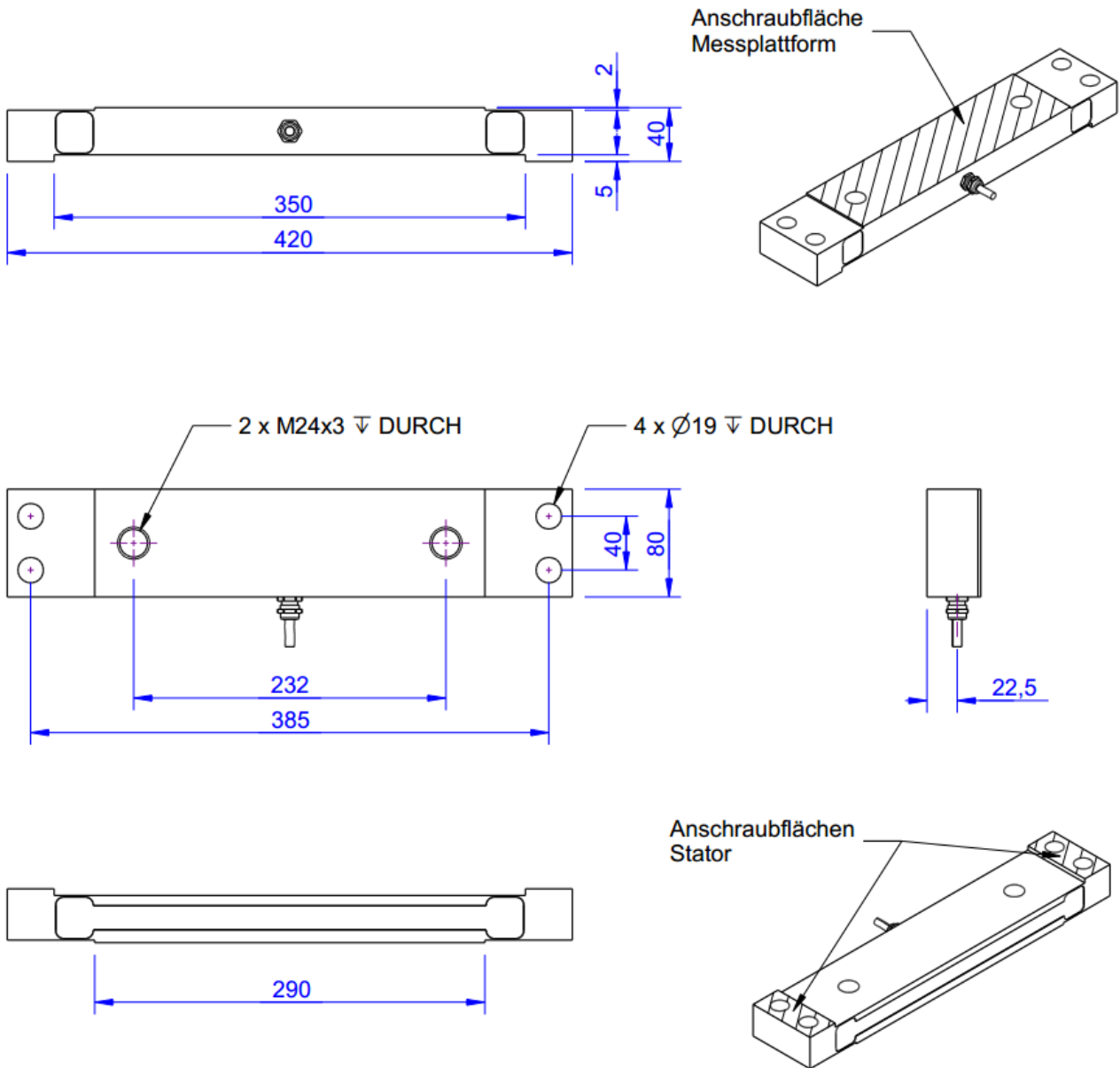


## KS420 10kN, 20kN, 50kN



### Description

## Dimensions





## Technical Data

### Kraftsensoren

Type	Force sensor
Force direction	Tension / Compression
Force introduction	Inner thread
Dimension 1	2xM24x3
Sensor Fastening	T through bore
Dimension 2	4xØ19
Operating force	150 %FS
Rated displacement	0.1 mm
Material	Tool steel
Surface	electrogalvanized
Height	40 mm
Length or Diameter	420 mm

### Elektrische Daten

Input resistance	200 Ohm
Tolerance input resistance	25 Ohm
Output resistance	350 Ohm
Insulation resistance	2 GOhm
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	1 mV/V / FS

### Precision

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

### Connection Data

Connection type	4 conductor open
Name of the connection	2x2x0,25/PUR



Cable length 5 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.*

*2) optional: 780 ±80 Ohm Pin Configuration*








## Pin Configuration

Channel	Symbol	Description	Wire colour
	+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*

## accessories

	Description	Description
	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.
	GSV-1H	Measuring amplifier in top-hat rail housing for sensors with strain gauges. Analogue output -10V...+10V, limiting frequency 250Hz, 4 input sensitivities from 2.0mV/V.
	GSV-2T SD-DI	Measuring amplifier in desktop-housing for sensors with strain gauges. 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 strain gauges. Limiting frequency 1250Hz, input sensitivity 2 / 3,5 / 10 mV/V.
	GSV-6K	analog amplifier pcb for sensors with strain gauges. Analog output configurable; sampling frequency is 10Hz ... 25kHz, input sensitivity adjustable 0.1 mV / V ... 8 mV / V