

MACKLOW SMITH

DIAPHRAGM LOAD CELL

Series CS

Applications

Test machines, calibration of compression test machines, load measurement for process control, restricted height applications, measuring the load applied in presses.

Design Features

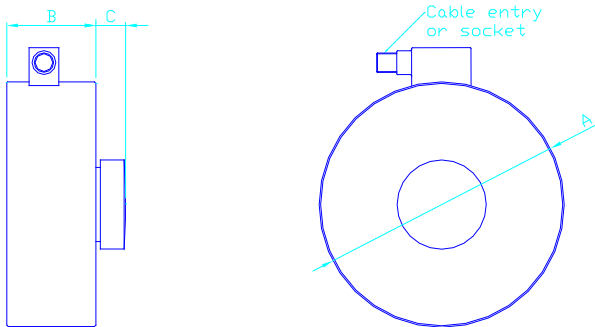
The standard design incorporates a pancake style compression load cell which can be adapted for measuring structures using a suitable mounting plate. A platen using spherical seating to ensure accurate measurement of miss-aligned loads in compression.

Calibration

These load cells can be supplied with a Macklow-Smith works calibration certificate traceable to national standards or a UKAS calibration certificate. They can also be supplied tested and ready for calibration by the customers preferred test laboratory.

Options

Cable socket and plug connections
Platens with spherical seat
Mounting plates



SPECIFICATION



Capacity	ØA	B	C
1kN, 2.5kN, 5kN	82mm	32mm	12mm
7.5kN, 10kN, 20kN			
30kN, 50kN			
75kN, 100kN			
200kN, 300kN	126mm	50mm	14mm
500kN, 750kN, 1000kN	165mm	60mm	20mm
1500kN, 2000kN	200mm	80mm	30mm
Rated output	2.0mV/V nominal		
Linearity	± 0.05% of rated output		
Non repeatability	± 0.05% of rated output		
Zero Return (30min)	± 0.025% of applied load		
Zero balance	± 1% of rated output		
Operating temperature	-20°C - +70°C		
Compensated temp'	-10°C - +40°C		
Temp' effect on output	± 0.0015% of applied load/°C		
Temp' effect on zero	± 0.0015% of rated output/°C		
Safe overload	150% of rated capacity		
Ultimate overload	300% or rated capacity		
Excitation	10V -18V, AC or DC		
Input impedance	700 Ω nominal		
Output impedance	705 Ω nominal		
Insulation resistance	>5 GΩ at 50 V DC		
Construction	Stainless steel		
Environmental	IP67		
Cable (standard)	4 core screened		

In the interest of product development we reserve the right to alter specifications without prior notice.