MUIR

SINCE 1968

# If it's mega...it's Muir

CAPSTANS
WINDLASSES
DEVIL CLAWS
CHAIN STOPPERS
DECK HARDWARE
ANCHOR ROLLERS
CRANES & DAVITS
ANCHORS & CHAIN
ELECTRIC CONTROLS
SYSTEM ACCESSORIES
CHAIN COMPRESSORS
3D MODELLING CAPABILITIES
COMPLETE ANCHORING SYSTEMS

THE WORLD POWER IN MEGAYACHT ANCHORING SYSTEMS

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# THE WORLD POWER IN MEGAYACHT ANCHORING SYSTEMS

Established in 1968, Muir has become a dominant force in anchoring and mooring technology, recognised today as the anchoring system choice for a large variety and size of luxury motor and sail yachts.

Muir design and manufacture one of the largest ranges of anchoring and mooring systems for vessels up to 150 metres.

Muir have designed and produced anchoring and mooring equipment having set Industry Standards and benchmarks over many years. Continued investment in research and development, design and innovation, keeps Muir at the forefront of the yachting industry. The development of high power to weight ratio equipment with the combination of highly efficient planetary drive gears, medium to high pressure hydraulics, one, two or variable speed AC electric drives will achieve the ideal anchoring system to suit your vessel.

Muir surpass or meet the world's most stringent classification requirements including ABS, LRS, DNV, BV, NKK, GL, CCS, RINA, RRR, RMSR and comply with MCA and USL codes.

Muir running gear is available in polished 316L stainless steel, manganese bronze, chromed bronze and aluminium bronze.

316L polished stainless steel anchor windlasses and mooring capstans of all sizes are being manufactured in larger volumes today resulting in increased affordability.

A Muir anchoring system provides long term reliability, durability and dependability.

Our success in the luxury yacht market has come from the long standing commitment to work closely with naval architects, designers, builders, captains, engineers and owners in the pursuit of excellence in anchoring and mooring systems.

A Muir anchoring system enhances the foredeck of the most elegant sail, motor or expedition yacht. Highly polished finishes and well proportioned components are synonymous with the Muir brand.

With an extensive and continually expanding distributor and service network established in over 60 countries including North and South America, Europe, Asia/Pacific, Middle East, Scandinavia, Australasia, Muir can provide the global support and confidence demanded by the cruising and charter operators.

In addition to mega yacht equipment, Muir manufacture a range of anchoring and mooring equipment in all configurations, including drum winches for work boats, fast ferries, naval and defence vessels up to 160 metres and up to 15,000kg pull.

With unrelenting dedication to total quality in design and manufacture and a desire to provide perfection for our clients, Muir is the preferred choice for your anchoring and mooring system solutions.

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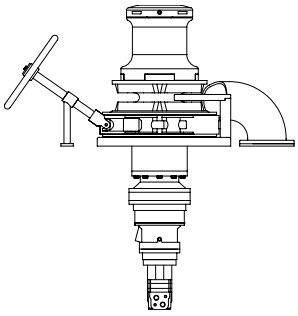
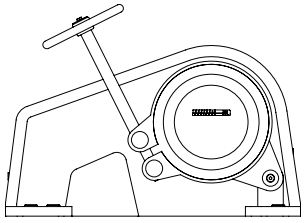
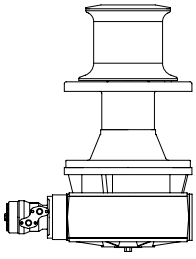
# MEGA YACHT ANCHORING SYSTEMS







DNV Certification Pty Ltd
Quality Assured ISO9001: 2000



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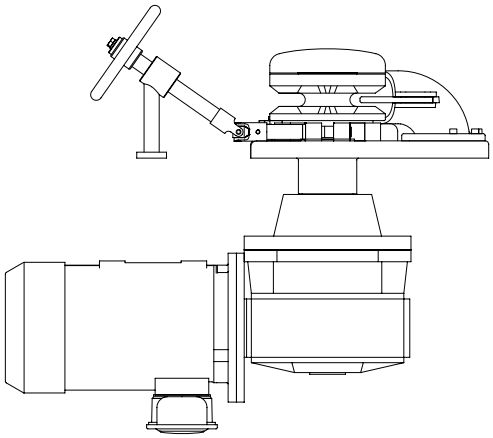

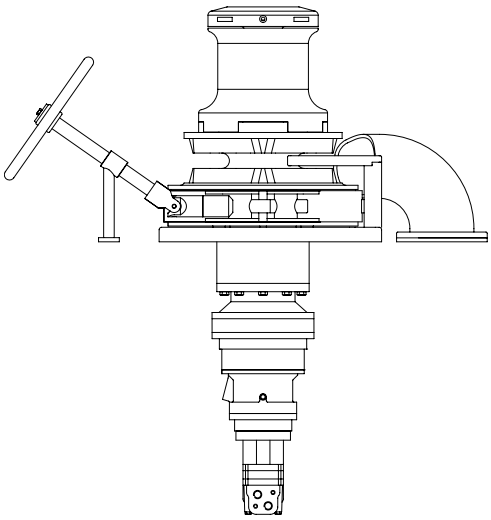

## VERTICAL WINDLASSES – VR/VRC

Vertical windlass models have a main vertical shaft and horizontal gypsy, and are available in two configurations. VRC has a gypsy and independent capstan, whilst the VR has gypsy and low profile top only. The low profile VR is available on models VR4000 through to VR 22000.

The vertical configuration allows for single and twin installations with the advantage of installing the windlasses in various positions. This facilitates the positioning of anchor pipes and spurling pipes. In some cases it may be preferable to install windlasses closer to the centre line or further apart.

Integral VR/VRC 4500, 6000, 8000, 11000 designs incorporate extended deck plates for the brake band location and integral chain pipe. The windlass and chain pipe are supplied as a complete assembly on one single base, either as single units or in mirror image.

New range of round base units offer flexibility of installing separate chain pipes or chain pipe rollers. A feature of the round base models is the heavy duty chain stripper.

Muir vertical windlass design innovation enables disassembly of the running gear above the deck plate and removal of the drive gear below deck leaving the deck plate and chain pipe/roller intact.

All vertical windlasses have a self-aligning gearbox adaptor that reduces installation time and allows the gearbox and motor to be installed directly onto the windlass drive in any radial position. This alleviates distortion between the deck plate and gearbox flange and a sealed shaft protects the transmission below deck.

Vertical windlasses require less deck space than a horizontal windlass and vertical capstans have operational advantages for mooring purposes due to the radial scope of the lead for mooring lines. For servicing and lubrication all running gear is readily accessible.

Planetary drives are available on vertical models with AC and Hydraulic brake motors fitted, right angle drives are available for all installations throughout the ranges. AC motors require to be supported to the deck structure.

Hydraulic drives are fitted with counter balance valves to prevent runback. Heavy-duty concealed dog clutch drives on larger models ensure positive drive at all times, hand wheels and brake bands to chain gypsies provide infinite control of braking.

Windlasses with round base plates have installation flexibility of rotating brake band and hand wheel in any position.

Up to 180° chain wrap on vertical designs ensures optimum utilisation of the chain gypsy pockets.

Independent operation of the capstan and gypsy is achieved by declutching the capstan. The full range is available with an extended capstan shaft for split positioning of the gypsy below deck and capstan above deck for mooring and line hauling purposes.

### Options - Vertical Windlasses

- Polished bronze finish
- Polished stainless steel finish
- Two-speed motors and variable speed controls
- Inline or 45° universal brake handwheel control
- Increased working speed
- Mirror Image
- Fluted capstans for line grip
- Variable brake band positioning to optimise deck space and handwheel location
- High pressure hydraulic motors standard on larger models and optional on other models
- Hydraulic and electric power packs and controls
- Raised bases and plinths for equipment
- Chain pipe with nylon or bronze rollers
- Control cabinets for electric AC models for in one or two speed or variable speed drives (VFD'S)

### Standard Features

- Single Speed Reversible motor
- Independent operation of gypsy and capstan
- Easy servicing: disassemble from top and bottom without disturbing deck plate fastenings
- Chain pipe
- Chromed bronze or polished 316L stainless steel
- Knurled capstan for line grip
- Stainless steel drive shaft
- Gearbox and motor can be rotated to fit confined space below deck
- Heavy duty totally sealed high efficiency in line or right angle
- Dog clutch (except 4000 / 4500) and clutch handle
- Brake band and brake handle
- AC torque limiter supplied with all anchor windlass models from 6000 to 24000 windlasses (in special cases the torque limiter may not be required when variable frequency drives are installed (VFD'S)



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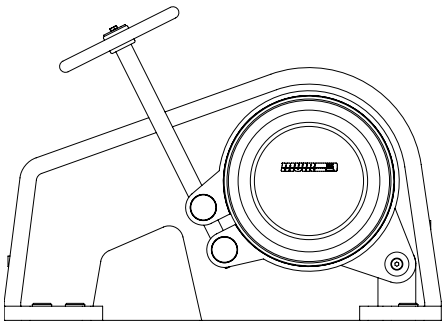


## HORIZONTAL WINDLASSES - HR

Horizontal windlasses have the main drive shaft with single or dual chain gypsies and capstans driving through a single gear drive. This drive mechanism is totally enclosed in the windlass casing above deck, which is an advantage when space below deck is at a premium.

A horizontal windlass gypsy increases the height of fall of the chain into the chain locker where depth may be critical. Positioning of the gypsy and chain pipe requires the location of the horizontal windlass above the chain-locker and the lead from the bow roller or hawser pipe determines the location.

Gypsy centres to windlass or vessel centre line can not be varied. All running gear can be serviced and lubricated without interfering with the windlass casing or chain pipes. Independent operation of capstan(s) and gypsies by declutching the drive. Operation of the horizontal capstan in the standing position for mooring and line handling can be advantageous.

Horizontal windlass casings are cast marine grade aluminium alloy with white gloss enamel finish. All Muir horizontal windlasses have heavy-duty clutch drives with handwheel and brake bands to gypsies for infinite control of braking.

A vertical capstan option on top of the windlass can facilitate mooring and line handling when horizontal capstans can not be fitted due to limited deck space.

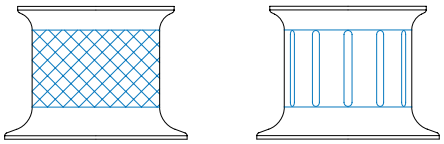
### Standard Features

- Single capstan to port, gypsy to starboard
- Reversible motor
- Independent operation of gypsy and capstan
- Heavy Duty totally sealed gearbox with ground worm drive and tapered roller bearings in oil bath
- All lubrication points are external
- White epoxy enamel housing with chrome bronze gypsy and capstan.
- Knurled capstan for line grip
- Stainless steel shaft
- Dog Clutch and clutch handles on hydraulic models
- Brake band and brake handles polished 316 stainless steel
- Chain pipes
- Chrome bronze gypsy and capstan

**NOTE:** Maximise angle of chain wrap up to 180°

### Options - Horizontal Windlasses

- 316L stainless steel housing in lieu of aluminium housing
- White epoxy enamel housing with polished bronze gypsy and capstan
- White epoxy enamel housing with polished stainless steel gypsy and capstan
- Twin gypsies
- Twin capstans
- Fluted capstan for line grip
- Vertical capstans
- 2 speed motor or variable speed controls
- Protective weatherproof cover
- Increased working speed
- High pressure motors available on request
- Various colours available for housing finish
- Hydraulic and electric power packs and controls
- Control cabinets for electric AC models for in one or two speed or variable speed drives (VFD'S)



## VERTICAL MOORING AND DOCKING CAPSTANS - VC

Muir capstans provide reliable and heavy duty operation for mooring and docking. Usually located on the aft deck and amidships to assist in the mooring or docking of the yacht, they can be operated by remote control or foot switches for hands free operation.

Capstans can be supplied with inline or 90° gear drives in hydraulic or electric power for the most compact installation.

Capstans can be serviced with the deck plate intact from top and bottom side. Capstan selection should be considered with warping line sizes and flexibility of warp.

### Standard features

- Reversible motor
- Easy servicing: disassemble from top and bottom without disturbing deck plate fastenings
- Chromed bronze or 316L polished stainless steel
- Knurled capstan for extra line grip
- Large capstan drums for increased line hold
- Stainless steel drive shaft
- Gearbox can be rotated to fit confined space below deck
- Heavy duty totally sealed high efficiency in line or right angle planetary drive gears on medium to larger models

### Options - Capstans

- Fluted Capstan for line grip
- Polished bronze finish
- Polished stainless steel finish
- Tall Drum models
- 2 speed motors and variable speed controls
- Increased working speed
- Raised bases and plinths for capstans
- High pressure motors available on request and standard on some larger models
- Hydraulic and electric power packs and controls
- Control cabinets for electric AC models for in one or two speed or variable speed drives (VFD'S)

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## IMPORTANT:

**KW Power requirements:** Power may be increased if required for special applications, pulls are indicated using motor kW sizes as in the catalogue specification.

On both windlasses and capstans it is advisable to maximise KW power on electric drives to optimise functionality, and to prevent the circuit breaker tripping under heavy load.

KW power requirements - may vary between planetary worm and gear drives.

**Starting loads:** the design of the preferred starting system is important, and it should be noted that the vessels generating capacity and requirements should be able to start the windlasses under load.

**Mooring Capstans:** Selection and sizing needs to consider high profile, large or heavy displacement craft and high wind conditions to be encountered while docking.

**Model Numbers:** Product model numbers are not necessarily indicative of the lift capacity.

## CLASSIFICATION PERFORMANCE AND APPROVAL:

Classification Societies require a minimum speed of 9 metres/minute and Muir designs can be supplied with optional two-speed AC electric systems or variable speed drives (VFD's) for variable speed ranges generally up to 20 metres/minute in high speed.

Muir build to specific classification society requirements including ABS, LRS, DNV, NKK, BV, GL, K.R, RINA, RRR, RMSR and CCS. All Muir equipment meets international standards including MCA and USL codes and CE Requirements for electrical components.

Muir recommend the windlass should have the capacity (pull) to retrieve all of the anchor and chain in a vertical lift with the anchor clear of the bottom.

*We strongly recommend contacting your local Muir agent or Muir head office regarding specific classification requirements prior to selecting a windlass or mooring capstan model.*

## TECHNICAL INFORMATION

Muir has adopted the corporate policy of manufacturing and selling products which have the recognised standard of quality that satisfies customers throughout the effective life span of the product. It is therefore an essential requirement of this stipulated policy for Muir to produce and supply its customers with products which are suitable for their intended purpose, and which are in conformity with the relevant and agreed specification or contract.

The procedures outlined in our ISO9001/2010 quality assurance manual describe how the quality system is designed to ensure that customer requirements are recognised and that consistent control of these requirements is established, implemented and maintained. Strict adherence to the policy stated above is a requirement of every aspect at Muir.

**3D and AutoCAD** drawings are available as digital files.

Standard builds are bronze with chromed finish and knurled capstans.
Fluted capstans are optional.

Chrome plating with a minimum of 35 microns is specified for manufacture.

Running gear is bronze, aluminium bronze or 316L stainless steel and the main drive shaft, brake spindle, handwheels and fastenings are stainless steel.

On vertical models motor drives and gears below deck are finished in white gloss. Horizontal models have the motor and gearbox enclosed above deck.

Brake design on some models may not require use of chain stoppers or where distance between spurling pipe and gypsy is tight, however a heavy duty devil claw and snubber line arrangement must be used to eliminate loads off the windlass drive.

Heaters and thermistors are supplied standard on AC motors above 5.5kW.

Chain Gypsies are available to suit ISO, DIN 766 and Studlink marine chains. Custom designed windlasses for specialised installations can be supplied on request.

On placing an order we require a chain sample, including joining links and kenter shackles (if they are to be accommodated), so they can be matched to the chain gypsy and ensure correct fit.

Larger windlasses are mainly manufactured from stainless steel in polished or satin finishes.

**MUIR RESERVES THE RIGHT TO ALTER SPECIFICATIONS WITHOUT NOTICE, AND THIS CATALOGUE SHOULD NOT BE USED FOR INSTALLATION PURPOSES.**

# WINDLASS SELECTION GUIDE

## VESSEL LENGTH

| Metres | | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MODEL** | | | | | | | | | | | | | | |
| **Vertical Windlasses** | | | | | | | | | | | | | | |
| VR/VRC 4000 | Page 6-7 | | | | | | | | | | | | | |
| VR/VRC 4500 | Page 8-9 | | | | | | | | | | | | | |
| VR/VRC 6000 | Page 10-11 | | | | | | | | | | | | | |
| VR/VRC 8000 | Page 12-13 | | | | | | | | | | | | | |
| VR/VRC 11000 | Page 14-15 | | | | | | | | | | | | | |
| VR/VRC 13000 | Page 16-17 | | | | | | | | | | | | | |
| VR/VRC 15000 | Page 18-19 | | | | | | | | | | | | | |
| VR/VRC 18000 | Page 20-21 | | | | | | | | | | | | | |
| VR/VRC 20000 | Page 22-23 | | | | | | | | | | | | | |
| VR/VRC 22000 | Page 24-25 | | | | | | | | | | | | | |
| VR/VRC 24000 | Page 26-27 | | | | | | | | | | | | | |
| **Horizontal Windlasses** | | | | | | | | | | | | | | |
| HR5000 | Page 28 | | | | | | | | | | | | | |
| HR6000 | Page 29 | | | | | | | | | | | | | |
| HR8000 | Page 30 | | | | | | | | | | | | | |
| HR11000 | Page 31 | | | | | | | | | | | | | |
| HR15000 | Page 32 | | | | | | | | | | | | | |
| HR22000 | Page 33 | | | | | | | | | | | | | |



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## Positioning of anchor windlass and chain locker

The chain pipe or spurling pipe should be positioned to allow the anchor chain to drop into the centre of the chain locker, to centralise the spread proportionally and minimise piling up.

When the anchor chain falls too far away from the centre of the chain locker or too close to a partition or bulkhead, the chain will not fall or pile evenly. Chain will actually climb up a partition or pile up if it drops close to the partition or bulkhead.

A chain locker being too small in volume or with a floor having insufficient height clearance from the underside of the deck or end of the spurling pipe extension, can limit the available height for the chain to pile up.

When the chain can pile up to touch the lower end of the spurling pipe, the chain will likely cause a jam up into the vicinity of the chain pipe and chain stripper above deck.

In shallow draft sail and motor yachts including planing hulls and semi displacement hulls, particular attention should be made to the installation of the anchor windlass and associated components to maximise the working depth of the chain locker. Right angle drive gears may have an advantage over inline drives in shallow or restricted chain lockers.

The ideal chain locker will have a maximum depth over minimum floor area. Conversely some installations incorrectly have minimum depth and maximum floor area requiring the chain to be flaked by hand, or causing the chain to pile up and jam.

As a guide, anchor chain will require a chain locker up to 3.5 X its compacted or flaked area or cube size. Example: chain packed tightly into a cubic metre container will require 3.5 cubic metres to enable the chain to fall and spread out evenly without piling up and getting close to the lower end of the spurling pipe on the underside of the deck.

Spurling pipes inside diameter should be at least twice the diameter of the anchor chain or kenter shackle, or even larger. Spurling pipes should be as vertical as possible with minimum elbows, bends on the offsets to prevent excess friction. Keeping in mind that the lower end of the spurling pipe determines the working height of the chain locker.

On vertical windlasses the optimum wrap angle of the chain around the gypsy is 180 degrees with the minimum wrap angle be no less than 145 degrees.

On Horizontal windlasses the optimum wrap of chain is 180 degrees, however with anchors stowed forward on anchor rollers the minimum angle of wrap angles should be no less than 135 degrees. Alternatively a chain roller may be used to position the anchor chain closer to the deck to increase the wrap.

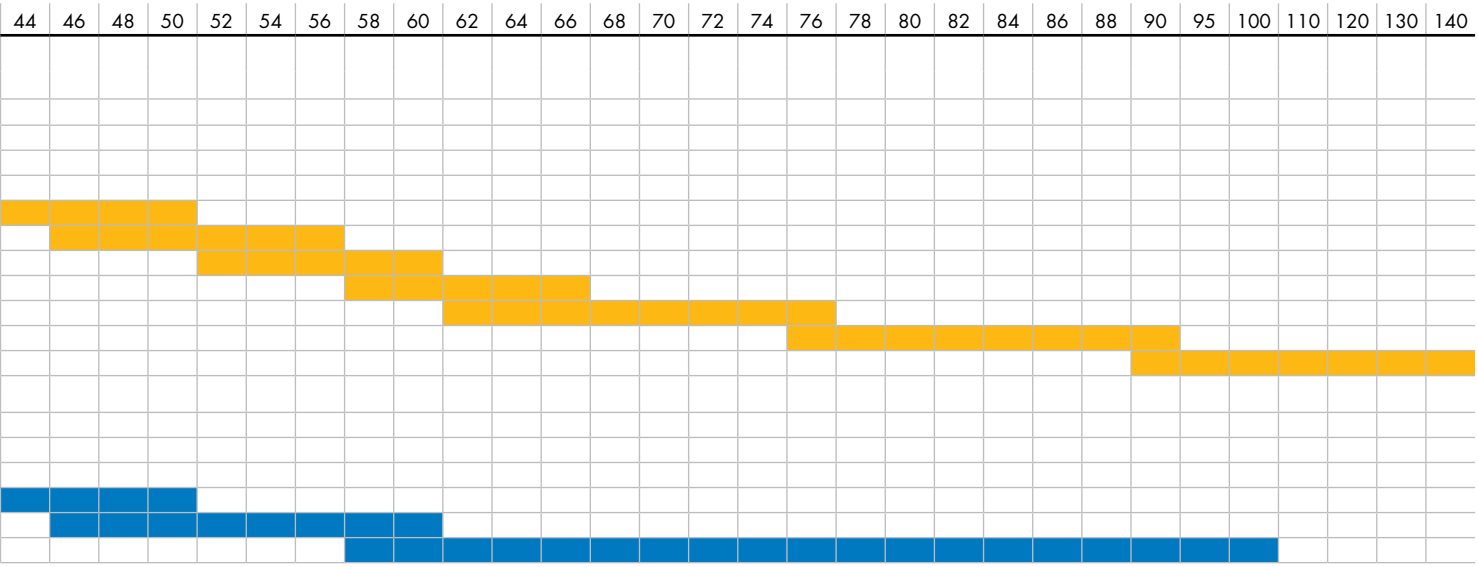
Please refer to your Muir representative or direct to the Muir design office for any additional information.

**Note** dispacement, length and windage of vessel must all be taken into consideration when selecting windlasses, anchor and chain. Refer to relevant classification society equipment number for class rules.

### ABBREVIATIONS

| | | | |
|---|---|---|---|
| **DC** | Direct Current | **lb** | Pound |
| **AC** | Alternating Current | **kg** | Kilogram |
| **HYD** | Hydraulic | **Min** | Minute |
| **gal** | Gallons (US) | **m** | Metre |
| **lt** | Litres | **mm** | Millimetre |
| **MPa** | Megapascal | **“** | Inch |
| **PSI** | Pounds per square inch | **‘ / ft** | Feet |

**Displacement, Length, Type of Vessel (Motor Boat or Sail Yacht, Heavy or Light Displacement etc) and Windage of a vessel must be taken into consideration when selecting a windlass, anchor and chain. The particular classification societies equipment number for the particular vessel is also very important as it stipulates the recommended chain size (and length), anchor åeight and other important information than needs to be considered. In addition, the vessels proposed use is important as it will differ depending on the application (short cruising in sheltered waters to extensive global cruising with exposure to all types of anchoring conditions).**

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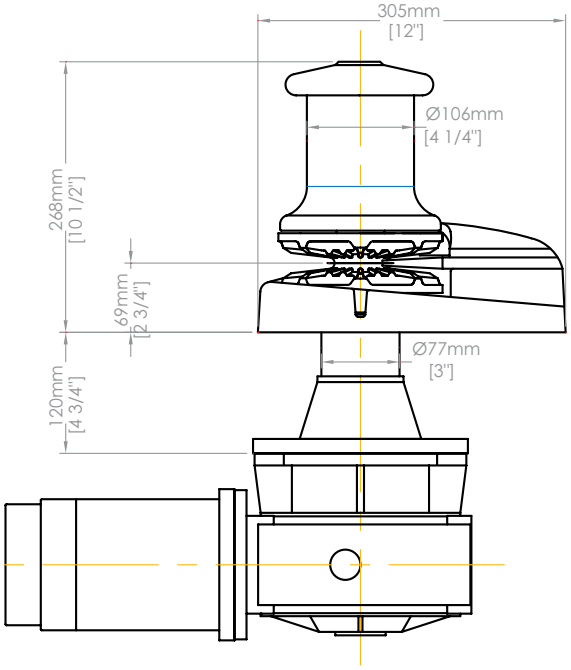
# VRC**4000**




## PERFORMANCE CRITERIA

| MODEL | VRC4000 / 86 | VRC4000 / 86 | VRC4000 / 86 | VRC4000 / 86 |
|---|---|---|---|---|
| Maximum Pull (kg/lb) | **1818** / 4000 | **1818** / 4000 | **1818** / 4000 | **1818** / 4000 |
| Continuous Pull (kg/lb) | **720** / 1584 | **810** / 1760 | | **1200** / 2640 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **16** / 52 | **10** / 33 | **10** / 33 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | | **20** / 66 | **20** / 66 | **20** / 66 |
| **Power Supply** | **24VDC** | **3PH / 50HZ** | **3PH / 60HZ** | **HYDRAULIC** |
| Input Power (KW) | 2000W | 2.2 | 2.2 | |
| Hydraulic Flow (l/pmin-USgpm) | | | | **22** / 5.8 |
| Maximum Flow (l/pmin-USgpm) | | | | **43** / 11.36 |
| Pressure (bar/PSI) | | | | **175** / 2537 |
| Maximum Pressure (bar/PSI) | | | | **200** / 2900 |
| **Chain Size** | | | | |
| Short link up to | **13mm** or 1/2" | **13mm** or 1/2" | **13mm** or 1/2" | **13mm** or 1/2" |
| Stud link up to | | | | |
| **Brake Size** | | | | |
| **Average Weight (kg/lb)** | **83** / 183 | **110** / 242 | **110** / 242 | **80** / 176 |



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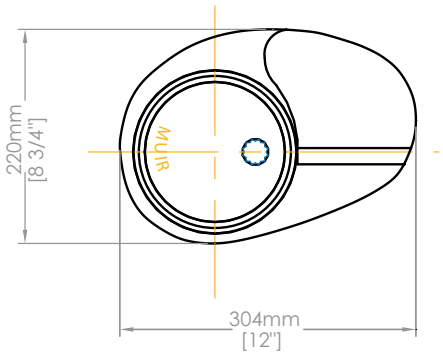
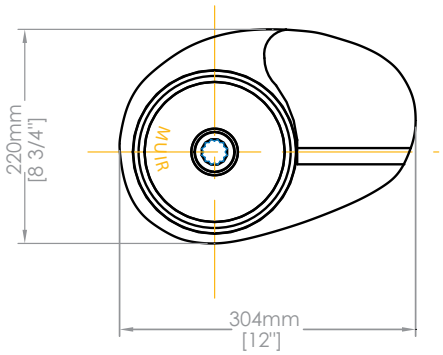
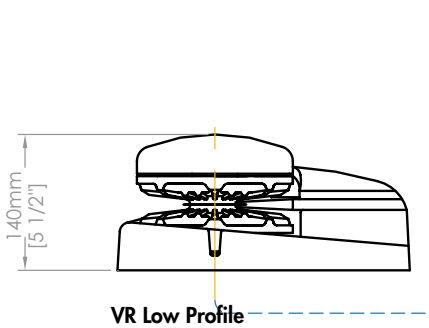
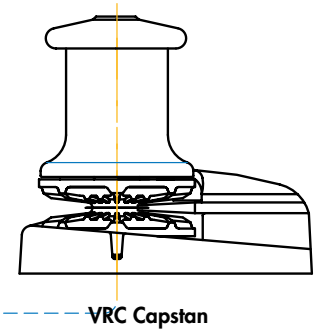


