FN7178-2 Shock Absorber Load Cell

- **Measures force in three directions**
- **On-car mounting**
- **Accuracy to 0.5% on each channel**
- **Rugged construction**

Single axis version also available as models **FN3228** and **FN3229**

DESCRIPTION

The **FN7178-2** is designed specifically to be mounted in series with a front wheel shock absorber on a vehicle. It measures the force in three directions to study ride characteristics under a wide range of driving conditions.

Mono-directional versions suited for rear wheel absorbers are available under reference **FN3228** and **FN3229.** Consult your MEAS' representative for technical specification.

With many years of experience as a designer and a manufacturer of sensors, Measurement Specialties, Inc. often works with customers to design or customize sensors for specific uses and testing environments.

FEATURES

- Measures Fx, Fy & Fz simultaneously
- Available as 3 or 1 axis sensor
- Custom designs and interfaces available
- Optional integrated amplifier
- Minimal Cross Effects

APPLICATIONS

- Quality control test benches
- Laboratory and research
- On-board monitoring
- Automotive testing

STANDARD RANGES

Model	FN7178-2		
	X axis	Y axis	Z axis
Range in N	1000	1000	2500
Range in lbf	200	200	500

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PERFORMANCE SPECIFICATIONS

All values are typical at temperature 20±1ºC

PARAMETERS	
Operating Temperature Range (OTR)	-20 to 80° C [-4 to 176° F]
Compensated Temperature Range (CTR)	0 to 60º C [32 to 140° F]
Zero Shift in CTR	<1% F.S. / 50º C [/100° F]
Sensitivity Shift in CTR	< 2% of reading / 50º C [/100° F]
Ranges (F.S.)	See table
Over-Range	
Without Damage	1.5 x F.S.
Accuracy	
Combined non-linearity and hysteresis	±0.5% F.S. on each axis

Electrical Characteristics

Model	**FN7178-2**
Supply Outage	10 Vdc
F.S. Output channels Fx & Fy F.S. Output channel Fz	± 5 mV/V ± 2 mV/V
Zero Offset	±5% F.S.
Insulation under 50Vdc	≥100MΩ

Notes

1. Electrical Termination: cable gland with 2m shielded cable
2. Wiring schematic depends on the sensor and number of channels
3. Materials: Body in stainless steel cover in aluminium alloy
4. Protection index: IP50
5. CE conformance according to EN 61010-1, EN 50081-1, EN 50082-1

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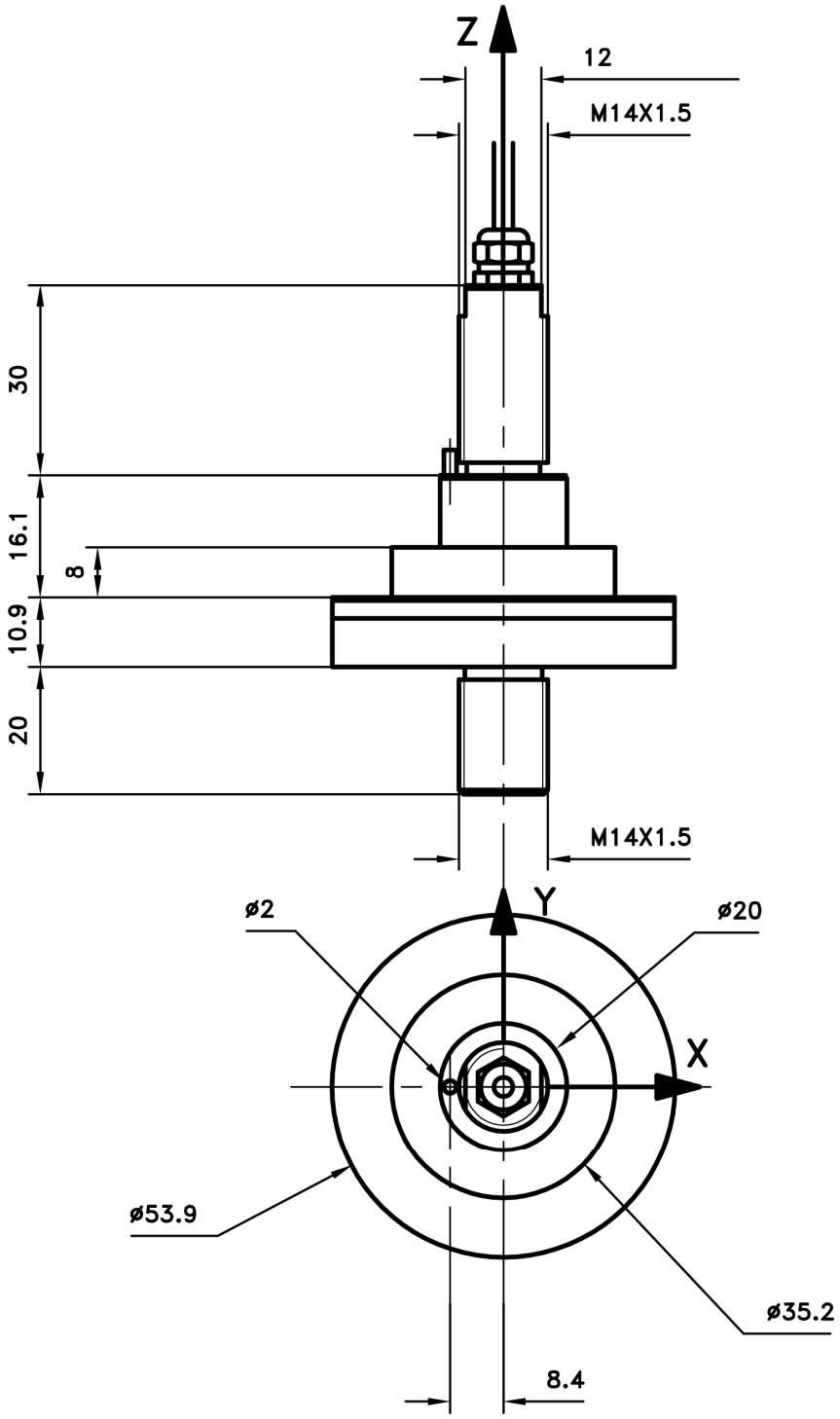
DIMENSIONS & WIRING SCHEMATIC (IN METRIC)



Dimensions are in mm.
The drawings correspond to FN7178-2 and can change depending on technical specifications.

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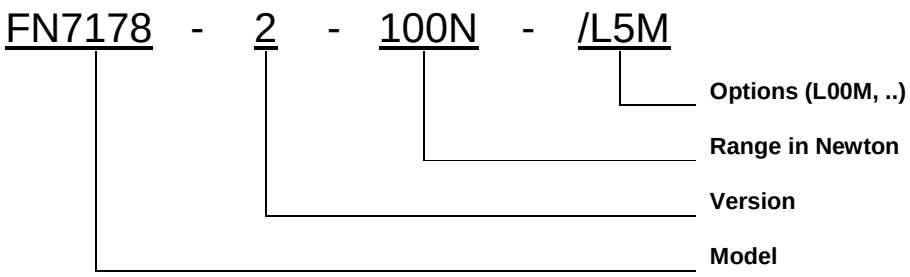
OPTIONS

L00M: Special Cable Length, replace “00” with total length in meter

ORDERING INFORMATION



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