



**Product Description**

The type PBW is a very low profile planar beam load cell. Load cell installation is simplified by the winged mounting arms providing optimum load cell performance in all types of scale structures.

**Application**

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

**Key Features**

- Capacities from 12.5 lb to 240 lb
- 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 (lb)	12.5	18.75	25	37.5
Weight (g)	35	45	41	50
■ Capacity (lb)	50	100	240	
Weight (g)	50	70	88	

**Available Accessories**

- Load mounts
- Compatible range of electronics

## Specifications

Maximum capacity	(E <sub>max</sub> )	lb	12.5 / 18,75 / 25 / 37.5 / 50 / 100 / 240*	
Metric equivalent (1 lb=0.45359 kg)		kg	5.7 / 8.5 / 11.3 / 17 / 22.7 / 45.4 / 109*	
Accuracy class according to OIML R60			(GP)	C3
Maximum number of verification intervals	(n <sub>max</sub> )		n.a.	3 000
Minimum load cell verification interval	(v <sub>min</sub> )		n.a.	E <sub>max</sub> / 7 500
Temperature effect on minimum dead load output	(TC <sub>0</sub> )	%*R <sub>0</sub> /10°C	≤ ± 0.0400	≤ ± 0.0187
Temperature effect on sensitivity	(TC <sub>R0</sub> )	%*R <sub>0</sub> /10°C	≤ ± 0.0200	≤ ± 0.0100
Combined error		%*R <sub>0</sub>	≤ ± 0.0500	≤ ± 0.0200
Non-linearity		%*R <sub>0</sub>	≤ ± 0.0400	≤ ± 0.0166
Hysteresis		%*R <sub>0</sub>	≤ ± 0.0400	≤ ± 0.0166
Creep error (30 minutes) / DR		%*R <sub>0</sub>	≤ ± 0.0600	≤ ± 0.0166
Rated Output	(R <sub>0</sub> )	mV/V	1 ± 10% / 1.2* ± 10%	0.9 ± 0.1% / 1.09* ± 0.1%
Calibration in mV/V/Ω		%	n.a.	≤ ± 0.05
Zero balance		%*R <sub>0</sub>	≤ ± 5	
Excitation voltage		V	5...15	
Input resistance	(R <sub>LC</sub> )	Ω	1 180 ± 50	
Output resistance	(R <sub>out</sub> )	Ω	1 000 ± 10	
Insulation resistance (100 V DC)		MΩ	≥ 5 000	
Safe load limit	(E <sub>lim</sub> )	%*E <sub>max</sub>	300 / 250*	
Ultimate load		%*E <sub>max</sub>	400	
Safe side load		%*E <sub>max</sub>	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	

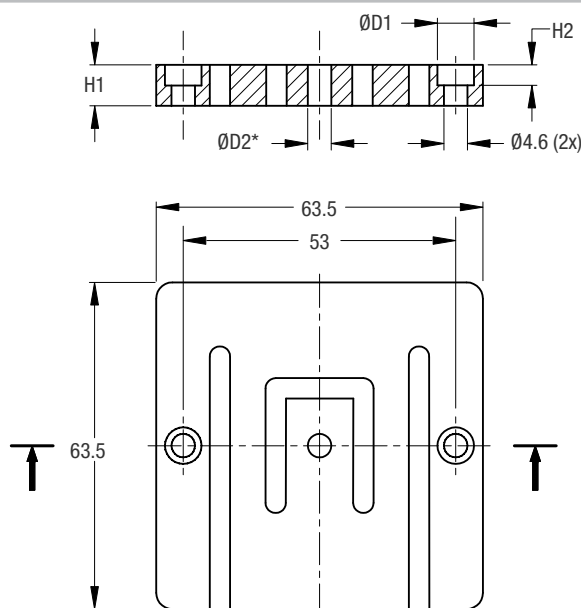
The limits for Non-Linearity, Hysteresis, and TC<sub>R0</sub> are typical values.

The sum of Non-linearity, Hysteresis and TC<sub>R0</sub> meets the requirements according to OIML R60 with p<sub>LC</sub>=0.7.

## Dimensions (in mm)

Type	H1	H2	ØD1	ØD2*
PBW-12.5 lb	2.5	--	--	4.2
PBW-18.75 lb	4	--	--	4.2
PBW-25 lb	3.2	--	--	4.2
PBW-37.5 lb	4	--	--	6.2
PBW-50 lb	4	--	--	6.2
PBW-100 lb	6.4	--	--	6.2
PBW-240 lb	8	3.2	7.4	8.2

\*Attention: Other loading holes on request



## Wiring

- The load cell is provided with a 4 conductor ribbon cable and with AMP #103957-4 connector
  - Cable length: 1.0 m for 12.5...50 lb  
1.5 m for 100...240 lb
- A special Junction Box type KPB-4 is available