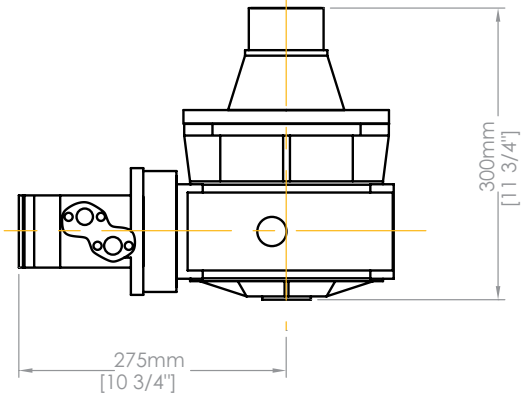



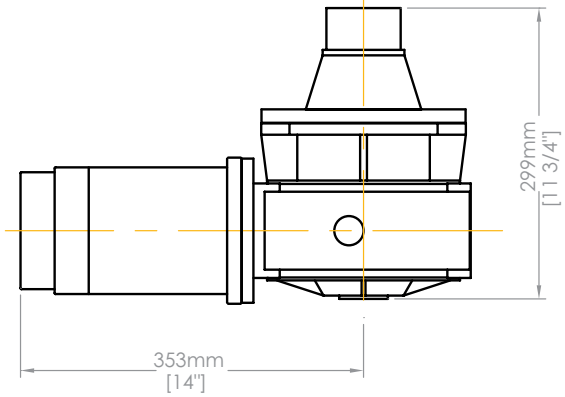

**VR Low Profile**



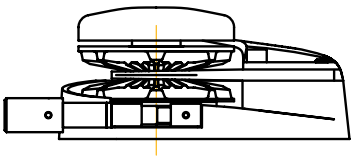
**VRC Capstan**




**Hydraulic Drive**




**Electric Drive**



**Optional Brake Band**

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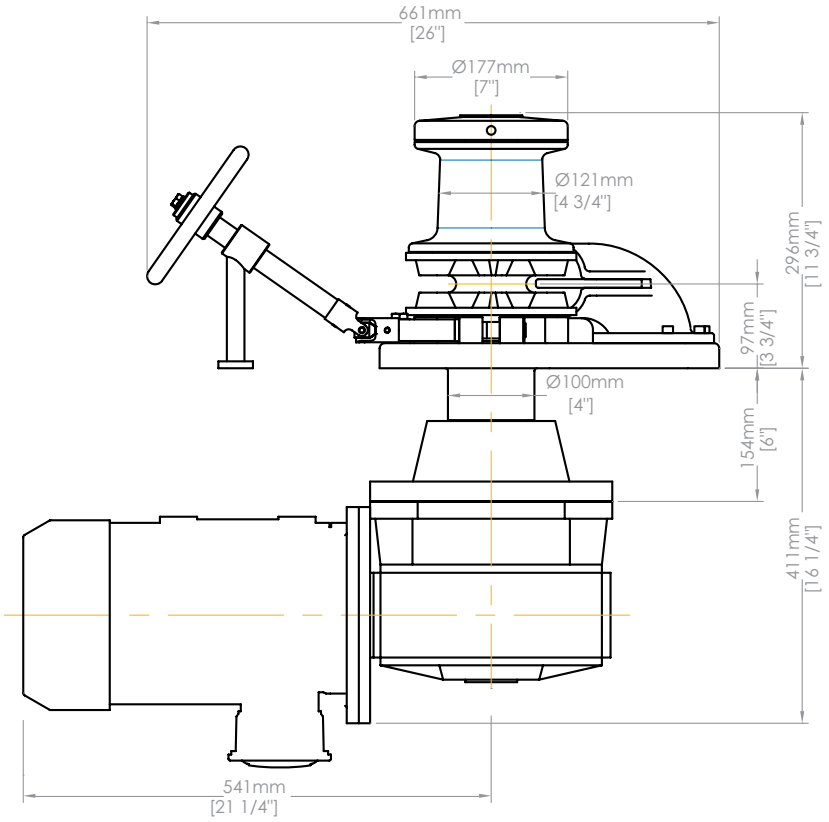
# VRC**4500**




## PERFORMANCE CRITERIA

| MODEL | VRC4500 | VRC4500 | VRC4500 | VRC4500 |
|---|---|---|---|---|
| Maximum Pull (kg/lb) | **2045** / 4500 | **2045** / 4500 | **2045** / 4500 | **2045** / 4500 |
| Continuous Pull (kg/lb) | **950** / 2090 | **1050** / 2310 | **1050** / 2310 | **1600** / 3520 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **14** / 46 | **10** / 33 | **10** / 33 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | | **20** / 66 | **20** / 66 | **20** / 66 |
| **Power Supply** | **24VDC** | **3PH / 50HZ** | **3PH / 60HZ** | **HYDRAULIC** |
| Input Power (KW) | 2500/3500W | 4 | 4 | |
| Hydraulic Flow (l/pmin-USgpm) | | | | **26** / 6.9 |
| Maximum Flow (l/pmin-USgpm) | | | | **52** / 13.8 |
| Pressure (bar/PSI) | | | | **175** / 2537 |
| Maximum Pressure (bar/PSI) | | | | **200** / 2900 |
| **Chain Size** | | | | |
| Short link up to | **16mm** / 5/8" | **16mm** / 5/8" | **16mm** / 5/8" | **16mm** / 5/8" |
| Stud link up to | **14mm U2** | **14mm U2** | **14mm U2** | **14mm U2** |
| **Brake Size** | **150mm** / 6" | **150mm** / 6" | **150mm** / 6" | **150mm** / 6" |
| **Average Weight (kg/lb)** | **125** / 275 | **155** / 341 | **155** / 341 | **113** / 248 |
| (Note - Deduct 2kg / 4.4lb for VR models) | | | | |



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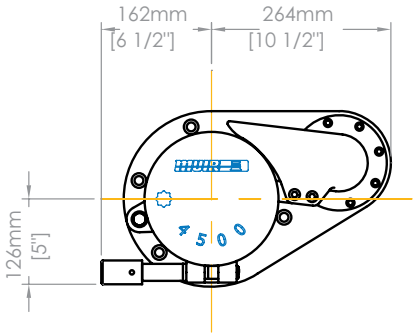
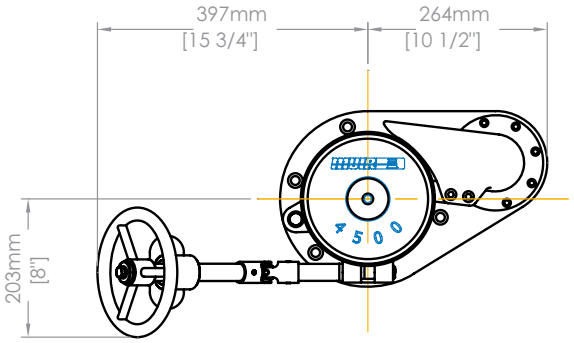
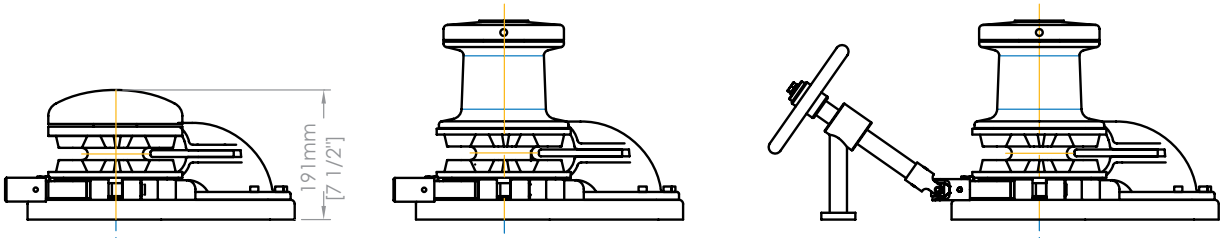


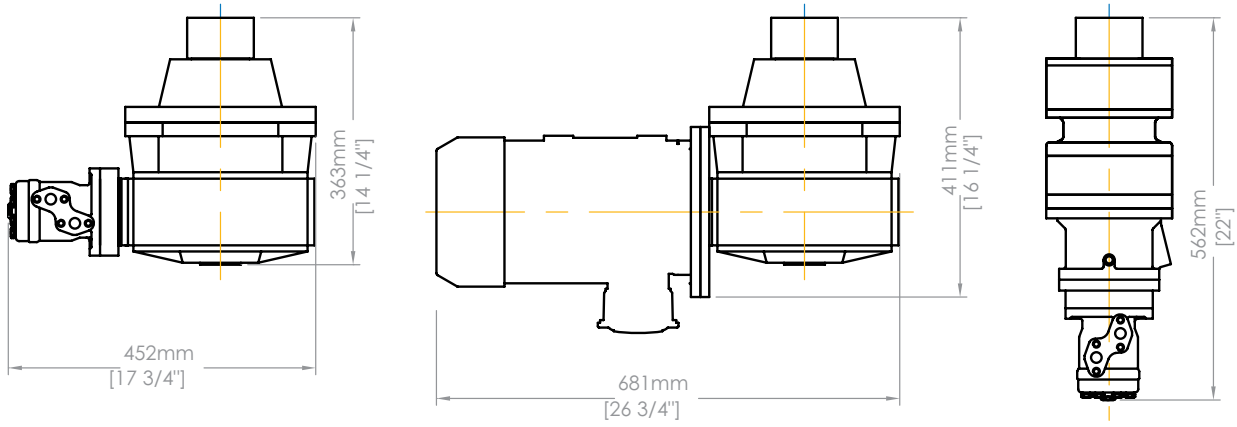

VR Low Profile Standard Brake




Integral Base 45° Brake with Handwheel and Chain Pipe




VR Low Profile Standard Brake | VRC Capstan Standard Brake | VRC Capstan 45° Brake/Handwheel




Hydraulic Drive | Electric Drive | Inline Drive

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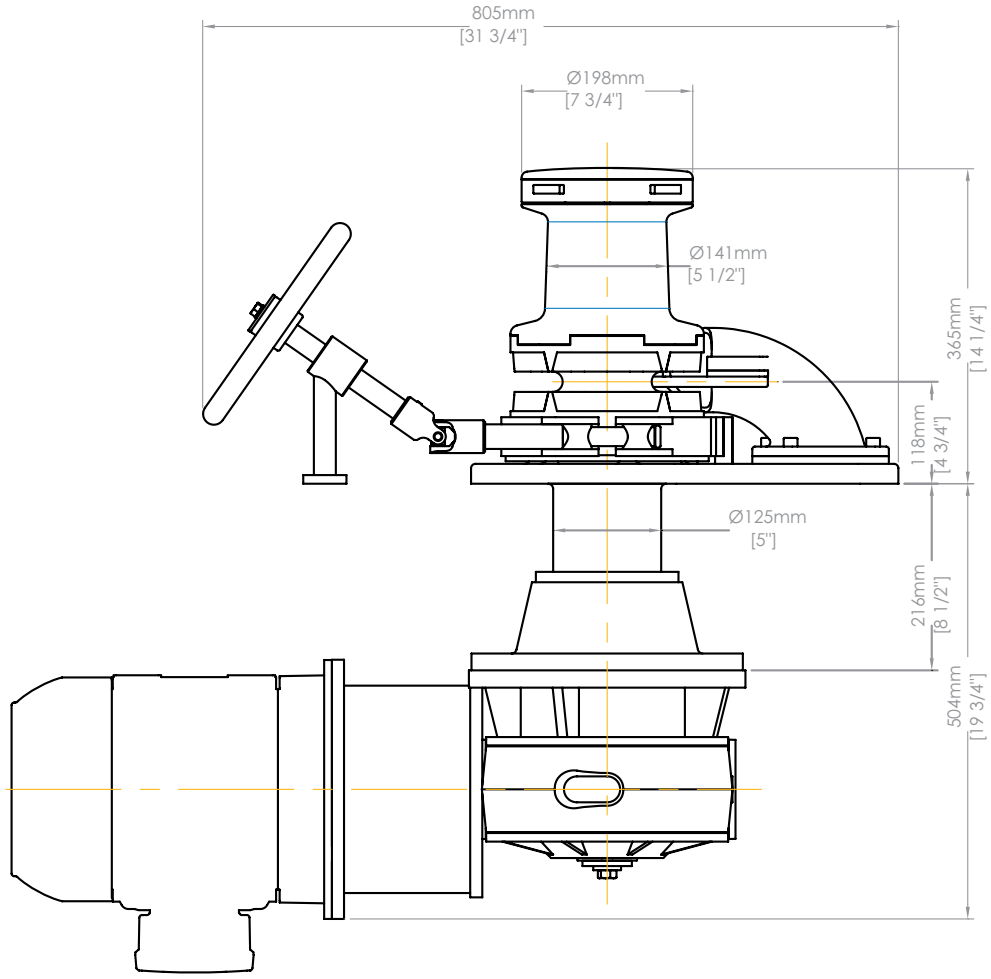
# VRC**6000**




## PERFORMANCE CRITERIA

| MODEL | VRC6000 | VRC6000 | VRC6000 | VRC6000 |
|---|---|---|---|---|
| Maximum Pull (kg/lb) | **2727** / 6000 | **2727** / 6000 | **2727** / 6000 | **2727** / 6000 |
| Continuous Pull (kg/lb) | **1300** / 2860 | **1430** / 3146 | **1430** / 3146 | **2138** / 4703 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **15** / 50 | **11** / 36 | **14** / 33 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | | **22** / 72 | **22** / 72 | **20**/66 |
| **Power Supply** | **24 VOLT** | **3PH / 50HZ** | **3PH / 60HZ** | **HYDRAULIC** |
| Input Power (KW) | 3.5 | 5.5 | 5.5 | |
| Hydraulic Flow (l/pmin-USgpm) | | | | **28** / 7.4 |
| Maximum Flow (l/pmin-USgpm) | | | | **56** / 14.8 |
| Pressure (bar/PSI) | | | | **175** / 2537 |
| Maximum Pressure (bar/PSI) | | | | **200** / 2900 |
| **Chain Size** | | | | |
| Short link up to | | **16mm** / 5/8" | **16mm** / 5/8" | **16mm** / 5/8" |
| Stud link up to | | **16mm** U2 | **16mm** U2 | **16mm** U2 |
| **Brake Size** | | **230mm** / 9" | **230mm** / 9" | **230mm** / 9" |
| **Average Weight (kg/lb)** | | **245** / 539 | **245** / 539 | **176** / 387 |
| (Note - Deduct 2kg / 4.4lb for VR models) | | | | |

High Pressure 240 BAR 3600PSI optional



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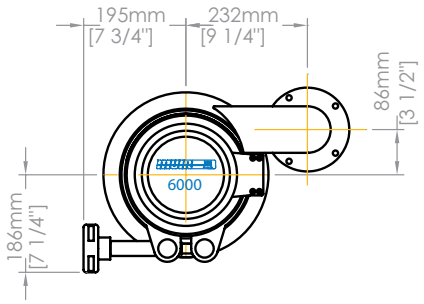
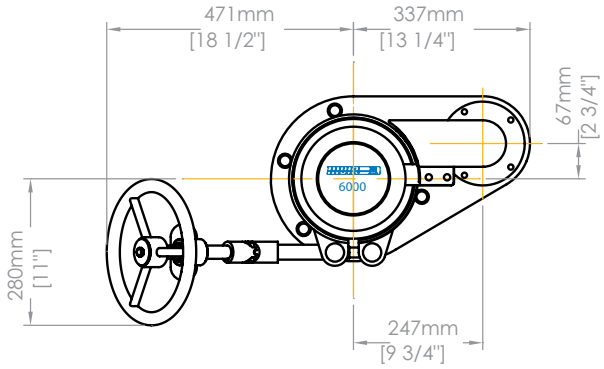
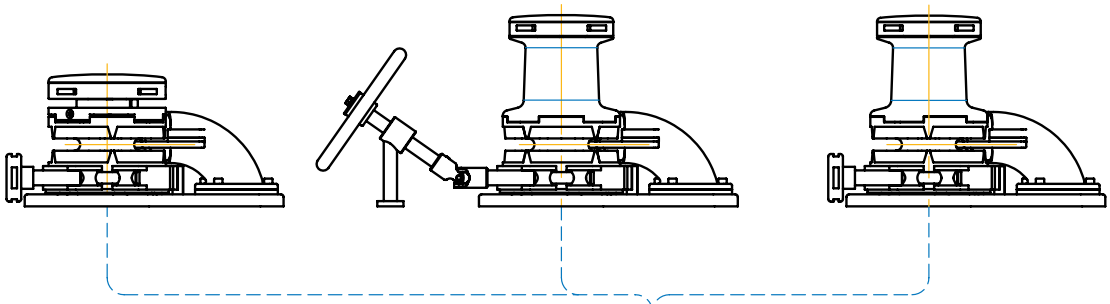



Round Base Standard Brake



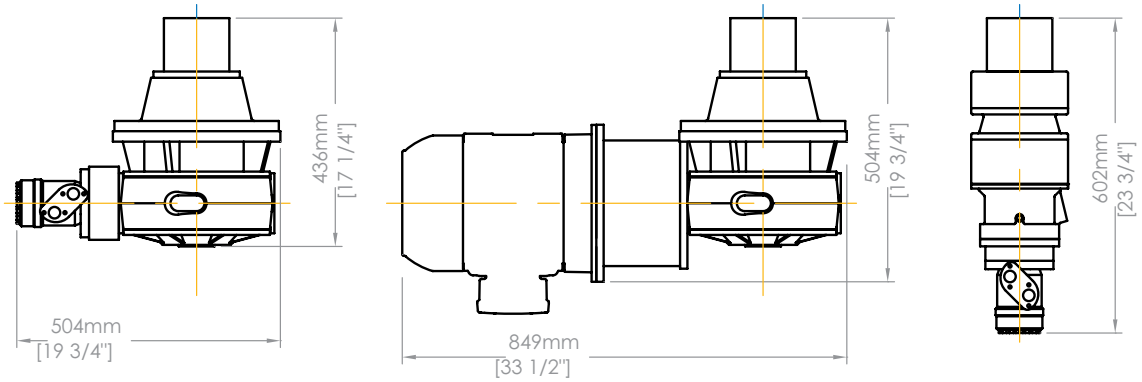

Integral Base 45° Brake with Handwheel and Chain Pipe



VR Low Profile Round Base Standard Brake

VRC Integral Base Standard Brake

VRC Capstan Base 45° Brake/Handwheel




Hydraulic Drive

Electric Drive

Planetary Drive

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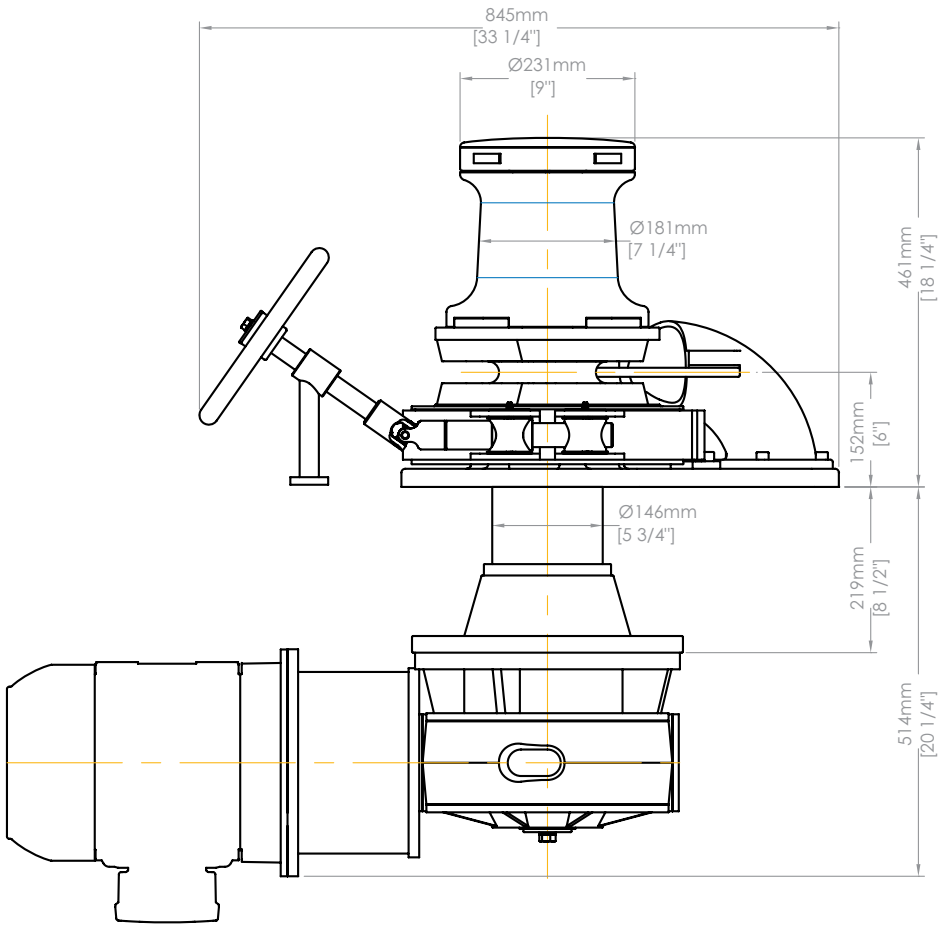
# VRC**8000**




## PERFORMANCE CRITERIA

| MODEL | VRC8000 | VRC8000 | VRC8000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **3636** / 8000 | **3636** / 8000 | **3636** / 8000 |
| Continuous Pull (kg/lb) | **2200** / 4840 | | **2900** / 6380 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10** / 33 | **10** / 33 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20** / 66 | **20** / 66 | **20** / 66 |
| **Power Supply** | **3PH / 50HZ** | **3PH / 60HZ** | **HYDRAULIC** |
| Input Power (KW) | 5.5 | 5.5 | |
| Hydraulic Flow (l/pmin-USgpm) | | | **28** / 7.4 |
| Maximum Flow (l/pmin-USgpm) | | | **56** / 14.8 |
| Pressure (bar/PSI) | | | **175** / 2537 |
| Maximum Pressure (bar/PSI) | | | **200** / 2900 |
| **Chain Size** | | | |
| Short link up to | **19mm** | **19mm** | **19mm** |
| Stud link up to | **19mm** U2 | **19mm** U2 | **19mm** U2 |
| **Brake Size** | **356** / 14 | **356** / 14 | **356** / 14 |
| **Average Weight (kg/lb)** | **325** / 715 | **325** / 715 | **270** / 594 |

High Pressure 240 BAR
3600PSI optional



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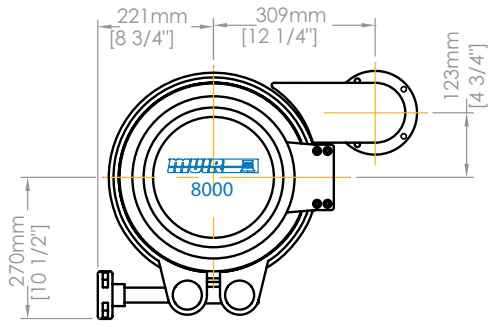
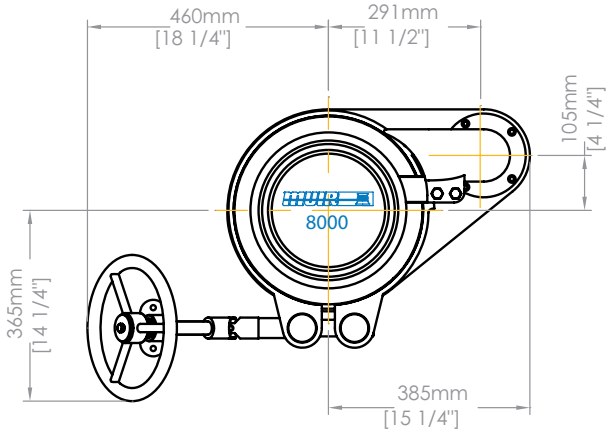
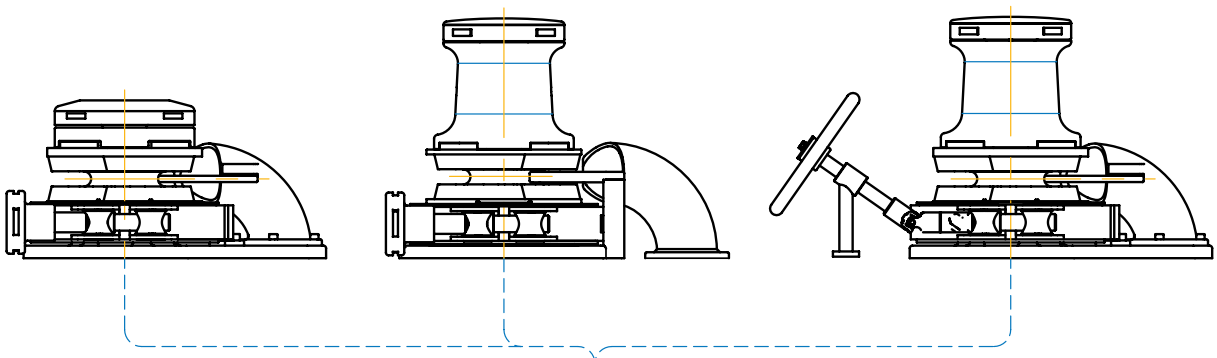



**Round Base Standard Brake and Chain Pipe**



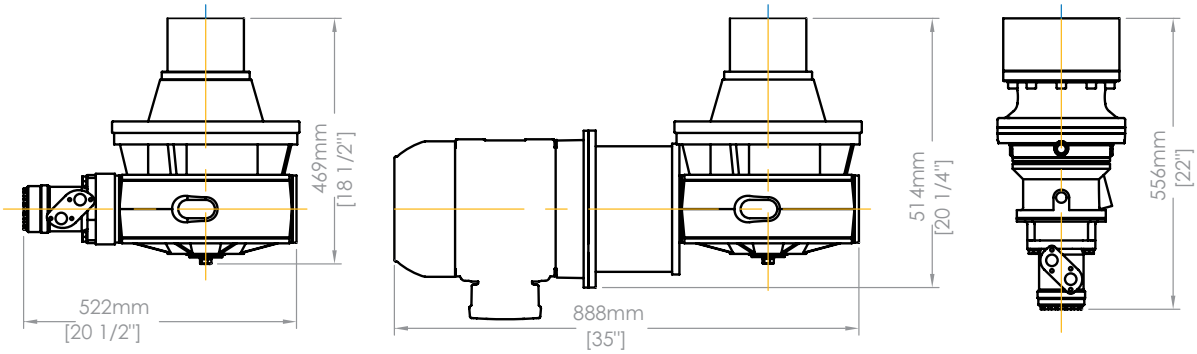

**Integral Base 45° Brake with Handwheel and Chain Pipe**



**VR Low Profile Round Base Standard Brake**

**VRC Integral Base Standard Brake**

**VRC Capstan Base 45° Brake with Handwheel**




**Hydraulic Drive**

**Electric Drive**

**Inline Drive**

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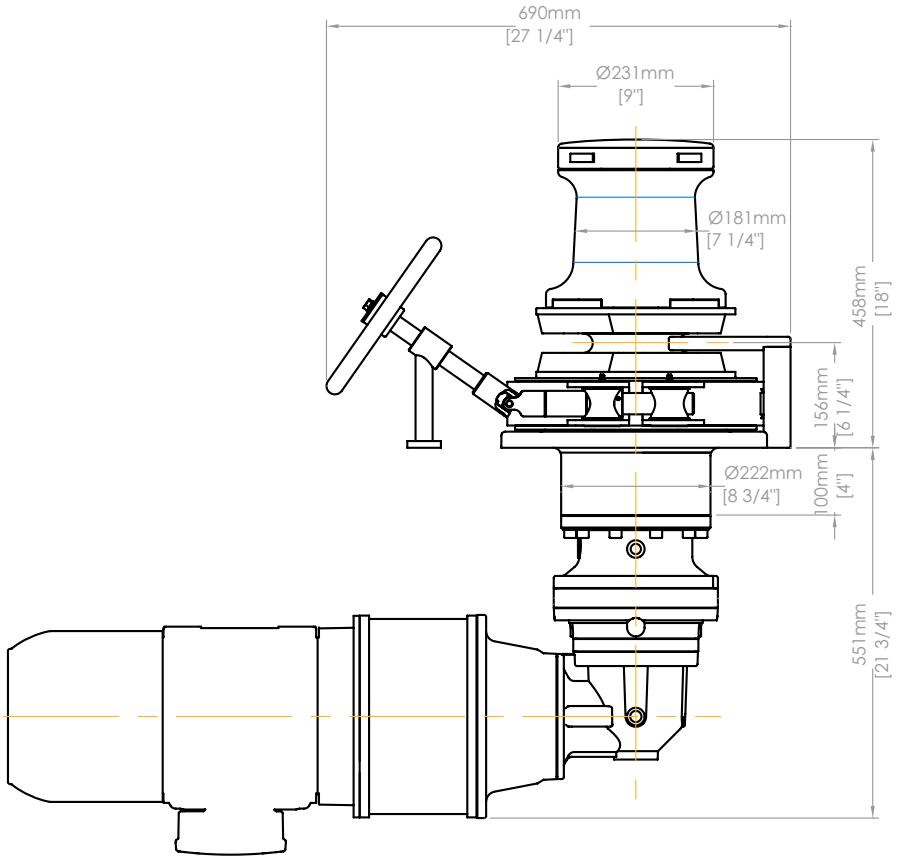
# VRC**11000**




