HAEHNE

Force sensor
RCZ-series

Very favorable price/performance ratio

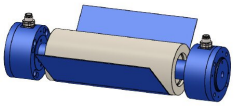
Nominal forces from 50 N to 2.000 N

Large measuring range up to 100:1

Accuracy class up to 0.1%

Simple mounting of standard pulleys

Mounting type



FORCE SENSOR

The **RCZ-series** force sensor offers compact dimensions and is designed for measuring the tensile force on running material webs for rollers with integrated roller bearings, without an axle.

The flexible mounting options include the possibility of installing the force transducer either with four fasteners from the front or with a single fastener 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* program processes the measurement 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

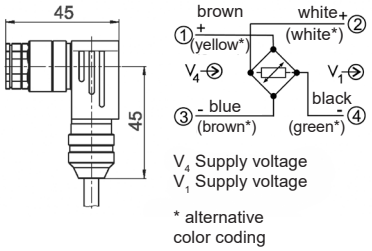
Increased accuracy
G3: 0,1%

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



V_4 Supply voltage
V_1 Supply voltage

* alternative color coding

ORDERING EXAMPLE

RCZ500-S1W0

Type
Nominal force
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

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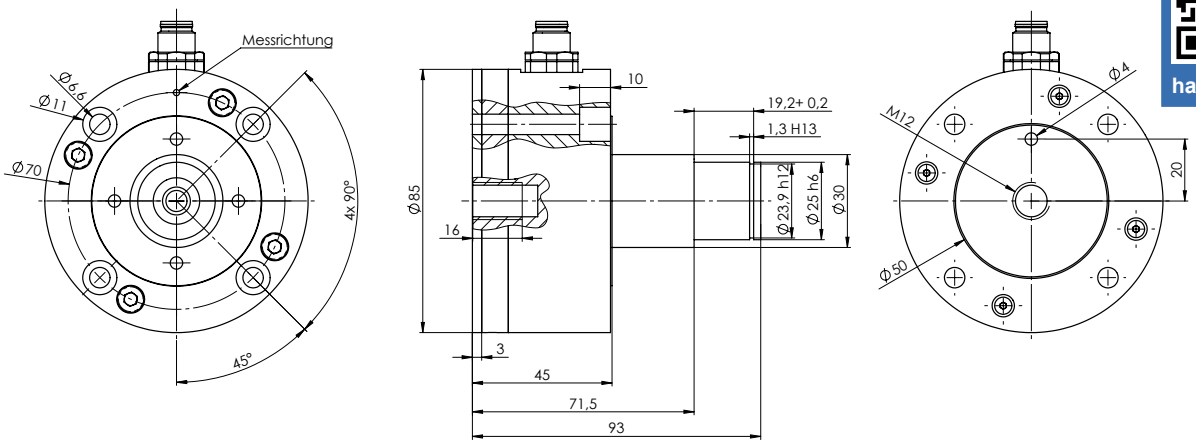
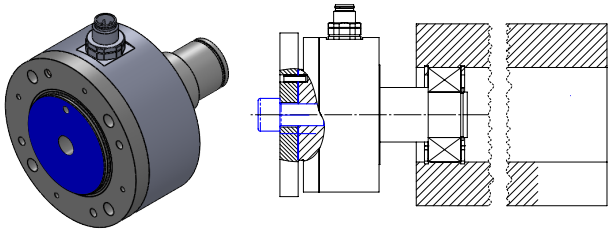
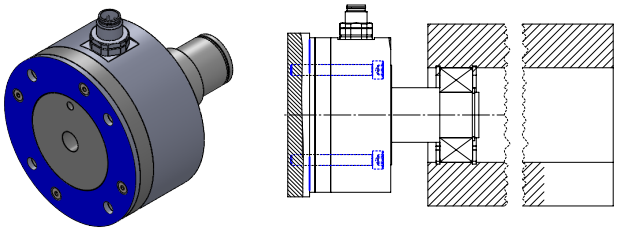


RCZ-SERIES: MOUNTING OPTIONS



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; 2000
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

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