

FN2317 HandBreak Load Cell



- Compatible with most handbrakes
- High accuracy regardless force application point
- Ergonomic design
- “Easy to mount” through clamping collars
- Optional high level output

DESCRIPTION

The **FN2317** is designed with the express purpose of allowing quick and easy installation when measuring forces applied to the handle of the hand brake in automobiles. Through careful placement of metallic strain gauges inside the sensors, accurate measurements are obtained regardless of the point of application of force. Clamping collars facilitate the prompt and uncomplicated installation of the load cell under the hand brake. As such, the **FN 2317** is compatible with most models of hand brakes.

Measurement Specialties, Inc. have many years of experience as a designer and manufacturer of sensing solutions to the automotive industry and can supply standard or custom sensors for specific uses and testing environments.

Other designs (e.g. **FN2317-3** with a connector output) have been created. Consult your MEAS' representative for any information or a custom solution to your application.

FEATURES

- Tension measurements
- High accuracy $\leq \pm 0.5\%$ F.S.
- Compact, rugged and easy to mount design
- Optional high level output

APPLICATIONS

- On-board equipment testing
- Production quality control
- Laboratory and Research

STANDARD RANGES

Ranges in N	500	1000
Ranges in lbf	100	200

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PERFORMANCE SPECIFICATIONS

All values are typical at temperature 20±1° C

Parameters	
Operating Temperature Range (OTR)	-20 to 80° C [-4 to 176° F]
Compensated Temperature Range (CTR)	0 to 60° C [32 to 140° F]
Zero Shift in CTR	<0.5% F.S. / 50° C [100° F]
Sensitivity Shift in CTR	<1% of reading / 50° C [100° F]
Range (F.S.)	0-500 to 0-1000 N [0-100 to 0-200 lbf]
Over-Range	
Without Damage	1.5 x F.S.
Without Destruction	3 x F.S.
Accuracy	
Combined non-linearity & hysteresis	≤±0.5% F.S.

