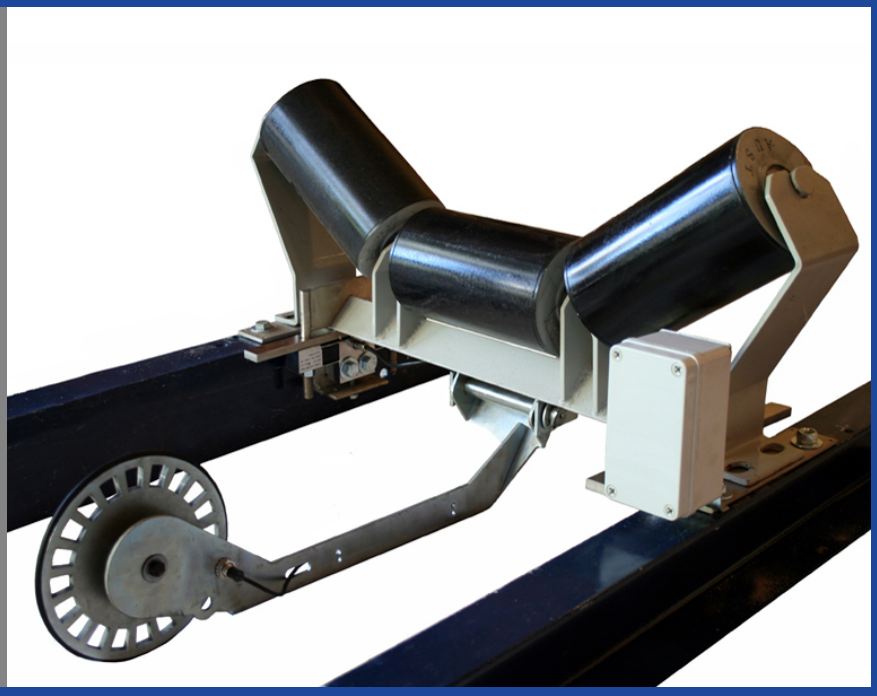
# Single idler belt scale Model MBSX

- **Simple installation**
- **Accurate (±1%) and reliable design**
- **Stainless Steel double ended shear beam load cell**
- **Optional Jockey wheel speed sensor running on return belt**
- **Junction box with spring loaded push in terminals**
- **Zinc plated surface finish with all mounting hardware**



## Application

Belt Weighers are used for the continuous acquisition of flow rates and totalized amounts. Fitted in either new or existing belt conveyors. They can be employed for a variety of tasks:

- Measurement of production rates in plants.
- Accountability of received and shipped amounts.
- Maximum or Minimum load limit alarms.
- Batching, in loading stations.
- Pre-feeder control.

The study design ensures a high degree of reliability and availability.

## Construction

The standard belt weigher comprises:

- Fully floating weighing platforms.
- Two double ended shear beam stainless Steel load cell(s) of IP56 construction.
- IP65 Cable junction box of ABS plastic.
- IP65 Tail drum speed sensor.
- Mounting and adjusting bolts.

