



PORTX[®] WINCH

› Assembly & Operation Guide

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Lightweight. Portable. **Safe.**

Please read the following instructions and guidance notes carefully, before using or operating the system.

They contain important information about how to handle and use the system in a safe and efficient way, avoiding danger, reducing repair costs and downtime, and increasing the reliability and lifespan of the system.

It is the responsibility of the end user to adhere to the Health & Safety and accident prevention standards and legislation valid in their respective countries, states and any regions in which the system is being used. It is also incumbent on the user or competent person to ensure that anyone working with the equipment has the necessary medical and physical capabilities. A rescue plan also needs to be in place in the event of an emergency that could occur during the work. This document should form part of the overriding Risk Assessment and Method Statement required for each lift.

➤ Safety Instructions

Safety Regulations

The PortX winch can be used for rescue purposes as part of a rescue system.

The PortX winch can be used for work positioning, as a Personal Fall Protection System (as defined by ANSI Z359 Series) provided the user is connected to and the system includes a secondary system such as a self retracting lifeline to prevent or arrest a fall.

The PortX Winch can be used to raise and/or lower a person (access and/or egress) to a place of work provided the user is connected to and the system includes a secondary system to prevent or arrest a fall in both permit and non-permit confined space.

The PortX winch can be used to raise or lower goods.

WARNING: The PortX winch must only be used for one of the above functions at one time. It cannot be used for the above functions simultaneously

The PortX Winch is not suitable for:

- As a fall arrest device
- Motorized drive
- Explosive Atmospheres

Technical alterations and/or the attachment of additional devices to the PortX Winch is only allowed with the manufacturer's written consent. Servicing, mounting, possible repairs and the maintenance of the PortX Winch are permitted only by specialized persons who:

- Have been appointed and authorized
- Have been trained
- Are familiar with the correct regulations
- Always use original parts for repairs

PortX Winch

The PortX Winch is a hand-driven wire rope winch, fitted with a bracket for mounting to a Reid Lifting Product/structure. The PortX Winch is for lifting personnel with a rating up to 310lb, with supplementary goods lifting capability of 660lb.

The PortX Winch is equipped with a load pressure brake which holds the load at any required height and ensures that it undergoes controlled lowering.

WARNING: The load pressure brake must not be greased or oiled. This destroys the brake function!

- The stipulated hoisting capacity calculated on the first wire rope layer, stated on the type identity sticker must not be exceeded.
- The PortX Winch must at least be mounted with the required mounting materials from the technical detail tables on page 11.
- The PortX Winch must be inspected/tested by a REID certified service provider at least once every 12 months
- Never touch moving parts during use.

Pre-use inspection:

- Ensure the brake functions as intended and holds a load correctly
- Check that the wire rope is in good condition, free from damage or breakages and all parts are present
- Ensure all fixings are present and correctly tightened

Load

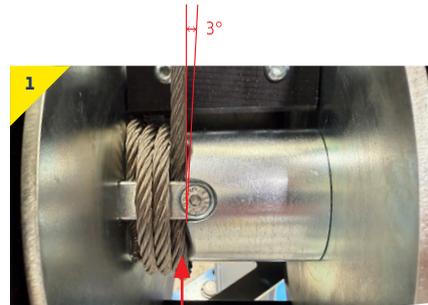
Pay attention to the following with respect to the load:

- > Never leave the load unattended whilst elevated.
- > Do not allow the load to swing.
- > Never allow the load to fall suddenly from the wire rope.
- > Ensure that the hoisting height remains in clear view
- > Do not stand under a suspended load
- > The load should always be centered when raising and lowering

Wire rope and Hoisting Material(s)

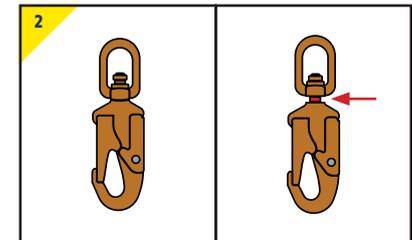
Pay attention to the following with respect to the wire rope and hoisting material(s):

