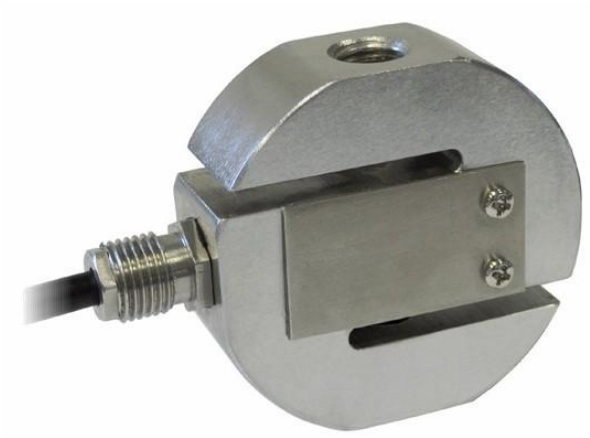
TENSION AND COMPRESSION LOAD CELL

TENSION & COMPRESSION

Capacity from 50 kg to 300 kg



Capacity from 500 kg to 5000 kg

- STAINLESS STEEL AISI 420
- COMBINED ERROR ≤ ±0.03 %
- IP67 PROTECTION RATING

Manufactured according to OIML R60 standards

NOMINAL LOAD (FS)

kg	kN	Net weight (kg)	Combined error	EAC	UKCA	ISO 376	Ex	Rated Output (mV/V)
50	0.5	0.7	≤±0.03 %	•	•	•	•	2.0 ±0.4%
100	1	0.7	≤±0.03 %	•	•	•	•	2.0 ±0.4%
200	2	0.7	≤±0.03 %	•	•	•	•	2.0 ±0.4%
300	3	0.7	≤±0.03 %	•	•	•	•	2.0 ±0.4%
500	5	0.7	≤±0.03 %	•	•	•	•	2.0 ±0.4%
1 000	10	1.4	≤±0.03 %	•	•	•	•	2.0 ±0.4%
2 500	25	1.4	≤±0.03 %	•	•	•	•	2.0 ±0.4%
5 000	50	2.7	≤±0.03 %	•	•	•	•	2.0 ±0.4%

ON REQUEST

TECHNICAL DATA

PRECISION

Rated Output (C_n)	2.0 mV/V±0.4 % at FS
Zero Balance	< ±2.0 %
Combined error	≤ ±0.03 %FS
Non-linearity	≤ ±0.021 %FS
Hysteresis	≤ ±0.021 %FS
Creep	≤ ±0.03 %FS (at 30 min FS)
Temperature coefficient on zero	0.0025 %FS/°C
Temperature coefficient on span	0.0025 %FS/°C
Compensated temperature range	-10...+40 °C
Operating temperature range	-20...+60 °C
Reference Temperature	23 °C

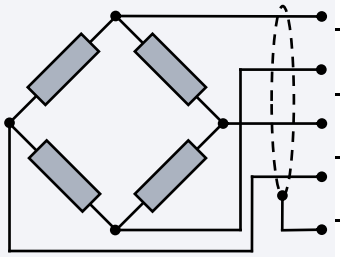
MECHANICAL PROPERTIES

Material	STAINLESS STEEL AISI 420
Deflection at FN	~ 0.4 mm

ELECTRICAL PROPERTIES

Bridge configuration	Full Wheatstone bridge, 6-wire
Input resistance	385 ± 30 Ω
Output resistance	350 ± 10 Ω
Insulation resistance	≥ 2 000 MΩ at 100 V
Recommended excitation voltage	5 - 15 V
Cable diameter	6.0 mm
Cable length	10 m
Cores	6 x 0.20 mm²

