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**Product specifications for model 1804**


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**Product Specifications (switch, relay)**

|                                     |   |
|-------------------------------------|---|
| <b>sensor type</b>                  | diaphragm   |
| <b>functions</b>                    | <b>gauge/switch, switch</b>   |
| <b>min. range</b>                   | 0-10 in. H <sub>2</sub> O   |
| <b>max. range</b>                   | 0-8 psid (221 in. H <sub>2</sub> O)   |
| <b>max. line pressure</b>           | 150 psig  |
| <b>min. burst pressure</b>          | 450 psig  |
| <b>standard maximum temperature</b> | gauge/switch: 176°F standard, 150°F (plastic lens)<br>switch: 176°F standard, 140°F (relay)   |
| <b>high temp. construction</b>      | N/A   |
| <b>minimum temperature*</b>         | <i>*Consult factory for low-temperature applications.</i>   |
| <b>calibration accuracy**</b>       | ±2% of full scale ascending after rap at room temperature<br><i>**Calibration accuracy is affected by temperature, and also by liquid-filling and follower-pointer options.</i> |
| <b>repeatability</b>                | ±1% of full scale   |
| <b>switches/relays</b>              | 1 or 2 hermetically sealed reed switches or 1 or 2 relays in explosion proof enclosure  |
| <b>switch adjustability</b>         | upper 80% of full scale ascending (70% for B & C form switches in SST)  |
| <b>switch dead band</b>             | 5-20% full scale  |
| <b>certification</b>                | CSA (File 080299), NEMA 3, 4X, IP66, 7BCD, 9EFG, 12<br>Class I (Groups B, C & D)<br>Class II (Groups E, F, G)<br>Class III  |

**Standard configuration options (switch, relay)**

| <b>configuration</b>             | <b>unless otherwise specified</b>   | <b>standard options available</b>  |
|----------------------------------|---|--|
| <b>porting size</b>              | 1/4" NPT  | 1/2" NPT   |
| <b>porting orientation</b>       | in-line   | N/A  |
| <b>direction of pressure</b>     | bottom to top (dial reads left to right)  | N/A  |
| <b>calibration medium</b>        | air   | N/A  |
| <b>switches &amp; relay</b>      | (must be specified)   | -A SPST N/O (120VAC,0.7A,70VA;200VDC,1.0A,50W)<br>-B SPST N/C (120VAC,0.25A,5VA;175VDC,0.25A,5W)<br>-C SPDT (120VAC,0.25A,5VA;175VDC,0.25A,5W)<br>-R1 DPDT relay (contacts:120VAC,28VDC,10A<br>coil:6 to 240VAC,6 to 110VDC) |
| <b>switch/relay setting</b>      | set at top of range ascending   | other set points within adjustability<br>ascending or descending   |
| <b>explosion proof enclosure</b> | standard box:<br>Class I, Div 1&2, groups B, C & D<br>Class II, groups E, F, G<br>Class III | N/A  |
| <b>prim. wetted parts</b>        | 316SS   | N/A  |
| <b>secondary wetted parts</b>    | range spring: 302SS<br>magnet: ceramic  | Teflon-coated spring and magnet  |
| <b>static seals</b>              | buna-N, except Viton for high temp.   | Viton, Teflon, EPDM, fluorosilicone, silicone  |
| <b>diaphragm</b>                 | buna-N, except Viton for high temp.   | Viton, EPDM, fluorosilicone, silicone  |
| <b>lens</b>                      | glass   | plastic  |
| <b>dial sizes</b>                | (must be specified)   | 3.5", 4.5", 6"   |
| <b>dial case styles</b>          | (must be specified)   | "B" Basic Case (c-clamp not available)<br>"F" Flanged Case (w/holes for panel mounting)  |
| <b>starting mark on dial</b>     | approximately 10% of full scale   | N/A  |

## Product specifications for model 1804

### Product Specifications (transmitter)

|                                      |   |
|--------------------------------------|---|
| <b>sensor type</b>                   | diaphragm   |
| <b>functions</b>                     | <b>gauge/transmitter, transmitter (Loop powered)</b>  |
| <b>min. range</b>                    | 0-10 in. H <sub>2</sub> O   |
| <b>max. range</b>                    | 0-8 psid (221 in. H <sub>2</sub> O)   |
| <b>max. line pressure</b>            | 150 psig  |
| <b>min. burst pressure</b>           | 450 psig  |
| <b>standard max. temperature</b>     | gauge/transmitter: 200°F (glass lens), 150°F (plastic lens)<br>transmitter: 200°F   |
| <b>high temperature construction</b> | N/A   |
| <b>minimum temperature</b>           | -20°F   |
| <b>calibration accuracy*</b>         | ±2% of full scale ascending after rap at room temperature<br><i>*Calibration accuracy is compensated for temperature effects between -20°F - 200°F.</i> |
| <b>repeatability</b>                 | ±1% of full scale   |
| <b>transducer enclosure</b>          | explosion-proof   |
| <b>certification/rating</b>          | NEMA 3, 4X, IP66, 7BCD, 9EFG, 12  |

### Standard configuration options (transmitter)

| configuration                 | unless otherwise specified   | standard options available  |
|-------------------------------|--|---|
| <b>porting size</b>           | 1/4" NPT   | 1/2" NPT  |
| <b>porting orientation</b>    | in-line  | N/A   |
| <b>direction of pressure</b>  | bottom to top (dial reads left to right)                               | N/A   |
| <b>calibration medium</b>     | air  | N/A   |
| <b>electronic outputs</b>     | analog outputs: 4-20 mA (2 wire)<br>0-5 VDC (3 or 4 wire)              |   |
| <b>supply voltage</b>         | 9-35 VDC (reverse polarity protected)                                  |   |
| <b>loop resistance</b>        | 1300 ohms max. $R = ((V_s - 9) * 1000) / 20$ (ohms at V <sub>s</sub> ) |   |
| <b>board connection</b>       | <b>1.</b> + (EXC) <b>2.</b> - <b>3.</b> 0-5 V <b>4.</b> GND            | 20-26 AWG wire  |
| <b>primary wetted parts</b>   | 316SS  | N/A   |
| <b>secondary wetted parts</b> | range spring: 302SS<br>magnet: ceramic                                 | Teflon-coated spring and magnet   |
| <b>static seals</b>           | buna-N   | Viton, Teflon, silicone, EPDM, fluorosilicone   |
| <b>diaphragm</b>              | buna-N   | Viton, EPDM, fluorosilicone, silicone   |
| <b>lens</b>                   | glass  | plastic   |
| <b>dial sizes</b>             | (must be specified)  | 3.5", 4.5", 6"  |
| <b>dial case styles</b>       | (must be specified)  | "B" Basic Case (c-clamp not available)<br>"F" Flanged Case (w/holes for panel mounting) |
| <b>starting mark on dial</b>  | approximately 10% of full scale  | N/A   |