# Saddleback Monitor

## SBM

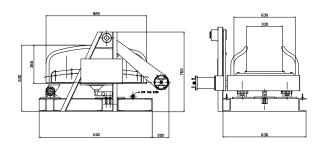
The DLM Saddleback is a line tension monitor suited for more delicate cable, including telecommunication cables or large cable where a Running Line Monitor is unsuitable.

The line tension is measured by the cable passing over the chute and deflecting the Load Cell mounted beneath.

As with the Running Line Monitors, the speed or distance of the cable pay out can be measured by the roller arm incorporated within the Saddleback.



#### **Dimensional Data**



#### **Features:**

- · DLM proprietary design
- Designed exclusively for the rigors of the offshore cable laying industry
- · Roller chute
- · Integral measuring wheel
- · Lifting eyes and securement plates
- · Optional frame and goal posts
- Suitable for use with a wide range of cable diameters

### **Applications:**

- · Offshore Cable Laying
- · PLGI
- Towing operations

### **Specification**

Frame Construction: • Welded steel fabrication

· Integral encoder box located on the side frame

· Sealed needle roller bearings used throughout

Robust design for harsh environments

Large or small capacities available

 Frame Finish:
 Epoxy powder coat 170 μ thickness

 Chute Option:
 Static / Roller

 Load Cell Specification:
 Stainless Steel / IP68 sealed / Shear Beam load cell

 Saddleback Variants:
 Note: all Saddleback dimensions remain the same, the only difference is the Load Cell capacity is fitted to the Saddleback

| Type   | Part number | Load cell | Expected line<br>tension min | Expected line<br>tension max |
|--------|-------------|-----------|------------------------------|------------------------------|
| Size 1 | 0001 - 1106 | 2.5t      | 5t                           | 10t                          |
| Size 2 | 0001 - 1107 | 5t        | 10t                          | 20t                          |
| Size 3 | 0001 - 1108 | 10t       | 20t                          | 40t                          |

All expected line tension ratings are calculated under the assumption that the Saddleback is mounted such that the cable running over the Chute is at 7° (wrap of 166°). Line tensions seen will vary if different mounting arrangements are employed

| Amplifier:   | 3 Wire 4-20mA current source / 11-24VDC powered / Potted for high environmental protection / Mounted in IP66 sealed marshalling box / Signal and power connection through IP67 LMG bulkhead connector shared with encoder output/input |
|--|--|
| Encoder:   | Mounted inside gasket sealed Roller Arm / Push-Pull quadrature output / 11-24VDC Powered / Signal and Power connection through IP67 LMG bulkhead connector shared with amplifier output/input  |
| Saddleback Mounting:   | Welded base frame suitable for welding to ships deck   |
| <b>Display:</b> Optional Master and Slave displays with serial and analogue retransmission |  |

Cradles with goal posts / Wear plates / Fleeting gear

**Optional Extras:**