

COMPRESSION LOAD CELL

- 100MV



MEAS | MEAS FX1901

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Sensors > Force Sensors > Force Sensor Elements

The FX1901 units are intended for OEM use in laboratory, hospital or consumer product applications, establishing a breakthrough price/performance value for compression load cells.



Force Sensor Type: **OEM Compression Load Cells**

Operating Temperature Range: **0 - 50 °C**

The FX1901 is a 1% load cell device with full scale ranges of 10, 25, 50 or 100 and 200lbf compression.

This new, low-cost technology enables force sensing in a whole new class of "smart" consumer and medical products. MEAS' proprietary technology, derived from demanding aerospace applications, employs micro-machined piezoresistive strain gages fused with high temperature glass to a high performance stainless steel force measuring flexure. Microfused™ technology eliminates age-sensitive organic epoxies used in traditional load cell designs, providing excellent long term span and zero stability. Operating at very low strains, TE technology provides an essentially unlimited cycle life expectancy, superior resolution, high over-range capabilities and a ratiometric span of 20mV/V. The combination of stamped flexures and micro miniaturized MEMs strain gages permits low costs to be achieved in high volume OEM applications ranging from disposable medical devices to durable appliances and exercise equipment.

Benefits

- High reliability design for OEM, Appliance and Medical applications
- 10 - 200 lbf Ranges
- Compact Coin Cell Package
- Anti-Rotation Mounting Features
- CE Compliance
- Small
- Low noise
- Robust: High over-range
- mV Output: 20mV/V Nominal
- Low deflection with high life cycle
- Fast

Features

Product Type Features

Force Sensor Type

OEM Compression Load Cells

Electrical Characteristics

Supply Voltage Range (VDC)

5



Full Scale Range (lbf) 25, 50, 100, 200

Usage Conditions

Accuracy (% of FS) ±1

Operating Temperature Range (°C) 0 - 50

Operating Temperature Range (°F) 32 - 122

Other

Zero Shift in CTR (% of FS) ±.05

Sensitivity Shift (% of FS) ±.05

Force Direction Compression

Reference Number

TE Internal Number CAT-FSE0005

SEE PRODUCTS ON NEXT PAGE

Products (1 of 2)



**200 LBF COMPRESSION
LOAD CELL 100MV**



FX1901-0001-0100-L



FX1901-0001-0025-L



FX1901-0001-0050-L

TE Part #	FX1901-0001-0200-L	FX1901-0001-0100-L	FX1901-0001-0025-L	FX1901-0001-0050-L
Full Scale Range	200 lbf	100 lbf	25 lbf	50 lbf
EU RoHS Directive 2011/65 /EU	EU RoHS Compliant with Exemptions	EU RoHS Compliant with Exemptions	EU RoHS Compliant with Exemptions	EU RoHS Compliant with Exemptions
EU ELV Directive 2000/53/EC	EU ELV Compliant with Exemptions	EU ELV Compliant with Exemptions	EU ELV Compliant with Exemptions	EU ELV Compliant with Exemptions
Product Families	MEAS	MEAS	MEAS	MEAS
Series	MEAS FX1901	MEAS FX1901	MEAS FX1901	MEAS FX1901

***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.

Products (2 of 2)



**25 LBF COMPRESSION LOAD CELL
100MV**

TE Part #	FX1900-0000-0025-L
Full Scale Range	25 lbf
EU RoHS Directive 2011/65/EU	EU RoHS Compliant with Exemptions
EU ELV Directive 2000/53/EC	EU ELV Compliant
Product Families	MEAS
Series	MEAS FX1901

***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](#)

[FX19](#)

English

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