Belt Weigh Scale

Ideally suited for mining and remote applications

Belt Scale or Weight-o-Meter are accepted means of moving bulk materials in process industries. With the advent of this fast mode of transportation, accounting for the quantity of material transferred assumes great importance. Since weight remains as the most reliable index of material accounting and can be measured directly and precisely, we offer weighing systems designed to maintain higher accuracy and better accountability in the process. These Belt Weighers also known as Belt Weighing Scales measure the quantity of materials that have been conveyed by a belt.

**Features**

- Product offered by a company of over 40 years of experience in the weighing field
- Ideal for process industries in harsh environment
- Available for explosion proof zone
- ‘Flex-o-Weigh’ arrangement guarantees accuracy even with low belt scale
- For belt width from 500-3000mm belt weighing
- Capacity from 0.5t to 5000t.
- Belt speed from 0.1m/ sec to 3.5m/sec
- Optional angle sensor for stacker reclaimer
- 32-bit ARM CPU for high speed
- Customized PC software for data logging and reporting
- Easy installation and maintenance
- Backed by a nationwide sales and service network
Belt Scale Indicator (BCW-DS)

Features
- 32-bit ARM CPU with 72 MHz & higher arithmetic speeds
- Max. connection Quantity: 8 loadcells
- Auto locking, key locking, key unlocking, digital setting & calibration and I/O testing function available
- Auto zero tracking, speed calibration & belt length calibration function available
- Accuracy guaranteed for even very low belt loads (system specific)
- Digital Proximity speed sensor designed to generate sufficient pulses even at very low belt speed.
- High Speed ADC is used to have faster response

Operating specification
- Operating Voltage: AC 220V ± 15%, 50/60 Hz
- Max Power Consumption: 15 w
- Operating temperature: -25°C to +55°C
- Storage temperature: -30°C to +60°C
- Relative humidity: Max 85% RH

Technical specification
- Accuracy Grade: 0.5
- System accuracy: 0.25% system specific

Display
- 8 + 4 + 4 red digital LEDs for character and digit display
- Display Refreshing time: Setting range .01 ~ 2.0 s

Keypad
- 6 key membrane push-buttons

Loadcell interface
- Excitation voltage /Max current: DC 10V/250mA [8-350Ω loadcells]
- Signal input range: 0 ~ 25mV
- \( \sum \Delta \) ADC: 24 bit, 100,000 internal code used
- Sampling Frequency: 200 Hz
- Non linearity: 0.005% FS

Speed Sensor Interface
- Output voltage/Max. Current: DC 12V/100mA
- Speed Pulse Input Range: 0.5 ~ 3000 Hz

Switch signal interface
- Digital output
  - Normally open relay switch outputs (DO): AC250V, DC24 V, 1A (4 nos)
  - “Totalized weight high-speed pulse” Output (PO): 100 mA, DC5 ~ 24 V; weight per pulse and pulse width can be preset (1 no.).

Analog Signal interface
- 4-20 mA corresponding to rate
- 4-20 mA proportional to load/speed/ rate

Digital communication
- COM 1: RS485 / Profibus - DS (optional)

Ingress protection
- Ip 65
Remote Indicator

Features
• Display: 7 segment 13 digit LED display
• Keypad: 4 switch keypad
• Communication protocol: RS 485 host-slave, mod-bus RTU
• Operating temperature: 5°C - 55°C
• Power supply: 110v ac or 230 v AC ± 10 %, 50 or 60 Hz
• Current consumption of card: 82mA@110v Ac, 81mA @230v AC
• Dimension: 94 x 152 x 132 mm
• Display parameter: rate, totaliser

Angle Sensor

Features
• Designed for harsh industrial environment
• Excitation 5V dc
• Output ± 2.5 V dc
• 0.5-degree angle accuracy

Speed Sensor

Features
• pulse (proximity/AC tachometer)
• Frequency range: 5 to 300 Hz
• Excitation: 12v DC @ 100 mA
Software

- Customized reports
- To communicate with up to 32 belt scales
- Integration portability with third party software

Our range of products

- Strain Gauges
- Vibration Switch
- Loadcells
- Accelerometer
- Crane Overload Protection System
- Pressure Transducers
- Vibration Meter
- Angle Sensor
- Lorry Weighbridge
- Bagging System
- Crane Scale
- Check Weighers
- Force Calibrator
- Belt Weighers
- Tyre Inflator
- Axle Weighers
- Hopper/Tank/Silo Weighing Systems
- Vibration Transmitter
- Ladle Weighing System
- Weigh Feeder
- Handheld Vibration Meter
- Bag Check System
- Batching System
- Loss-in-weigh Feeder
- Screw Feeder
- Solid Flow-meter
- Throughput Weighing Instrumentation
- Indicators & Controllers
- Signal Conditioner
- Trip Safe
- On-line Weighing System

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