- > The wire rope and connector must be regularly checked for any damage or defects
- > Connectors must be mounted to the wire rope with a thimble and a ferrule
- > The sideways leverage angle of the wire rope, must not exceed 3 degrees (see Fig. 1)



⚠ Min. 4 safety windings

- > There must be a minimum of 4 safety windings on the first layer of the drum when loaded
- > The top of the last wire rope layer must have at least one and a half wire rope diameter clearance between the outer edge of the drum flange
- > The wire rope must be pre-stressed when being wrapped around the drum (approx. 110lb)
- > Never reach into the wire rope assembly
- > Only hold the wire rope when wearing safety gloves
- > Adhere to the correct wire rope capacity
- > When the swivel snap hook fall indicator shows, do not try to reset it. A red band will be visible as shown in the diagram. Contact the authorized company or manufacturer for service (Figure 2).



➤ Safety Instructions

Technical Details

The code designation is as follows:

Stainless Steel Wire rope

➤ PTXW-20

Spurgear winch with hoisting load of 660lb.

Function Description

The PortX Winch is a drum winch with a spur gear transmission. The load is held at each required height by a built-in load pressure brake. The housing is made of plate steel and is suitable for mounting on walls, masts and the like. The handle is adjustable in length and detachable. This version is equipped with wire rope drum free spooling.

Mounting Instructions

The PortX Winch must be mounted with the bolts as set out in the table on page 11.

To avoid tension build up in the PortX Winch housing there must be a smooth surface at the mounting bolt position.

Additional Notes for Correct Operation

- The structure must be of a suitable grade and strength for the anchor method
- The level of the mounted PortX Winch must be checked with a spirit level in order to ensure good wire rope movement.

Refer to PortX Winch bracket Assembly & Operation Guide.

Wire Rope Mounting

For PortX Winch with a hoisting load of 660lb the wire rope must run-off upwards from the right side of the drum.

Warning: The brake will not function if wire rope is incorrectly fitted

The wire rope length must be of sufficient length to allow for 4 windings to remain on the drum when in the lowest position.

The fixing of the wire rope for the PortX Winch is done directly on the drum by means of a double lock. See page 7 for full wire rope mounting instructions.

Correct Operation

The PortX Winch is suitable for manual operation only. For the load to be hoisted, turn the handle clockwise. For the load to be lowered, turn the handle anticlockwise.

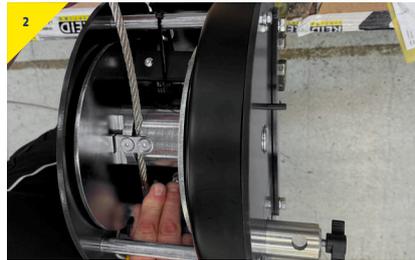
To enable the load pressure brake to function correctly, the PortX Winch must carry a minimum load of 155lb.

The PortX Winch is equipped with a Free Spool (FS) option for the wire rope drum. Follow the instructions on page 8 to engage and disengage the wire rope drum.

Wire Rope Mounting Instructions



- › Locate the wire rope clamp on the drum and securely disengage the tensioner using a clamping device.



- › Feed the non-hook end of the wire rope assembly through the inner clamp location as shown.



- › Ensuring the winch drum remains static, wrap the wire rope tightly **4 times** around the drum.



Ensure the wire rope does not pull too far through to ensure the wire rope can wrap over the end without causing damage.

- › Feed the end of the wire rope into the outer clamp location.



- › Secure the wire rope end by tightening the outer securing bolt.



- › Ensure the wire rope is pulled tightly around the drum and tighten the inner bolt to secure the wire rope as shown.

