IHAEHNE

Force measuring bearing

RC-series

Very favorable price/performance ratio

Nominal forces from 50 N to 1,500 N

Large measuring range up to 100:1

Accuracy class up to 0.1%

Compact design

Mounting type





FORCE SENSOR

The **RC-series** force sensor offers compact dimensions and is designed for measuring the web tension on rollers with rotating shafts. The RC can be used flexibly as a force measuring bearing for flange mounting.

The **flexible mounting options** include the possibility of installing the force sensor either with four fastening elements from the front or with a single fastening element from the rear.

Like all *HAEHNE* web tension sensors, the inner part acts as a double bending beam system with the familiar properties thanks to its special design:

- high linearity
- high rigidity

HAEHNE force measuring bearings with strain gauges in a full bridge circuit provide very precise signals even with a small wrap angle and low material tension. A downstream measuring amplifier from the HAEHNE range processes the measuring signals and feeds the strain gauge full bridge.

OPTIONS

Angled plug connection

\$1: M12 (Metal) **\$2**: M12 (injected)

Straight connector N1: M12 (Metal) N2: M12 (injected)

Plug connection with cable

W5: 5m cable **W10**: 10m cable **W20**: 20m cable

ADVANCED OPTIONS

F: Designed for operation in hazardous areas, incl. J-Box

Increased accuracy

G3: 0,1%

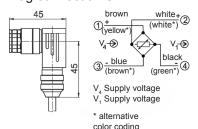
Increased temperature up to

H1: 120°C

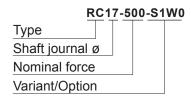
Vacuum version
V: up to 10⁻⁷ millibar

STANDARD CONNECTION

Plug connection S1



BESTELLBEISPIEL



SCOPE OF DELIVERY

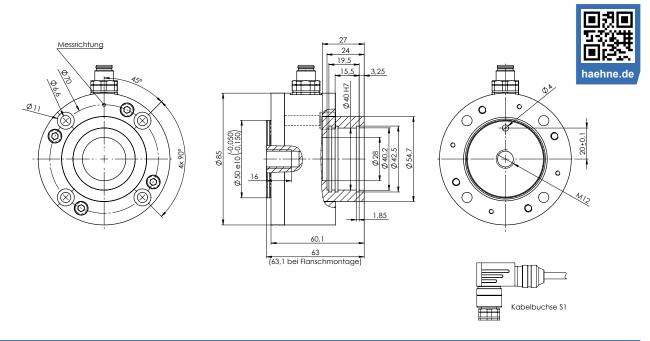
Force sensor with adapter and cable socket

Standard connection S1W0: Self-assembly cable socket (metal) 90° angled without cable

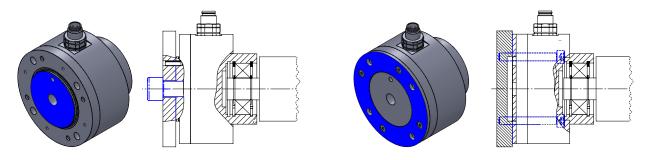
ADDITIONALLY AVAILABLE

- Mounting bracket (alternative mounting)
- Connection cable (pre-assembled)
- Measuring amplifier





RC-SERIES: MOUNTING OPTIONS



Mounting via center with 1x M12

Mounting via flange with 4x M6

| Technical data | % Values related to the nominal force |
|------------------------------|---------------------------------------|
| Nominal forces (N) | 50; 125; 250; 500; 1000; 1500 |
| Max. Service force | 160% |
| Limit force | 1000% |
| Nominal characteristic value | 1,5 mV/V |
| Accuracy | 0,3% |
| Reproducibility | 0,05% |
| Measuring Range | 100:1 |
| Nominal temperature range | +10+60°C |
| Service temperature range | -10+70°C |
| Bridge resistance | 1000 Ohm |
| Max. Supply voltage | 10 VDC |
| Protection class | IP 42 |
| Material | Stainless steel |

