

Type PB Load Cell



Flintec load cells are designed to meet the most stringent accuracy requirements.

The unique, very low profile Planar Beam load cells offer very low scale profile design while at the same time offering 3000 divisions scale performance.

PB platform load cells are available in the capacities 3.75 kg to 375 kg; offering recommended scale capacities from 6 kg to 600 kg by using 4 PB load cells.

Available in the Accuracy Classifications GP and C3 according to OIML R 60.

They are used in each corner resulting in a “full load cell scale” with maximum mechanical stability. “Spiders” are eliminated as well as the platform size limitations dictated by conventional single point load cells.

The Flintec calibration technique (in $mV/V/\Omega$) for the C3 classification eliminates time consuming corner calibration in multiple load cell systems.

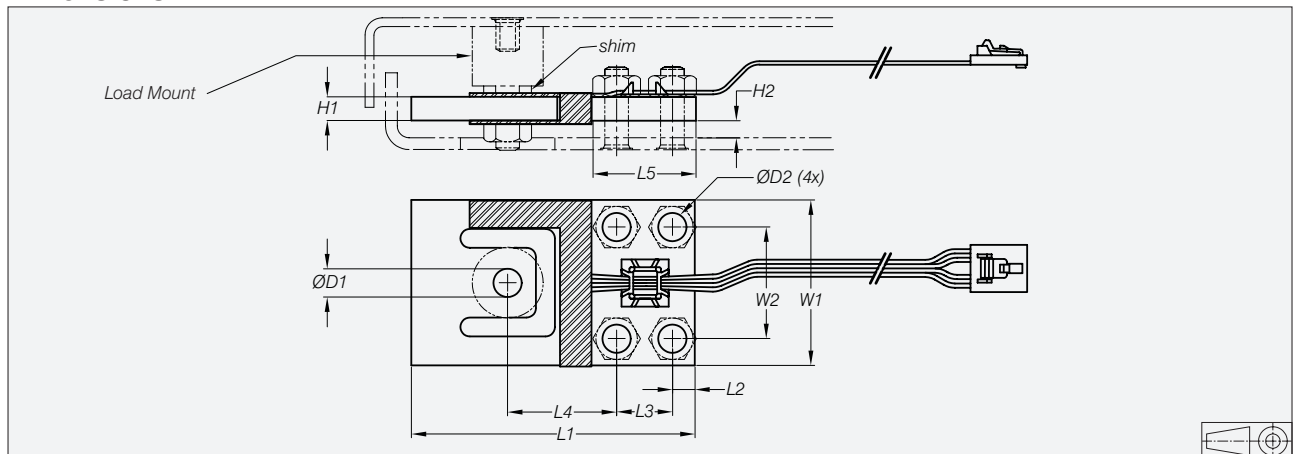
Important Features

- Capacities: 3.75 kg to 375 kg.
- Scale capacity: 6 kg to 600 kg.
- High accuracy.
- Very low profile.
- Calibration in $mV/V/\Omega$ for C3 classification.

PB Specifications

Maximum capacity (=E _{max})	kg	3.75 / 7.5 / 15 / 37.5 / 75 / 150 / 375	
Recommended scale capacity (Max = 400% E _{max})	kg	6 / 15 / 30 / 60 / 150 / 300 / 600	
Rated Output (=RO)	mV/V	1 ± 10%	0.9 ± 0.1%
Calibration in mV/V/Ω	%RO	n.a.	≤ ± 0.05
Accuracy class according to OIML R 60		(GP)	C3
Maximum number of verification intervals (n)		n.a.	3000
Minimum load cell verification interval (v _{min})		n.a.	E _{max} /6000
Combined error	%RO	≤ ± 0.040	≤ ± 0.020
Creep error (30 minutes)	%RO	≤ ± 0.060	≤ ± 0.024
Temperature effect on minimum dead load output	%RO/°C	≤ ± 0.0040	≤ ± 0.0016
Temperature effect on sensitivity	%/°C	≤ ± 0.0020	≤ ± 0.0011
Excitation voltage	V	5...15	
Zero balance	%RO	≤ ± 5.0	
Input resistance	Ω	1190 ± 10	
Output resistance	Ω	1000 ± 10	
Insulation resistance	MΩ	≥ 5000	
Compensated temperature range	°C	-10...+40	
Operating temperature range	°C	-10...+65	
Safe load limit	%E _{max}	300	
Ultimate load	%E _{max}	400	
Safe side load	%E _{max}	200	
Load cell material		aluminium	
Sealing		environmentally sealed	
Protection according DIN 40.050		IP 65	

Dimensions



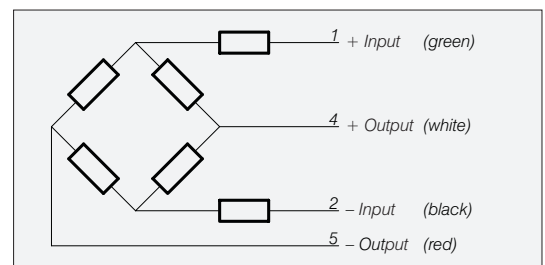
Type	L1	L2	L3	L4	L5	W1	W2	H1	H2(min)	ØD1	ØD2
PB-3.75 kg-RH	70	4.9	14	28	23.7	39	27.8	2	3	5.1	5.1
PB-7.5 kg-RH	70	4.9	14	28	23.7	39	27.8	2.5	3	5.1	5.1
PB-15 kg-RH	70	4.9	14	28	23.7	39	27.8	4.1	4.5	7.6	5.1
PB-37.5 kg-RH	76.2	6	15	29.3	27	44.5	30	4.8	5	7.6	6.6
PB-75 kg-RH	84.4	6.4	15	34	27.7	54.8	30	6.4	5	7.6	6.6
PB-150 kg-RH	107.3	7.8	22.9	45.9	38.4	69.9	44.5	7.9	6	9.1	8.1
PB-375 kg-RH	119.4	9.1	25.4	52.6	43.7	76.1	50.8	12.7	6	9.1	9.8

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

Wiring

- The load cell is provided with a 4 conductor ribbon cable and with AMP #103957-4 connector.
- Cable length: 1.0 m for 3.75/7.5/15 kg, 1.5 m for 37.5/75/150/375 kg.

A special Junction Box, Type KPB-4 is available.



Load Mounts for Planar Beam Load Cells

Material: Natural rubber
with steel, zinc plated.

Load Mount for PB Load Cell

	ØD × H	G	L	S
3.75 kg	10 × 15	M4	10	4
7.5 kg	10 × 15	M4	10	4
15 kg	15 × 15	M4	13	4
37.5 kg	20 × 15	M6	15	6
75 kg	20 × 15	M6	15	6
150 kg	30 × 15	M8	20	6
375 kg	40 × 15	M8	23	8

