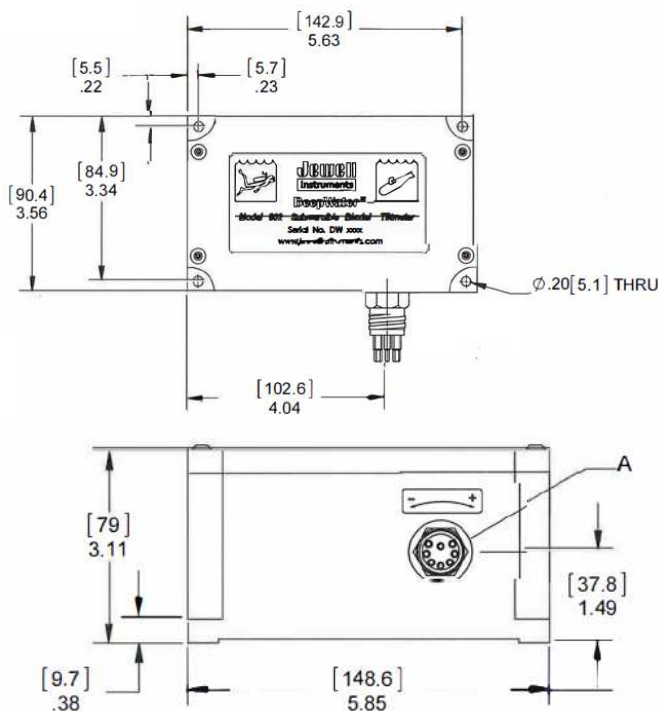


Model D802

DeepWater Analog Tiltmeter

The model D802 Deepwater is a high-precision submersible tiltmeter for use in marine, offshore, and deep ocean applications. Using an absolute gravity referenced electrolytic sensor, the D802 delivers superior measurement accuracy with virtually no long-term drift. Highgain units are sensitive to <math><0.0017\text{ mm/m}</math> or better. Output is RS232 or RS422. All units are rated to +2500m waterproof for advanced protection from the elements. Use the D802 "Deepwater" for structural monitoring, angle measurement and control, platform leveling, and more.

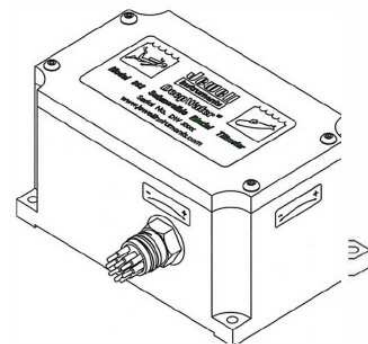


Dimensions: in [mm]



APPLICATIONS:

- Structural Monitoring
- Platform Leveling
- Industrial Measurement & Control



PERFORMANCE SPECIFICATIONS

PERFORMANCE

ANGULAR RANGE (°) ¹	±0.5°	±3°	±50°
RESOLUTION	<0.0001°	0.002°	0.02°
NONREPEATABILITY (° max)	0.0003°	0.002°	0.02°
NONLINEARITY (%FRO) ² max	0.1		
SCALE FACTOR	0.0625°/mA	0.375°/mA	6.25°/mA
TIME CONSTANT	0.15 sec		
K _z TEMP COEFFICIENT (°/°C)	±0.001 °/°C (typical)		±0.01 °/°C (typical)
OUTPUT	RS232, RS422		
OUTPUT FORMAT	NMEA XDR, Trimble TCM, Ashtec compatible, Simple (default: X, Y, Temp., S/N)		
BAUD RATE	9600 (default), 19200, 28800, 57600, 115200, 230400		
CHANNELS	X-tilt, Y-tilt, Temperature		

ELECTRICAL & ENVIRONMENTAL

NUMBER OF AXES	1 or 2
OUTPUT IMPEDANCE (Ohms, nominal)	270
TEMPERATURE OUTPUT	Temperature is measured with a 2500 Ohm thermistor, -50° to 150°C range
POWER	7 to 25 VDC @ 27 mA, 250 mV peak-to-peak ripple maximum, reverse polarity protected
OPERATING TEMPERATURE RANGE	-4° to +60°C
STORAGE TEMPERATURE RANGE	-30° to +100°C
WEIGHT	5 kg (11 lb)
MATERIALS	316 stainless steel
SEAL	IP68
CABLE	3m (10 ft.), 6 conductors + one overall shield, PVC jacket. DB9 connector for digital I/O.

PIN OUT:

RS232 Wiring

WIRE COLOR	FUNCTION
BLACK	GND
WHITE	-
RED	PWR
GREEN	RX
YELLOW	-
BLUE	TX

RS422 Wiring

WIRE COLOR	FUNCTION
BLACK	GND
RED	TX-
YELLOW	PWR
BLUE	TX+
GREEN	RX-
WHITE	RX+

NOTES:

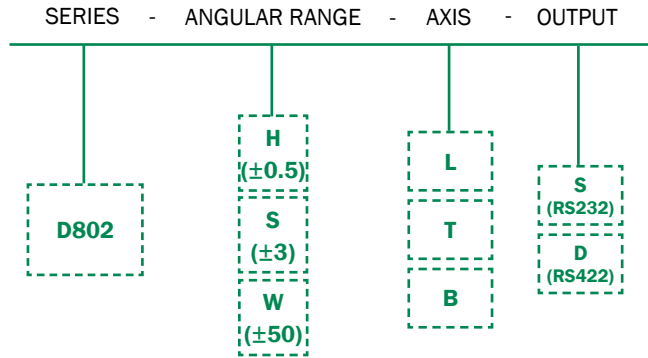
1. Custom ranges available on request
2. Nonlinearity is specified as deviation of output referenced to theoretical sine function value, independent of misalignment

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.



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

	MODEL #	PART #
±0.5	D802-HLS	98033-01-ROHS
	D802-HLD	98033-02-ROHS
	D802-HT-S	98033-03-ROHS
	D802-HT-D	98033-04-ROHS
	D802-HB-S	98033-05-ROHS
	D802-HB-D	98033-06-ROHS
±3	D802-SLS	98033-07-ROHS
	D802-SLD	98033-08-ROHS
	D802-ST-S	98033-09-ROHS
	D802-ST-D	98033-10-ROHS
	D802-SB-S	98033-11-ROHS
	D802-SB-D	98033-12-ROHS
±50	D802-WLS	98033-13-ROHS
	D802-WLD	98033-14-ROHS
	D802-WT-S	98033-15-ROHS
	D802-WT-D	98033-16-ROHS
	D802-WB-S	98033-17-ROHS
	D802-WB-D	98033-18-ROHS