



MAKING SENSE OUT OF MOTION

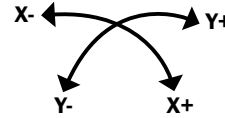
# C750-200

## Dual-Axis Tiltmeter

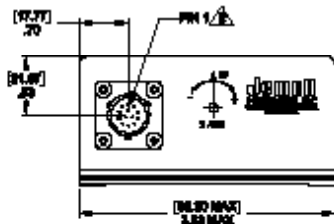
The Jewell C750-200 **Black Diamond** tiltmeter series offers the same performance and reliability as the A750-200 series, but with a convenient 4-20mA output signal. This solution is ideal for applications that require long cable runs such as platform/radar leveling and geotechnical monitoring.

### FEATURES:

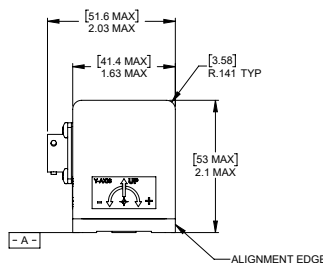
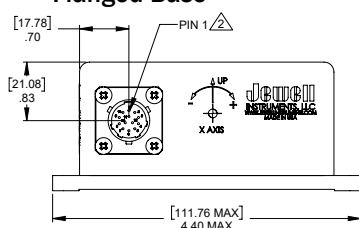
- $\pm 1^\circ$  to  $\pm 90^\circ$  Input Full Range
- Micro Radian Resolution
- Available Internal Temp Sensor
- High Level 0-5Vdc Output
- Superior  $0^\circ$  Output Stability Over Temperature
- RoHS Compliant Option Available



Standard Base



Flanged Base



Dimensions: in [mm]



### APPLICATIONS:

- Radar & Antenna Leveling
- Structural Monitoring
- Seismic Monitoring
- Platform Leveling
- Lab Testing & Research

# PERFORMANCE SPECIFICATIONS A750-200

## PERFORMANCE

<b>INPUT RANGE (°)</b>	<b>±1</b>	<b>±3</b>	<b>±14.5</b>	<b>±30</b>	<b>±90</b>
<b>FULL RANGE OUTPUT (VDC)<sup>1</sup></b>	0-5				
<b>NONLINEARITY (% FRO)<sup>2</sup> max</b>	0.05	0.05	0.02	0.02	0.02
<b>SCALE FACTOR (V/g) nominal</b>	143.2	47.8	10	5	2.5
<b>SCALE FACTOR TEMP SENSITIVITY (PPM/°C max)</b>	300	300	100	60	60
<b>BANDWIDTH (-3dB) Hz, nominal</b>	0.5	2	15	20	30
<b>TRANSVERSE AXIS MISALIGNMENT, ° max</b>	±0.2	±0.50	±0.50	±1.00	±1.00
<b>OUTPUT AT 0° TILT (V) max</b>	±0.1	±0.04	±0.02	±0.02	±0.02
<b>0° OUTPUT TEMP. SENSITIVITY (Volts/°C) max</b>	0.015	0.005	0.001	0.0005	0.0003
<b>RESOLUTION &amp; THRESHOLD (μradians) max</b>	1				

**NOTES:**

1. Full range is defined as "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

<b>NUMBER OF AXES</b>	2
<b>INPUT VOLTAGE RANGE (VDC)</b>	±9 to ±18
<b>INPUT CURRENT (mA, max)</b>	80
<b>OUTPUT IMPEDANCE (Ohms) nominal</b>	100
<b>NOISE (Vrms, max)</b>	0.002

## ENCLOSURE

<b>WEIGHT</b>	280 g
<b>SEAL</b>	MIL-STD 202, Method 112

## ENVIRONMENTAL

<b>OPERATING TEMP. RANGE</b>	-40° to +80°C
<b>STORAGE TEMP. RANGE</b>	-60° to +90°C
<b>VIBRATION</b>	20 grms
<b>SHOCK</b>	1000g, 1 msec, ½ sine

## OPTIONS

- Temperature Sensor  
Type: AD590  
Scale Factor: 1μA/K  
Spec @ Room Ambient Temperature: 298.2 ±10.5 μA
- Flange Base
- Metric Mounting Threads

