

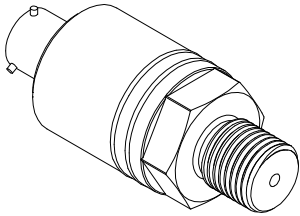
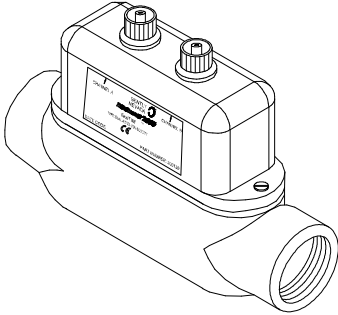
Dual Pressure flexiTIM* System

Bently Nevada* Asset Condition Monitoring

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

Full Scale Range

The pressure transducer sets the Trendmaster full-scale pressure range. The user enters the transducer's full-scale range into the Trendmaster software.

Accuracy

±8.5% of the transducer full-scale rating (transducer accuracy not included).

Transducer Excitation Voltage

4.98 Vdc ± 65 mVdc.

Maximum Transducer Supply Current

2.5 mA absolute maximum available over temperature.

Transducer OK Range

1 Vdc to 3 Vdc bias from transducer (nominal).

Resolution

0.025% of transducer's full scale rating.

Transducer

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 Figure 1 and Figure 2.

Compliance and Certifications

EMC

Standards:

EN 61000-6-2 Immunity for Industrial Environments
EN 55011/CISPR 11 ISM Equipment
EN 61000-6-4 Emissions for Industrial Environments

European Community Directives:

EMC Directive 2004/108/EC

Hazardous Area Approvals

CSA

**Installed with
Intrinsically
Safe Zener
Barriers per
Drawing 136925**

Class I, Div 1 Groups A, B, C & D

Class II, Div 1 Groups E, F & G

Class III, Div 1

Ex ia IIC; T4, T4a = 80 °C

AEx ia IIC T4 : T4a = 80 °C

Class I, Zone 0

**Installed
Without
Barriers per
Drawing 136926**

Ex nA IIC, Class I, Zone 2


T4, Ta = 100 °C

Class I, Div 2, Groups A, B, C & D

T4, @ Ta = 100 °C

ATEX

**Installed with
Intrinsically
Safe Zener
Barriers per
Drawing 136925**

 II 1 G

EEx ia IIC T4

Ta = 100 °C

IECEX

Ex ia IIC T4

Brazil

Ex ia IIC T4 Ga

For further certification and approvals information please visit the following website:

http://www.ge-energy.com/prod_serv/products/oc/en/bently_nevada.htm

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 PSI SG

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 Ω.

Output Resistance	< 6 K Ω .
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 M Ω @ 50 VDC.

03	Appleton Style C body, aluminum
04	Appleton Style E body, aluminum
05	Weatherproof housing mount
B:	Approvals
00	CSA, Class 1 DIV 2, no barriers
01	CSA approvals installed with barriers
02	CENELEC approvals installed with barriers

Transducer Cables

200131-AXX

A:	Cable length
05	0.5 metres (1.6 feet)
10	1.0 metre (3.3 feet)
15	1.5 metres (4.9 feet)
20	2.0 metres (6.6 feet)
40	4.0 metres (13.1 feet)
60	6.0 metres (19.7 feet)
90	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

Ordering Information

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

200130-AXX-BXX

A:	Conduit body style
00	No conduit body
01	Appleton® Style C body, malleable iron
02	Appleton Style E body, malleable iron

Accessories

126709-04	Trendmaster 2000 Installation Guide. Includes flexiTIM Installation Guide.
137230-01	flexiTIM installation Guide
01620085	Extra terminal plugs for SPA line connection. Each flexiTIM module includes 3 terminal plugs.
03814231	Compression fitting for 1-inch conduit body hubs. Seals for cables when installing flexiTIM modules without conduit.
04500006	Dow Corning® 4, Electrical Insulating Compound (5.3 Oz).

Dimensional diagrams

Note: All dimensions in millimetres [inches] except as noted.

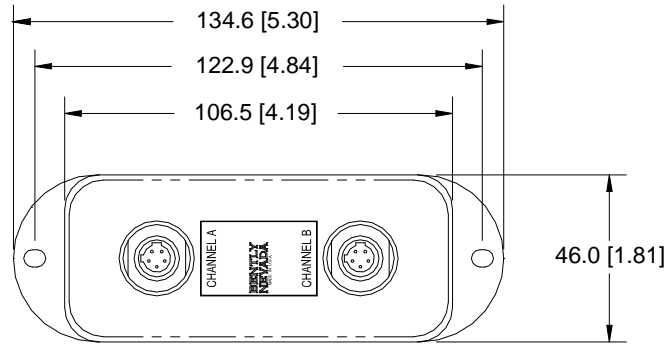
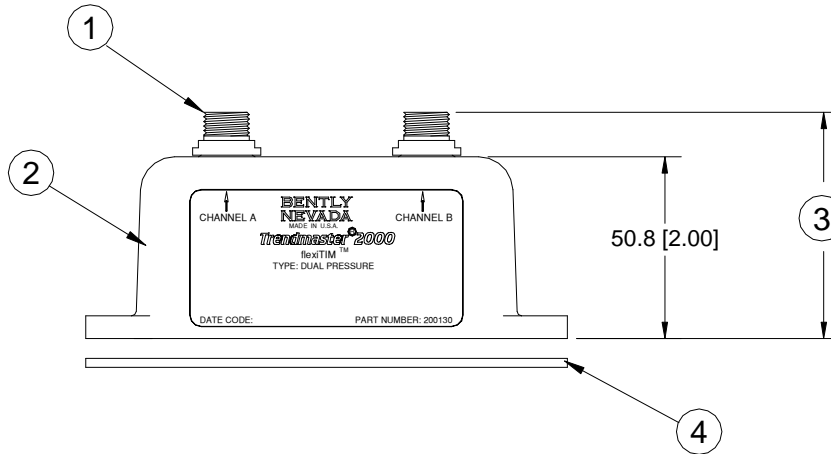


