



## Dual Seal Instructional Sheet

**Electronic Pressure and Temperature  
Transmitter-Switch  
One Series Models with Option M041**



UNITED ELECTRIC  
CONTROLS

### Installation Instructions

Please read all instructional literature carefully and thoroughly before starting. Refer to the final page of the installation manual for the listing of Recommended Practices, Liabilities and Warranties.

#### INSTALLATION REQUIREMENTS (ANSI 12.27.01)

The One Series Dual Seal (option M041) contains a fixed header with attached wiring. The sensor and unit head must never be rotated more than 360° in either direction (clockwise/counterclockwise) from the original factory position or permanent wiring damage could occur. To prevent damage due to rotation never loosen the 1 3/4" union nuts (2) located on the dual seal prior to installing the unit. The installation steps below must be followed in the sequence given:

- 1. Connect unit to pressure port:** The unit must be connected to the pressure port using the wrench hex(s) at the sensor only. The gage pressure sensor has a 1 1/6" wrench hex. The differential pressure sensor has (2) 3/4" wrench hexes.
- 2. Mount the Dual Seal housing:** Loosen (but do not remove) the lower 1 3/4" union nut located on the dual seal to allow orientation of the union housing up to 180° in either direction (clockwise/counter clockwise). The head of the unit must then be securely mounted to a back plane support as instructed in either IM\_ONEX-04 or IM\_ONE\_SAFETY-03. The sensor & dual seal are not designed to support the weight of the unit head when installed.
- 3. Orient the Dual Seal vent:** Loosen (but do not remove) the upper 1 3/4" union nut located on the dual seal. With the sensor & unit head secured, and with both the upper & lower union nuts loosened, the union housing (containing the vent) may be oriented as desired. The two union nuts must be tightened to 15-20 ft-lbs to complete the installation.
- 4. Connect the vent (optional):** The vent provides visual annunciation of a primary seal failure. The vent must be kept free of any debris. The vent may be left open to the atmosphere. If desired, the vent may also be connected to a collection system using the 1/8" NPT thread provided.



NOTE: ALL WARNINGS REFERENCED IN IM\_ONEX-04 AND IM\_ONE\_SAFETY-03 APPLY TO DUAL SEAL OPTION M041.



THIS INSTRUCTIONAL SHEET IS TO INFORM YOU THAT WHEN YOU CHOOSE DUAL SEAL OPTION M041, THE INSTRUMENT WILL NOT COVER GAS GROUP A "ACETYLENE" FOR cULus APPROVAL.

#### THIS EQUIPMENT IS SUITABLE FOR USE IN NON-HAZARDOUS LOCATIONS AND THE FOLLOWING HAZARDOUS LOCATIONS:



Class I, Div. 1, GRPS B, C, D  
Class II, Div. 1, GRPS E, F, G  
Class III  
Class I, Zone 1, AEx d IIC T3/T5\*  
Class I, Zone 1, Ex d IIC T3/T5\*  
Enclosure Type 4X, IP66  
2X2D, 2X3A, 2X4D: -40°C ≤ TAMB ≤ +85°C (-40°F TO +185°F)  
2XLP, 8X2D: -40°C ≤ TAMB ≤ +80°C (-40°F TO +176°F)  
4X3A: -40°C ≤ TAMB ≤ +70°C (-40°F TO +158°F)

#### THIS EQUIPMENT IS ATEX CERTIFIED SUITABLE FOR APPROPRIATE USE IN GAS ZONE 1 & DUST ZONE 21 APPLICATIONS.



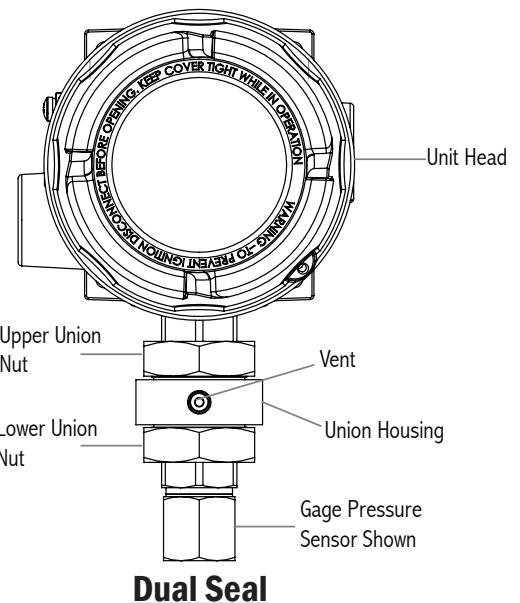
DEMKO 09 ATEX 0813748X  
II 2 G Ex d IIC T3/T5\*  
II 2 D Ex tb IIIC T+90°C Db, IP66  
2X2D, 2X3A, 2X4D: -40°C ≤ TAMB ≤ +85°C (-40°F TO +185°F)  
2XLP, 8X2D: -40°C ≤ TAMB ≤ +80°C (-40°F TO +176°F)  
4X3A: -40°C ≤ TAMB ≤ +70°C (-40°F TO +158°F)

#### THIS EQUIPMENT IS IECEx CERTIFIED, SUITABLE FOR APPROPRIATE USE IN GAS ZONE 1 APPLICATIONS.



IECEx UL 08.0017X  
Ex d IIC T3/T5\*  
Ex d tb IIIC T+90°C Db, IP66  
2X2D, 2X3A, 2X4D: -40°C ≤ TAMB ≤ +85°C (-40°F TO +185°F)  
2XLP, 8X2D: -40°C ≤ TAMB ≤ +80°C (-40°F TO +176°F)  
4X3A: -40°C ≤ TAMB ≤ +70°C (-40°F TO +158°F)

\* Straight pressure sensor models 10-16 have a temperature class of T3, all others T5.



**Dual Seal**