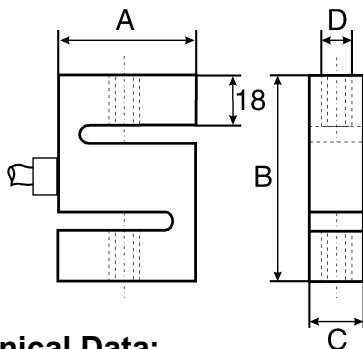
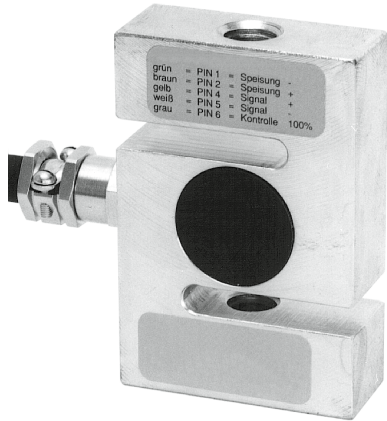


Force, Displacement

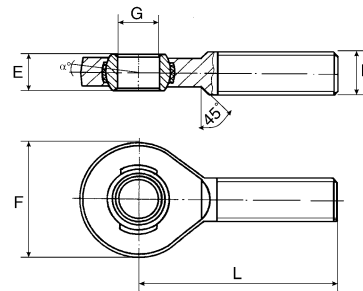
Tension and Compression Sensor K25



- 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.

Other version: Force sensor with digital ALMEMO® D7 measuring plug, see page 91
Digital sensor, can be calibrated without measuring device. High measured value resolution.



Technical Data:

Max. load limit:	150% of final value	Drift error at permanent load:	<0.07% per 30min
Maximum dynamic load:	70% of final value	Permissible lateral forces:	±60% of fin. val.
Reference temperature:	23°C	Protection system:	up to 1kN: IP 65, from 2kN: IP 67
Cable:	3m long, with axial ALMEMO® connector	Material:	up to 1kN: aluminium 2 to 50kN: stainless steel
Accuracy for tension:	<±0.1% of fin. val.	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
Accuracy for tension and compression:	<±0.2% of fin. val.		
Nominal measuring path:	<0.15mm		
Operative range:	-10 to +70°C		

Options for all Force Transducers

Options for all Force Transducers	Order no.	Options for all Force Transducers	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

Accessories	Order no.	Accessories	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)

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

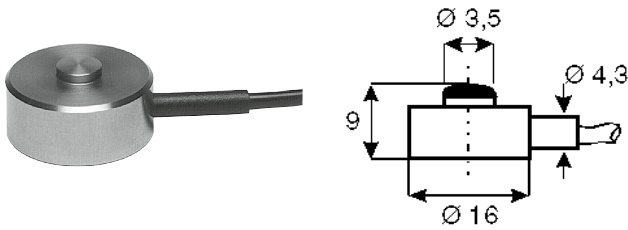


Tension and compression sensor FKA 1563 low height, with male thread terminal up to 2 kN



Force

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.

Other version: Force sensor with digital ALMEMO® D7 measuring plug, see page 91
Digital sensor, can be calibrated without measuring device. High measured value resolution.

Technical Data:

Max. load limit:	150% of final value	Nominal measuring path:	<0.2mm
Maximum dynamic load:	70% of final value	Operative range:	-10 to +50°C
Reference temperature:	23°C	Drift error at permanent load:	0.1% per 30min
Cable:	radial, 3m long with ALMEMO® connector	Protection system:	IP 65
Accuracy:	<±0.5% of final value	Material:	stainless steel

Type (including test certificate)

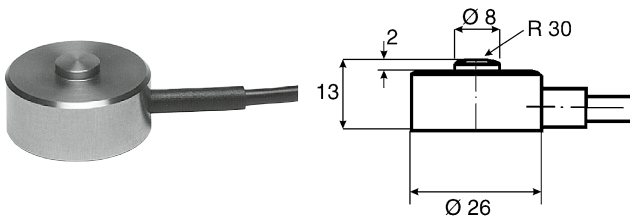
Measuring range 100 N, 200N, 500N, 1000N or 2000N please specify

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

Order no.

Order no. FKA022

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 ranges.

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

Other version: Force sensor with digital ALMEMO® D7 measuring plug, see page 91
Digital sensor, can be calibrated without measuring device. High measured value resolution.

Technical Data:

Max. load limit:	150% of final value	Nominal measuring path:	<0.2mm
Maximum dynamic load:	70% of final value	Operative range:	-10 to +50°C
Reference temperature:	23°C	Drift error at permanent load:	0.1% per 30min
Cable:	radial, 3m long with ALMEMO® connector	Protection system:	IP 65
Accuracy:	<±0.5% of final value	Material:	stainless steel

Type (including test certificate)

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

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

Order no.

FKA613

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



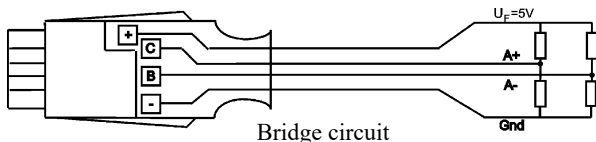
Static torque sensor
e.g. with square terminal 2 to 5000 Nm



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

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

Full bridges are measured in four-conductor circuits. The power supply for the bridges is provided by the ALMEMO® plug.



For technical data, see chapter “Input connectors”.

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

Digital ALMEMO® D7 measuring plug for bridge differential mV

For force transducers (compression / tension), torque transducer or strain gauges.

High resolution or high conversion rate. Only for current ALMEMO® V7 measuring instruments, i.a. precision measuring instrument ALMEMO® 710 or ALMEMO® 202-S.

Full bridges are measured in four-conductor circuits. The power supply for the bridges is provided by the ALMEMO® D7 plug.

For technical data, see chapter “Input connectors”.

Types:

Range	Display range	Conversion rate	Order no.
DMS1*	±200 000 digits	10 mops	ZKD700FS
or DMS2	±50 000 digits	1000 mops	

* Factory setting : The desired measuring range can be programmed on the ALMEMO® V7 device itself.

Option: Configuration of ALMEMO® D7 measuring connector; measuring rate 1000 mops **OA9007PRM1000**