

STEEL. TOP AND BOTTOM SURFACES, 17-4 PH ST. STEEL

SHEET

FORCE SENSOR, SERIES 1061V

**Model Number** Doc No PERFORMANCE SPECIFICATION PS1061V6 1061V6 Force Sensors, IEPE REV A, ECN 12920, 08/23/16



- DYNAMIC FORCE SENSOR
- VOLTAGE MODE
- EXCELLENT LINEARITY

		ENGLIS	H	SI	SI	
PHYSICAL						
Weight, Max.		15.82	oz	452	grams	
Connector	Type	Coaxial	1	Coaxial	7	
	Thread	10-32	1	10-32		
Housing	Material	Stainless steel		Stainless steel		
	Isolation	Case grounded		Case grounded		
Sensing Element	Material	Quartz		Quartz		
	Mode	Compression	]	Compression		
PERFORMANCE						
Sensitivity, +/-10%		0.1	mV/Lb	0.02	mV/N	
Compression Range		50000	Lbs.Force	222400	N	
Maximum Compression , +/-5%		60000	Lbs.Force	266880	N	
Tension Range		1000	Lbs.Force	4448	N	
Maximum Tension [1], +/-5%		1000	Lbs.Force	4448	N	
Resolution		0.70	Lb. RMS	3.11360	N RMS	
Linearity [2]		± 1	% Full Scale	± 1	% Full Scale	
Mounted Resonance (Unloaded)		≥ 75	kHz	≥ 75	kHz	
Stiffness		50	Lb/µin	8.66	kN/μm	
ENVIRONMENTAL						
Coefficient Of Thermal Sensitivity		0.03	%/°F	0.05	%/°C	
Operating Temperature		-100 to +250	°F	-73 to +121	°C	
Maximum Vibration		±3000	g's,Peak	±29400	m/s^2 Peak	
Maximum Shock		5,000	g's,Peak	49,000	m/s^2 Peak	
Environmental Seal		Ероху		Ероху		
ELECTRICAL						
Supply Current [3]		2 to 20	mA	2 to 20	mA	
Compliance Voltage		18 to 30	VDC	18 to 30	VDC	
Discharge Time Constant, Min.		2000	Seconds	2000	Seconds	
F.S. Output Voltage		5	Volts	5	Volts	
Output Impedance		100	ο	100	Ω	

This family also includes:							
Model	Sensitivity (mV/Lb)	Range (LbsF) Compressive, Tensile	Max Force (LbsF) Compressive, Tensile	Discharge Time Constant (Sec)			
1061V1	10	500, 500	10000, 1000	150			
1061V2	5	1000, 1000	20000, 1000	300			
1061V3	1	5000, 1000	30000, 1000	1500			
1061V4	0.5	10000, 1000	40000, 1000	2000			
1061V5	0.2	25000, 1000	50000, 1000	2000			

Refer to the performance specifications of the products in this family for detailed description

## Supplied Accessories:

- 1) Accredited Calibration Certificate (ISO 17025)
- 2) MOD 6232 MOUNTING STUDS (2)

## Available Accessories:

1) MOD 6217 STAINLESS STEEL IMPACT CAP

## Notes:

- [1] Absolute maximum tension. Do not exceed in any case!
- [2] Percent of full scale or any lesser range, zero based best-fit sraight line method.
- [3] Power these instruments only with constant current type power units. Do not connect to a source of voltage without current limiting. This will destroy the integral IC amplifier.



