



- Membrane Load Cell Design
- 100 to 50,000 N (20 to 10,000 Lbf)
- Stainless Steel or Aluminum
- Small Size

## **DESCRIPTION**

The FN2640 is specially designed for overseeing manufacturing processes. It measures with high consistency the regularity of compression load generated when fitting pieces. With its compact design and robust construction, the sensor easily integrates into industrial environments for use in applications such as printing, embossing, or other mounting controls. The FN2640 features a spherical load button for better load distribution.

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

To meet your needs we also offer complete turnkey systems. The matched components (sensor, power, amplifier and digital display) are formatted, calibrated and ready for immediate use.

## **FEATURES**

- Full Scale Range: from 0-100 to 0-50,000 N (20 to 10,000 Lbf)
- Compression
- For Static and Dynamic Applications
- Spherical Load Button
- Easy Installation

## **APPLICATIONS**

- Process control equipment
- Printing Embossing
- · Laboratory and Research

## STANDARD RANGES

F.S. Ranges in N	100	250	500	1K	2,5K	5K	10K	25K	50K
F.S. Ranges in lbf	20	50	100	200	500	1K	2K	5K	10K
Stiffness in N/m	5x10 <sup>6</sup>	2x10 <sup>7</sup>	5x10 <sup>7</sup>	9x10 <sup>7</sup>	3x10 <sup>8</sup>	1x10 <sup>9</sup>	8x10 <sup>8</sup>	3x10 <sup>9</sup>	9x10 <sup>9</sup>
Stiffness in Lbf/ft	3.4x10 <sup>5</sup>	1.4x10 <sup>6</sup>	3.4x10 <sup>6</sup>	6.2x10 <sup>6</sup>	2.1x10 <sup>7</sup>	6.9x10 <sup>7</sup>	5.5x10 <sup>7</sup>	2.1x10 <sup>8</sup>	6.2x10 <sup>8</sup>
Material	Aluminum alloy			Stainless steel					



## PERFORMANCE SPECIFICATIONS

Ambient Temperature: 20±1°C (unless otherwise specified)

#### **PARAMETERS**

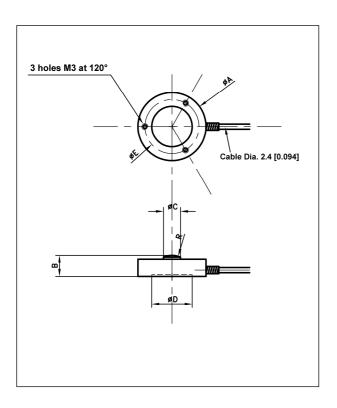
Operating Temperature Range (OTR)	-20 to 80 ℃ [-4 to 176 °F]
Compensated Temperature Range (CTR)	0 to 60 ℃ [32 to 140 °F]
Zero Shift in CTR	<0.5% F.S. / 50℃ [100 °F]
Sensitivity Shift in CTR	<2.10 <sup>4</sup> / °C of reading ; [<1.10 <sup>4</sup> / °F of reading]
Range (F.S.)	0-100 N to 0-50 kN [20 lbf to 10 klbf]
Over-Range	
Without Damage	3 x F.S.
Without Destruction	5 x F.S.
Accuracy	
Combined Non-Linearity & Hysteresis	±1% F.S.
<b>Electrical Characteristics</b>	
Model	FN2640
Supply Outage	10Vdc
F.S. Output	1mV/V
Zero Offset	<±5% F.S.
Input Impedance/Consumption	$350$ to $700\Omega$
Output Impedance	$350$ to $750\Omega$
Insulation under 50Vdc	≥100MΩ

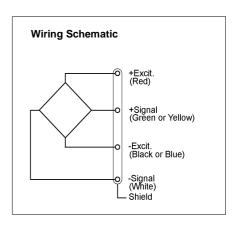
#### Notes

- 1. Electrical Termination: Shielded cable; standard length 2 m [6.5 ft] with strain relief spring 2. Materials: Body in stainless steel or aluminium alloy depending on F.S.



# DIMENSIONS & WIRING SCHEMATIC (IN METRIC AND IMPERIAL)



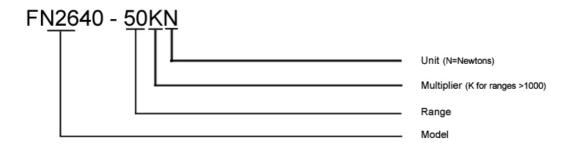


## Dimensions in mm [inch]

F.S. Ranges in N [Lbf]	100 [20]	250 [50]	500 [100]	1K [200]	2,5K [500]	5K [1K]	10K [2K]	25K [5K]	50K [10K]
ØA	32 [1.26]					53 [2.09]			
В	10 [0.39]					16 [0.63]			
ØC	8 [0.31]					22 [0.87]			
ØC	19 [0.75]					40 [1.57]			
ØC	25.5 [1.00]					46.5 [1.83]			
R	15 [0.59]					50 [1.97]			
Material	Aluminum alloy Stainless steel								



# **OPTIONS** Not Available **ORDERING INFO**



The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not oney to the purchaser of such devices any license under the patent rights to the accurate. In desponsionally is assumed for maccuracies. Turnermore, mis information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights of others.