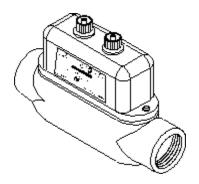
# 20013X Dual Pressure flexiTIM

# Datasheet

Bently Nevada Machinery Condition Monitoring

141576 Rev. M



# **Description**

The Dual Pressure flexiTIM\* module interfaces 2 individual pressure transducers to the Trendmaster\* 2000 System and is intended for non-dynamic pressure applications.

The flexiTIM module and cable interfaces with pressure transducers using a 4-pin, locking bayonet connection. Compatible transducers are standard, millivolt output type devices with an output sensitivity of 10 mV/V. This flexibility allows the dual pressure flexiTIM system to measure a wide range of pressures under a variety of operating conditions. We offer a standard transducer for use with the flexiTIM module for convenience.





# **Specifications**

All specifications are at 25 °C (77 °F) unless otherwise specified.



Operation outside the specified limits will result in false or inaccurate readings.

# 200130 Dual Pressure flexiTIM

# **Electrical**

The pressure transducer sets the Trendmaster full-scale pressure range. The user enters the transducer's full-scale range into the Trendmaster software.
±8.5% of the transducer full-scale rating (transducer accuracy not included).
4.98 Vdc ± 65 mVdc.
2.5 mA absolute maximum available over temperature.
1 Vdc to 3 Vdc bias from transducer (nominal).
0.025% of transducer's full scale rating.
Bridge type meeting stated requirements.

# **Environmental Limits**

Operating Temperature	-40 °C to +100 °C (-40 °F to +212 °F).
Humidity	100% condensing on exposed surfaces. 100% non-condensing on surfaces inside conduit.

# Mechanical

Housing Materials	Powder-coated aluminum.
Weight	554 g (20 oz) not including conduit body
Dimensions	See <u>Graphs and Figures</u> and <u>Graphs and Figures</u> .

## **200131 Cables**

Operating Temperature	-20 °C to +100 ° C (-4 °F to +212 °F).
Minimum Bend Radius	25.4 mm (1.0 in).
Construction	4-conductor (22 AWG) with foil shield and drain wire (100% coverage), yellow PVC outer jacket.
Connectors	Screw-on, 5-pin, keyed connector on the flexiTIM end and a PT06F8-4S (or equivalent) on the transducer end. The user should install the environmental boot over the transducer's connector and body.

# 200132 Pressure Transducer

Pressure Ranges PSISG	30, 50, 100, 300, and 500.
Sensitivity	10 mV/V ± 1%.
Zero Offset	±3mV (±6% of full scale range) at atmospheric pressure (14.7 PSI).
Absolute Accuracy	±4% over compensated temperature range.
Excitation	5 Vdc to 10 VDC (nominal).
Input Resistance	> 2 K W.
Output Resistance	< 6 K W.



Operating Temperature	-54 °C to +121 °C (-65 °F to +250 °F).
Compensated Temperature	+10 °C to +93 °C (+50 °F to +200 °F).
Connector	MS3113H8-4P, 4-position male or equivalent: A = + Excitation
	B = + Out
	C = - Out
	D = - Excitation
Proof Pressure	2X Full Pressure Scale.
Burst Pressure	3X Full Pressure Scale
Pressure Fitting	1/4 - 18 NPT male.
Case Material	316 Stainless Steel.
Insulation resistance	> 50 MΩ @ 50 VDC.



