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# Ring-Torsion load cell *C34N*



## Features



- Material: stainless steel
- Nominal load: 10,000 kg - 200,000 kg
- Accuracy class C3 up to 100 t; 200 t G3
- Construction: laser-welded, protection class: IP65
- Particularly robust for tough continuous use in industrial applications
- Verifiable according to OIML R60 up to 3000 D (models up to 100 t)



*Scope of application:*

- Silo and tank weighing
- Container scales
- Vehicle scales
- Track scalesF
- orce measurements in the process industry
- Column force sensor after calibration in Newtons



+49 (0) 5491.999.689.0
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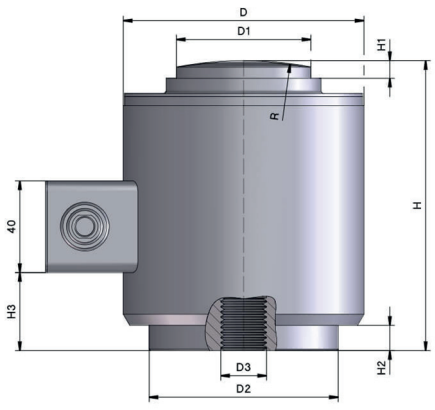
**Compressive force sensors for industrial applications**

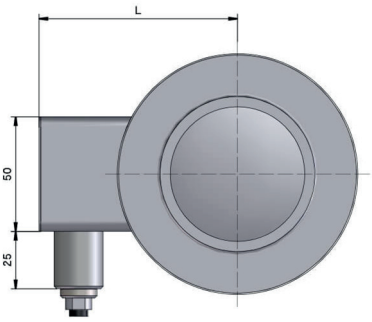
The symmetrically designed C34N multi-column load cells are used for measuring
cells are used to measure compressive forces in a wide variety of industrial applications. They are very compact and deliver extremely precise and reproducible measurement results even in long-term use in harsh industrial environments.
and reproducible measurement results even in long-term use in harsh industrial environments. Four square columns on which strain gauges are force-fitted serve as the measuring element. Due to this special "four-column construction", the load cells are generally insensitive to eccentric loads. The applied load causes an elastic deformation of the columns. Thereby, the applied strain gauges provide a measuring voltage proportional to the load. The C34N compression load cell is legal for trade up to 3000D according to OIML, R60. It is made of high-quality stainless steel, laser-welded and meets the requirements of protection class IP65.

## TECHNICAL DETAILS

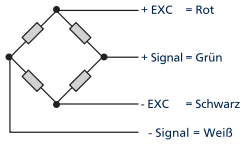
| | | |
|---|---|---|
| **Accuracy class according to OIML R 60** | | G3, C3 |
| **Nominal load ($E_{max}$)** | t | 10.000 kg, 40.000 kg, 100.000 kg, 150.000 kg, 200.000 kg |
| **Number of division values ($n_{LC}$)** | | 3000 |
| **Nominal value ($C_n$) / Characteristic tolerance** | mV/V | 2,0 ± 0,002 / ± 0,01 mV/V |
| **Minimum preload ($E_{min}$)** | | 0 |
| **Limit load ($E_L$)**<br>**Breaking load ($E_d$)** | % from Emax | 150<br>300 |
| **Recommended supply voltage ($U_{ref}$)**<br>**Maximum permissible supply voltage ($B_U$)** | V | 5 - 12<br>18 |
| **Zero adjustment** | % v. $C_n$ | ≤ 1 % |
| **Input resistance ($R_{LC}$) at reference temperature**<br>**Output resistance ($R_O$) at reference temperature** | Ω | 450 ± 5<br>480 ± 5 |
| **Insulation resistance** | MΩ | > 5 000 |
| **Nominal temperature range ($B_T$)** | °C | - 10 ... + 40 |
| **Protection class according to (DIN 40.050 / EN 60529)** | | IP65 |
| **Cable length** | | 20 m, 10m (10t) |
| **Material** | | Stainless steel |

## TECHNICAL DRAWINGS




**Elektrischer Anschluss**
4 -Leiter - Kabel




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BOSCHE GmbH & Co. KG
Reselager Rieden 3
49401 Damme