

TENSION AND COMPRESSION COLUMN LOAD CELL



TENSION &
COMPRESSION

- COMBINED ERROR $\leq \pm 0.02 \%$
- IP67 PROTECTION RATING
- STEEL



NOMINAL LOAD (FS)

N	kg	Net weight (kg)	Combined error	ISO 17025
100	10	0.01	$\leq \pm 0.02 \%$	(optional)
150	15	0.01	$\leq \pm 0.02 \%$	(optional)
200	20	0.01	$\leq \pm 0.02 \%$	(optional)
300	30	0.01	$\leq \pm 0.02 \%$	(optional)
500	50	0.01	$\leq \pm 0.02 \%$	(optional)

TECHNICAL DATA

PRECISION

Rated Output (C_n)	2.0 mV/V ± 10 % at FS
Zero Balance	$< \pm 2.0$ %
Combined error	$\leq \pm 0.02$ %FS
Non-linearity	$\leq \pm 0.02$ %FS
Hysteresis	$\leq \pm 0.01$ %FS
Repeatability	$\leq \pm 0.01$ %FS
Creep	$\leq \pm 0.01$ %FS (at 30 min FS)
Temperature coefficient of zero	0.001 %FS/°C
Temperature coefficient of sensitivity	0.001 %FS/°C
Compensated temperature range	-20...+60 °C
Operating temperature range	-20...+80 °C
Reference Temperature	23 °C

MECHANICAL PROPERTIES

Material	17-4 PH STAINLESS STEEL 1.4542
Deflection at FN	~ 0.4 mm

ELECTRICAL PROPERTIES

Bridge configuration	Full Wheatstone bridge, 4-wire
Input resistance	350 ± 20 Ω
Output resistance	350 ± 20 Ω
Insulation resistance	$\geq 5\,000$ M Ω at 100 V
Recommended excitation voltage	5 - 15 V
Cable diameter	4 mm
Cable length	2 000 mm

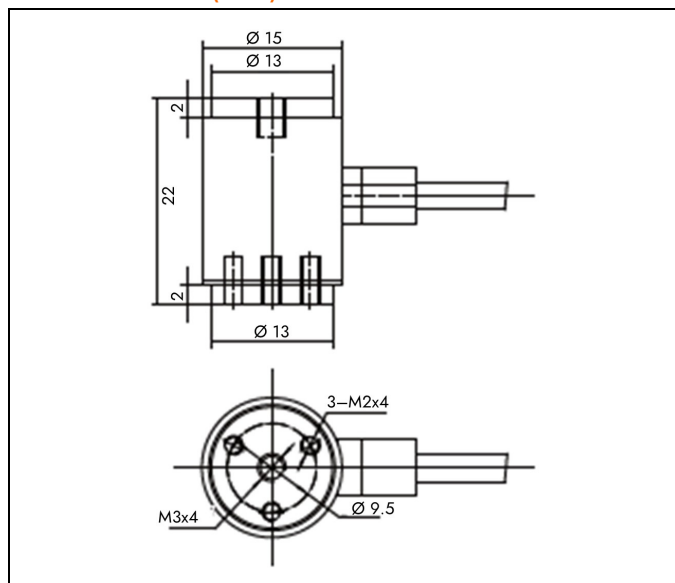
MECHANICAL LIMITS

Service load	120 %FS	Load without any permanent deformation or change in calibration.
Safe overload	150 %FS	The highest static load that may be applied once or briefly without mechanical damage.
Breaking load	> 150 %FS	Load at which permanent deformation or mechanical failure (fracture) occurs.
Max. transverse load (side)	50 %FS	Maximum lateral or shear load that can be applied (e.g. due to misalignment or friction).
Max. permissible dynamic load	70 %FS	For cyclic or oscillating loads, the amplitude should not exceed this load to prevent fatigue failure.

COMPLIANCE AND CERTIFICATION

Protection Rating	IP65 (IEC 60529)
Compliance	CE, RoHS, REACH
Calibration	Factory-calibrated, ISO 17025 calibration available on request
HS-CODE	9031.80.80

DIMENSIONS (mm)



ELECTRICAL CONNECTION

