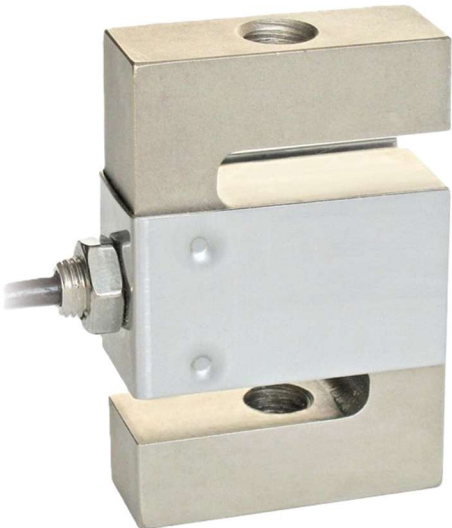


TENSION AND COMPRESSION LOAD CELL

TENSION & COMPRESSION



- NICKEL PLATED STEEL AISI 4340
- COMBINED ERROR $\leq \pm 0.02\%$C3
- COMBINED ERROR $\leq \pm 0.017\%$C4
- IP67 PROTECTION RATING





NOMINAL LOAD (FS)

kg	N	NET WEIGHT (kg)	COMBINED ERROR (C3)	ACCURACY CLASS			
				C3	C4		
25	250	0.4	$\leq \pm 0.02 \%$	-	-	-	-
100	1 000	0.6	$\leq \pm 0.02 \%$	•	•	•	•
200	2 000	0.6	$\leq \pm 0.02 \%$	•	•	-	•
300	3 000	0.6	$\leq \pm 0.02 \%$	•	•	-	•
500	5 000	0.7	$\leq \pm 0.02 \%$	•	•	•	•
1 000	10 000	0.9	$\leq \pm 0.02 \%$	•	•	•	•
2 500	25 000	1.6	$\leq \pm 0.02 \%$	•	•	•	•

ON REQUEST



TECHNICAL DATA

PRECISION

Rated Output (C_n)	2.0 mV/V $\pm$ 0.2 % at FS
Zero Balance	$< \pm 1.0$ %
Combined error	$\leq \pm 0.02$ %FS
Non-linearity	$\leq \pm 0.014$ %FS
Hysteresis	$\leq \pm 0.014$ %FS
Creep	$\leq \pm 0.03$ %FS (at 30 min FS)
Temperature coefficient on zero	0.0015 %FS/ $^{\circ}$ C
Temperature coefficient on span	0.0017 %FS/ $^{\circ}$ C
Compensated temperature range	-10...+40 $^{\circ}$ C
Operating temperature range	-35...+65 $^{\circ}$ C
Reference Temperature	24 $^{\circ}$ C

MECHANICAL PROPERTIES

Material	NICKEL PLATED STEEL AISI 4340
Deflection at FN	~ 0.4 mm

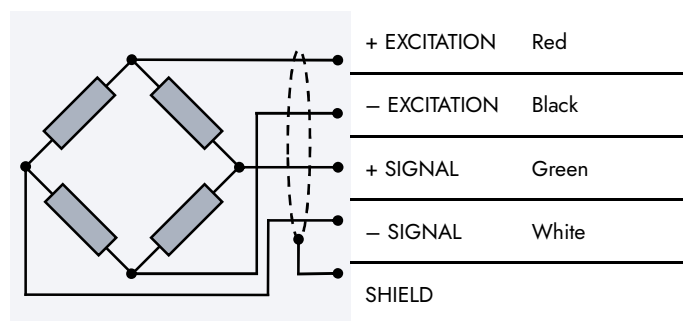
MECHANICAL LIMITS

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.

