

DOUBLE SHEAR BEAM LOAD CELL



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





NICKEL PLATED
STEEL
AISI 4340

NOMINAL LOAD (FS)

kN	t	Net weight (kg)	Accuracy Class		ISO 17025
90	9	2.7	C3	•	(optional)
136	13.6	7.75	C3	•	(optional)
180	18	7.78	C3	•	(optional)
230	23	8.3	C3	•	(optional)
270	27	8.5	C3	•	(optional)



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

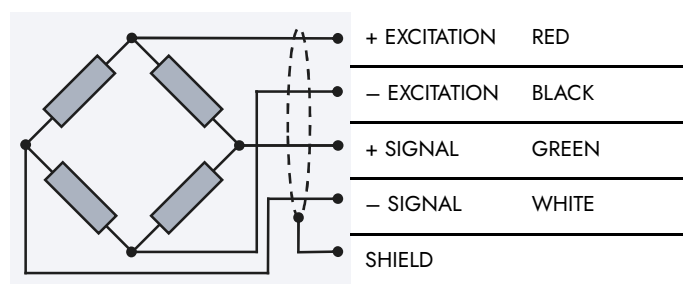
MECHANICAL LIMITS

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.

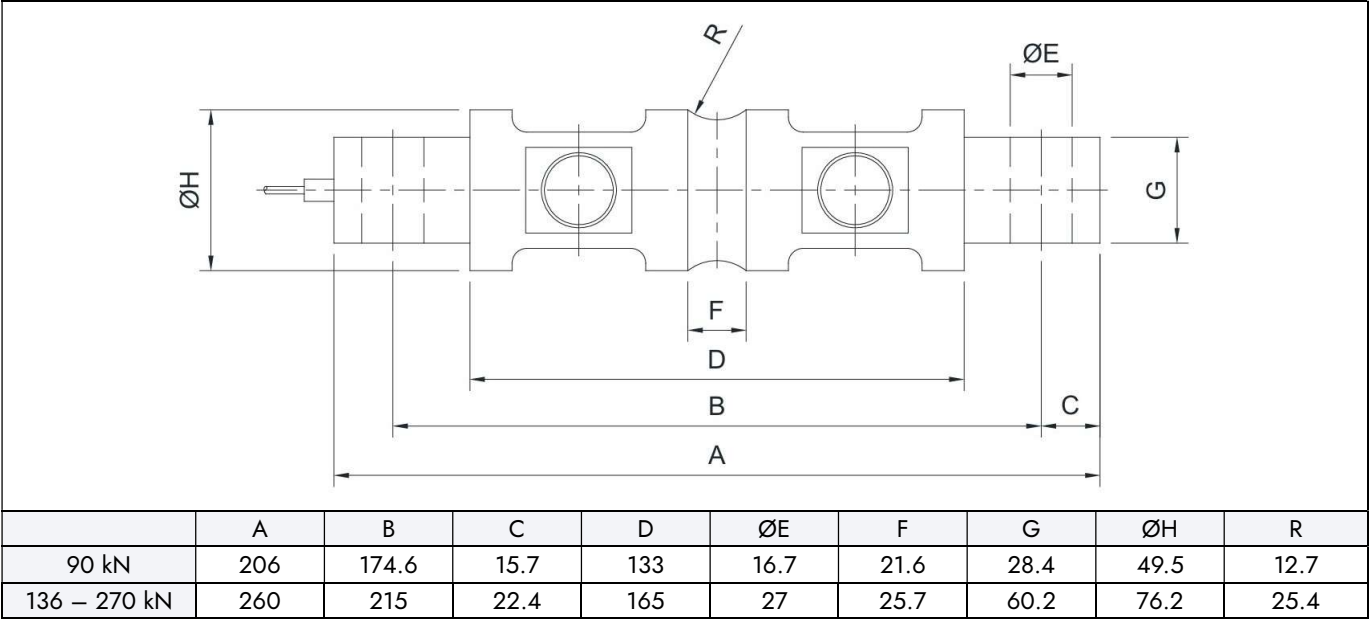
ELECTRICAL PROPERTIES

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

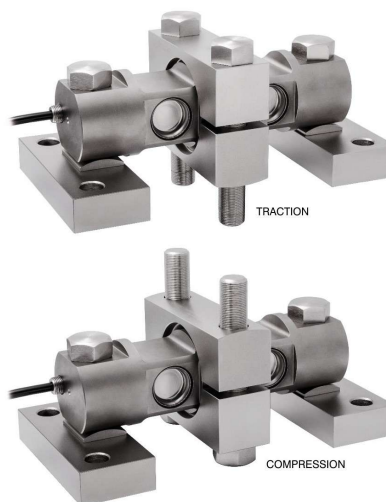
Protection Rating	IP68 according to IEC 60529
Compliance	CE, RoHS, REACH
Calibration	Factory calibrated, ISO 17025 calibration available on request
HS-CODE	9031.80.80
Certifications	 OIML R60 C3
	 Complies with the Eurasian Customs Union regulations
	 Equivalent of the CE marking for the United Kingdom
	 Complies with United Kingdom regulations for legal for trade use
Certifications (on request)	 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) ( )
	 IECEx (zone 0-1-2-20-21-22)
	 Complies with the Eurasian Customs Union regulations for use in potentially explosive atmospheres



MOUNTING KITS AND ACCESSORIES

VDTX

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



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

