



## FN9620

### Force Load Cell

#### Specifications

- High tensile strength Stainless Steel
- Quick availability & stock
- $\pm 500\text{N}$  to  $\pm 10,000\text{N}$  range
- Non-linearity  $\pm 0.05\%$  FS
- Strain gage  $350\ \Omega$  bridge
- Integral shielded cable

**The Model FN9620** is a S-Beam load cell with ranges from 500N to 10kN, designed to operate in hostile environments from  $-40$  to  $90^\circ\text{C}$  with IP68 ingress protection.

It provides high stiffness for high cycle use, low off-axis load sensitivity and high level of accuracy.

To ease its use for Process Control Automation equipment, the sensor's sensitivity (in mV/V) is calibrated with 2% tolerance.

#### Features

- High tensile strength Stainless Steel
- Metric or Imperial thread
- Safe over load 300%
- 10Vdc Excitation Voltage
- $-40$  to  $90^\circ\text{C}$  temperature operating range
- 3 meters Integral cable
- IP68-1m water column

## Applications

- Structure Testing
- Test Benches
- Process Control & Automation
- Mechanical resistance of materials
- Laboratory and Research

## Performance Specifications

Range (FS)	kN	0.5	1	2	5	10
Over range	% FS	150				
Rated output	mV/V	1 ±2%	2 ±2%			
Excitation voltage	Vdc	10				
Excitation voltage min/max	Vdc	2 / 12				
Bridge resistance	Ω	350				
Bridge resistance min/max	Ω	340/450				
Zero balance	±% FS	2				
Insulation	>MΩ	5000				
Non Linearity	±% FS	0.05				
Hysteresis	±% FS	0.03				
Repeatability	±%	0.02				
Symmetry	±%	0.25				
Creep (20mn)	%	0.025				
Side Load sensitivity *	%	1				
Eccentric Load sensitivity	%/mm	0.1				
Safe overload	%	300				
Deflection	mm	0.033	0.065	0.075	0.08	0.13
Stiffness	N/m	1.5.10 <sup>7</sup>	1.5.10 <sup>7</sup>	2.6.10 <sup>7</sup>	6.2.10 <sup>7</sup>	7.6.10 <sup>7</sup>
Natural frequency	KHz	1	1	1.25	1.95	2.15
Operating temperature range	°C	-40 to +90				
Compensated temperature range	°C	-10 to +45				
Effect on zero	±% FS/°C	0.008	0.004			
Effect on Output	±% /°C	0.01	0.005			
Protection		IP68 – 1m water column – 100h				
Side load limit	% FS	100				
Bending moment limit	N.m	15	30	60	150	300
Weight (without cable)	kg	0.45				
Cable length**	m	3				
Material		Stainless steel				

\* Load = 10% range

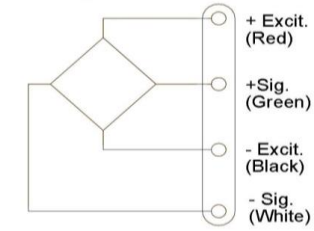
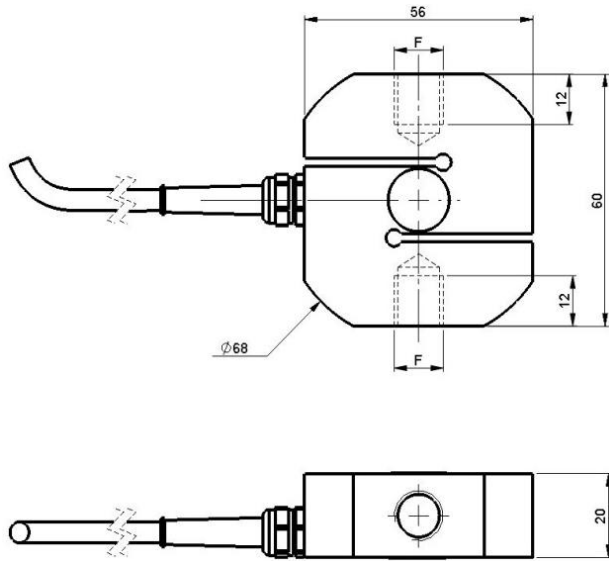
\*\* 4 conductors shielded Ø5 - neoprene jacket (braid not connected to sensor body)

All values are typical

# FN9620

Force Load Cell

## Dimensions (mm)



Thread	F
Metric	M12x1.75-6H
Imperial	1/2-20UNF-2B

## Ordering Information

**Part Number**  
(Model Number + Thread Type + Range)

**FN9620 – M – 10KN**

### Thread F

<b>M</b>	M12x1.75-6H
<b>X</b>	1/2-20UNF-2B

### Range in kN

<b>0.5</b>	0.5
<b>1</b>	1
<b>2</b>	2
<b>5</b>	5
<b>10</b>	10

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