

SHEAR BEAM LOAD CELL

TENSION &
COMPRESSION



- COMBINED ERROR $\leq \pm 0.02\%$C3
- COMBINED ERROR $\leq \pm 0.017\%$C4
- IP68 PROTECTION RATING
- 17-4PH STAINLESS STEEL



NOMINAL LOAD (FS)

kg	N	Net weight (kg)	ACCURACY CLASS		ISO 17025	Rated Output (mV/V)
			C3	C4		
500	5 000	2.1	•	•	(optional)	2 $\pm$ 0.2%
1 000	10 000	2.1	•	•	(optional)	2 $\pm$ 0.2%
2 000	20 000	2.1	•	•	(optional)	2 $\pm$ 0.2%
5 000	50 000	4.2	•	–	(optional)	2 $\pm$ 0.2%
7 500	75 000	4.2	•	–	(optional)	2 $\pm$ 0.2%
10 000	100 000	4.2	•	–	(optional)	2 $\pm$ 0.2%

ON
REQUEST



TECHNICAL DATA

PRECISION

Rated Output (C_n)	2 mV/V ± 0.2 % at FS
Zero Balance	$< \pm 1$ %
Combined error	$\leq \pm 0.02$ %FS (C3)
	$\leq \pm 0.017$ %FS (C4)
Non-linearity	$\leq \pm 0.014$ %FS (C3)
	$\leq \pm 0.012$ %FS (C4)
Hysteresis	$\leq \pm 0.014$ %FS (C3)
	$\leq \pm 0.012$ %FS (C4)
Repeatability	-
Creep	$\leq \pm 0.02$ %FS (at 30 min FS)
Temperature coefficient of zero	0.0018 %FS/°C
Temperature coefficient of sensitivity	0.0014 %FS/°C
Compensated temperature range	-10...+40 °C
Operating temperature range	-30...+65 °C
Reference Temperature	23 °C

