

**BEST OF
CLASS**



The Jewell LCF-2310 Series is an extremely rugged biaxial fluid damped flexure suspension servo Inclinometer designed for industrial, commercial and aerospace sensing requirements. The seal of the LCF-2310 is splash proof making it ideal for outdoor use.

LCF-2310 Inclinometer Specifications

Performance

Input Range, ° (Note 1)	±3
Full Range Output (FRO), VDC ±0.050%	±5.0
Nonlinearity, % FRO, maximum (Note 2)	0.005
Scale Factor, volts/g nominal	95.5
Scale Factor Temp Sensitivity, PPM/°C maximum	100
Natural Frequency, Hz nominal (Note 3)	2
Bandwidth (-3dB), Hz nominal	2
Input-Axis Misalignment, ° maximum	0.15
Bias Volts, maximum	0.020
Zero Tilt Output Temp Sensitivity, volts/°C, maximum	0.0025
Resolution and Threshold, μ rad max	1

Electrical

Input Voltage, VDC ⁴	±13.5 to ±16.5
Input Current, mA, maximum	50
Output Impedance, ohms, nominal	100
Noise, Vrms maximum	0.001

Environmental

Operating Temp Range	-40° to +80°C
Survival Temp Range	-60° to +90°C
Shock	1500g, 1 msec, ½ sine
Seal	MIL-STD-202F, Method 112C

¹ Full Range is defined "from negative full input to positive full input angle."

The inclinometer output is proportional to the sine of the tilt angle.

² Nonlinearity is specified as deviation of output referenced to theoretical sine function value, independent of misalignment.

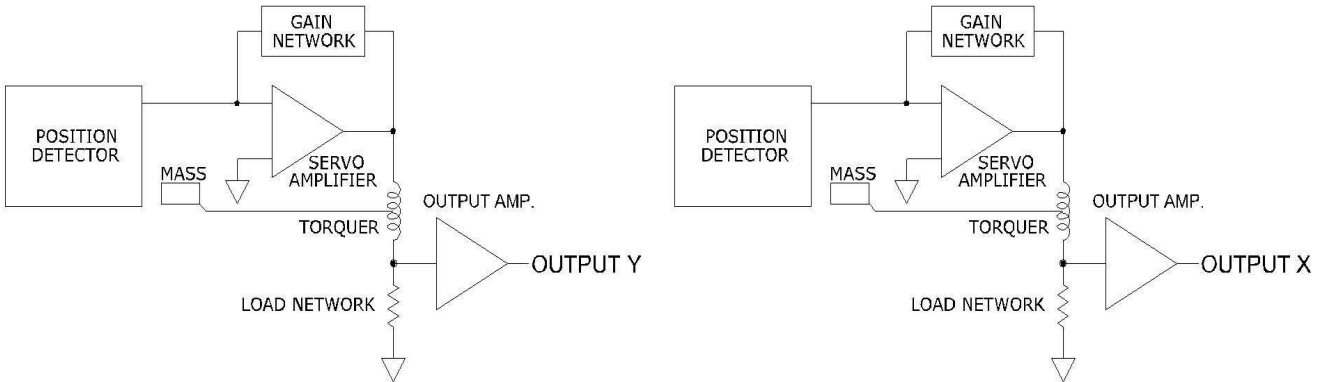
³ Output Phase angle = -90°

⁴ Unit Power connections can be easily adapted for operation from single-ended, floating power supplies of 24 to 36 Volts DC.

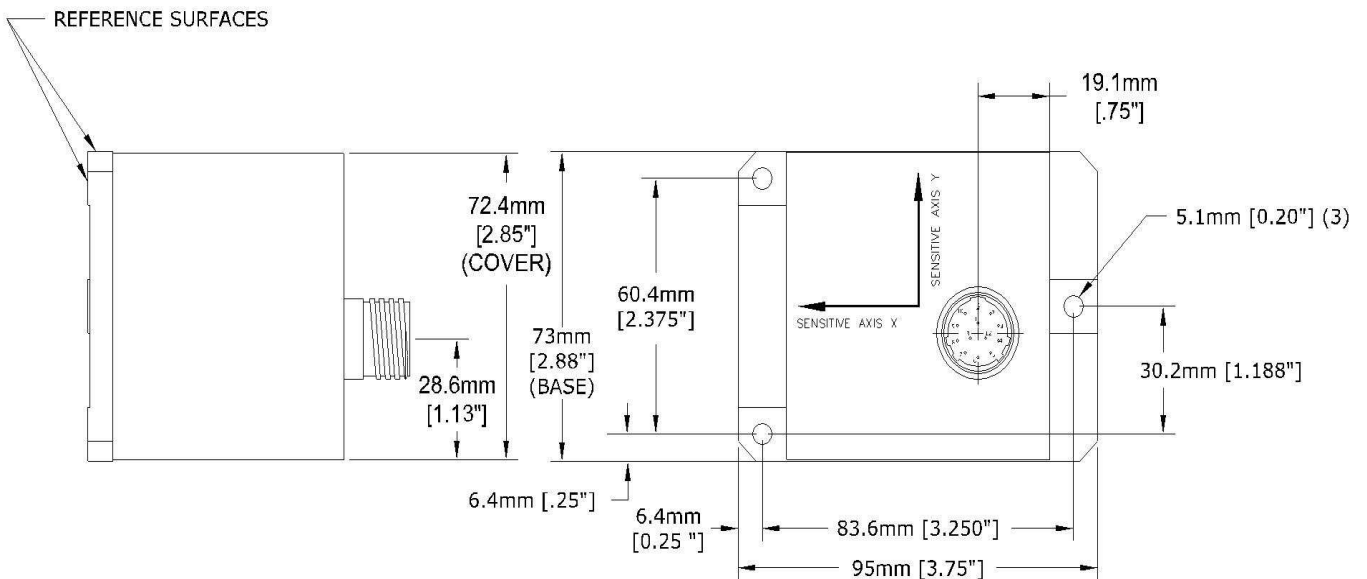
Applications

- Antenna Leveling
- Offshore Platforms
- Barge Leveling and Control
- Vehicle Attitude Control

Block Diagram



Outline Diagram



CONNECTOR: 038999/25NB35PN

PIN-OUT:

- 1 - +15VDC
- 2 - -15VDC
- 3 - +/-15V RTN
- 4 - OUTPUT AXIS X
- 5 - OUTPUT AXIS X RTN
- 6 - OUTPUT AXIS Y
- 7 - OUTPUT AXIS Y

