<table>
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<th>CERTIFICATIONS for KPSI® Transducers</th>
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The Transducers listed below are designed for installation in a Class I, Division 1, Groups A, B, C and D, Class II, Division 1, Groups E, F, and G, Class III, Division 1 hazardous location when connected to Associated Apparatus as described in note 1.

### Series 27FABCDG (EEEE), 28FABCDG (EEEEE), 30FABCDG (EEEE)

- **F**: material: S.T
- **A**: pressure type: 1.3, 4, 7, 8, 9
- **B**: excitation/output: 3, 4, E, F, G, H, J, K, L, M
- **C**: pressure connection: 1, 2, 7
- **D**: electrical connection: 0, 1, 4
- **G**: voltage suppression: A, B, C
- **EEEEE**: pressure range: 0-2000 PSI

*Engraved in Pressure Field, not in p/n.*

### Series 700FABCDG (EEEE), 705FABCDG (EEEE), 710FABCDG (EEEE), 720FABCDG (EEEE), 730FABCDG (EEEE), 750FABCDG (EEEE), 770FABCDG (EEEE)

- **F**: material: S.T
- **A**: pressure type: 1.3, 4, 7, 8, 9
- **B**: excitation/output: 3, 4, E, F, G, H, J, K, L, M
- **C**: pressure connection: A, B, C, D, E, 2, 7
- **D**: electrical connection: 0, 4, A, B
- **G**: voltage suppression: A, B, C
- **EEEEE**: pressure range: 0-304 PSI

*Engraved in Pressure Field, not in p/n.*

### Series 300FABCDGEEE, 320FABCDGEEE, 330FABCDGEEE

- **F**: material: S.T
- **A**: pressure type: 1.3, 4, 7, 8, 9
- **B**: excitation/output: 3, 4, E, F, G, H, J, K, L, M
- **C**: pressure connection: A, B, C, D, E, 2, 7
- **D**: electrical connection: 0, 4, A, B
- **G**: voltage suppression: A, B, C
- **EEE**: pressure range: 0-304 PSI

*Engraved in Pressure Field, not in p/n.*

### Series LTABCDGFGHIJK

- **A**: pressure connection: A, B, C, R, 1, 5, 7
- **B**: excitation/output: 1, 2, 3, 4, 5, 6, 7, 8, A, B, C, D, E, F, G
- **C**: cable type: A, B, C
- **D**: accuracy: A, B, C, D, E, F, T, S, R
- **E**: intrinsic safety approvals: A, B, C
- **F**: label: A, B, J, K
- **G**: material: S.T
- **H**: electrical connection: A, B, D, F, 1, 2
- **J**: pressure range: 0-2000 psi
- **K**: units: P, F, M, K

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Class I, II, III, Div. 1 Groups A-G Hazardous Location

Figures 1-4

Hazardous Location

Nonhazardous Location

Approved 2-wire Transducer

Supply voltage

Intrinsic Safety Barrier

Field Circuit Isolated

Figure 1. Return Lead Floating

Hazardous Location

Nonhazardous Location

Approved 2-wire Transducer

Supply voltage

Intrinsic Safety Isolator

Figure 3. Field Circuit Isolated

Wiring diagram for 2-wire, 4-20mA output.

Entity Parameters

\[ V_{\text{max}} = 28V \]

\[ I_{\text{max}} = 110mA \]

\[ C_i = 0.064\mu F \]

\[ L_i = 0 \]

\[ P_i = 1W \]

Figure 2. Return Lead Grounded

Hazardous Location

Nonhazardous Location

Approved 3-wire Transducer

Supply voltage

Intrinsic Safety Barrier

Figure 4. Wiring diagram for 3-wire, VDC output.

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Notes:
1. Install in terminal box.
2. Installation should be in accordance with Article 504 in the National Electric Code, ANSI/NFPA 70 and ISA RP12.06.01.
3. The surge protector part #50-02-2790 is a passive device and as a result the device has no capacitance or inductance and its Vmax and Tmax would be identical to the connected transducer.
4. However, when using the entity formula on page 2, note 1, the Ci value of the pressure transducer shall be used.
5. No change to 50-02-2790 this rev. Label remains at rev. AF.

Class I, DIV I, Groups A, B, C, D; Class II, Groups F, G; Class III Hazardous Location

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TYPICAL MECHANICAL INSTALLATION

SUPERDRY VENT FILTER

METAL VENT FILTER

OR

VENT TUBE

ANT-SNAG CONE
(OPTIONAL)

MOUNTING CLAMP
(OPTIONAL)

TRANSUCER

WARNING!

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The Transducers listed below are designed for installation in a Class I, Division 1, Groups A, B, C, and D, Class II, Division 1, Groups E, F, and G, and Class III, Division 1 hazardous location when connected to Associated Apparatus as described in note 1.

