# SCC Inc.

### **Technical Instructions**

Document No. SEN-2000

April 15, 2015

## **7MF Series**

### **Sitrans Pressure Transducers**



| _   |     |    | •   |
|-----|-----|----|-----|
| Des | Cri | nt | ınn |
|     |     | M. | w   |

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

#### **Features**

- Measuring accuracy of 0.25% of full scale
- Temperature-compensated measuring cell
- Suitable for aggressive and non-aggressive media
- Stainless steel NEMA 4 housing
- 1/2" NPT electrical connection
- Compact design

## **Application**

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

#### **Product Part Numbers**

Table 1: Available 7MF... Pressure Transducers

| Pressure Range | Output Signal      |                    |  |  |
|----------------|--------------------|--------------------|--|--|
|                | 4-20 mA            | 0-10 Vdc           |  |  |
| 0-15 PSI       | 7MF1565-4BB00-5EA1 | 7MF1565-4BB10-5EA1 |  |  |
| 0-30 PSI       | 7MF1565-4BE00-5EA1 | 7MF1565-4BE10-5EA1 |  |  |
| 0-60 PSI       | 7MF1565-4BF00-5EA1 | 7MF1565-4BF10-5EA1 |  |  |
| 0-100 PSI      | 7MF1565-4BG00-5EA1 | N/A                |  |  |
| 0-150 PSI      | 7MF1565-4CA00-5EA1 | 7MF1565-4CA10-5EA1 |  |  |
| 0-200 PSI      | 7MF1565-4CB00-5EA1 | 7MF1565-4CB10-5EA1 |  |  |
| 0-300 PSI      | 7MF1565-4CD00-5EA1 | 7MF1565-4CD10-5EA1 |  |  |
| 0-500 PSI      | 7MF1565-4CE00-5EA1 | 7MF1565-4CE10-5EA1 |  |  |
| 0-750 PSI      | 7MF1565-4CF00-5EA1 | 7MF1565-4CF10-5EA1 |  |  |

# **Specifications**

#### **Physical characteristics**

Materials

-Housing Stainless Steel

-Measuring cell Ceramic-Electronics module Ceramic-Gasket Viton

-Process connection Stainless steel

Media Aggressive and non-aggressive

liquid, gas, or vapor

Electrical connection 1/2" NPT
Process connection 1/4" NPT
NEMA rating NEMA 4

Accuracy 0.25% of full scale

Process temperature 5 to 257 °F [-15 to 125 °C]Ambient temperature -13 to 185 °F [-25 to 85 °C]

Weight 0.55 lb [0.25 kg]

Page 2 SCC Inc.

### Installation

- The output signal is linearly proportional to the input pressure.
- A steam syphon loop (pig tail) should 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.

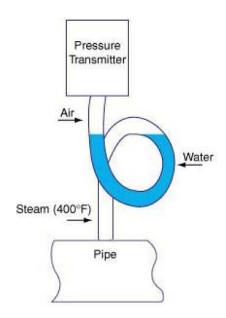


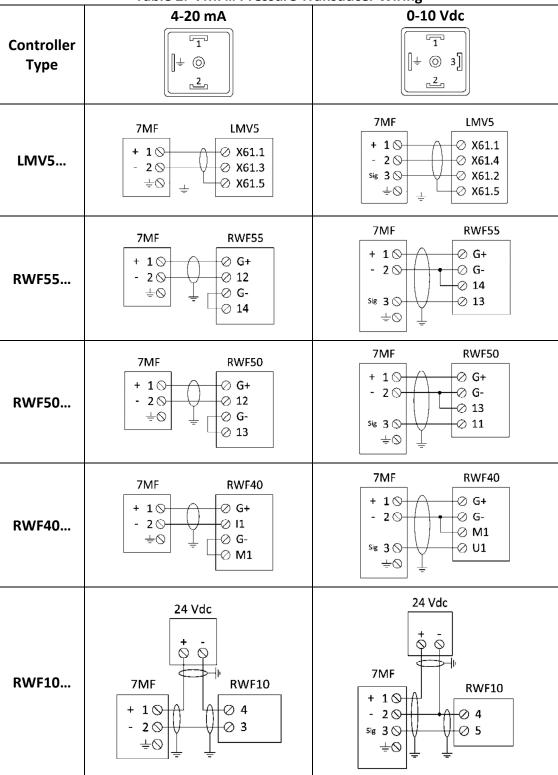
Figure 1: Example of a Syphon Loop

 A cord grip comes installed on the back of the transducer for the electrical connection. To use 1/2" conduit instead, remove the cord grip, washer, and packing.

SCC Inc. Page 3

### Wiring

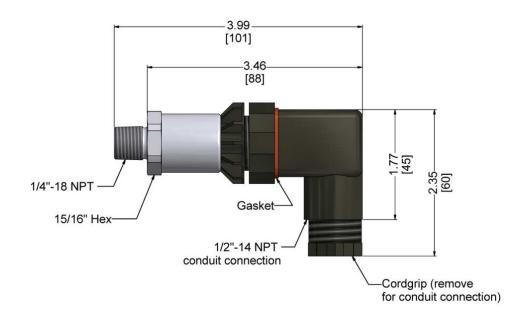
Table 2: 7MF... Pressure Transducer Wiring



Page **4** SCC Inc.

#### **Dimensions**

Dimensions in inches; millimeters in brackets



Information in this publication is based on current specifications. The company reserves the right to make changes in specifications and models as design improvements are introduced. Product or company names mentioned herein may be the trademarks of their respective owners. © 2009 SCC Inc.