

## Product Description

### Compression-Tension-Sensor CTS 01

#### Special Features

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

## Scope of Supply

Force sensor with fixed cable (PVC), 5 m in length

## Additional Accessories

- **Option F:** Use in potentially explosive atmospheres (Adaption Modul J-Box contained in the scope of supply)



## Application

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

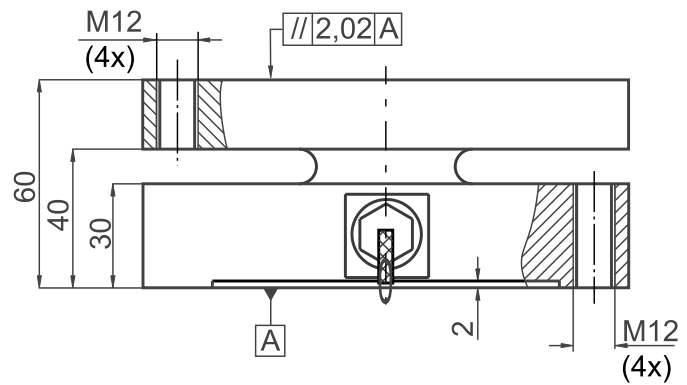
For this purpose, the outer ring is flanged to the mounting surface and the force passes into the centre bore.

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.

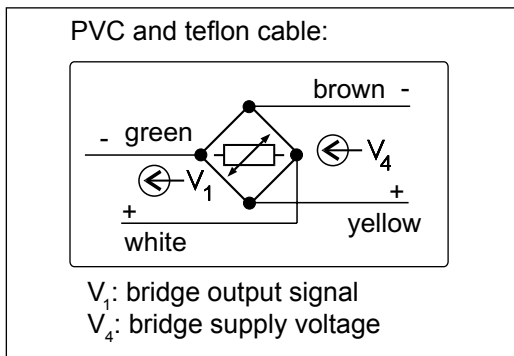
**HAEHNE** offers for all its sensors a corresponding range of amplifiers, e.g. the measuring amplifier **MV125**, to condition the measuring signal and deliver the bridge voltage supply.

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

Technical Data	Values (%) based on nominal force
Nominal Force	10, 20 kN
Max. operating force	250 %
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
Operational temperature range	-10...+70 °C
Enclosure protection	IP 67
Sensor cable (standard)	PVC, grey, 4 x 0,34 mm <sup>2</sup>
Sensor cable (option F)	PUR, blue, 2 x 2 x 0,34 mm <sup>2</sup>



**Measuring cable lead colors**



**Ordering data:**

**CTS 01 - 20k**

Nominal force in **kN**  
type

