

## 7MF Series

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### Pressure Transducers



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#### Description

7MF... series pressure transducers accurately measure the pressure of liquid, gas, or vapor.

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#### Features

- Measuring accuracy of 1% of full scale
- Suitable for aggressive and non-aggressive media
- Stainless steel NEMA 4X housing
- 1/2" NPT electrical connection on DIN 43650 plug
- Compact design
- UL and CE approved

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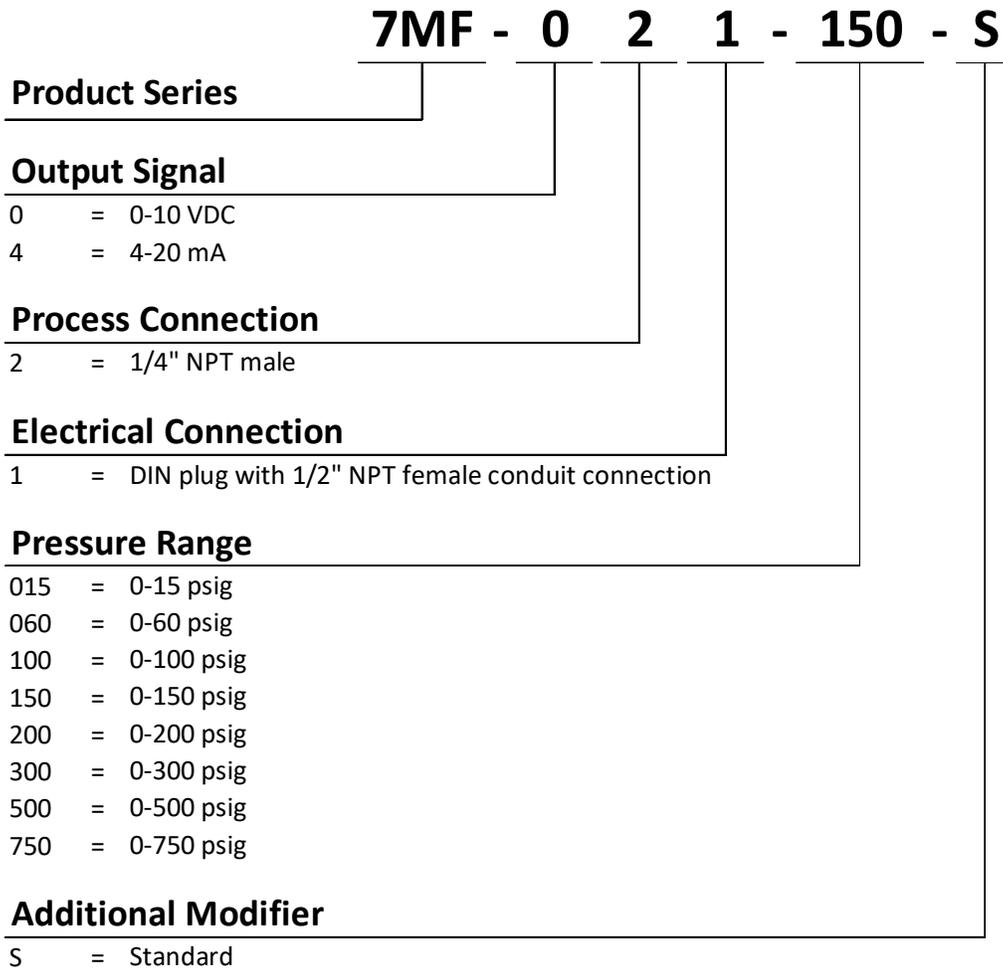
#### Application

7MF... series transducers measure the pressure of liquid, gas, or vapor. A selection of transducers is available for measuring pressures up to 750 psig. 7MF... series pressure transducers produce either a 4-20 mA or 0-10 VDC output signal that is linearly proportional to the input pressure.

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## Product Part Numbers

The part number structure includes output signal type and pressure range. The example part number is for a 0-10 VDC pressure transducer with a pressure range of 0-150 psig.



