Diaphragm Seals

**Application**
Process industry diaphragm seal to combine with Bourdon tube pressure gauges or transmitters. Intended for rapidly flowing corrosive, contaminated, hot or light to medium viscous pressure media.

**Design**
Body with cylindrical diaphragm to be sandwiched between two pipe flanges. Requires hydraulic fluid to transmit pressure to instrument.

**Process Connection**
1" to 4" per ASME B16.5; other see options

**Suitable Pressure Ranges**
From 10 PSI to class2500 (for lower ranges consult factory)

**Available Options** (connections, materials, etc.)
See Selection Guide (over)

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To determine the effects of temperature and response time in a specific application, contact the factory for an **Application Questionnaire**. The information provided will allow WIKA Technical Support to accurately model your application parameters using state-of-the-art computer simulation techniques.
# Selection Guide - 981.10

<table>
<thead>
<tr>
<th>981.10,1/4X1.0,SS,SS</th>
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</thead>
<tbody>
<tr>
<td><strong>Diaphragm Material</strong></td>
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<tr>
<td>SS = 316 stainless steel</td>
</tr>
<tr>
<td>MO = Monel® 400</td>
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<tr>
<td>HB = Hastelloy® B-2</td>
</tr>
<tr>
<td>HC = Hastelloy® C-276</td>
</tr>
<tr>
<td>PF = 316 stainless steel, PFA coating (500°F max.)</td>
</tr>
<tr>
<td>EC = 316 stainless steel, ECTFE (Halar®) coating (300°F max.)</td>
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<tr>
<td>TA = Tantalum</td>
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<tr>
<td>TI = Titanium, grade 2 (See note 4)</td>
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</tbody>
</table>

**Upper Housing Material** (See note 3)

| SS = 316 stainless steel |
| MO = Monel® 400 |
| HB = Hastelloy® B-2 |
| HC = Hastelloy® C-276 |
| TI = Titanium, grade 2 |

**Process Connection** (See note 2)

| 1.0 = 1" Pipe |
| 1.5 = 1-1/2" Pipe |
| 2.0 = 2" Pipe |
| 3.0 = 3" Pipe |
| 4.0 = 4" Pipe |
| 6.0 = 6" Pipe |
| 8.0 = 8" Pipe |

**Instrument Connection**

| 1/4 = 1/4" NPT female |
| 1/2 = 1/2" NPT female |
| CPL = Capillary connection (To weld capillary directly to seal) |

**Diaphragm Seal Design** (See note 1)

| 981.10 = INLINE SEAL™ |

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**Notes**

1. Suitable pressure ranges 0-10 PSI to 0-2,500 PSI. Maximum working pressure based on mounting flange rating per AMSE B16.5.
2. Sealing face to fit piping per ASME B16.5 raised face smooth finish open flanges. Process connections to meet other sealing faces available, consult factory for availability.
3. Upper housing is a process wetted component.
4. For titanium diaphragm, upper housing material must be titanium also.

*Items in bold are available from stock (subject to prior sales). For optional items, consult factory for current lead-time.*

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**Ordering Information:**
State computer part number (if available) / type number / size / range / connection size and location / options required.

Specifications given in this price list represent the state of engineering at the time of printing. Modifications may take place and the specified materials may change without prior notice.

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