

CUSTOMIZABLE COMPACT RING LOAD CELL

COMPRESSION



- CUSTOMIZABLE
- COMBINED ERROR $\leq \pm 0.28 \%$
- IP67 PROTECTION RATING
- 17-4PH STAINLESS STEEL | 1.4542



NOMINAL LOAD (FS)

kN	kg (optional)	Net weight (kg)	Combined error	ISO 17025	High Temperature -40...250°C	Rated Output (mV/V)
5	500	0.1	$\leq \pm 0.28 \%$	(optional)	(optional)	$1.5 \pm 10\%$
10	1 000	0.1	$\leq \pm 0.28 \%$	(optional)	(optional)	$1.5 \pm 10\%$
20	2 000	0.1	$\leq \pm 0.28 \%$	(optional)	(optional)	$1.5 \pm 10\%$
50	5 000	0.1	$\leq \pm 0.28 \%$	(optional)	(optional)	$1.5 \pm 10\%$



TECHNICAL DATA

PRECISION

Rated Output (C_n)	1.5 mV/V ± 10 % at FS
Zero Balance	$< \pm 0.05$ %
Combined error	$\leq \pm 0.28$ %FS
Non-linearity	$\leq \pm 0.2$ %FS
Hysteresis	$\leq \pm 0.2$ %FS
Repeatability	$\leq \pm 0.1$ %FS
Creep	$\leq \pm 0.2$ %FS (at 30 min FS)
Temperature coefficient of zero	-0.01 %FS/°C
Temperature coefficient of sensitivity	0.01 %FS/°C
Compensated temperature range	-10...+60 °C
Operating temperature range	-20...+80 °C
Reference Temperature	23 °C

MECHANICAL PROPERTIES

Material	17-4PH STAINLESS STEEL 1.4542
Deflection at FN	~ 0.6 mm

ELECTRICAL PROPERTIES

Bridge configuration	Full Wheatstone bridge, 4-wire
Input resistance	$780 \pm 20 \Omega$
Output resistance	$700 \pm 10 \Omega$
Insulation resistance	$\geq 5\,000\, \text{M}\Omega$ at 100 V
Recommended excitation voltage	5 - 15 V
Cable diameter	4 mm
Cable length	4 000 mm

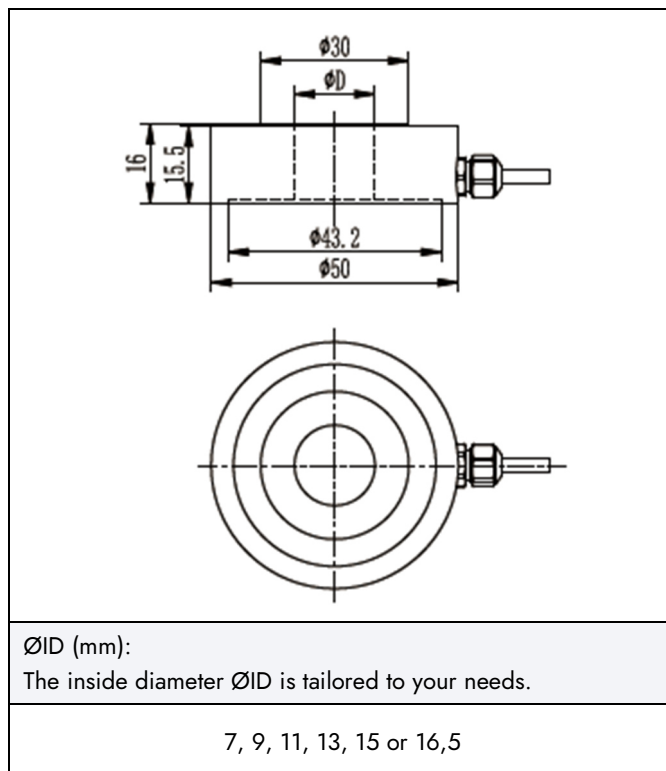
MECHANICAL LIMITS

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	> 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.

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



ELECTRICAL CONNECTION

