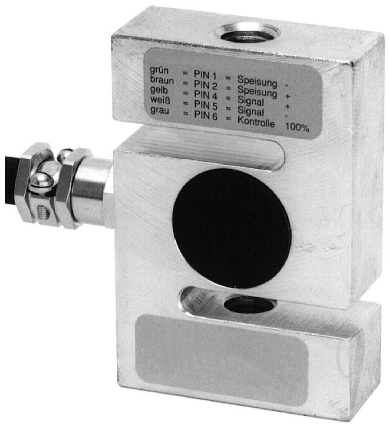
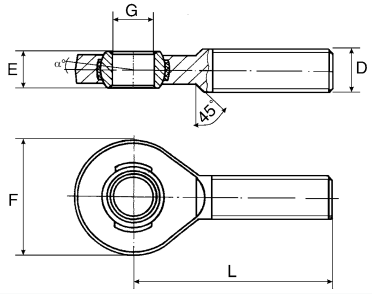
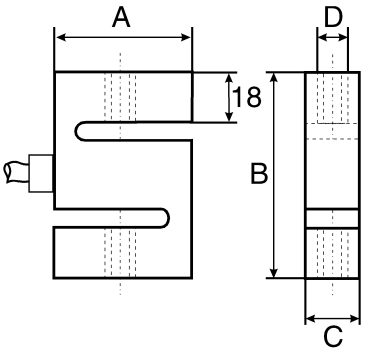
Tension and Compression Sensor K25



- Wire strain gauges in four-conductor full-bridge circuit.
- Control resistance for final adjustment of the measuring range.
- All measuring ranges that are specified in Newton can also be supplied in kg ranges

! All ALMEMO® devices provide easy push-button adjustment of no-load and final value.





Technical Data:

Max. load limit:	150% of final value
Maximum dynamic load:	70% of final value
Reference temperature:	23°C
Cable:	3m long, with axial ALMEMO® connector
Accuracy for tension:	<±0.1% of fin. val.
Accuracy for tension and compression:	<±0.2% of fin. val.
Nominal measuring path:	<0.15mm
Operative range:	–10 to +70°C

Drift error at permanent load:	<0.07% per 30min
Permissible lateral forces:	±60% of fin. val.
Protection system:	up to 1kN: IP 65, from 2kN: IP 67
Material:	up to 1kN: aluminium 2 to 50kN: stainless steel
Dimensions in mm	up to 10kN: A=50, B=75, C=20, D=M12 20kN, 50kN: A=65, B=85, C=40, D=M24 x2

Options for all Force Transducers	Order no.		Order no.
Indication of measured values with ALMEMO® devices in kg	OK9000K	Indication of measured values with ALMEMO® devices in N and kg	OK9000NK

Accessories	Order no.		Order no.
Knuckle eyes with external thread M 12 (2 pcs) (dimensions in mm: D = M 12, E = 16, F = 32, G = 12, L = 54)	ZB902512	Knuckle eyes with external thread M 24 x 2 (2 pcs) (dimensions in mm: D = M 24 x 2, E = 26, F = 62, G = 25, L = 94)	ZB902524

Types (including test certificate)	Order no.
Measuring range 0.02kN 0.05kN, 0.1kN, 0.2kN, 0.5kN, 1kN, 2kN, 5kN or 10kN please specify	**FKA0251**
Measuring range 20kN	**FKA0252**
Measuring range 50kN	**FKA0255**
Factory calibration KK9xxx force (traction / thrust) for sensor or measuring chain (sensor + device) (see chapter Calibration certificates)	

Other designs are available on request

Tension and compression sensor FKA 012 with male thread terminal up to 1000 kN

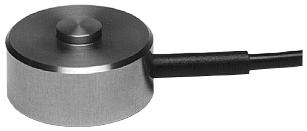


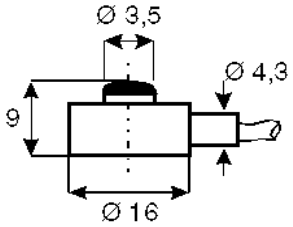
Tension and compression sensor FKA 1563 low height, with male thread terminal up to 2 kN



10/2013 • We reserve the right to make technical changes.

