

Type BK2 Load Cell



Flintec load cells are designed to meet the most stringent accuracy requirements. Certifications have been obtained from Weights & Measures Authorities, worldwide.

BK2 load cells are available in the capacities from 200 kg to 2000 kg and include Accuracy Classifications GP and C3 according to OIML R 60.

They offer stainless steel construction and improved potting, making them suitable for use in tough industrial environments.

These load cells allow very low profile platform design and offer advantages in all kinds of weighing applications.

Load introduction via threaded hole or through hole.

The Flintec calibration technique (in $\text{mV/V}/\Omega$) avoids time consuming corner calibration in multiple load cell systems.

The BK2 is available for use in hazardous areas zone 1, 2 (gas) and 21, 22 (dust) according to EEx ia IIC T6...T4 T150°C ATEX.

Important Features

- Capacities: 200 to 2000 kg.
- High accuracy.
- Stainless steel construction.
- Protection IP 67.
- Very low profile.
- High input resistance: 1100 Ω .
- W&M certified for 3000 intervals.
- Calibration in $\text{mV/V}/\Omega$.
- Factory mutual approved.

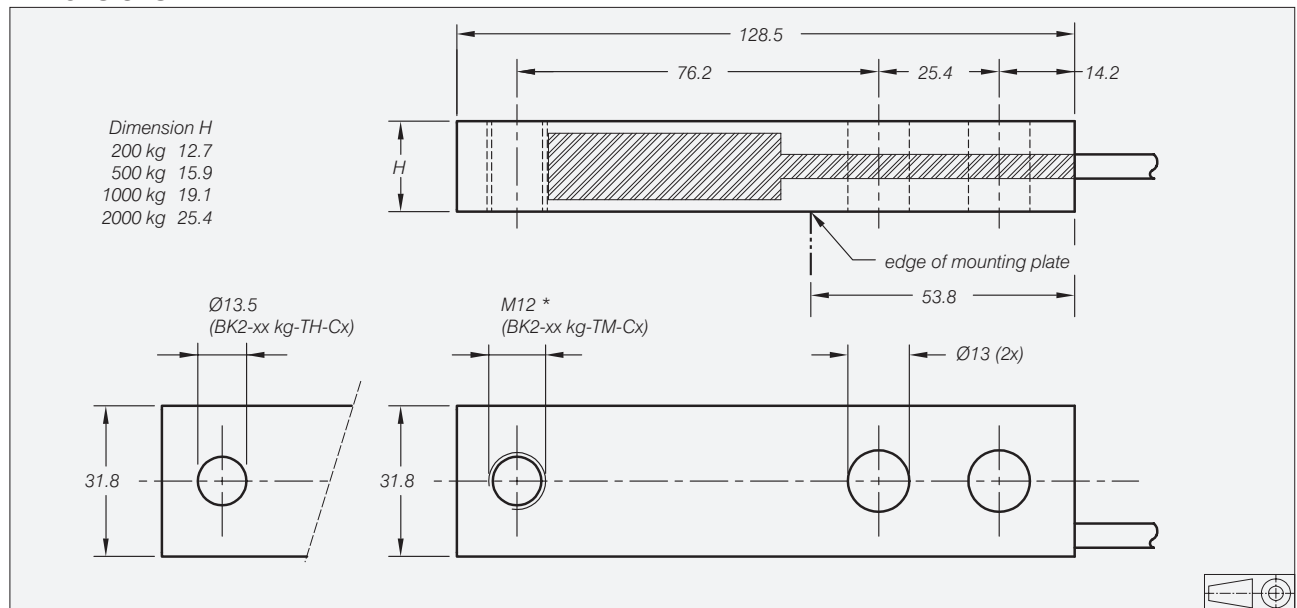
Option

- Explosion protection zone 1, 2, 21 and 22 ATEX.

BK2 Specifications

Maximum capacity(E_{\max})	kg	200 / 500 / 1000 / 2000	
Rated Output (=RO)	mV/V	$2 \pm 0.1\%$	
Calibration in mV/V/ Ω (A...I classified)	%RO	$\leq \pm 0.05$ ($\leq \pm 0.005$)	
Accuracy class according to OIML R 60		(GP)	C3
Maximum number of verification intervals(n_{\max})		n.a.	3000
Minimum load cell verification interval(v_{\min})		n.a.	$E_{\max} / 10000$
Combined error	%RO	$\leq \pm 0.040$	$\leq \pm 0.020$
Creep error (30 minutes) / DR	%RO	$\leq \pm 0.060$	$\leq \pm 0.016$
Temperature effect on minimum dead load output	%RO/ $^{\circ}\text{C}$	$\leq \pm 0.0040$	$\leq \pm 0.0012$
Temperature effect on sensitivity	%/ $^{\circ}\text{C}$	$\leq \pm 0.0020$	$\leq \pm 0.0011$
Excitation voltage	V	5...15	
Zero balance	%RO	$\leq \pm 1.0$	
Input resistance	Ω	1106 \pm 5	
Output resistance	Ω	1000 \pm 1	
Insulation resistance (100 V DC)	M Ω	≥ 5000	
Compensated temperature range	$^{\circ}\text{C}$	-10...+40	
Operating temperature range	$^{\circ}\text{C}$	-20...+65	
Safe load limit(E_{lim})	% E_{\max}	200	
Ultimate load	% E_{\max}	300	
Safe side load	% E_{\max}	100	
Load cell material		stainless steel 17-4 PH (1.4548)	
Sealing		potted	
Protection according DIN 40.050		IP 67	

Dimensions



All dimensions in mm. Dimensions and specifications are subject to change without notice.

Mounting bolts for 200 to 1000 kg: M12 8.8 / torque 90 Nm; for 2000 kg: M12 10.9 / torque 120 Nm. Torque values assume oiled threads.

* Unified thread 1/2-20 UNF is available (BK2-xx kg-TU-Cx).

Wiring

- The load cell is provided with a shielded, 4 conductor cable (AWG 24).
- Cable length: 3 m.
- Cable diameter: 5 mm.
- The shield is floating.

