

FS19

Force Load Cell

SPECIFICATIONS

- **All stainless steel construction**
- **Small compression load 350G to 3000G range**
- **High sensitivity 20 mV/V**
- **Non-linearity +/-1% FS**
- **Flex cable for tight space**

The FS19 load cell, with ranges from 350G to 3000G, uses proven Microfused 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. 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.

FEATURES

- Small size
- High sensitivity
- High overload
- Low deflection
- Long life
- Low cost

APPLICATIONS

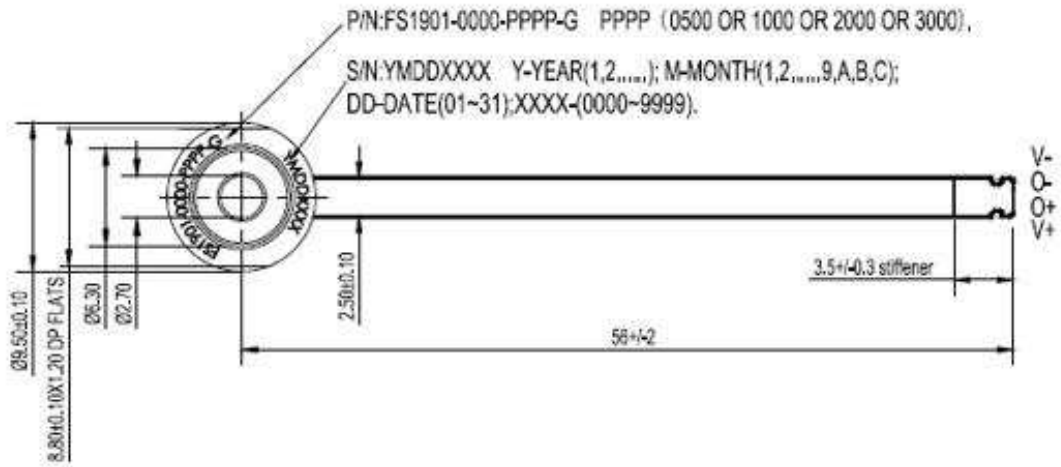
- Infusion Pumps
- Load Sensing
- Contact Sensing
- Weighing
- Household Appliances

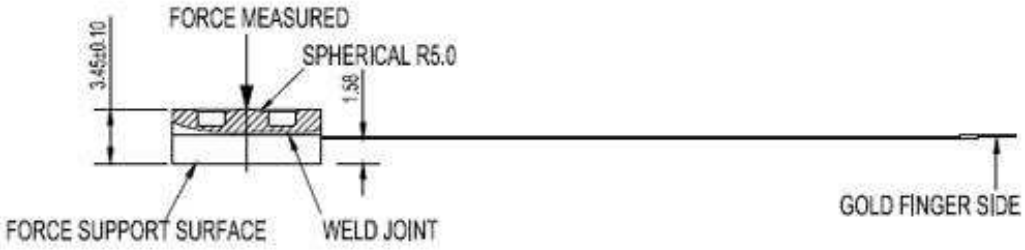
PERFORMANCE SPECIFICATIONS

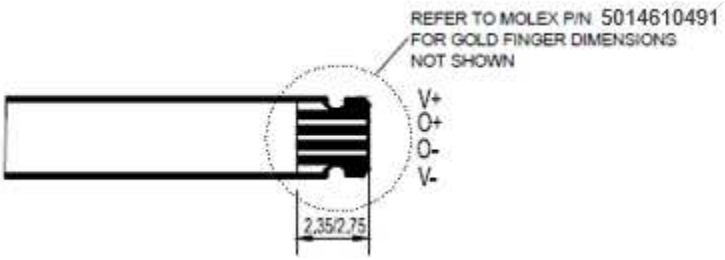
All specifications are at 25°C except where indicated.

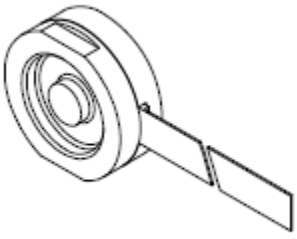
PARAMETER	MIN	TYP	MAX	UNITS, NOTES
Force Range		350/500/1000/2000/3000		G
Excitation Voltage	2	5	10	VDC
Sensitivities (FSO)	14	20	26	mV/V, Ratiometric to excitation voltage
Non-Linearity	-1		1	%FSO
Hysteresis	-1		1	%FSO
Zero Offset	-9		+9	mV/V, Ratiometric to excitation voltage
Operating Temperature	0		40	°C
Storage Temperature	-40		85	°C
Humidity	0		95	% RH
Safe Load Limit			2x	Rated load
Insulation	50			Meg ohms at 250 VDC
Deflection			0.020	mm at rated load
Input Resistance	1.50K	2.15K	2.80K	Ω
Output resistances	1.50K	2.15K	2.80K	Ω
Thermal Error – Sensitivities	-0.05		+0.05	%FSO / °C
Thermal Error –Zeros	-0.5		+0.5	%FSO / °C
Response Time			1	ms
ESD			±15	KV, 10 discharges qualified per IEC
Weight		1.1		gram
Weather Proof		IP43		

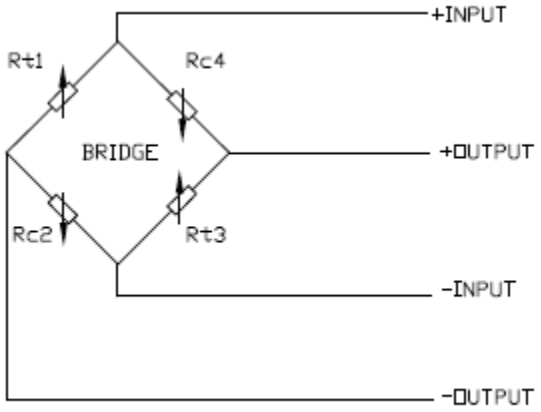
DIMENSIONS (mm)











ORDERING INFORMATION

FS1901	-	0000	-	1000G
Model	**-**	**0000**	**-**	**Force Range**
FS1901	-	0000	-	**0350G** **0500G** **1000G** **2000G** **3000G**

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