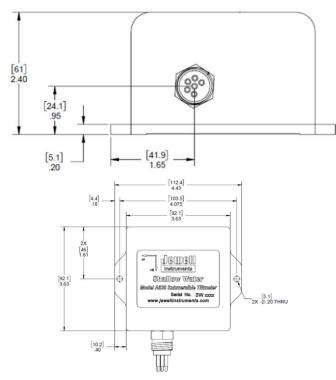


MAKING SENSE OUT OF MOTION

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.



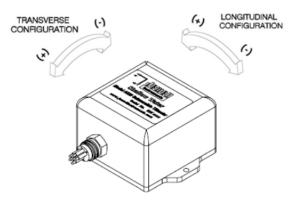
Dimensions: in [mm]





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

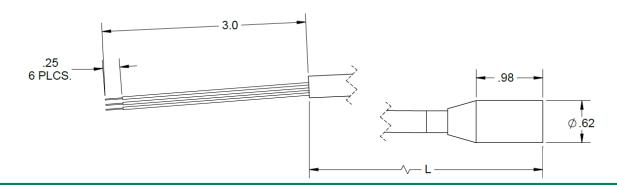


ACCESSORIES

| | | - |
|-----------|--|---|
| 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. | |

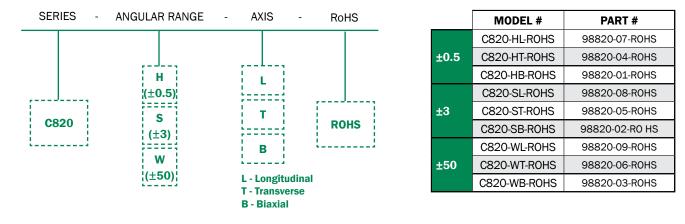


| COLOR CODE | | | |
|------------|---|--|--|
| WIRE COLOR | | | |
| BLACK | 1 | | |
| WHITE | 2 | | |
| RED | 3 | | |
| GREEN | 4 | | |
| ORANGE | 5 | | |
| BLUE | 6 | | |



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

