

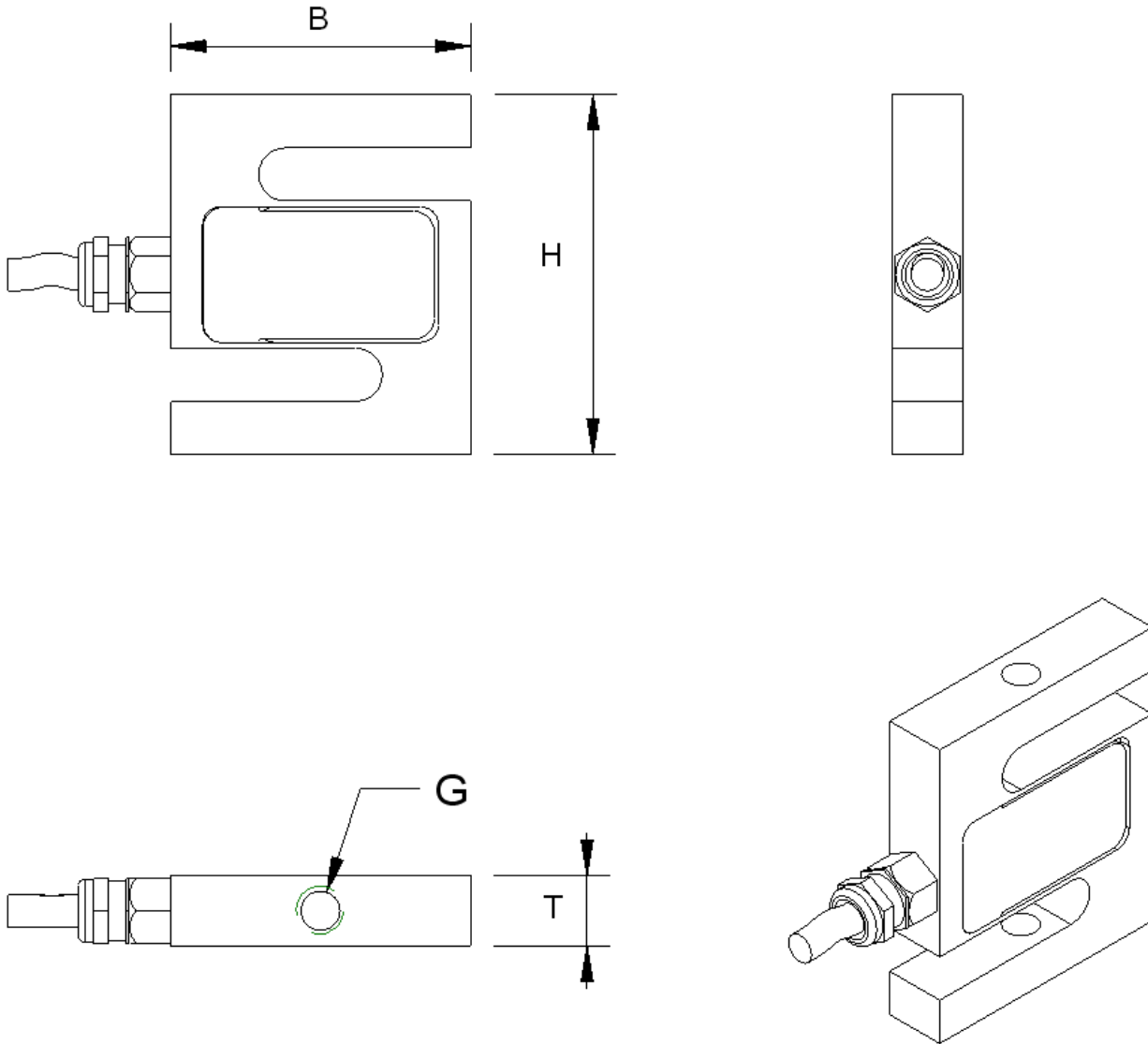
KD9363s 50kg, 100kg, 250kg, 500kg, 1,0t, 2,5t, 5,0t, 7,5t



Description

The force sensor KD9363S is used for tensile and compressive force measurements and for weighing. The areas of application are e.g. wire rope measurements, test beds, overload securing for lifting tools, process controllers as well as weighing scales. The force sensor KD9363S conforms to the stringent European requirements for use in calibration-obligatory weighing scales. The method of protection is IP67.

Dimensions



Technical Data

Force sensor

Type	Force sensor
Force direction	Tension / Compression
Force introduction	Inner thread
Sensor Fastening	Inner thread
Operating force	150 %FS
Rated displacement	0.3 mm
Lateral force limit	100 %FS
Material	Stainless steel
Natural frequency	2 kHz

Electrical Data

Input resistance	400 Ohm
Tolerance input resistance	50 ±
Output resistance	350 Ohm
Tolerance output resistance	10 ±
Insulation resistance	5x10 ⁹ Ohm
Rated range of excitation voltage f	2.5 ... 5 V
Operating range of excitation voltage f	1 ... 10 V
Zero signal	0.05 mV/V
Rated output	3 mV/V / FS

Precision

Accuracy class	0,05%
Relative linearity error	0.02 %FS
Relative zero signal hysteresis	0.02 %FS
Temperature effect on zero signal	0.02 %FS/K
Temperature effect on characteristic value	0.01 %RD/K
Relative creep	0.1 %FS

Connection Data

Connection type	4 conductor open
Cable length	6 m

Temperature

Rated temperature range f	-10 ... 70 °C
Operating temperature range f	-10 ... 85 °C
Storage temperature range f	-10 ... 85 °C
Environmental protection	IP65

Abbreviation: RD: „Reading“; FS: „Full Scale“;

1) The exact nominal sensitivity is indicated in the test report;









Pin Configuration

Symbol	Description	Wire colour
+Us	positive bridge supply	red
-Us	negative bridge supply	black
+Ud	positive bridge output	green
-Ud	negative bridge output	white

Shield- transparent.

Pressure load: positive output signal

accessories

	Description	Description
	Rod End Mx	Rod End with male thread Mx, Hole Diameter x, Thread: right, Hight: x mm, Application: for KD24s, KD9363s, KD40s, KD80s;
	Calibration Certificate kn/20/5	Factory calibration certificate for force to 20 kN in accordance with DIN EN ISO / IEC 17025 for test materials monitoring according to DIN ISO 9001: 2008 with 5 load levels and 3 series of measurements.
	Calibration Certificate kn/200/5	Factory calibration certificate for force to 200 kN in accordance with DIN EN ISO / IEC 17025 for test materials monitoring according to DIN ISO 9001: 2008 with 5 load levels and 3 series of measurements.
	GSV-1H	Measuring amplifier in top-hat rail housing for sensors with straingages. Analogue output -10V...+10V, limiting frequency 250Hz, 4 input sensitivities from 2.0mV/V.
	GSV-2TSD-DI	Measuring amplifier in desktop-housing for sensors with straingages. Serial port RS232, USB port, analogue output -5V...+5V, limiting frequency 260Hz, input sensitivity 3.5mV/V.
	GSV-3USB	Measuring amplifier in aluminum housing (IP54) for sensors with straingages. Limiting frequency 1250Hz, input sensitivity 2 / 3,5 / 10 mV/V.