Model Number	ICP® FORCE SENSOR	Revision: F
205C		ECN #: 48681

Performance	ENGLISH	SI	
Sensitivity(± 15 %)	0.08 mV/lb	18.0 mV/kN	
Measurement Range(Compression)	60,000 lb	266.9 kN	
Maximum Static Force(Compression)	70,000 lb	311.4 kN	
Broadband Resolution(1 to 10,000 Hz)	1 lb-rms	4.45 N-rms	[1]
Low Frequency Response	0.0003 Hz	0.0003 Hz	[2]
Upper Frequency Limit	50 kHz	50 kHz	[3]
Non-Linearity	≤ 1.5 % FS	≤ 1.5 % FS	[4]
Environmental			
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Coefficient of Sensitivity	≤ 0.10 %/°F	≤ 0.18 %/°C	
Electrical			
Discharge Time Constant(at room temp)	≥ 2000 sec	≥ 2000 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	
Spectral Noise(1 Hz)	0.0981 lb/√Hz	0.44 N/√Hz	[1]
Spectral Noise(10 Hz)	0.0306 lb/√Hz	0.14 N√Hz	[1]
Spectral Noise(100 Hz)	0.00709 lb/√Hz	0.032 N/√Hz	[1]
Spectral Noise(1 kHz)	0.00192 lb/√Hz	0.00857 N/√Hz	[1]
Output Polarity(Compression)	Positive	Positive	
Physical			
Preload	12,000 lb	53.379 kN	
Stiffness	40 lb/µin	7 kN/µm	[1]
Size (Diameter x Height x Bolt Diameter x Sensing Surface)	1.580 in x 0.510 in x .75 in x 1.375 in	40.13 mm x 12.95 mm x 20 mm x 34.93 mm	
Size (ID)(Hole Diameter)	0.830 in	21.08 mm	
Size (OD)(Sensor)	1.580 in	40.13 mm	
Weight	2.7 oz	77 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	

CE [5]

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.

M - Metric Mount
Supplied Accessory : Model M081A15 Mounting Stud, M16 x 1.50 x 1.650, BeCu (1)
Supplied Accessory : Model M083B05 Pilot Bushing (1)

N - Negative Output Polarity

Output Polarity(Compression)	Negative	Negative

W - Water Resistant Cable

Electrical Connector	Sealed Cable	Sealed Cable
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 081A15 Mounting Stud, 5/8-18 x 1.650, BeCu (1)
Model 082B05 Anti-friction washer (for Models 205B and 215B) (1)
Model 083B05 Pilot bushing (for Models 205C and 215B) (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	5758

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