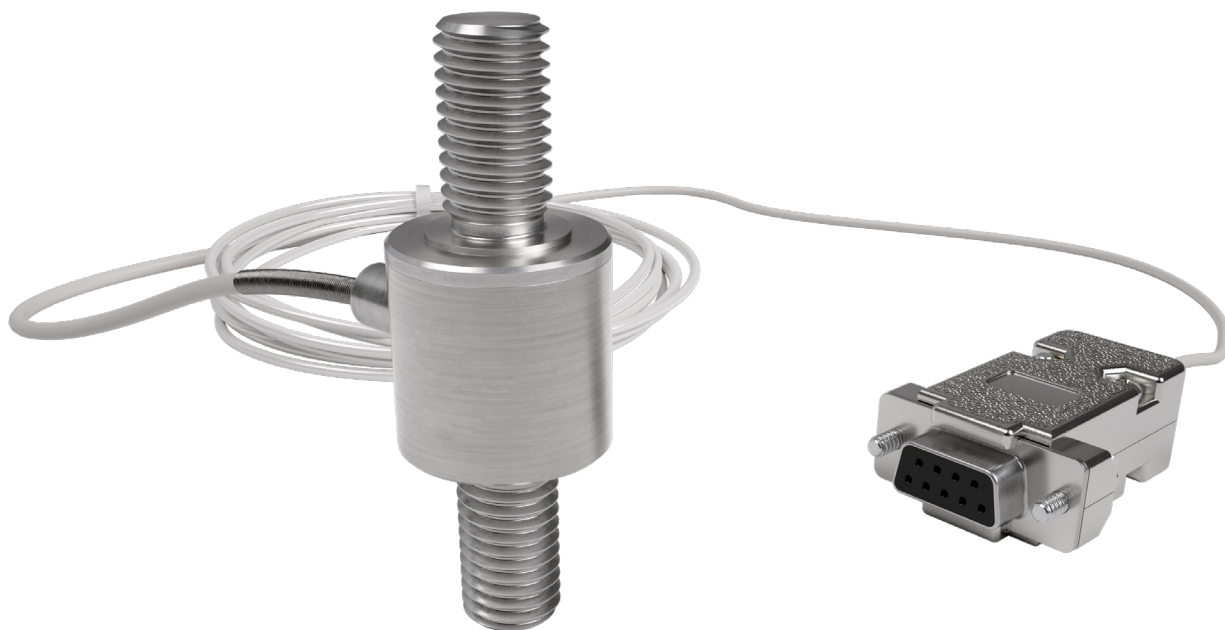


Y2 in-line threaded force sensor



product description

The Y2 is a series of miniature force sensors designed for applications in general test and measurement as well as machine monitoring and control.

The threaded construction enables the Y2 to be easily assembled into equipment under test where both tension and compression forces require monitoring. Available in a range of standard capacities from 10kN through to 50kN; the Y2 is a full-bridge, bonded foil strain gauge transducer that provides excellent long-term stability and ensures high performance even in applications requiring in excess of 1 million load cycles.

Constructed of high-grade stainless steel and protected from moisture with an epoxy bonded cover, ensuring excellent long-term performance in harsh environments. The Y2 can be supplied with standard cable configurations or with industry standard connectors. As an additional aid to system integrators, the Y2 can be supplied as a TEDS (Transducer Electronic Data Sheet) enabled smart transducer this provides an onboard memory chip storing manufacturing and calibration data.

Comprehensive range of electronic modules available.

applications

General test and measurement as well as machine monitoring and control. Ideal for packaging machinery, assembly machinery or end-of-line test equipment.