Figure 1: Dual Pressure flexiTIM Module Dimensions (Top View)



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)

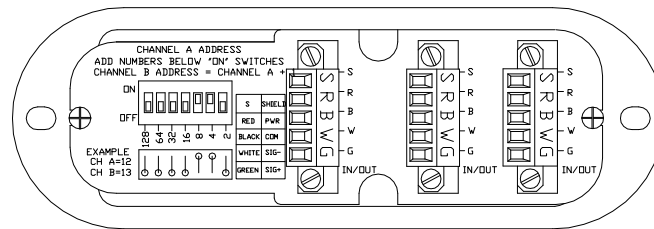


Figure 3: Dual Pressure flexiTIM Module Bottom View

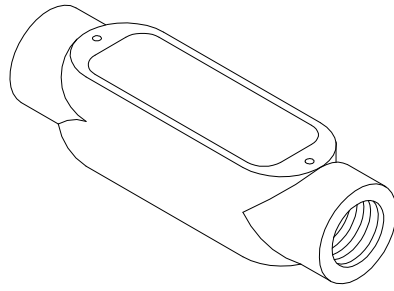


Figure 4: Conduit Body Style C Provided with flexiTIM Modules

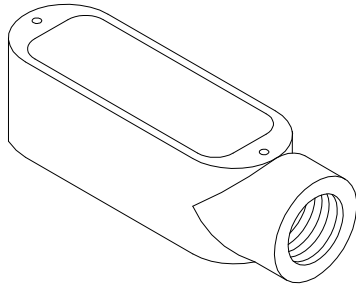
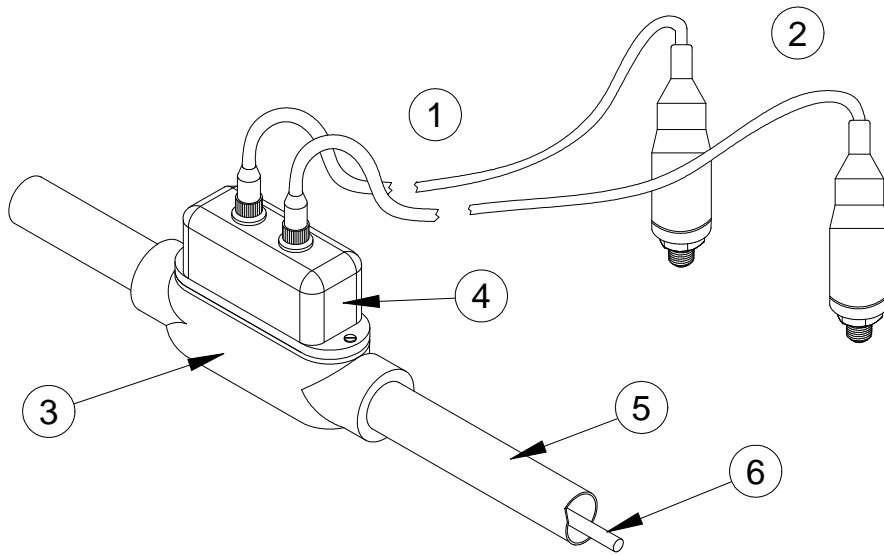
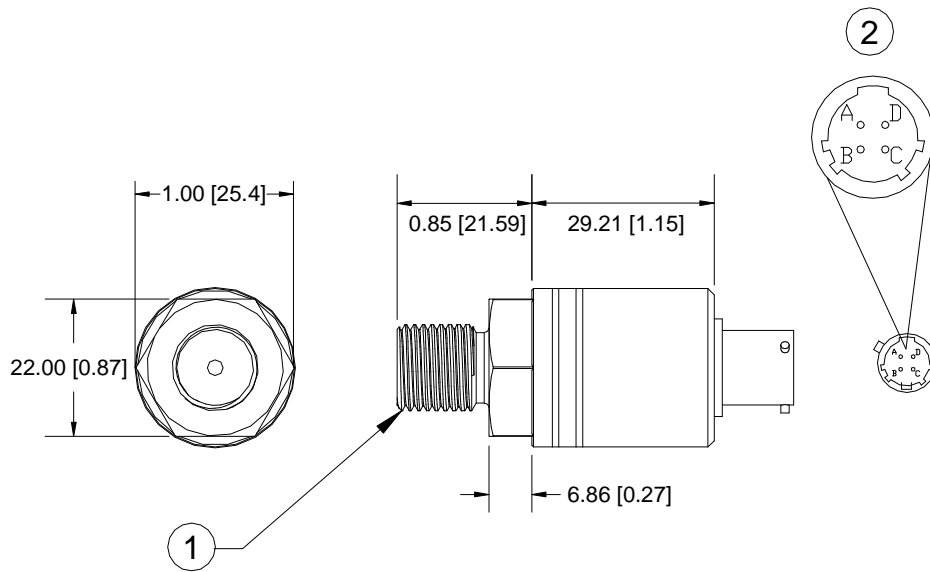


Figure 5: Conduit Body Style E Provided with flexiTIM Modules



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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