Load cell for DEMAG DRS-M 125 wheel block

M12

COMPRESSION



- COMBINED ERROR ≤ ±0.2%
- IP67 PROTECTION RATING
- 17-4-PH STAINLESS STEEL

IP67

Stainless Steel
17-4 PH · 1.4542

REACH COMPLIANCE

RoHS COMPLIANT

ISO 17025 ACCREDITED LABORATORY

NOMINAL LOAD (FS)

kg	kN	ISO 17025	Net Weight (kg)	Rated Output (mV/V)
3 000	30	(optional)	5.5	1 ±0.1 %

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TECHNICAL DATA

PRECISION

Rated Output (C_n)	1 mV/V ±0.1 %FS
Zero Balance	±1 %FS
Combined error	±0.2 %FS
Repeatability	±0.02 %FS
Return to zero over 30 min	±0.02 %FS
Creep	±0.03 %FS (at 30 min FS)
Temperature coefficient of zero	±0.005 %FS/°C
Temperature coefficient of sensitivity	±0.005 %FS/°C
Compensated temperature range	-10...+50 °C
Operating temperature range	-20...+70 °C
Reference Temperature	20 °C

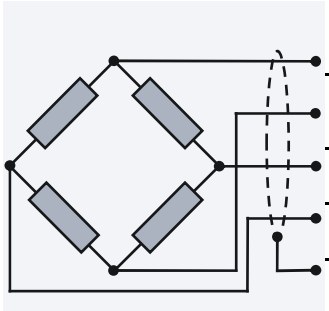
MECHANICAL PROPERTIES

Material	17-4 - PH stainless steel
Deflection at FN	0.20 mm

ELECTRICAL PROPERTIES

Bridge configuration	Full Wheatstone bridge, 6-wire
Input resistance	700±20 Ω
Output resistance	700±5 Ω
Insulation resistance	≥ 5,000 MΩ
Recommended excitation voltage	5...15 V, max 15 V
Cable diameter	5 mm
Cable length	10 m

ELECTRICAL CONNECTION



+ EXCITATION	RED
+ REF./SENSE	BLUE
– EXCITATION	BLACK
– REF./SENSE	BROWN
+ SIGNAL	GREEN
– SIGNAL	WHITE
SHIELD	



View: Plug Side

PIN 1 | –SIG	PIN 5 | –REF
PIN 2 | +SIG	PIN 6 | +REF
PIN 3 | –EXC	PIN 7
PIN 4 | +EXC	PIN 8

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	>500 %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	50 %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.

COMPLIANCE AND CERTIFICATION

Protection Rating	IP67 (IEC 60529)
Compliance	CE, RoHS, REACH
Calibration	Factory-calibrated, ISO 17025 calibration available on request
HS-CODE	PRR 3005

DIMENSIONS (mm)

