

Load Cell electric

Type KKLN



The KKLN load cells with integrated distribution plate and electric pressure transducer are used for remote monitoring of loads. Main applications are static pile load tests and the control of stress in steel struts or equivalent stiffening elements. The load cell works on the hydraulic measuring principle - when load is applied on the cell the pressure of the internal hydraulic fluid increases. We offer a choice of three different electric transducers - mV (type AU), mA (type AI) or Frequency (type VW).

Advantage

- hydraulic measuring principle
- easy installation
- very robust design
- low construction height
- integrated distribution plate

Handheld Readout Units

- HMG for Model AU and AI
- VWM for vibrating wire sensors VW

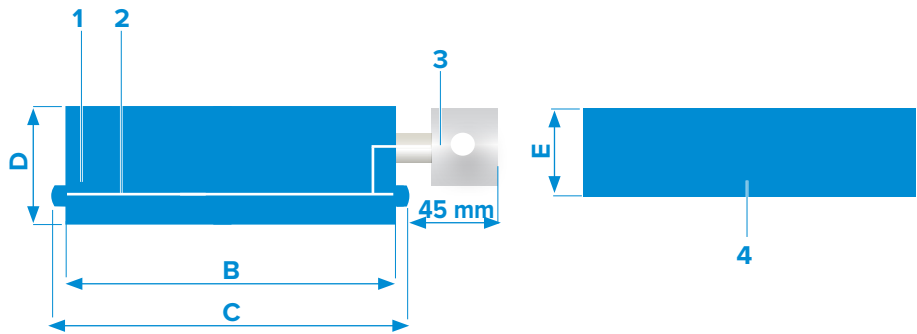
Data logging

For automated readings you can use a battery-operated data logger DL or by digitalization of the signal with a DC Controller or Multiplexer you can use a measuring station MCC. On request it is possible to equip the load cell with a temperature sensor for further observations.



Bild: Data logger

TYPE AU, AI AND VW
for electrical remote measurement



SYSTEM AND MODEL

- 1. Pressure Pad
- 2. Hydraulic liquid
- 3. Load distribution plate
- 4. Electrical sensor

type KKLN AI, AU or VW	Belastung (kN)		dimensions (mm)		weight (kg)		load cell with integrated distribution plate
	nom.	max.	B (∅)	C (∅)	D	E	
KKLN 120	120	140	78	98	65	30	3
KKLN 250	250	300	111	132	65	30	5,1
KKLN 500	500	600	131	152	65	32	6,8
KKLN 750	750	900	131	152	65	32	6,8
KKLN 1000	1000	1200	189	210	65	45	13,5
KKLN 1400	1400	1600	189	210	65	45	13,5
KKLN 2000	2000	2400	218	240	80	65	21,8
KKLN 3000	3000	3600	284	306	80	76	36,5
KKLN 5000	5000	6000	358	382	90	85	64,4

*Other measuring ranges on request

TECHNICAL DATA



AU



AI



VW

AU PRESSURE SENSOR
PIEZORESISTIVE,
4 WIRE TECHNIQUE

Power Supply:	1 mA opt. 10 V DC
Output signal:	0 up to max. 250 mV
Measuring range:	120 up to 5000 kN
Resolution:	< 1 kN
Linearity:	< 0,5% FS
Temperature range:	-30°C up to 70°C
Temperature error:	< 0,1%°C FS
Protection class:	IP68
Temperature sensor:	AD592 (optional)

AU PRESSURE SENSOR PIEZORESISTIVE
SEE BEFORE, WITH INTEGRATED
AMPLIFIER

Power Supply:	10 up to 30 V DC
Output signal:	4 up to 20 mA
Measuring range:	120 up to 5000 kN
Resolution:	<1 kN
Linearity:	< 0,5% FS (0,1%)
Temperature range:	-30°C up to 70°C
Temperature error:	< 0,1%°C FS
Protection class:	IP68
Temperature sensor:	AD592 (optional)

PRESSURE SENSOR WITH VIBRATING
WIRE TECHNIQUE

Output signal:	frequency
Measuring range:	120 up to 5000 kN
Resolution:	<1 kN
Linearity:	< 0,5% FS
Temperature range:	-30°C up to 70°C
Temperature error:	< 0,1%°C FS
Protection class:	IP68
Temperature sensor:	Thermistor (optional)