

## Force Sensor KB16x32 10kN

Item number: 2526



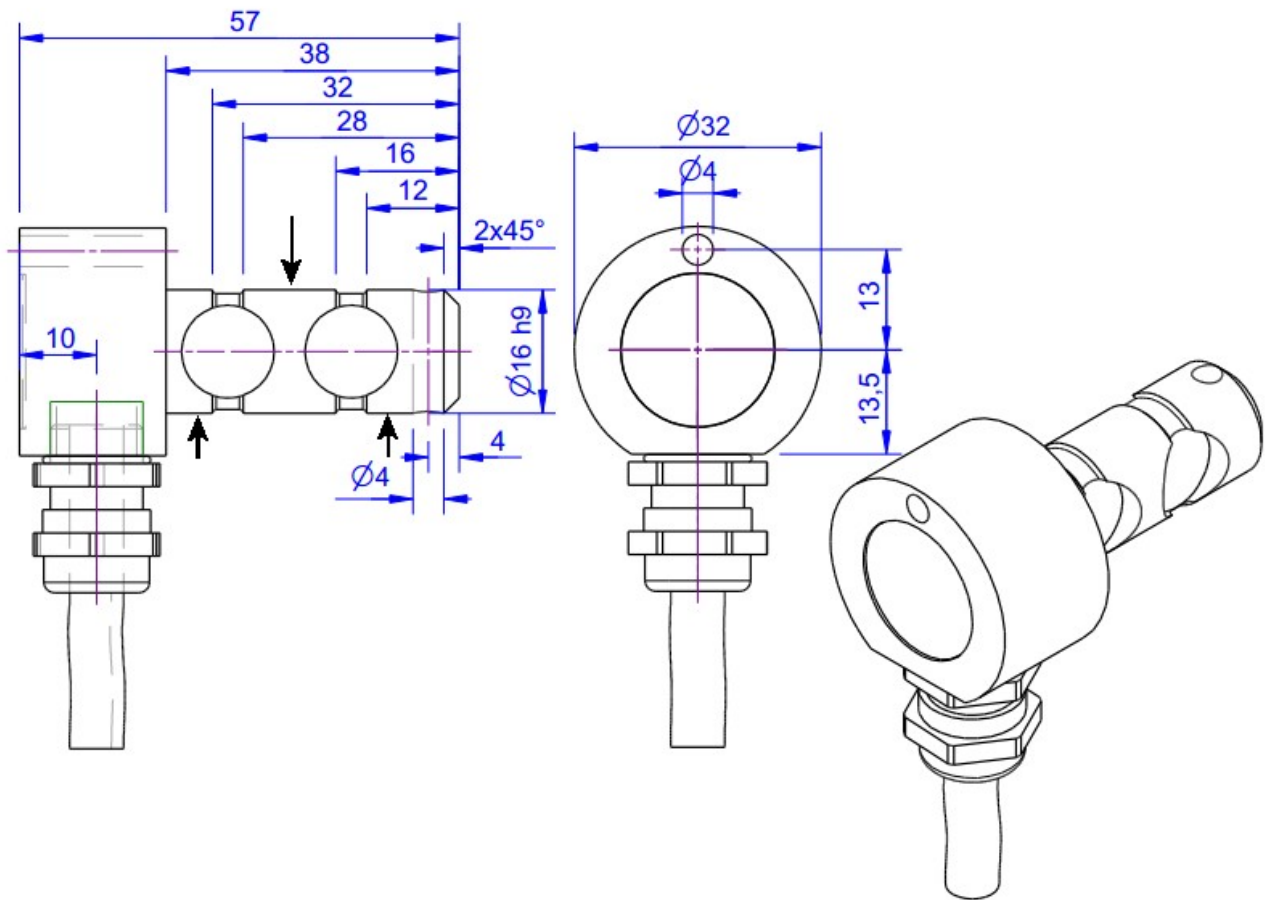
The plug gauge KB16x32 can be used to measure the force in connection with a fork head of the DIN 71152 / DIN ISO 8140.

The  $\varnothing 4$ mm holes in the head and bolt can be used as an anti-rotation device.

### Optional special version

- Protection class IP68: from rated force 200 N
- Pressure range up to 8 bar

## Technical Drawing



## Technical Data

Basic Data		Unit
Type	Messbolzen	
Force direction	Tension/Compression	
Rated force F <sub>x</sub>	10	kN
Force introduction	Zylinder	
Dimension 1	Ø16x6	
Sensor Fastening	Zylinder	
Dimension 2	2xØ16x6	
Operating force	150	%FS
Rated displacement	0.04	mm
Material	Stainless steel	
Dimensions	Ø16mm x 32mm	
Height	16	mm
Length or Diameter	38	mm
Bending moment limit	50	Nm
Variants	1kN... 10kN	

Electrical Data		Unit
Input resistance	390	Ohm
Tolerance input resistance	40	±
Output resistance	350	Ohm
Tolerance output resistance	1	±
Insulation resistance	2x10 <sup>9</sup>	Ohm
Rated range of excitation voltage from	2.5	V
Rated range of excitation voltage to	5	V
Operating range of excitation voltage from	1	V
Operating range of excitation voltage to	10	V
Zero signal	0.05	mV/V
Rated output	1	mV/V / FS

Accuracy Data		Unit
Accuracy class	1	
Relative linearity error	0.2	%FS
Relative zero signal hysteresis	0.05	%FS
Temperature effect on zero signal	0.02	%FS/K
Temperature effect on characteristic value	0.02	%RD/K
Relative creep	0.1	%FS
Environmental Data		Unit
Rated temperature range from	-10	°C
Rated temperature range to	70	°C
Operating temperature range from	-10	°C
Operating temperature range to	85	°C
Storage temperature range from	-10	°C
Storage temperature range to	85	°C
Environmental protection	IP66	

Abbreviation : RD: „Reading“; FS: „Full Scale“;1) The exact nominal sensitivity is indicated in the test report.

## Pin Assignment

Channel	Symbol	Description	Wire color	PIN
	+Us	positive bridge supply	brown	
	-Us	negative bridge supply	white	
	+Ud	positive bridge output	green	
	-Ud	negative bridge output	yellow	

Pressure load: positive output signal.  
Shield- transparent.