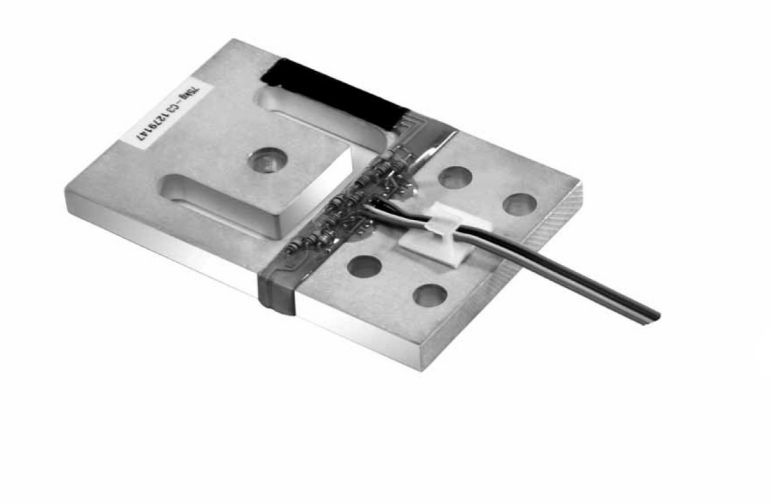
PENKO Engineering BV

The Leading Experts In Weighing & Dosing

3.75Kg-375Kg

PB



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	

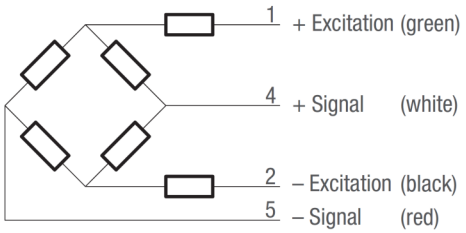
Available Accessories

- Load mounts
- Compatible range of electronics

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 cell PB: 3.75kg-375kg

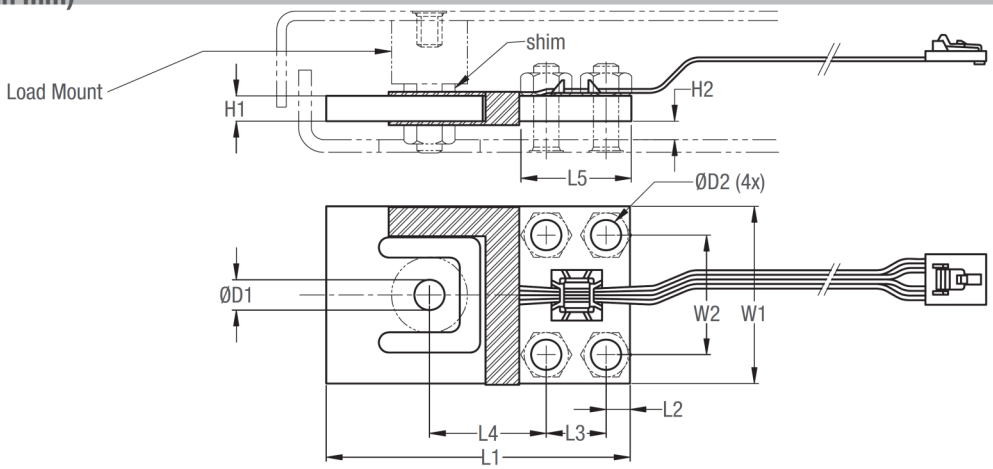
Technical Data

Specifications

Maximum capacity		kg	3.75 / 7.5 / 15 / 37.5 / 75 / 150 / 375	3.75 / 7.5 / 15 / 37.5 / 75 / 150	375
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)	%*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 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 TH*	D1 RH**	D2	Deflection (mm) at E_{max}
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								2.5					0.40
PB-15 kg								4.1	4.5	6.2	7.6		0.27
PB-37.5 kg	76.2	6	15	29.3	27	44.5	30	4.8	5			6.6	0.36
PB-75 kg	84.4	6.4		34	27.7	54.8		6.4		8.2	9.1		0.35
PB-150 kg	107.3	7.8	22.9	45.9	38.4	69.9	44.5	7.9	6			8.1	0.56
PB-375 kg	119.4	9.1	25.4	52.6	43.7	76.1	50.8	12.7				9.8	0.68

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

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Updated 08/13