



- Membrane Load Cell Design
- Range from 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, Inc. 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 Ibf/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						

FN2640\_en\_revA



## 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.)	0-100 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.			

#### **Electrical Characteristics**

Mar Jal	ENIO2 (0
Model	FN2640
Supply Outage	10Vdc
F.S. Output	1mV/V
Zero Offset	<±5% F.S.
Input Impedance/Consumption	350 to 700Ω
Output Impedance	350 to 750Ω
Insulation under 50Vdc	≥100MΩ

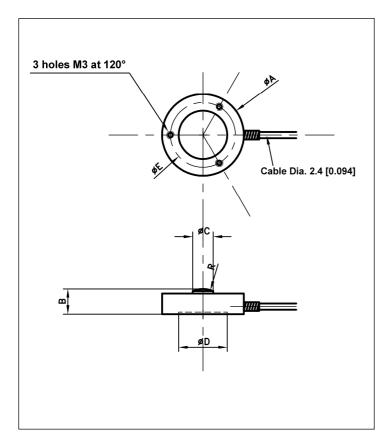
#### Notes

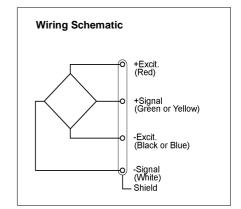
1. Electrical Termination: Shielded cable; standard length 2 m [6.5 ft] with strain relief spring

2. Materials: Body in stainless steel or aluminium alloy depending on F.S.



# DIMENSIONS & WIRING SCHEMATIC (IN METRIC AND IMPERIAL)





#### Dimensions in mm [inch]

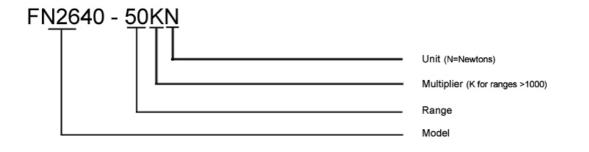
F.S. Ranges in N [lbf]	100 [20]	250 [50]	500 [100]	1k [200]	2.5k [500]	5k [1k]	10k [2k]	25k [5k]	50k [10k]
ØA	32 [1.26]						53 [2.09]		
В	10 [0.39]					16 [0.63]			
ØC	8 [0.31]					22 [0.87]			
ØD	19 [0.75]					40 [1.57]			
ØE	25.5 [1.00]					46.5 [1.83]			
R	15 [0.59]					50 [1.97]			
Material	Aluminum alloy Stainless steel								



**OPTIONS** 

Not Available

## **ORDERING INFO**



### NORTH AMERICA

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