

PLC—Bi-Directional Pancake Load Cell-Custom



FEATURES

- Capacities 0.5—1000kN
- Sealed to IP65.
- Tension & Compression use.
- Single or dual bridge option.

APPLICATIONS

- Test Machines.
- Mis-aligned loading applications.
- Restricted height constraints.
- Virtually all industries.

DESCRIPTION

The BD-PLC-C provides a simple device for tension and compression measurement. The design is based on a shear web principle which allows for mis-alignment loading with minimal effect on the load cells output. The DB-PLC-C can be custom built to suit your application.

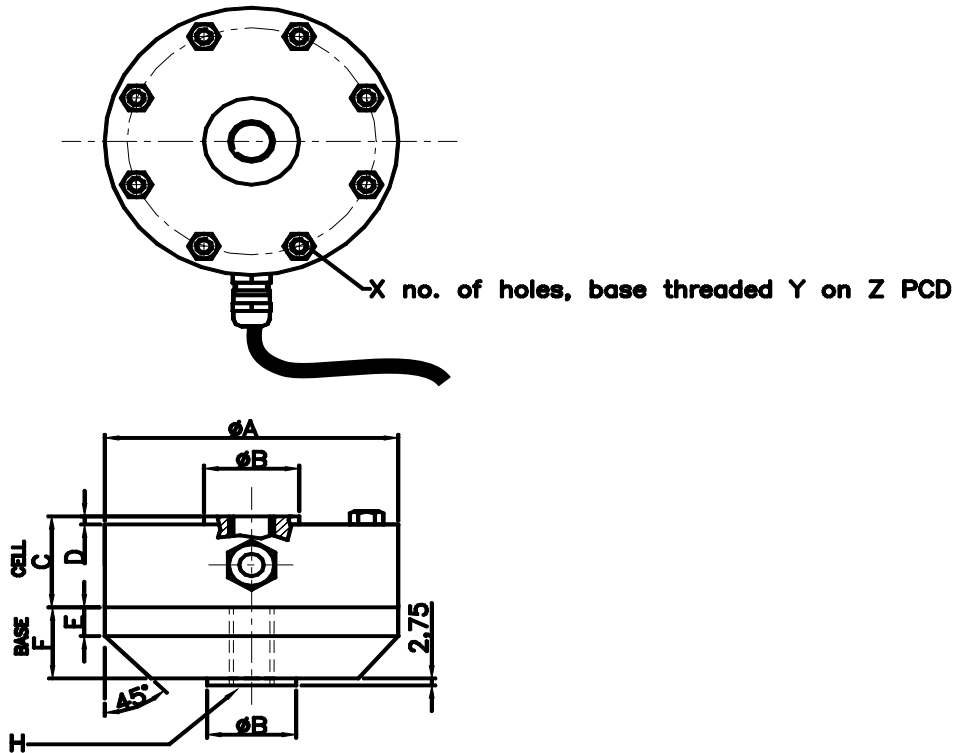
The PLC load cell has been designed for test rig applications where static and dynamic measurement is required. The units are supplied with calibration certificates using BS EN ISO 7500-1 test machine traceable to National Standards.

TYPICAL SPECIFICATION

PARAMETER	VALUE	UNITS
Capacities Range	0.. 0.5, 1, 2.5, 5, 12.5, 25, 50, 100, 125, 250, 500, 1000	kN
Rated Output	2.0 Nominal	mV/V
Linearity & non repeatability	0.15	±% of Rated Output
Zero Return after 30 minutes	0.05	±% of Applied Load
Zero Balance	1.0	±% of Rated Output
Temperature Range: Operating	-10 to +80	°C
Temperature Range: Compensated	20 to +70	
Temperature Effect: On Output	0.1	±% of Rated Output/°C
Temperature Effect: On zero	0.02	±% of Rated Load/°C
Safe Overload	150	% of Rated Capacity
Ultimate Overload	300	% of Rated Capacity
Excitation: Recommended	10	Volts AC or DC
Excitation: Maximum	20	
Input Impedance	780 nominal	ohm
Output Impedance	700 nominal	ohm
Insulation Resistance	>2	GΩ at 50VDC
Deflection at Rated Capacity	NA	mm
Weight (approximate) :	NA	kg
Construction	Plated tool steel	
Environmental Protection	IP65	
Cable	5m 4 core screened	Connector optional

PLC—Bi-Directional Pancake Load Cell-Custom

OUTLINE DIMENSIONS in millimeters

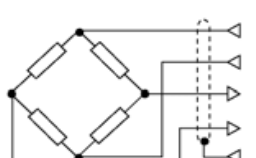


CAPACITY kN	ØA	ØB	C	D	E	F	H	X	Y	Z	BOLT TORQUE
0.5 - 1	65	18	17	2	10	20	M8 x 1.25	6	M4 x 0.7	56	4.6 Nm
2.5 - 5	106	32	28	3	16	28	M16 x 1.5	8	M6 x 1.0	92	16 Nm
12.5 - 25	106	32	36	3	16	29	M16 x 1.5	8	M6 x 1.0	92	16 Nm
50 - 100	154	50	36	3	20	40	M30 x 2	8	M12 x 1.75	128	77 Nm
125 - 250	194	93	64	6	26	60	M42 x 3	16	M12 x 1.75	165	135 Nm
500 - 1000	240	125	75	8	45	75	M72 x 3	16	M16 x 1.5	206	330 Nm

Note 0.5 - 5kN are produced from aluminium material. The base is optional

NOTE: If the dimensions or specification do not suit, PCM have an in-house design and build service that should satisfy your requirements.

WIRING DETAIL

Dynamometer	OUTPUT	CABLE
	EXCITATION+ EXCITATION - OUTPUT- OUTPUT+	Red Blue Green Yellow Shield

LOADING MODE