## PIN OUTS

<b>1</b>	RED	+9 to +18 VDC
<b>2</b>	BLACK	N/C
<b>3</b>	WHITE	POWER COMMON
<b>4</b>	ORANGE	X-AXIS OUTPUT SIGNAL

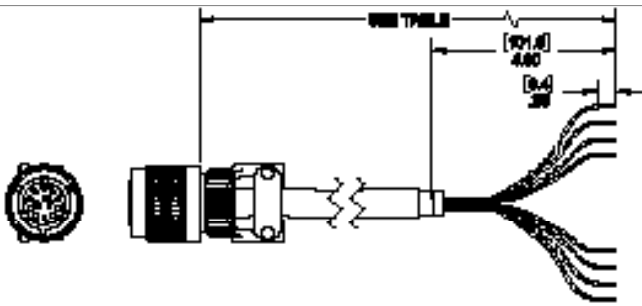
<b>5</b>	GREEN	X-AXIS OUTPUT RETURN
<b>6</b>	RED/BLACK	Y-AXIS OUTPUT SIGNAL
<b>7</b>	BLUE	Y-AXIS OUTPUT RETURN
<b>8-13</b>	-	N/C

(Color codes correspond to cable assembly.)



# ACCESSORIES

## CONNECTOR CABLE



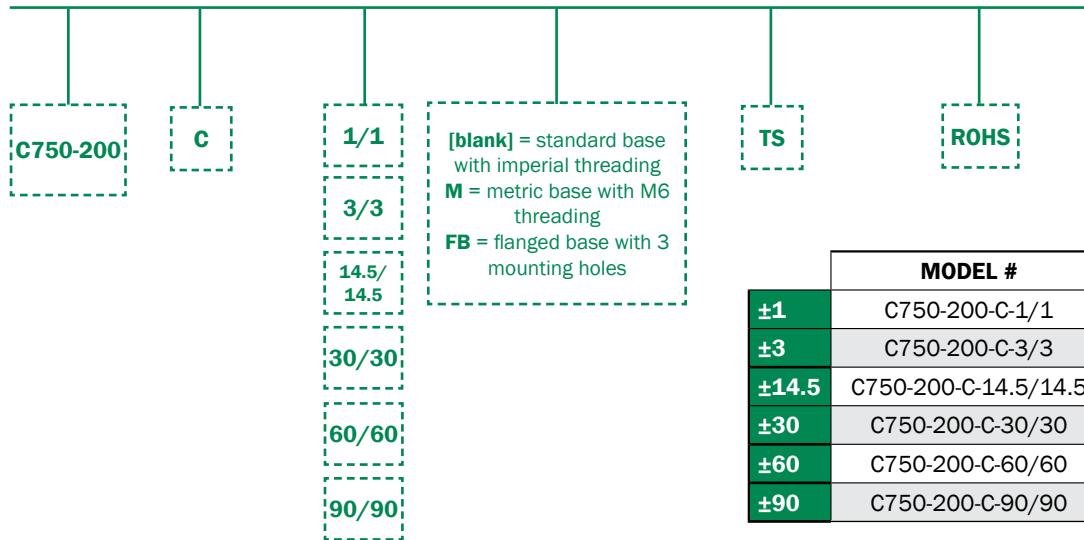
PART #	MODEL #	LENGTH m (ft)
62101011-001	6-Pin Mating Connector	-
879605-007	DSI-CBL-02M-1	2 (6.56)
879605-008	DSI-CBL-03M-1	3 (9.84)
879605-020	DSI-CBL-05M-1	5 (16.4)
Contact manufacturer for custom lengths		

# ORDERING INFORMATION

## HOW TO ORDER

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

SERIES - CONNECTION - INPUT RANGE - BASE & THREADING\* - TEMP SENSOR\* - ROHS COMPLIANT\*



	MODEL #	PART #
±1	C750-200-C-1/1	98750-66
±3	C750-200-C-3/3	98750-67
±14.5	C750-200-C-14.5/14.5	98750-68
±30	C750-200-C-30/30	98750-69
±60	C750-200-C-60/60	98750-70
±90	C750-200-C-90/90	98750-71