

SS2/SS3

Ultra Low Force Load Cell

Gram range, Hi-precision Force Transducer

The SS2-3 load cells have been designed for applications where precision measurement of extremely low forces is required. They are based upon bonded semi-conductor strain gauge technology, conferring excellent sensitivity and eliminating the fragility associated with unbonded strain gauge types. The design features excellent immunity to the effects of eccentric loading, side loading and bending moments. Forces may be applied either in tension or compression and alternative loading adaptors are available. The low deflection and consequent high frequency response ensures that the unit is suitable for measuring peak and transient forces. The transducer will replace the well known UC2 and UC3 range of load cells, originally marketed by Gould-Statham®, who stopped production in the 1980's.



There are many applications for this range of load cells in medical applications, research and development and industry.

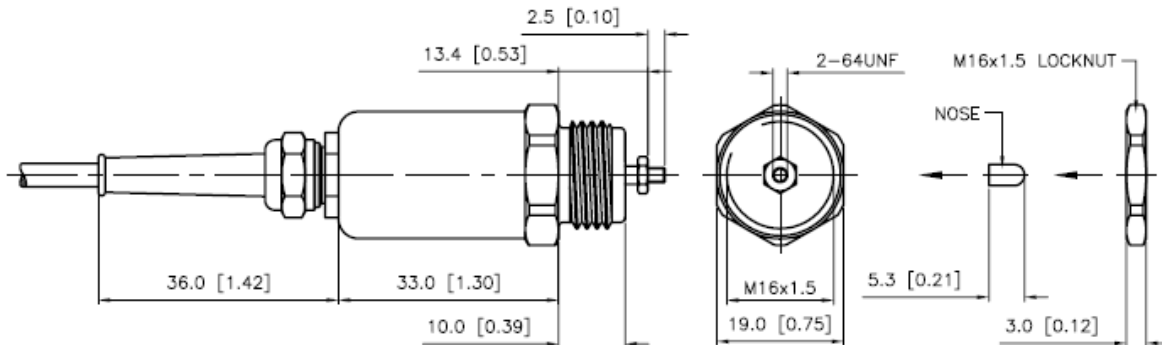
Specifications

Type No		SS2	SS3
Standard Range	grams	± 30	60
Operational Mode		Bi-directional	Compression
Calibration Excitation Voltage	VDC	5	
Maximum Excitation Voltage	VDC	10	
Full Scale Output	mV/Volt (nominal)	6	12
Combined Error	± % Full Scale (max)	±0.50	
Operating Temperature Range	°C	-20 to +90	
Compensated Temperature Range	°C	-10 to +65	
Thermal Zero Shift	± % Full Scale/°C (max)	0.02	
Thermal Sensitivity Shift	± % Reading/°C (max)	0.02	
Input Resistance	Ω (nominal)	650	
Output Resistance	Ω (nominal)	400	
Overload Capacity (compression)	% Full Scale	500	
Maximum Side Load	% Full Scale	100	
Deflection at Rated Load	mm (inches)(max)	0.05 (0.002")	
Environmental protection level	IEC529	IP51	
Documentation		Individual calibration data sheet	

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Outline Dimensions



Notes

1. Standard unit is supplied with 4 conductor, 1m shielded cable, shield not connected to transducer
2. Units supplied calibrated in compression
3. Signal polarity is positive in compression

Ordering Information

Order by specifying type number, e.g. SS2 or SS3

Continuous product development may result in minor specification change without notice. All dimensions are in millimetres. Drawings are shown for general guidance only - detail drawings are available on request.