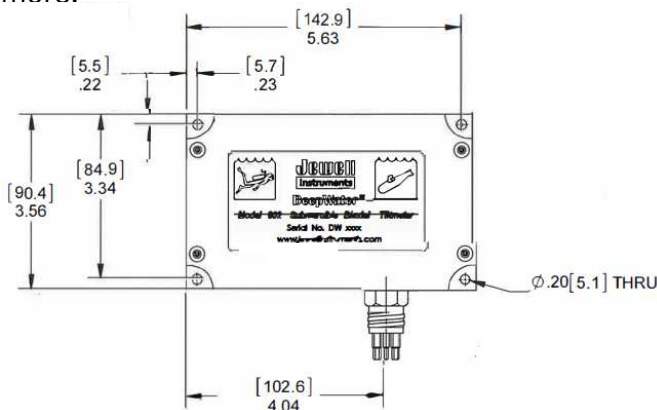


## Model A802

### “DeepWater” Analog Tiltmeter

The model A802 Deepwater is a high-precision submersible tiltmeter for use in marine, offshore, and deep ocean applications. Using an absolute gravity referenced electrolytic sensor, the A802 delivers superior measurement accuracy with virtually no long-term drift. Highgain units are sensitive to  $<0.0017$  mm/m or better. Output is a stable  $\pm 5$  DC voltage ( $\pm 10$  VDC differential), which can be read with any VDC input data recorder. All units are rated to +2500m waterproof for advanced protection from the elements. Use the A802 “Deepwater” for structural monitoring, angle measurement and control, platform leveling, and more.

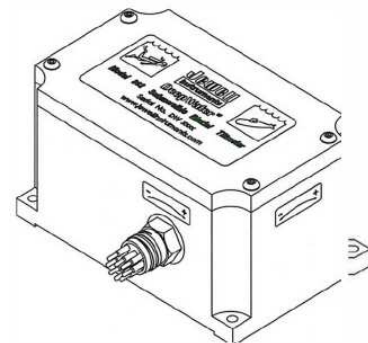


Dimensions: in [mm]



#### APPLICATIONS:

- Structural Monitoring
- Platform Leveling
- Industrial Measurement & Control



# PERFORMANCE SPECIFICATIONS

## PERFORMANCE

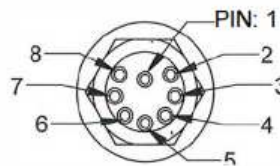
ANGULAR RANGE (°) <sup>1</sup>	±0.5°	±3°	±50°
RESOLUTION	<0.0001°	0.0006°	0.01°
NONREPEATABILITY (° max)	<0.0002°	0.001°	0.02°
NONLINEARITY (%FRO) <sup>2</sup> max	±1	<±2	±0.5
SCALE FACTOR	0.1°/V	0.6°/V	10°/V
TIME CONSTANT	1.75 sec (2-pole Butterworth low-pass filter)		0.15 sec
Kz TEMP COEFFICIENT (°/°C)	±0.0002 arcsec/°C (typical)		±0.002 arcsec/°C (typical)
Ks TEMP COEFFICIENT (%/°C)	0.02%/°C (typical)		
OUTPUT	±5VDC (single ended); ±10VDC (differential)		
CHANNELS	Tilt, Temperature		

## ELECTRICAL & ENVIRONMENTAL

NUMBER OF AXES	1 or 2
OUTPUT IMPEDANCE (Ohms, nominal)	270
TEMPERATURE OUTPUT	0.1 °C/mV typical (single ended; 0 °C = 0mV)
POWER	8-18 VDC @ 8mA, 250 mV ripple max, reverse polarity protected
OPERATING TEMPERATURE RANGE	-4° to +60°C
STORAGE TEMPERATURE RANGE	-30° to +100°C
WEIGHT	5 kg (11 lb.)
MATERIALS	316 SS (6AL-4V Titanium also available)
SEAL	IP68
CABLE	6-conductors, two-types available: 1) Neoprene, 20 AWG, no shield or 2) PVCjacketed, polypropylene-insulation, 24 AWG, shielded. Order cable separately.

## PIN OUT:

CONNECTOR	FUNCTION
3	12V
1	PWR GND
2	SIG GND
4	X+
6	X-
7	Y+
8	Y-
5	TEMP



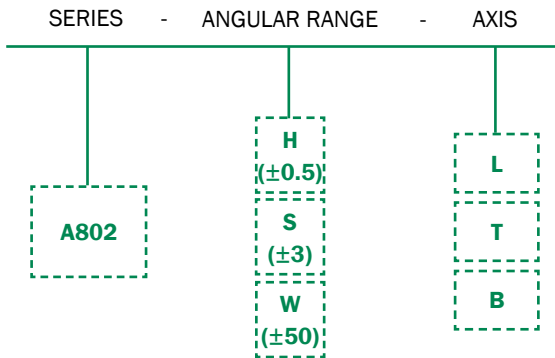
## NOTES:

1. Custom ranges available on request
2. Nonlinearity is specified as deviation of output referenced to theoretical sine function value, independent of misalignment

Specifications are subject to change without notice due to continued product development

# ORDERING INFORMATION

**HOW TO ORDER** Model Numbers are comprised of the series, the number of axes, and the angular range.



	MODEL #	PART #
±0.5	A802-HL	98802-04-ROHS
	A802-HT	98802-01-ROHS
	A802-HB	98802-07-ROHS
±3	A802-SL	98802-05-ROHS
	A802-ST	98802-02-ROHS
	A802-SB	98802-08-ROHS
±50	A802-WL	98802-06-RORS
	A802-WT	98802-03-ROHS
	A802-WB	98802-09-ROHS

## Accessories:

PART #	DESCRIPTION
00389	Extra 8-socket Female in-line connector, Neoprene, on 24-inch (60 cm) Cable Whip (bare wire leads)
00359	Extra Delrin Locking Sleeve (locks 00358 and 00389 in-line connector to Male bulkhead)
00358-xxx	Extra 6-socket Female in-line connector, Neoprene, (bare wire leads) price per foot