> Safety Instructions

Free Spool Operation

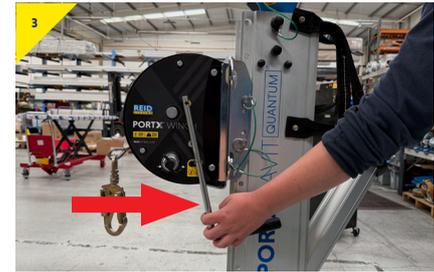
To be able to operate the Free spool clutch handle there must be **no load** on the drum.



- > Ensure the winch is secured to the lifting equipment.



- > Insert the handle as shown into the free spool mechanism and anchor point.



- > Pull the handle as shown to activate the freespool mechanism



Note: The mechanism will only be active as long as the lever is held in the active position

- > Retain the activation position and pull out as much cable as required.

WARNING: Do not activate the free spool system with a load attached.

Maintenance

The PortX Winch must be unloaded for inspection and maintenance tasks. Inspection and maintenance tasks must be performed by a REID certified service provider.

Inspection/ Maintenance interval	Tasks
Before each use	Visually check wire rope and connector
	Check bracket and fixings are all present and correctly tightened
	Check the brake function
	Check the tightness of the mounting bolts
	Check the type identity sticker for clarity
Every 12 months (In addition to the previous sections)	Examination complete with report by a REID certified service provider as safe to use (Legal maximum interval)

Increased frequency of thorough examination may be required dependant on environmental and usage conditions

➤ Safety Instructions

Troubleshooting

Trouble/malfunction	Cause	Solution
The unloaded winch is difficult to operate	No grease on the gearing	Apply grease
	Dirt on the gearing	Clean with a detergent and re-grease
	During mounting the winch has pulled askew	Level the mounting surface and re-mount the winch
The load cannot be held	The wire rope has been incorrectly wound round the drum which means the handle turning direction is incorrect	Wind the wire rope correctly around the drum
	The brake discs are either worn down or faulty	Check and/or renew the brake discs
The load pressure brake does not function	Braking mechanism and/or discs are jammed due to infrequent use	Loosen the brake by hitting the handle in the correct turning direction with the flat of the hand

Service

For servicing and/or servicing parts contact your nearest REID representative.

Use original servicing parts only, correct functioning cannot otherwise be guaranteed!

Environment

At the end of the winch's lifespan, the various winch parts must be disposed of according to the current environmental regulations.

Guarantee

Refer to REID lifting guarantee which can be found online at reidlifting.com

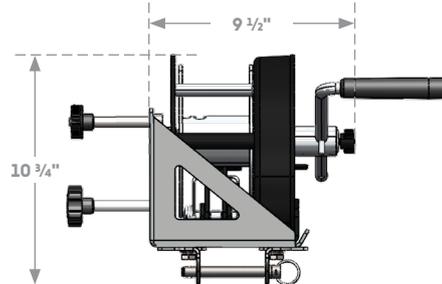
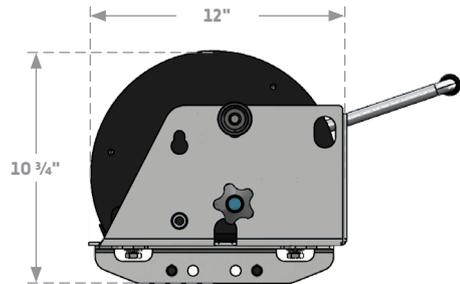
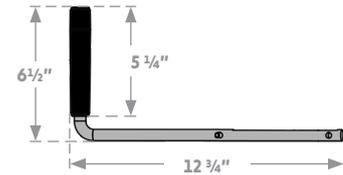
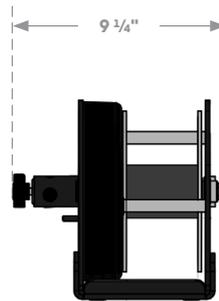
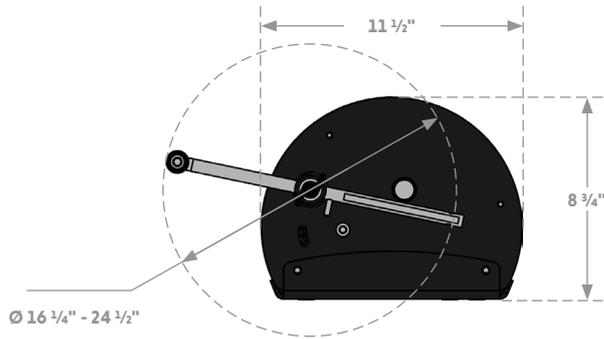
Ø 6mm Stainless Steel Wire Rope				
Wire rope Layer	Wire Rope Capacity per layer	Total Capacity	Personnel Max Load (lb)	Materials Max Load (lb)
1	6' 2 ¾"	6' 2 ¾"	310	660
2	8' 6 ½"	14' 9 ¼"	310	660
3	10' 10"	25' 7"	310	660
4	11' 1 ¾"	36' 9"	310	660
5	13' 5 ½"	50' 2 ¼"	310	660
6	13' 5 ½"	63' 7 ¾"	310	660