## PERFORMANCE CRITERIA

| MODEL | VRC11000 | VRC11000 | VRC11000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **5000** / 11000 | **5000** / 11000 | **5000** / 11000 |
| Continuous Pull (kg/lb) | **2600** / 5720 | **2600** / 5720 | **3850** / 8470 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10** / 33 | **10** / 33 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20** / 66 | **20** / 66 | **20** / 66 |
| **Power Supply** | **3PH / 50HZ** | **3PH / 60HZ** | **HYDRAULIC** |
| Input Power (KW) | 7.5 | 7.5 | |
| Hydraulic Flow (l/pmin-USgpm) | | | **30** / 7.9 |
| Maximum Flow (l/pmin-USgpm) | | | **60** / 15.8 |
| Pressure (bar/PSI) | | | **175** / 2537 |
| Maximum Pressure (bar/PSI) | | | **200** / 2900 |
| **Chain Size** | | | |
| Short link up to | **22mm** | **22mm** | **22mm** |
| Stud link up to | **20.5mm** U2 | **20.5mm** U2 | **20.5mm** U2 |
| **Brake Size** | **356** / 14 | **356** / 14 | **356** / 14 |
| **Average Weight (kg/lb)** | **403** / 886 | **403** / 886 | **315** / 693 |

High Pressure 240 BAR
3600PSI optional



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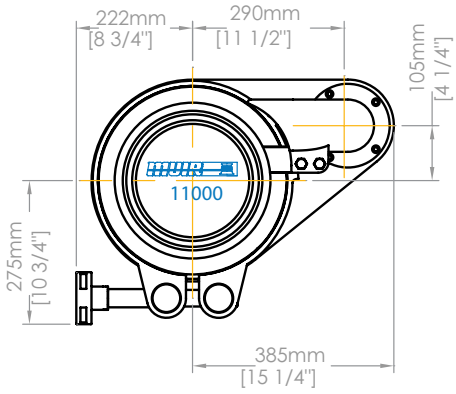
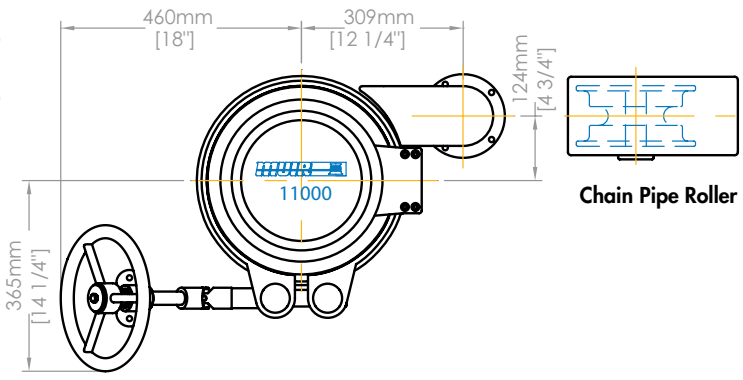
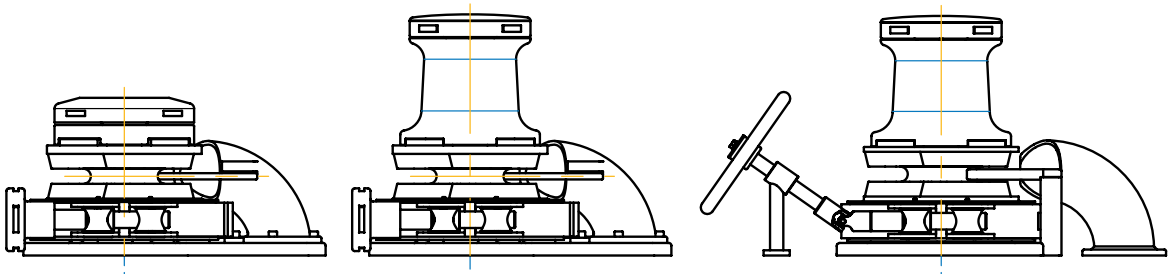



**Standard Integral Base Base with Standard Brake and Chain Pipe**




**Round Base with 45° Brake and Handwheel (with Curved Chain Pipe or optional Chain Pipe Roller)**

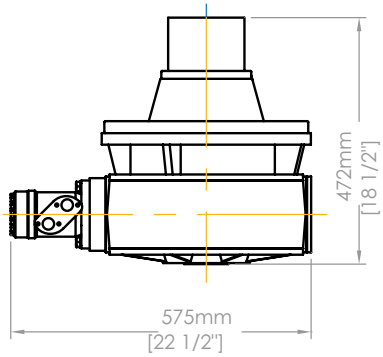
**Chain Pipe Roller**



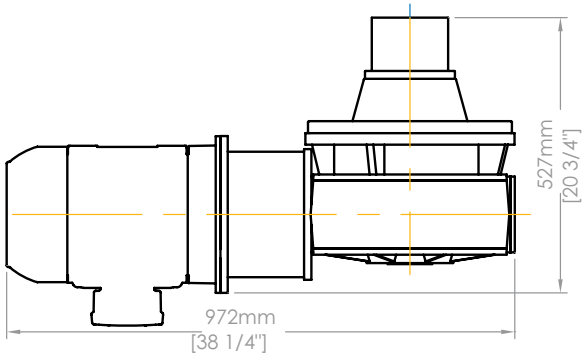
**VR Low Profile Round Base Standard Brake**

**VRC Integral Base Standard Brake**

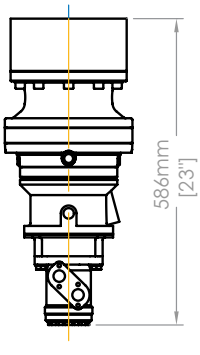
**VRC Capstan Base 45° Brake/Handwheel**




**Hydraulic Drive**




**Electric Drive**




**Inline Drive**

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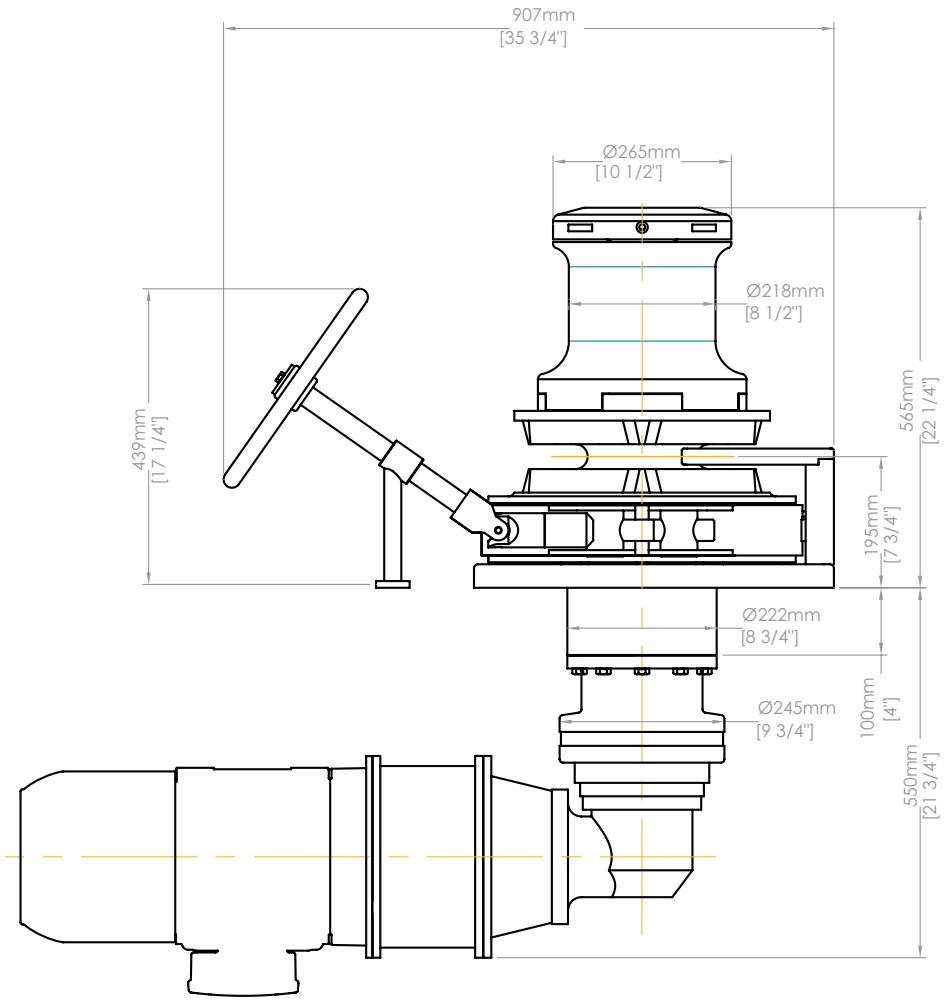
# VRC13000




## PERFORMANCE CRITERIA

| MODEL | VRC13000 | VRC13000 | VRC13000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **5909** / 13000 | **5909** / 13000 | **5909** / 13000 |
| Continuous Pull (kg/lb) | **3300** / 6966 | **3300** / 6966 | **3900** / 8580 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10** / 33 | **10** / 33 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20** / 66 | **20** / 66 | **20** / 66 |
| **Power Supply** | **3PH / 50HZ** | **3PH / 60HZ** | **HYDRAULIC** |
| Input Power (KW) | 9.2 | 9.2 | |
| Hydraulic Flow (l/pmin-USgpm) | | | **32** / 8.5 |
| Maximum Flow (l/pmin-USgpm) | | | **64** / 17 |
| Pressure (bar/PSI) | | | **175** / 2537 |
| Maximum Pressure (bar/PSI) | | | **200** / 2900 |
| **Chain Size** | | | |
| Short link up to | **22mm** | **22mm** | **22mm** |
| Stud link up to | **24mm** U2/**22m** U3 | **24mm** U2 /**22m** U3 | **24mm** U2 /**22m** U3 |
| **Brake Size** | **457** / 18 | **457** / 18 | **457** / 18 |
| **Average Weight (kg/lb)** | **520** / 1144 | **520** / 1144 | **400** / 880 |

High Pressure 240 BAR
3600PSI optional



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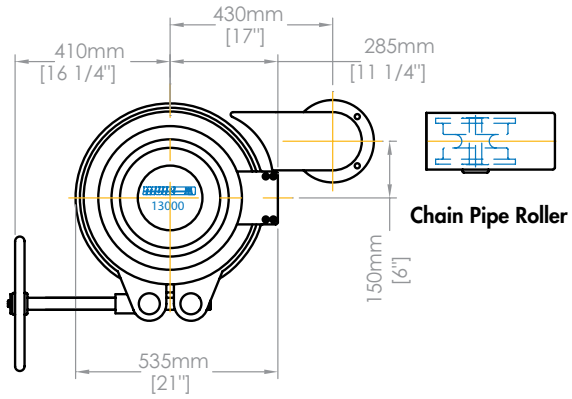
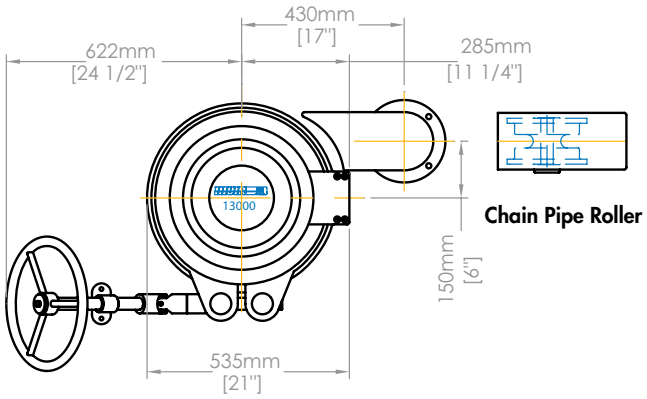
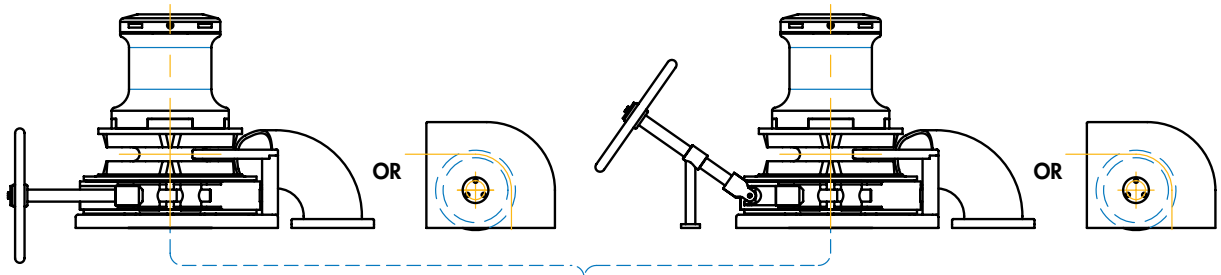



**Round Base Standard Brake**
**(with Curved Chain Pipe or optional Chain Pipe Roller)**

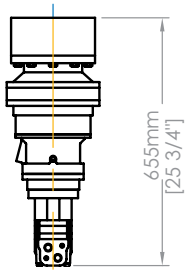



**Round Base with 45° Brake and Handwheel**
**(with Curved Chain Pipe or optional Chain Pipe Roller)**

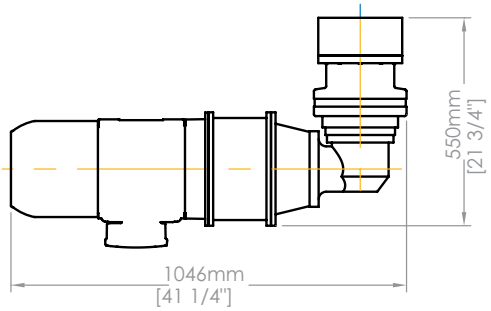



**Round Base**
**Standard Brake**

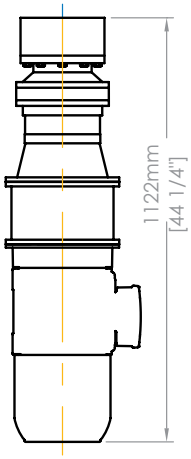
**Round Base**
**45° Brake/Handwheel**




**Hydraulic Drive - Inline Planetary**




**Electric Drive**




**AC Planetary Drive**

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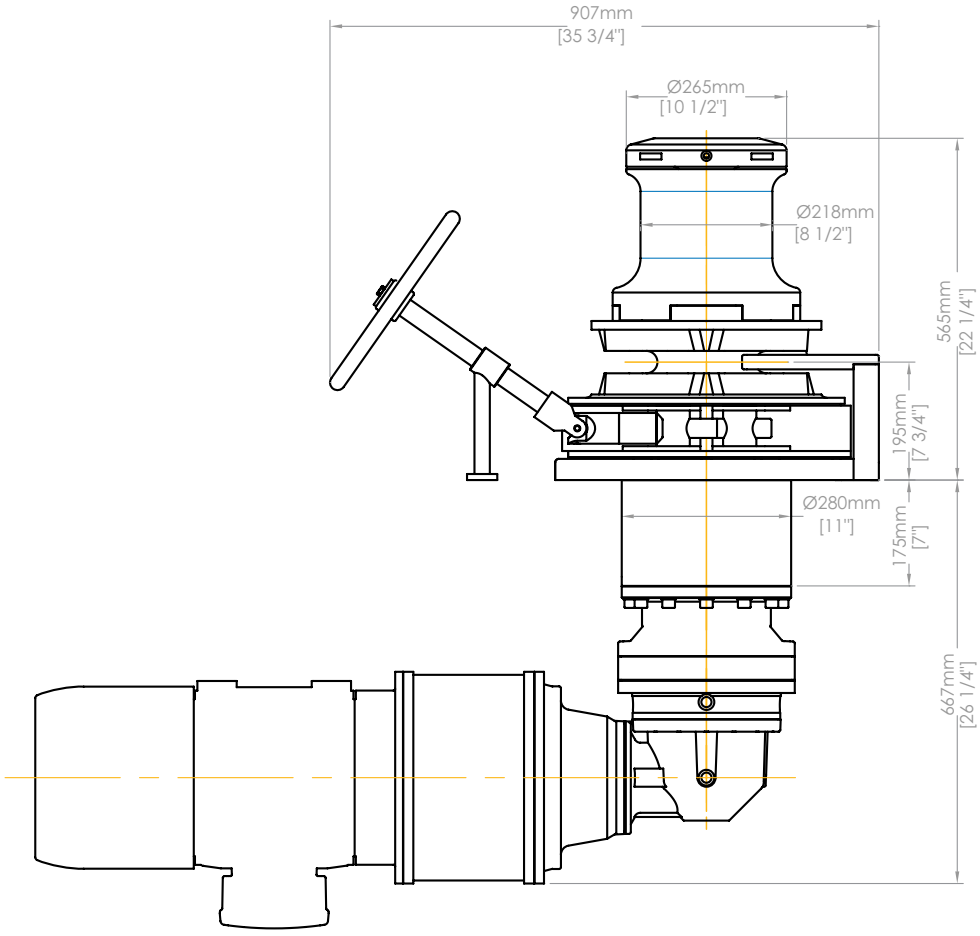
# VRC**15000**




## PERFORMANCE CRITERIA

| MODEL | VRC15000 | VRC15000 | VRC15000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **6818** / 15000 | **6818** / 15000 | **6818** / 15000 |
| Continuous Pull (kg/lb) | **3600** / 7920 | **3600** / 7920 | **4300** / 9460 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10** / 33 | **10** / 33 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20** / 66 | **20** / 66 | **20** / 66 |
| **Power Supply** | **3PH / 50HZ** | **3PH/60HZ** | **HYDRAULIC** |
| Input Power (KW) | 9.2/11 | 9.2/ 11 | |
| Hydraulic Flow (l/pmin-USgpm) | | | **34** / 9 |
| Maximum Flow (l/pmin-USgpm) | | | **68** / 18 |
| Pressure (bar/PSI) | | | **175** / 2537 |
| Maximum Pressure (bar/PSI) | | | **200** / 2900 |
| **Chain Size** | | | |
| Stud link up to | **26mm** U2 / **24mm** U3 | **26mm** U2 / **24mm** U3 | **26mm** U2 / **24mm** U3 |
| **Brake Size** | **457** / 18 | **457** / 18 | **457** / 18 |
| **Average Weight (kg/lb)** | **640** / 1408 | **640** / 1408 | **520** / 1144 |

High Pressure 240 BAR
3600PSI optional



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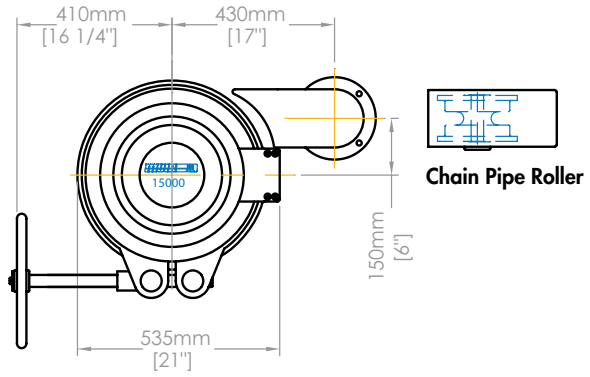
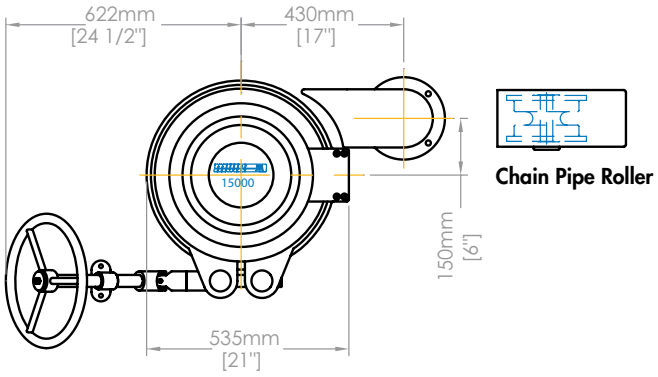
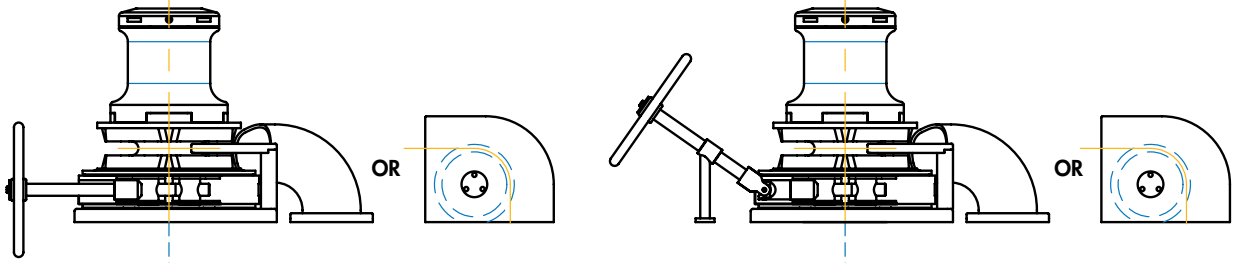



**Round Base Standard Brake**
**(with Curved Chain Pipe or optional Chain Pipe Roller)**

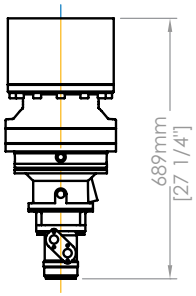



**Round Base 45° with Brake and Handwheel**
**(with Curved Chain Pipe or optional Chain Pipe Roller)**

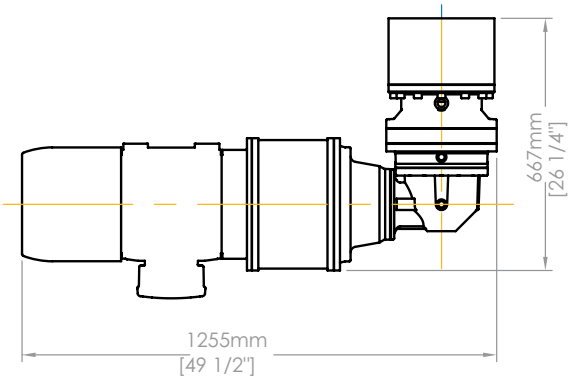



**Round Base**
**Standard Brake**

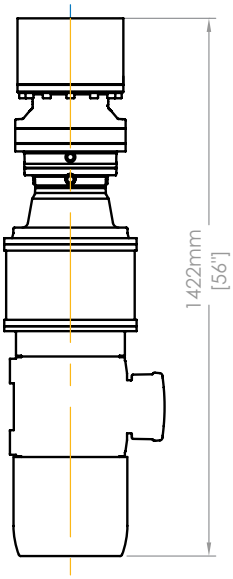
**Round Base**
**45° Brake/Handwheel**




**Hydraulic Drive**




**Electric Drive**




**AC Planetary Drive**

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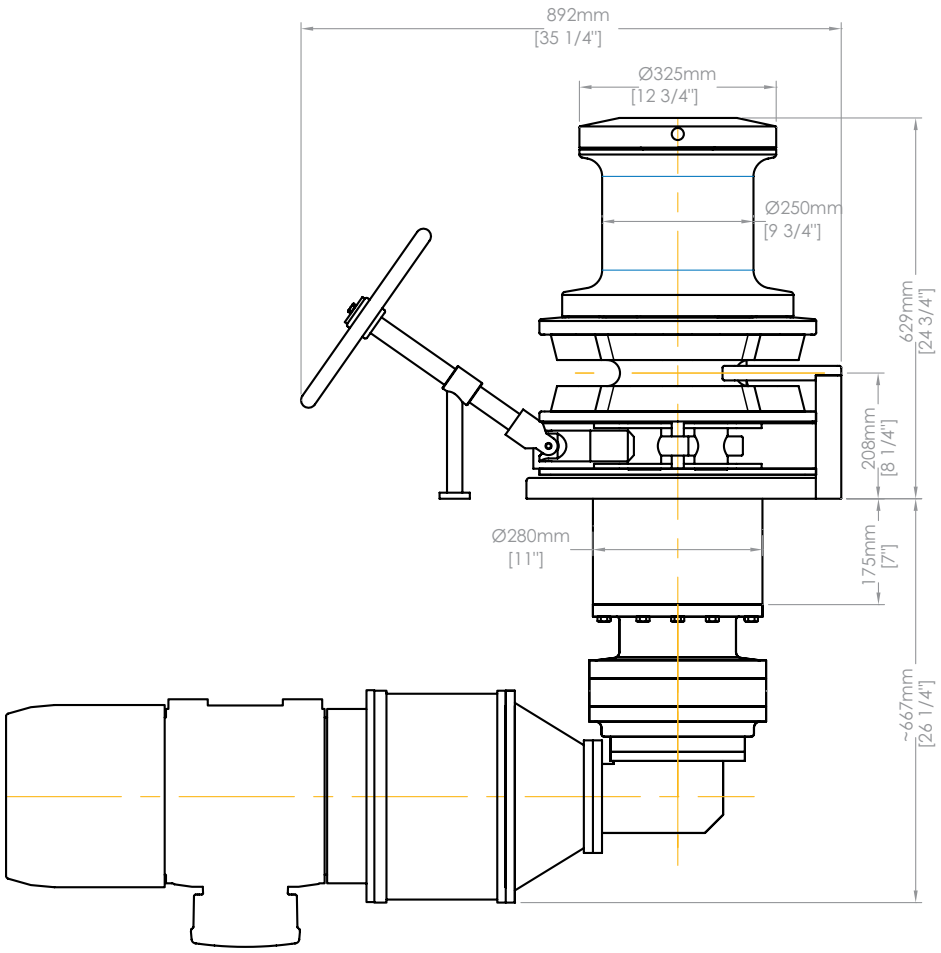
# VRC**18000**




## PERFORMANCE CRITERIA

| MODEL | VRC18000 | VRC18000 | VRC18000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **8180** / 18000 | **8180** / 18000 | **8180** / 18000 |
| Continuous Pull (kg/lb) | **4400** / 9680 | | **4900** / 10780 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10** / 33 | **10** / 33 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20** / 66 | **20** / 66 | **20** / 66 |
| **Power Supply** | **3PH / 50HZ** | **3PH / 60HZ** | **HYDRAULIC** |
| Input Power (KW) | 11 | 11 | |
| Hydraulic Flow (l/pmin-USgpm) | | | **39** / 10.3 |
| Maximum Flow (l/pmin-USgpm) | | | **78** / 20.6 |
| Pressure (bar/PSI) | | | **210** / 3045 |
| Maximum Pressure (bar/PSI) | | | **250** / 3625 |
| **Chain Size** | | | |
| Stud link up to | **28mm** U2 / **24mm** U3 | **28mm** U2 / **24mm** U3 | **28mm** U2 / **24mm** U3 |
| **Brake Size** | **457 /** 18 | **457 /** 18 | **457 /** 18 |
| **Average Weight (kg/lb)** | **697** / 1533 | **697** / 1533 | **582** / 1280 |



