DOUBLE SHEAR BEAM LOAD CELL

- COMBINED ERROR ≤ ±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	Rated Output (mV/V)
90	9	2.7	C3	(optional)	3.0 ±0.267%
136	13.6	7.75	C3	(optional)	3.0 ±0.267%
180	18	7.78	C3	(optional)	3.0 ±0.267%
230	23	8.3	C3	(optional)	3.0 ±0.267%
270	27	8.5	C3	(optional)	3.0 ±0.267%

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TECHNICAL DATA

PRECISION

Rated Output (C_n)	3 mV/V ±0.267 % at FS
Zero Balance	< ±1 %
Combined error	≤ ±0.023 %FS
Non-linearity	≤ ± %FS
Hysteresis	≤ ± %FS
Repeatability	≤ ± %FS
Creep	≤ ±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	°C

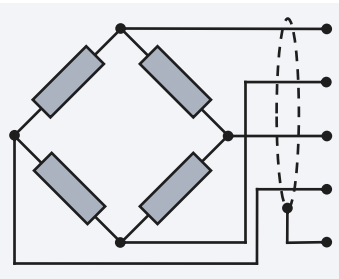
MECHANICAL PROPERTIES

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

ELECTRICAL PROPERTIES

Bridge configuration	Full Wheatstone bridge, 4-wire
Input resistance	700±7 Ω
Output resistance	700±7 Ω
Insulation resistance	≥ 5,000 MΩ at 100 V
Recommended excitation voltage	≤ 18 V
Cable diameter	5 mm (90 kN), 8 mm (136 - 270 kN)
Cable length	9 m
Cores	4 x 0.22 mm²

ELECTRICAL CONNECTION

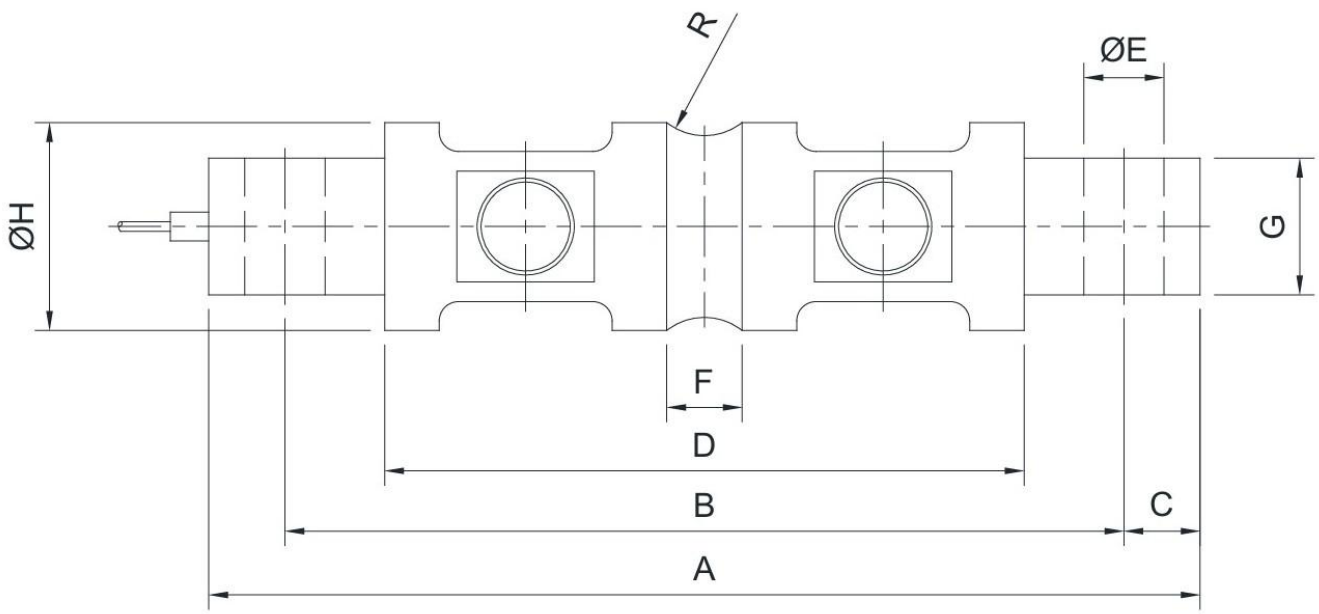


+ EXCITATION	RED
– EXCITATION	BLACK
– SIGNAL	WHITE
+ SIGNAL	GREEN
SHIELD	

MECHANICAL LIMITS

Safe overload	150 %FS	The highest static load that may be applied once or briefly without mechanical damage.
Ultimate overload	> 300 %FS	Load at which permanent deformation or mechanical failure (fracture) occurs.

DIMENSIONS (mm)



	A	B	C	D	ØE	F	G	ØH	R
90 kN	206	174.6	15.7	133	16.7	21.6	28.4	49.5	12.7
136 – 270 kN	260	215	22.4	165	27	25.7	60.2	76.2	25.4

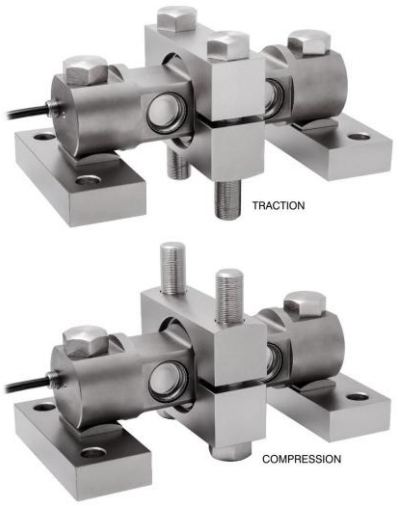
COMPLIANCE AND CERTIFICATION

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	OIML R60 C3
	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)
	Ex IECEx	ATEX/IECEx (zone 1-21)
	EAC Ex	Complies with the Eurasian Customs Union regulations for use in potentially explosive atmospheres
	FM APPROVED	FM HazLoc - Complies with the United States and Canada regulations for use in potentially explosive atmospheres
	Ex NEPSI	Complies with Chinese market regulations for use in potentially explosive atmospheres

MOUNTING KITS

LMLBB

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



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