

BENDING BEAM AND SHEAR LOAD CELL

TENSION & COMPRESSION



- LOW PROFILE
- COMBINED ERROR $\leq \pm 0.025 \%$
- IP68 PROTECTION RATING
- 17-4PH STAINLESS STEEL | 1.4542



NOMINAL LOAD (FS)

kg	N	Net weight (kg)	Combined error	ISO 17025	High Temperature -40...250°C
10	100	0.5	$\leq \pm 0.025 \%$	(optional)	(optional)
20	200	0.5	$\leq \pm 0.025 \%$	(optional)	(optional)
30	300	0.5	$\leq \pm 0.025 \%$	(optional)	(optional)
50	500	0.5	$\leq \pm 0.025 \%$	(optional)	(optional)
100	1 000	0.5	$\leq \pm 0.025 \%$	(optional)	(optional)
200	2 000	0.5	$\leq \pm 0.025 \%$	(optional)	(optional)
500	5 000	0.5	$\leq \pm 0.025 \%$	(optional)	(optional)



TECHNICAL DATA

PRECISION

Rated Output (C_n)	2.0 mV/V $\pm 0,04$ % at FS
Zero Balance	$< \pm 0.02$ %
Combined error	$\leq \pm 0.025$ %FS
Non-linearity	$\leq \pm 0.018$ %FS
Hysteresis	$\leq \pm 0.017$ %FS
Repeatability	$\leq \pm 0.018$ %FS
Creep	$\leq \pm 0.0166$ %FS (at 30 min FS)
Temperature coefficient of zero	-0.0125 %FS/°C
Temperature coefficient of sensitivity	0.008 %FS/°C
Compensated temperature range	-10...+40 °C
Operating temperature range	-30...+70 °C
Reference Temperature	23 °C

MECHANICAL PROPERTIES

Material	17-4 PH STAINLESS STEEL 1.4542
Deflection at FN	~ 0.06 mm

ELECTRICAL PROPERTIES

Bridge configuration	Full Wheatstone bridge, 6-wire
Input resistance	$390 \pm 5 \Omega$
Output resistance	$350 \pm 5 \Omega$
Insulation resistance	$\geq 5\,000\, \text{M}\Omega$ at 100 V
Recommended excitation voltage	5 - 15 V
Cable diameter	5.4 mm
Cable length	1500 mm

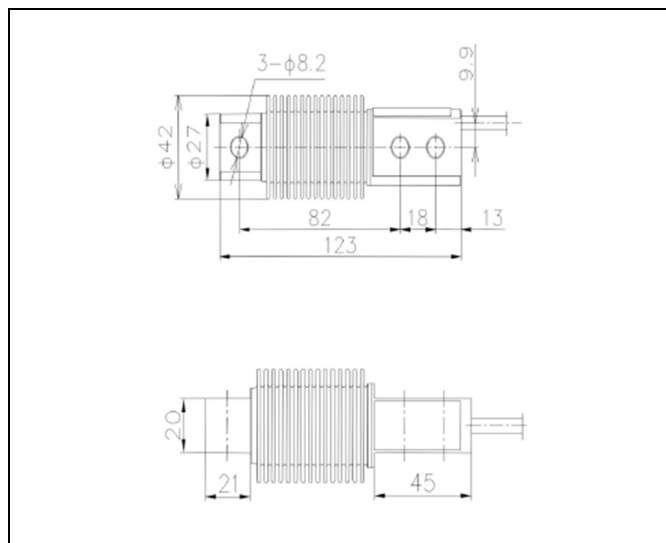
MECHANICAL LIMITS

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	> 300 %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.

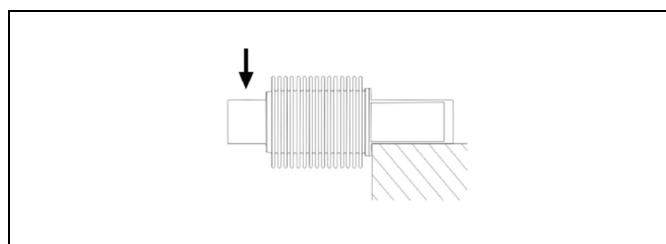
COMPLIANCE AND CERTIFICATION

Protection Rating	IP68 (IEC 60529)
Compliance	CE, RoHS, REACH
Calibration	Factory-calibrated, ISO 17025 calibration available on request
HS-CODE	9031.80.80

DIMENSIONS



LOAD DIRECTION



ELECTRICAL CONNECTION

