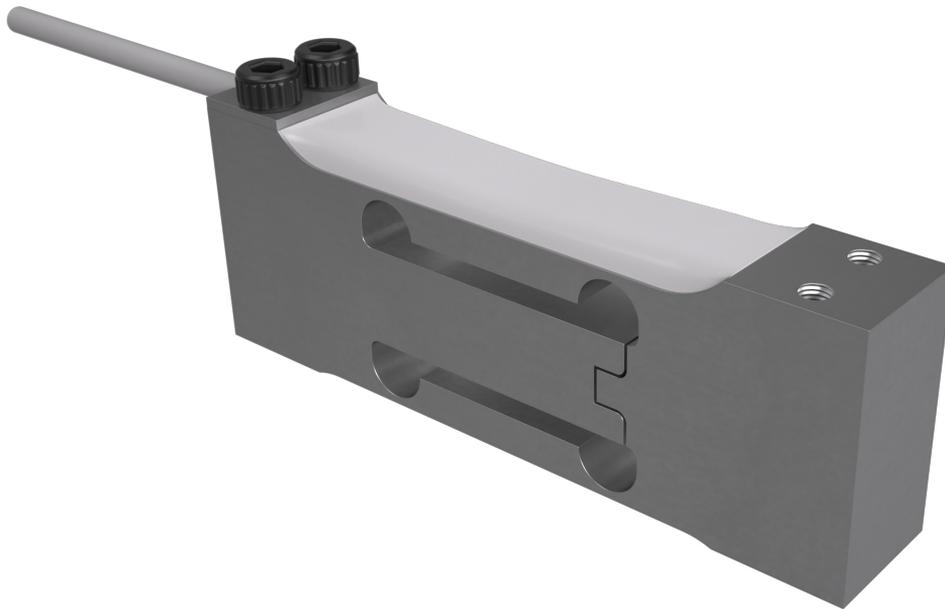


MC5 mini-beam load cell



product description

The MC5 is a precision-engineered, miniature beam load cell designed for demanding test and measurement applications where durability is key. With a single capacity of 5lb, the MC5 offers fatigue resistance up to 10 million cycles, making it ideal for applications requiring long-term reliability.

It features built-in overload protection, incorporating a machined physical stop within the sensor body. The MC5 provides accuracy within $\pm 0.03\%$ non-linearity of rated output and high-resolution performance with minimal deflection.

Constructed from aerospace-grade 2024 aluminium, the MC5 utilises Flintec-designed and manufactured strain gauges for enhanced output and superior thermal performance.

For applications requiring different capacities or specifications, consider the MC1, which offers a broader range of capacities (5lb to 250lb) without overload protection, or the MC4, available in 5lb and 10lb capacities, with built-in overload protection.

applications

Medical devices, test and measurement and general weighing applications.

accessories

A comprehensive range of electronic modules and accessories available



RoHS
compliant



key features

Overload protection to 1000% RO

Fatigue rated to 10M cycles

Compact miniature beam design

High performance with $\pm 0.03\%$ non-linearity

2mV/V output

Low profile with a height of 24.4mm (0.96 inch)

Cost effective solution

options

Range of cable lengths

Flying leads or cable connectors

TEDS (IEEE 1451.4)



