WRH - WIRELESS RELEASE HOOKS

ROBORIGGER

The Roborigger WRH wireless release hooks can release loads from a distance without workers needing to work at heights or in difficult environments to release the rigging from the load. We offer 25t, 35t, 55t and 85t WLL versions. The hook has a simple construction inside such that mechanical components can be serviced on site. The hook is opened using an electric actuator.

Key features of the design are:

- The load path from the shackle pin to the hook saddle is directly through the hook itself meaning that the hook is incredibly strong with no connecting parts in the load path.
- The hook is powered by a commercially available 21700 battery cells. This allows the hook to be shipped without Dangerous Goods restrictions if required. Battery installation and replacement can be done by the customer. Replacement cells are low cost and readily available.
- Rugged steel battery case with stainless hinge and latch.
- Hook includes a shackle tilt lever to sense when there is load on the hook. This provides a positive lock to prevent the hook being opened under load. The allowable opening load can be adjusted to suit the weight of rigging to be dropped. Typically this is set to between 50kg and 150kg
- Hook has a wifi web interface for diagnostics and software updates.
- Hook logs onboard the number of opening cycles performed
- Corrosion resistant construction with extensive use of stainless steel.
- Hooks can be supplied in 4 colours which can be opened independently according to colour or all hooks can be opened together.
- Simultaneous 2 button press required to open the hook to prevent against accidental actuation
- Backup mechanical release using auxiliary handle in case of electric or electronic failure
- Unlocked mode allows loading via spring loaded latch. This allows for autonomous connection to a load. Locked mode only allows hook to be opened electrically or by backup mechanical release.
- Wireless remote control has a minimum 100m range. 868MHz EU certified and 918 MHz FCC and Aus RCM certified. (switchable internally by manufacturer)



A shackle or oblong link can be loaded into the hook in three ways:

1) by pressing “unlock” on the remote and pushing the shackle in through the spring-loaded latch or landing the hook on the link or shackle and allowing it to latch.
2) by using the open and close buttons on the hook body
3) by installing the shackle pin in situ with the hook locked.

The shackle or oblong link in the hook can be released by any of the following 3 methods:

1) pressing two buttons on the remote control
2) moving the backup manual release lever to the open position
3) releasing the shackle manually by removing the pin.







SPECIFICATIONS WRH 85:

Module Size : 650w x 375d x 850h

Maximum diam of link/shackle pin in hook: 85mm

Weight: 215kg including top shackle

SPECIFICATIONS WRH 55:

Module Size: 600w x 330d x 700h

Maximum diam of link/shackle pin in hook: 70mm

Weight: 130kg including top shackle

SPECIFICATIONS WRH 35:

Module Size : 550w x 300d x 600h

Maximum diam of link/shackle pin in hook: 60mm

Weight: 85 kg including top shackle

SPECIFICATIONS WRH 25:

Module Size : 460w x 250d x 550h

Maximum diam of link/shackle pin in hook: 50mm

Weight: 70 kg including top shackle

GENERAL

Design Standards:
AS 3776-2015 Lifting Components
AS4991-2004 Lifting Devices
DNVGL-ST-0378 Lifting Appliances
Design Factor of Safety: 5 x WLL
Proof Load: 2xWLL

Battery System: 24V - 8x 21700 LFP or NMC cells. (user installable and replaceable)

Battery Life: approx. 900 releases

Wireless Remote: 868 or 918MHz suitable for use in Australia, Europe and North America

Range: 100m minimum. Up to 300m line of sight

Maintenance: Quarterly inspection as part of rigging equipment. Annual inspection by Roborigger. Load test every 3 years.

Roborigger International Pty Ltd
Perth Australia
Tel: +61 8 9488 4500
www.roborigger.com.au