

# GLÖTZL Baumeßtechnik

## LOAD CELL

Models DK, DKV and VW

Type: KKLN . . .  
Art. No.: 43.30



Figure: Load cell KKLN 3000 DK 6

The Glötzl load cell consists of a piston pad which is formed by two rigid ring disks which are flexible by turned ring-dovetail grooves at the rims. The annular gap between the pads is filled with a hydraulic fluid which is recording the pressure at the defined area.

In case of the here presented hydraulic / electric models, the hydraulic pressure is converted into an electric signal by a piezoelectric pressure converter (models DK, DKV) resp. by a vibrating wire transducer (VW). Additionally, the cell can optionally be delivered with an installed temperature sensor (AD 590) resp. with a thermistor.

The sensor and the corresponding electronics are placed in a lateral, compact and space-saving stainless steel housing with cable connection.

### Model DK:

Equipment with piezoelectric pressure converter, 4-conductor system, supply 4 mA constant current resp. 10 V DC, output signal 0 up to max. 1000 mV.

When using the additional temperature sensor AD 590 (model DK / T), a 6-core cable will be necessary.

### Model DKV:

Equipment with piezoelectric pressure converter, 2-conductor system, installed amplifier, supply 10 up to 30 V DC (calibration with standard = 24 V DC), output signal standardized 4 up to 20 mA for the measuring range 0 up to max. load.

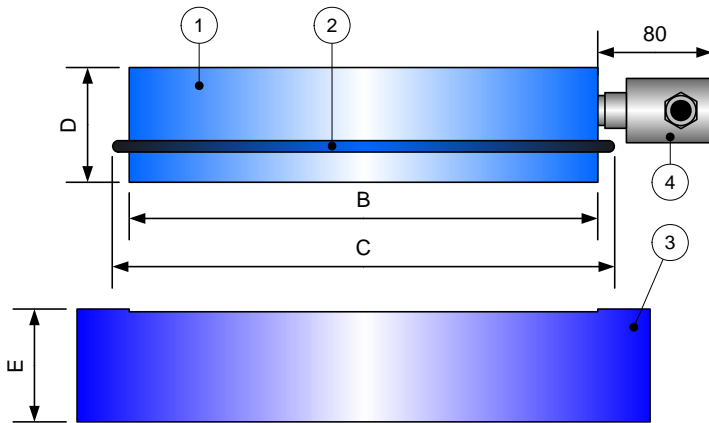
When using the additional temperature sensor AD 590 (model DKV / T), a 4-core cable will be necessary.

### Model VW

Equipment with vibrating wire transducer and thermistor, 4-conductor system. For this equipment, a special readout unit is required resp. the hand measuring device type SMC 2.02 or the multimeter, type VMG 14.1.

## Model DK and DKV with electric remote control

### Load ranges and dimensions



### System and construction:

1. Piston pad
2. Hydraulic fluid
3. Distribution plate
4. Electric pressure converter

Type KKLN..DK(DKV),(VW)	Load [kN]		Dimensions [mm]				Weights [kgs]	
	Nom.	max.	B	C	D	E	Cell	Cell + distribution plate
KKLN 120 DK 2,5	120	140	78	98	65	30	3,0	5,0
KKLN 250 DK 2,5	250	300	111	132	65	30	5,5	9,0
KKLN 500 DK 4	500	600	131	152	65	40	7,5	13,5
KKLN 750 DK 4	750	900	161	182	65	40	10,5	19,0
KKLN 1000 DK 4	1000	1200	189	210	65	45	14,5	27,0
KKLN 2000 DK 6	2000	2400	218	242	80	65	24,0	48,0
KKLN 5000 DK 6	5000	6000	358	385	90	85	72,0	150,0

Further load ranges on request



### Digital readout unit for two meas. Channels type FMG 01-2

- Load and temperature
- Direct display of load in kN
- Display temperature °C
- Installed current supply with charger
- Robust housing

### Technical data (piezoelectric transducer)

Measuring accuracy +/- 0.5%  
 Temperature error < 0.1% °C f.s.  
 Application range -40 °C up to +70 °C  
 Permissible tubing length max. 1000 m



### Hand Measuring device for Vibrating Wire Transducer Typ SMC 2.02

- Simple handling
- Mains independent
- Small weight
- Illuminated display
- Installed current supply with charger
- Display temperature °C

Measuring range: 0,5 - 3,5 kHz  
 Resistance: 0 – 2200 Ω  
 Inducing impulse: 60 V/1 ms  
 Measuring error: 0,05 – 0,1 %



### Readout Unit Type VMG 14.1

- Load
- Pressure
- Display temperature °C
- All sensors with output signal 4 – 20 mA and 0 – 20 mA
- Displacement transducer
- LVDT, e.g. fissuremeter
- Vibrating wire transducer (VW)
- Resistive strain gauge (DMS)
- Installed current supply with charger
- Robust housing

Subject to technical alternations