Compression Sensor K 22





- Wire strain gauges in four-conductor full-bridge circuit.
- Control resistance for final adjustment of the measuring range.
- All measuring ranges that are specified in Newton can also be supplied in kg ranges.

! All ALMEMO® devices provide easy push-button adjustment of no-load and final value.

Technical Data:

Max. load limit:	150% of final value
Maximum dynamic load:	70% of final value
Reference temperature:	23°C
Cable:	radial, 3m long with ALMEMO® connector
Accuracy:	<±0.5% of final value

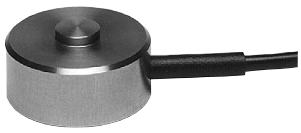
Nominal measuring path:	<0.2mm
Operative range:	–10 to +50°C
Drift error at permanent load:	0.1% per 30min
Protection system:	IP 65
Material:	stainless steel

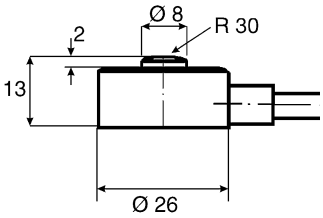
Type (including test certificate) **Order no.**

Measuring range 100 N, 200N, 500N, 1000N or 2000N please specify **Order no. FKA022**

Factory calibration KK9xxx force (tension or compression) for sensor or measuring chain (sensor + device) (see chapter Calibration certificates)

Compression Sensor K 1613





- Wire strain gauges in 4-conductor full-bridge circuit.
- Control resistance for final adjustment of the measuring range.
- All measuring ranges that are specified in Newton can also be supplied in kg rangesr.

! All ALMEMO® devices provide easy push-button adjustment of no-load and final value.

Technical Data:

Max. load limit:	150% of final value
Maximum dynamic load:	70% of final value
Reference temperature:	23°C
Cable:	radial, 3m long with ALMEMO® connector
Accuracy:	<±0.5% of final value

Nominal measuring path:	<0.2mm
Operative range:	–10 to +50°C
Drift error at permanent load:	0.1% per 30min
Protection system:	IP 65
Material:	stainless steel

Type (including test certificate) **Order no.**

Measuring range 0.5kN, 1kN, 2kN, 5kN, 10kN or 20kN (50 kN on request) please specify **FKA613**

Factory calibration KK9xxx force (tension or compression) for sensor or measuring chain (sensor + device) (see chapter Calibration certificates)

Compression Sensor

Other designs are available on request



Compression sensor FKA 2528
inexpensive Protective class IP60
0.2 to 10 kN



Compression sensor FKA 013
other measuring ranges
from 10 N up to 100 kN

Torque sensor

Other designs are available on request



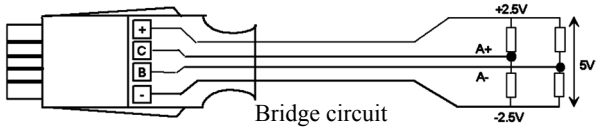
Static torque sensor
e.g. with square terminal 2 to 5000 Nm



Rotating torque sensor (slip ring)
e.g. with square terminal 1 to 5000 Nm

ALMEMO® input connector for measuring bridges, millivolt / volt differential

With zero-symmetrical voltage supply of ±2.5 V stabilized from the ALMEMO® device



Bridge circuit

Technical Data:

Sensor supply:	
Voltage UF:	5V ± 0.05V
Temperature coefficient:	<50ppm/°C
Output current:	max. 100mA
Quiescent current	approx. 3 mA

New

Energy saving	So long as the measuring point is not selected, the bridge voltage remains switched OFF.

Types

Model	Meas. Range	Resolution	Order no.
55mV DC	–10.0 to +55.0	1 µV	**ZA9105FS0**
26mV DC	–26.0 to +26.0	1 µV	**ZA9105FS1**
260mV DC	–260.0 to +260.0	10 µV	**ZA9105FS2**
2.6V DC	–2.6 to +2.6*	0.1 mV	**ZA9105FS3**

* Data may vary depending on device; (see data sheet per device)

10/2013 • We reserve the right to make technical changes.