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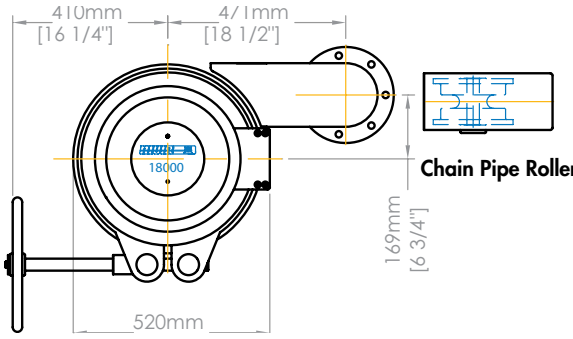
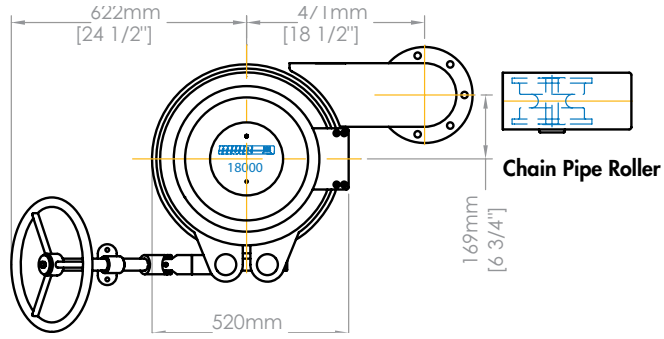
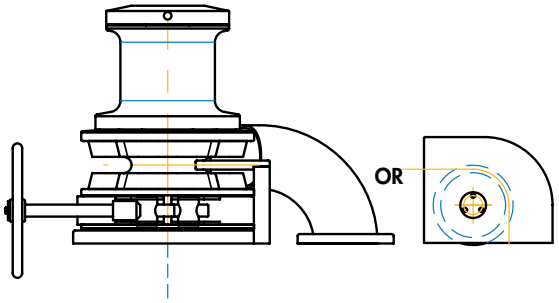


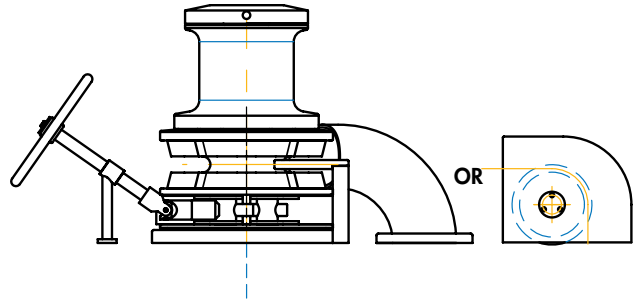

**Round Base Standard Brake**
**(with Curved Chain Pipe or optional Chain Pipe Roller)**



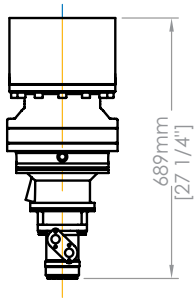

**Round Base 45° with Brake and Handwheel**
**(with Curved Chain Pipe or optional Chain Pipe Roller)**



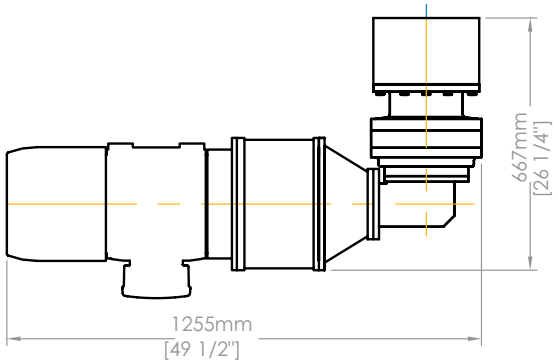

**Round Base**
**Standard Brake**



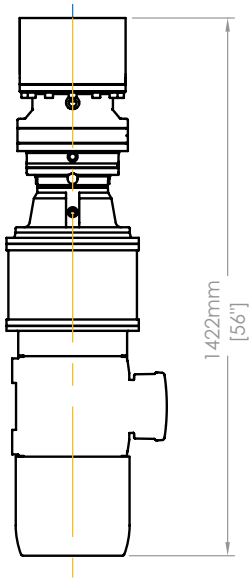

**Round Base**
**45° Brake/Handwheel**




**Hydraulic Drive**




**Electric Drive**




**AC Planetary Drive**

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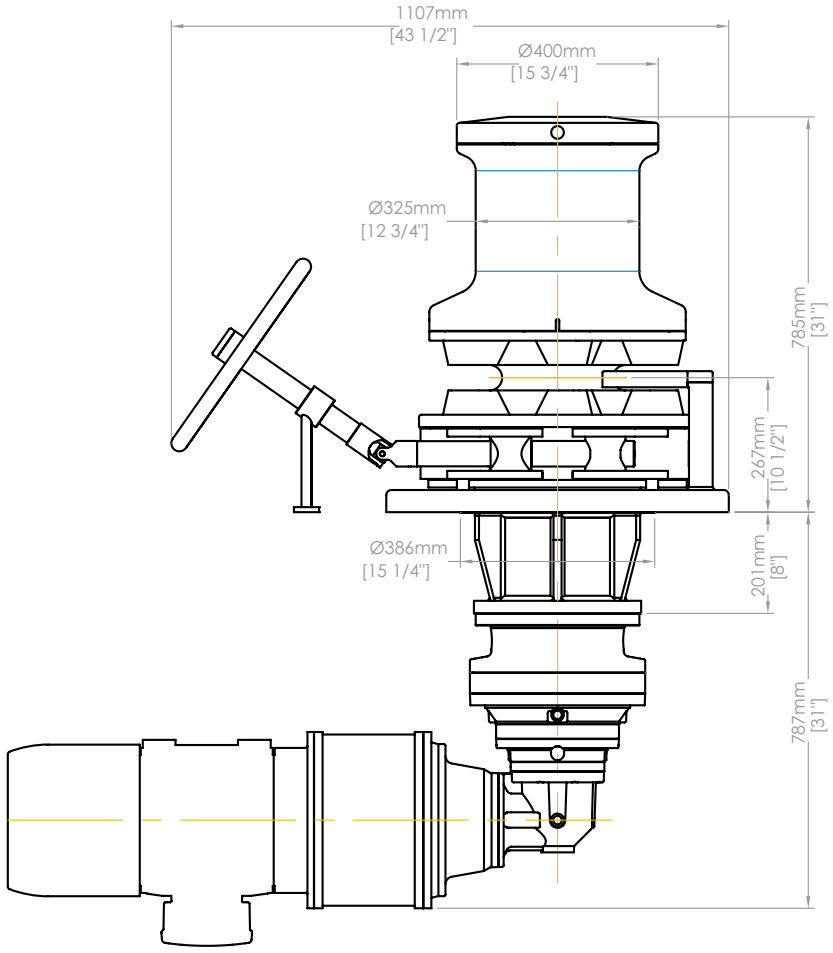
# VRC**20000**




## PERFORMANCE CRITERIA

| MODEL | VRC20000 | VRC20000 | VRC20000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **9090** / 20000 | **9090** / 20000 | **9090** / 20000 |
| Continuous Pull (kg/lb) | **6000** / 13200 | **6000** / 13200 | **7200** / 15840 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10** / 33 | **10** / 33 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20** / 66 | **20** / 66 | **20** / 66 |
| **Power Supply** | **3PH / 50HZ** | **3PH / 60HZ** | **HYDRAULIC** |
| Input Power (KW) | 11 / 15 | 11 / 15 | |
| Hydraulic Flow (l/pmin-USgpm) | | | **50** / 13 |
| Maximum Flow (l/pmin-USgpm) | | | **98** / 25 |
| Pressure (bar/PSI) | | | **210** / 3045 |
| Maximum Pressure (bar/PSI) | | | **250** / 3635 |
| **Chain Size** | | | |
| Stud link up to | **28mm** U3 / **32mm** U2 | **28mm** U3 / **32mm** U2 | **28mm** U3 / **32mm** U2 |
| **Brake Size** | **520** / 24 | **520** / 24 | **520** / 24 |
| **Average Weight (kg/lb)** | **1200** | **1200** | **1015** |



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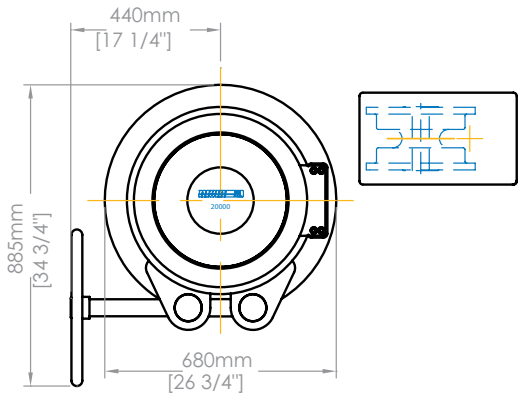
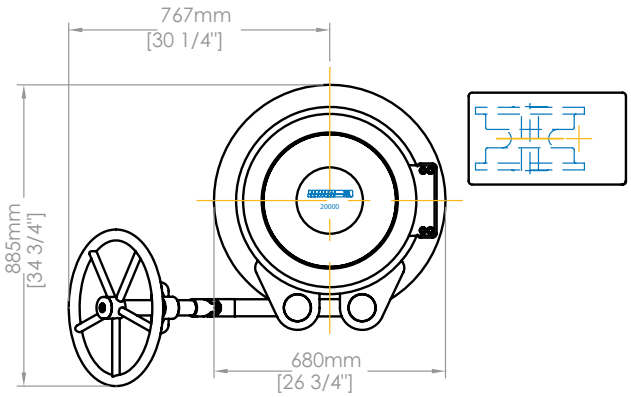
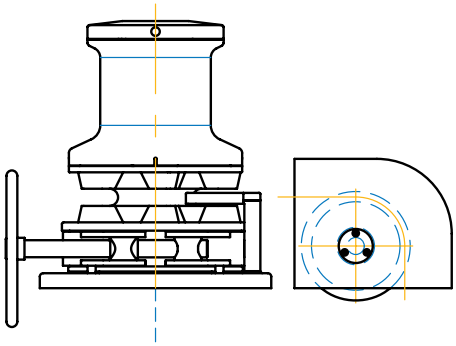


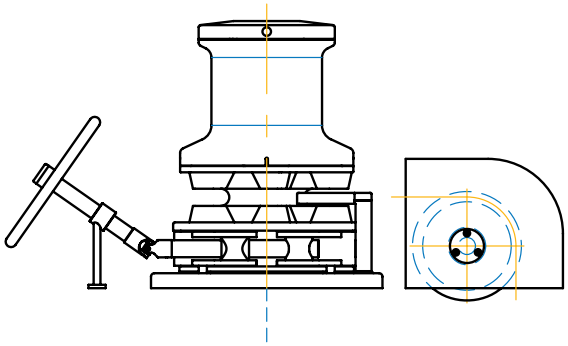

Round Base Standard Brake



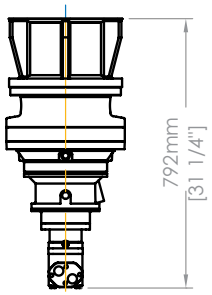

Round Base with 45° Brake and Handwheel with Chain Pipe Roller



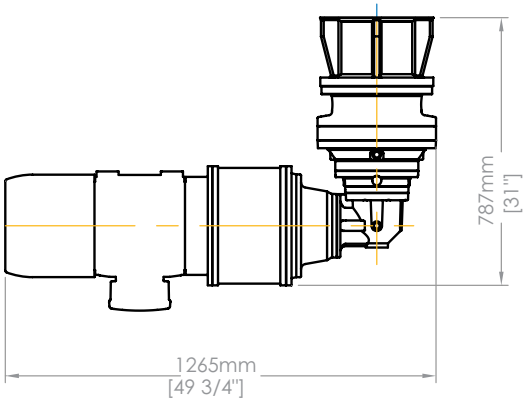
Round Base
Standard Brake



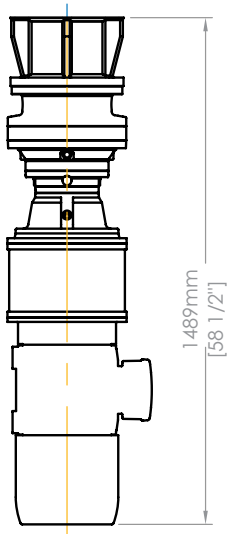
Round Base
45° Brake/Handwheel




Hydraulic Drive




Electric Drive




AC Planetary Drive

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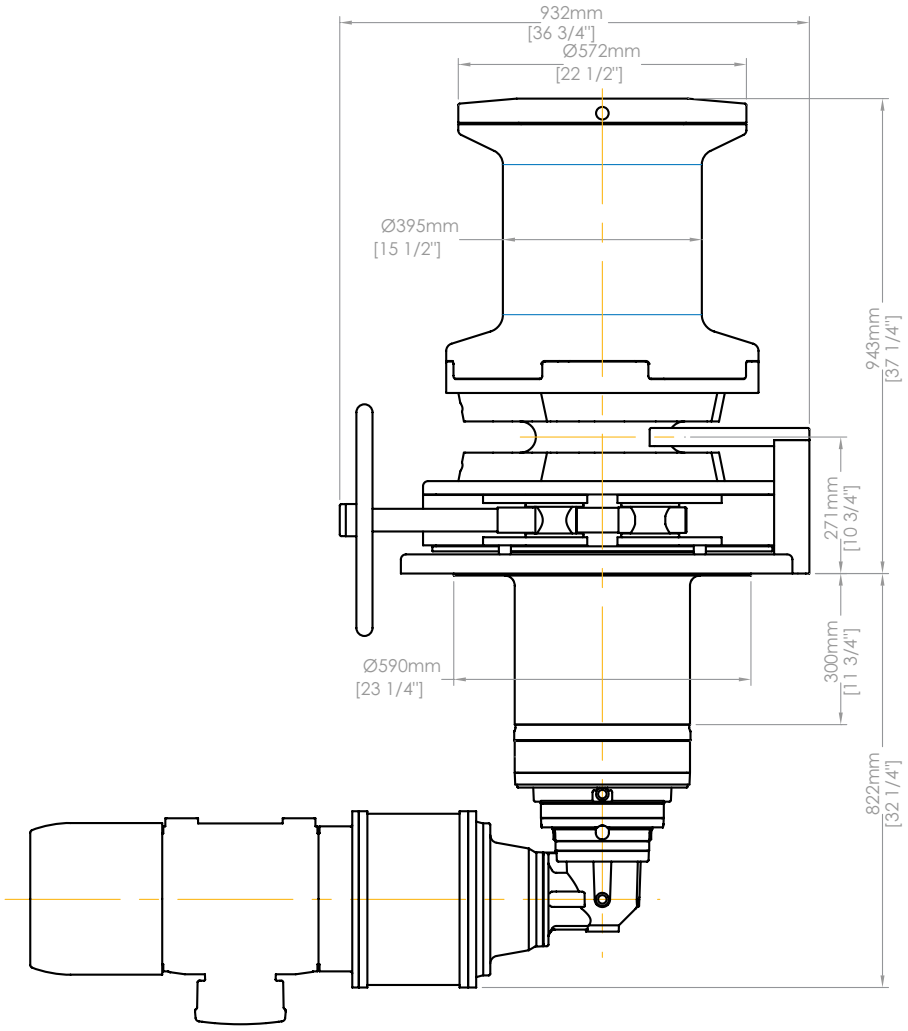
# VRC**22000**




## PERFORMANCE CRITERIA

| MODEL | VRC22000 | VRC22000 | VRC22000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **10000** / 22000 | **10000** / 22000 | **10000** / 22000 |
| Continuous Pull (kg/lb) | **7000** / 15400 | **7000** / 15400 | **7500** / 15500 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10** / 33 | **10** / 33 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20** / 66 | **20** / 66 | **20** / 66 |
| **Power Supply** | **3PH / 50HZ** | **3PH / 60HZ** | **HYDRAULIC** |
| Input Power (KW) | **15** / 18.2KW | **15** / 18.2KW | |
| Hydraulic Flow (l/pmin-USgpm) | | | **65** / 17.2 |
| Maximum Flow (l/pmin-USgpm) | | | **120** / 31.7 |
| Pressure (bar/PSI) | | | **210** / 3045 |
| Maximum Pressure (bar/PSI) | | | **250** / 3625 |
| **Chain Size** | | | |
| Stud link up to | **34mm U3**/ 36MM U2 | **34mm U3**/ 36MM U2 | **34mm U3**/ 36MM U2 |
| **Brake Size** | **610** / 24 | **610** / 24 | **610** / 24 |
| **Average Weight (kg/lb)** | **1750** / 3850 | **1750** / 3850 | **1700** / 3740 |



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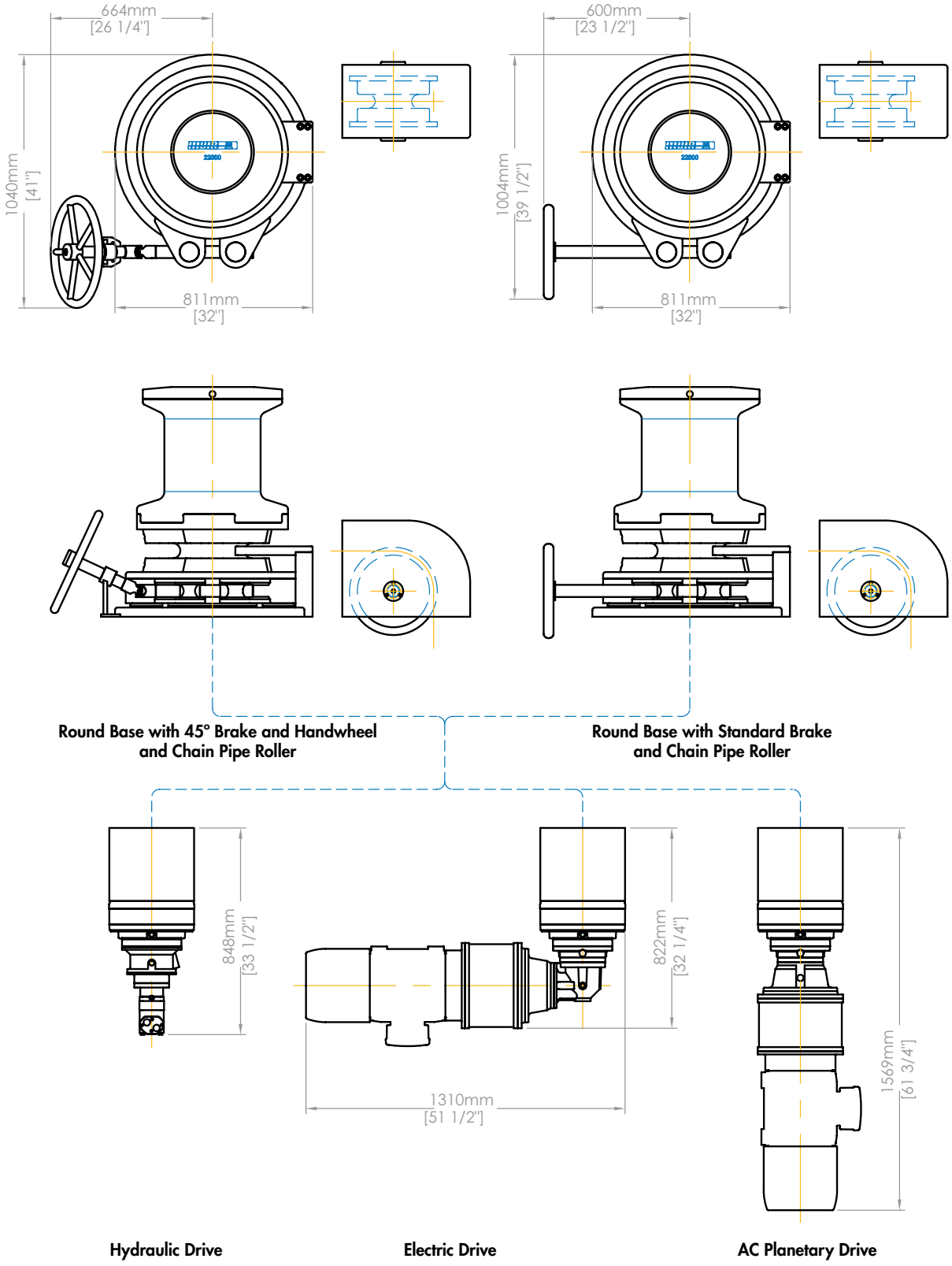


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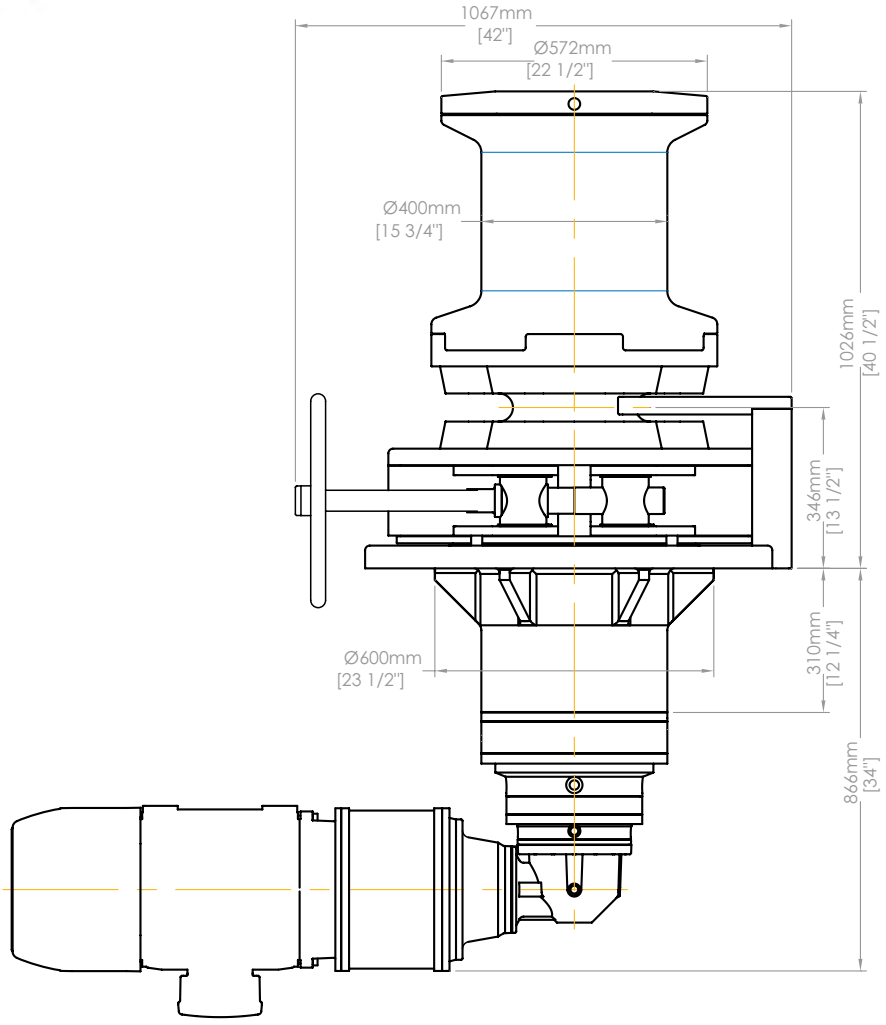
# VRC24000 NEW




## PERFORMANCE CRITERIA

| MODEL | VRC24000 | VRC24000 | VRC24000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **11500** / 25300 | **11500** / 25300 | **11500** / 25300 |
| Continuous Pull (kg/lb) | **8500** / 18700 | **8500** / 18700 | **8500** / 18700 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10** / 33 | **10** / 33 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20** / 66 | **20** / 66 | **20** / 66 |
| **Power Supply** | **3PH / 50HZ** | **3PH / 60HZ** | **HYDRAULIC** |
| Input Power (KW) | 18.2 / 22 | 18.2 / 22 | |
| Hydraulic Flow (l/pmin-USgpm) | | | **65** / 17.2 |
| Maximum Flow (l/pmin-USgpm) | | | **120** / 31.7 |
| Pressure (bar/PSI) | | | **210** / 3045 |
| Maximum Pressure (bar/PSI) | | | **250** / 3625 |
| **Chain Size** | | | |
| Stud link up to | **38mm** U3 / 42mm U2 | **38mm** U3 / 42mm U2 | **38mm** U3 / 42mm U2 |
| **Brake Size** | **725** / 30 | **725** / 30 | **725** / 30 |
| **Average Weight (kg/lb)** | **2300** / 5060 | **2300** / 5060 | **2150** / 4730 |



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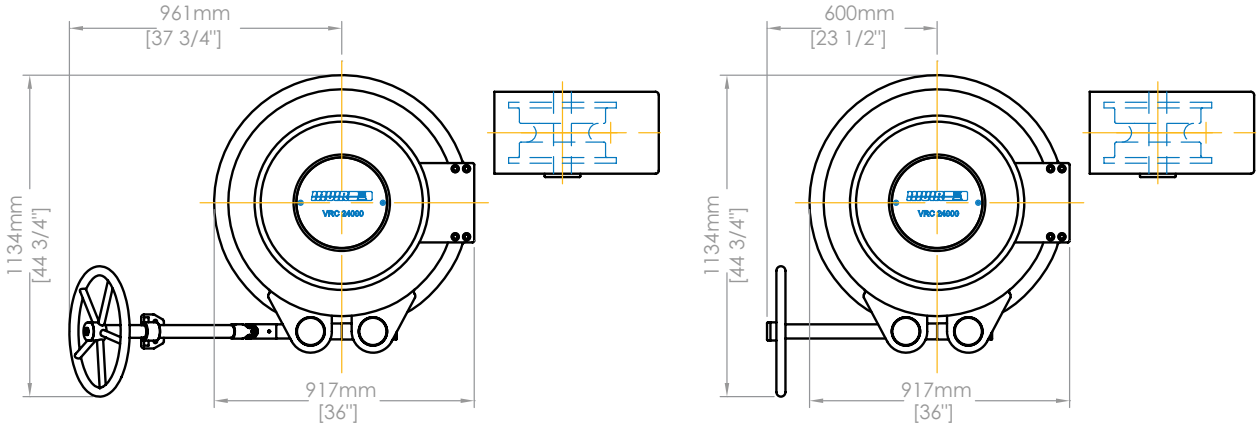
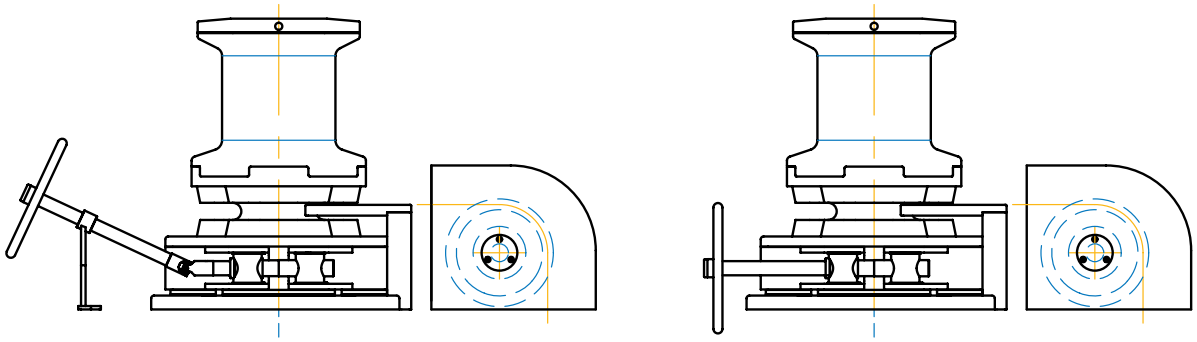
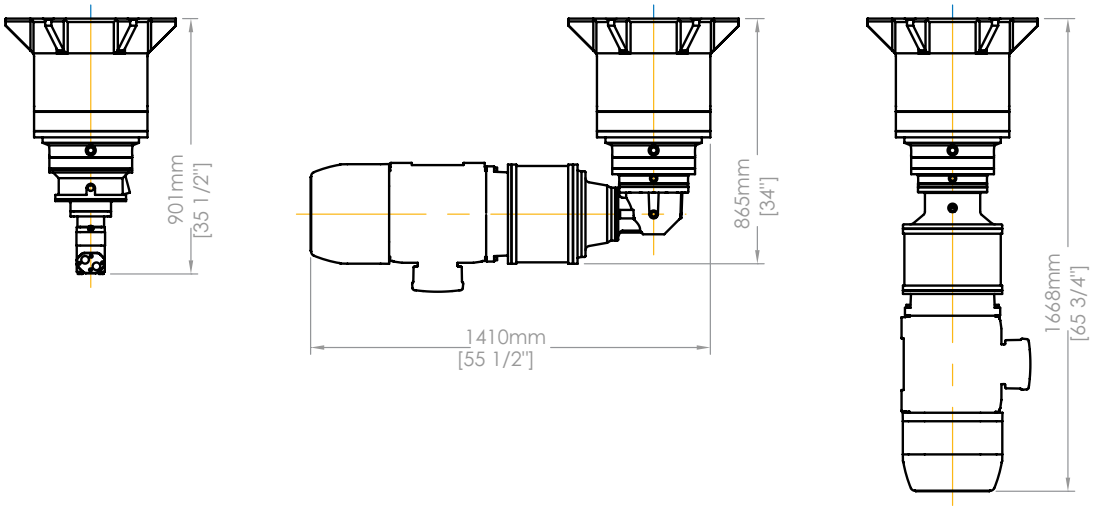


