Model Number						
201R01						

ICP® FORCE SENSOR

[3]

[1]

Revision: D ECN #: 48681

Performance	ENGLISH	<u>SI</u>
Sensitivity(± 15 %)	500 mV/lb	112,405 mV/kN
Measurement Range(Compression)	10 lb	0.0445 kN
Maximum Static Force(Compression)	60 lb	0.267 kN
Broadband Resolution(1 to 10,000 Hz)	0.0002 lb-rms	0.0008896 N-rms
Low Frequency Response(-5 %)	0.01 Hz	0.01 Hz
Upper Frequency Limit	90 kHz	90 kHz
Non-Linearity	≤ 1 % FS	≤ 1 % FS
Environmental		
Temperature Range	-65 to +250 °F	-54 to +121 °C
Temperature Coefficient of Sensitivity	≤ 0.03 %/°F	≤ 0.054 %/°C
Electrical		
Discharge Time Constant(at room temp)	≥ 50 sec	≥ 50 sec
Excitation Voltage	20 to 30 VDC	20 to 30 VDC
Constant Current Excitation	2 to 20 mA	2 to 20 mA
Output Impedance	≤ 100 Ohm	≤ 100 Ohm
Output Bias Voltage	8 to 14 VDC	8 to 14 VDC
Output Polarity(Compression)	Positive	Positive
Physical		
Preload	60 lb	0.267 kN
Stiffness	12 lb/µin	2.1 kN/µm
Size (Diameter x Height x Bolt Diameter x Sensing Surface)	0.650 in x 0.310 in x	
	0.25 in x 0.50 in	mm x 12.7 mm
Size (ID)(Hole Diameter)	0.251 in	6.38 mm
Size (OD)(Sensor)	0.650 in	16.51 mm
Weight	0.35 oz	10 gm
Housing Material	Stainless Steel	Stainless Steel
Sealing	Hermetic	Hermetic
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack
Electrical Connection Position	Side	Side



All specifications are at room temperature unless otherwise specified.

In the interest of constant product improvement, we reserve the right to change specifications without notice.

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OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

N - Negative Output Polarity

Output Polarity(Compression) Negative Negative

W - Water Resistant Cable

Sealed Cable Sealed Cable **Electrical Connector Electrical Connection Position** Side Side

NOTES:

- [1] Typical.
- [2] Calculated from discharge time constant.
- [3] Estimated using rigid body dynamics calculations.
- [4] Zero-based, least-squares, straight line method.
- [5] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

Model 080A82 Assembly Lubricant (1)

Model 081A11 Mounting Stud, 10-32 x 0.730, BeCu (1)

Model 082B01 Anti-Friction Washer (1)

Model 083B01 Pilot Bushing (1) Model M081A11 Mounting Stud, M5 x 0.8 x 0.730, BeCu (1)

Model M083B01 Pilot Bushing (1)

Entered: LK	Engineer: RPF	Sales: KK	Approved: RPF	Spec Number:
Date: 9/19/2018	Date: 9/19/2018	Date: 9/19/2018	Date: 9/19/2018	201-2010-80



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