Shear Beam Load Cell Model BLS and mounts BLM

- Highly accurate and reliable design
- Hermetically sealed, IP67
- Optimized for multiple load cells due to precise calibration
- · Fully enclosed option
- Six wire circuit
- 100% Stainless Steel
- Grade 316 Stainless Steel contact surfaces



Application

Load cells of the BLS type are designed to convert the mechanical input signal, the load, proportionally into the electrical output voltage. Combined with the corresponding BLM mounts, they are very suitable for use with platform, batching, and hopper scales. Their compact design simplifies the integration in any existing construction.

The rugged design of the load cells and mounts ensures reliable operation even in severe environments.

Construction

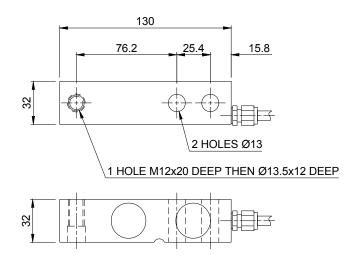
Entirely made of stainless steel and hermetically sealed by laser welding, the BLS load cells are connected by using a high-quality shielded 6-wire PVC cable.

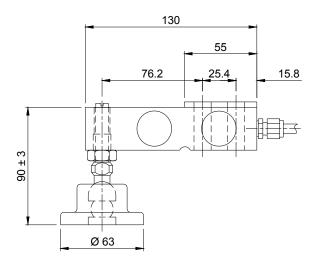
The 6-wire circuit provides for a measuring signal which is insensitive to connecting cables of different lengths.

Functions

- High calibrating accuracy, thus, optimal prerequisites for the parallel connection of multiple load cells
- High degree of measuring signals repeatability
- Damping of side forces through the BLM mount
- Self-centring load cell mount
- Minimal effect on accuracy by side forces

Standard Dimensions





Load Cell BLS

Load Cell Mount BLM

Versions

| Model | Capacity | Part Number |
|---------------------|----------------|-------------|
| BLS 0.5t Load Cell | 500 kg | PS0004301 |
| BLS 1t Load Cell | 1000 kg | PS0004302 |
| BLS 2t Load Cell | 2000 kg | PS0004303 |
| BLM Load Cell Mount | 500 to 2000 kg | PS0006001 |

Technical Data

| Total error | 0.02% | |
|------------------------------|-----------------------------------|--|
| Sensitivity | 3.0mV/V ± 0.003mV/V | |
| Creep (30min) | 0.02% Full scale | |
| Zero balance | 1% Full scale | |
| Zero error from temp. change | 0.02% Full Scale per 10°C | |
| Span error from temp. change | 0.02% Full Scale per 10°C | |
| Input resistance | $400\Omega \pm 10\Omega$ | |
| Output resistance | $352\Omega \pm 2\Omega$ | |
| Isolation resistance | ≥ 5000MΩ | |
| Operating temperature | -30° to 70°C | |
| Maximum excitation | Recommended 10V to 12V maximum15V | |
| Construction | IP67 Stainless Steel | |
| Cable length | 3M 5mm Dia. PVC | |
| | Red Excitation + | |
| | Black Excitation – | |
| | Green Signal + | |
| Cable colours | White Signal – | |
| | Blue Sense + | |
| | Yellow Sense – | |
| | Thk. Black Shield | |

Dimensions and specifications are subject to change without notice.

