**Description:**
Pro Gyro® is made for accuracy.

Watson Industries has been designing and manufacturing solid-state gyros since 1980. Our latest series of rate gyros is the Pro Gyro®. This breakthrough new gyro is built to be a VSG replacement and much more. Based on proven technology, this gyro is built under AS9100 quality standards with new features including built-in test and enhanced EMI/RFI protection.

The Pro Gyro® has excellent performance for stability, acceleration insensitivity, low mounting sensitivity and vibration rejection. This is achieved by having a sensing element that is finely tuned and temperature compensated. The advanced tuning methods allow better relative tolerances and better signal to noise performance. Special internal mounting holds the gyro sensing element in a stable alignment while rejecting linear vibration.

Upgrades that are standard for the Pro Gyro® include available rate ranges up to 475 degrees per second, internal power regulation for power input between 8 volts and 45 volts, and a case mounted connector.

**Watson Pro Gyro® features:**
- Accurate in severe environments
- Excellent performance (time, temperature, vibration)
- Rugged
- Wide bandwidth
- Low drift
- Low noise
- CE Certified
- High reliability
- Two-year warranty

**Applications:**
- Aircraft flight instrumentation and control
- Platform stabilization (antenna, camera, etc.)
- Robotics
- Short-term navigation
- Vehicle test instrumentation
- Train tilt controls

**Watson Industries Pro Gyro® Models**

<table>
<thead>
<tr>
<th>Model</th>
<th>Range</th>
<th>Output</th>
<th>Zero Ref (°/sec)</th>
<th>Scale Factor</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRO-122-2A</td>
<td>±50°/sec</td>
<td>0 to 5 VDC</td>
<td>2.5 VDC</td>
<td>50mV/°/sec</td>
<td>0.025°/sec</td>
</tr>
<tr>
<td>PRO-122-3A</td>
<td>±50°/sec</td>
<td>±5 VDC</td>
<td>0.0 VDC</td>
<td>100mV/°/sec</td>
<td>0.013°/sec</td>
</tr>
<tr>
<td>PRO-132-2A</td>
<td>±100°/sec</td>
<td>0 to 5 VDC</td>
<td>2.5 VDC</td>
<td>25mV/°/sec</td>
<td>0.05°/sec</td>
</tr>
<tr>
<td>PRO-132-3A</td>
<td>±100°/sec</td>
<td>±5 VDC</td>
<td>0.0 VDC</td>
<td>50mV/°/sec</td>
<td>0.025°/sec</td>
</tr>
<tr>
<td>PRO-142-2A</td>
<td>±200°/sec</td>
<td>0 to 5 VDC</td>
<td>2.5 VDC</td>
<td>12.5mV/°/sec</td>
<td>0.01°/sec</td>
</tr>
<tr>
<td>PRO-142-3A</td>
<td>±200°/sec</td>
<td>±5 VDC</td>
<td>0.0 VDC</td>
<td>25mV/°/sec</td>
<td>0.05°/sec</td>
</tr>
</tbody>
</table>

*Custom ranges are available
Watson Pro Gyro® Specifications

Angular Rate

Range: ±100°/sec (Typical)  
Resolution: 0.025°/sec (Typical)  
Analog Scale Factor: 50mV/°/sec (Typical)  
Scale Factor Accuracy: 0.2%  
Bias: ±0.1°/sec  
Bias: Zero Bias: ±0.1°/sec  
Bias: Over Temp Range: ±0.5°/sec  
Warmup Drift: ±0.6°/sec  
Non-Linearity: < 0.03%  
Bandwidth: 70 Hz  
Noise: < 0.5°/sec rms  

Environmental

Temperature: Operating: -40°C to +85°C  
Temperature: Storage: -55°C to +85°C  
Vibration: Operating: 5g rms  
Vibration: Survival: 10g rms  
Shock: Survival: 500g  

Electrical

Input Power: 8 to 45VDC  
Input Current: 60mA @ 12VDC  
Analog Output: ±5VDC (Typical)  
Analog Output Impedance: 1000 Ohm  

Physical

Size: Including Mounting Flanges: 1.2"W x 2.8"L x 1.2"H  
Weight: 2.2oz (0.1lb)  
Connection: Amp 1445057-6  
Life: > 100,000 Hrs MTBF

Specifications are subject to change without notice.  
This product may be subject to export restrictions.  Please consult the factory.

Single Axis Watson Pro Gyro® (Actual Size)