

C750-100

Single-Axis Analog Inclinometer

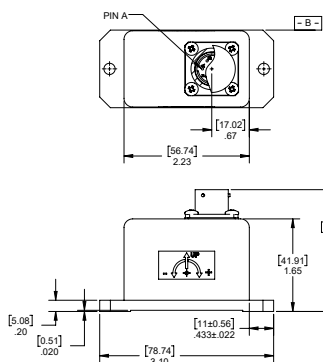
The 750-100 Series Tiltmeter is a rugged, high performance, single-axis tilt sensor designed for peak performance in extreme conditions. The fluid damped mechanism delivers superior noise rejection in high shock and vibration environments as well as excellent output stability. Units are available with a 6-pin connector or pin-terminals. Custom input ranges, filters and temperature compensation are also available on request.

FEATURES:

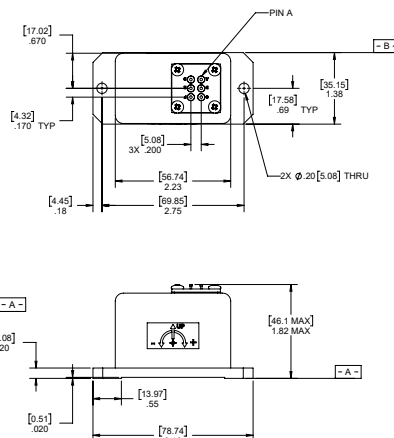
- Resolution of 1 μ rad
- Internal Temperature Sensor Available
- 4-20mA Outputs
- +20 to +30 Volts DC Power Input
- RoHS Compliant



Connector Version



Pin-Terminal Version



Dimensions: in [mm]

APPLICATIONS:

- High-precision Geotech
- Oil and Gas, Riser Tilt Monitoring
- Railroad MOW Equipment
- Pavement Profiling Rigs
- Vehicle Wheel Alignment
- Robotics

Performance Specifications

STATIC/DYNAMIC

INPUT RANGE (°)	±1	±3	±14.5	±30	±60	±90
FULL RANGE OUTPUT (mA) ±1.0% ¹	4-20					
NONLINEARITY (% FRO) max ²	0.05	0.05	0.03	0.02	0.03	0.05
SCALE FACTOR (mA/g) nominal	458.4	152.9	32.0	16.0	9.2	8.0
SCALE FACTOR TEMP. SENSITIVITY (PPM/°C) max	300	300	100	80	80	80
BANDWIDTH (-3dB) Hz, nominal	0.5	2	15	20	30	30
TRANSVERSE AXIS MISALIGNMENT, ° max	±0.2	±0.5	±0.5	±0.5	±0.5	±0.5
0° OUTPUT (mA) nominal	12 ±0.3	12 ±0.6	12 ±0.3	12 ±0.3	12 ±0.3	12 ±0.3
0° OUTPUT TEMP. SENSITIVITY (mA/°C) max	0.024	0.01	0.002	0.001	0.001	0.0008
RESOLUTION & THRESHOLD (µrad) max	1					

PIN OUTS

PIN OPTION

A	POSITIVE INPUT POWER
B	POWER/SIGNAL COMMON
C	N/C
D	SIGNAL OUT
E	N/C
F	N/C

CONNECTOR OPTION

A	RED	POSITIVE INPUT POWER
B	WHITE	POWER/SIGNAL COMMON
C	BLACK	N/C
D	ORANGE	SIGNAL OUT
E	N/C	N/C
F	BLUE	N/C

NOTES:

1. Full Range is defined "from negative full input angle to positive full input angle."
2. Nonlinearity is specified as deviation of output referenced to theoretical sine function value, independent of misalignment.

*Specifications subject to change without notice on account of continued product development