Handle force first layer	26.5 lbf
Transmission ratio	1:7
Hoisting height per handle rev.	½"
Unit weight	31lb
Wall fastening, class 8.8 bolts	4 x M10
Permitted environment temperature (°F)	-4/+104
Dimensions	See page 12

Usable Cable Length		
Product	Max	Min
Porta Gantry Rapide	62' 4"	49' 2 ½"
Porta Gantry Small & Medium	60' 8 ¼"	37' 8 ¾"
Porta Gantry Intermediate +	56' 7 ¼"	25' 5"
TDAVIT	60' 8 ¼"	55' 9 ¼"
Porta Davit Quantum (Column)	59' ¾"	57' 5"
Porta Davit Quantum (Rigid Backstay)	60' 8 ¼"	60' 8 ¼"
PortX Davit	60' 8 ¼"	54' 1 ½"

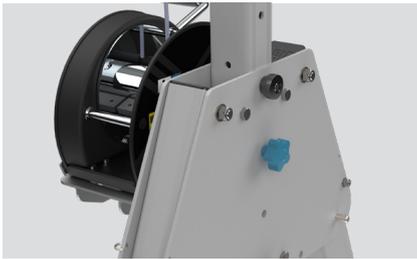
*Refers to the available usable cable length after connecting to the relevant REID product with correct set-up.

➤ Dimensions



> Fittings

The PortX Winch is provided with a standard universal bracket which can be fitted to the range of REID safety products.



On products where the attachment point is the trap plate the winch and bracket will be orientated as shown using bolts.



Part Code **PTXBRK01**



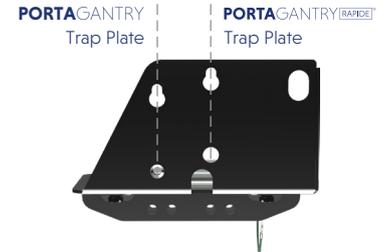
On all vertical columns the bracket is attached as shown using the pins. The width of the wings varies according to which product it is attached to.



- > TDAVIT[®]
- > PORTAGANTRY[®] Winch Column
- > PORTADAVIT[®] QUANTUM[™] Column
- > PORTX[®] DAVIT