key features

Capacities of 10kN, 20kN & 50kN

Stainless steel construction

Environmental protection to IP64

High accuracy $\pm 0.5\%$

Compact, low-weight design

Temperature compensated from -15°C to $+70^{\circ}\text{C}$

options

Range of cable lengths

Flying leads or cable connectors

TEDS IEEE 1451.4 memory chip



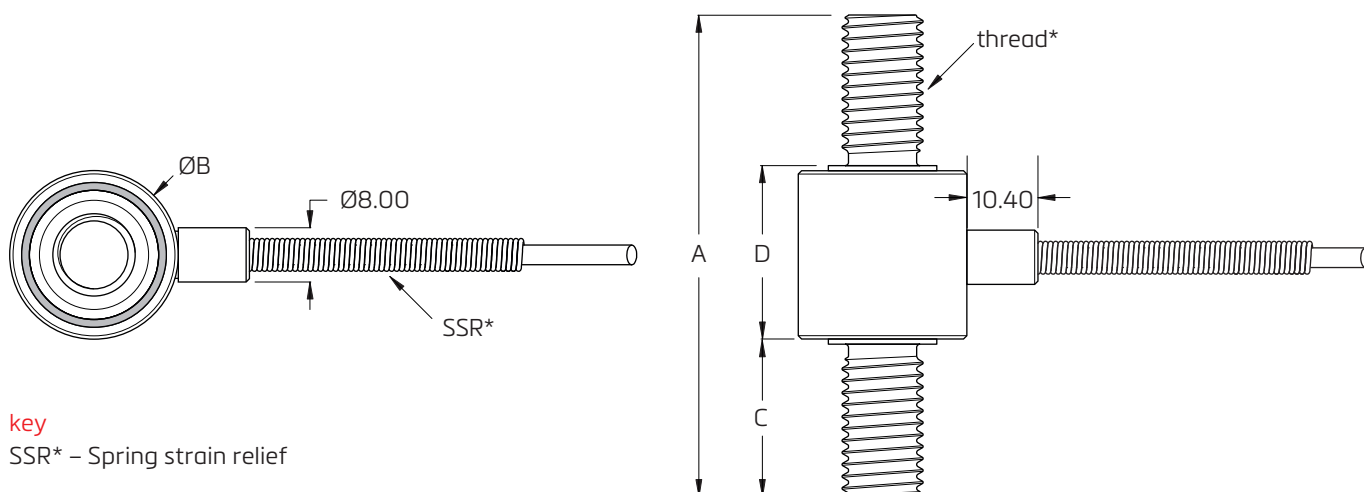
RoHS
compliant



specifications

Capacity	kN	10, 20, 50
Rated Output (RO)	mV/V	2 nom.
Excitation voltage (VDC OR VAC)	V	5 (recommended), 10 (max)
Allowable maximum load	% Full Scale	150
Non-linearity	% of RO Max	± 0.5
Hysteresis	% of RO Max	± 0.5
Repeatability	% of RO Max	± 0.1
Zero balance	% of RO Max	5
Zero temp coefficient	% FS/°C	0.01
Span temp coefficient	% FS/°C	0.02
Compensated temp range	°C	-15 to +70
Operating temp range	°C	-20 to +80
IP Rating	-	IP64
Bridge resistance	Ω	350 nom.

product dimensions (mm)



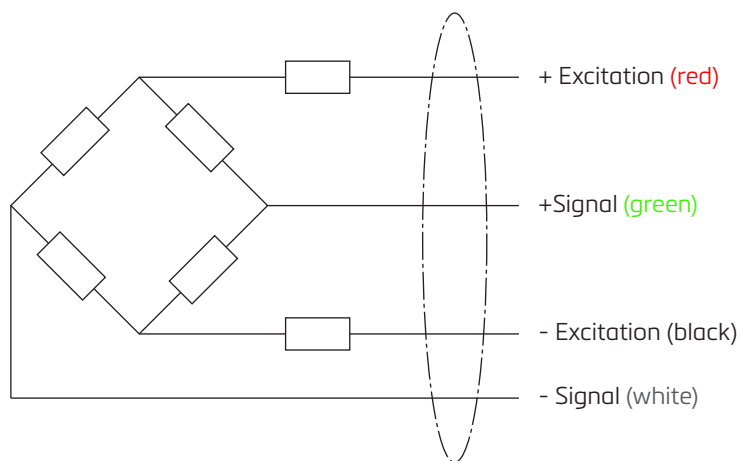
capacity	A	B	C	D	thread*
10kN	38.10 [1.50"]	24.80 [.98"]	10.65 [.42"]	17.55 [.69"]	M10x1.5-6g
20kN	70.40 [2.77"]	24.80 [.98"]	22.85 [.90"]	25.45 [1.00"]	M12x1.75-6g
50kN	70.40 [2.77"]	28.30 [1.11"]	22.10 [.87"]	26.20 [1.03"]	M16X2.0-6g

wiring

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

Cable length: 3m

Cable sheath: PVC



optional connector

The sensor can be supplied with an optional DB9 connector with integrated TEDS chip. Wiring configuration for the connector is shown below.

