

U2000 Series

Miniature Low-Profile Load Cell



Features

- Ultra-low profile
- High frequency response
- Low deflection
- Integral electrical connector
- Stainless steel construction
- 2.5kN to 25kN ranges available
- Load direction: compression
Load direction: tension (optional)

Benefits

- Low profile 18-25mm deep
- Compact size for use in small spaces
- Operating temperature from -20to 80°C
- Low weight 0.15-0.8kg
- same footprint for different ranges

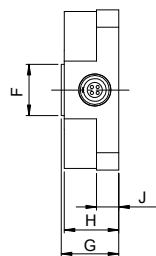
Applications

Materials Testing	Process Control
Component Fatigue Testing Applications	Calibration Test Rigs
Dynamic Force Applications	Load Measurement Applications

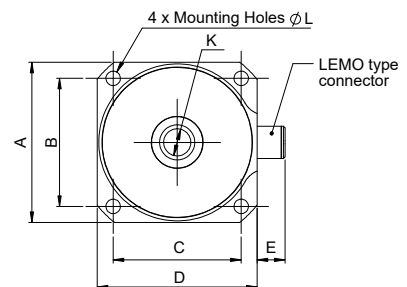
Electrical Connections

Red	Excitation (+)
Blue	Excitation (-)
Green	Output (+)
Yellow	Output (-)

SIDEVIEW



PLAN VIEW



Range kN	A	B	C	D	E	F	G	H	J	K	L	Weight kg
2.5 - 25	50	40	40	50	9	16	18	17	7	M10 x 1.5	4.5	0.15
50	85	71	71	85	9	32.5	25	22	-	M16 x 1.5	6.5	0.8

Specifications

Specifications by Range @+20°C(+68°F)

2.5kN

5kN

10kN

25kN

Operational mode		Compression
Static Error Band	± % Full Scale(max)	0.25
Overload Capacity	% Full Scale	150
Maximum Side Load	% Full Scale	50
Deflection at Rated Load	mm (max)	0.03
Thermal Zero Shift	%FRO/°C(max)	0.02
Thermal Sensitivity	%Reading/°C(max)	0.005

Electrical

Full Scale Output	mV/Volt (nom.)	2.0
Recommended Excitation Voltage	Volts dc	10
Maximum Excitation Voltage	Volts dc	15
Input Resistance	Ω (nom.)	750
Output Resistance	Ω (nom.)	700

Environmental Characteristics

Operating Temperature Range	°C	-20 to 80
Compensated Temperature Range	°C	0 to 60
Environmental Protection Level	IEC529	IP54

Notes

1. Signal polarity shown is for compression operation.
2. Each unit is supplied with a 5m-cable connector assembly.
3. A spherical load button accessory is available that screws into the centre of the load cell for compression use.
4. Calibration in compression only is standard.

Model Designation & Ordering Code