Round Base with 45° Brake and Handwheel with Chain Pipe Roller

Round Base with Standard Brake and Chain Pipe Roller




Hydraulic Drive

Electric Drive

AC Planetary Drive

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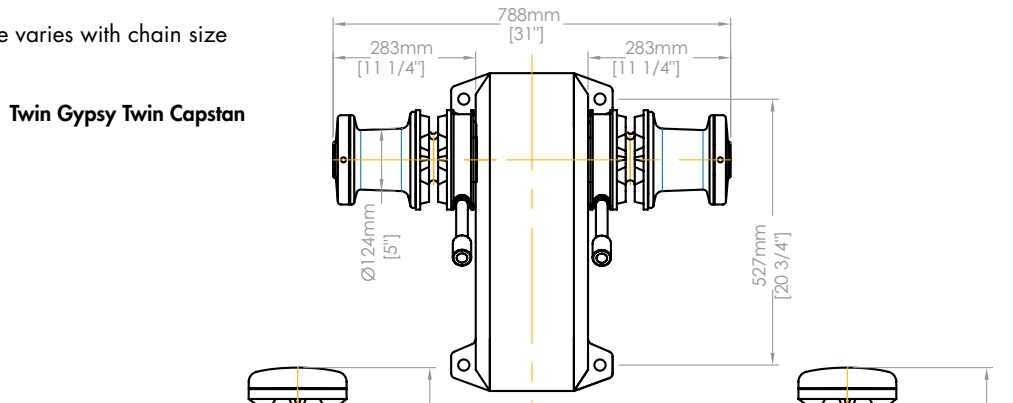
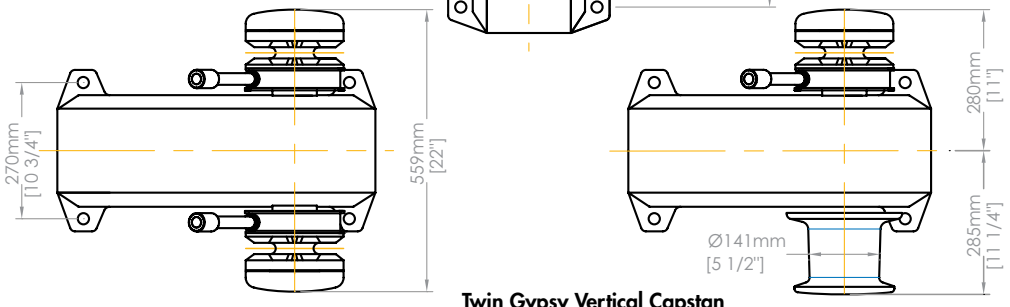
# HR5000 NEW

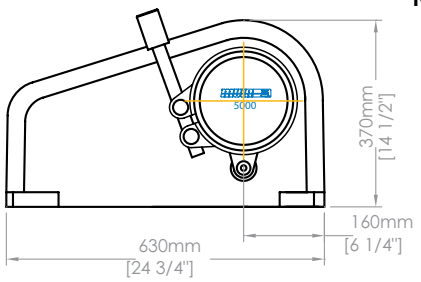
Gypsy centre varies with chain size

**Twin Gypsy Twin Capstan**




**Twin Gypsy Vertical Capstan**




**Twin Gypsy Single Capstan**

## PERFORMANCE CRITERIA

| MODEL | HR5000 | HR5000 |
|---|---|---|
| Maximum Pull (kg/lb) | **2045** / 4500 | **2045** / 4500 |
| Continuous Pull (kg/lb) | **1950** / 2090 | **1600** / 3520 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **15** / 50 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | | **20** / 66 |
| **Power Supply** | **24VDC** | **HYDRAULIC** |
| Input Power (KW) | **2500** / 3500W | |
| Hydraulic Flow (l/pmin-USgpm) | | **26** / 6.9 |
| Maximum Flow (l/pmin-USgpm) | | **52** / 13.7 |
| Pressure (bar/PSI) | | **175** / 2537 |
| Maximum Pressure (bar/PSI) | | **200** / 2900 |
| **Chain Size** | | |
| Short link up to | **16mm** | **16mm** |
| Stud link up to | **14mm** U2 | **14mm** U2 |
| **Brake Size** | **150/230mm** | **150/230mm** |
| **Average Weight (kg/lb)** | **130** / 286 | **113** / 248 |



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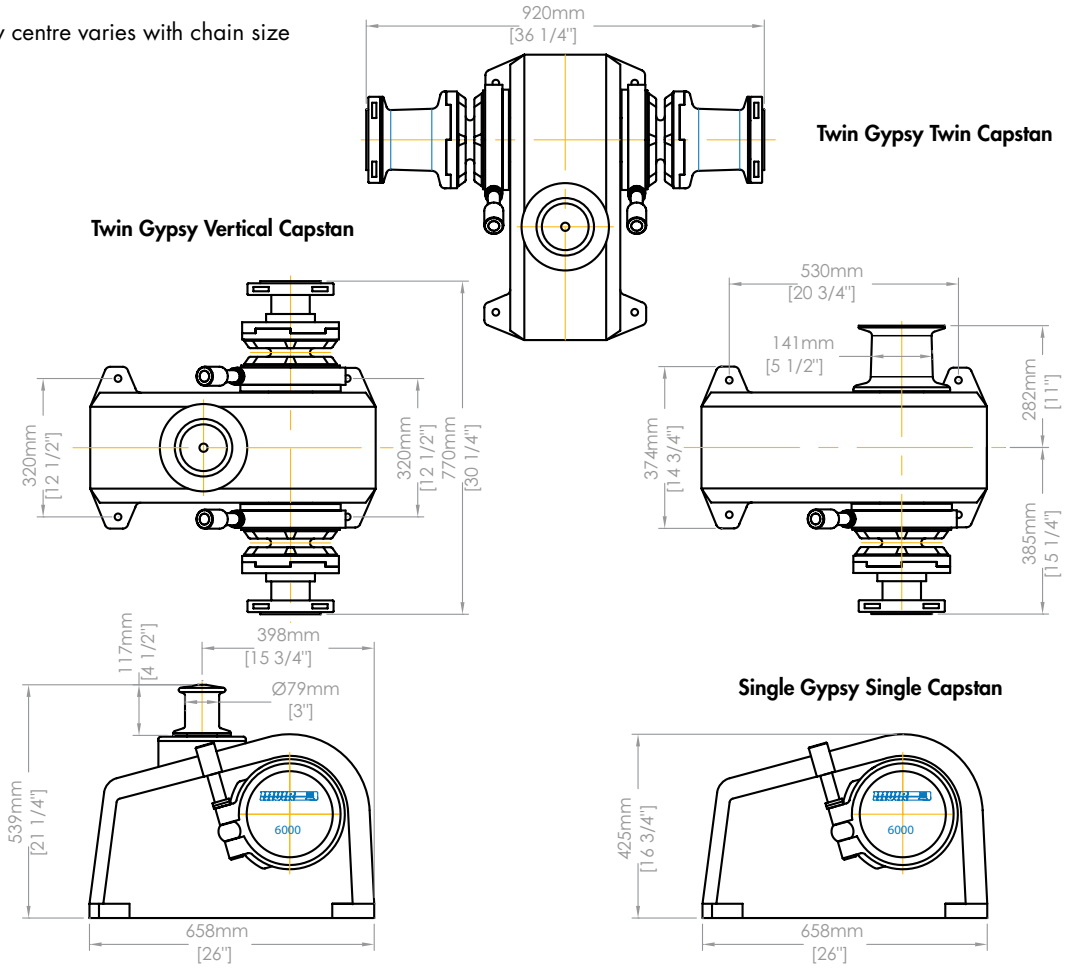
# HR6000

Gypsy centre varies with chain size




## PERFORMANCE CRITERIA

| MODEL | H6000 | H6000 |
|---|---|---|
| Maximum Pull (kg/lb) | **2727** / 6000 | **2727** / 6000 |
| Continuous Pull (kg/lb) | **1409** / 3100 | **2138** / 4703 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **15** / 50 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | | **20** / 66 |
| **Power Supply** | **24VDC** | **HYDRAULIC** |
| Input Power (KW) | **2500** / 3500W | |
| Hydraulic Flow (l/pmin-USgpm) | | **28** / 7.4 |
| Maximum Flow (l/pmin-USgpm) | | **56** / 14.8 |
| Pressure (bar/PSI) | | **175** / 2537 |
| Maximum Pressure (bar/PSI) | | **200** / 2900 |
| **Chain Size** | | |
| Short link up to | **16mm** / 5 / 8" | **16mm** / 5 / 8" |
| Stud link up to | **14mm** U2" | **16mm** U2" (Hydraulic only) |
| **Brake Size** | **230** / 9 | **230** / 9 |
| **Average Weight (kg/lb)** | **370** / 814 | **335** / 781 |

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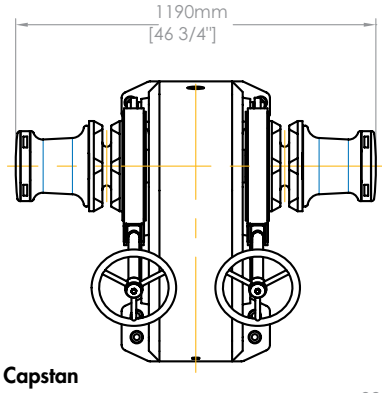
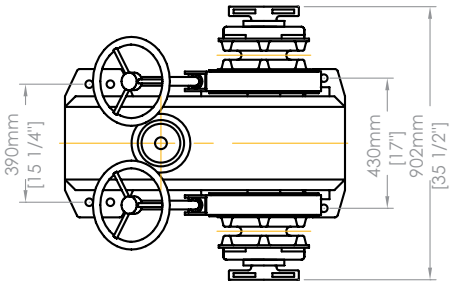
# HR8000

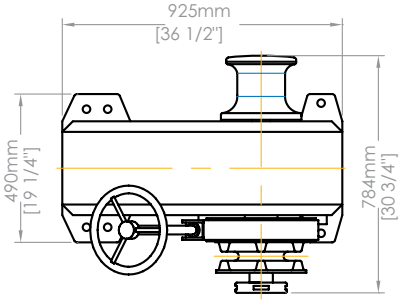
Gypsy centre varies with chain size

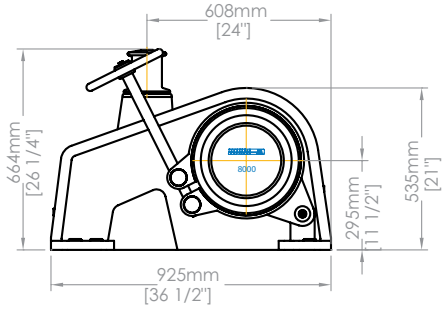



**Twin Gypsy Twin Capstan**

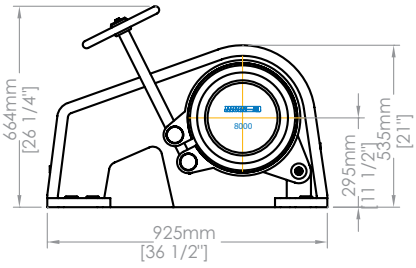
**Twin Gypsy Vertical Capstan**




**Single Gypsy Single Capstan**




## PERFORMANCE CRITERIA

| MODEL | HR8000 | HR8000 | HR8000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **3636** / 8000 | **3636** / 8000 | **2636** / 8000 |
| Continuous Pull (kg/lb) | **2400** / 5280 | **2400** / 5280 | **2900** / 6380 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10** /33 | **10** / 33 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20** / 66 | **20** / 66 | **20** / 66 |
| **Power Supply** | **3PH / 50HZ** | **3PH / 50HZ** | **HYDRAULIC** |
| Input Power (KW) | *5.5* | *5.5* | |
| Hydraulic Flow (l/pmin-USgpm) | | | **28** / 7.4 |
| Maximum Flow (l/pmin-USgpm) | | | **56** / 14.8 |
| Pressure (bar/PSI) | | | **170** / 2537 |
| Maximum Pressure (bar/PSI) | | | **200** / 2900 |
| **Chain Size** | | | |
| Short link up to | **19mm** | **19mm** | **22mm** |
| Stud link up to | **19mm** U2 | **19mm** U2 | **20.5** / U2 |
| **Brake Size** | **356**/14 | **356**/14 | **356**/14 |
| **Average Weight (kg/lb)** | **502** / 1140 | **502** / 1140 | **450**/990 |



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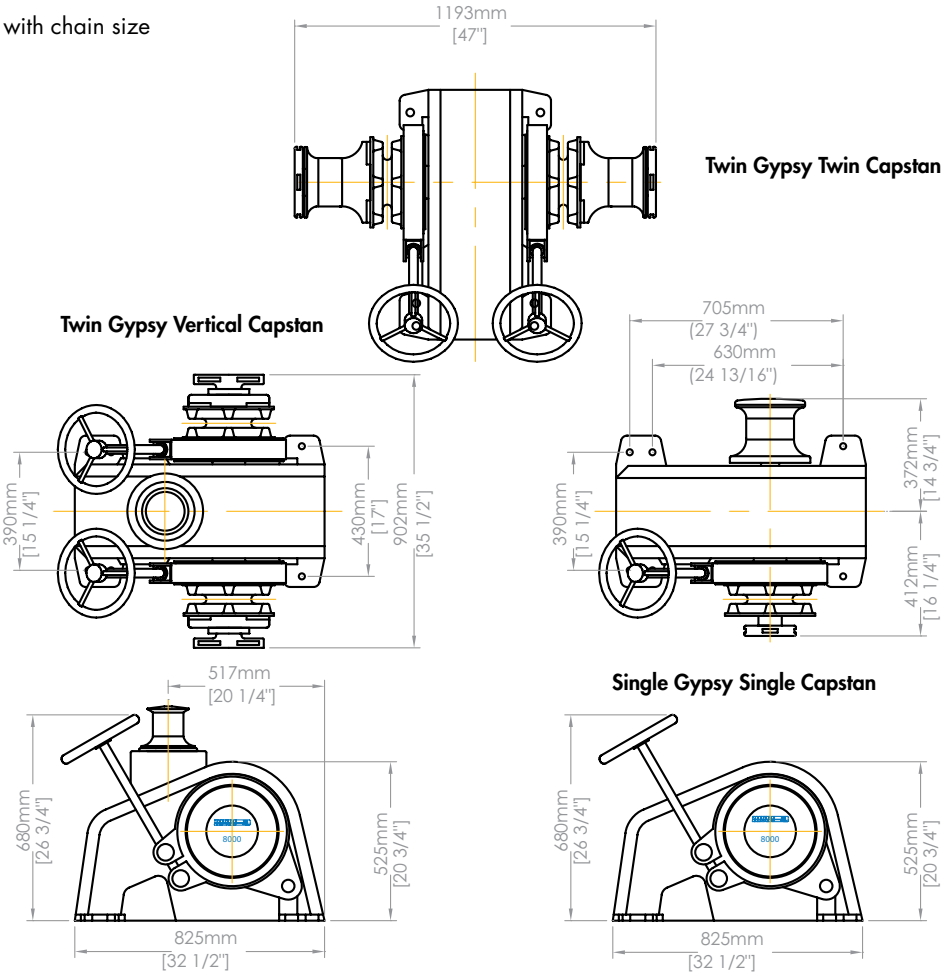
# HR11000

Gypsy centre varies with chain size




## PERFORMANCE CRITERIA

| MODEL | HR11000 | HR11000 | HR11000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **5000** / 11000 | **5000** / 11000 | **5000** / 11000 |
| Continuous Pull (kg/lb) | **2600** / 5720 | **2600** / 5720 | **3200** / 7040 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10** / 33 | **10** / 33 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20** / 66 | **20** / 66 | **20** / 66 |
| **Power Supply** | **3PH /50HZ** | **3PH /50HZ** | **HYDRAULIC** |
| Input Power (KW) | *7.5* | *7.5* | |
| Hydraulic Flow (l/pmin-USgpm) | | | **30** / 7.9 |
| Maximum Flow (l/pmin-USgpm) | | | **60**/15.8 |
| Pressure (bar/PSI) | | | **170**/2537 |
| Maximum Pressure (bar/PSI) | | | **200**/2900 |
| **Chain Size** | | | |
| Short link up to | **22mm** | **22mm** | **22mm** |
| Stud link up to | **20.5mm** U2 | **20.5mm** U2 | **20.5/** U2 |
| **Brake Size** | **356** / 14 | **356** / 14 | **356**/14 |
| **Average Weight (kg/lb)** | **536** / 1179 | **536** / 1179 | **450**/990 |

High Pressure 240 BAR
3600PSI optional

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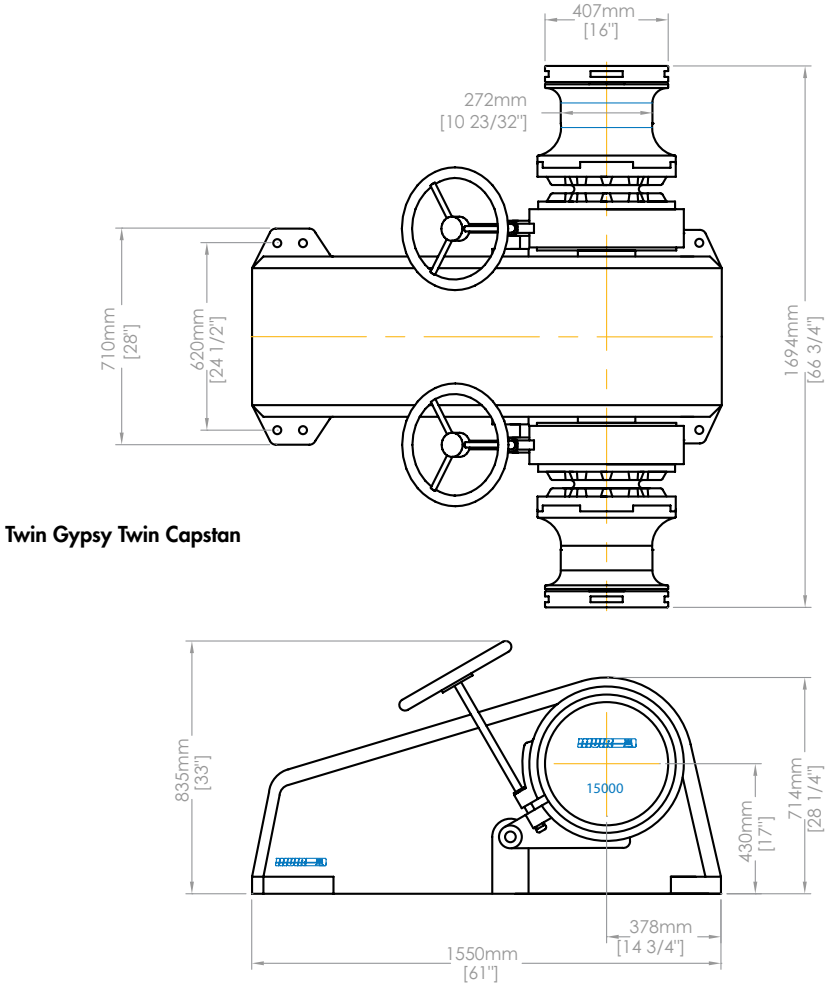
# HR15000




**Twin Gypsy Twin Capstan**

## PERFORMANCE CRITERIA

| MODEL | HR15000 | HR15000 | HR15000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **6820** / 15000 | **6820** / 15000 | **6820**/15000 |
| Continuous Pull (kg/lb) | **3500** / 7700 | **3500** / 7700 | **4600** / 10120 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **13**/43 | **13**/43 | **10**/33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | | | 20/66 |
| **Power Supply** | **3PH/50HZ** | **3PH/60HZ** | **HYDRAULIC** |
| Input Power (KW) | 11 | 11 | |
| Hydraulic Flow (l/pmin-USgpm) | | | **34** / 9 |
| Maximum Flow (l/pmin-USgpm) | | | **68** / 18 |
| Pressure (bar/PSI) | | | **175**/2537 |
| Maximum Pressure (bar/PSI) | | | **200**/2900 |
| **Chain Size** | | | |
| Short link up to | | | |
| Stud link up to | **26mm/1**" U2 | **26mm/1**" U2 | **26mm/1**" U2 |
| **Brake Size** | **457**/18 | **457**/18 | **457**/18 |
| **Average Weight (kg/lb)** | **736**/1619 | **736**/1619 | **776**/1487 |

High Pressure 240 BAR 3600PSI optional



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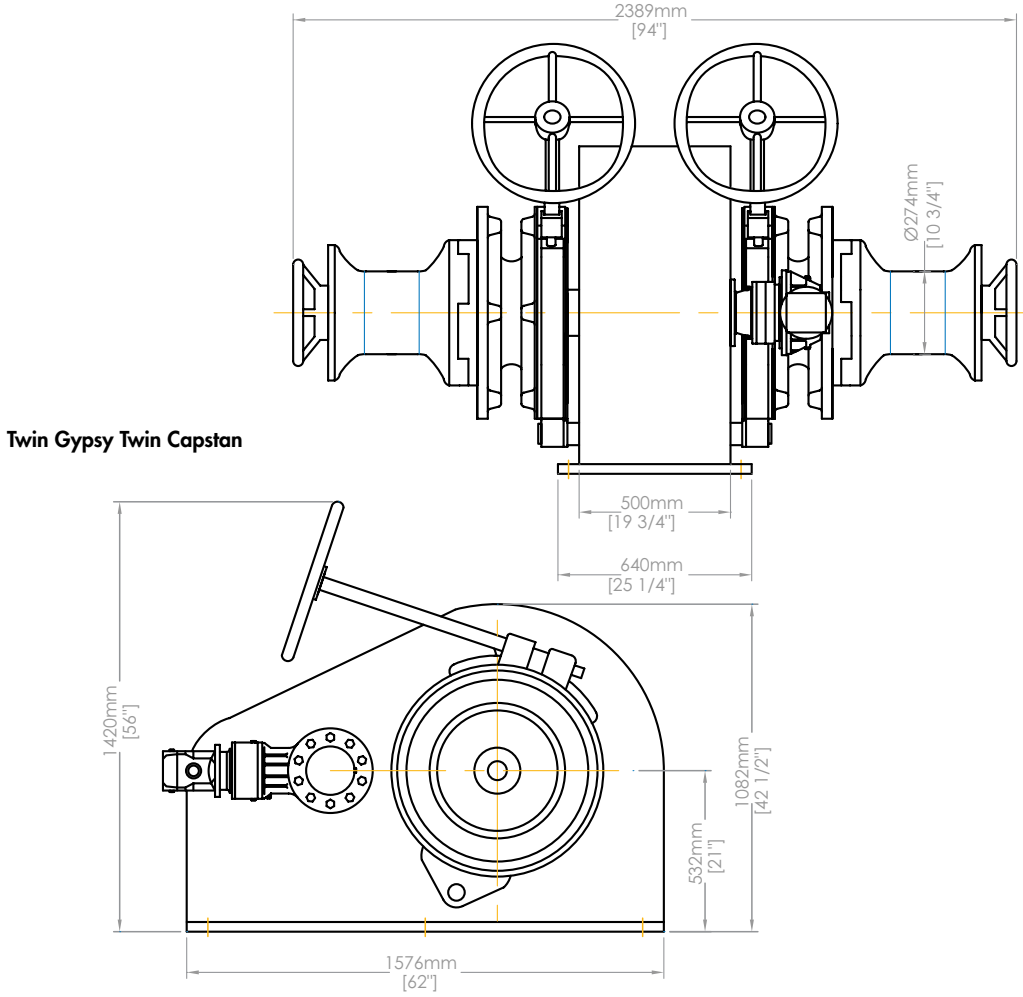
# HR22000




**Twin Gypsy Twin Capstan**

## PERFORMANCE CRITERIA

| MODEL | HR22000 |
|---|---|
| Maximum Pull (kg/lb) | **10000**/22000 |
| Continuous Pull (kg/lb) | **7500** / 15500 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20** / 66 |
| **Power Supply** | **HYDRAULIC** |
| Input Power (KW) | |
| Hydraulic Flow (l/pmin-USgpm) | **65** / 17.2 |
| Maximum Flow (l/pmin-USgpm) | **120** / 31.7 |
| Pressure (bar/PSI) | **210**/3045 |
| Maximum Pressure (bar/PSI) | **250**/3625 |
| **Chain Size** | |
| Short link up to | |
| Stud link up to | **38mm** U2 |
| **Brake Size** | **660**/26 |
| **Average Weight (kg/lb)** | **1800**/3960 |

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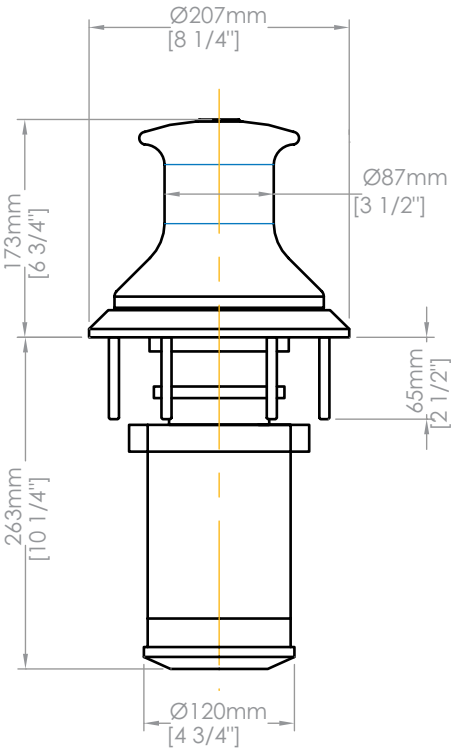
# VC2000




Muir introduce the new Inline drive capstan, delivering more power when you need it. This highly efficient and light weight capstan is fitted with a 1000w one piece integrated gearbox/motor assembly.

The one piece assembly significantly reduces installation time and is ideal for use where below deck space is restricted.

