



Product Description

The type PB is a very low profile planar beam load cell. Its unique Flintec design allows for an extremely low scale construction. Using 3 or 4 type PB load cells is an alternative to a single point load cell configuration with the additional benefit of a practical unlimited platform size.

Application

- Compact scales, bench and floor scales, retail and counting scales, special applications in medical and other areas

Key Features

- Capacities from 3.75 kg to 375 kg
- Scale capacities from 6 kg to 600 kg
- Aluminium construction
- Environmental Protection IP65
- Very low profile design
- High input resistance
- Calibration in mV/V/Ω for accuracy class C3

Approvals

- OIML approval to C3
(Y = 7 500; Y = 6 500 for 375 kg capacity)

Weight

■ Capacity (kg)	3.75	7.5	15	37.5
Weight (g)	23	26	36	52
■ Capacity (kg)	75	150	375	
Weight (g)	85	157	281	

Available Accessories

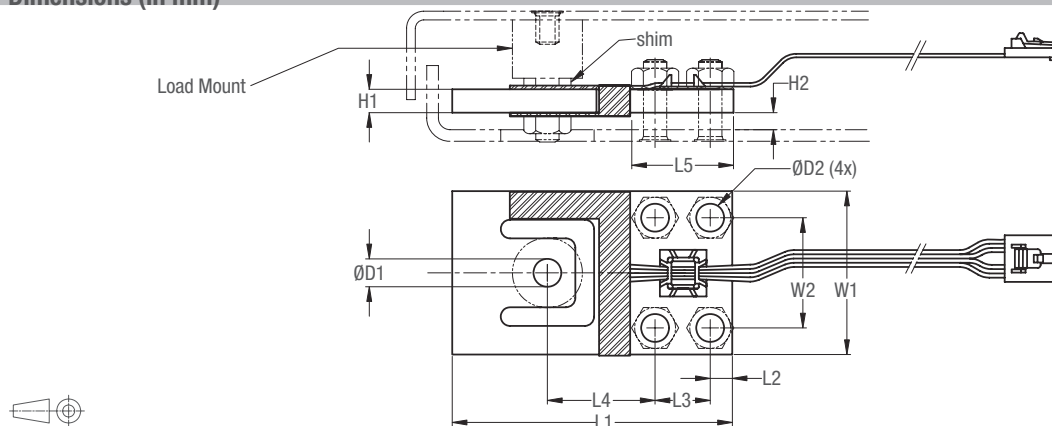
- Load mounts
- Compatible range of electronics

Specifications

	kg	3.75 / 7.5 / 15 / 37.5 / 75 / 150 / 375	3.75 / 7.5 / 15 / 37.5 / 75 / 150	375
Maximum capacity				
Accuracy class according to OIML R60		(GP)		C3
Maximum number of verification intervals (n_{max})		n.a.		3 000
Minimum load cell verification interval (v_{min})		n.a.	$E_{max} / 7 500$	$E_{max} / 6 500$
Temperature effect on minimum dead load output (TC_0)	$\% \cdot RO / 10^\circ C$	$\leq \pm 0.0400$		$\leq \pm 0.0187$
Temperature effect on sensitivity (TC_{RO})	$\% \cdot RO / 10^\circ C$	$\leq \pm 0.0200$		$\leq \pm 0.0100$
Combined error	$\% \cdot RO$	$\leq \pm 0.0500$		$\leq \pm 0.0200$
Non-linearity	$\% \cdot RO$	$\leq \pm 0.0400$		$\leq \pm 0.0166$
Hysteresis	$\% \cdot RO$	$\leq \pm 0.0400$		$\leq \pm 0.0166$
Creep error (30 minutes) / DR	$\% \cdot RO$	$\leq \pm 0.0600$		$\leq \pm 0.0166$
Rated Output (RO)	mV/V	$1 \pm 10\%$		$0.9 \pm 0.1\%$
Calibration in mV/V/ Ω	%	n.a.		$\leq \pm 0.05$
Zero balance	$\% \cdot RO$			$\leq \pm 5$
Excitation voltage	V			5...15
Input resistance (R_{LC})	Ω			$1 180 \pm 50$
Output resistance (R_{out})	Ω			$1 000 \pm 10$
Insulation resistance (100 V DC)	M Ω			$\geq 5 000$
Safe load limit (E_{lim})	$\% \cdot E_{max}$			300
Ultimate load	$\% \cdot E_{max}$			400
Safe side load	$\% \cdot E_{max}$			200
Compensated temperature range	$^\circ C$			-10...+40
Operating temperature range	$^\circ C$			-10...+65
Load cell material				aluminium
Sealing				environmentally sealed
Protection according EN 60 529				IP65

The limits for Non-Linearity, Hysteresis, and TC_{RO} are typical values.
The sum of Non-linearity, Hysteresis and TC_{RO} meets the requirements according to OIML R60 with $p_{LC}=0.7$.

Dimensions (in mm)



Type	L1	L2	L3	L4	L5	W1	W2	H1	H2(min)	D1		D2	Deflection (mm) at E_{max}
										TH*	RH**		
PB-3.75 kg	70	4.9	14	28	23.7	39	27.8	2	3	4.2	5.1	5.1	0.46
PB-7.5 kg	70	4.9	14	28	23.7	39	27.8	2.5	3	4.2	5.1	5.1	0.40
PB-15 kg	70	4.9	14	28	23.7	39	27.8	4.1	4.5	6.2	7.6	5.1	0.27
PB-37.5 kg	76.2	6	15	29.3	27	44.5	30	4.8	5	6.2	7.6	6.6	0.36
PB-75 kg	84.4	6.4	15	34	27.7	54.8	30	6.4	5	8.2	7.6	6.6	0.35
PB-150 kg	107.3	7.8	22.9	45.9	38.4	69.9	44.5	7.9	6	8.2	9.1	8.1	0.56
PB-375 kg	119.4	9.1	25.4	52.6	43.7	76.1	50.8	12.7	6	8.2	9.1	9.8	0.68

*Loading hole diameters with fit to metric load mounts.

**Loading hole diameters with fit to unified load mounts.

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

