

# Manual Double Drum Winch

## WATER FLOW

### General Description

HyQuest Solutions' Riverina winch is a **hand-operated double drum winch** capable of handling gauging weights up to 100 kg (220 lb). The design shows two main advantages: Firstly, it enables the operator to **change from sounding mode to traversing mode very quickly** by engaging the drive gears on each drum. Secondly, the double drum concept **eases traversing**, as the forces exerted by the gauging weight are largely cancelled out. The winch can be used on small travellerways up to 125 m (410 ft) span.

The winch is designed for ease of operation and serviceability in the field: **robust, portable, and operated easily and safely by one person.**

Special attention is paid to **safety**: An automatic Weston Brake locks the drum if the handle is released. This holds the load in any position - for **safe and smooth sounding operation.**

HyQuest Solutions' winches are equipped with Amergraph cables. **The special construction combines two purposes:** They permit the suspension in the stream of the current meter and heavy Columbus weights and at the same time they are the medium for carrying the meter signals to a counting device. The winches' counters are protected within the frame and can be ordered to display either **metric or imperial counts.**

### Use with current meter

Some elaborate features support current metering: A silver-plated slip ring conducts the signal from the sounding drum to the current meter counter. The counter can be installed at the winch itself, i.e. close to the winch operator instead of deep in the water at the current meter. The single layer of the signal cable on the drum prevents damage of the internal conductor and premature replacement.

### Applications

The Riverina winch enables current meter observations and sediment samples in streams of moderate widths. It is used for the vertical positioning of suitable hydrometric equipment, amongst others in the areas of hydrometry, hydrology, water quality analysis, sediment sampling, and discharge measurement.

### Features

- Type: double drum winch (single drum version available on request)
- Safety: Weston Brake
- Adjustable manual drum handle
- Portable (allows for use on multiple sites with the reduced risk of vandalism)
- Low-maintenance
- Counters housed within the frames, protected from external damage



## Technical Specifications

<b>Load Capacity</b>	Designed for weights up to 100 kg (220 lb)
<b>Sounding Drum</b>	<ul style="list-style-type: none"><li>■ Cast aluminium, 1000 mm circumference</li><li>■ Silver plated slipping</li><li>■ Sounding counter: mechanical, five digit resettable, registering metric (1 centimeter resolution) or optional: registering imperial (1/10 of a foot resolution)</li><li>■ Capacity:<ul style="list-style-type: none"><li>- 118 m (387 ft) for 3.2 mm (1/8") mergraph cable</li><li>- 152 m (498 ft) for 2.5 mm (1/10") Amergraph cable</li></ul></li></ul>
<b>Traversing Drum</b>	<ul style="list-style-type: none"><li>■ Cast aluminium, 1000 mm circumference</li><li>■ Traverse counter: mechanical, five digit resettable, registering metric (either in centimeters (10 mm resolution) or decimeters (100 mm resolution)) or optional registering imperial (resolutions of either 1 ft or 0.1 ft)</li><li>■ Capacity:<ul style="list-style-type: none"><li>- 93 m (305 ft) for 4.0 mm (5/32") wire rope</li><li>- 118m (387 ft) for 3.2 mm (1/8") wire rope</li><li>- 152 m (498 ft) for 2.5 mm (1/10") wire rope</li></ul></li></ul>
<b>Frame</b>	Robust aluminium, powder coated, stainless steel shaft components, corrosion resist. fasteners
<b>Scope of Delivery</b>	Riverina winch with <ul style="list-style-type: none"><li>■ Traveller block to suit up 32 mm (1 1/4") main cable</li><li>■ Banana style connections to suit most current meter counters</li><li>■ Winch to counter connecting lead</li><li>■ 4 x 10 mm mounting bolts</li><li>■ Not included (optionally available): Operating side post head sheave assembly, far side post head sheave assembly, aluminum carry case</li></ul>
<b>Dimensions and Mass</b>	<ul style="list-style-type: none"><li>■ L x W x H: 735 mm (29") x 800 mm (31.5") x 700 mm (27.6"); weight: 70 kg (154 lb)</li><li>■ Packed: 0.6 m<sup>3</sup>, 100 kg (220 lb)</li></ul>

## Accessories



**Current Meter Counters** (various models): Features: waterproof enclosures, simple button controlled menus, embedded LCDs and beepers to make counts audible. Pre-set

or manually stopped sampling period. Improved accuracy due to signal conditioning. Bluetooth interfaces for use with HydroTab Stream Gauging Computer available.



**Current Meters:** HyQuest Solutions offers various models, e.g. OSSB1 (universal device for open and closed channels), and Red Back (cup-type device with advanced contact switching system that allows the measurement of water flow in streams, open canals, pressure pipes, lakes and seas to a fine degree of accuracy and repeatability.)



**Gauging Weights:** Columbus weights with hanger bar

and nose mounted ground feeler weights with optional carrying case available. The weight positions the current meter correctly in fast flowing water, protects it against heavy debris damage, streamlined shape reduces resistance to flowing water.



**Sediment Samplers:** HyQuest Solutions offers modular equipment (choice of samplers and accessories) for sediment sampling.

Please ask for details.

## Reseller

### Contact Us

#### HyQuest Solutions Australia

☎ +61 2 9601 2022  
✉ sales@hyquestsolutions.com.au  
🌐 www.hyquestsolutions.com

#### HyQuest Solutions Europe

📍 Pascalstr. 8+10 | 52076 Aachen - Germany  
☎ +49 2408 9385 0  
✉ info@hyquestsolutions.eu  
🌐 www.hyquestsolutions.eu

#### HyQuest Solutions New Zealand

☎ +64 (0)7 857 0810  
✉ sales@hyquestsolutions.co.nz  
🌐 www.hyquestsolutions.com