**Table 1: Available 7MF... Pressure Transducers**

Pressure Range	Output Signal	
	4-20 mA	0-10 VDC
<b>0-15 psig</b>	7MF-421-015-S	7MF-021-015-S
<b>0-60 psig</b>	-	7MF-021-060-S
<b>0-100 psig</b>	-	7MF-021-100-S
<b>0-150 psig</b>	7MF-421-150-S	7MF-021-150-S
<b>0-200 psig</b>	7MF-421-200-S	-
<b>0-300 psig</b>	7MF-421-300-S	-
<b>0-500 psig</b>	7MF-421-500-S	7MF-021-500-S
<b>0-750 psig</b>	7MF-421-750-S	7MF-021-750-S

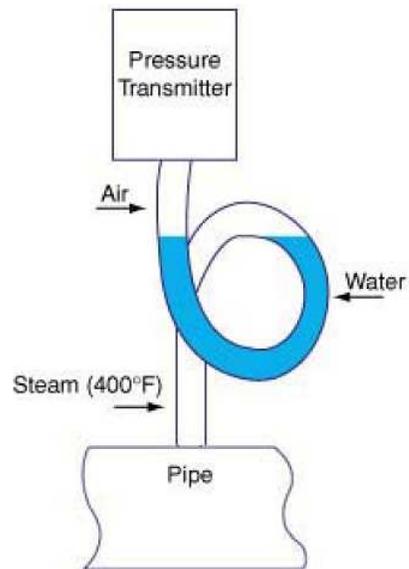
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## Specifications

<b>Physical characteristics</b>	<b>Materials</b>	
	-Housing	304 stainless steel
	-Measuring cell	Stainless steel (17-4 PH)
	-Electronics module	PA (nylon)
	-Gasket	Nitrile
	-Process connection	304 stainless steel
	<b>Media</b>	Aggressive and non-aggressive liquid, gas, or vapor that are compatible with 304 & 17-4 PH stainless steel
	<b>Electrical connection</b>	1/2" NPT
	<b>Process connection</b>	1/4" NPT
	<b>NEMA rating</b>	NEMA 4X and IP65
	<b>Accuracy</b>	1% of full scale
	<b>Process temperature</b>	-40 to 257 °F [-40 to 125 °C]
	<b>Ambient temperature</b>	-40 to 257 °F [-40 to 125 °C]
	<b>Weight</b>	0.24 lb [0.11 kg]
	<b>Overpressure rating</b>	
	-Proof	2x range
	-Burst ( $\leq$ 100 psi range)	50x range
-Burst ( $>$ 100 psi range)	5x range	
<b>Supply voltage</b>		
-4-20 mA transducers	9-32 VDC	
-0-10 VDC transducers	14-32 VDC	

