

FORCE LOAD CELL - 20MV/V

MEAS | MEAS FS

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Sensors > Force Sensors > Force Sensor Elements

The FS19 load cell, with ranges from 500G to 3000G, uses proven MEMS sensor technology derived from demanding aerospace and automotive applications which employs micro-machined piezoresistive strain gages fused with high temperature glass to a high performance stainless steel force measuring flexure.



Force Sensor Element Sensor Type: OEM Compression Load Cells

Output Signal: 20 mV/V

Zero Shift in CTR: ± 0.05 % of FS

Sensitivity Shift: ± 0.05 % of FS

This sensing technology eliminates age-sensitive organic epoxies used in traditional load cell designs, providing excellent long term stability.

This high sensitivity strain gage allows the load cell to produce 20 mv/V output with low strains and deflection, thus long endurance in the smallest package. The flexure is precisely machined to produce excellent consistency from part to part. Typical applications range from medical devices to appliances and exercise equipment.

BENEFITS

- All stainless steel construction
- Small compression load 500G to 3000G range
- High sensitivity 20 mV/V
- Non-linearity +/-1% FS
- Strain gage 2200 Ω bridge
- Flex cable for tight space
- Small size
- High sensitivity
- High overload
- Low deflection
- Long life
- Low cost

Sold in North America By:
Servoflo Corporation
75 Allen Street
Lexington, MA 02421
Tel: 781-862-9572
www.servoflo.com / info@servoflo.com

Features

Product Type Features

Force Sensor Element Sensor Type	OEM Compression Load Cells
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Electrical Characteristics

Supply Voltage (VDC)	5
Full Scale Range (Nm)	10, 30

Signal Characteristics

Output Signal	20 mV/V
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Usage Conditions

Operating Temperature Range (°C)	-40 - 85, 0 - 40
Operating Temperature Range (°F)	-40 - 185, -40 - 185, 32 - 104

Other

Accuracy (% of FS)	±1
Force Direction	Compression
Zero Shift in CTR (% of FS)	±.05
Sensitivity Shift (% of FS)	±.05

Reference Number

TE Internal Number	CAT-FSE0003
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SEE PRODUCTS ON NEXT PAGE

Products (1 of 1)



1000 GRAM FORCE 20MV/V FORCE LOAD CELL



3000G COMPRESSION SENSOR

TE Part #	FS1901-0000-1000-G	FS1901-0000-3000-G
Full Scale Range	10 Nm	30 Nm
Operating Temperature Range	0 - 40 °C	-40 - 85 °C
EU RoHS Directive 2011/65/EU	EU RoHS Compliant	EU RoHS Compliant
EU ELV Directive 2000/53/EC	EU ELV Compliant with Exemptions	EU ELV Compliant with Exemptions
Product Families	MEAS	MEAS
Series	MEAS FS	MEAS FS

***EU RoHS Directive 2011/65/EU**

These products comply with the substance restrictions of the Restriction on Hazardous Substances Directive 2011/65/EU (RoHS2). The RoHS2 Directive requires that certain electrical and electronic equipment products do not contain mercury, cadmium, hexavalent chromium, PBB, PBDE, lead, DEHP, BBP, DBP and DIBP above defined thresholds. Products indicated as 'Compliant' do not contain any of these substances above the prohibition thresholds. Finished electrical and electronic equipment products will be CE marked as required by the Directive. Components may not be CE marked.

****EU ELV Directive 2000/53/EC**

These products comply with the substance restrictions of the End of Life Vehicles Directive 2000/53/EC (ELV). The ELV Directive requires that materials and components of vehicles do not contain mercury, cadmium, hexavalent chromium, and lead above defined thresholds. Products indicated as 'Compliant' do not contain any of these substances above the prohibition thresholds.

Related Materials

Data Sheet

FS19

English

Brochure

Sensor Solutions for Medical Applications

English

Sell Sheet

Medical Device Sensor Solutions

English

Also in the Series | MEAS FS



Flow Switch(9)



Force Sensor Elements(11)

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