ELECTRICAL CONNECTION

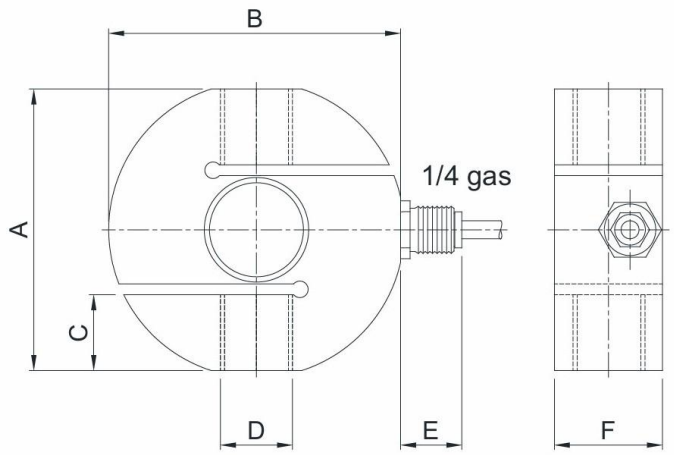


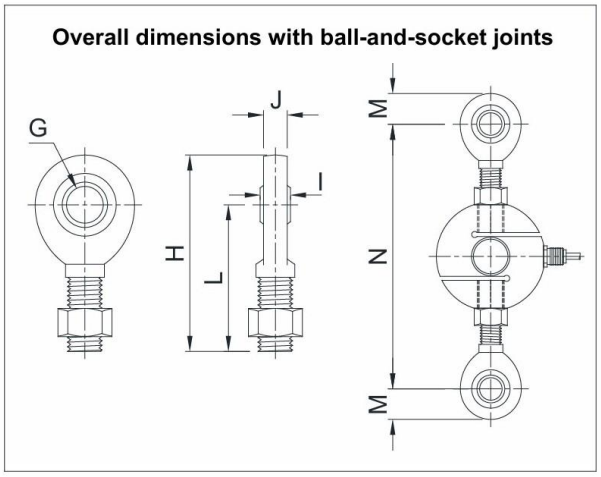
+ EXCITATION	Red
+ REF./SENSE	Blue
– EXCITATION	Black
– REF./SENSE	Yellow
+ SIGNAL	Green
– SIGNAL	White
SHIELD	

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	> 350 %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.

DIMENSIONS (mm)





	500 kg 1 000 kg	1 000 kg	2 500 kg	5 000 kg
A	59.5	78	78	90
B	63,5	82	82	102
C	14.5	21	21	24
D	M12 x 1.75	M16 x 2	M20 x 1.5	M24 x 2
E	17	17	17	17
F	22	30	30	45
G	Ø12	Ø17	Ø20	Ø25
H	71	92	104.5	126
I	10	14	16	20
J	8.5	11.5	13.5	17.5
L	54.5	69.5	77.5	94.5
M	16.5	22.5	27	31.5
N (≈)	140	176	191	230

COMPLIANCE AND CERTIFICATION

Protection Rating	IP67	
Compliance	CE, RoHS, REACH	
Calibration	Factory-calibrated, ISO 17025 calibration available on request	
HS-CODE	9031.80.80	
Certifications	EAC	Complies with the Eurasian Customs Union regulations
	UKCA	Equivalent of the CE marking for the United Kingdom
Certifications (on request)		Calibration report
	ISO 376	LAT Accredia calibration certificate ISO 376 or ASTM E74 for capacities from 1000 kg to 10000 kg
	Ex	ATEX (zone 2-22)
	EAC Ex	Complies with the Eurasian Customs Union regulations for use in potentially explosive atmospheres
	Ex NEPSI	Complies with Chinese market regulations for use in potentially explosive atmospheres

COMPLEMENTARY ACCESSORIES

LALAR	Dimensions	Load Cell Capacity
Ball-and-socket with nut:	M12x1.75	50-500 kg
	M16x2	1 000 kg
	M20x1.5	2 500 kg
stainless steel	M24x2	5 000 kg

LALAS	Dimensions	Load Cell Capacity
Ball-and-socket with nut:	M12x1.75	50-500 kg
	M16x2	1 000 kg
	M20x1.5	2 500 kg
galvanized C40 steel	M24x2	5 000 kg