

A750-100

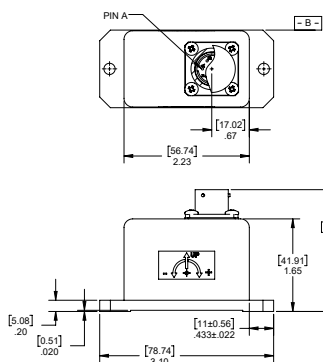
Single-Axis Analog Inclinometer

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.

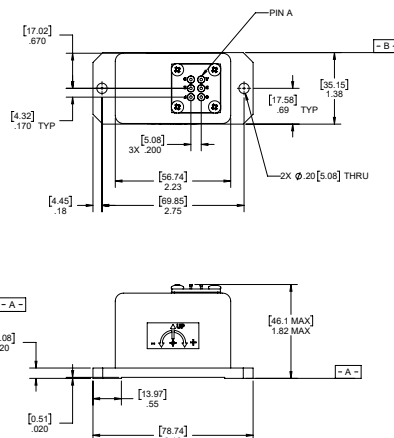
FEATURES:

- Resolution of 1 μ rad
- Internal Temperature Sensor Available
- 0-5V Output
- +9 to +18 Volts DC Power Input
- RoHS Compliant

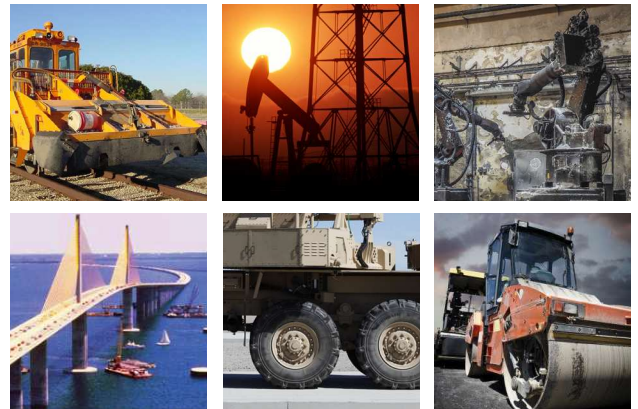
Connector Version



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 (VDC) ¹ ±0.5%	0-5					
NONLINEARITY (% FRO) ² max	0.05	0.04	0.02	0.02	0.02	0.05
SCALE FACTOR (V/g) nominal	143.2	47.8	10.0	5.0	2.9	2.5
SCALE FACTOR TEMP. SENSITIVITY (PPM/°C) max	350	150	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 (V) nominal	2.48 to 2.52					
0° OUTPUT TEMP. SENSITIVITY (V/°C) max	0.015	0.005	0.001	0.0005	0.0004	0.0003
RESOLUTION & THRESHOLD (µrad) max	1					

PIN OUTS

PIN OPTION

A	+VDC
B	N/C
C	POWER/SIGNAL COMMON
D	SIGNAL OUT

CONNECTOR OPTION

A	+VDC
B	POWER/SIGNAL COMMON
C	N/C
D	SIGNAL OUT
E	N/C
F	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)	+9 to +18
INPUT CURRENT (mA, max)	40
OUTPUT IMPEDANCE (Ohms, nom)	1
NOISE (V _{rms} , max)	0.002
MASS (g)	230

ENVIRONMENTAL

OPERATING TEMP. RANGE	-40° to +80° C
STORAGE TEMP. RANGE	-60° to +90° C
SHOCK	1500g, 0.5 msec, ½ sine

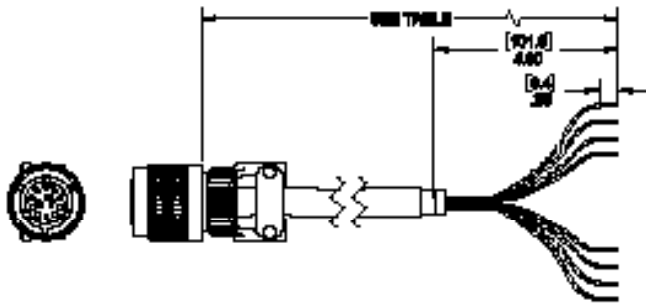
ENCLOSURE

SEAL	IP66
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ACCESSORIES

CONNECTOR CABLE

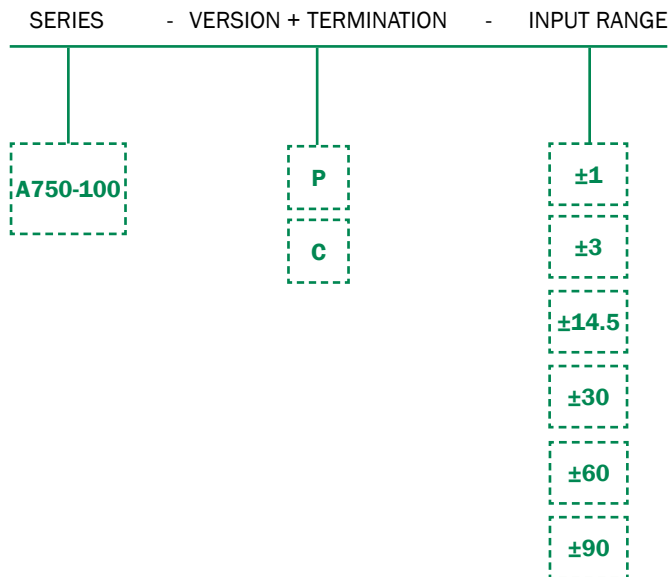


PART #	MODEL #	LENGTH m (ft)
62101011-001	6-Pin Mating Connector	-
879605-007	DSI-CBL-02M-1	2 (6.56)
879605-008	DSI-CBL-03M-1	3 (9.84)
879605-020	DSI-CBL-05M-1	5 (16.4)
Contact manufacturer for custom lengths		

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	A750-100-P-1	98750-36
	CONNECTOR	A750-100-C-1	98750-30
±3	PIN	A750-100-P-3	98750-37
	CONNECTOR	A750-100-C-3	98750-31
±14.5	PIN	A750-100-P-14.5	98750-38
	CONNECTOR	A750-100-C-14.5	98750-32
±30	PIN	A750-100-P-30	98750-39
	CONNECTOR	A750-100-C-30	98750-33
±60	PIN	A750-100-P-60	98750-40
	CONNECTOR	A750-100-C-60	98750-34
±90	PIN	A750-100-P-90	98750-41
	CONNECTOR	A750-100-C-90	98750-35