

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)

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

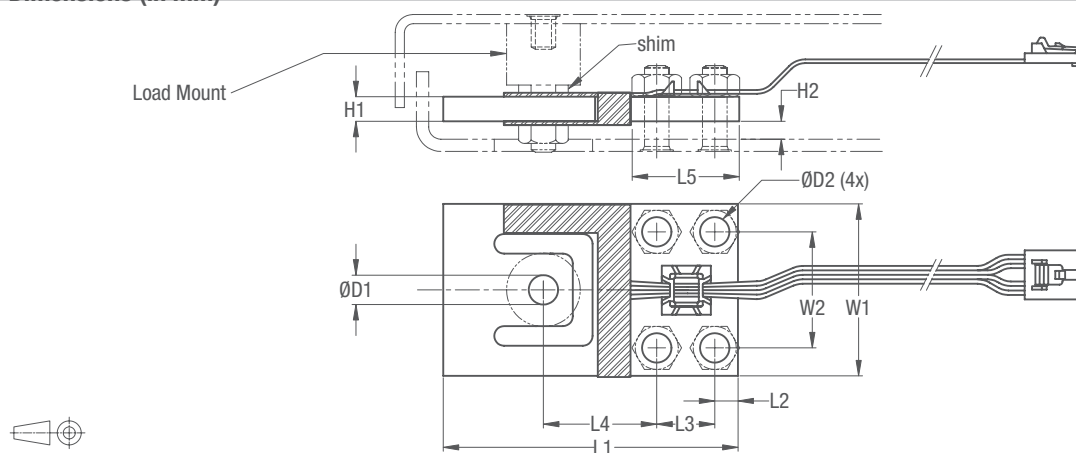
- Load mounts
- Compatible range of electronics

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	
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
Temperature effect on minimum dead load output	(TC ₀)	%*RO/10°C	≤ ± 0.0400	≤ ± 0.0187
Temperature effect on sensitivity	(TC _{RO})	%*RO/10°C	≤ ± 0.0200	≤ ± 0.0100
Combined error		%*RO	≤ ± 0.0500	≤ ± 0.0200
Non-linearity		%*RO	≤ ± 0.0400	≤ ± 0.0166
Hysteresis		%*RO	≤ ± 0.0400	≤ ± 0.0166
Creep error (30 minutes) / DR		%*RO	≤ ± 0.0600	≤ ± 0.0166
Rated Output	(RO)	mV/V	1 ± 10%	0.9 ± 0.1%
Calibration in mV/V/Ω		%	n.a.	≤ ± 0.05
Zero balance		%*RO		≤ ± 5
Excitation voltage		V		5...15
Input resistance	(R _{LC})	Ω		1 180 ± 50
Output resistance	(R _{out})	Ω		1 000 ± 10
Insulation resistance (100 V DC)		MΩ		≥ 5 000
Safe load limit	(E _{lim})	%*E _{max}		300
Ultimate load		%*E _{max}		400
Safe side load		%*E _{max}		200
Compensated temperature range		°C		-10...+40
Operating temperature range		°C		-10...+65
Load cell material				aluminium
Sealing				environmentally sealed
Protection according DIN 40.050				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-TH*	D1-RH	D2	Deflection (mm) at E _{max}
PB-3.75 kg-RH	70	4.9	14	28	23.7	39	27.8	2	3	4.2	5.1	5.1	0.46
PB-7.5 kg-RH	70	4.9	14	28	23.7	39	27.8	2.5	3	4.2	5.1	5.1	0.40
PB-15 kg-RH	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-RH	76.2	6	15	29.3	27	44.5	30	4.8	5	6.2	7.6	6.6	0.36
PB-75 kg-RH	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-RH	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-RH	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

*Mounting hole diameter to metric holes and fit to 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

