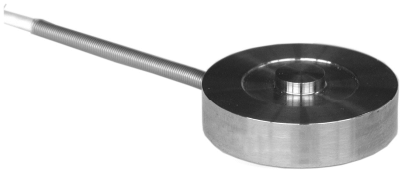
FN2640 Press-Fit Load Cell



- **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	$5x10^6$	$2x10^7$	$5x10^7$	$9x10^7$	$3x10^8$	$1x10^9$	$8x10^8$	$3x10^9$	$9x10^9$
Stiffness in lbf/ft	$3.4x10^5$	$1.4x10^6$	$3.4x10^6$	$6.2x10^6$	$2.1x10^7$	$6.9x10^7$	$5.5x10^7$	$2.1x10^8$	$6.2x10^8$
Material	Aluminum alloy			Stainless steel					

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PERFORMANCE SPECIFICATIONS

All values are typical at temperature 20 ±1℃

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

Model	**FN2640**
Supply Voltage	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.
3. CE conformance according to EN 61010-1, EN 50081-1, EN 50082-1

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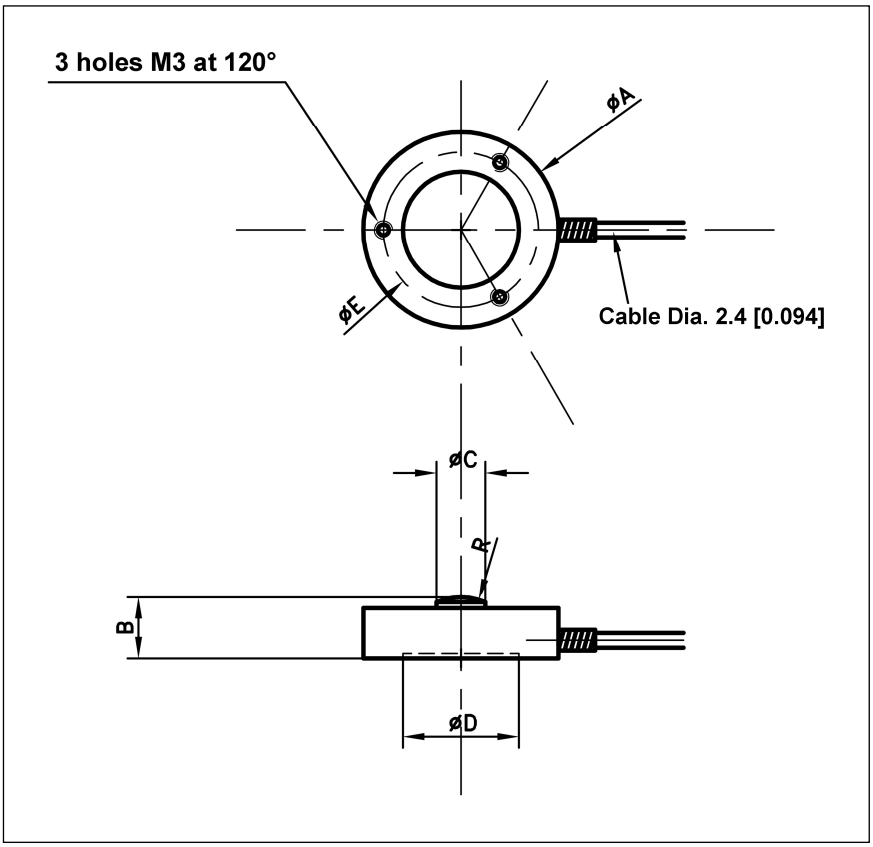
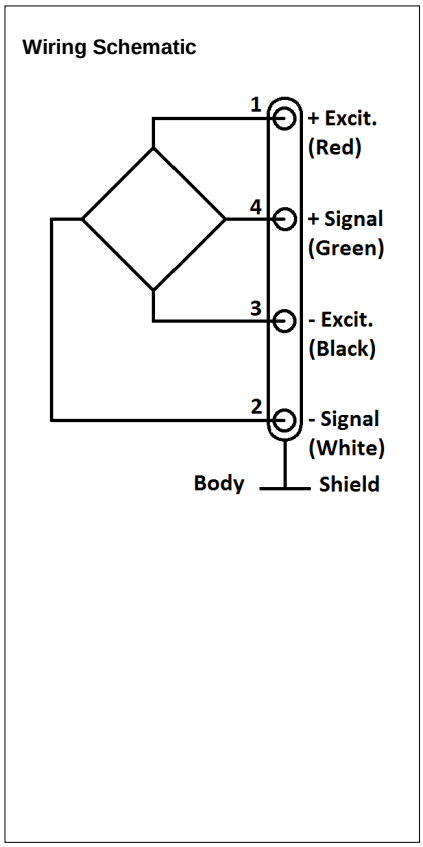
DIMENSIONS & WIRING SCHEMATIC (IN METRIC AND IMPERIAL)





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]		
B	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					

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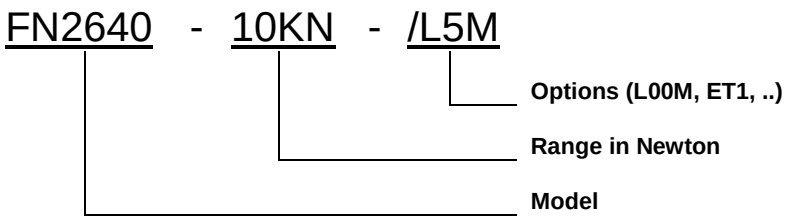
OPTIONS

L00M : special cable length, replace “00” with total length in meters

ORDERING INFO



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