DATA SPEED S.R.L.
Str. Corneliu Coposu nr. 103, Cluj-Napoca, cod 400235, jud. Cluj
Tel: 0264 566 473, 0735 803 121
office@dataspeed.ro · www.dataspeed.ro

Senzor izometric de forta UF1



Senzor izometric de forta UF1 Producator: LCM Systems UF1 Low Range Isometric Force Sensor

Descriere

- Capacităţi: 25 la 1500g
- Abatere mică
- Sensibilitate mare de ieşire
- Domeniu superior de sensibilitate
- Metodă versatilă de conectare a semnalului
- Configuraţie versatilă de instalare

Seria de senzori de forţă UF1 produsă de LCM Systems a fost utilizată la scară largă în numeroase aplicaţii timp de mai bine de 40 de ani. UF1 s-a dovedit a fi prima opţiune pentru numeroase aplicaţii, inclusiv monitorizarea mişcării musculare şi a membranei, controlul tensiunii firelor şi materialelor textile, măsurarea viscozităţii lichidelor şi chiar forţa indusă aripilor fluturilor în timpul zborului

Există numeroase aplicaţii pentru care a fost utilizată seria UF1. Este extrem de populară în aplicaţiile unde este necesară măsurarea forţelor mici, beneficiind de un nivel bun de precizie, abatere minimă, precum şi în cazul în care este necesară o configuraţie flexibilă de montaj.

Seria UF1 poate fi furnizată individual sau în combinaţie cu oricare din gamele largi de instrumente de măsură şi control ale LCM Systems, pentru furnizarea unui pachet de monitorizare sau control simplu sau mai complex.

UF1 Low Range Isometric Force Sensor

Features :

- Ranges 25g (1oz) to 1500g (54oz)
- Low Deflection
- High Output Sensitivity
- High Overload Range
- Versatile signal connection method
- Versatile Mounting Arrangement

The LCM Systems UF1 series force sensors from the range of Pioden Transducers has been widely used in many applications for more than 40 years.

The UF1 has proved the first choice for many applications including muscular and membrane movement monitoring, yarn and fabric tension control, fluid viscosity measurement and even the force induced in butterfly wings during flight.

There are many other applications that the UF1 has been used in. It is most popular in applications where our customers need to measure small forces, with a good level of accuracy, minimal deflection and with a flexible mounting arrangement.

The UF1 can be supplied on it's own or combined with any of LCM Systems wide range of instrumentation

products to provide either a simple or more complex monitoring or control system.

Specification :

Range (FSO)	25g, 55g, 110g, 220g, 450g, 1000g, 1500g Equivalent to:- 1oz, 2oz, 4oz, 8oz, 18oz, 36oz, 54oz
Maximum Overload Range	2500g for all ranges
Output Sensitivity	4mV/V nominally
Zero Offset	< ±2% FSO
Accuracy	< ±0.3% FSO
Repeatability	< ±0.1% FSO
Excitation Voltage	10vdc maximum
Bridge Resistance	25g, 55g, 450g:- nominally 725Ω 110g, 220g, 1000g, 1500g:- nominally 1000Ω
Insulation Resistance	> 100MΩ at 50vdc
Operating Temperature Range	-40°C to +80°C
Compensated Temperature Range	+10°C to +60°C
Zero Temperature Coefficient	< ±0.05% FSO/°C
Span Temperature Coefficient	< ±0.05% FSO/°C
Environmental Protection Level	IP51
Deflection	< ±0.03mm
Connection Type	Via 4off PTFE insulated solder terminals Pin A + Signal Pin B + Excitation Pin C - Signal Pin D - Excitation

Caracteristici tehnice

Caracteristică	Detalii
Range (FSO)	25g, 55g, 110g, 220g, 450g, 1000g, 1500g Equivalent to:- 1oz, 2oz, 4oz, 8oz, 18oz, 36oz, 54oz
Maximum Overload Range	2500g for all ranges
Output Sensitivity	4mV/V nominally
Zero Offset	< ±2% FSO
Accuracy	< ±0.3% FSO
Repeatability	< ±0.1% FSO
Excitation Voltage	10vdc maximum
Bridge Resistance	25g, 55g, 450g:- nominally 725Ω 110g, 220g, 1000g, 1500g:- nominally 1000Ω
Insulation Resistance	> 100MΩ at 50vdc
Operating Temperature Range	-40°C to +80°C
Compensated Temperature Range	+10°C to +60°C
Zero Temperature Coefficient	< ±0.05% FSO/°C
Span Temperature Coefficient	< ±0.05% FSO/°C
Environmental Protection Level	IP51
Deflection	< ±0.03mm
Connection Type	Via 4off PTFE insulated solder terminals Pin A + Signal Pin B + Excitation Pin C – Signal Pin D – Excitation