

# MHT2 button force sensor



## product description

The MHT2 is a series of miniature force transducers designed for applications in general test and measurement as well as machine monitoring and control.

The low profile, small diameter design enables the MHT2 to be easily embedded into machinery or test equipment – ideal for packaging machinery, assembly machinery or end-of-line test equipment.

Available in a wide range of standard capacities from 500kg through to 5000kg; the MHT2 is configured for compression force measurement. Full-bridge, bonded foil strain gauge technology provides excellent long-term stability and ensures high performance even in applications requiring in excess of 1 million load cycles. Constructed from stainless steel and protected from moisture with an epoxy bonded cover.

The MHT2 can be supplied with standard cable configurations or with industry standard connectors. As an additional aid to system integrators, the MHT2 can be supplied as a TEDS (Transducer Electronic Data Sheet) enabled smart transducer this provides an on-board 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

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Capacities from 500kg to 5,000kg

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Stainless-steel construction

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Environmental protection to IP64

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High accuracy  $\pm 0.5\%$

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Low profile, low weight design

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Temperature compensated from  $-15^{\circ}\text{C}$  to  $+71^{\circ}\text{C}$

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## options

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Alternative thread sizes

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Range of cable lengths

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Flying leads or cable connectors

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TEDS IEEE 1451.4 memory chip

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Multi-point calibration available

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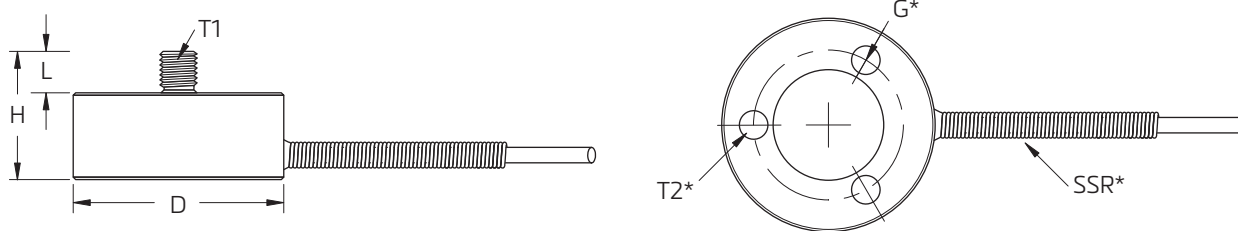
RoHS  
compliant



## specifications

Capacity	kg	500, 1,000, 2,000, 5,000
Capacity	lb	1,000, 2,000, 5,000, 10,000
Output	mV/V	1.5 ± 20%
Excitation voltage (vdc or vac)	V	5 (recommended), 10 (max)
Input impedance	Ω	350 nom. (700 ± 100 for 2000kg, 5000kg, 5000lb & 10000lb)
Output impedance	Ω	350 nom. (700 ± 100 for 2000kg, 5000kg, 5000lb & 10000lb)
Allowable maximum load	% FS	150
Non-linearity	% FS max	± 0.5
Hysteresis	% FS max	± 0.3
Repeatability	% FS max	± 0.1
Total error	% FS max	± 0.8
Zero balance	% FS max	2
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
Material	-	Stainless steel
IP Rating	-	IP64

## product dimensions (mm)



### key

G\* - Pitch circle diameter (PCD)

T2\* - 3x threaded blind holes (B mm deep)

SSR\* - Spring strain relief

Model	D	H	L	T1	T2	B	G
500kg 1,000kg	25	15	5	M5	M3	6	20
2,000kg 5,000kg	40	25	8	M12	M4	8	32

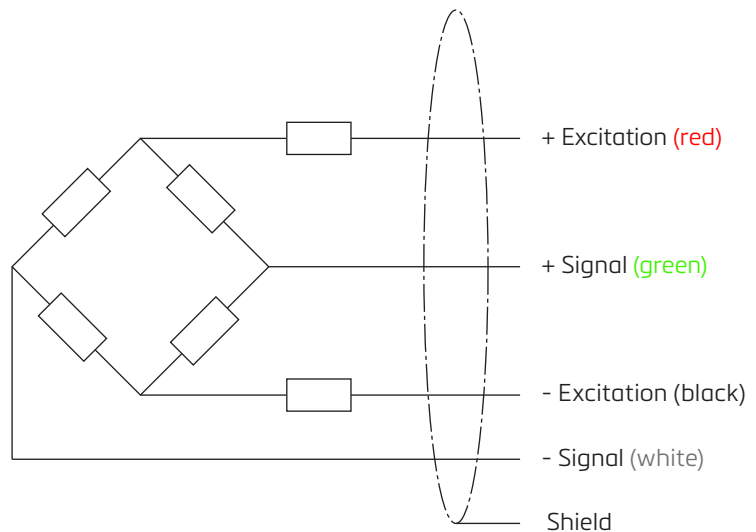
## wiring

The load button is provided a 32AWG for 500-1000kg, 1000-2000lb and a 28 AWG for 2000-5000kg, 5000-10000lb, 4-conductor braided shielded cable

Outer jacket diameter: 32AWG-2.2mm (0.086"), 28AWG-3.2mm (0.126")

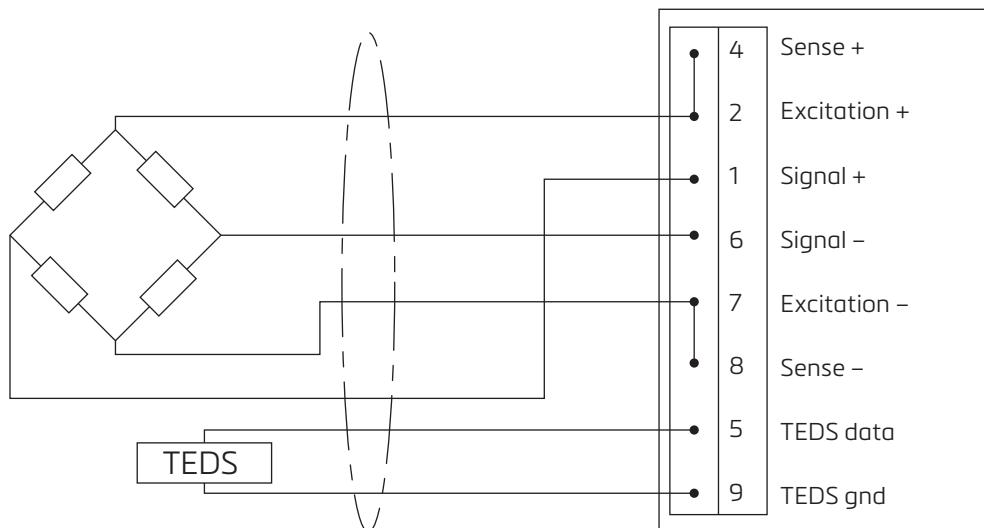
Standard cable length: 1m

Cable sheath material: 32AWG-Teflon, 28AWG-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.



Specifications and dimensions are subject to change without notice.