

# ASM Series Angular Accelerometer

## Input Ranges From $\pm 200.0$ to $\pm 1,000$ With Miniaturization, High Accuracy and Ruggedness

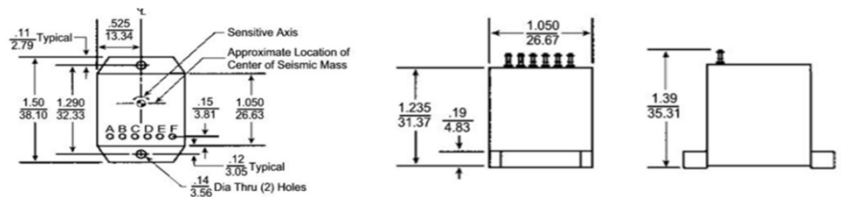
The Jewell **ASM Series** Angular Accelerometer is configured specifically to yield a combination of miniaturization, high accuracy and ruggedness. The ASM Series has been designed to minimize thermal errors associated with outdoor applications. The Jewell ASM Series is the highest accuracy sensor of 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
- $\pm 15$  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	$E_o$ (V/Rad/Sec <sup>2</sup> )
Pin E	Current Output
Pin F	Self-Test

# ASM Series Angular Accelerometer



Making Sense Out of Motion...

## ASM Series Specifications

### PERFORMANCE

Input Range rad/sec <sup>2</sup>	± 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/sec <sup>2</sup> Nominal	0.025	0.01	0.005
Scale Factor Temp. Sens, PPM /°C, Max.	180	180	180
Bias, rad/sec <sup>2</sup> Max.	±1.0	±4.0	±4.0
Bias, Temp. Sens, rad/sec <sup>2</sup> /°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/sec <sup>2</sup> 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