Force measuring bearing
RC-series



Very favorable price/performance ratio

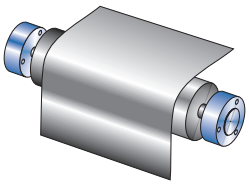
Nominal forces from 50 N to 1,500 N

Large measuring range up to 1:100

Accuracy class up to 0.1% FNOM

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
S1: M12 (Metal)
S2: 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

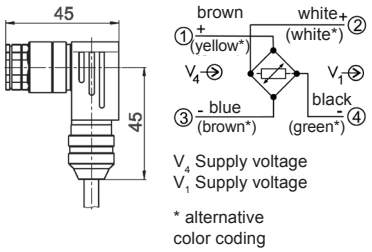
Increased accuracy
G3: 0,1%

Increased temperature up to
H1: 120°C

Vacuum version
V: up to 10^{-7} millibar

STANDARD CONNECTION

Plug connection S1



V_4 Supply voltage
V_1 Supply voltage

* alternative color coding

BESTELLBEISPIEL

RC17-500-S1W0

Type
Shaft journal ø
Nominal force
Variant/Option

SCOPE OF DELIVERY

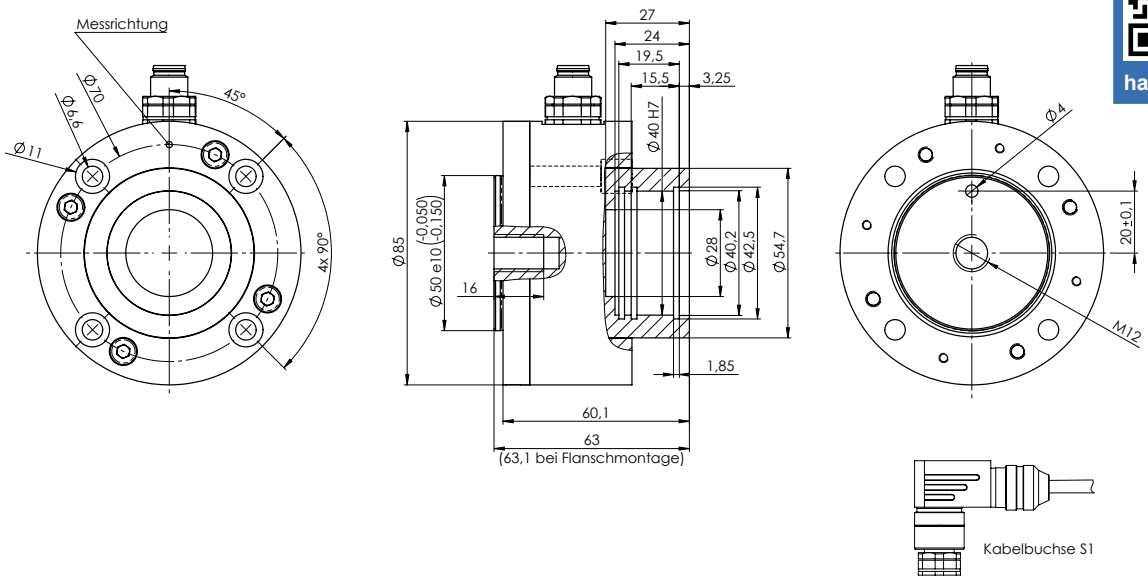
Force sensor with adapter and cable socket

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

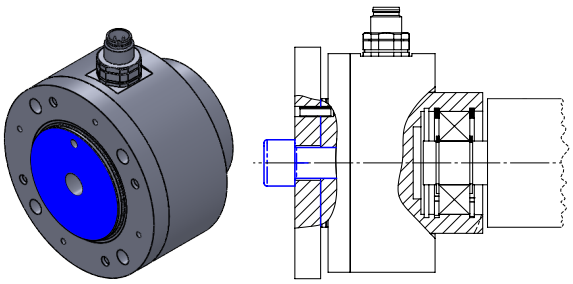
ADDITIONALLY AVAILABLE

- Mounting bracket (alternative mounting)
- Connection cable (pre-assembled)
- Measuring amplifier
- Cover for shaft seal

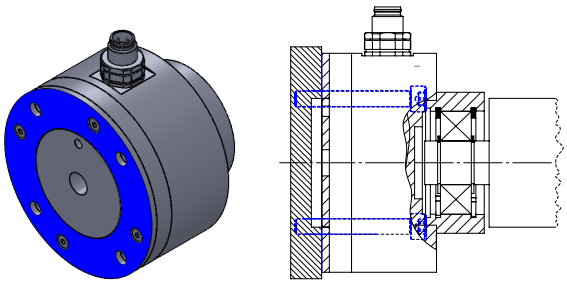
haehne.de



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	1:100
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

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Technische Änderungen vorbehalten · RC PB GB 01_25.indd