

Tension and Compression Force Sensor CTS01

Scope of Supply

Force sensor with flat design, 5 m cable (PVC) and connection variant T: cable gland, straight

Variant

N2: Plug connection, straight, M12, moulded

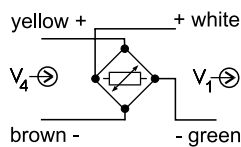
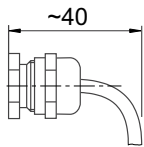
Additional Options

F: For use in explosive areas, incl. J-Box

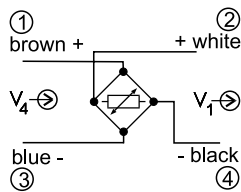
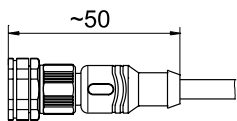


Connection

Variant T



Variant N2



V_4 Supply voltage
 V_1 Signal voltage

Special Features

- Low profile
- For dynamic and static force measurement in tension-compression range
- Made of stainless steel

The tension and compression force sensors CTS was developed for the precise measurement of forces, which works in axial direction.

For this purpose, the outer ring is flanged to the mounting surface and the force passes into the centre bore.

The force sensor function according to the membrane principle to which full bridge strain gauges are applied. The sensor elements captures the elongations in the membrane and transform them into electrical signals proportional to the force.

HAEHNE offers for all its sensors a corresponding range of amplifiers, e.g. the measuring amplifier MV125, to condition the measuring signal and deliver the bridge voltage supply.

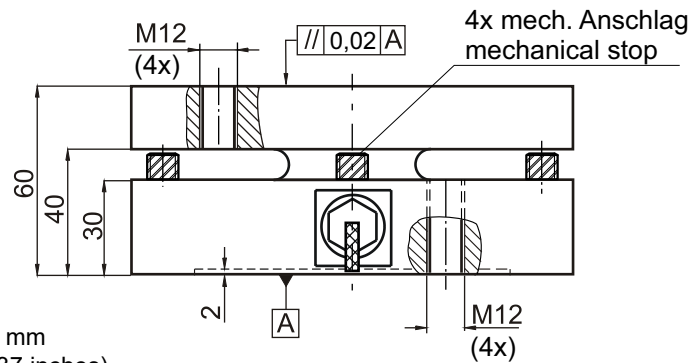
Due to the design principle applied the measuring errors remain negligibly small even in case of extreme eccentrically acting forces.

Ordering Example

CTS01-20k-TF

Type	
Nominal force	
Variants/ Options	

Technical Data	Values (%) based on nominal force
Nominal force	10, 20 kN
Max. operating force	160 %
Absolute max. force	1000 %
Combined error	0,5 %
Nominal rating	1 mV/V
Max. bridge supply voltage	700 Ω
Max. excitation voltage	10 V DC
Nominal ambient temperature	+ 10 ... +60° C (+50...+140° F)
Operational temperature range	- 10 ... +70° C (+14... +158° F)
Enclosure protection	IP 67
Sensor cable (standard)	PVC, grey, 4 x 0,34 mm ²



Dimensions in mm
(1 mm = 0.03937 inches)

