MINIATURE LOAD CELL

TENSION & COMPRESSION

- MINIATURE LOAD CELL
- COMBINED ERROR ≤ ±0.5 %
- IP67 PROTECTION RATING
- 17-4PH STAINLESS STEEL

CE RoHS COMPLIANT REACH COMPLIANCE IP67 STAINLESS STEEL 17-4PH | 1.4542 ISO 17025 ACCREDITED LABORATORY

NOMINAL LOAD (FS)

N	kg (optional)	Net weight (kg)	Combined error	Rated Output (mV/V)
50	5	0.1	≤±0.50 %	1.5 ±15%
100	10	0.1	≤±0.50 %	1.5 ±15%
200	20	0.1	≤±0.50 %	1.5 ±15%
300	30	0.1	≤±0.50 %	1.5 ±15%
500	50	0.1	≤±0.50 %	1.5 ±15%
1 000	100	0.1	≤±0.50 %	1.5 ±15%

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V04 | 09/2026 | © octogon GmbH

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TECHNICAL DATA

PRECISION

Rated Output (C_n)	1.5 mV/V ±15% at FS
Zero Balance	< ±0.05 %
Combined error	≤ ±0.5 %FS
Non-linearity	≤ ±0.5 %FS
Hysteresis	≤ ±0.02 %FS
Repeatability	≤ ±0.02 %FS
Creep	≤ ±0.02 %FS (at 30 min FS)
Temperature coefficient of zero	0.05 %FS/°C
Temperature coefficient of sensitivity	0.05 %FS/°C
Compensated temperature range	-10...+60 °C
Operating temperature range	-20...+80 °C
Reference Temperature	23 °C

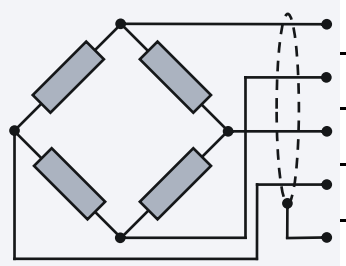
MECHANICAL PROPERTIES

Material	17–4 PH | 1.4542
Deflection at FN	~ 0.4 mm

ELECTRICAL PROPERTIES

Bridge configuration	Full Wheatstone bridge, 4-wire
Input resistance	950±150 Ω
Output resistance	950±150 Ω
Insulation resistance	≥ 5 000 MΩ at 100 V
Recommended excitation voltage	5...12 V
Cable diameter	1.2 mm
Cable length	4000 mm

ELECTRICAL CONNECTION



+ EXCITATION	RED
– EXCITATION	BLACK
+ SIGNAL	GREEN
– SIGNAL	WHITE
SHIELD	

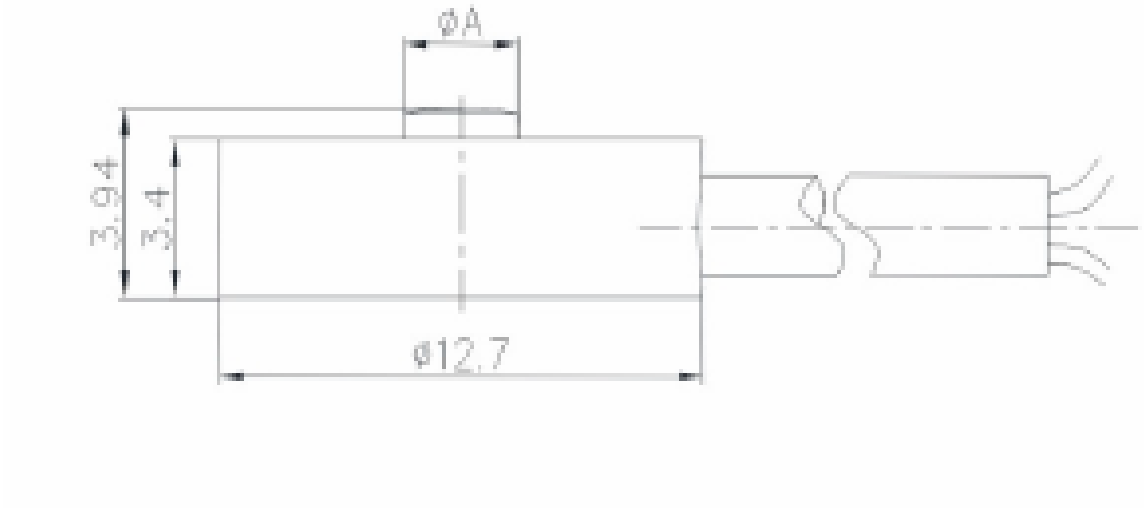
MECHANICAL LIMITS

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	> 200 %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. The dynamic load must be applied to the transducer central thread.

COMPLIANCE AND CERTIFICATION

Protection Rating	IP67 (IEC 60529)
Compliance	CE, RoHS, REACH
Calibration	Factory-calibrated, ISO 17025 calibration available on request
HS-CODE	9031.80.80

DIMENSIONS



	5...20 kg 50...200 N	30...100 kg 300...1 000N
A [mm]	12	15