- > PORTADAVIT[®] QUANTUM[™] Rigid Backstay



> Product Labelling

Markings

Product name

PortX Winch



Suitable for 140kg/310lb personnel or 300kg/660lb goods

Product Standards

EN 1496:2017 Class A
OSHA 1910.140

European conformity

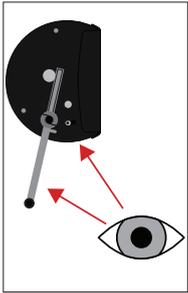
CE



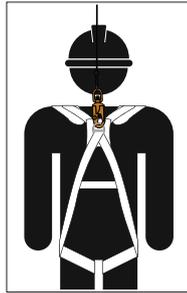
Read instructions before use



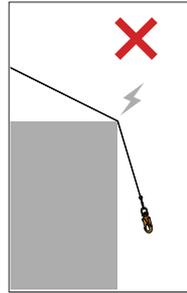
Safety Instructions



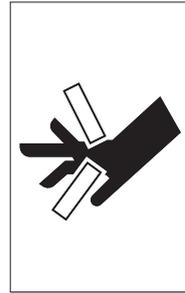
Inspect equipment condition before use



Attach safety harness that complies with ANSI Z359.11



Avoid contact with unprotected sharp edges



Be aware of pinch points on the device



Do not operate the free spool system with either personnel or a load attached.



Use the appropriate PPE during use.

➤ Quality & Safety

Regulations, Standards & Directives

Refer to the local, state, and federal (OSHA) requirements governing occupational safety for additional information regarding Personal Fall Protection.

It is essential to adhere to the safety regulations of the respective country for using manual lifting equipment.

Accreditations

Quality and safety are key themes throughout this document and the REID Lifting ethos. It is with this in mind that we have undertaken external accreditations to ensure we stay focused on what is important to our clients and users, and ahead of market trends and developments.

REID Lifting is continuously audited by Lloyds Register Quality Assurance (LRQA) for approval of its Integrated Management System combining quality systems management, environmental issues and the health and safety practices within the company.

- ISO 9001:2015 - Specifies requirements for a quality management system for any organization that needs to demonstrate its ability to consistently provide products that meet customer and applicable regulatory requirements and aims to enhance customer satisfaction
- ISO 14001:2015 - Specifies the requirements for implementing environmental management systems throughout all areas of the company
- ISO 45001 – Health & Safety Management System

- LEEA Membership - REID Lifting is a full member of the Lifting Equipment Engineers Association (LEEA membership 000897). REID Lifting conforms to the main aims of the association which is to achieve the highest standards of quality and integrity in the operations of members. Entry qualifications are demanding and strictly enforced through technical audits based on the Technical Requirements for Members

Conformité Européenne [CE] & UK Conformity Assessed [UKCA]

Reid Lifting's products have been designed, tested and assessed as required for Conformité Européenne and UK Conformity Assessed marking.

Testing

Testing and technical file review are integral parts of our design and manufacturing process. External verification of products is undertaken where appropriate, using government approved Notified Bodies.

All products have been thoroughly type tested. Each product is supplied with a certificate of conformance and individual record of thorough examination or test.

Language

It is essential for the safety of the user that if this product is re-sold outside of the original country of destination, the reseller shall provide instructions for use, maintenance, inspection and repair in the language of the country where it will be used.

Product IPR

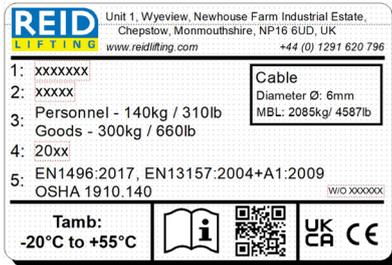
Intellectual property rights apply to all REID Lifting Ltd products. There are patents in place, or pending, for:

PORTAGANTRY | **PORTAGANTRY**^{RAPIDE} |
PORTADAVIT^{QUANTUM} | **TDAVIT**

All product names are trademarks of REID Lifting Ltd:

PORTAGANTRY | **PORTAGANTRY**^{RAPIDE} |
PORTADAVIT | **PORTABASE** | **TDAVIT** |
PORTAQUAD | **PORTX**

➤ Product Identification & Inspection Record



Marking

The serial labels indicate:

- The product identification number
- The product's unique serial number
- The goods' capacity (WLL) of the device
- The year of manufacture
- The standards to which the device is approved
- The ATEX rating of the product (if applicable)
- CE Marking
- Minimum braking load (MBL)

Insert data from serial numbers found on product into table here:

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