

KLN

Load cell



Art.-No. 43.00..

The KLN load cell with electric pressure transducer are used for remote monitoring of loads. Main applications are static load test and the control of the support force in steel struts or equivalent stiffening elements. The load cell works on the hydraulic measuring principle - when the cell is loaded the pressure of the internal hydraulic fluid increases. This is measured by electric transducers - you can choose between mV (type AU), mA (type AI) or Frequency (type VW).

Advantage

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

Handheld Readout Units

- HMG for Model AU an 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.

Distribution Plates

We offer additional load distribution plates in various designs to ensure that force is applied to the entire area of the load cell. Customized solutions are available on request.



Fig.: Distribution Plate

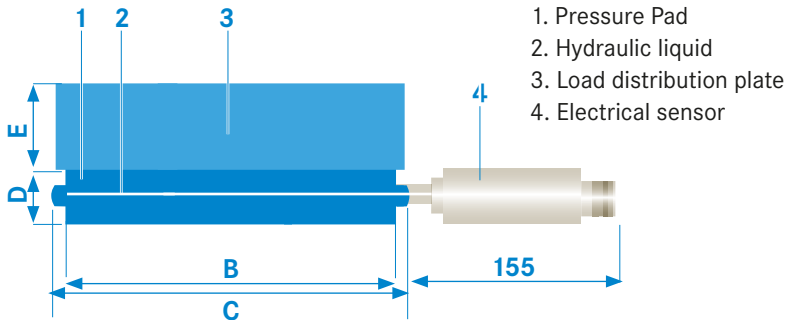


Fig.: DC2 Controller

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 KLN M or MF	load (kN)		dimensions (mm)				weight (kg) load cell	load cell + distribution plate
	nom.	max	B (∅)	C (∅)	D	E		
KLN 120	120	140	78	98	29	27	2	3,5
KLN 250	250	300	111	132	28	30	3	5
KLN 500	500	600	131	152	28	32	3,5	7
KLN 750	750	900	131	152	28	32	3,5	7
KLN 1000	1000	1200	189	210	28	45	6,5	16
KLN 1400	1400	1600	189	210	28	45	6,5	16
KLN 2000	2000	2400	218	240	30	65	9	27,5
KLN 3000	3000	3600	284	306	30	76	14,5	50,5
KLN 5000	5000	6000	358	382	50	85	36	99,5
KLN 10000	10000	12000	496	522	50	105	68,5	221

*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 10000 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 10000 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 10000 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)