

---

## MD-01 Transducers

---

### FEATURES

- Nominal capacity: 200 N, 500 N, 1 kN, 2 kN and 5 kN
- Cost effective: high accuracy and long service reliability
- Damage-resistant: no mechanically sensitive parts
- Resistant to chemical media: can be used in humid environments and in chemical plants
- Welded stainless steel housing; IP 67 protection class
- Small size: ideal for space-saving applications
- Simple installation: single-screw mounting (M6)



### DESCRIPTION

Magtrol's MD-01 Transducers are designed for measuring static and dynamic compression loads. Using strain gauge technology, deformation of the sensing element provides an electrical signal proportional to the load or force being measured.

With quick single-screw mounting, this transducer can be easily integrated into several applications.

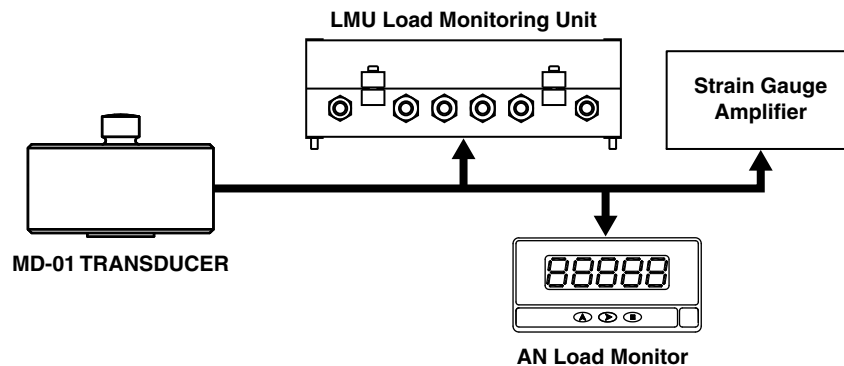
### APPLICATIONS

Made entirely of stainless steel, this hermetically-sealed transducer can be used anywhere without restriction.

When connected to a signal conditioner, this high-accuracy transducer is ideally suited to applications where weights have to be measured like hoppers/silos, platforms etc.

---

### SYSTEM CONFIGURATION



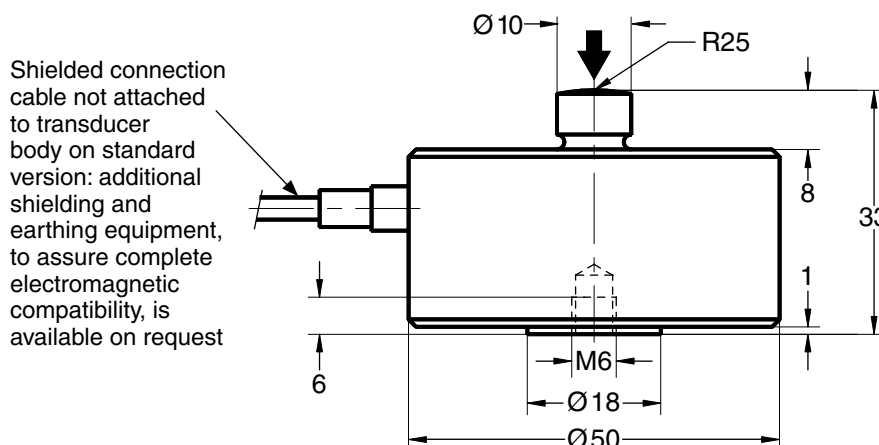

---

### ORDERING INFORMATION

PART NUMBER	MD - 01 - <input type="text"/> - B
• Nominal Force:	
(N) 200 or 500	<input type="text"/>
(kN) 1, 2 or 5	<input type="text"/>

**TECHNICAL RATINGS**

	<b>MD-01-B</b>
<b>MECHANICAL CHARACTERISTICS</b>	
Nominal Force	200 N, 500 N, 1 kN, 2 kN or 5 kN
Accuracy Class	0.2
Admissible Overload	120%
Overload Limit	150%
Overload at Rupture	> 300%
Maximum Dynamic Load (double amplitude)	70%
Flexion at Nominal Force	≈ 0.1 mm to 0.3 mm (depending on model)
Weight	≈ 0.3 kg
<b>ELECTRICAL CHARACTERISTICS</b>	
Nominal Sensitivity	2 mV/V ± 0.5 %
Bridge Impedance: Input	340 Ω to 450 Ω
Bridge Impedance: Output	350 ± 3 Ω
Insulation Resistance	> 5 × 10 <sup>9</sup> Ω
Nominal Supply Voltage	0.5 V to 10 V
Combined Error (nonlinearity + hysteresis)	≤ ± 0.2%
<b>ENVIRONMENTAL CHARACTERISTICS</b>	
Reference Temperature	+23 °C
Operating Temperature (compensated)	-10 °C to +60 °C
Usable Temperature Range	-40 °C to +80 °C
Temperature Influence: On Zero	< ± 0.01% / K
Temperature Influence: On Sensitivity	< ± 0.01% / K
Protection Class	IP 67
<b>CONNECTION CABLE</b>	
Cable Length	1.5 m

**DIMENSIONS**

**PIN CONNECTIONS**

Pin	Color Code
+ supply	black
- supply	blue
+ signal	red
- signal	white

*Due to the continual development of our products, we reserve the right to modify specifications without forewarning.*


[www.magtrol.com](http://www.magtrol.com)
**MAGTROL INC**

70 Gardenville Parkway  
 Buffalo, New York 14224 USA  
 Phone: +1 716 668 5555  
 Fax: +1 716 668 8705  
 E-mail: [magtrol@magtrol.com](mailto:magtrol@magtrol.com)

**MAGTROL SA**

Centre technologique Montena  
 1728 Rossens/Fribourg, Switzerland  
 Phone: +41 (0)26 407 3000  
 Fax: +41 (0)26 407 3001  
 E-mail: [magtrol@magtrol.ch](mailto:magtrol@magtrol.ch)

**Subsidiaries in:**

- Germany
- France
- Great Britain
- China

Worldwide Network  
 of Sales Agents