## Installation

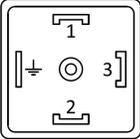
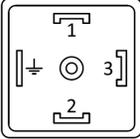
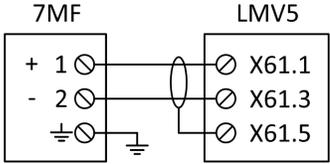
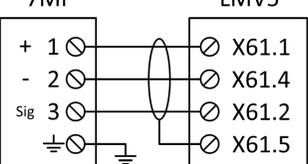
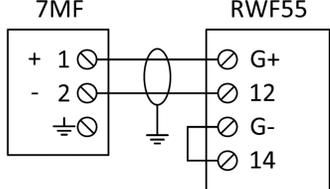
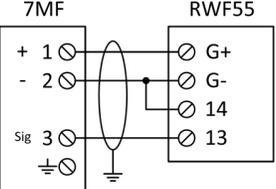
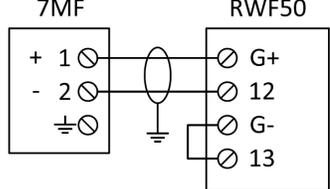
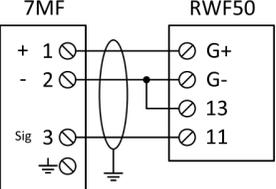
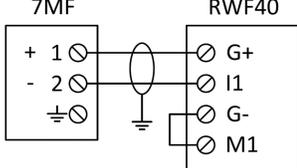
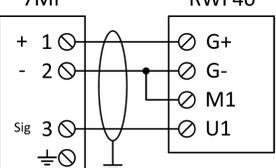
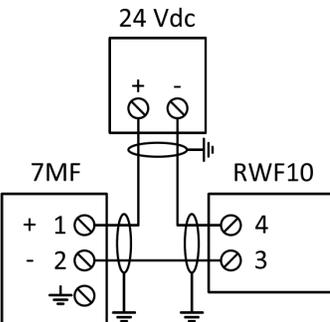
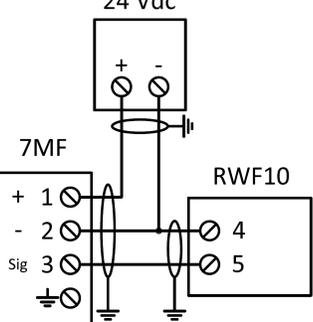
- The output signal is linearly proportional to the input pressure.
- A steam syphon loop (pig tail) must be installed between the steam source and the pressure transducer as shown in Figure 1. As condensate forms in the syphon loop, it creates a water barrier to protect the transducer from heat and chemicals. On new installations, it is recommended to add water to the syphon loop to protect the transducer when condensate has not yet formed.



**Figure 1: Example of a Syphon Loop**

# Wiring

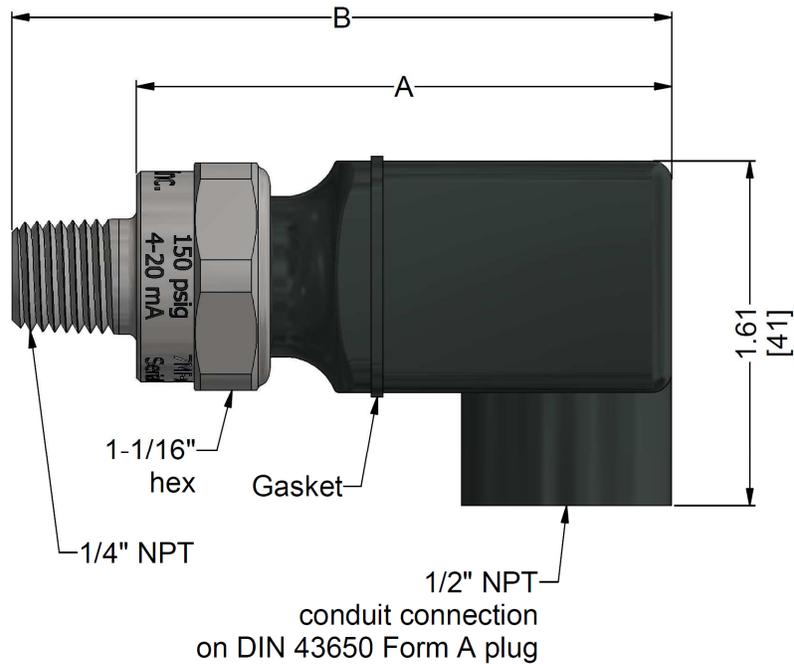
**Table 2: 7MF... Pressure Transducer Wiring**

Controller Type	4-20 mA 	0-10 VDC 
LMV5...		
RWF55...		
RWF50...		
RWF40...		
RWF10...		

**Note:** The wiring of the 7MF...-S pressure transducers is the same as the two previous models, the 7MF-x21-xxx series pressure transducers and the 7MF1565... series pressure transducers.

## Dimensions

Dimensions in inches; millimeters in brackets



**Table 3: 7MF... Pressure Transducer Dimensions**

Pressure Range	A	B
15-60 psig	2.74 [69]	3.32 [84]
100-750 psig	2.49 [63]	3.07 [78]

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