specifications

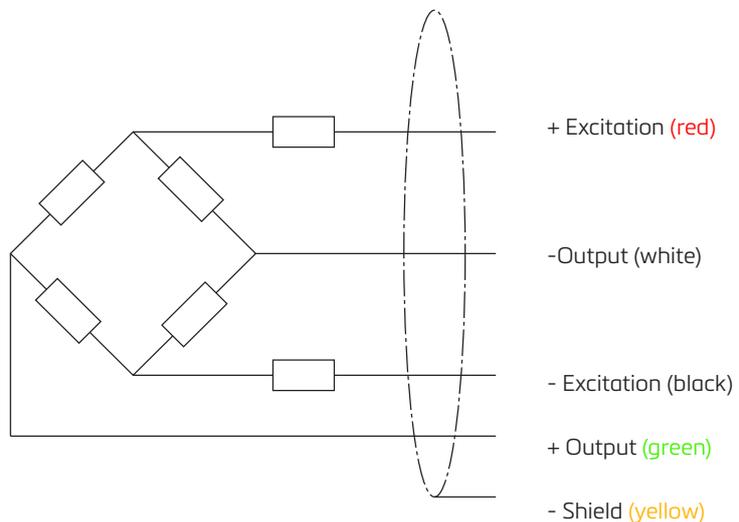
Maximum capacity E_{max}	lb	5
Metric equivalents (1lb=0.45359kg) 2dp	kg	2.27
Non-linearity	%*RO	±0.03
Hysteresis	%*RO	±0.03
Non-repeatability	%*RO	±0.01
Creep error (20 mins)	%*RO	±0.025
Compensated temperature range	°C (°F)	-10 to 40 (14 to 104)
Operating temperature range	°C (°F)	-40 to 80 (-40 to 176)
Temperature effect on Output	%*RO / °C Max (°F)	± 0.00144 (0.0008)
Temperature effect on Zero	%*RO / °C Max (°F)	± 0.0036 (0.002)
Rated output (Nominal)	mV/V	2
Zero balance	%*RO	±1
Bridge Resistance (Nominal)	Ω	350
Excitation voltage	VDC or VAC Max	15
Insulation resistance	MΩ	5000
Calibration	-	compression
Safe Overload	%*RO	1000
Cable Length	m (ft)	1.5 (5)
Sensor Element	-	Aerospace-grade 2024 aluminium

wiring

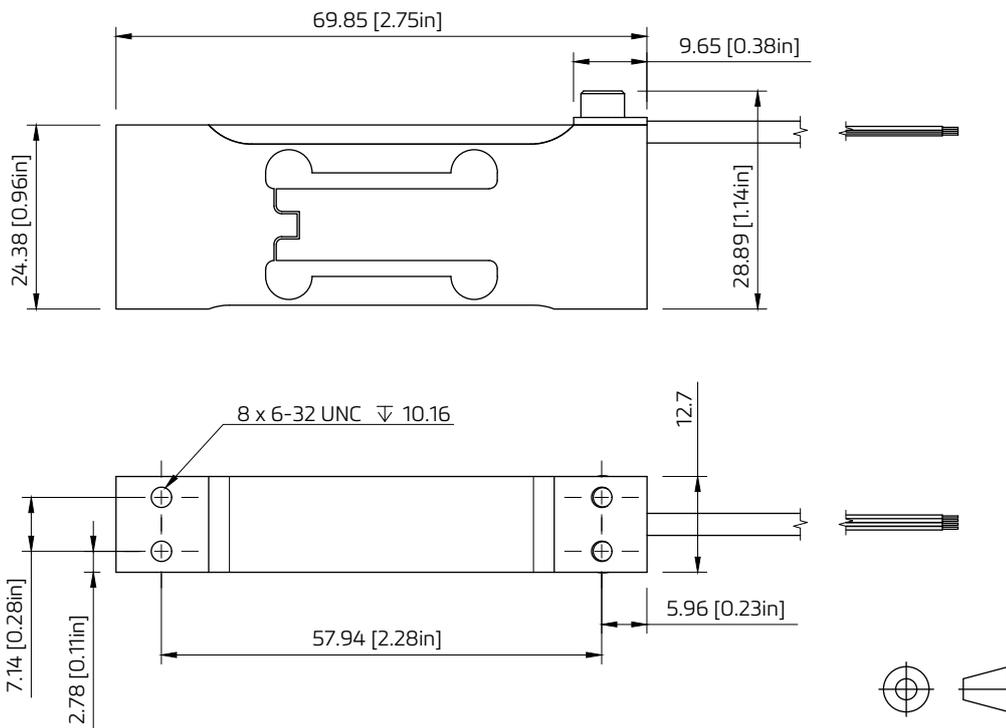
The sensor is provided with a 28AWG 4-conductor cable with a braided shield.

Standard cable jacket: PVC

Standard cable length: 1.5m (5ft)



product dimensions (mm)



Specifications and dimensions are subject to change without notice.