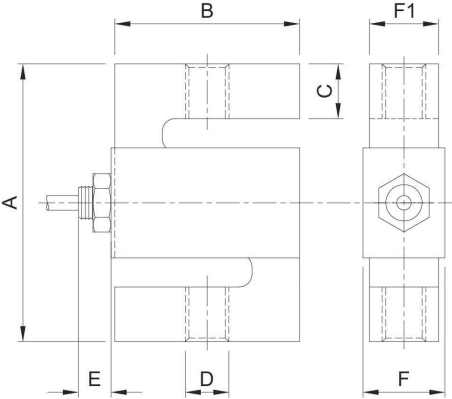
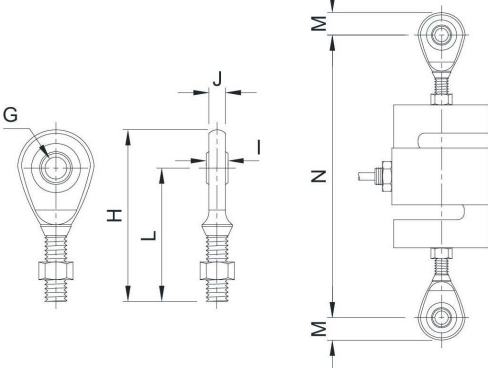
ELECTRICAL PROPERTIES

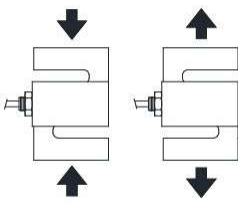
Bridge configuration	Full Wheatstone bridge, 4-wire
Input resistance	350 ± 3.5 Ω
Output resistance	350 ± 3.5 Ω
Insulation resistance	$\geq 5\,000$ M Ω at 100 V
Recommended excitation voltage	5 - 15 V
Cable diameter	5.0 mm
Cable length	5 000 mm (25 - 300 kg) 10 000 mm (500 - 2 500 kg)

ELECTRICAL CONNECTION

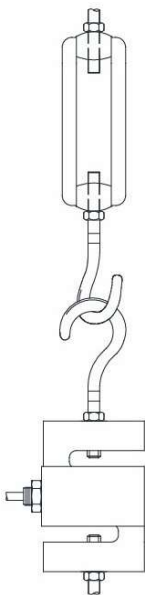


DIMENSIONS (mm)

 Overall dimensions with ball-and-socket joints 					
	25 kg	100 kg	200 kg 300 kg 500 kg	1 000 kg	2 500 kg
A	76.2	76.2	76.2	76.2	101.6
B	50.8	50.8	50.8	50.8	76.2
C	15.5	15.3	14.4	12.5	20
D	M8 x 1.25	M10 x 1.5	M12 x 1.75	M12 x 1.75	M20 x 1.5
E	10	9	8 9 9	10	6
F	14.5	22.4	22.4	28.9	28.9
F1	12.7	19	19	25.4	25.4
G	Ø8	Ø10	Ø12	Ø12	Ø20
H	54	62.5	71	71	104.5
I	8	9	10	10	16
J	6.5	7.5	8.5	8.5	13.5
L	42.5	48.5	54.5	54.5	77.5
M	11.5	14	16.5	16.5	27
N (≈)	129	142	154	159	217



Example of application on the tension bar mechanical scale





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	 OIML R60 C3
	 Complies with the Eurasian Customs Union regulations
	 Equivalent of the CE marking for the United Kingdom
	 Complies with United Kingdom regulations for legal for trade use
Certifications (on request)	 OIML R60 C4
	 LAT Accredia calibration certificate ISO 376 or ASTM E74 <u>for capacities from 1000 kg to 10000 kg</u>
	 ATEX II 1G 2D (zone 0-1-2-21-22) ( - )
	 Complies with the Eurasian Customs Union regulations for use in potentially explosive atmospheres
	 FM HazLoc - Complies with the United States and Canada regulations for use in potentially explosive atmospheres
	 Complies with Chinese market regulations for use in potentially explosive atmospheres
	 NTEP - Complies with United States regulations for legal for trade use
	 IECEx (zone 0-1-2-20-21-22)



COMPLEMENTARY ACCESSORIES



DESCRIPTION	DIMENSIONS	LOAD CELL CAPACITY	CODE
Ball-and-socket joint with nut:			
stainless steel	M12x1.75	200-1000 kg	EM-INOX
	M20x1.5	2500 kg	
galvanized C40 steel	M8x1.25	25 kg	EM
	M10x1.5	100 kg	
	M12x1.75	200-1000 kg	
	M20x1.5	2500 kg	

