

Move the
future ...

RACO- Electric Actuators

Intelligent Sensor Actuator



Tactile linear movement
with integrated load cell in thrust tube

Electrical cylinder with a load cell built into the thrust tube. When embedded into a feedback control loop it will enable precise thrust control.

- Integrated load cell for compact unit size 4 & 5
- Direct thrust measurement in the thrust tube of the cylinder
- Requirement for an intelligent sensor control of the electrical cylinder
- Pre-selected load cell range rated to the electrical cylinder
- High dynamic load range
- High sensitivity
- Measurement of thrust (compression/tension)
- Applications: Assembly and joining of parts; Thrust controlled test bench inspections; Overload shut down
- Possible motor combinations with the sensor cylinder: AC- Motor; DC - Motor; Servo Motor; Stepper Motor

Powerful performance

Protected by tactile sensor

For Industrial Applications



Certified by DIN EN ISO 9001

Application examples



Positioning and control cylinder T6E4 with integrated load cell in the thrust unit for positioning and parts joining applications with thrust measurement or overload shut down. Positioning of slit gate and butter fly valves.



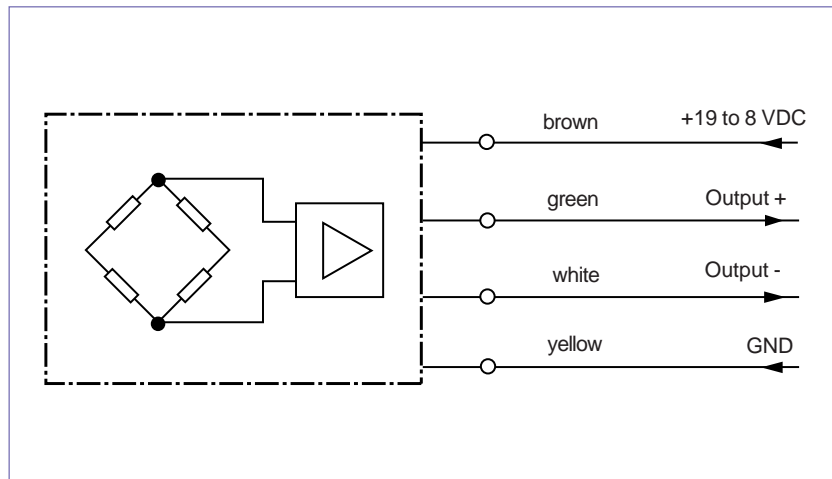
Electrical cylinder K6E5 with servo or stepper motor. The load cell is integrated into the thrust tube assembly. Ideal for positioning and thrust control on test benches and assembly and material handling areas.

Please request information on load cells for other size cylinders and thrust ranges.

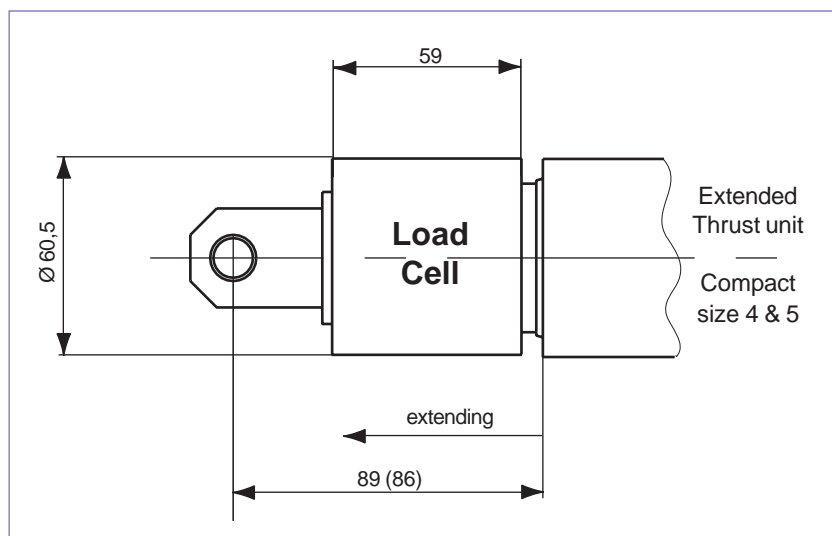
Technical data for the load cell

Load Cell	Nominal Thrust +/- 10 kN (2,250 lb.)(compression/tension) Class 2 strain gage with integrated amplifier
Output Signal	+/- 10 VDC; accuracy class 0,2% or 4 / 12 / 20 mA; accuracy class 2%
Sensitivity	1 mV/V
Power Supply	19 to 28 VDC
Reference Temp.	23 °C (74 °F)
Nominal Temp. Range	-20 to 60 °C (-4 to 140 °F)
Operating Temp.	-30 to 70 °C (-22 to 158 °F)
Zero Point	< 1% of nominal thrust
Max. Load	15 kN (3,370 lb.) (compression/tension)
Shear Load	> 30 kN (6,730 lb.) (compression/tension)
Isolation Resistant	> 5 * 10 ⁹ Ohm
Connector	Connection cable 1.5 m (5 ft.) long with open leads

Electrical connection diagram for load cell



Dimension Diagram for load cell with Compact unit size 4 & 5



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