geometry.

- ✔ Hard anodised aluminium drum and centre stem, aluminium self-tailing arm.
- ✔ Grade 316 stainless steel shaft and pawls.
- ✔ Grade 2205 stainless steel axle pins.
- ✔ Aluminium bronze gears.
- ✔ Glass-filled nylon self tailer.
- ✔ Self-lubricating acetal bearings.

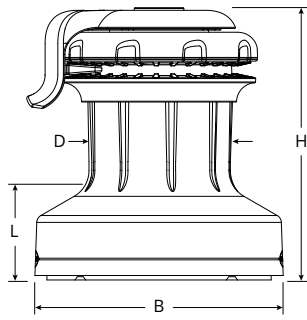


**RA6302**

Gear Ratio, 1st Speed	1.4 : 1
Gear Ratio, 2nd Speed	5.2 : 1
Power Ratio, 1st Speed	8.3 : 1
Power Ratio, 2nd Speed	30.2 : 1
Line Size	7 - 12mm
Drum "D"	86mm
Base "B"	136mm
Height "H"	166mm
Line Entry "L"	57mm
Weight	3.1kg
Max Pulling Load	700kg

- ✔ Sprung self-tailing jaws to accept 7 - 12mm line.
- ✔ QuickTrim™ patented self-tailing feature for rapid sail trim and smooth adjustment.
- ✔ Ball bearings carry the thrust loads, roller bearings carry the radial loads of the drum to minimise rotational friction.
- ✔ Smallest winch in its class with a powered option.
- ✔ Proven Andersen winch gearing configuration.
- ✔ Power Rib™ ensures a controlled grip on the line at all times, whether trimming or easing. Minimal rope wear compared to more abrasive drum surface finishes.
- ✔ No tools required for configuration and servicing.
- ✔ Machined aluminium drum – stronger and lighter than traditional cast aluminium drums.
- ✔ Aluminium centre stem, lighter weight compared to bronze stems.
- ✔ Low line entry due to gearing configuration geometry.
- ✔ Hard anodised aluminium drum and centre stem, aluminium self-tailing arm.
- ✔ Grade 316 stainless steel shaft and pawls.
- ✔ Grade 2205 stainless steel axle pins.
- ✔ Aluminium bronze gears.
- ✔ Glass-filled nylon self tailer.
- ✔ Self-lubricating acetal ball and roller bearings.




**RA6402**

Gear Ratio, 1st Speed	1.4 : 1
Gear Ratio, 2nd Speed	6.8 : 1
Power Ratio, 1st Speed	8.3 : 1
Power Ratio, 2nd Speed	39.5 : 1
Line Size	7 - 12mm
Drum "D"	86mm
Base "B"	151mm
Height "H"	166mm
Line Entry "L"	57mm
Weight	3.1kg
Max Pulling Load	850kg



- ✔ Sprung self-tailing jaws to accept 7 - 12mm line.
- ✔ QuickTrim™ patented self-tailing feature for rapid sail trim and smooth adjustment.
- ✔ Ball bearings carry the thrust loads, roller bearings carry the radial loads of the drum to minimise rotational friction.
- ✔ Proven Andersen winch gearing configuration.
- ✔ Power Rib™ ensures a controlled grip on the line at all times, whether trimming or easing. Minimal rope wear compared to more abrasive drum surface finishes.
- ✔ No tools required for configuration and servicing.
- ✔ Machined aluminium drum – stronger and lighter than traditional cast aluminium drums.
- ✔ Aluminium centre stem, lighter weight compared to bronze stems.
- ✔ Low line entry due to gearing configuration geometry.
- ✔ Hard anodised aluminium drum and centre stem, aluminium self-tailing arm.
- ✔ Grade 316 stainless steel shaft and pawls.
- ✔ Grade 2205 stainless steel axle pins.
- ✔ Aluminium bronze gears.
- ✔ Glass-filled nylon self tailer.
- ✔ Self-lubricating acetal balls and roller bearings.



# ORBIT WINCH™ SELECTION GUIDE

Choose your Ronstan Orbit Winch™ keeping in mind the size of your yacht and your sailing requirements. This selection guide is intended for masthead rigged monohull yachts of medium displacement. Refer to the notes to the right regarding other rig or displacement types.

Please note that this table lists typical winch sizing for the given applications, but can not take into account all variables due to the wide variety of sailing vessels and conditions.

For electric winches, the size selection is generally similar to that of a manually operated winch.

For further details see our website at [www.ronstan.com](http://www.ronstan.com) or consult your local Ronstan representative for assistance in selecting your winches and information on features, options and installation.

#### Masthead Rigged

Use the Length Overall (LOA) figures as your primary selection criteria.

#### Fractional Rigged

Refer primarily to the sail area, rather than LOA.

#### Heavy Displacement

For boats with heavy displacement and/or a high righting moment, it is advisable to choose a winch larger than those indicated in the table.

#### Multihulls

Catamarans and trimarans have higher righting moments than monohulls of the same size, and should use winches larger than those indicated in the table.

<b>LOA (Feet)</b>	25-28	29-32	33-35	36-39	40-43	44-48	49-54
<b>LOA (Metres)</b>	7.6-8.5	8.8-9.8	10.1-10.7	11.0-11.9	12.2-13.1	13.4-14.6	14.9-16.5
<b>Genoa Sail Area (ft<sup>2</sup>/m<sup>2</sup>)</b>	300/28	350/33	470/44	560/52	770/72	880/82	1300/120
<b>Spinnaker Sail Area (ft<sup>2</sup>/m<sup>2</sup>)</b>	410/38	600/56	800/74	1200/111	1600/150	2000/185	2800/260
<b>Main Sail Area (ft<sup>2</sup>/m<sup>2</sup>)</b>	150/14	210/20	260/24	320/30	430/40	470/46	750/70

Application	Recommended Winch Size						
<b>Genoa Sheet</b>	20	30/40	40				
<b>Spinnaker Sheet</b>	20	20	20/30	20/30	40		
<b>Main Sheet</b>	20	20	20/30	20/30	30/40		
<b>Genoa Halyard</b>	20	20	20/30	30/40	40		
<b>Spinnaker Halyard</b>	20	20	20/30	30	40		
<b>Main Halyard</b>	20	20	20/30	30/40	40	40	
<b>Reef Line</b>	20	20	20	20	20/30	30/40	40

Watch this space for more news.



[www.ronstan.com](http://www.ronstan.com)

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