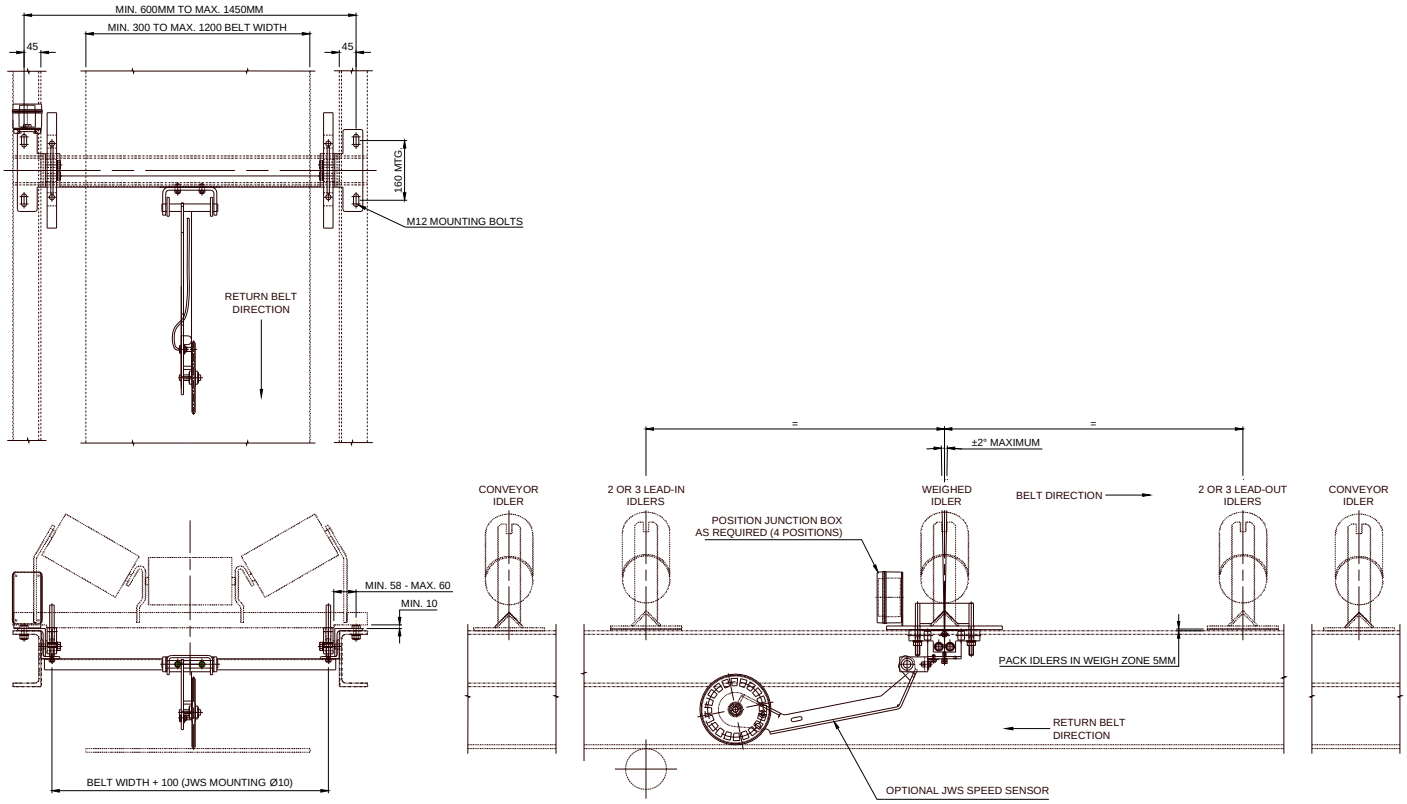
Options include:

- Weigh quality idler sets with screw adjustment (for precise idler alignment, ± 0.2mm).
- IP65 Cable junction box in 316 stainless steel.
- Friction Jockey Wheel running on return belt.

## Operating Principle

The belt weigher comprises load cells that measure the load on the weigh length while a speed transducer acquires the belt speed. The controller calculates both the instantaneous load and the totalized amount. The MBSX features two stainless steel double ended shear beams mounted on each conveyor stringer. The modular design also results in a lighter construction better suited to the working range of the load cells.

## Standard Dimensions




## Application

| | |
|---|---|
| Belt widths | 300 to 1200mm |
| Accuracy | ± 1% (subject to installation) |
| Idler troughing angle | 20 to 35° |
| Belt Speed | 0.1 to 3 meters per second |
| Idler Base Angle Size | 50x50 to 90x90mm angle |

## Models and Configuration

| | Model | Description | Part Number |
|---|---|---|---|
| Belt Scale | MBSX.100 | Belt Scale, 100kg capacity with junction box | NU0016008A |
| | MBSX.200 | Belt Scale, 200kg capacity with junction box | NU0016008B |
| | MBSX.400 | Belt Scale, 400kg capacity with junction box | NU0016008C |
| Controller (see separate datasheet) | GWS-MS | GWS Controller in IP65 Mild Steel control box 24VDC | PS0007901 |
| | GWS-SS | GWS controller in IP65 Stainless Steel control box 24VDC | PS0007902 |
| | 4AN | 4-20mA output for GWS controller | PS00048A1 |
| | PS24 | 110-240VAC to 24VDC cabinet power supply | PS00177A1 |
| Speed Sensor | TDS | Tail drum mounted speed sensor | PS0003802 |
| | JWS | Jockey Wheel speed sensor | PS0001401 |

All belt scales should be installed in accordance with our recommendations for the planning in of belt scales (TCM0002) and the installation and operating manual. Due to our policy of continuous improvement, dimensions and specifications may change without notice. Have all applications and specification reviewed prior to final design and all dimensions certified for installation purposes.

TC Process Equipment
Ph +61(0) 2 8021 1672
Fx +61(0) 2 9906 5661
Em sales@tcprocess.com.au
www.tcprocess.com.au