

| Model Number<br>607A61               | <b>SPINDLER® INDUSTRIAL ICP® ACCELEROMETER</b> |                                       |                      | Revision G<br>ECN #: 41189  |
|--------------------------------------|--|---------------------------------------|----------------------|---|
| <b>Performance</b>                   | <b>ENGLISH</b>                                 | <b>SI</b>                             |                      | <b>Optional Versions</b> (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.)<br><b>EX - Hazardous Area Approval-</b> contact factory for specific approvals |
| Sensitivity (±15 %)                  | 100 mV/g                                       | 10.2 mV/(m/s <sup>2</sup> )           | [2]                  | Hazardous Area Approval   |
| Measurement Range                    | ±50 g  | ±490 m/s <sup>2</sup>                 |                      | CI I, Div 2, Groups A, B, C, D; ExnL  |
| Frequency Range (±3 dB)              | 30 to 600000 cpm                               | 0.5 to 10000 Hz                       |                      | IIC T4, AExnA IIC T4  |
| Resonant Frequency                   | 1500 kcpm                                      | 25 kHz                                | [1]                  | CI I, Div 2, Groups A, B, C, D; ExnL  |
| Broadband Resolution (1 to 10000 Hz) | 350 µg   | 3434 µm/sec <sup>2</sup>              | [1]                  | IIC T4, AExnA IIC T4  |
| Non-Linearity                        | ±1 %   | ±1 %                                  | [3]                  | CI I, Div 2, Groups A, B, C, D; ExnL  |
| Transverse Sensitivity               | ≤7 %   | ≤7 %                                  |                      | IIC T4, AExnA IIC T4  |
| <b>Environmental</b>                 |  |                                       |                      | Hazardous Area Approval   |
| Overload Limit (Shock)               | 5000 g pk                                      | 49050 m/s <sup>2</sup> pk             |                      | EEx nL IIC T4, -40°C≤Ta≤121°C, II 3 G   |
| Temperature Range                    | -65 to +250 °F                                 | -54 to +121 °C                        |                      | EEx nL IIC T4, -40°C≤Ta≤121°C, II 1 G   |
| Enclosure Rating                     | IP67   | IP67                                  |                      | CI I, Div I, Groups A, B, C, D; CI II, Div I, Groups E, F, G; CI III, Div I   |
| <b>Electrical</b>                    |  |                                       |                      | Hazardous Area Approval   |
| Settling Time (within 1% of bias)    | ≤2 sec   | ≤2 sec                                |                      | Exia IIC T4, AExia IIC, T4  |
| Discharge Time Constant              | ≥0.3 sec                                       | ≥0.3 sec                              |                      |   |
| Excitation Voltage                   | 18 to 28 VDC                                   | 18 to 28 VDC                          |                      |   |
| Constant Current Excitation          | 2 to 20 mA                                     | 2 to 20 mA                            |                      |   |
| Output Impedance                     | <150 Ohm                                       | <150 Ohm                              |                      |   |
| Output Bias Voltage                  | 8 to 12 VDC                                    | 8 to 12 VDC                           |                      |   |
| Spectral Noise (10 Hz)               | 8 µg/&#8730;Hz                                 | 78.5 (µm/sec <sup>2</sup> /&#8730;Hz) | [1]                  |   |
| Spectral Noise (100 Hz)              | 5 µg/&#8730;Hz                                 | 49.1 (µm/sec <sup>2</sup> /&#8730;Hz) | [1]                  |   |
| Spectral Noise (1 kHz)               | 4 µg/&#8730;Hz                                 | 39.2 (µm/sec <sup>2</sup> /&#8730;Hz) | [1]                  |   |
| Electrical Isolation (Case)          | >10 <sup>8</sup> Ohm                           | >10 <sup>8</sup> Ohm                  |                      |   |
| <b>Physical</b>                      |  |                                       |                      | <b>M - Metric Mount</b>   |
| Size (Hex x Height)                  | 9/16 in x 1.0 in                               | 14 mm x 25.4 mm                       |                      | Supplied Accessory: Model M080A159A Mounting stud, 1/2-20 to M6 x 1   |
| Weight (without cable)               | 1.1 oz   | 31 gm                                 | [4]                  | <b>TO - Temperature Output</b>  |
| Mounting                             | Stud   | Stud                                  |                      | Temperature Output Range  |
| Mounting Thread                      | 1/4-28 Male                                    | 1/4-28 Male                           |                      | Temperature Scale Factor  |
| Mounting Torque (stud)               | 3 to 4 ft-lb                                   | 4.1 to 5.4 Nm                         | [5]                  | Electrical Connector  |
| Mounting Torque (hex nut)            | 2 to 3 ft-lb                                   | 2.7 to 4.1 Nm                         | [6][7]               | Electrical Connections (Red)  |
| Sensing Element                      | Ceramic  | Ceramic                               |                      | Electrical Connections (Black)  |
| Sensing Geometry                     | Shear  | Shear                                 |                      | Electrical Connections (White)  |
| Housing Material                     | Stainless Steel                                | Stainless Steel                       |                      |   |
| Sealing                              | Welded Hermetic                                | Welded Hermetic                       |                      |   |
| Electrical Connector                 | Integral Armored                               | Integral Armored                      |                      |   |
|                                      | Cable  | Cable                                 |                      |   |
| Electrical Connection Position       | Side   | Side                                  |                      |   |
| Cable Length                         | 10 ft  | 3.0 m                                 |                      |   |
| Cable Type                           | Polyurethane                                   | Polyurethane                          | [8]                  |   |
| <b>Notes</b>                         |  |                                       |                      |   |
|                                      |  |                                       |                      | [1] Typical.  |
|                                      |  |                                       |                      | [2] Conversion Factor 1g = 9.81 m/s <sup>2</sup> .  |
|                                      |  |                                       |                      | [3] Zero-based, least-squares, straight line method.  |
|                                      |  |                                       |                      | [4] Measured with mounting stud.  |
|                                      |  |                                       |                      | [5] 1/4-28 has no equivalent in S.I. units.   |
|                                      |  |                                       |                      | [6] Stud torque must exceed sensor hex nut torque to ensure proper dismantling.   |
|                                      |  |                                       |                      | [7] 1/8" hex Allen key required for English version, 3mm hex Allen key required for metric version.   |
|                                      |  |                                       |                      | [8] Stainless steel armor jacket over twisted shielded pair.  |
|                                      |  |                                       |                      | [9] See PCB Declaration of Conformance PS023 or PS060 for details.  |
| <b>Supplied Accessories</b>          |  |                                       |                      |   |
|                                      |  |                                       |                      | 080A156 Mounting Base (1)   |
|                                      |  |                                       |                      | ICS-2 NIST-traceable single-axis single-point amplitude response calibration at 6000 cpm (100 Hz) ( )   |
| <b>Entered: AP</b>                   | <b>Engineer: jg</b>                            | <b>Sales: EGY</b>                     | <b>Approved: BAM</b> | <b>Spec Number:</b>   |
| Date:                                | Date:  | Date:                                 | Date:                | <b>13704</b>  |
| 04/11/2013                           | 04/11/2013                                     | 04/11/2013                            | 04/11/2013           |   |



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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