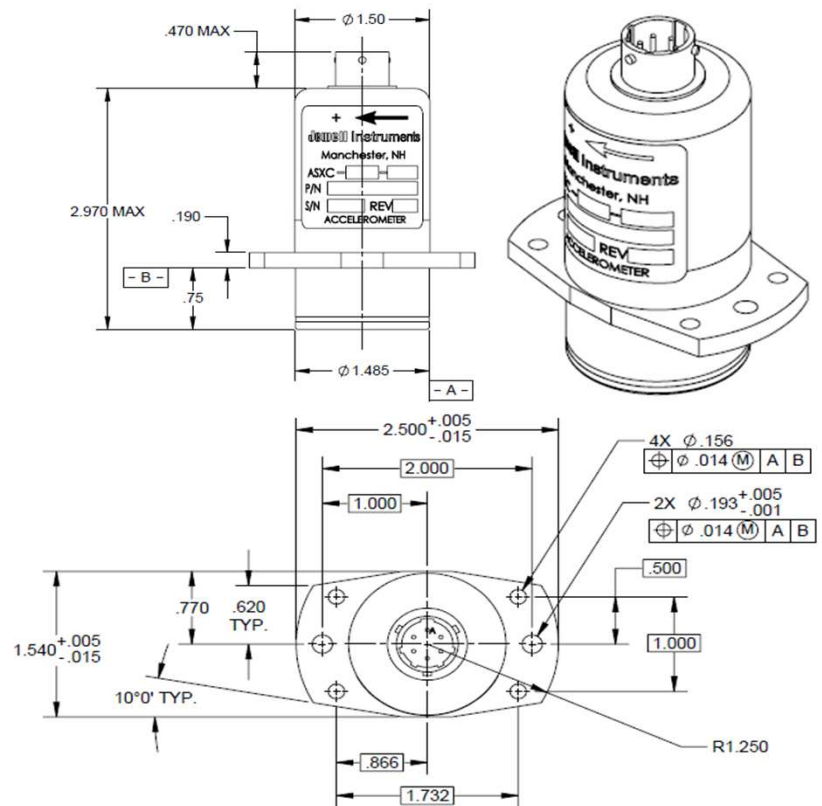


Input Ranges From $\pm 2.0^\circ$ to $\pm 100^\circ$ & offers precise readings with high resolution.

The Jewell **ASXC Series** Fluid Rotor Angular Accelerometer is a force balanced servo accelerometer that uses a fluid-filled ring chamber to measure angular acceleration. The ASXC is currently used in a wide variety of applications such as many military and aviation flight controls including autopilot or aircraft stability and control systems or satellite stability.



Dimensional Drawing: ASXC Angular Accelerometer



Block Diagram: ASXC Angular Accelerometer

PIN	FUNCTION
A	+15 VDC INPUT
B	SIGNAL PWR & GND
C	-15 VDC INPUT
D	E_0 VOLTAGE OUTPUT
E	FACTORY TEST RETURN
F	FACTORY TEST

Features & Benefits

- Standard Input Ranges ± 2 to ± 100 rad/sec²
- Resolution to 0.001 rad/sec²
- Very High Output to Size Ratio
- Self-test for Greater Than 95% Fail Detection
- -30°C to $+70^\circ\text{C}$ Operating Temperature Range

Applications

- Aircraft Stability Augmentation
- Race car Performance Testing
- Camera Angular Motion Stabilization
- Autopilot System Input
- Rotating System Performance Testing
- FLIR
- Flight Simulation
- Dyno Testing
- Weapons Control and Targeting
- Airframe Fatigue Monitoring

ASXC Series Angular Accelerometer Specifications

PERFORMANCE

STATIC/DYNAMIC

Input Range, rad/sec ²	± 2	± 10	± 20	± 50	± 100
Full Range Output (FRO, V ±5%)	± 10.0	± 10.0	± 10.0	± 10.0	± 10.0
Non Linearity (%FRO' Max.)	1.0	1.0	1.0	1.0	1.0
Scale Factor (V/rad/sec ² , 5%)	5.000	1.000	0.500	0.200	0.100
Scale Factor Temp Sens (% reading/°C, Max.)	0.09	0.09	0.09	0.09	0.09
Bias (rad/sec ²)	±0.005	±0.020	±0.030	±0.080	±0.100
Bias Temp. Sens. (FRO/°C, Max.)	0.001	0.001	0.001	0.001	0.001
Natural Frequency (Hz, Min.)	100	150	200	170	170
Damping Ratio (Nominal)	0.9	0.9	0.9	0.9	0.9
Input Axis Misalignment (rad/sec ² /rad/sec ² , max.)	±0.025	±0.025	±0.025	±0.025	±0.025
Resolution and Threshold (rad/sec ² , Max.)	0.001	0.001	0.002	0.005	0.010

ELECTRICAL

# of Axes	1				
Input Voltage (Vdc, 10%)	±15				
Input Current (mA, Max.)	25				
Output Impedance (Ohms, Nom.)	100				
Noise (Vrms, Max.)	0.03	0.03	0.05	0.05	0.05

ENVIRONMENTAL

Operating Temp Range	-30°C to +70°C				
Survival Temp Range	-40°C to +70°C				
Seal	MIL-STD 202, Method 112				
Weight	8.5 oz.				

How to Order

ASXC-2	02550271-000
ASXC-10	02550267-000
ASXC-50	02550257-000
ASXC-100	02550262-000

Accelerometers exported from the United States must be done in accordance with the Export Administration Regulations (EAR) and/or the International Traffic in Arms Regulations (ITAR) as applicable.