

# APPLIED MEASUREMENTS LTD.

Transducer Specialists...

+44 (0) 118 981 7339

info@appmeas.co.uk

https://appmeas.co.uk

## BOSS-F Bolt-On Load Cell

#### **Key Features:**

- Capacities 2500psi to 10,000psi
- Output 1mV/V
- Environmental Protection IP65
- Safe Overload 200%/Rated Capacity
- Simple Installation
- Robust Construction
- All Mounting Accessories Supplied
- 2 x Mounting Blocks Provided
- Full On-Site Commission and Calibration Service Offered (UK Only).
- 3 Year Warranty



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Attaches directly to steel structures to monitor tensile, compressive or bending stresses.

The BOSS-F bolt-on strain sensors are designed to be attached directly to existing support structures to monitor tensile, compressive and bending stresses, removing the need for complicated works to retro-fit load cell assemblies underneath the legs or sub-frame. Bolt-on strain sensors measure changes in the stress levels of vessel supports, eliminating the problems associated with side buildup and air pockets.

The BOSS-F is sealed to IP65 protection rating ensuring excellent waterproof properties for outside use.

To assist with the installation, each unit is supplied with a template to which the 2 mounting blocks are attached using high tensile cap head bolts. The mounting blocks are welded in position using the template which is then removed and the bolt-on sensor attached in its place.

We offer full on-site commissioning and calibration service to get your bolt-on measuring system up and running promptly after installation (UK installation site only), please <u>contact our technical</u> <u>sales team</u> for details.

#### **Options:**

- Full On-Site Commission and Calibration Service Offered (UK Only).
- Single or Multi-Channel PC-Based Monitoring & Data Logging System.
- Wireless Version (via T24 instrumentation)
- TEDS (Transducer Electronic Data Sheet)
- TEDS Allows Plug & Play with TEDS Enabled Instrumentation.
- USB Version (via DSC-USB)

#### **Applications:**

- Bins and Tanks
- Storage Vessels
- Hoppers
- Silo Weighing
- Overload Protection Systems on Cranes, Winches, Lifts and Presses.



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## Specification:

Rated Capacity (RC)	psi	2500 to 10,000	
Output at Rated Load	mV/V @ 10000psi	1.0 nominal	
Accuracy	±%/Rated Load	1-10 (depending on installation)	
Zero Balance/Offset	±%/Rated Load	5.0	
Zero Return (30 mins)	±%/Rated Load	0.04	
Temperature Effect on Zero	±%/Rated Load/ °C	0.005	
Temperature Effect Rated Output	±%/Applied Load/ °C	0.003	
Input Resistance	Ohms	350 nominal	
Output Resistance	Ohms	350 nominal	
Insulation Resistance	Megohms	>5000 @ 50Vdc	
Excitation Voltage	Volts DC or AC	10 recommended (2-15 acceptable)	
Operating Temperature Range	°C	-30 to +70	
Compensated Temperature Range	°C	+15 to +65	
Storage Temperature Range	°C	-30 to +70	
Safe Overload	% of Rated Load	200	
Ultimate Overload	% of Rated Load	600	
Deflection at Rated Capacity	mm	<0.5	
IP Rating (Environmental Protection)		IP65	
Weight	kg	0.20 (excluding cable)	
Cable Length	metres	3	
Cable Type		4 core + screen PUR sheath, Ø5 nominal	
Construction		Alloy Tool Steel	

## Wiring Diagram:

Wire		Designation
	Red	+ve excitation
	Blue	-ve excitation
	Green	+ve signal
	Yellow	-ve signal
	Screen	To ground - not connected to load cell body



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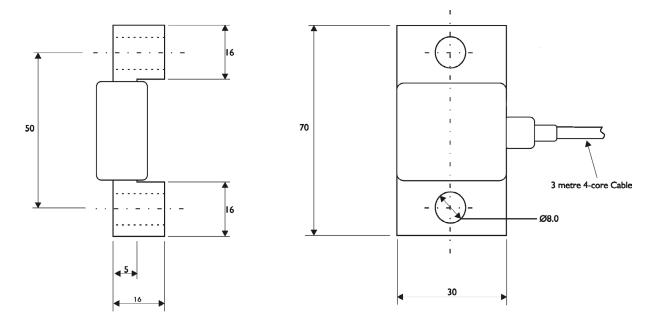
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#### **Dimensions (mm):**



### **Ordering Codes:**

Core Product	Capacity (inc Engineering Units)	Cable Length (m)	Specials Code	Example Result
BOSS-F	2500psi	003	000	BOSS-F-2500psi-003-000
BOSS-F	3000psi	003	000	BOSS-F-3000psi-003-000
BOSS-F	5000psi	003	000	BOSS-F-5000psi-003-000
BOSS-F	7500psi	003	000	BOSS-F-7500psi-003-000
BOSS-F	10,000psi	003	000	BOSS-F-10,000psi-003-000

#### **Associated Products:**



AMLJBNA Passive Junction Box



SGA Signal Conditioner/Amplifier



Intuitive4-L Panel-Mount Indicator