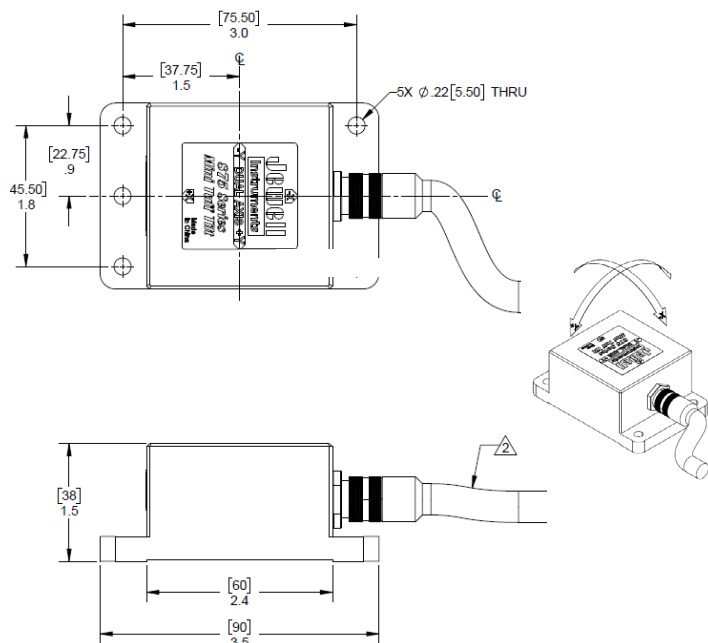


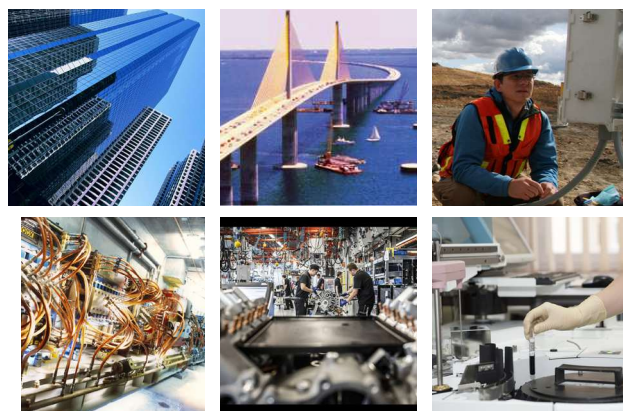
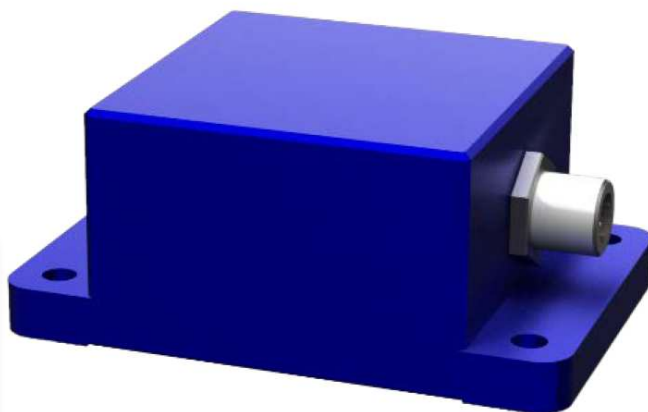
Model C875

Analog MEMS Tiltmeter

The model 875 MEMS Tiltmeter combines high precision and durability in a miniaturized and economical instrument package. Using MEMS technology, the 875 delivers superior measurement accuracy with virtually no long-term drift and a resolution of 0.05° . Output options include 0.5-4.5Vdc, 4-20mA and digital RS485. All units are rated IP67 waterproof for advanced protection from the elements. Use the C875 for structural monitoring, angle measurement and control, platform leveling, testing and research, OEM and more. This product is RoHS compliant.



Dimensions: in [mm]



APPLICATIONS:

- Structural Monitoring
- Platform Leveling
- Laboratory Testing
- Angle Measurement
- Educational Research
- OEM

PIN OUT:

	OUTPUT OPTIONS			
WIRE COLOR	0.5-4.5V	4-20MA	RS485	RS232
BROWN	+PWR			
BLACK	GND			
BLUE	X OUT	X OUT	D+(A)	TXD
WHITE	Y OUT	Y OUT	D-(B)	RXD
GREY	ZERO CAL	ZERO CAL	NC	ZERO CAL

PERFORMANCE SPECIFICATIONS: C875

PERFORMANCE

ANGULAR RANGE (°) ¹	±5°	±15°	±30°
RESOLUTION	0.05°		
OUTPUT RANGE (mA)	4-20		
FULL RANGE OUTPUT (FRO) ² VDC ± 0.5%	±0.5		
SCALE FACTOR (mA/°)	1.600 ± 0.008	0.533 ± 0.003	0.267 ± 0.002
SCALE FACTOR TEMP. SENSITIVITY (PPM/°C, max)	±100		
NONLINEARITY (%FRO) ³ max	2		
NONREPEATABILITY (° max)	0.05		
BANDWIDTH (-3db, Hz, nominal)	<1		
TRANSVERSE AXIS MISALIGNMENT (° max)	±1		
RELATIVE ACCURACY (° max)	0.10	0.15	0.27
0° OUTPUT RANGE (Volts)	±0.03		
0° OUTPUT TEMP. SENSITIVITY (Volts/°C, max)	±0.005		
START UP TIME (seconds max)	5		
RESPONSE TIME (seconds max)	0.3		

ELECTRICAL & ENVIRONMENTAL

NUMBER OF AXES	1 or 2
INPUT VOLTAGE RANGE (VDC)	12 to 30
INPUT CURRENT (mA @ 24V max)	35
NOISE (mA rms max)	0.03
OPERATING TEMPERATURE RANGE	-40° to +85°C
STORAGE TEMPERATURE RANGE	-50° to +105°C
SHOCK (g, 1 msec, ½-sine)	500
WEIGHT (grams)	210 (7.4 oz.)
SEAL	IP67
CABLE	2m (6.6 ft), flying leads

NOTES:

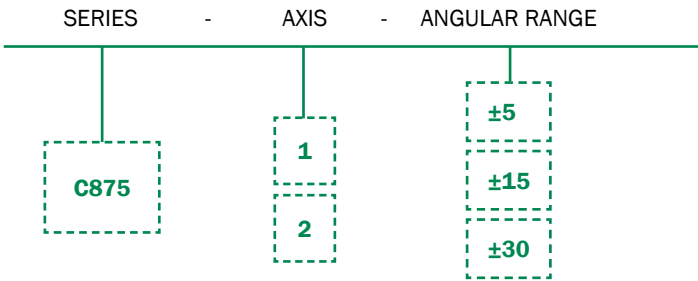
1. Custom ranges available on request
2. Full range is defined as "from negative full input angle to positive full input angle." The Inclinometer output is proportional to the sine of the tilt angle.
3. Nonlinearity is specified as deviation of output referenced to theoretical sine function value, independent 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 #
±5	C875-1-5	98875-121
	C875-2-5	98875-221
±15	C875-1-15	98875-122
	C875-2-15	98875-222
±30	C875-1-30	98875-123
	C875-2-30	98875-223

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