

Model 191 Series Vibration Transmitters

Features:

- UL Listed for Intrinsic Safe Use
- 4-20 mA Output for Vibration Velocity
- Two-Wire, Loop Powered
- Interface with PLC, DCS or 4-20 mA monitor
- Rugged NEMA 4 weather-proof case

Applications

Fans, Motors, Pumps, Compressors **Controlling Vibrating Conveyors General Purpose Machinery**

Specifications:

Model 191-1 0 - 1 in/sec (0 - 25.4 mm/sec) (peak) Model 191-2 0 - 2 in/sec (0 - 50.8 mm/sec) (peak) 0 - 5 in/sec (0 - 127 mm/sec) (peak) Model 191-5

Model 191-X Special Order Example:

191-25 = 0 - 25 in/sec (0 - 635 mm/sec)

Frequency 7 - 1300 Hz to -3 dB

420 - 78,000 RPM

Output 4 - 20mA proportional to overall vibration (an

output of 4mA indicates 0 in/sec or no vibration while an output of 20mA indicates the maximum full scale range is present)

14 to 50 Vdc Supply Voltage

Red lead/terminal = positive (+) Black lead/terminal = negative (-) With reverse voltage protection

Circuitry Solid-state, encapsulated in hardened epoxy

Adjustment Span and Zero

Max. Loop

 $R_{L} = 50 (V_{S} - 14) \text{ ohms}$ Resistance Isolation 500 V, circuit to case -20°C to 85°C (-4°F to 185°F) Temperature Weight 13.6 oz. (387 grams)

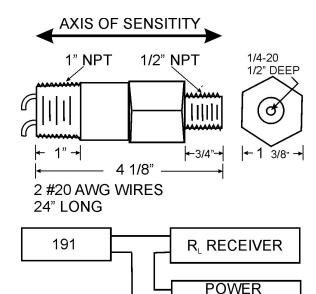
Case Material Plated Steel, NEMA 4 weatherproof

1/2 inch NPT pipe thread, or, Mounting 1/4-20 stud x ½ inch deep

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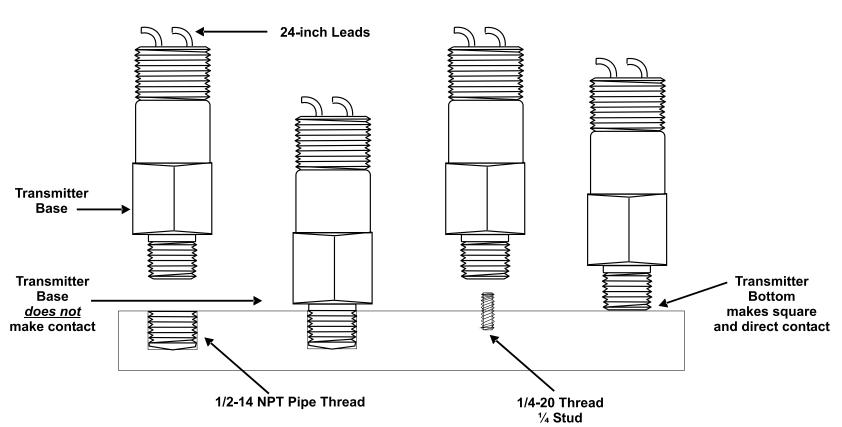


INTRINSICALLY SAFE VIBRATION TRANSMITTER FOR USE IN HAZARDOUS LOCATION CLASS 1, GROUPS A, B, C AND D; CLASS II, GROUPS E, F, AND G; CLASS III WHEN INSTALLED IN ACCORDANCE WITH BALMAC CONTROL DRAWING B-11812.

 $V_{\rm s}$ = 14 - 50 VDC



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Model 191 Vibration Transmitter Mounting Guidelines

It is important that the transmitter body is solidly mounted to the machine surface.

When mounting the Model 191 using the 1/2-inch NPT (National Pipe Thread), the transmitter is secured by the thread engagement and the base of the transmitter <u>does not</u> make contact with the machine surface.

When mounting the Model 191 using the drilled and tapped 1/4-20 hole in the bottom of the transmitter, the flat surface of the bottom of the transmitter must make square and direct contact with the surface of the machine.

BALMAC INC.		
DATE: 05/09/2014	MODEL 191	
DRAWN: S.CRAW	MOUNTING	
(balmacinc.com)	SIZE A	DWG NUMBER A-
SCALE NONE	REV -	SHEET 1 OF 1