Electrical Characteristics

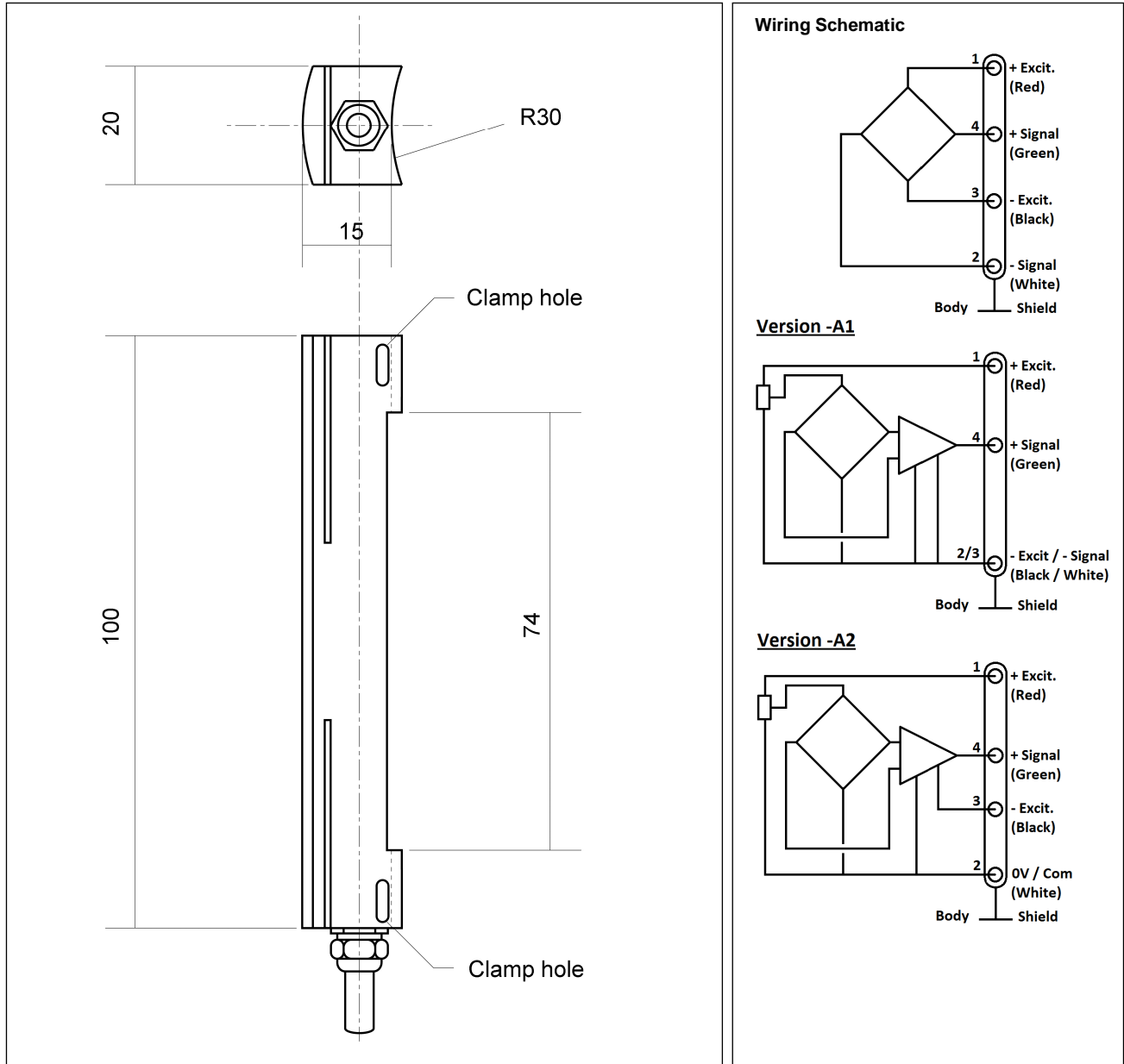
Model	FN2317	FN2317-A1	FN2317-A2
Supply Outage	10Vdc	10 – 30Vdc	±15Vdc (±12 to ±18Vdc)
F.S. Output ⁴	±1.5mV/V	4V ±5% F.S.	5V ±5% F.S.
Zero Offset ⁴	±5% F.S.	0.5V ±5% F.S.	0V ±5% F.S.
Input Impedance/Consumption	350 to 700Ω	<50mA	50mA
Output Impedance	350 to 700Ω	1 kΩ ⁵	1 kΩ ⁵
Insulation under 50Vdc	≥100MΩ	≥100MΩ	≥100MΩ

Notes

1. standard electrical termination: cable gland with Φ3mm shielded cable, 2meters length
2. Material: stainless steel.
3. Protection Index: IP50
4. Other signal output on request
5. Output impedance < 100Ω on request
6. CE conformance according to EN 61010-1, EN 50081-1, EN 50082-1

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DIMENSIONS & WIRING SCHEMATIC (IN METRIC)

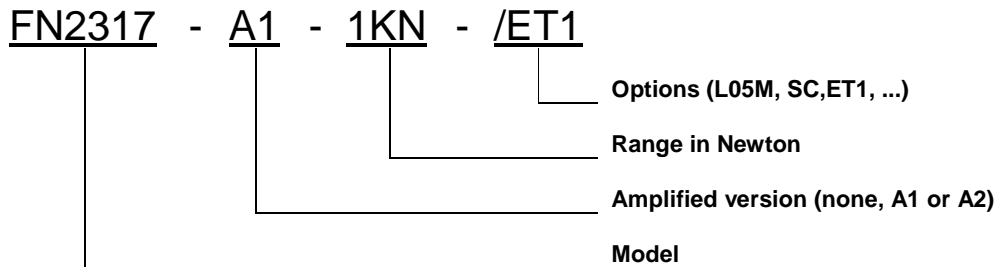


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OPTIONS

A1 : Amplified Tension output with unipolar power supply
A2 : Amplified Tension output with bipolar power supply
ET1 : CTR -20 to 100° C OTR = CTR
SC : LEMO connector output instead of standard cable gland
L00M : special cable length, replace "00" with total length in meters

ORDERING INFO



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