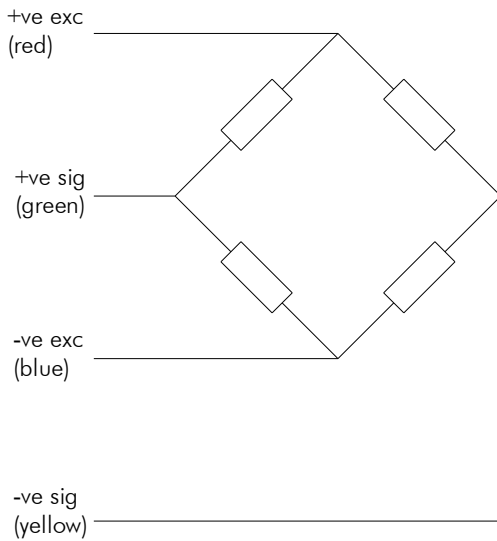




Bolt-On

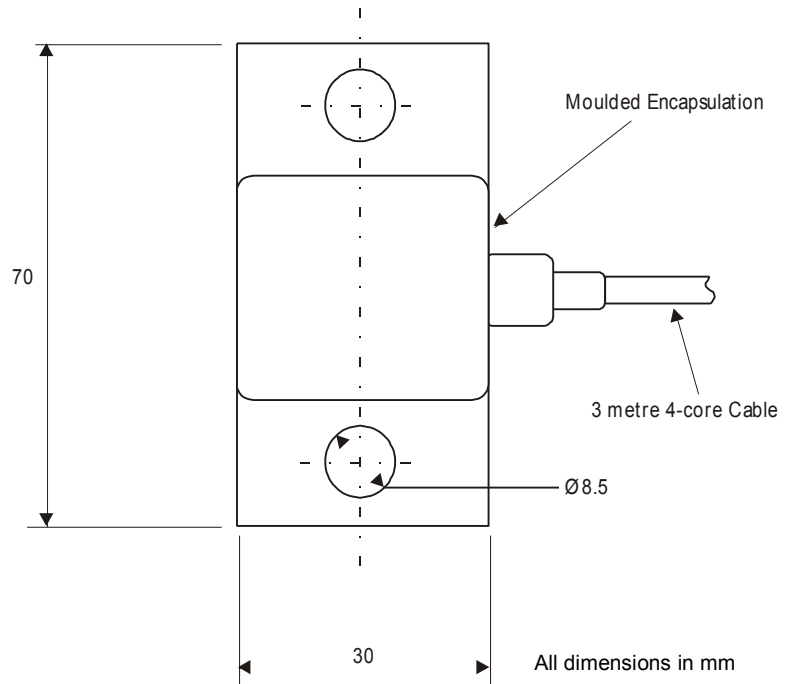
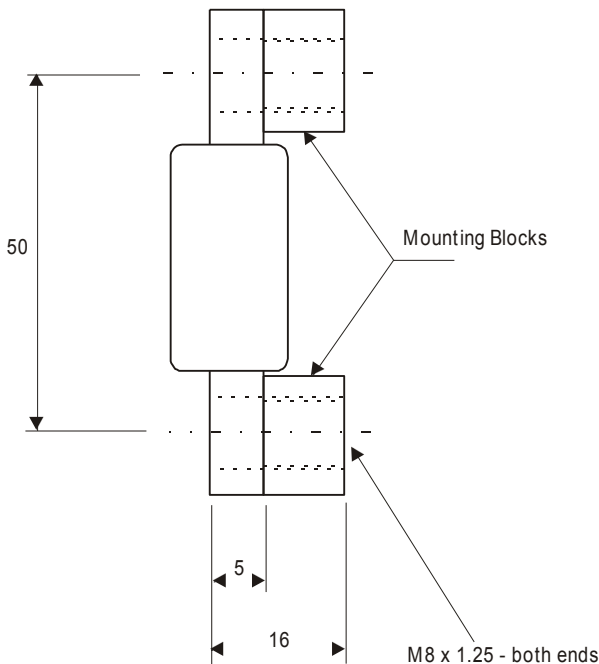
Bolt On Strain Sensing

- Cost effective solution for high capacity vessel/silo weighing applications
- Sealed to IP65
- Robust construction
- Simple installation
- All mounting accessories supplied



Characteristics	BOSS-F	BOSS-S	UNITS
Full Load Output	1.0 nom.	20.0 nom.	mV/V @ 10000psi
Zero Load Output	± 5.0	± 5.0	%
Excitation (Max)	10 (15)	10 (15)	V
Accuracy	<math>< 0.25</math>	<math>< 0.25</math>	%
Repeatability	<math>< 0.04</math>	<math>< 0.04</math>	%
Terminal Resistance	350 nom.	2100 nom.	Ω
Deflection	<math>< 0.5</math>	<math>< 0.5</math>	mm
Compensated Temp. Range	-10 to +40	-10 to +40	$^{\circ}\text{C}$
Operating Temp. Range	-20 to +60	-20 to +60	$^{\circ}\text{C}$
Temp. Coefficient on Zero	0.010	0.010	% Capacity/ $^{\circ}\text{C}$
Temp Coefficient on Span	0.005	0.010	% Capacity/ $^{\circ}\text{C}$
Safe Overload	200	200	%
Insulation	>5000@100Vdc	>5000@100Vdc	M Ω
Environmental Protection	IP65	IP65	
Cable Length	4	4	m

Specifications subject to change without notice



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Bolt-On

Bolt On Strain Sensing

Installation Instructions

Each **Bolt On** sensor is supplied with a template to which the two mounting blocks are attached using high tensile cap head bolts. The mounting blocks are welded into position using the template which is then removed and the **Bolt On** attached in its place.

-  Ensure the target surface area is suitable for welding the attachment blocks.
-  Mount blocks to the template using supplied cap head bolts.
-  Position template and block assembly in the required position and clamp securely.
-  Weld blocks to mounting surface.
-  Remove template and attach **Bolt On** to mounting blocks.

It is important to avoid excess strain being applied to the **Bolt On** during installation as this can cause unwanted high zero-offset signals. This risk can be minimised by connecting a 10V DC supply and $>0.1\text{mV}$ scale voltmeter to the sensor during installation and trying to ensure an offset of no more than 2mV greater than the starting figure is present when the bolts are tightened to 25Nm. This result is best achieved through incremental tightening of the bolts to keep a balanced torque level throughout the installation.

Thermal Insulation

To minimise the effect of temperature on **Bolt On** sensors it is essential to protect them with thermally isolating material or heat reflective tape.

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