# **Ordering Information**

# 200130 Dual Pressure flexiTIM Module (all conduit bodies have 1-inch hubs).

#### 200130-AXX-BXX

A:	Conduit body style
0 0	No conduit body
01	Appleton® Style C body, malleable iron
0 2	Appleton Style E body, malleable iron
0 3	Appleton Style C body, aluminum
0 4	Appleton Style E body, aluminum
0 5	Weatherproof housing mount
B:	Approvals
0 0	CSA, Class 1 DIV 2, no barriers
0 1	CSA approvals installed with barriers
0 2	CENELEC approvals installed with barriers

## **Transducer Cables**

#### 200131-AXX

A:	Cable length
0 5	0.5 metres (1.6 feet)
10	1.0 metre (3.3 feet)
15	1.5 metres (4.9 feet)
2 0	2.0 metres (6.6 feet)
4 0	4.0 metres (13.1 feet)
6 0	6.0 metres (19.7 feet)
9 0	9.0 metres (29.5 feet)

# **Pressure Transducer**

## 200132-AXXX

A:	Pressure rating
030	0 to 30 PSI SG
050	0 to 50 PSI SG
100	0 to 100 PSI SG
200	0 to 200 PSI SG
300	0 to 300 PSI SG
500	0 to 500 PSI SG
1000	0 to 1000 PSI SG
1500	0 to 1500 PSI SG
2000	0 to 2000 PSI SG

#### **Accessories**

Trendmaster 2000 Installation
Guide. Includes flexiTIM Installation Guide.
flexiTIM installation Guide
Extra terminal plugs for SPA line connection. Each flexiTIM module includes 3 terminal plugs.
Compression fitting for 1-inch conduit body hubs. Seals for cables when installing flexiTIM modules without conduit.
Dow Corning® 4, Electrical Insulating Compound (5.3 Oz).



# **Graphs and Figures**



All dimensions in millimetres [inches] except as noted.

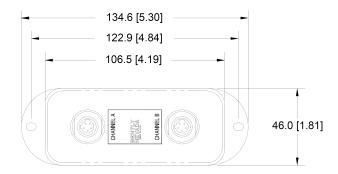
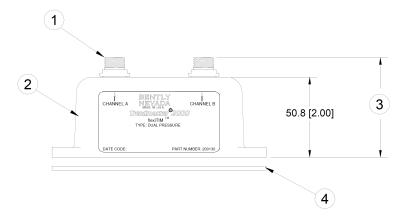


Figure 1: Dual Pressure flexiTIM Module Dimensions (Top View)



- 1. 1/2-20 5-pole female receptacle
- 2. Powder-coated aluminum housing
- 3. 63.3 mm [2.49 in]. Allow 127 mm [5 in] for total height with connector and cable bend.
- 4. Gasket

Figure 2: Dual Pressure flexiTIM Module Dimensions (Side View)



Figure 3: Dual Pressure flexiTIM Module Bottom View



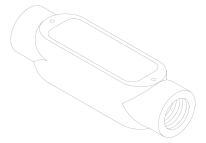


Figure 4: Conduit Body Style C Provided with flexiTIM Modules

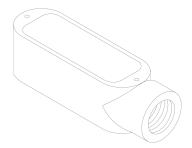
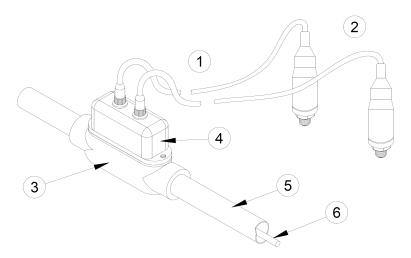


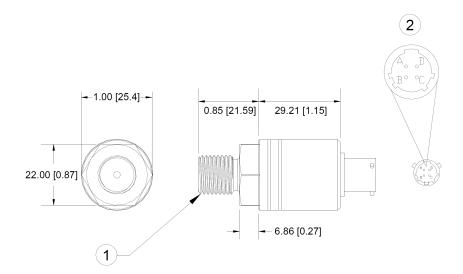
Figure 5: Conduit Body Style E Provided with flexiTIM Modules



- 1. Transducer cables with environmental boots
- 2. Transducers
- 3. Conduit body
- 4. flexiTIM module
- 5. Rigid conduit
- 6. SPA line

Figure 6: Installed Pressure flexiTIM Module





- 1. 1/4-18 NPT
- 2. MS3113H8-4P, 4-position male or equivalent. A = + Excitation, B = + Out, C = Out, D = Excitation.

Figure 7: Pressure Transducers



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