

Type PBW Load Cell



Planar Beam
Load Cells

Flintec load cells are designed to meet the most stringent accuracy requirements. Certifications have been obtained from Weights & Measures Authorities, worldwide.

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

PBW load cells are available in the capacities 12.5 lb to 300 lb (5.7 to 136 kg) and available in the Accuracy Classifications GP and C3 according to OIML R 60.

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

Important Features

- Capacity 12.5 to 300 lb.
- High accuracy.
- W&M certified for 3000 intervals (PTB: D09-03.03 Rev.1).
- Very low profile.
- Calibration in $mV/V/\Omega$ for C3 classification.

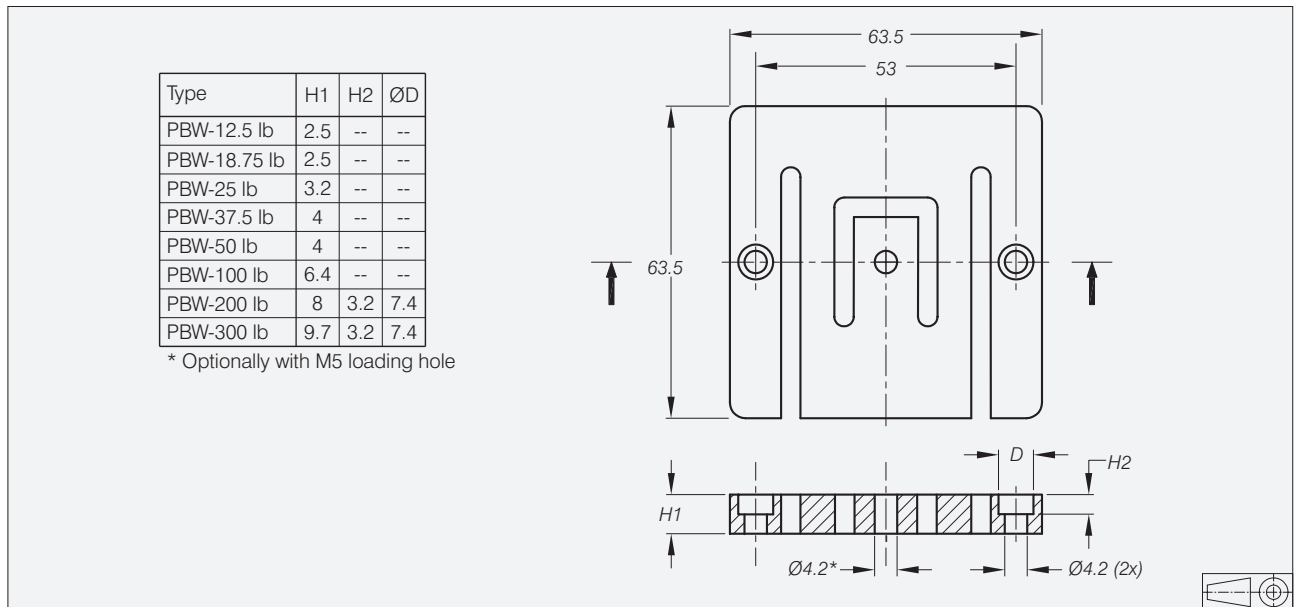
Option

- Loading hole M5.

PBW Specifications

Maximum capacity	(E _{max})	lb	12.5 / 18.75 / 25 / 37.5 / 50 / 100 / 200 / 300	
Metric equivalent (1 lb=0.45359 kg)		kg	5.7 / 8.5 / 11.3 / 17 / 22.7 / 45.4 / 91 / 136	
Rated Output	(Cn)	mV/V	1 ± 10%	0.9 ± 0.1%
Accuracy class according to OIML R 60		(GP)	C3	
Calibration in mV/V/Ω		%Cn	n.a.	≤ ± 0.05
Maximum number of verification intervals	(n _{max})		n.a.	3000
Minimum load cell verification interval	(V _{min})		n.a.	E _{max} /7500
Combined error		%Cn	≤ ± 0.040	≤ ± 0.020
Creep error (30 minutes) / DR		%Cn	≤ ± 0.060	≤ ± 0.016
Temperature effect on minimum dead load output		%Cn/°C	≤ ± 0.0040	≤ ± 0.0018
Temperature effect on sensitivity		%/°C	≤ ± 0.0020	≤ ± 0.0011
Excitation voltage		V	5...15	
Zero balance		%Cn	≤ ± 5	
Input resistance		Ω	1180 ± 50	
Output resistance		Ω	1000 ± 10	
Insulation resistance (100 V DC)		MΩ	≥ 5000	
Compensated temperature range		°C	-10...+40	
Operating temperature range		°C	-10...+65	
Safe load limit	(E _{lim})	%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



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 12.5...50 lb, 1.5 m for 100...300 lb.

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

