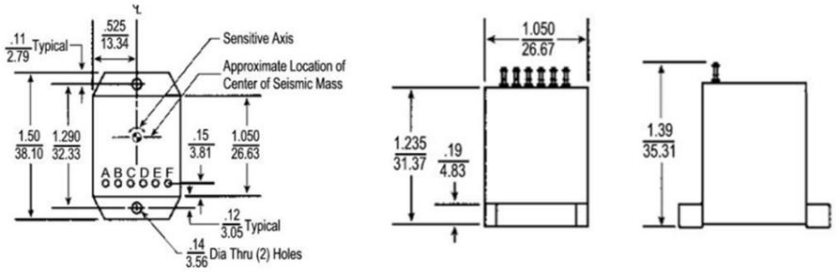
# ASM Series Angular Accelerometer

*Making Sense Out of Motion…*

## Input Ranges From ±200.0 to ±1,000 With Miniaturization, High Accuracy and Ruggedness

The Jewell **ASM Series** Angular Accelerometer is configured specifically to yield a combination of miniaturization, high accuracy and ruggedness. The ASM Series has been designed to minimize thermal errors associated with outdoor applications. The Jewell ASM Series is the highest accuracy sensor of its class in the world today.


**Outline Drawing:** ***Dimensional Drawing for the ASM Accelerometer***




## Features & Benefits

- Bandwidth to 200 Hz
- 1.05" Cube Housing Size
- ± 15 Standard Input Voltage
- Aerospace Quality and Reliability

## Applications

- Fatigue Monitoring
- Oil Well Drilling
- Flight Control Systems
- Automotive Angular Accelerometer Testing
- Antenna Stabilization
- Autopilot System Testing
- Optical System Stabilization
- Missile Orientation
- Fire Control

| | |
|---|---|
| Pin A | 12 to +18 VDC |
| Pin B | Power/Signal Common |
| Pin C | -12 to -18 VDC |
| Pin D | Eo (V/Rad/Sec²) |
| Pin E | Current Output |
| Pin F | Self-Test |


**Jewell Instruments LLC, 850 Perimeter Road, Manchester, NH 03103**
**sales@jewellinstruments.com • www.jewellinstruments.com • Tel (800) 227-5955**


**REV.C**

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## ASM Series Specifications

### PERFORMANCE

| | | | |
|---|---|---|---|
| Input Range rad/sec² | ± 200.0 | ± 500.0 | ± 1000.0 |
| Full Range Output (FRO V± 1.0%) | ± 5.0 | ± 5.0 | ± 5.0 |
| Non Linearity (%FRO' Max.) | 0.5 | 0.2 | 0.1 |
| Scale Factor, Vdc/rad/sec² Nominal | 0.025 | 0.01 | 0.005 |
| Scale Factor Temp. Sens, PPM /°C, Max. | 180 | 180 | 180 |
| Bias, rad/sec² Max. | ±1.0 | ±4.0 | ±4.0 |
| Bias, Temp. Sens, rad/sec²/°C Max. | 0.40 | 0.40 | 0.40 |
| Bandwidth. Hz (Nominal) (-3db) | 70 | 100 | 120 |
| Alignment (True Sens Axis to Mount), ° Max. | ±1.0 | ±1.0 | ±1.0 |
| Resolution and Threshold, rad/sec² Max. | 0.004 | 0.010 | 0.020 |

### ELECTRICAL

| | |
|---|---|
| Input Voltage, (Vdc) | ±12 to ±18 |
| Input Current (mA, Nom.) | 10 |
| Output Impedance (Ohms, Nom.) | 4000 |
| Noise, Volts RMS Max. | 0.005 |

### ENVIRONMENTAL

| | |
|---|---|
| Operating Temp Range | -55°C to +95°C |
| Survival Temp Range | -65°C to +105°C |
| Vibration | 100 grms |
| Seal | MIL-STD-202, Method 112, IP 65 |
| Weight, oz (grams) | 2.0 (57) |

## How to Order

| | |
|---|---|
| ASMP-200 | 02550279-001 |
| ASMP-500 | 02550279-002 |
| ASMP-1000 | 02550279-003 |

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