Designed to suit vessels up to 20m (67ft) the Inline capstan can be used for mooring, warping, anchoring, line hauling and fishing from any direction and are well suited to any application in either vertical or horzontal mounting positions.

Accommodating any deck thickness, this model is available in 24 V DC.

## PERFORMANCE CRITERIA

| MODEL | VC2000 |
|---|---|
| Maximum Pull (kg/lb) | **1090** / 2400 |
| Continuous Pull (kg/lb) | **500** / 1010 |
| Rec Min Speed (m/pmin - f/pmin) | **10** / 33 |
| Max Recovery High Speed (m/pmin - f/pmin) | |
| **Power Supply** | **24V DC** |
| Input Power (KW) | 1 |
| Hydraulic Flow (l/pmin-USgpm) | |
| Maximum Flow (l/pmin-USgpm) | |
| Pressure (bar/PSI) | |
| Maximum Pressure (bar/PSI) | |
| **Average Weight (kg/lb)** | **16 / 36** |

### Features

- Bronze Plated Chrome Capstans
- Capstan features knurled finish for increased grip
- VC2000 have clockwise rotation and has auto action clutch to prevent rollback
- Unit can be mounted horizontally
- Self aligning gearbox/adaptor
- Stainless steel shaft
- Stainless steel mounting bolts
- Shaft seal
- Installation/Operation booklet



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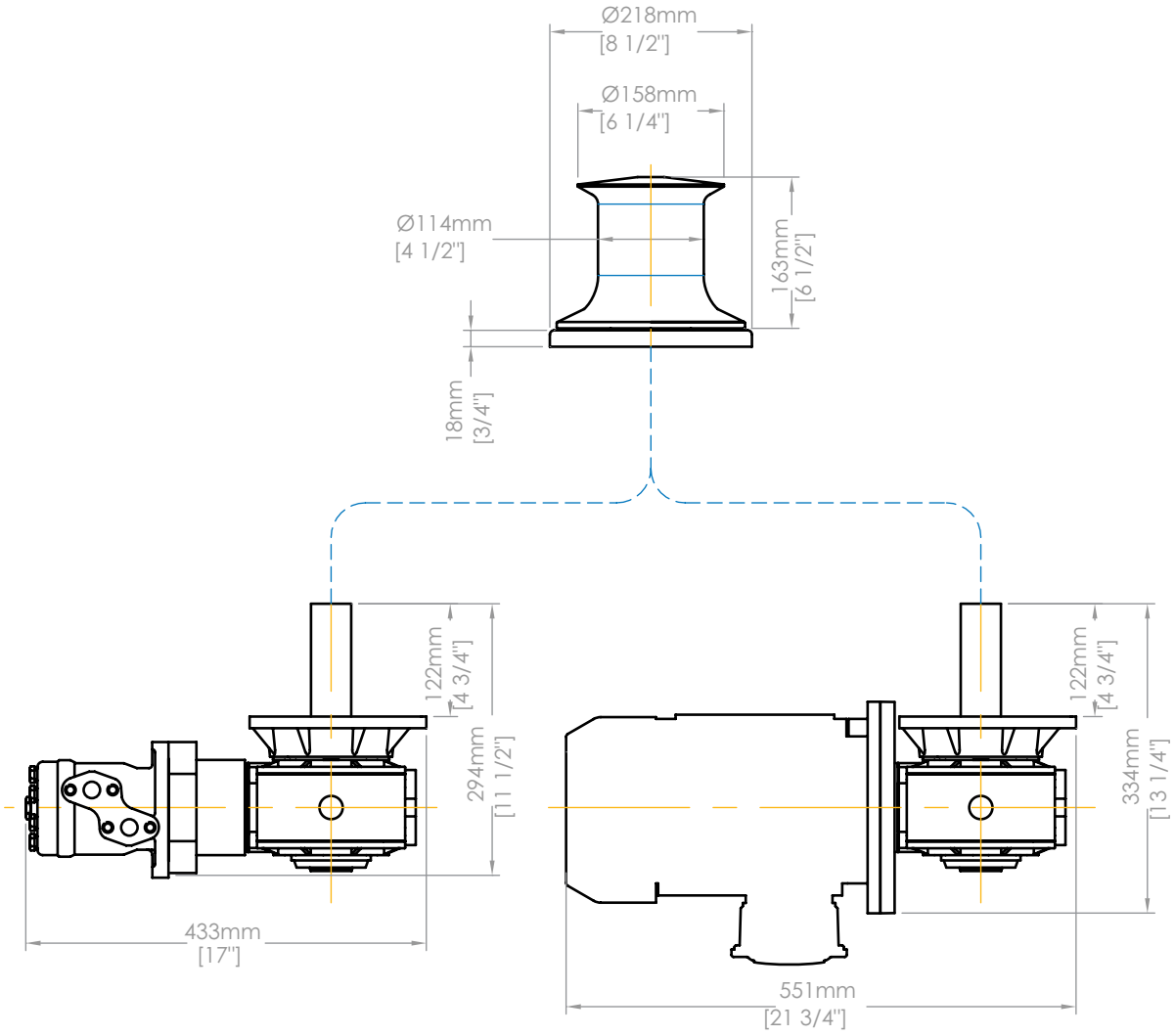
# VC2500 / VC3500




**Hydraulic Drive** **Electric Drive**

## PERFORMANCE CRITERIA

| MODEL | VC2500 | VC 2500 | VC 2500 | VC 3500 | VC 3500 | VC 3500 |
|---|---|---|---|---|---|---|
| Maximum Pull (kg/lb) | **1136** / 2500 | **1136**/2500 | **1136**/2500 | **1590**/ 3500 | **1590**/3500 | **1590**/3500 |
| Continuous Pull (kg/lb) | **700** / 1540 | | **900** / 1980 | **825** / 1815 | | **1350** / 2970 |
| Rec Min Speed (m/pmin - f/pmin) | **16**/53 | **16**/53 | **16**/53 | **16**/53 | **16**/53 | **16**/53 |
| Max Recovery High Speed (m/pmin - f/pmin) | | | | | | |
| **Power Supply** | **12 24V DC** | **50/60HZ** | **HYDRAULIC** | **12 24V DC** | **50/60HZ** | **HYDRAULIC** |
| Input Power (KW) | 1.2 | 2.2 | | 1.5 | 2.2 | |
| Hydraulic Flow (l/pmin-USgpm) | | | **17.6**/4.6 | | | **22**/5.8 |
| Maximum Flow (l/pmin-USgpm) | | | **35**/8.9 | | | **43**/11.4 |
| Pressure (bar/PSI) | | | **100**/1450 | | | **175**/2537 |
| Maximum Pressure (bar/PSI) | | | **116**/1658 | | | **200**/2900 |
| **Average Weight (kg/lb)** | **26**/57 | **42**/92 | **24**/52 | **29**/64 | **53**/116 | **27**/59 |

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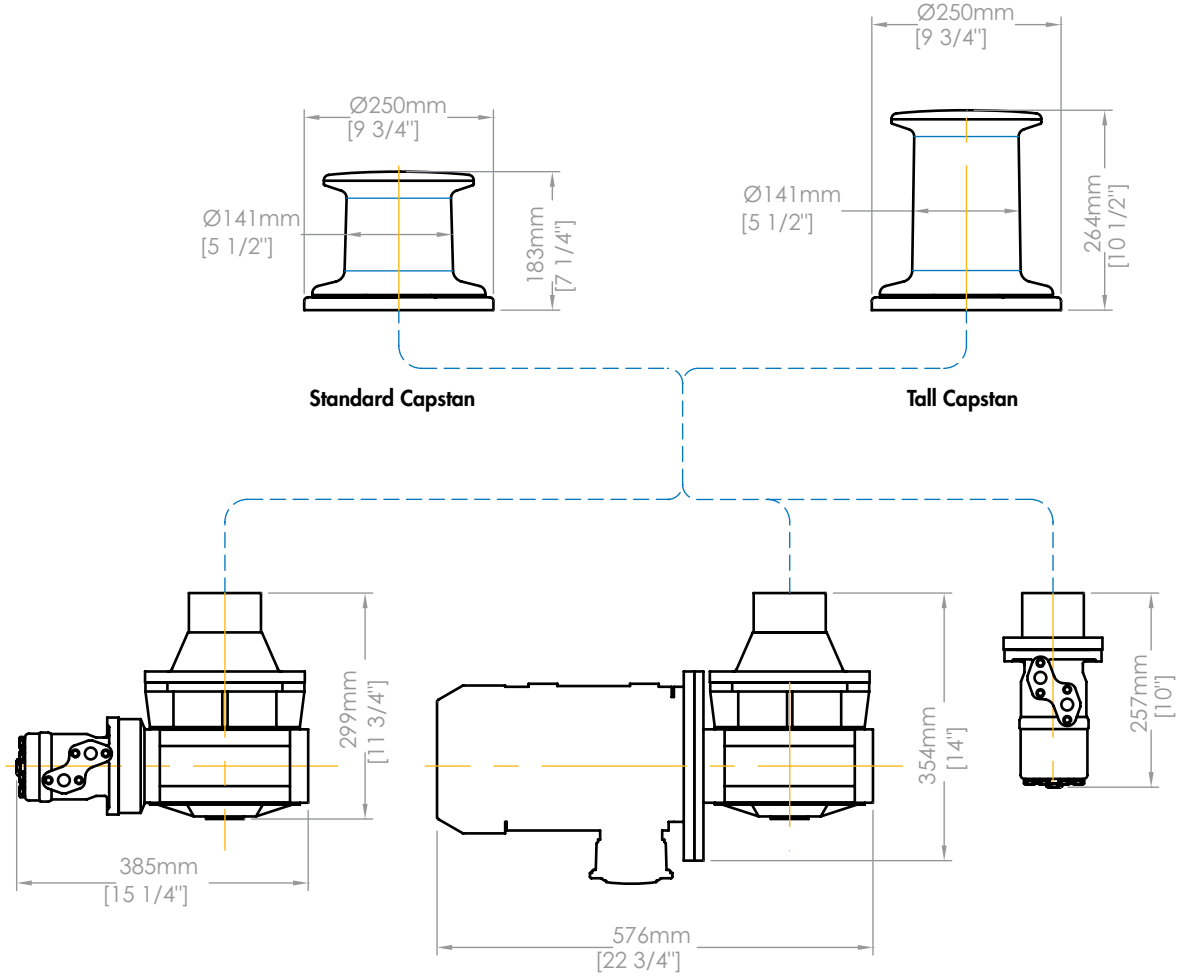
# VC4000




## PERFORMANCE CRITERIA

| MODEL | VC 4000 | VC 4000 | VC 4000 | VC 4000 |
|---|---|---|---|---|
| Maximum Pull (kg/lb) | **1818**/4000 | **1818**/ 4000 | **1818**/4000 | **1818**/4000 |
| Continuous Pull (kg/lb) | **750**/ 1650 | **1000** / 2200 | **1000** / 2200 | **1050** / 2300 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **15** / 50 | **10**/33 | **10**/33 | **10**/33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | | **20** / 66 | **20** / 66 | **20** / 66 |
| **Power Supply** | **24V DC** | **3PH/50HZ** | **3PH/60HZ** | **HYDRAULIC** |
| Input Power (KW) | 2000W | 2.2 | 2.2 | |
| Hydraulic Flow (l/pmin-USgpm) | | | | **22**/5.8 |
| Maximum Flow (l/pmin-USgpm) | | | | **44**/11.6 |
| Pressure (bar/PSI) | | | | **175**/2537 |
| Maximum Pressure (bar/PSI) | | | | **200**/2900 |
| **Average Weight (kg/lb)** | **62**/136 | **85**/187 | **85**/187 | **56**/123 |

High Pressure 240 BAR
3600PSI optional



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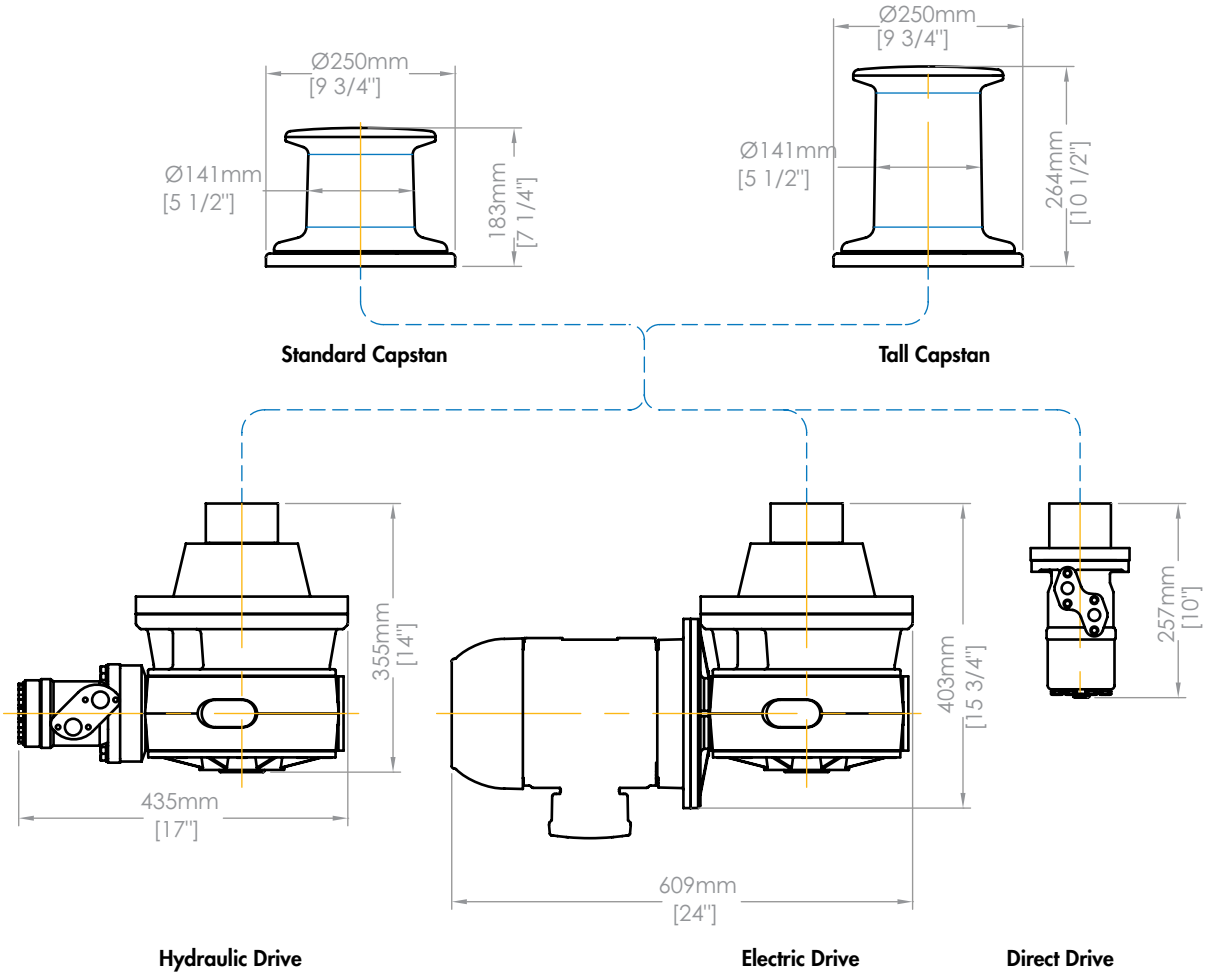
# VC6000




## PERFORMANCE CRITERIA

| MODEL | VC 6000 | VC 6000 | VC 6000 | VC 6000 |
|---|---|---|---|---|
| Maximum Pull (kg/lb) | **2727** / 6000 | **2727**/ 6000 | **2727**/6000 | **2727**/6000 |
| Continuous Pull (kg/lb) | **1500** / 3300 | 1500 / 3300 | 1500 / 3300 | **2138** / 4703 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **15** / 50 | **10**/33 | **10**/33 | **10**/33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | | **20** / 66 | **20** / 66 | **20**/66 |
| **Power Supply** | **24V** | **3PH/50HZ** | **3PH/60HZ** | **HYDRAULIC** |
| Input Power (KW) | 3.5 | 3 | 3 | |
| Hydraulic Flow (l/pmin-USgpm) | | | | **28**/7.4 |
| Maximum Flow (l/pmin-USgpm) | | | | **56**/14.8 |
| Pressure (bar/PSI) | | | | **175**/2537 |
| Maximum Pressure (bar/PSI) | | | | **200**/2900 |
| **Average Weight (kg/lb)** | **90** / 198 | **122**/268 | **122**/268 | **83**/182 |

High Pressure 240 BAR 3600PSI optional

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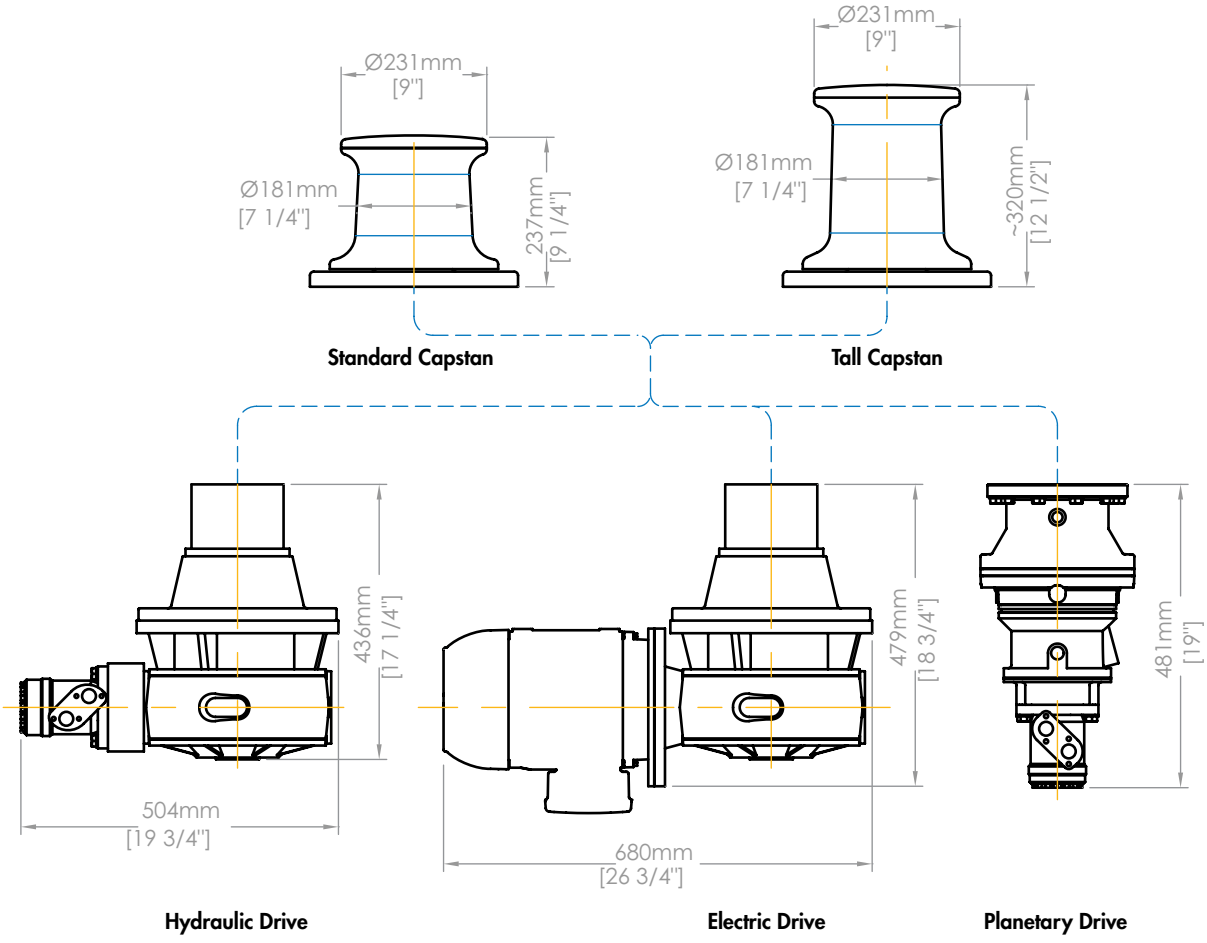
# VC**8000** / VC**11000**




## PERFORMANCE CRITERIA

| MODEL | VC 8000 | VC 8000 | VC 11000 | VC 11000 |
|---|---|---|---|---|
| Maximum Pull (kg/lb) | **3636** / 8000 | **3636** / 8000 | **5000** / 11000 | **5000** / 11000 |
| Continuous Pull (kg/lb) | **2200** / 4840 | **3000** / 6600 | **2600** / 5720 | **4140** / 9108 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10** / 33 | **10** / 33 | **10** / 33 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20** / 66 | **20** / 66 | **20** / 66 | **20** / 66 |
| **Power Supply** | **3PH / 50HZ** | **HYDRAULIC** | **3PH / 50HZ** | **HYDRAULIC** |
| Input Power (KW) | 4 | | | |
| Hydraulic Flow (l/pmin-USgpm) | | **28** / 7.4 | | **30** / 7.9 |
| Maximum Flow (l/pmin-USgpm) | | **56** / 14.8 | | **60** / 15.8 |
| Pressure (bar/PSI) | | **175** / 2537 | | **175** / 2537 |
| Maximum Pressure (bar/PSI) | | **200** / 2900 | | **200** / 2900 |
| **Average Weight (kg/lb)** | **169** / 372 | **103** / 226 | **193** / 424 | |

High Pressure 240 BAR
3600PSI optional



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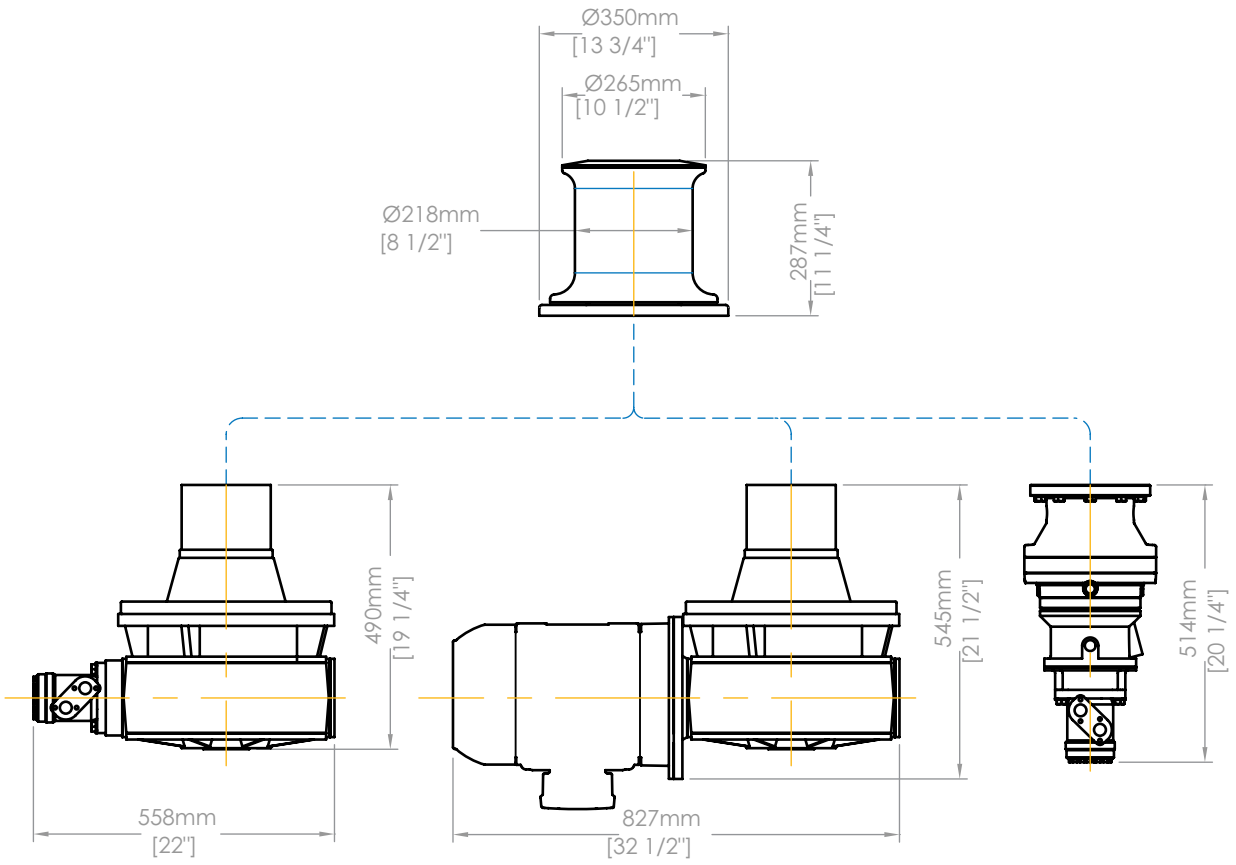
# VC13000




**Hydraulic Drive** **Electric Drive** **Planetary Drive**

## PERFORMANCE CRITERIA

| MODEL | VC 13000 | VC 13000 | VC 13000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **5910**/13000 | **5910**/13000 | **5910**/13000 |
| Continuous Pull (kg/lb) | **3180** / 6966 | | **3900** / 8580 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10**/33 | **10**/33 | **10**/33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20**/66 | **20**/66 | **20**/66 |
| **Power Supply** | **3PH/50HZ** | **3PH/60HZ** | **HYDRAULIC** |
| Input Power (KW) | 7.5 | 7.5 | |
| Hydraulic Flow (l/pmin-USgpm) | | | **30**/7.9 |
| Maximum Flow (l/pmin-USgpm) | | | **60**/15.8 |
| Pressure (bar/PSI) | | | **210**/3045 |
| Maximum Pressure (bar/PSI) | | | **250**/3625 |
| **Average Weight (kg/lb)** | **235**/517 | **235**/517 | **185**/407 |

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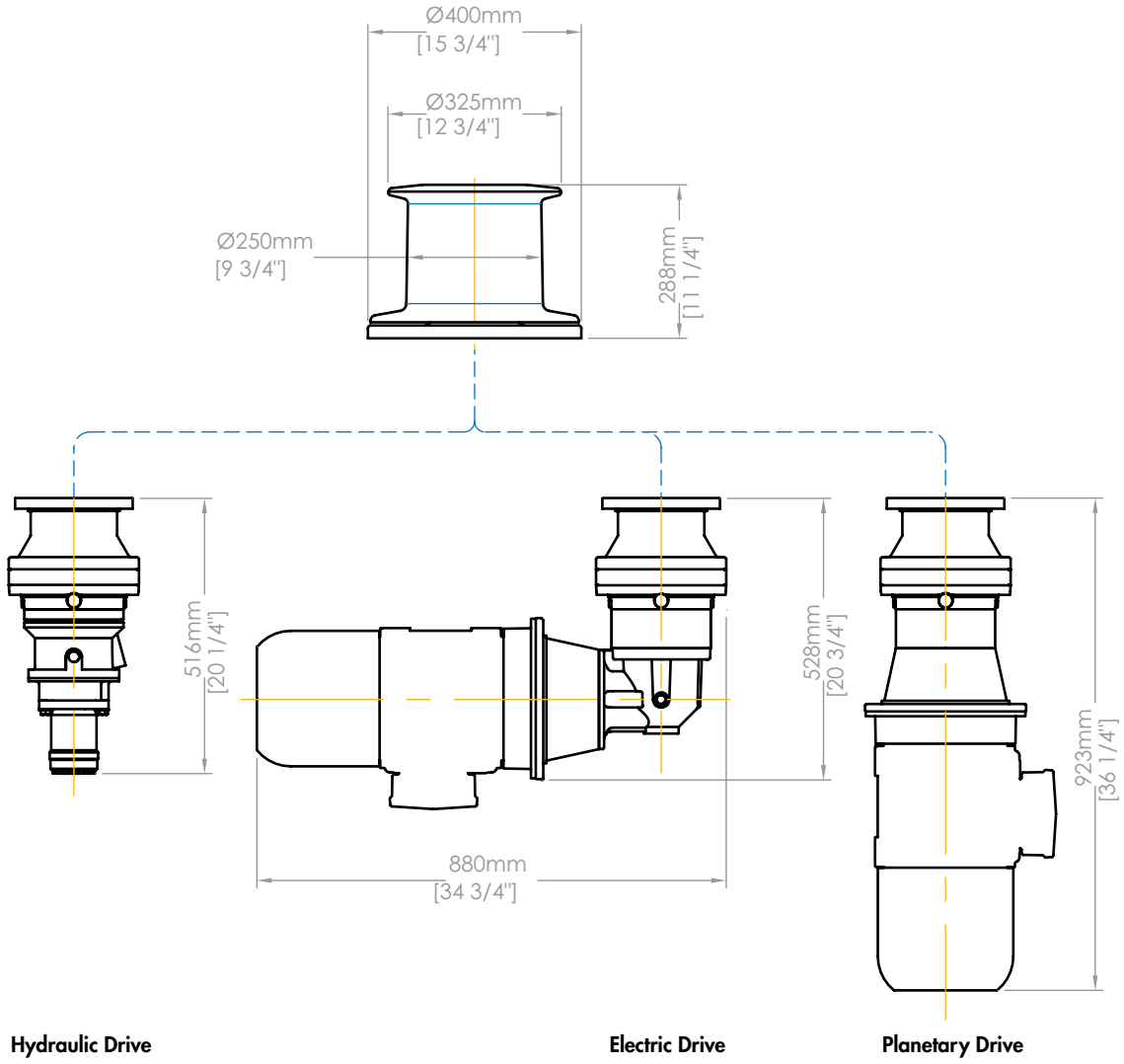
# VC18000




