FN9620

Force Load Cell

SPECIFICATIONS

- **High tensile strength Stainless Steel**
- **Quick availability & stock**
- **Ranges from ±500N to ±10,000N**
- **Non-linearity ±0.05% FS**
- **-40 to 90°C temperature operating range**
- **Integral shielded cable**

The **FN9620** is a S-Beam load cell with ranges from 500N to 10kN, designed to operate in hostile environments from -40 to 90°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.

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

FEATURES

- High tensile strength Stainless Steel
- Metric or Imperial thread
- Surcharge sans destruction 300%
- Safe over load 300%
- 3 meters Integral cable
- IP68-1m water column

APPLICATIONS

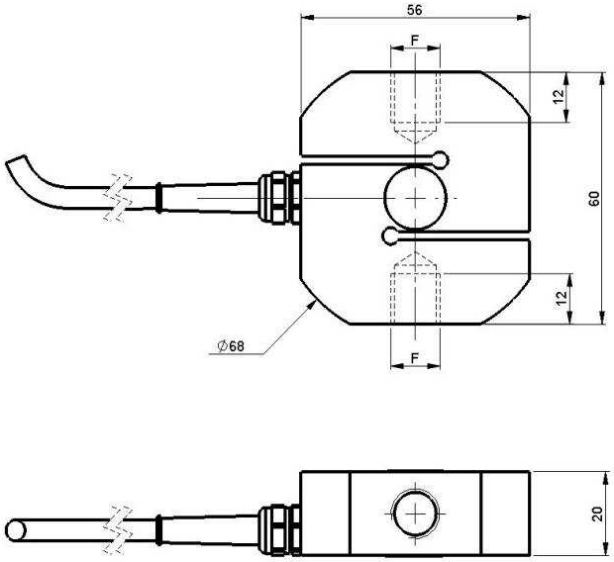
- Structure Testing
- Test Benches
- Process Control & Automation
- Mechanical resistance of materials
- Laboratory and Research

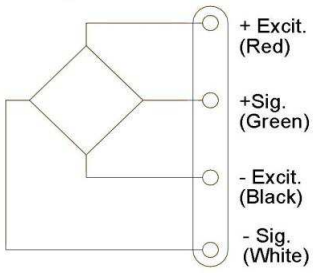
PERFORMANCE SPECIFICATIONS (typical values at temperature 23±3°C)

Range (FS)	**kN**	**0.5**	**1**	**2**	**5**	**10**
Over range	% FS	150				
Sensitivity “FSO”*	mV/V	1 ±2%	2 ±2%			
Power supply	Vdc	10 regulated				
Power supply min/max **	Vdc	1 à 10				
Bridge resistance	Ω	350				
Bridge resistance min/max	Ω	340/450				
Zero Offset	±% FS	2				
Insulation under 50Vdc	>MΩ	5000				
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	$1.5.10^7$	$1.5.10^7$	$2.6.10^7$	$6.2.10^7$	$7.6.10^7$
Natural frequency	kHz	1	1	1.25	1.95	2.15
Operating Temperature Range (OTR)	°C	-40 to +90				
Compensated Temperature range (CTR)	°C	-10 to +45				
Thermal Zero Shift in CTR	±% FS/°C	0.008	0.004			
Thermal Sensitivity shift in CTR	±% /°C	0.01	0.005			
Ingress 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				

* Signal goes positive in traction with standard wiring configuration
** Load = 10% range
*** 4 conductors shielded Ø5 -neoprene jacket

DIMENSIONS (in mm) & WIRING





Cable shield is not connected to sensor's body

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

ORDERING INFORMATION

FN9620	-	M	-	10KN
Model	-	Thread	-	Range
FN9620	-	**M :** M12x1.75-6H **X :** ½-20UNF-2B	-	**0.5KN** **1KN** **2KN** **5KN** **10KN**

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