

Force Sensor KS575 50kN

Item number: 6762



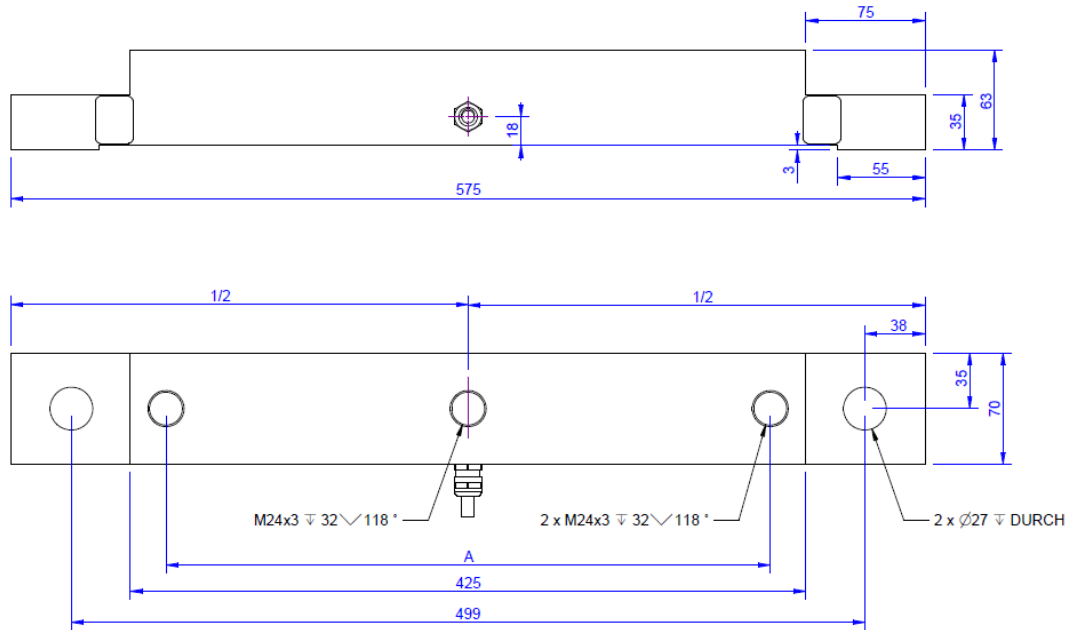
The KS575 force sensor is suitable for measuring forces between two bearing surfaces.

For example, this force sensor is used to measure the bearing force of pedestal bearings. Other dimensions can be supplied on request.

Optional special version

- Protection class IP68: from rated force 200 N
- Vacuum version from 10^{-5} mbar
- Pressure range up to 8 bar
- Suitable for cleanrooms

Technical Drawing



Technical Data

Basic Data		Unit
Type	Kraftsensor	
Force direction	Tension/Compression	
Rated force F _x	100	kN
Force introduction	Internal thread	
Dimension 1	3xM24x3	
Sensor Fastening	Through-hole	
Dimension 2	2xØ27	
Operating force	150	%FS
Rated displacement	0.1	mm
Lateral force limit	20	kN
Material	Stainless steel	
Dimensions	575mm x 70mm x 63mm	
Height	63	mm
Length or Diameter	575	mm
Variants	50kN... 100kN	

Electrical Data		Unit
Input resistance	200	Ohm
Tolerance input resistance	25	±
Output resistance	350	Ohm
Insulation resistance	2x10 ⁹	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	0,1	
Relative linearity error	0.1	%FS
Relative zero signal hysteresis	0.1	%FS
Temperature effect on zero signal	0.01	%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	IP65	

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	

Screen - transparent. Pressure load: positive output signal