

MACKLOW SMITH TENSION & COMPRESSION LOAD CELL

Series MST04

Applications

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

Design Features

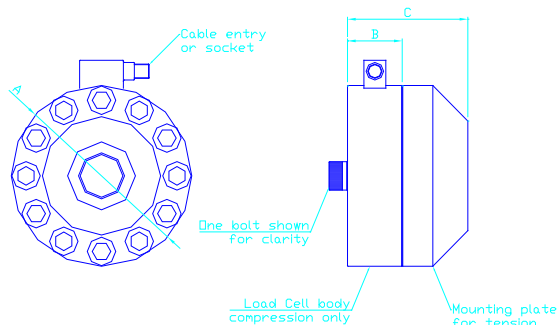
The standard design incorporates a pancake style compression load cell which can be easily adapted for measuring tension forces by fitting the mounting plate. A pair of platens using spherical seating to ensure accurate measurement of miss-aligned loads in compression.

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
Platens with spherical seat for compression
Mounting plate for tension
Rod eye bearings for tension



SPECIFICATION



| Capacity | ØA | B | C |
|------------------------|-----------------------------|----------------|-------|
| 5kN, 10kN, 25kN | 100mm | 35mm | 72mm |
| 50kN, 100kN | 127mm | 35mm | 72mm |
| 200kN, 300kN | 159mm | 50mm | 110mm |
| 500kN | 169mm | 60mm | 120mm |
| 750kN, 1000kN | 253mm | 80mm | 165mm |
| 2000kN | 324mm | 100mm | 200mm |
| 3000kN, 5000kN | 384mm | 120mm | 240mm |
| | 5kN ~ 500kN | 750kN ~ 5000kN | |
| Rated output | 2.0mV/V nominal | | |
| Linearity | ± 0.05% of rated output | | |
| Non repeatability | ± 0.05% of rated output | | |
| Zero Return (30min) | ± 0.05% of applied load | | |
| Zero balance | ± 1% of rated output | | |
| Operating temperature | -10°C - +70°C | | |
| Compensated temp' | -10°C - +40°C | | |
| Temp' effect on output | ± 0.024% of applied load/°C | | |
| Temp' effect on zero | ± 0.028% of rated output/°C | | |
| Safe overload | 150% of rated capacity | | |
| Ultimate overload | 300% or rated capacity | | |
| Excitation | 10V -18 V, AC or DC | | |
| Input impedance | 800 Ω nominal | 430 Ω nominal | |
| Output impedance | 705 Ω nominal | 352 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.