**Series 27FABCDG (EEE), 28FABCDG (EEE), 30FABCDG (EEE)**

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<th>CHK</th>
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<td>SMK</td>
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<td>ADDED MORE PROCESS OPTIONS, REVISED CONNECTION OF TOTAL DISCONNECT FROM BERTHS 33 &amp; 34, BHT 1 ONLY</td>
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<td>TEXT CORRECTION TO BERTHS</td>
<td>GHP</td>
<td>GWH</td>
<td>SMK</td>
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</tbody>
</table>

**Notes:** (applies to all figures on sheet 2)

1. Associated Apparatus shall provide intrinsically safe connections which meet the following parameters.

   - \( V_{\text{max}} \): For all barrier channels used.
   - \( I_{\text{max}} \): Combined current for all barrier channels used.
   - \( C_i \): For all barrier channels used.
   - \( I_1 \): For all barrier channels used.
   - \( P_1 \): Combined power for all barrier channels used.
   - \( V_{\text{in}} \leq V_{\text{max}} \)
   - \( C_{\text{in}} \leq C_i \)
   - \( I_{\text{in}} \leq I_1 \)
   - \( P_{\text{in}} \leq P_1 \)

\* Includes all cables connected to the barrier including the transducer cable.

Selected barriers must be third party approved as providing intrinsically safe circuits for the application, and have Voc or \( V_{\text{in}} \) not exceeding \( V_{\text{max}} \) and \( I_{\text{in}} \) or \( I_{\text{in}} \) not exceeding \( I_{\text{max}} \), and the Po of the barrier must be less than or equal to the \( P_{\text{max}} \) of the intrinsically safe equipment, as shown in the Table of Entity parameters.

2. Control Room apparatus shall not generate in excess of 250V ( \( V_{\text{max}} \)).

3. Installation should be in accordance with Article 504 in the National Electrical Code, ANSI/NFPA 70 and ISA RP-12.06.01

4. Flat unused wires in cable. Insure that these wires are electrically isolated from other conductors.

---

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Class I, II, III, Div. 1 Groups A-G Hazardous Location

Figures 1-4

Hazardous Location

Approved 2-wire Transducer

Nonhazardous Location

Intrinsic Safety Barrier

I.S. ground conductor

Figure 1. Return Lead Floating

Wiring diagram for 2-wire, 4-20mA output.

Class I, II, III, Div. 1 Groups C&D (only) Hazardous Location

Wiring Diagrams Same as Figures 1, 2, 3 & 4

Entity Parameters

$V_{	ext{max}} = 20\text{V}$

$I_{\text{max}} = 110\text{mA}$

$C_r = 0.064\mu\text{F}$

$L_r = 0$

$P_r = 1\text{W}$

WARNING!

Agency approved drawing. Revisions must be submitted for agency approval.

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Notes:
1. Install in terminal box.
2. Installation should be in accordance with Article 504 in the National Electric Code, ANSI/NIAPA 70 and ISA RP12.06.01
3. The surge protector part #50-02-2790 is a passive device and as a result the device has no capacitance or inductance and its $V_{max}$ and $I_{max}$ would be identical to the connected transducer.
4. However, when using the entity formula on page 2, note 1, the Ci value of the pressure transducer shall be used.
5. The surge protector part #50-02-2790 is used with all Series Transducers on shunt 1. Not approved for use in a class E environment.
6. No change to 50-02-2790 this rev. Label remains at rev AF.

Class I, DIV I, Groups A, B, C, D; Class II, Groups F, G; Class III Hazardous Location

<table>
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Certificate of Compliance

June 18, 2014

We,

Measurement Specialties Inc.

certify that the products listed below:

Series 27, 28, 30
Series 300DS, 320, 330, 335, 342
Series 700, 705, 710, 720, 730, 735, 745, 750

comply with the specifications published in the following standard:

Immunity & Emissions Standards

Including requirements of:

EN 61000-4-2 Electrostatic Discharge Immunity
EN 61000-4-3 Radiated Electromagnetic Field Immunity
EN 61000-4-4 Electrical Fast Transient/Burst Immunity
EN 61000-4-5 Surge Immunity
EN 61000-4-6 Conducted Radio-Frequency Immunity
EN 61000-4-8 Magnetic Field Immunity
CISPR11 Electromagnetic Disturbance Characteristics

Per the provisions of directive 89/336/EEC as amended by 92/31/EEC and 93/68/EEC.

97/23/EC Pressure Equipment Directive

RoHS2 – These products comply with Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Certified by:

Greg Hall
Senior Design Engineer
Email: greg.hall@meas-spec.com