

Force measuring roller RCR-series

Very favorable price/performance ratio

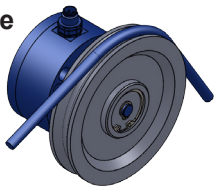
Nominal forces from 50 N to 1.500 N

Large measuring range up to 100:1

Accuracy class up to 0.1%

Simple mounting of standard pulleys

Mounting type



FORCE MEASURING ROLLER

The force measuring roller of the **RCR-series** offers compact dimensions and is used for measuring the tensile force in linear materials. The RCR can accommodate a variety of standardized pulleys and is therefore very versatile.

The flexible mounting options the force transducer either with four fastening elements from the front or with 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 measuring strips 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

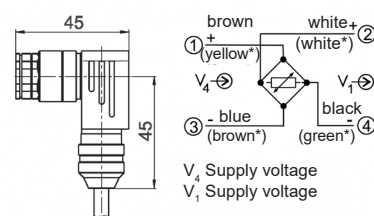
H1.5: 150°C with cable gland "T" and 5m Teflon cable

Vacuum version

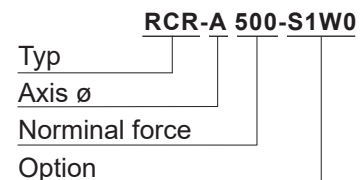
V: up to 10⁻⁷ millibar

STANDARD CONNECTION

Plug connection S1



ORDERING EXAMPLE



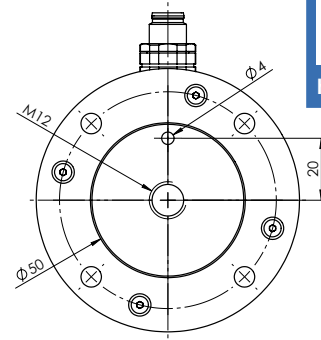
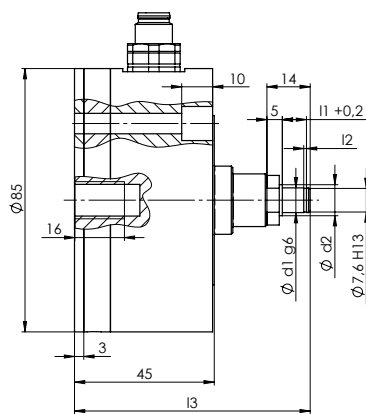
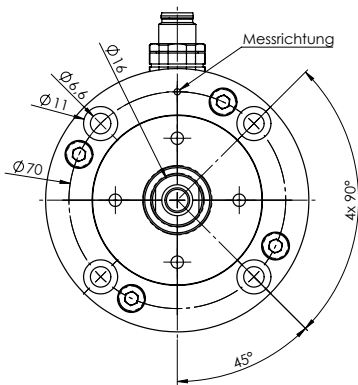
SCOPE OF DELIVERY

Force sensor and cable socket (without sheave)

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

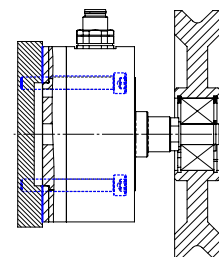
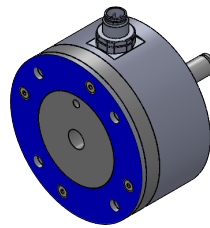
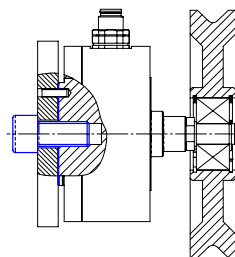
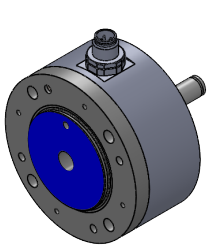
ADDITIONALLY AVAILABLE

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



Journal size	d1	d2	l1	l2	l3
RCR-A	8	10	7,8	09	76
RCR-B	10	12	17	1,1	86
RCR-C	12	14	17	1,1	86

RCR-SERIES: MOUNTING OPTIONS



Mounting via center with 1x M12

Mounting via flange with 4x M6

Technical data	Values (%) based on nominal force
Nominal forces (N)	50; 125; 250; 500; 1000; 1500
Max. operating force	160%
Absolute max. force	1000%
Nominal rating	1,5 mV/V
Accuracy	0,3%
Reproducibility	0,05%
Measuring range	100:1
Nominal temperature range	+10...+60°C
Operating temperature range	-10...+70°C
Nominal resistance	1000 Ohm
Max. Supply voltage	10 VDC
Protection class	IP 42
Material	Stainless steel



follow us on LinkedIn