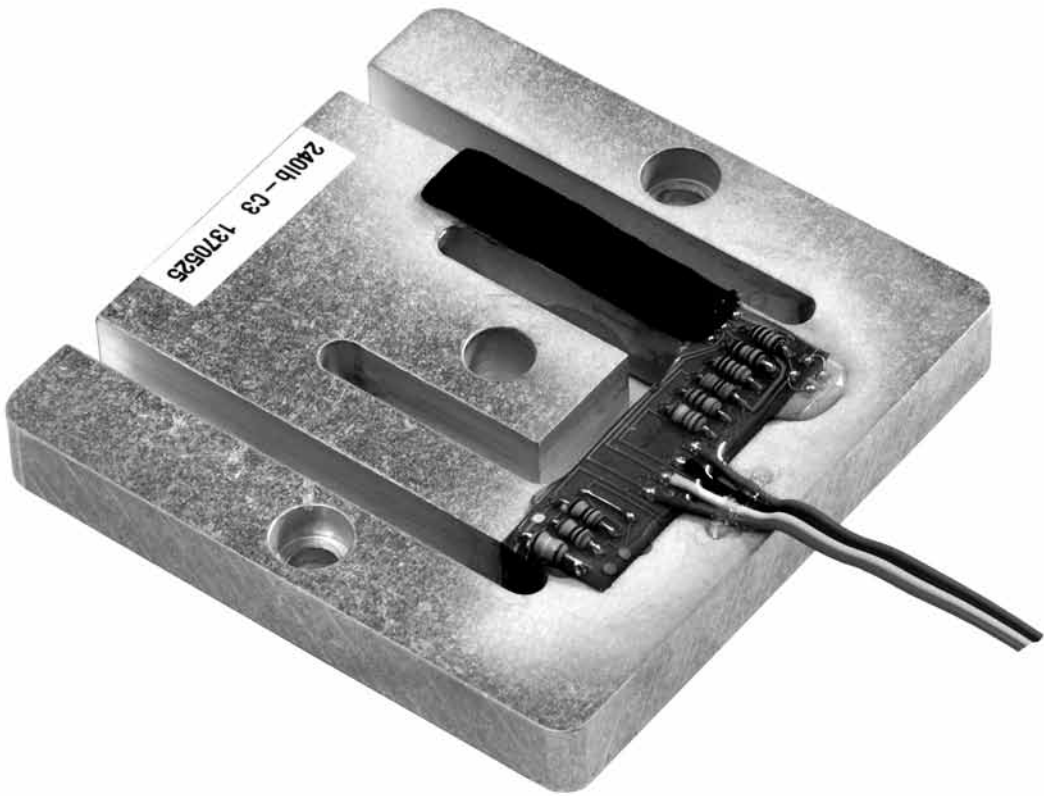




Product Description

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 _{max})	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 _{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)	%*R ₀ /10°C	± 0.0400	± 0.0187
Temperature effect on sensitivity	(TC _{R0})	%*R ₀ /10°C	± 0.0200	± 0.0100
Combined error		%*R ₀	± 0.0500	± 0.0200
Non-linearity		%*R ₀	± 0.0400	± 0.0166
Hysteresis		%*R ₀	± 0.0400	± 0.0166
Creep error (30 minutes) / DR		%*R ₀	± 0.0600	± 0.0166
Rated Output	(R ₀)	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 ₀	± 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 / 250*	
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	

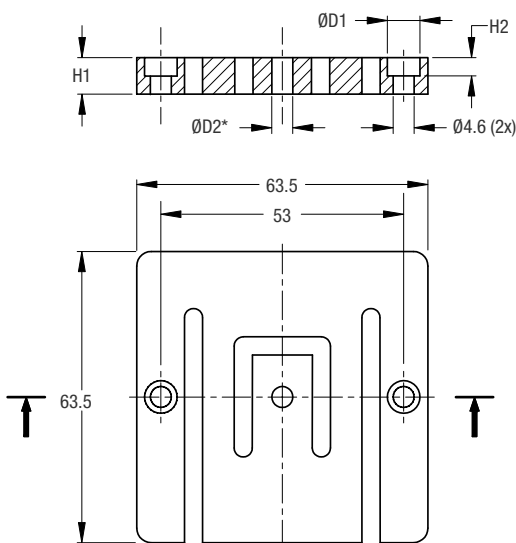
The limits for Non-Linearity, Hysteresis, and TC_{R0} are typical values.

The sum of Non-linearity, Hysteresis and TC_{R0} meets the requirements according to OIML R60 with p_{LC}=0.7.

Dimensions (in mm)

Type	H1	H2	ØD1	ØD2*	Deflection (mm) at E _{max}
PBW-12.5 lb	2.5	--	--	4.2	0.42
PBW-18.75 lb	4	--	--	4.2	
PBW-25 lb	3.2	--	--	4.2	0.49
PBW-37.5 lb	4	--	--	6.2	0.38
PBW-50 lb	4	--	--	6.2	0.48
PBW-100 lb	6.4	--	--	6.2	
PBW-240 lb	8	3.2	7.4	8.2	0.46

*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

