

Model Number  
260A12

# 3-COMPONENT CHARGE OUTPUT FORCE SENSOR

Revision: B  
ECN #: 22798

	ENGLISH	SI	
<b>Performance</b>			
Sensitivity (± 15 %) (x or y axis)	32 pC/lb	7.19 pC/N	[2]
Sensitivity (± 15 %) (z axis)	15 pC/lb	3.37 pC/N	[2]
Measurement Range (z axis)	1000 lb	4.45 kN	
Measurement Range (x or y axis)	1000 lb	4.45 kN	
Maximum Force (z axis)	1320 lb	5.87 kN	
Maximum Force (x or y axis)	1000 lb	4.45 kN	
Maximum Moment (z axis)	40 ft-lb	54.23 N-m	
Maximum Moment (x or y axis)	70 ft-lb	94.91 N-m	
Upper Frequency Limit	90 kHz	90 kHz	
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[3]
Cross Talk (between x and y axis)	± 3 %	± 3 %	
Cross Talk (between (x or y axis) and z axis)	± 5 %	± 5 %	
<b>Environmental</b>			
Temperature Range	-100 to +350 °F	-73 to +177 °C	
<b>Electrical</b>			
Capacitance (all channels)	30 pF	30 pF	[1]
Insulation Resistance (all channels)	≥ 10 <sup>12</sup> ohm	≥ 10 <sup>12</sup> ohm	
Output Polarity (in direction of markings)	Negative	Negative	
<b>Physical</b>			
Preload	≤ 10,000 lb	≤ 44.48 kN	[4]
Stiffness (z axis)	19 lb/μin	3.3 kN/μm	[1]
Stiffness (x or y axis)	6 lb/μin	1 kN/μm	[1]
Size (Height x Length x Width x Bolt Diameter x ID x Sensing Surface)	0.390 in x 1.25 in x 1.25 in x 0.500 in x 0.512 in x 0.920 in	9.90 mm x 31.8 mm x 31.8 mm x 13 mm x 13 mm x 23.37 mm	
Weight	1.5 oz	42.5 gm	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Hermetic	Hermetic	
Electrical Connector (Quantity, 3)	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.

ICP® is a registered trademark of PCB Group, Inc.

**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 M081A74 Mounting Stud (1) replaces Model 081A74

**W** - Water Resistant Cable  
Electrical Connection Position: Side Side

**NOTES:**  
[1] Typical.  
[2] Sensitivites are for listed preload. Sensitivites may vary ±5% depending on preload used.  
[3] Zero-based, least-squares, straight line method.  
[4] Preload should be at least 10 times the X and Y operating range used.

**SUPPLIED ACCESSORIES:**  
Model 081A74 Pre-load bolt (for Models 260A02, 260A12, and 260A32) (1)  
Model 082M12 Anti-friction washer (for Models 260A02, 260A12, and 260A32) (1)  
Model 083A13 Pilot bushing (for Models 260A02, 260A12, and 260A32) (1)

Entered: <i>BLS</i>	Engineer: <i>mgic</i>	Sales: <i>JJW</i>	Approved: <i>SNB</i>	Spec Number:
Date: <i>9-7-05</i>	Date: <i>9-8-05</i>	Date: <i>9/8/05</i>	Date: <i>9/8/05</i>	<b>14903</b>

**PCB PIEZOTRONICS™**  
**FORCE / TORQUE DIVISION**  
3425 Walden Avenue, Depew, NY 14043

Phone: 716-684-0001  
Fax: 716-684-8877  
E-Mail: force@pcb.com



Represented in India by  
**Structural Solutions Pvt Ltd. | Phone: 040 2322 2380 | Email: sales@stsols.com**  
#4th Floor, Sudheer Tapani Towers, Himayath Nagar, Hyderabad - 500 029