ELECTRICAL

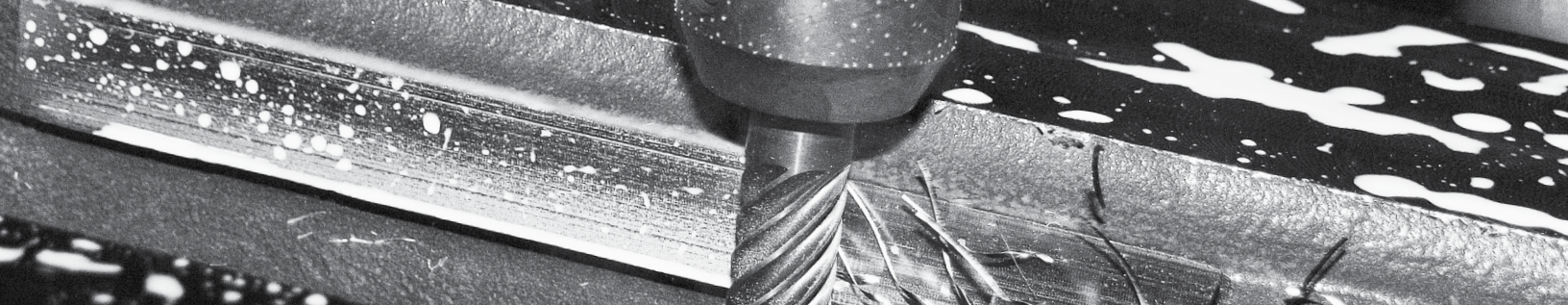
NUMBER OF AXES	1
INPUT VOLTAGE RANGE (VDC)	+20 to +30
INPUT CURRENT (mA, max)	50
NOISE (mArms, max)	0.01
MASS (g) max	240

ENVIRONMENTAL

OPERATING TEMP. RANGE	-40° to +80° C
STORAGE TEMP. RANGE	-60° to +90° C
SHOCK	1000g, 1 msec, ½ sine

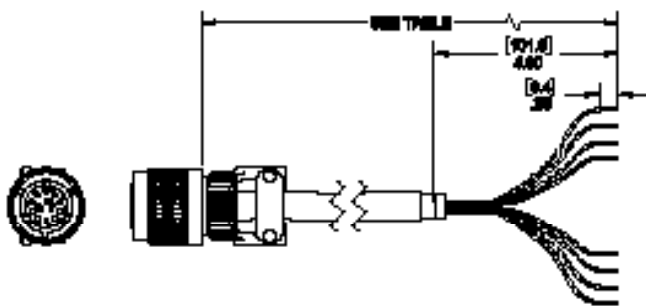
ENCLOSURE

SEAL	IP65
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ACCESSORIES

CONNECTOR CABLE

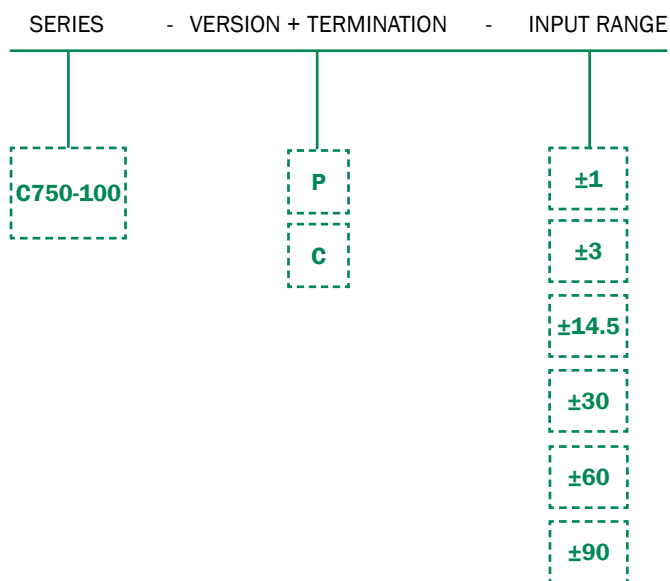


PART #	MODEL #	LENGTH m (ft)
62101011-001	6-Pin Mating Connector	-
879605-007	DSI-CBL-02M-1	2 (6.56)
879605-008	DSI-CBL-03M-1	3 (9.84)
879605-020	DSI-CBL-05M-1	5 (16.4)
Contact manufacturer for custom lengths		

ORDERING INFORMATION

HOW TO ORDER

Model Numbers are comprised of the series, the version, the termination option, and the input range.



	TERMINATION	MODEL #	PART #
±1	PIN	C750-100-P-1	98750-48
	CONNECTOR	C750-100-C-1	98750-42
±3	PIN	C750-100-P-3	98750-49
	CONNECTOR	C750-100-C-3	98750-43
±14.5	PIN	C750-100-P-14.5	98750-50
	CONNECTOR	C750-100-C-14.5	98750-44
±30	PIN	C750-100-P-30	98750-51
	CONNECTOR	C750-100-C-30	98750-45
±60	PIN	C750-100-P-60	98750-52
	CONNECTOR	C750-100-C-60	98750-46
±90	PIN	C750-100-P-90	98750-53
	CONNECTOR	C750-100-C-90	98750-47