

## FEATURES

- Small size
- Spherical load button
- Easy Installation

## APPLICATIONS

- Process Control Equipment
- Printing Embossing
- Laboratory and Research

## FN9040

### Press-fit load cell

### SPECIFICATIONS

- Ranges from 0-1 kN to 0-100 kN
- Deflection at full scale < 50µm
- Natural frequency > 20 kHz
- Global accuracy < 1% FS

The **FN9040** 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 **FN9040** features a spherical load button for better load distribution.

The **FN9040** sensitivity is adjusted to 1.5mV/V and multiple sensors can be used in parallel or easy to replace in case of maintenance of an assembly machinery.

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

**FN9040**

Press-Fit load cell

**STANDARD RANGES**

<b>Ranges in kN (FS)</b>	1	2	5	10	20	50	100
<b>Ranges in lbf (FS)</b>	200	400	1000	2000	4000	10k	20k
<b>Combined Linearity &amp; hysteresis in %FS</b>	±0.75	±0.5	±0.5	±0.5	±0.5	±0.75	±0.75
<b>Repeatability in %EM</b>	±0.4	±0.25					
<b>Natural frequency in kHz</b>	> 20						
<b>Deflection at FS in µm</b>	< 50						

**PERFORMANCE SPECIFICATION (typical values at temperature 23±3°C)**

<b>Paramètres</b>	
Operating Temperature Range (OTR)	-30 to 100°C [-22 to 212 °F]
Compensated Temperature Range (CTR)	-15 to 70 °C [5 to 158 °F]
Thermal Zero Shift in CTR	<0.05% FS / 50°C [0.03% /°F]
Thermal Sensitivity Shift in CTR	<0.05% of reading /°C [0.03% /°F]
<b>Over-Range</b>	
Without Damage	1,5 x FS
Without Destruction	
<b>Accuracy</b>	< ±1% FS (see table)

**Electrical characteristics**

<b>Model</b>	<b>FN9040</b>
Supply Voltage	3 to 5 Vdc regulated
Sensitivity "FSO" <sup>123</sup>	1.5mV/V ±0.5%
Zero Offset	<±1mV
Input Impedance/Consumption	350Ω
Output Impedance	350Ω
Insulation under 50Vdc	≥10MΩ

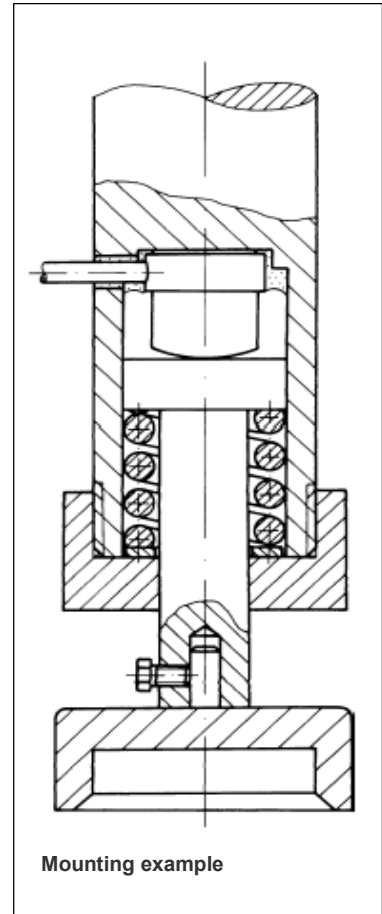
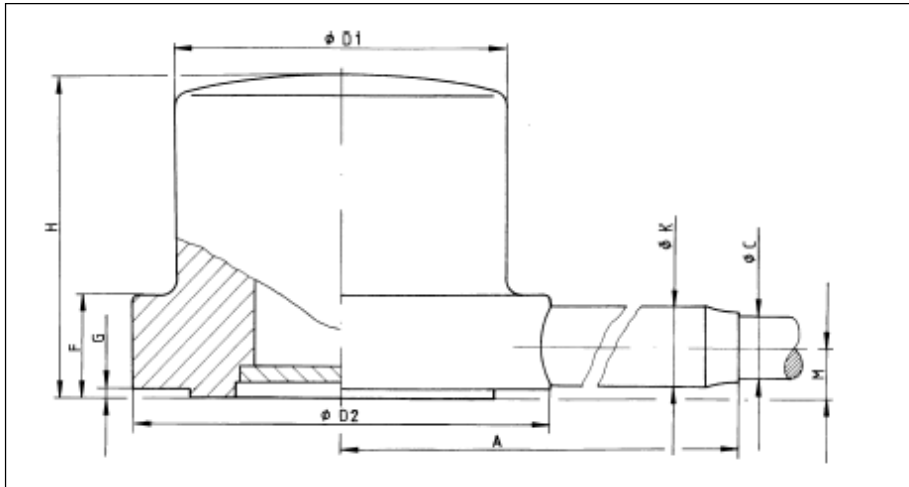
**Notes**

1. Sensors are calibrated with 5Vdc power supply as standard.
2. Signal goes positive in compression with standard wiring configuration
3. Electrical Termination: Shielded cable; standard length 2 m [6.5 ft] with strain relief tube/spring  
Standardization as a circuit board (70 x 8 mm) at the connection cable, 30 cm away from the end
4. Materials: Body in stainless steel 1.4542
5. Protection ingress IP54 DIN60529

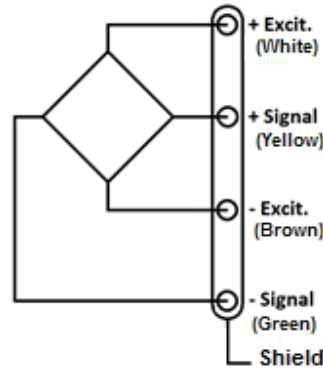
# FN9040

Press-Fit load cell

## DIMENSION AND WIRING SCHEMATIC (IN METRIC AND IMPERIAL)



### Wiring schematic



Cable shield is not connected to sensor's body.

### Dimensions en mm [inch]

F.S. in kN [lb]	1 [200]	2 [400]	5 [1000]	10 [2000]	20 [4000]	50 [10000]	100 [20000]
Ø D1	6.6 [0.26]	6.8 [0.27]	7.7 [0.3]	10 [0.39]	14 [0.55]	19.7 [0.78]	26.5 [1.04]
Ø D2	12.7 [0.5]				15.9 [0.63]	22.4 [0.88]	44 [1.73]
F	3.05 [0.12]				6.0 [0.24]		15 [0.59]
A	14.9 [0.59]				16.5 [0.65]	19.7 [0.78]	35 [1.38]
H	9.6 [0.38]				16 [0.63]		38 [1.5]
G	0.25 [0.0098]						0.5 [0.02]
Ø C	1.9 [0.075]						3 [0.12]
Ø K	2.8 [0.11]						7 [0.28]
M	1.6 [0.063]				3.1 [0.12]		7.5 [0.3]

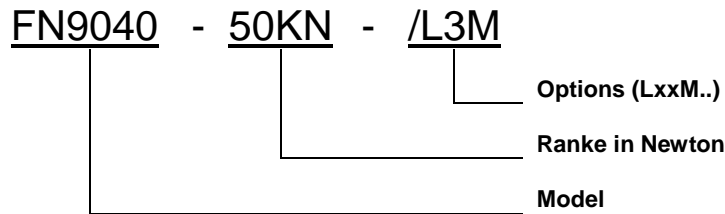
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## OPTIONS

**L00M** : special cable length, replace "00" with total length in meters

## ORDERING INFORMATION



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