

# Model 140 Series Vibration Transmitters

## Features:

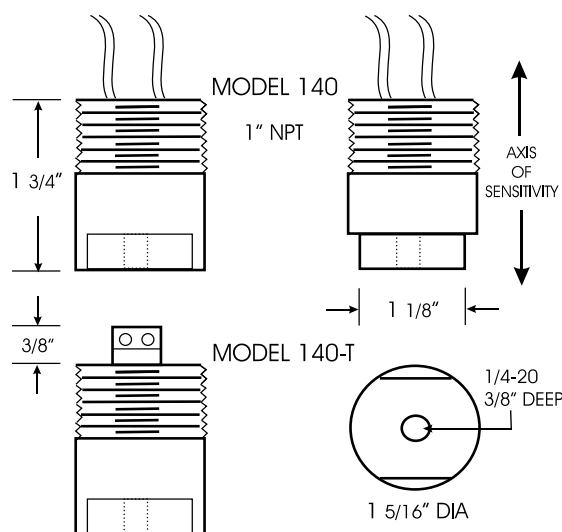
- UL Listed for Intrinsic Safe Use
- 4-20 mA Output for Vibration Velocity
- Two-Wire, Loop Powered
- Interface with PLC, DCS or 4-20 mA monitor
- Rugged NEMA 4 weather-proof case
- 140-T has Terminal Strip

## Applications

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

## Specifications:

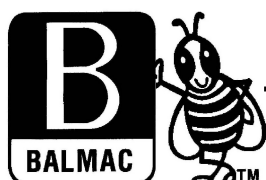
Model 140-1	0 - 1 in/sec (0 - 25.4 mm/sec) (peak)
Model 140-2	0 - 2 in/sec (0 - 50.8 mm/sec) (peak)
Model 140-5	0 - 5 in/sec (0 - 127 mm/sec) (peak)
Model 140-X	Special Order Example: 140-25 = 0 - 25 in/sec (0 - 635 mm/sec)
Frequency	7 - 1300 Hz to -3 dB 420 - 78,000 RPM
Output	4 - 20mA proportional 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)
Supply Voltage	14 to 50 Vdc 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 Resistance	$R_L = 50 (V_s - 14)$ ohms
Isolation	500 V, circuit to case
Temperature	-20°C to 85°C (-4°F to 185°F)
Weight	13.6 oz. (387 grams)
Case Material	Plated Steel, NEMA 4 weatherproof
Mounting	1/4-20 stud x 3/8 inch deep



MODEL 140 (-1, -2, -5, -X) HAS #20 AWG LEADS, 24" LONG  
 MODEL 140-T (-1, -2, -5, -X) HAS TERMINAL STRIP



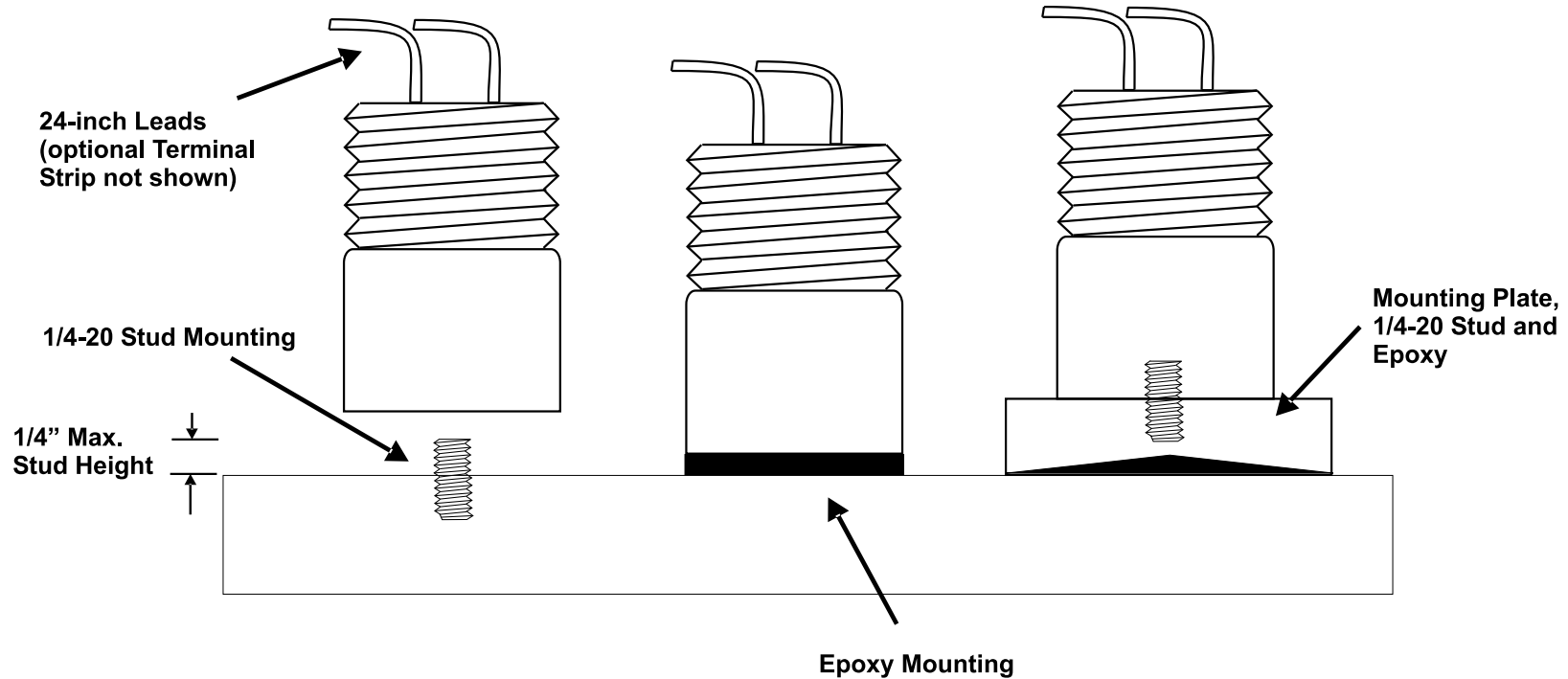
INTRINSICALLY SAFE VIBRATION TRANSMITTER  
 FOR USE IN HAZARDOUS LOCATION CLASS 1,  
 GROUPS A, B, C AND D; CLASS II, GROUPS E, F,  
 AND G; CLASS III WHEN INSTALLED IN  
 ACCORDANCE WITH BALMAC CONTROL  
 DRAWING B-11812-1.



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### Model 140 Vibration Transmitter Mounting Guidelines

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

When mounting the Model 140 using the drilled and tapped 1/4-20 hole in the bottom of the transmitter and Mounting Stud, or Mounting Plate and Mounting Stud, the flat surface of the bottom of the transmitter must make square and direct contact with the surface of the machine.

When mounting the Model 140 using epoxy, use a quality industrial grade adhesive such as Loctite or Devcon.

<b>BALMAC INC.</b>			
DATE: 05/09/2014		<b>MODEL 140 MOUNTING</b>	
DRAWN: S.CRAW			
<a href="http://balmacinc.com">balmacinc.com</a>		SIZE A	DWG NUMBER A-
SCALE NONE		REV -	SHEET 1 OF 1