

Model Number
603C02

LOW-COST INDUSTRIAL ICP® ACCELEROMETER

Revision: B
ECN #: 38753

Performance

Sensitivity(± 20 %) [2]
Measurement Range [3]
Frequency Range(± 3 dB) [1]
Resonant Frequency [1]
Broadband Resolution(1 to 10,000 Hz) [4]
Non-Linearity
Transverse Sensitivity
Environmental
Overload Limit(Shock)
Temperature Range
Temperature Response
Enclosure Rating

ENGLISH

500 mV/g
± 10 g
30 to 180,000 cpm
1500 kcpm
300 µg
± 1 %
≤ 7 %
5000 g pk
-65 to +200 °F
See Graph
IP68

SI

51.0 mV/(m/s²)
± 98 m/s²
0.5 to 3000 Hz
25 kHz
2943 µm/sec²
± 1 %
≤ 7 %
49,050 m/s² pk
-54 to +93 °C
See Graph
IP68

Electrical

Settling Time(within 1% of bias)
Discharge Time Constant
Excitation Voltage
Constant Current Excitation
Output Impedance
Output Bias Voltage
Spectral Noise(10 Hz)
(100 Hz)
(1 kHz)
Electrical Isolation(Case)

≤ 5.0 sec
≥ 0.3 sec
18 to 28 VDC
2 to 20 mA
<500 Ohm
8 to 12 VDC
8 µg/√Hz
3 µg/√Hz
3 µg/√Hz
>10⁸ Ohm

≤ 5.0 sec
≥ 0.3 sec
18 to 28 VDC
2 to 20 mA
<500 Ohm
8 to 12 VDC
78.5 (µm/sec²)/√Hz
29.4 (µm/sec²)/√Hz
29.4 (µm/sec²)/√Hz
>10⁸ Ohm

Physical

Size (Hex x Height)
Weight
Mounting Thread
Mounting Torque
Sensing Element
Sensing Geometry
Housing Material
Sealing
Electrical Connector
Electrical Connection Position

11/16 in x 1.65 in
1.8 oz
1/4-28 Female
2 to 5 ft-lb
Ceramic
Shear
Stainless Steel
Welded Hermetic
2-Pin MIL-C-5015
Top

TO - Temperature Output
Temperature Output Range
Temperature Scale Factor
Electrical Connector
Electrical Connections(Pin A)
(Pin B)
(Pin C)
Size - Height
Weight

+36 to +200 °F
5.56 mV/°F + 32
3-Pin MIL-C-5015
Acceleration Output
Ground
Temperature Output
1.86 in
2.0 oz
+2 to +93 °C
+10 mV/°C
3-Pin MIL-C-5015
Acceleration Output
Ground
Temperature Output
47.2
56.7

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.
EX - Hazardous Area Approval- contact factory for specific approvals
Hazardous Area Approval
CI I, Div 2, Groups A, B, C, D; CI I, Div 2, Groups A, B, C, D, D;
ExnL IIC T4, AExnA IIC T4
EEx nL IIC T4, -40°
CSTas121°C, II 1 G
CI I, Div 1, Groups A, B, C, D; CI I, Div 1, Groups A, B, C, D;
CI II, Div 1, Groups E, F, G; CI II, Div 1, Groups E, F, G; CI III, Div I
Exia IIC T4, AExia IIC, T4
EEx nL IIC T4, -40°
CSTas121°C, II 3 G
M - Metric Mount
Supplied Accessory : Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1)

NOTES:

- [1] Typical.
- [2] Conversion Factor 1g = 9.81 m/s².
- [3] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [4] Zero-based, least-squares, straight line method.
- [5] 1/4-28 has no equivalent in S.I. units.
- [6] See PCB Declaration of Conformance PS023 or PS060 for details.

SUPPLIED ACCESSORIES:

Model 081A40 Mounting Stud
Model ICS-2 NIST-traceable single-axis single-point amplitude response calibration at 6000 cpm (100 Hz) (1)

Typical Sensitivity Deviation vs Temperature



[6]

Temperature (°F)

Sensitivity Deviation(%)

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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Date: <i>3-15-12</i>	Date: <i>3-9-12</i>	Date: <i>3-9-12</i>	Date: <i>3-9-12</i>	38367