SX-M-FS
WEIGHING RANGE 0 - 60 g

The series SX-M-FS Weigh Cells cover a weighing range up to 60 g. They have been specifically designed as a compact sensor component and are especially suited for installation in multi-lane applications with centerline distance of 25 mm or more.

The load distribution is designed in such a way that a customers provided housing/stainless steel cover can very easily be adapted across all Weigh Cells. System-induced active self-damping guarantees the shortest possible measuring times while maintaining the highest resolution. The Weigh Cell sensor is connected to the separate electronics via a 5 m long cable. The electronics are prepared for rail mounting in the control cabinet (in accordance with DIN 60715). The system already supplies final weight values as standard via a CAN, RS 422, Profinet DP, Profinet IO, Ethernet/IP, or EtherCAT interface.

Alternatively, the sensor can also be used as a Modular Multilane System (MMS) with or without AVC technology (Active Vibration Compensation).

Details on MMS are provided in a separate documentation.

You need an individual solution?
Please contact us.

/ TO BE USED IN
- Multilane weighing systems
- In-Process control applications (IPC)
- Special machine manufacturing
- Filling and packaging machines

/ FEATURES
- Weighing range up to 60 g, covered by 2 models
- Additive dead load range up to 60 g
- Very slim construction in aluminum housing with separate electronic box
- Multilane applications starting from 25 mm centerline distance
- Interface 1: CAN, RS 422, Profinet DP, Profinet IO, Ethernet/IP, EtherCAT
- Interface 2: RS 232 for service and configuration
- Sampling rate: 1 ms
- MMS capable (Modular Multilane System)
### WEIGH CELL TYPE

<table>
<thead>
<tr>
<th></th>
<th>SX-M 30/60-FS</th>
<th>SX-M 60/60-FS</th>
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</thead>
<tbody>
<tr>
<td>Weighing range</td>
<td>30 g</td>
<td>60 g</td>
</tr>
<tr>
<td>Electrically adjustable dead load range</td>
<td>60 g</td>
<td>60 g</td>
</tr>
<tr>
<td>Display value (d) with higher resolution (standard)</td>
<td>0.00005 g</td>
<td>0.0001 g</td>
</tr>
<tr>
<td>Higher display value (d) in combination with MMS and AVC</td>
<td>0.0001 g</td>
<td>0.0002 g</td>
</tr>
<tr>
<td>Linearity ≤</td>
<td>± 0.00015 g</td>
<td>± 0.0003 g</td>
</tr>
<tr>
<td>Repeatability (s) ≤</td>
<td>0.00005 g</td>
<td>0.0001 g</td>
</tr>
<tr>
<td>Repeatability (s) ≤ in combination with MMS and AVC</td>
<td>0.0001 g</td>
<td>0.0002 g</td>
</tr>
<tr>
<td>Maximum dimension of weighing platform</td>
<td>24 x 24 mm</td>
<td></td>
</tr>
<tr>
<td>Settling time (on 1‰ of final weighing range value)</td>
<td>&lt; 120 ms</td>
<td></td>
</tr>
<tr>
<td>Protection class of the Weigh Cell</td>
<td>IP44</td>
<td></td>
</tr>
<tr>
<td>Temperature range</td>
<td>+10 °C to +30 °C</td>
<td></td>
</tr>
<tr>
<td>Power supply</td>
<td>24 V DC, ± 5 %, 0.5 A</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 850 g</td>
<td></td>
</tr>
<tr>
<td>Interface 1</td>
<td>CAN, RS 422, Profibus DP, Profinet IO, Ethernet/IP, EtherCAT</td>
<td></td>
</tr>
<tr>
<td>Interface 2</td>
<td>RS 232, 115200/8/1/odd</td>
<td></td>
</tr>
<tr>
<td>Housing material</td>
<td>Aluminum hard coated with stainless steel side cover AISI 304</td>
<td></td>
</tr>
</tbody>
</table>

1) From top edge of factory-provided load bolt. With a load of 50 g on the factory-provided load bolt, by using a standard version without MMS with AVC, the system is in a balanced state and most resistant to floor vibrations. When the optional load plate (approx. 20 g) is used, the dead load range is reduced to 40 g.

2) Depends on the preference settings and on setup and ambient conditions of the system. The absolute repeatability is +/- 3 s.

3) Temperature range: +10 °C to +30 °C

4) Weighing time = settling time plus (adjustable) measuring time

5) IP44 with customer-provided secondary protection and double labyrinth possible

6) 5 m cable connection between electronic box and sensor

Customer specific variations on request

/ OPTIONS

- **Option 10**: RS 422 instead of CAN interface
- **Option 11**: Bus operation (standard)
- **Option 12**: Higher display resolution (standard)
- **Option 13**: Binary I/O channels (standard)
- **Option 14**: Filling algorithm
- **Option 25**: Dead load compensation
- **Option 34**: Interface connection at the bottom
- **Option 35**: Profibus DP instead of CAN interface
- **Option 36**: Ethernet/IP instead of CAN interface
- **Option 37**: Profinet IO instead of CAN interface
- **Option 38**: EtherCAT instead of CAN interface
- **Option 39**: Powerlink (only for MMS)
- **Option 40**: Mounting flange bottom
- **Option 43**: Load output front
**Selectable versions**

1. Load output
   - only load bold
   - with load plate
   - housing options

2. Electrical connection
   - pug position
   - cable versions

3. Installation
   - housing bottom
   - mounting flange bottom

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All measurements in mm  Subject to technical modifications