

TENSION AND COMPRESSION LOAD CELL

TENSION &
COMPRESSION



- LOW PROFILE
- COMBINED ERROR $\leq \pm 0.014 \%$
- IP66 PROTECTION RATING
- 17-4PH STAINLESS STEEL | 1.4542



NOMINAL LOAD (FS)

t	kN	Net weight (kg)	Combined error	ISO 17025	High Temperature -40...250°C	Rated Output (mV/V)
100	1 000	~25	$\leq \pm 0.014 \%$	(optional)	(optional)	2.0 $\pm 1\%$
200	2 000	~48	$\leq \pm 0.014 \%$	(optional)	(optional)	2.0 $\pm 1\%$
250	2 500	~48	$\leq \pm 0.014 \%$	(optional)	(optional)	2.0 $\pm 1\%$
300	3 000	~92	$\leq \pm 0.014 \%$	(optional)	(optional)	2.0 $\pm 1\%$
400	4 000	~162	$\leq \pm 0.014 \%$	(optional)	(optional)	2.0 $\pm 1\%$
500	5 000	~162	$\leq \pm 0.014 \%$	(optional)	(optional)	2.0 $\pm 1\%$
600	6 000	~208	$\leq \pm 0.014 \%$	(optional)	(optional)	2.0 $\pm 1\%$
800	8 000	~208	$\leq \pm 0.014 \%$	(optional)	(optional)	2.0 $\pm 1\%$



TECHNICAL DATA

PRECISION

Rated Output (C_n)	2.0 mV/V ± 1 % at FS
Zero Balance	$< \pm 1.0$ %
Combined error	$\leq \pm 0.014$ %FS
Non-linearity	$\leq \pm 0.1$ %FS
Hysteresis	$\leq \pm 0.1$ %FS
Repeatability	$\leq \pm 0.1$ %FS
Creep	$\leq \pm 0.05$ %FS (at 30 min FS)
Temperature coefficient of zero	0.005 %FS/°C
Temperature coefficient of sensitivity	0.005 %FS/°C
Compensated temperature range	-10...+40 °C
Operating temperature range	-10...+70 °C
Reference Temperature	23 °C

MECHANICAL PROPERTIES

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

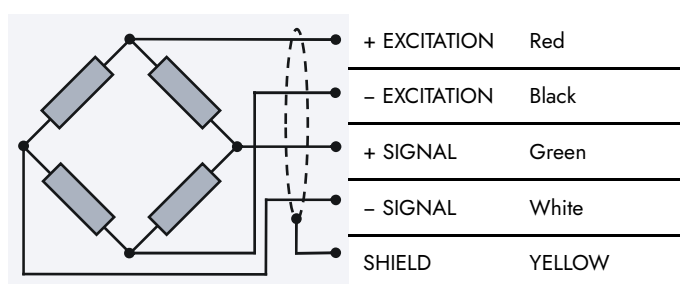
COMPLIANCE AND CERTIFICATION

Protection Rating	IP66 (IEC 60529)
Compliance	CE, RoHS, REACH
Calibration	Factory calibrated, ISO 17025 calibration available on request
HS-CODE	9031.80.80

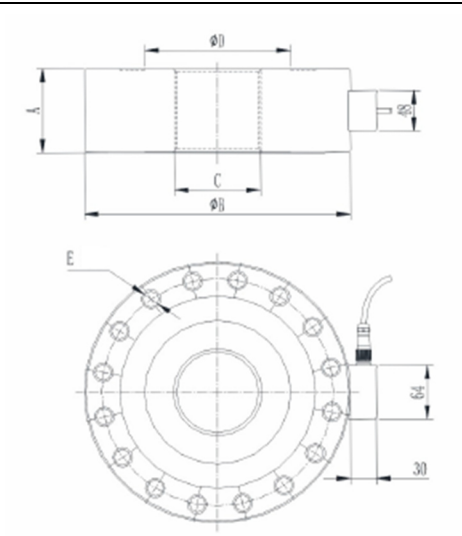
ELECTRICAL PROPERTIES

Bridge configuration	Full Wheatstone bridge, 4-wire
Input resistance	$780 \pm 20 \Omega$
Output resistance	$700 \pm 10 \Omega$
Insulation resistance	$\geq 5\,000\, M\Omega$ at 100 V
Recommended excitation voltage	5 - 15 V
Cable diameter	5.0 mm
Cable length	6 000 mm

ELECTRICAL CONNECTION



DIMENSIONS



Cap(t)	(mm)				
	A	B	C	D	E
100	68	268	M72 x 2	122	16-Ø17
200, 250	100	310	M100 x 4	170	16-Ø19
300	120	390	M120 x 4	200	20-Ø21
400, 500	142	480	M160 x 4	260	20-Ø26
600,800	148	540	M200 x 4	310	20-Ø32