**Hydraulic Drive** **Electric Drive** **Planetary Drive**

## PERFORMANCE CRITERIA

| MODEL | VC 18000 | VC 18000 | VC 18000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **8181**/18000 | **8181**/18000 | **8181**/18000 |
| Continuous Pull (kg/lb) | **5000** / 11000 | **5000** / 11000 | **5700** / 12540 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **12**/40 | **15**/50 | **10**/33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | | | **20**/66 |
| **Power Supply** | **3PH/50HZ** | **3PH/60HZ** | **HYDRAULIC** |
| Input Power (KW) | 9.2 / 11 | 9.2 / 11 | |
| Hydraulic Flow (l/pmin-USgpm) | | | **36** / 9.5 |
| Maximum Flow (l/pmin-USgpm) | | | **72** / 19 |
| Pressure (bar/PSI) | | | **210** / 3045 |
| Maximum Pressure (bar/PSI) | | | **250** / 3625 |
| **Average Weight (kg/lb)** | **338**/744 | **338**/744 | **276**/607 |



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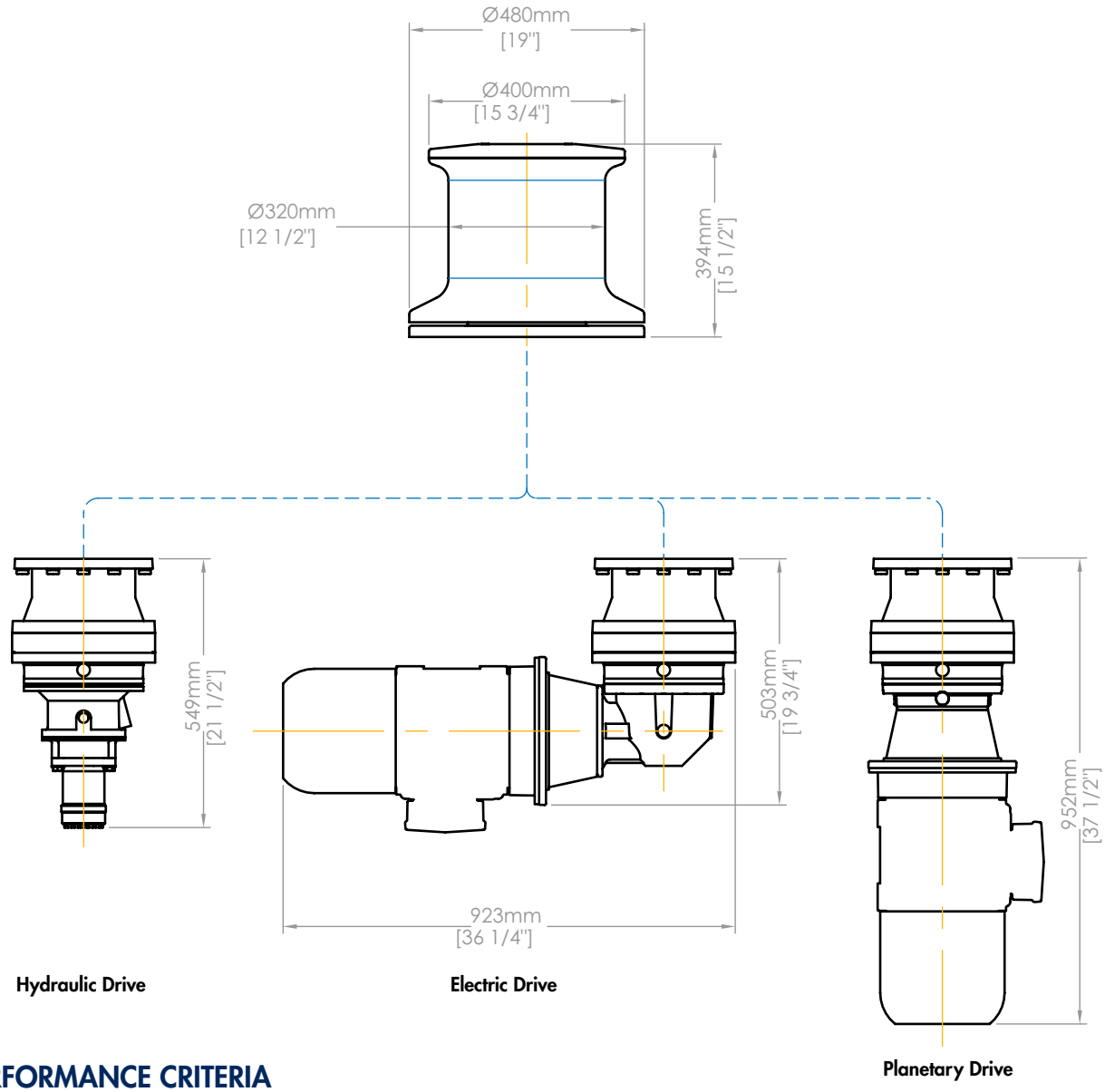
# VC20000




**Hydraulic Drive**

**Electric Drive**

**Planetary Drive**

## PERFORMANCE CRITERIA

| MODEL | VC 20000 | VC 20000 | VC 20000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **9090**/20000 | **9090**/20000 | **9090**/20000 |
| Continuous Pull (kg/lb) | **5200** / 11440 | | **6100** / 13420 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10** / 33 | **10** / 33 | **10** / 33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20**/66 | **20**/66 | **20**/66 |
| **Power Supply** | **3PH/50HZ** | **3PH/60HZ** | **HYDRAULIC** |
| Input Power (KW) | 9.2 / 11 | 9.2 / 11 | |
| Hydraulic Flow (l/pmin-USgpm) | | | **40**/10.6 |
| Maximum Flow (l/pmin-USgpm) | | | **80**/21.2 |
| Pressure (bar/PSI) | | | **210**/3045 |
| Maximum Pressure (bar/PSI) | | | **250**/3625 |
| **Average Weight (kg/lb)** | **468**/1030 | **468**/1030 | **408** / 897 |

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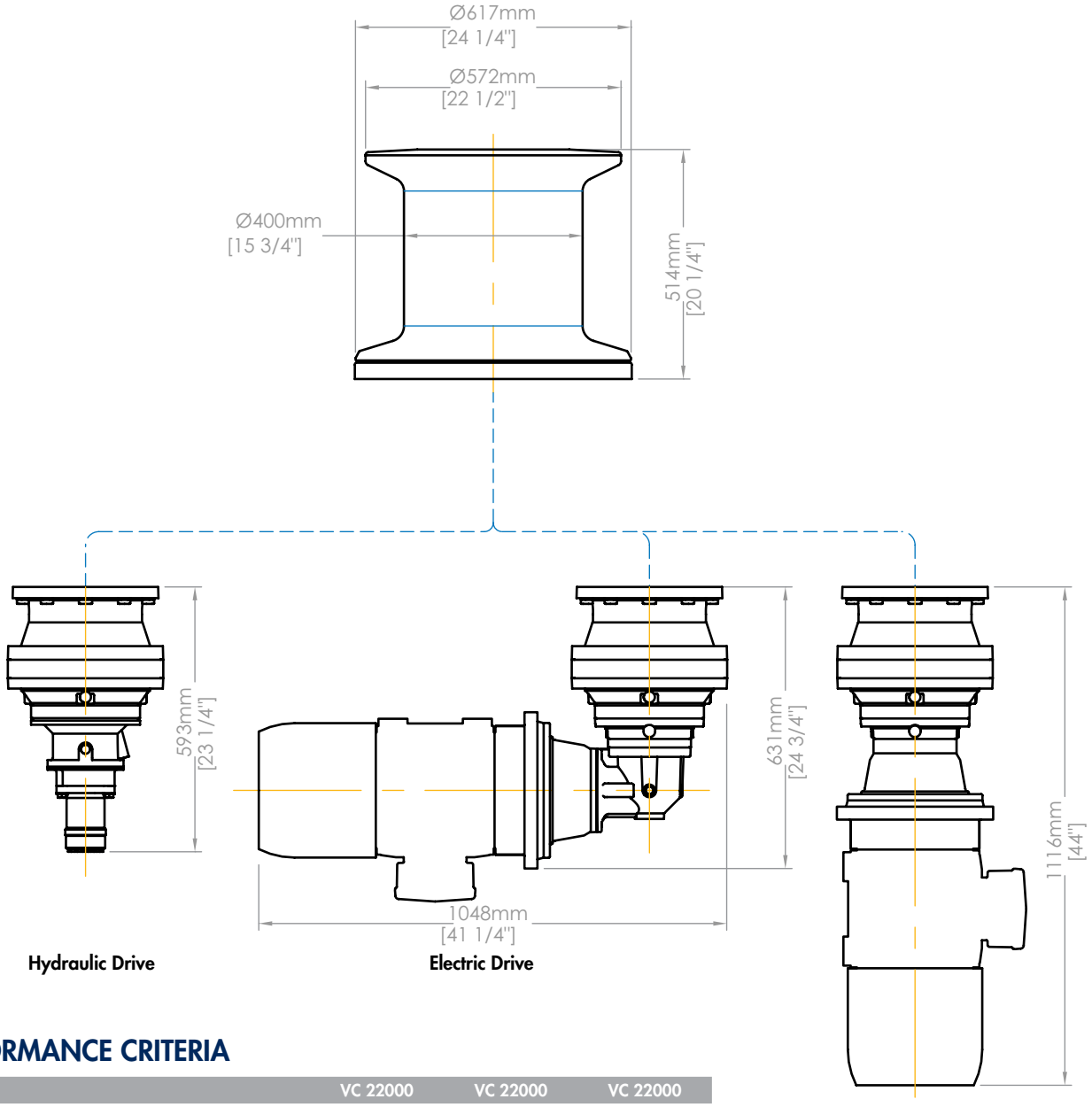
# VC22000




**Hydraulic Drive** **Electric Drive** **Planetary Drive**

## PERFORMANCE CRITERIA

| MODEL | VC 22000 | VC 22000 | VC 22000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **10000**/22000 | **10000**/22000 | **10000**/22000 |
| Continuous Pull (kg/lb) | **6060** / 13332 | | **7200** / 15840 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10**/33 | **10**/33 | **10**/33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20**/66 | **20**/66 | **20**/66 |
| **Power Supply** | **3PH/50HZ** | **3PH/60HZ** | **HYDRAULIC** |
| Input Power (KW) | 11 / 15 | 11 / 15 | |
| Hydraulic Flow (l/pmin-USgpm) | | | **48**/12.7 |
| Maximum Flow (l/pmin-USgpm) | | | **96**/25.4 |
| Pressure (bar/PSI) | | | **210**/3045 |
| Maximum Pressure (bar/PSI) | | | **250**/3625 |
| **Average Weight (kg/lb)** | **770**/1694 | **770**/1694 | **645**/1419 |



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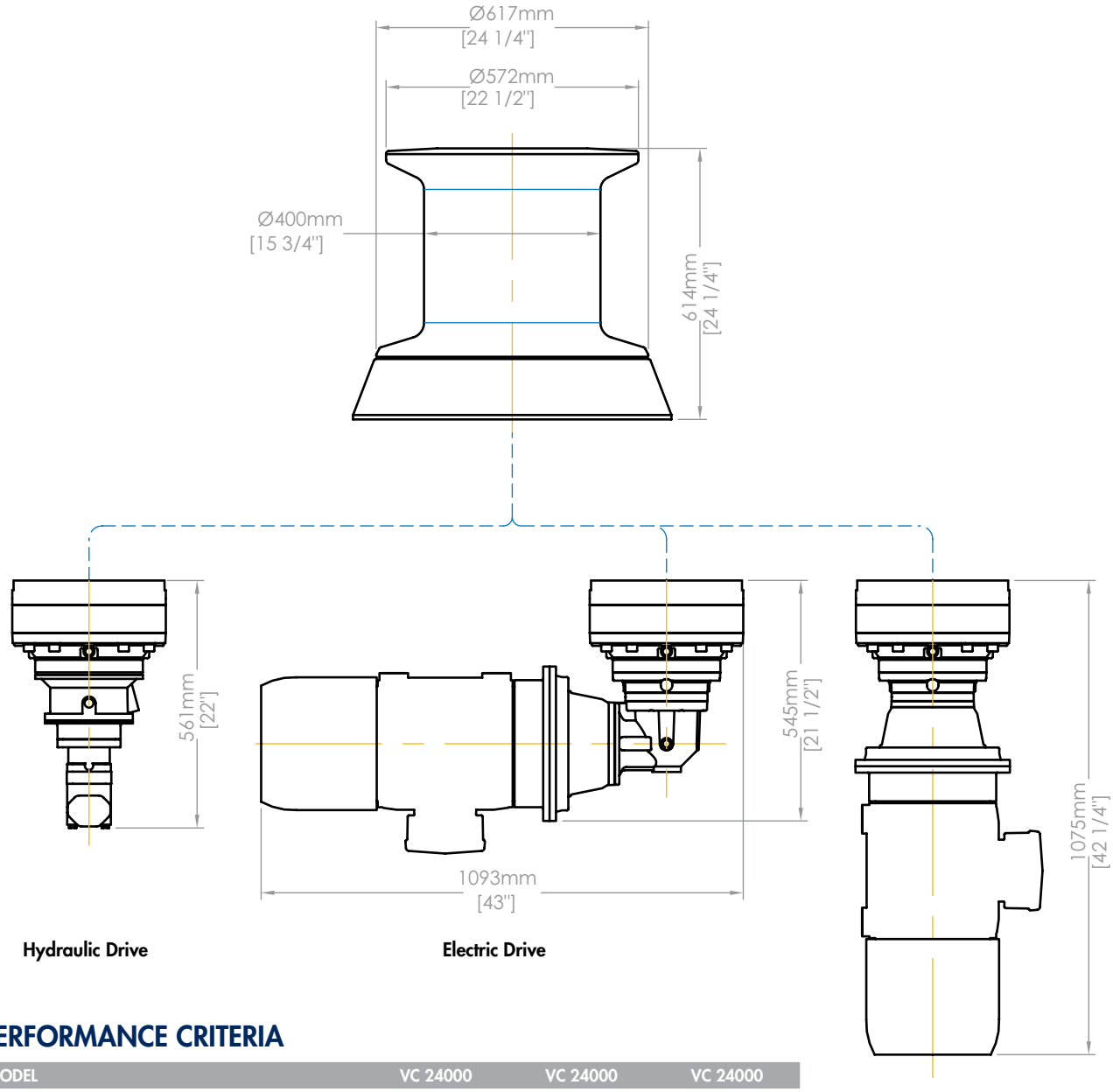
# VC24000 NEW




**Hydraulic Drive** **Electric Drive** **Planetary Drive**

## PERFORMANCE CRITERIA

| MODEL | VC 24000 | VC 24000 | VC 24000 |
|---|---|---|---|
| Maximum Pull (kg/lb) | **11000**/24000 | **11000**/24000 | **11000**/24000 |
| Continuous Pull (kg/lb) | **7000** / 15400 | | **8400** / 18480 |
| Recommended Minimum Speed (m/pmin - f/pmin) | **10**/33 | **10**/33 | **10**/33 |
| Maximum Recovery High Speed (m/pmin - f/pmin) | **20**/66 | **20**/66 | **20**/66 |
| **Power Supply** | **3PH/50HZ** | **3PH/60HZ** | **HYDRAULIC** |
| Input Power (KW) | 15 / 18.5 | 15 / 18.5 | |
| Hydraulic Flow (l/pmin-USgpm) | | | **48**/12.7 |
| Maximum Flow (l/pmin-USgpm) | | | **96**/25.4 |
| Pressure (bar/PSI) | | | **210**/3045 |
| Maximum Pressure (bar/PSI) | | | **250**/3625 |
| **Average Weight (kg/lb)** | **955** / 2101 | **955** / 2101 | **940** / 2068 |

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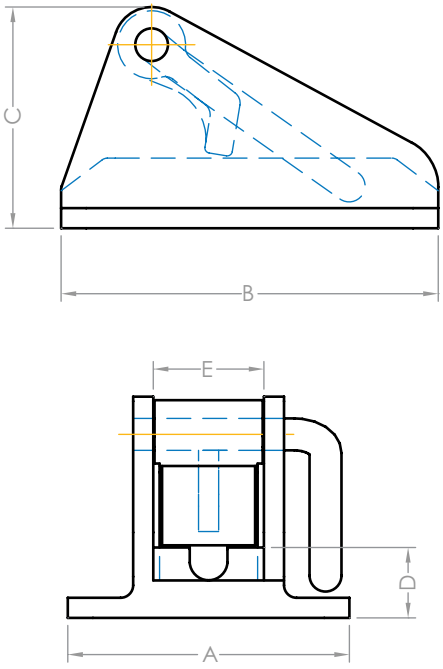
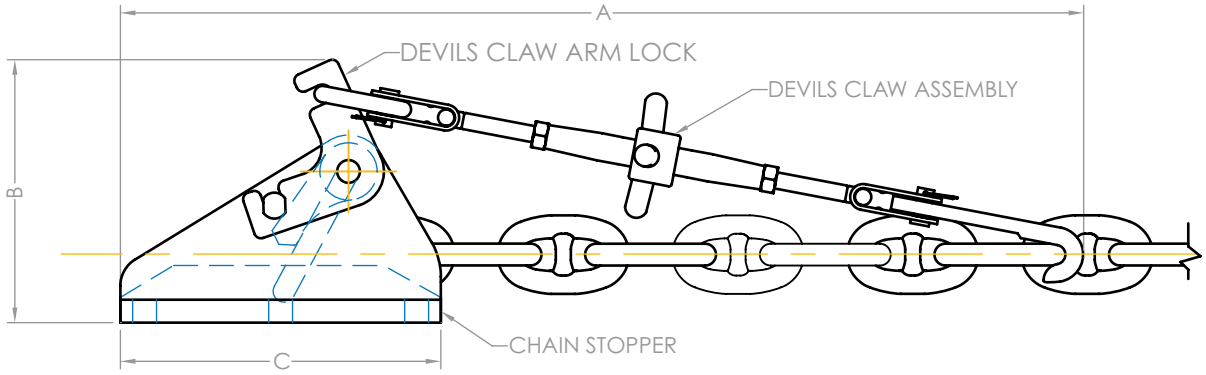
## CHAIN STOPPERS

| CHAIN SIZE SHORT LINK | A | B | C | D | E |
|---|---|---|---|---|---|
| 10mm | 112 | 150 | 88 | 28 | 44 |
| 13mm | 130 | 185 | 111 | 33, 32 | 54 |
| 16mm | 197 | 235 | 138 | 43 | 69.5 |
| | 198 | 238 | 143 | 41 | 70 |
| | 192 | 235 | 136 | 42 | 70 |
| | 198 | 238 | 136 | 42 | 70 |
| **CHAIN SIZE STUD LINK** | **A** | **B** | **C** | **D** | **E** |
| 16mm | 209 | 235 | 138 | 43 | 82 |
| | 193 | 236 | 143 | 42 | 82 |
| | 209 | 238 | 143 | 42 | 82 |
| 17.5mm, 19mm | 230 | 285 | 207 | 50 | 94 |
| | 230 | 285 | 202 | 50 | 94 |
| 20.5mm, 22mm, 24mm | 270 | 300 | 205 | 65 | 116 |
| 20.5mm, 22mm | 270 | 300 | 205 | 54 | 116 |
| 24mm, 26mm | 280 | 280 | 255 | 71 | 110 |
| 28mm | 310 | 375 | 256 | 55 | 134 |
| 34mm | 350 | 385 | 275 | 50 | 160 |
| 38mm | 388 | 460 | 350 | 76 | 180 |




Chain stoppers are strongly recommended for safe anchoring to protect and remove load from the windlass when at anchor, and to prevent accidental free fall of the anchor while under way. The hinged pawl allows the chain to be pulled up automatically, and is easily disengaged to deploy the anchor. To suit all chain types up to 38mm (11/2") with optional finishes in chromed bronze, traditional polished bronze, highly polished or bead blasted 316 stainless steel.

## CHAIN STOPPER DEVIL CLAW




| CHAIN | A | B |
|---|---|---|
| 10mm | 472 | 126 |
| 13mm | 524 | 1632 |
| 14mm, 16mm | 688 | 199 |
| 17.5mm-19mm | 841 | 248 |
| 21.5mm, 24mm | 857 | 280 |

Following the same principal of the conventional chain stoppers we combine a separate devil claw, this unique arrangement offers additional safety. The devil claw hooks onto the chain and provides tension on the chain while the anchor is stowed ensuring additional hold while underway. The devil claw can be easily removed or simply secured off to the side. The combined set provided increased safety. Available to suit chain up to 19mm (3/4"), and finished in either chromed bronze, traditional polished bronze, highly polished or bead blasted 316L stainless steel.



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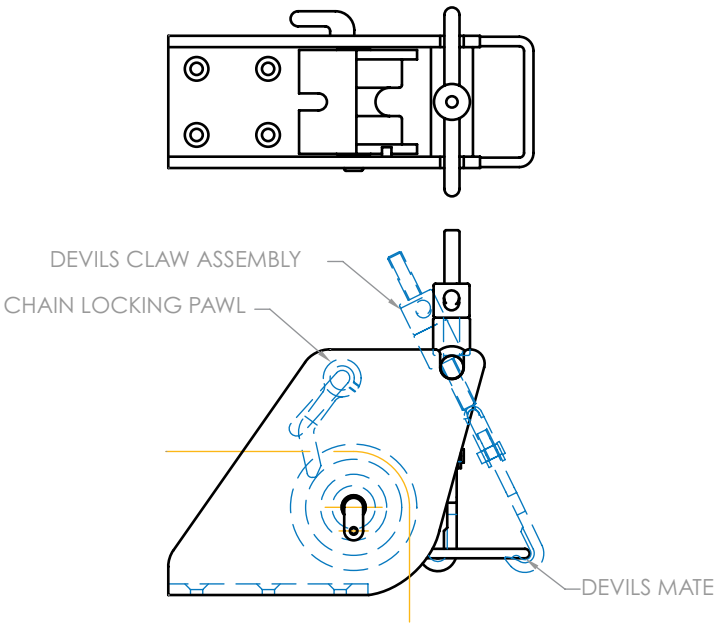
## HIGH PROFILE CHAIN STOPPER DEVIL CLAW ROLLER

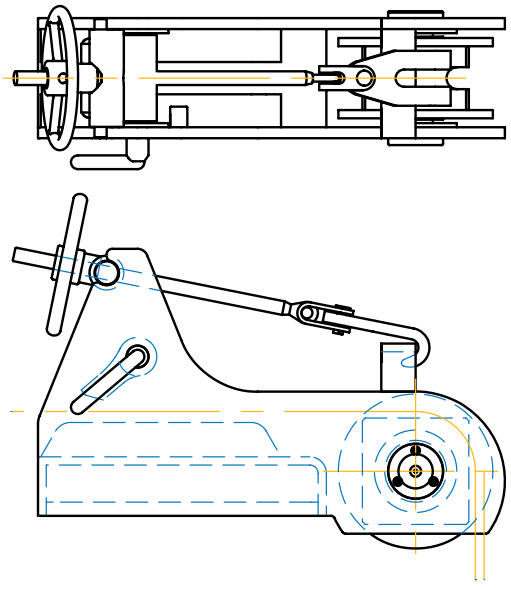



Ideally suited when space is limited, these compact units remove load from the windlass, secure the stowed anchor and facilitate the chain transition. Finished in highly polished or bead blaseted 316L stainless steel. The devil claw is used to pull "home" the stowed anchor to prevent movement when travelling.

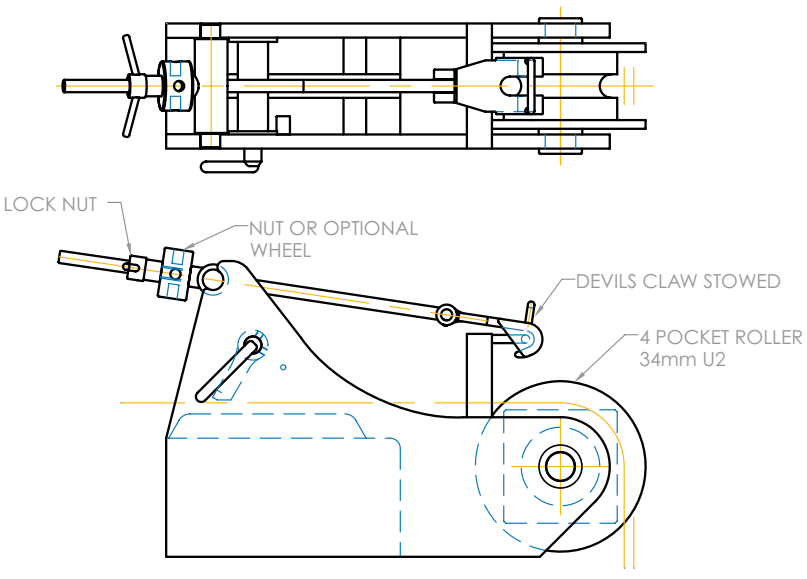
## LOW PROFILE CHAIN STOPPER DEVILS CLAW ROLLER

These heavy duty units provide excellent protection for the windlass against stress and strain, with the added benefit of an integrated roller for smooth retrieval and deployment of the anchor rode. These models are available to accommodate chain up to 40mm, and is available in highly polished or bead blasted 316L stainless steel with four pocket bronze chain roller. The devil claw is used to pull "home" the stowed anchor to prevent movement when travelling.

