

# Manual Double Drum Winch

## WATER FLOW

### General Description

HyQuest Solutions' Barossa winch is a **hand-operated double drum winch** capable of handling gauging weights up to 70 kg (154 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 60 m (200 ft) span.

The winch is designed for ease of operation and serviceability in the field 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**.

The unit is equipped with a breakaway kit rated @ 272 kg for the safety of the user during operation. Attention: Failure to use this device may cause severe injury or death.

The winch drum is fitted with an amergraph cable. The special construction of this cable offers these advantages:

- It allows the suspension in the stream of the sensing device (e.g. current meter and large Columbus weight).
- It serves as a medium for transmission of current meter signals to a counting device attached to the winch.

The winches' counters are protected within the frame and can be ordered to display either **metric or imperial units**.

#### 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 connected to terminals provided on the winch itself. The single layer of the amergraph signal cable on the drum prevents damage of the internal conductor and premature replacement.

### Applications

The Barossa winch is used for the deployment of mechanical current meters with gauging weights, sediment samplers and other suitable hydrometric equipment for:

- Water Quality Analysis
- Sediment Sampling
- Stream Discharge Measurement

### Features

- Type: double drum winch (single drum version available on request)
- Safety: Weston brake, breakaway kit (standard)
- Adjustable manual drum handle
- Portable (a sturdy metal carry case is available as an accessory item)
- Low-maintenance
- Counters housed within the frames, protected from external damage



## Technical Specifications

<b>Load Capacity</b>	Designed for weights up to 70 kg (154 lb)
<b>Sounding Drum</b>	<ul style="list-style-type: none"> <li>■ Cast aluminum, 600 mm circumference</li> <li>■ Silver plated slipping</li> <li>■ Sounding counter: five digit resettable, registering in centimetres (metric) or optional 1/10 of a foot (imperial)</li> </ul>
<b>Traversing Drum</b>	<ul style="list-style-type: none"> <li>■ Cast aluminum, 600 mm circumference</li> <li>■ Traverse counter: five digit resettable, registering in decimeters (metric) or optional 1 foot (imperial), detachable</li> </ul>
<b>Sounding Drum Capacity</b>	<ul style="list-style-type: none"> <li>■ 57 m of 3.2 mm (1/8") diameter amergraph cable</li> <li>■ 70 m of 2.5 mm (1/10") diameter amergraph cable</li> </ul>
<b>Frame</b>	Robust aluminum, powder coated, stainless steel shaft components, corrosion resist. fasteners
<b>Scope of Delivery</b>	DDT700 Barossa winch with <ul style="list-style-type: none"> <li>■ Traveller block to suit up 32 mm (1¼") 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, metal carry case</li> </ul>
<b>Dimensions and Mass</b>	■ L x W x H: 600 mm (24") x 560 mm (22") x 470 mm (18.5"); weight: 36 kg (79.4 lb)

## Accessories



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

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



**Mechanical Current Meters:** HyQuest Solutions offers various models, e.g. OSSB1 (universal current meter) and Red Back (cup-type current meter) 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:** Cumbus 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 with its streamlined shape reducing resistance to fast flowing water.



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

Please ask for details.