

DOUBLE SHEAR BEAM LOAD CELL



- COMBINED ERROR $\leq \pm 0.023\%$
- IP68 PROTECTION RATING
- AISI 4340 NICKEL PLATED STEEL



NOMINAL LOAD (FS)

kN	t	Net weight (kg)	Accuracy Class	ISO 17025	Rated Output (mV/V)
90	9	2.7	C3	(optional)	3.0 $\pm$ 0.1%
136	13.6	7.75	C3	(optional)	3.0 $\pm$ 0.1%
180	18	7.78	C3	(optional)	3.0 $\pm$ 0.1%
230	23	8.3	C3	(optional)	3.0 $\pm$ 0.1%
270	27	8.5	C3	(optional)	3.0 $\pm$ 0.1%



TECHNICAL DATA

PRECISION

Rated Output (C_n)	3 mV/V ± 0.1 % at FS
Zero Balance	$< \pm 1$ %
Combined error	$\leq \pm 0.023$ %FS
Non-linearity	$\leq \pm 0.016$ %FS
Hysteresis	$\leq \pm 0.016$ %FS
Repeatability	$\leq \pm 0.02$ %FS
Creep	$\leq \pm 0.016$ %FS (at 30 min FS)
Temperature coefficient of zero	0.002 %FS/°C
Temperature coefficient of sensitivity	0.002 %FS/°C
Compensated temperature range	-10...+40 °C
Operating temperature range	-35...+65 °C
Reference Temperature	23 °C

MECHANICAL PROPERTIES

Material	AISI 4340 nickel plated steel
Deflection at FN	~ 0.6 mm

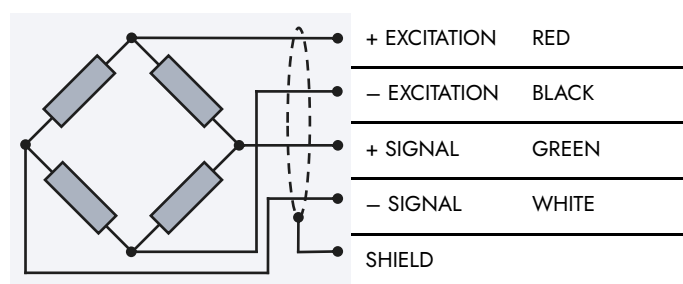
MECHANICAL LIMITS

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.

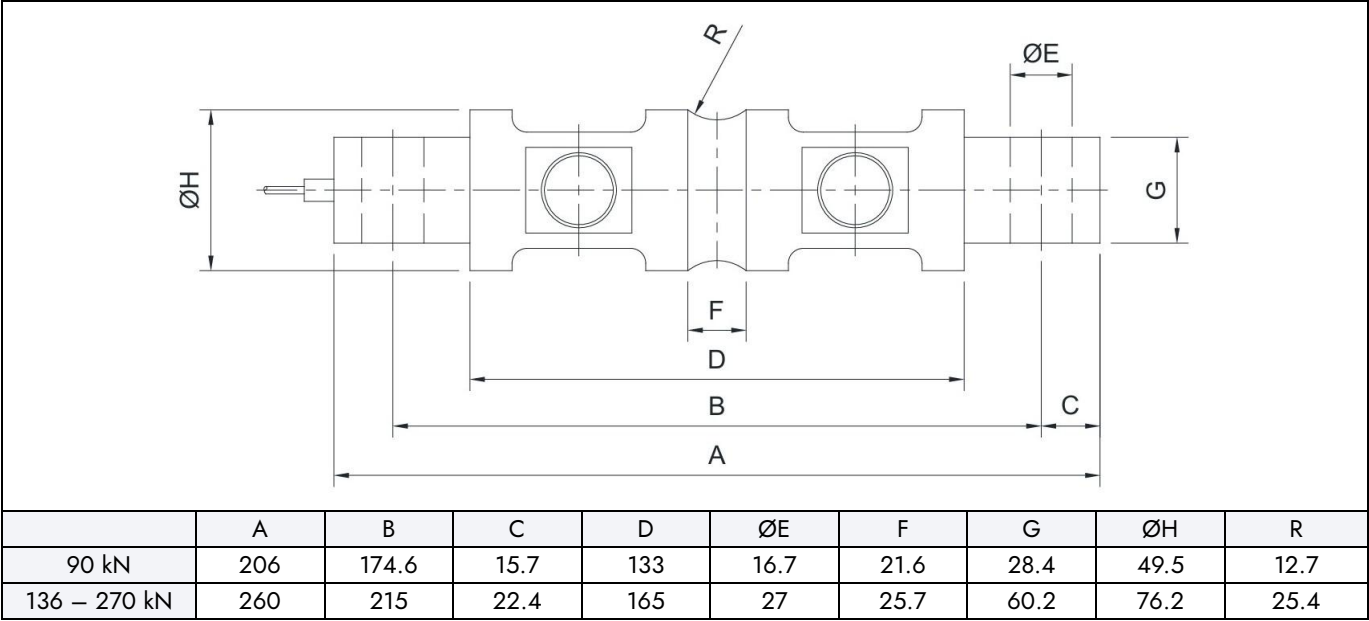
ELECTRICAL PROPERTIES

Bridge configuration	Full Wheatstone bridge, 4-wire
Input resistance	700 $\pm$ 7 Ω
Output resistance	700 $\pm$ 7 Ω
Insulation resistance	$\geq 5,000$ M Ω at 100 V
Recommended excitation voltage	≤ 18 V
Cable diameter	5 mm (90 kN), 8 mm (136 - 270 kN)
Cable length	9 000 mm

ELECTRICAL CONNECTION



DIMENSIONS (mm)



COMPLIANCE AND CERTIFICATION

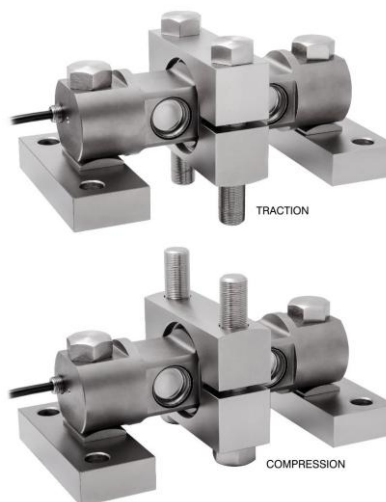
Protection Rating	IP68 according to IEC 60529	
Compliance	CE, RoHS, REACH	
Calibration	Factory calibrated, ISO 17025 calibration available on request	
HS-CODE	9031.80.80	
Certifications		OIML R60 C3
		Complies with the Eurasian Customs Union regulations
		Equivalent of the CE marking for the United Kingdom
Certifications (on request)		Calibration report
		LAT Accredia calibration certificate ISO 376 or ASTM E74 for <u>capacities from 1000 kg to 10000 kg</u>
		ATEX (zone 2-22)
		ATEX/IECEx (zone 1-21)
		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



MOUNTING KITS AND ACCESSORIES

LMLBB

- Nickel-plated steel alloy mounting kit for rigid attachment of the load cell.
- It prevents horizontal movement.



9...27 t
90...270 kN

