FN2640

Press-Fit Load Cell

SPECIFICATIONS

- **Membrane Load Cell Design**
- **Range from 100 N to 50,000 N (20 lbf to 10,000 lbf)**
- **Stainless Steel or Aluminum**

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 a long standing experience as a designer and manufacturer of sensors, TE CONNECTIVITY often works with customers to design or customize sensors for specific uses and testing environments.

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

On request, Instruction documents can be provided to ease the selection and use of our sensors and provide helpful tips.

FEATURES

- Compression only
- Small size and flat design
- Spherical Load Button
- Easy Installation

APPLICATIONS

- Process Control Equipment
- Printing Embossing
- Laboratory and Research

STANDARD RANGES

Ranges in N (FS)	100	250	500	1k	2,5k	5k	10k	25k	50k
Ranges in lbf (FS)	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					

PERFORMANCE SPECIFICATIONS (typical values at temperature 23±3 °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]
Thermal Zero Shift in CTR	<0.5% F.S. / 50° C [/100° F]
Thermal Sensitivity Shift in CTR	<1% of reading / 50° C [/100° F]
Over-Range	
Without Damage	3 x F.S.
Without Destruction	5 x F.S.
Accuracy	
Combined Non-Linearity & Hysteresis	±1% F.S.

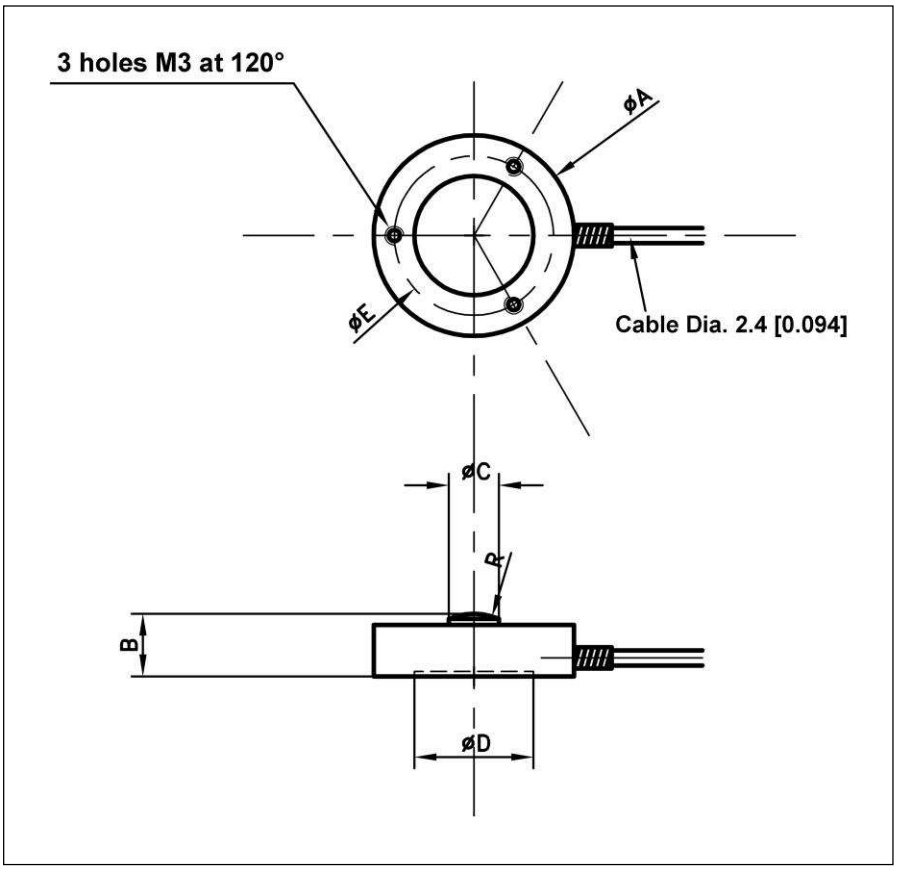
Electrical Characteristics

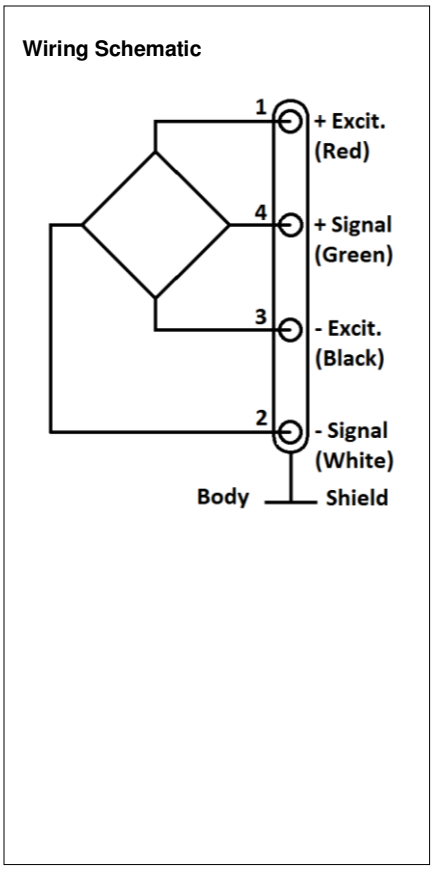
Model	**FN2640**
Supply Voltage	1 to 10 Vdc
Sensitivity “FSO”	1mV/V
Zero Offset	<±1mV
Input Impedance/Consumption	350 to 700Ω
Output Impedance	350 to 750Ω
Insulation under 50Vdc	≥100MΩ

Notes

1. Sensors are calibrated with 10Vdc power supply as standard.
2. Signal goes negative in compression with standard wiring configuration
3. Electrical Termination: Shielded cable; standard length 2 m [6.5 ft] with strain relief spring
4. Materials: Body in stainless steel or aluminium alloy depending on F.S.
5. CE conformance according to EN 61010-1, EN 50081-1, EN 50082-1
6. Signal goes negative in compression with standard wiring configuration

DIMENSIONS & WIRING SCHEMATIC (IN METRIC AND IMPERIAL)





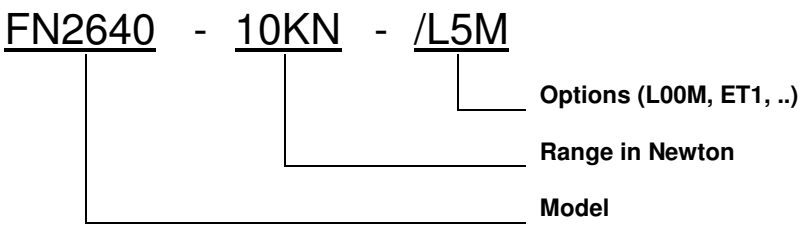
Dimensions in mm [inch]

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					

OPTIONS

V00	: Non-standard power supply calibration, replace “00” with value in Volt (standard 10Vdc)
L00M	: special cable length, replace “00” with total length in meters

ORDERING INFORMATION



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