MECHANICAL PROPERTIES

Material	AISI 420 stainless steel
Deflection at FN	~ 0.4 mm

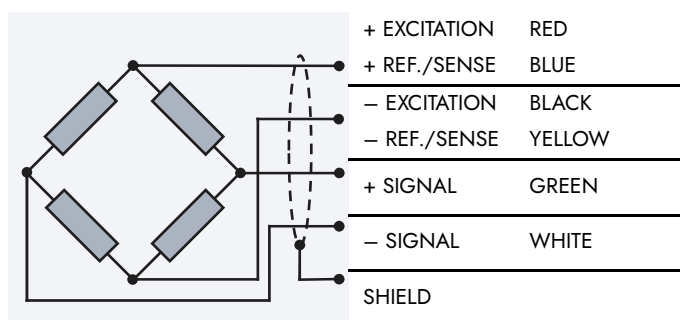
MECHANICAL LIMITS

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

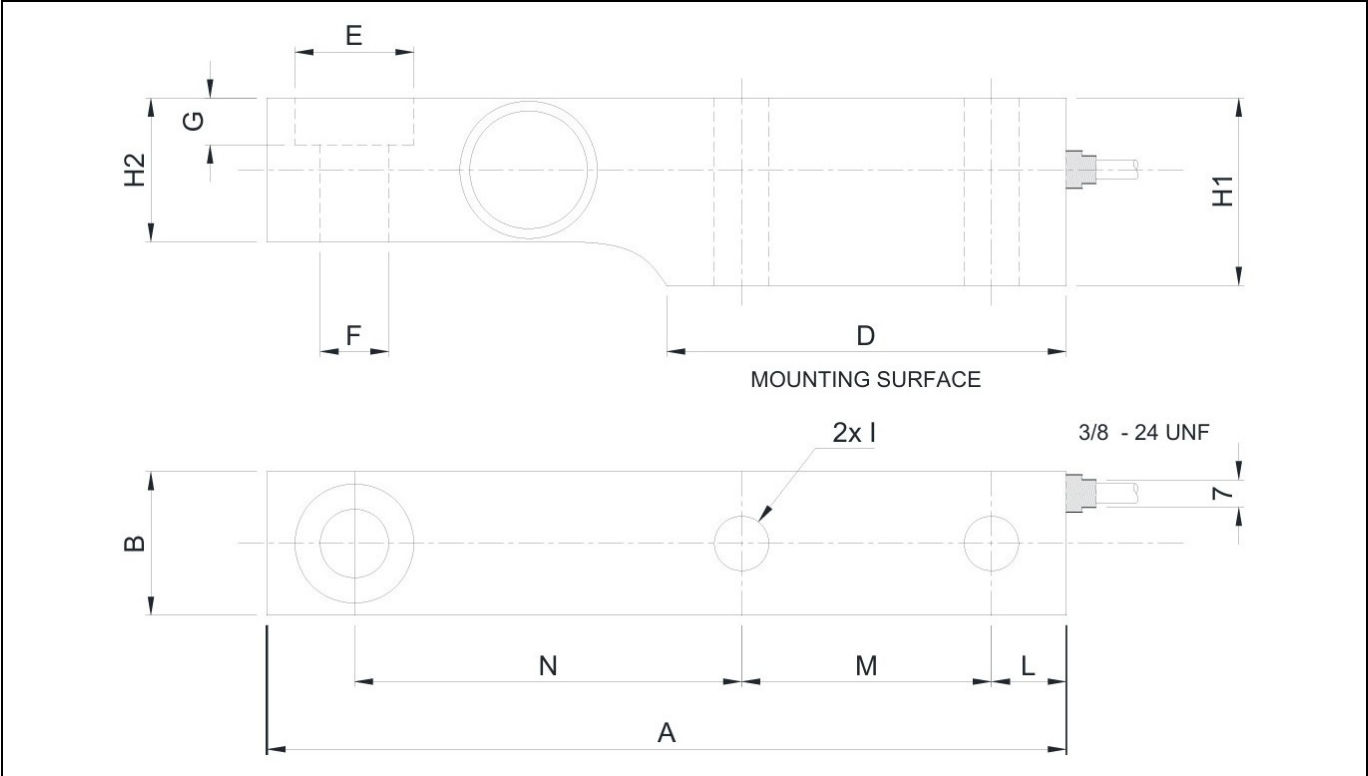
ELECTRICAL PROPERTIES

Bridge configuration	Full Wheatstone bridge, 6-wire
Input resistance	$350 \pm 3.5 \Omega$
Output resistance	$350 \pm 3.5 \Omega$
Insulation resistance	$\geq 5,000$ M Ω at 100 V
Recommended excitation voltage	≤ 18 V
Cable diameter	5 mm
Cable length	5 000 mm

ELECTRICAL CONNECTION



DIMENSIONS (mm)



	500 kg 1 000 kg 2 000 kg	5 000 kg 7 500 kg	10 000 kg
A	203.2	235	235
B	36.48	47.5	55
D	101.6	111.2	111.2
E	Ø30.3	Ø41.3	Ø41.3
F	Ø17.5	Ø25.5	Ø25.5
G	11.9	15.75	15.75
H1	47.63	69.9	69.9
H2	36.5	47.6	47.6
I	Ø14	Ø22	Ø25
L	19.05	20.06	20.06
M	63.5	66.7	66.7
N	98.45	123.8	123.8



COMPLIANCE AND CERTIFICATION

Protection Rating	IP68 according to IEC 60529	
Compliance	CE, RoHS, REACH	
Calibration	Factory-calibrated, ISO 17025 calibration available on request	
HS-CODE	9031.80.80	
Certifications (on request)		OIML R60 C3
		Complies with the Eurasian Customs Union regulations
		Equivalent of the CE marking for the United Kingdom
	Calibration report	
		LAT Accredia calibration certificate ISO 376 or ASTM E74 for <u>capacities from 1000 kg to 10000 kg</u>
		OIML R60 C4
		ATEX (zone 2-22)
		Complies with the Eurasian Customs Union regulations for use in potentially explosive atmospheres
		Complies with Chinese market regulations for use in potentially explosive atmospheres

