

MACKLOW SMITH TENSION & COMPRESSION LOAD CELL

Series MST S20

Applications

Test machines, calibration of test machines both in tension and compression, load measurement for process control, measuring the load applied in presses, small tanks and silos, hanging scales.

Design Features

The standard design incorporates a design in the form of a letter S which is suitable for both tension and compression forces, metric threads are standard, UNF threads are available, negating the need for extra plates.

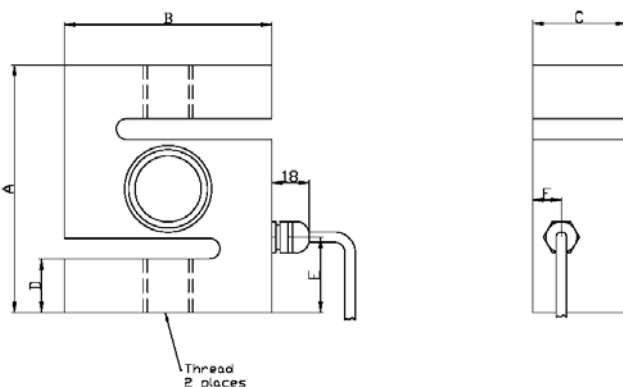
High accuracy throughout the range of 0.05% rated output. The S20 model is manufactured in stainless steel and the design incorporates a welded seal to IP68 making it suitable for the toughest environment conditions. Model range of four capacities offering 5kN through to 50kN

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 plug connections for display/data logger
Ball seat fittings
Platens with spherical seats
Rod eye bearings for tension



dimensions are in mm

SPECIFICATION



Capacity	5kN – 20kN	50kN
Dimension A	90mm	120mm
Dimension B	70mm	100mm
Dimension C	32mm	45mm
Dimension D	19mm	26mm
Dimension E	36.6mm	60mm
Dimension F	10.4mm	13.8mm
Weight	1.5kg	3.0kg
Thread size	Standard	Special order
0 – 5kN	M12 x 1.75	½" x 20 UNF
0 – 10kN	M16 x 2.0	½" x 20 UNF
0 - 20kN	M16 x 2.0	¾" x 16 UNF
0 – 50kN	M24 x 2.0	1" x 12 UNF
Rated output	2.0mV/V ± 0.1%	
Linearity	± 0.05% of rated output	
Non repeatability	± 0.05% of rated output	
Zero Return (30min)	± 0.05% of applied load	
Zero balance	± 2% of rated output	
Operating temperature	-30°C - +90°C	
Compensated temp'	-10°C - +40°C	
Temp' effect on output	± 0.04% of applied load/°C	
Temp' effect on zero	± 0.007% of rated output/°C	
Safe overload	150% of rated capacity	
Ultimate overload	300% or rated capacity	
Excitation recommended	10V AC or DC	
Excitation maximum	15V AC or DC	
Input impedance	400 Ω nominal	
Output impedance	350 Ω nominal	
Insulation resistance	>5 GΩ at 50 V DC	
Construction	Stainless steel	
Environmental	IP68	
Cable (standard)	5m x 6 core screened	

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