### UP TO 26MM



### UP TO 40MM

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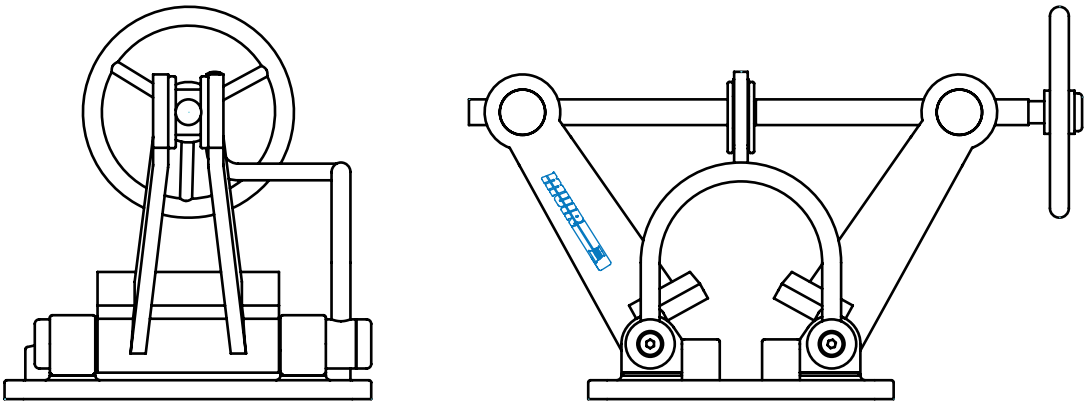
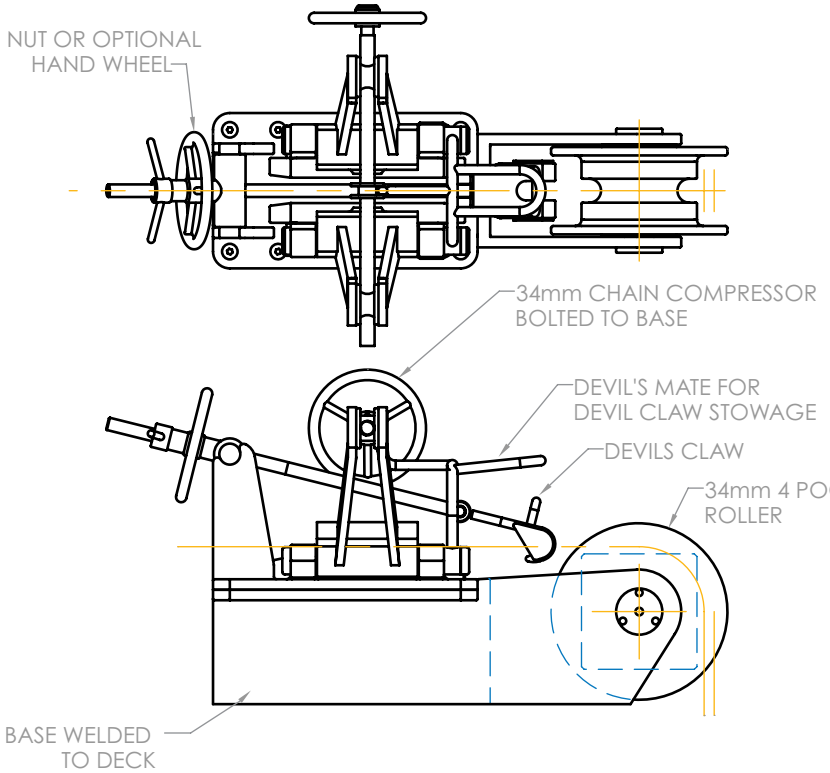
## CHAIN COMPRESSOR



## CHAIN COMPRESSOR DEVIL CLAW ROLLER WITH BASE




Suited to larger yachts and chain sizes, chain compressors protect the windlass from unnecessary load and strain providing added security while the anchor is stowed. Tensioning of the hand wheel tightens the arms clamping the chain securely. The hand wheel ensures safe release of the chain for deployment. Finished in choice of chromed bronze, traditional polished bronze, highly polished or bead blasted 316L stainless steel.

These units will suit chain up to 40mm U2.

Variations in this range include Chain Compressor Devil Claw Roller Arrangement and Integral Chain Compressor Devil Claw Roller Arrangement (rasied base optional).



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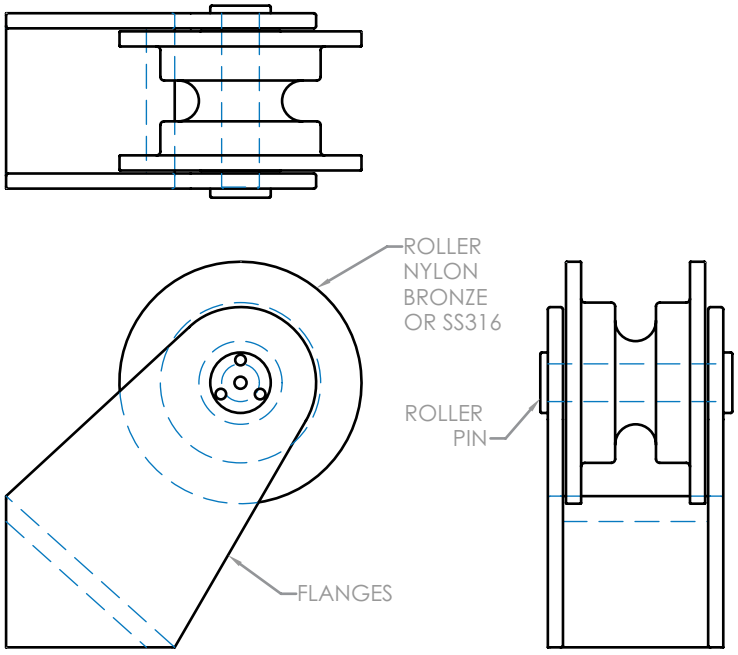
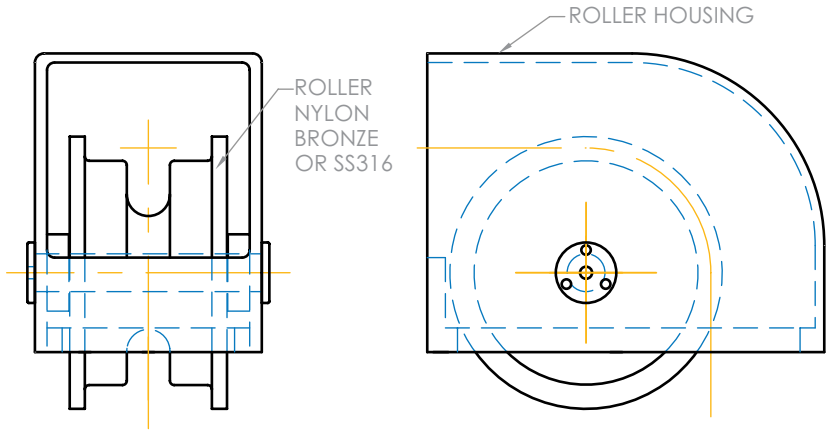
## ROLLER WITH FLANGES




Muir can supply a range of roller and flange solutions for both bow rollers and chain return rollers. Rollers are available in bronze, bronze chrome, stainless steel or nylon. Flanges available in stainless steel, steel or aluminium.

## CURVED CHAIN PIPE ROLLER




Chain Pipe Rollers facilitate smooth chain transition between the winch equipment and anchor locker spurling pipe. Available for all chain sizes, are finished in highly polished stainless steel. Rollers are available in bronze or nylon.

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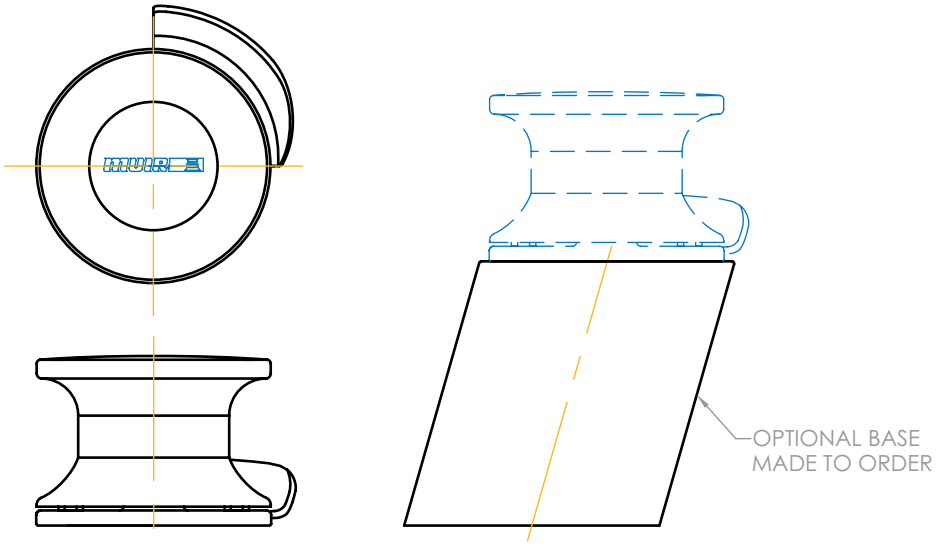
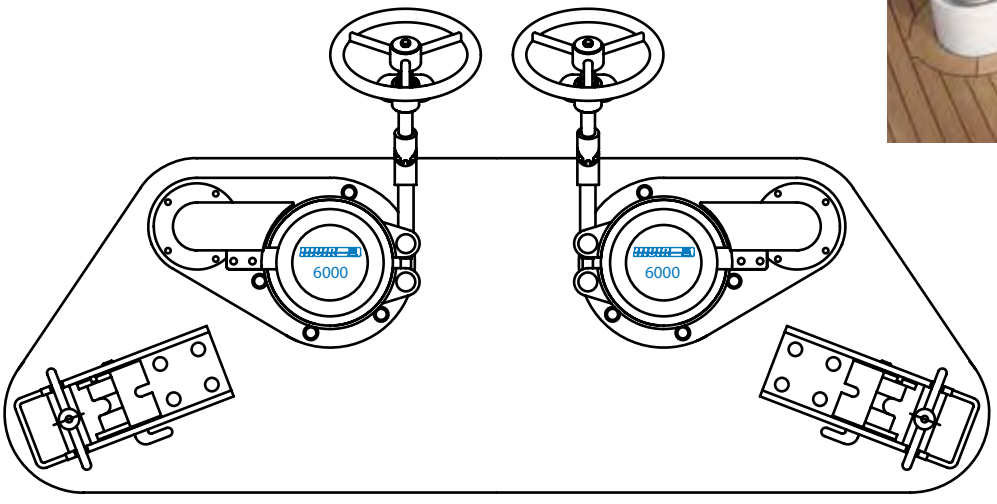
## TURNING BLOCK FAIRLEAD




Muir free wheeling turning blocks aid and assist in the prevention of chafing and rubbing of mooring lines, and for rapid or severe alignment to capstans or windlasses. Equipped with double row sealed bearings, the robust construction ensures they are capable of withstanding the breaking strain of the line. Available in chrome bronze, traditional polished bronze or highly polished stainless steel, these units are custom built to suit particular requirements of the anchoring system components specified, and can be supplied as a pocket roller for anchor chain. Various sizes available.

## FOUNDATION PLATES/TRAYS

Customised aluminium or stainless steel foundation plates designed to suit individual installation in single, twin and mirror image configurations. Design can incorporate any system combinations such as windlasses, chain compressors, chain stopper, devil claws, devil arches and rollers. Available in various finishes.



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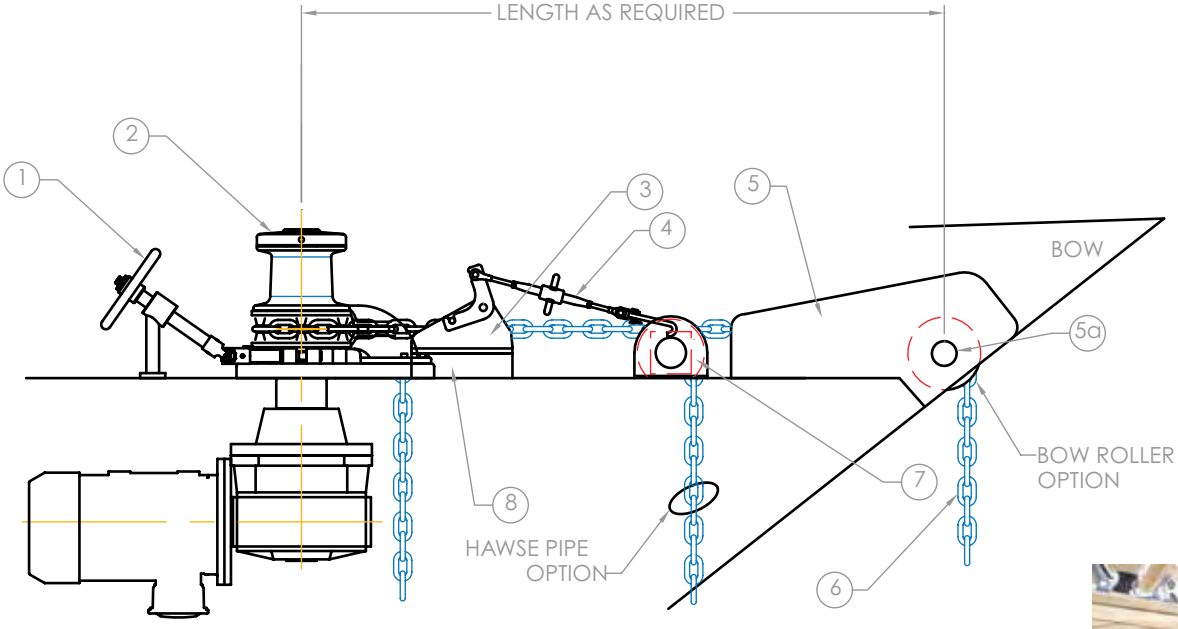
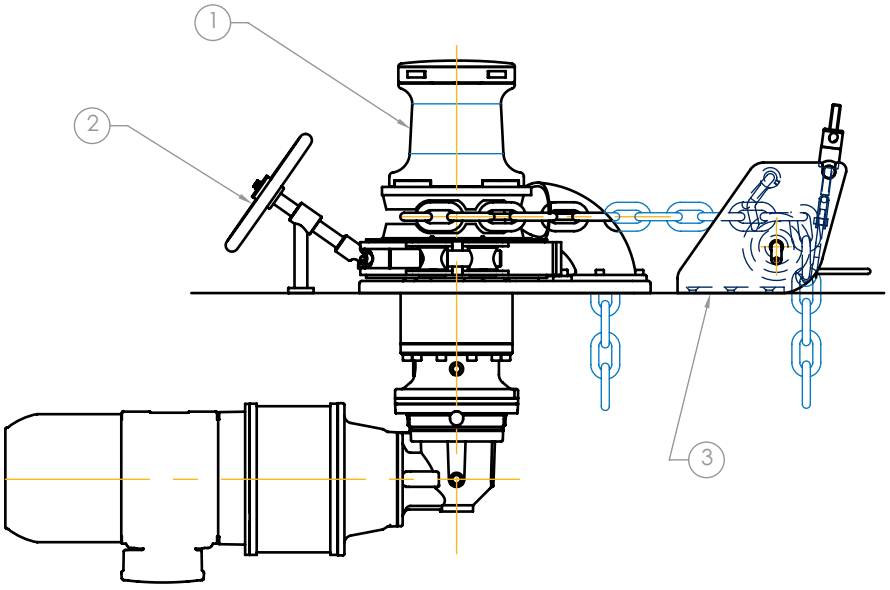
## ANCHORING SYSTEM ARRANGEMENTS – EXAMPLE A




1 OPTIONAL 45 DEG BRAKE HANDLE
2 VRC4500 WINDLASS
3 CHAIN STOPPER - BRONZE
4 DEVILS CLAW KIT WITH ARM LOCK
5 CHANNEL ASSEMBLY - STAINLESS STEEL
5A CHAIN ROLLER – STAINLESS STEEL
6 CHAIN AND ANCHOR SYSTEMS
7 CHAIN ROLLER
8 CHAIN STOPPER SPACER – STAINLESS STEEL

## ANCHORING SYSTEM ARRANGEMENTS – EXAMPLE B




1 VRC8000/11000 WINDLASS SHOWN
2 45° BRAKE ASSEMBLY
3 HIGH PROFILE ROLLERLOCK / DEVILS CLAW ASSEMBLY

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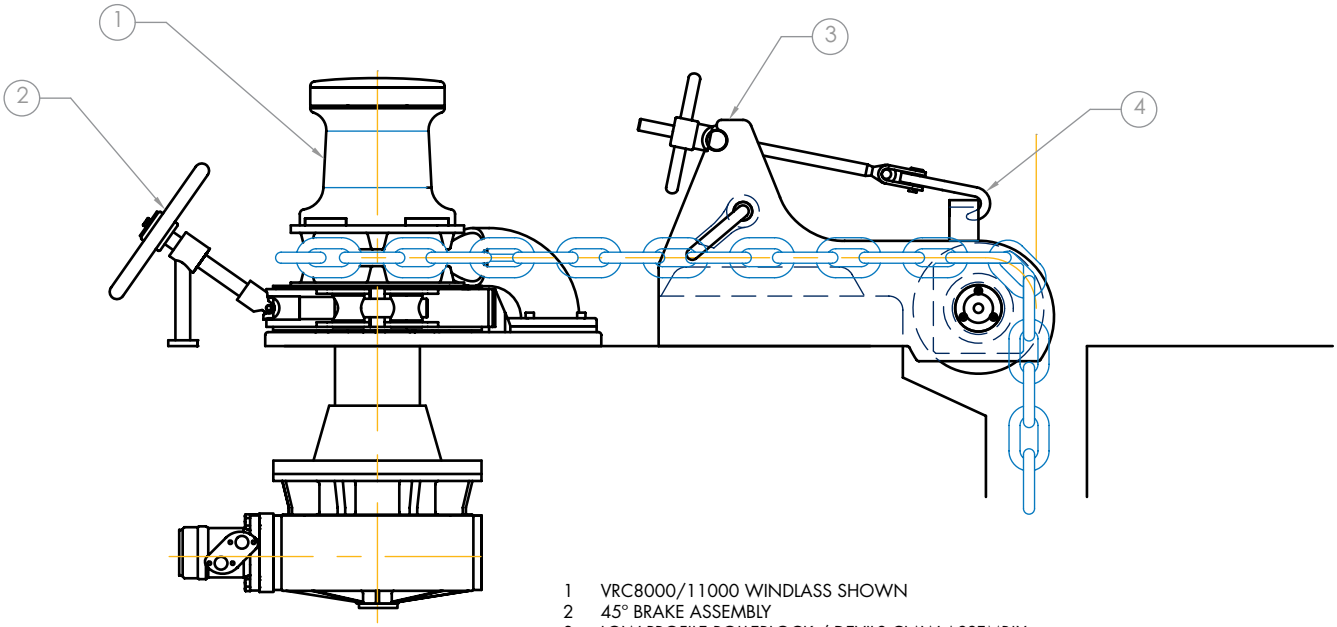
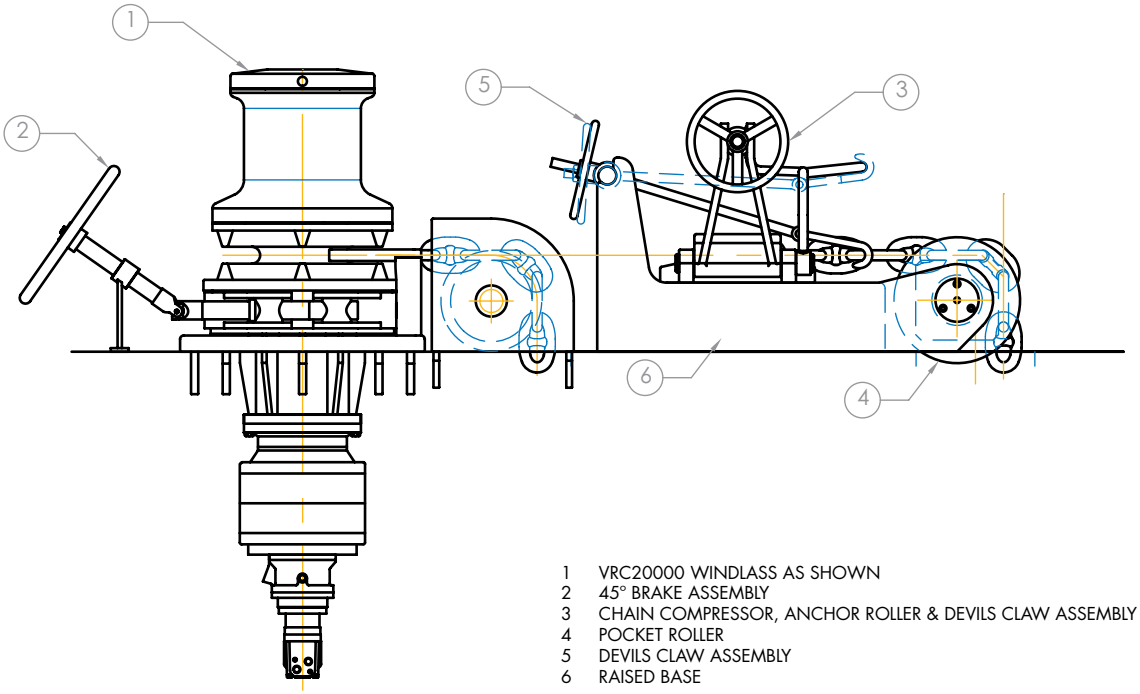
## ANCHORING SYSTEM ARRANGEMENTS – EXAMPLE C




1 VRC8000/11000 WINDLASS SHOWN
2 45° BRAKE ASSEMBLY
3 LOW PROFILE ROLLERLOCK / DEVILS CLAW ASSEMBLY
4 DEVILS ARCH ASSEMBLY

## ANCHORING SYSTEM ARRANGEMENTS – EXAMPLE D




1 VRC20000 WINDLASS AS SHOWN
2 45° BRAKE ASSEMBLY
3 CHAIN COMPRESSOR, ANCHOR ROLLER & DEVILS CLAW ASSEMBLY
4 POCKET ROLLER
5 DEVILS CLAW ASSEMBLY
6 RAISED BASE



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**PORTABLE HAND PENDANT CONTROL UNIT**

Weatherproofed solid-state modules give you complete control of your winch/windlass operations from anywhere on your boat enabling the operator to visually check the anchor under retrieval. Simply plug into the socket fitted on the foredeck, at the helm or cockpit. Available for all windlass and capstan models. Radio control units are available providing total freedom for operation.

**CHAIN PIPE (CP)**

Facilitate the feeding of the anchor rode through into the locker. Available in 316L stainless steel, chrome bronze or polished bronze finish, to suit all models and chain up to 40mm u2 (1 5/8").

**MASTER CONTROL HYDRAULIC POWER UNITS**

Comprising pump, motor, valve block (with pressure relief valve and pressure gauge), and oil reservoir. Various capacities available. Full technical specifications are available on request.

**CHAIN PIPE ROLLERS (CPR)**

Facilitate smooth transition of anchor rode from the chain gypsy to stowage below deck and provide accurate chain placement. Available in polished 316L stainless steel, rollers bronze or nylon, to suit all windlass models and chain up to 40mm (1 5/8").

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**CONTROL CABINETS**

Configured to suit all windlass voltages and applications in single, two or variable speed and for control of single or multiple windlasses and capstans. Finished in stainless steel or various coloured coatings, these units can be supplied to comply with classification requirements.

**ANCHORS**

Various configurations and sizes for all vessels available including the popular HHP and SHHP in galvanized and stainless steel finishes.

**FOOTSWITCHES**

Heavy duty up down switches fitted standard with poly flip top or optional stainless steel or bronze covers with hardwearing U.V. stabalised neoprene boot. Suitable for 12 and 24 volt applications, nickel plated copper contacts provide corrosion free operation. Various colours, finishes and low amp models available.

**MUIR CHAIN**

A wide range and grades of galvanized, black, high tensile, studlink and shortlink chain available. Tested to comply with mechanical properties and ISO standards. Studlink chain can be supplied with test certificates to comply with all classification society requirements.



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# AUTOANCHOR WINDLASS CONTROLS AND CHAIN COUNTERS


**AA560 PANEL MOUNT CHAIN COUNTER AND WINDLASS CONTROL**

Features:

- Graphic LCD featuring intuitive user interface
- Adjustable back lit display in feet, metres or fathoms
- Preset stopping point on retrieval
- One touch function to deploy and retrieve a preset length of rode
- Displays windlass speed and direction
- Safety lock helps protect against accidental windlass deployment
- Logs windlass operation hours to help ensure regular windlass maintenance
- Weather cover and choice of black or grey console
- Operates in parallel with all AutoAnchor products, toggle switches, foot switches or other control equipment

**AA710 WIRELESS HAND HELD REMOTE CONTROL WITH CHAIN COUNTER**


**AA710 WIRELESS HAND HELD REMOTE CONTROL WITH CHAIN COUNTER**

All the features of the AA560 plus options to control thrusters and other deck equipment

- Kit includes 1 remote console and 1 base station.
- Each base station has 6 outputs - up to 3 base stations and consoles can be combined in one system.
- Console displays rode count plus signal strength and battery level
- Control 2 windlasses from a single remote console
- Operate a dual speed windlass
- Shockproof
- 2.4Ghz ISM band
- Meets IP67 waterproof standard
- IEEE802.15.4 compliant
- Console holder and protective cover
- High level wireless transmission security with unique ID
- Ergonomic shape with lanyard connector
- Rubber over moulding for grip and non slip protection
- Antenna available if wireless communication is impeded


**AA730 CABLE REMOTE CONTROL WITH COUNTER**

**AA730 (same features as AA710) but also features**

Rugged cable and connectors with:

- Moulded plug and socket rated to IP67
- 2m flying-lead from socket for better connectivity
- Gold plated contacts on plug and socket to reduce corrosion
- Socket sealing cap


**AA601 CHAIN COUNTER FOR GLASS BRIDGE MONITORING**

The latest in electronic windlass monitoring from the helm. This black box chain counter is designed to integrate with an on board computer or electronic monitoring system. It displays the count in feet, metres or fathoms. Has a docking alarm and logs windlass operating hours for maintenance. All software protocols are supplied.


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# GLOSSARY OF TERMS

**AMPS Workload** – determined as up to the maximum amps.

**Anchor Rode** – the line that secures the anchor to the vessel, consisting of either rope, chain or a combination of rope and chain.

**Bollard** – an upright round post with projecting arm, for belaying and snubbing dock or anchor lines.

**Bridle** – chain stopper/compressor, devils claw. Located between the winch and bow roller. Secures chain and takes load off the winch/windlass.

**Capstan** – drum, rope drum. The capstan is used for hauling rope.

**Chain Locker** – the storage compartment in which the chain occupies.

**Chain Pipe/Chain Pipe Roller** – chain pipe that anchor rode feeds through into locker.

**Chain Stopper** – located between the winch and the bow roller (or hawse pipe), it secures the chain and anchor and takes the load off the winches.

**Continuous Pull –** is nominally 50% of the maximum pull.

**Displacement** – the amount of water displaced by a floating vessel, usually measured in tonnes.

**Draft (Draught)** – is the vertical distance between the waterline and the bottom of the hull (keel), with the thickness of the hull included.

**Fixed drive** – direct couple from transmission to gypsy/capstan.

**Free Fall** – release of clutch manually releases the chain to freefall.

**Gypsy –** chain wheel (Wild Cat) is the sprocket around which the chain is wrapped on the windlass.

**Hauling** – weighing, lifting. The operation of lifting anchor, rope or chain.

**Horizontal windlass/winch** – drive shaft, capstan and gypsy are located horizontally to the deck.

**Inline drive** – powerful and efficient integrated gearbox and motor.

**Maximum Pull –** is the peak intermittent pull.

**Max Line Speed** – maximum speed the anchor rode could be retrieved at.

**Rode** – an anchor line. Refers to chain, rope or rope/chain lines.

**Snub** – to check the movement of a line by taking a turn around a snubbing capstan, a cleat or post.

**Spurling Pipe** – mounted below deck it is the means to guide the chain into the anchor locker.

**VFD (Variable Frequency Drive)** – an electronic device used to control the AC motors by varying the alternating frequency of the voltage supplied to the motor from a constant source.

**Vertical windlass/winch** – drive shaft, capstan and gypsy are located vertically to the deck.

**Weigh** – to weight anchor (to lift - anchor).

**Windlass –** a vertical or horizontal mechanical apparatus manually, electrically or hydraulically operated for pulling or hoisting anchor and cable (chain or synthetic rope), incorporating a circular chain wheel or gypsy normally with a minimum of five pockets into which anchor chain links fit snugly.

**Workload** – typical lift. Usually up to 25% of the Maximum load.



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