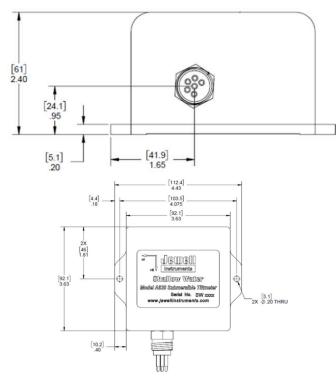


MAKING SENSE OUT OF MOTION

Model C820

Shallow Water Analog Tiltmeter

The model C820 Shallow Water is a high-precision submersible tiltmeter for use in fresh and salt later applications with 4-20mA output. Using an absolute gravity referenced electrolytic sensor, the C820 delivers superior measurement accuracy with nearly no long-term drift. High-gain units are sensitive to <0.0017 mm/m or better. All units are rated to 200 meters (656.2 ft) waterproof for advanced protection from the elements. Use the C820 "Shallow Water" for structural monitoring, angle measurement and control, platform leveling, and more.



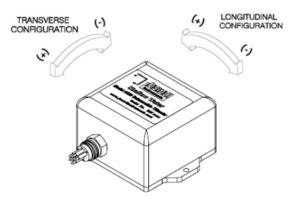
Dimensions: in [mm]





APPLICATIONS:

- Off-shore Floating Rigs
- Dam Monitoring
- Bridge Monitoring
- Underwater Tilt Measurements



PERFORMANCE SPECIFICATIONS

PERFORMANCE	High-Gain	Standard	Wide-Angle
ANGULAR RANGE (°) ¹	±0.5°	±3°	±50°
RESOLUTION	<0.0001°	0.0006°	0.01°
NONREPEATABILITY (° max)	<0.0002°	0.001°	0.02°
NONLINEARITY (%FRO) ² max	1%	2%	0.5%
SCALE FACTOR (°/mA)	0.0625	0.375	6.25
TIME CONSTANT (sec)	0.15		
Kz TEMP COEFFICIENT (°/C)	±0.0002		±0.002
Ks TEMP COEFFICIENT (%/°C)	<0.04		<0.1
OUTPUT	4-20mA Two-wire current loop (per axis)		
CHANNELS	Tilt, Temperature		

West .

ELECTRICAL & ENVIRONMENTAL

NUMBER OF AXES	1 or 2	
OUTPUT IMPEDANCE (Ohms, nominal)	270	
TEMPERATURE OUTPUT	Temperature is measured with a 2500 Ohm thermistor, -50 $^\circ$ to 150 $^\circ\text{C}$ range	
POWER	(0.02 Ampere x R + 10 VDC) < Vs < 29 VDC	
OPERATING TEMPERATURE RANGE	-4° to +60°C	
STORAGE TEMPERATURE RANGE	-30° to +100°C	
WEIGHT	1.6 kg	
MATERIALS	316 SS (6AL-4V Titanium also available)	
SEAL	Submersible to 200 meters (656.2 ft)	
CABLE	6-conductor unshielded, 20AWG female receptacle with locking sleeve, neoprene jacket. Charged separately. Specify cable length per unit on order	

PIN OUT:

WIRE COLOR	FUNCTION	
BLACK	X RETURN	
WHITE	Y RETURN	
RED	X PWR	
GREEN	Y PWR	
ORANGE	TEMP RTRN	
BLUE	TEMP EX.	

NOTES:

Custom ranges available on request
Nonlinearity is specified as deviation

 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

ML

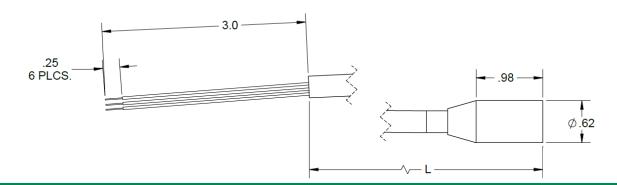


ACCESSORIES

		-
PART #	DESCRIPTION	
00359	Delrin Locking Sleeve (locks 00358 in-line connector to Male bulkhead)	
00358-15M	15m 6-socket Female in-line connector, Neoprene, (bare wire leads). PN 00359 included.	
00358-20M	20m 6-socket Female in-line connector, Neoprene, (bare wire leads). PN 00359 included.	
00358-25M	25m 6-socket Female in-line connector, Neoprene, (bare wire leads). PN 00359 included.	

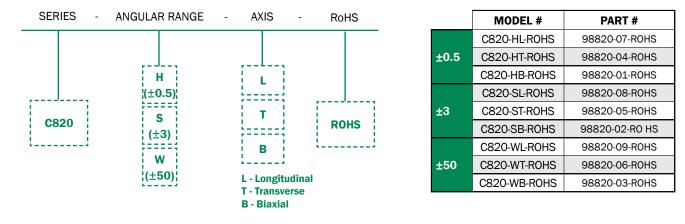


COLOR CODE			
WIRE COLOR			
BLACK	1		
WHITE	2		
RED	3		
GREEN	4		
ORANGE	5		
BLUE	6		



ORDERING INFORMATION

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



850 Perimeter Road Manchester, NH 03103 USA

