**Description**

The “Peramic” is a solid state, all stainless, pressure transmitter based on a ceramic pressure sensor. The amplifier system is based on a single integrated circuit, which ensures a perfect linearity in the 4-20 mA output, also the transmitter is fully temperature compensated on process temperatures. The “Peramic” has the latest state of the art planar technology which results in a very compact construction, it is made for pressure applications in liquids, gases and vapours. Zero and span are internally adjustable in wide ranges. A local indicator (programmable) is available (option).
Specifications

Ordering Information

Order code key  SERIES CER-8000-

<table>
<thead>
<tr>
<th>measuring range bar</th>
<th>max. overpressure bar</th>
<th>adjustable span range in bar</th>
<th>adjustable span range in bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 0.2 ...0.8</td>
<td>6</td>
<td>0 - 0.2 / 0 - 0.8</td>
<td>C</td>
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<tr>
<td>0 - 0.8 ...1.6</td>
<td>12</td>
<td>0 - 0.8 / 0 - 1.6</td>
<td>D</td>
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<tr>
<td>0 - 1.6 ...4</td>
<td>20</td>
<td>0 - 1.6 / 0 - 4</td>
<td>E</td>
</tr>
<tr>
<td>0 - 2.5 ...10</td>
<td>50</td>
<td>0 - 2.5 / 0 - 10</td>
<td>F</td>
</tr>
<tr>
<td>0 - 10 ...40</td>
<td>120</td>
<td>0 - 10 / 0 - 40</td>
<td>G</td>
</tr>
<tr>
<td>0 - 40 ...150</td>
<td>350</td>
<td>0 - 40 / 0 - 150</td>
<td>H</td>
</tr>
<tr>
<td>0 - 100 ...350</td>
<td>600</td>
<td>0 - 100 / 0 - 350</td>
<td>I</td>
</tr>
</tbody>
</table>

**PROCESS CONNECTIONS:**
- G 1/2” (1/2” BSP) DIN 16288 manometer (gauge) connection
- G 1/2” (male) and G 1/4” (female)
- 1/2” NPT (male) and 1/4” NPT (female)

**OPTIONAL:**
- Digital local Indicator (3½ digit, programmable) (EXEx i, not programmable)
- Intrinsically safe: ATEX I1G, EEx ia IIc T4
- Vacuum range (Specify relative or absolute). Compound range available (example -1 / +1 bar)
- P / I converter: 3-15 PSI = 4-20 mA, Incl. wall mounting bracket. Always range D
- SPECIALS: please specify (example: PTFE or Hastelloy C wetted parts)

**Parts description:**
1. Cover AISI 304
2. O-ring EPDM
3. Venting (cover) AISI 304
4. Cable entry
5. Electronic housing AISI 304
6. Foot/cooling fins AISI 316
7. Ceramic sensor Al₂O₃ (96%)
8. Process connection AISI 316

**Dimensions (mm)**
**APPLICATIONS**

The “Peramic” is a universal pressure transmitter for all gauge- and absolute pressure measurements on liquids, gases and vapours. When a flush diaphragm has to be used, for example food- or paper industry or for level applications, ask for our transmitters series 8000 or 8000-SAN, or our “Intelligent” transmitters, series 2000 (see page 4).

**TERMINAL BOARD**

When mounting the “Peramic”, use the same principles as those for a manometer (gauge). We recommend using shut-off valves and water trap pipes acc. to BS/DIN standards, specially on steam applications and those applications where the process temperature will be higher than 100°C.

**ATEX Ex(i) CERTIFICATE**

The “Peramic” is certified for use in hazardous areas, according to ATEX I11G Ex ia IIC T4 (Intrinsically safe). Use only a certified power supply from 17-28 Vdc.

**EMC/CE**

Klay Instruments manufactures all transmitters according to the EMC/CE rules.

**MATERIALS**

Construction materials of the standard unit are:

- Measuring cell: Ceramic (Aluminiumoxyde 96%)
- O-Ring seal: Viton
- Process connection: 316 SS
- Electronic housing: 304 SS
- Other materials for wetted parts available on request.

* Always check the medium and look which o-ring you have to use.

**Accessoires**

**WATER TRAP PIPE**

For use on steam applications and those applications where the process temperature will be higher than 100°C. Water trap pipe (syphon) acc. to DIN 16282.

Type: Syphon-CS-1½’’
Material: Carbon Steel

**POWER SUPPLY UNIT / PANELMETERS**

Power supply unit, 24 Vdc for Peramic.
Type: D4PS
Supply: 220 Vac
Output: 24 Vdc (Supply for transmitter)
Mounting: DIN-rail or wall-mounting

Programmable 4 digit panelmeter, including 24 Volt power supply for transmitters.
Type: Diginorm 75
Supply: 220 Vac
Input: 4-20 mA
Size: 96 x 48 mm
Incl. 2 alarm contacts
Klay Instruments b.v. is an ISO 9001-2000 certified company who develops and manufactures a wide range of electronic pressure and level transmitters, "Intelligent" transmitters with HART® protocol or Profibus PA and pressure and level switches. All instruments are designed and manufactured in our factory in Dwingeloo, The Netherlands. Klay Instruments has a world wide service and sales distribution network.

Other Klay pressure- and level transmitters

'Intelligent' pressure- and level transmitters

The Klay series 2000 is a complete range of microprocessor based pressure- and level transmitters with local display and adjustment by three pushbuttons. Zero and span can be adjusted without testpressure. The display can be used during programming to assist the operation. An engineering unit can be chosen and also the process temperature can be shown on the display. Also a damping (0-25 sec) and a current simulation (4-20 mA) can be performed. Over 40 different process connections are available including many flush diaphragm designs. The series 2000 are also available with HART® Protocol or Profibus PA. Detailed brochure available.

Pressure transmitter ‘Peramic’ “S”

The “Peramic” “S” is an “All Stainless” intelligent pressure transmitter based on a ceramic pressure cell which can withstand high overpressures. The “Peramic” can be used for all gauge- and absolute pressure measurements on steam, liquids, gases and vapours. The available process connections are G1/2´´ (¼´´ BSP) or ½´´ NPT. Zero and span are internally adjustable over wide ranges. Ranges are available from 0 - 0.2 bar to 0 - 350 bar. Peramic “S” (series CER-2000) includes the HART® protocol or Profibus PA. A Detailed brochure is available.

Pressure- and level transmitters

Klay Instruments manufactures a wide range of electronic level and pressure transmitters with strong flush mounted diaphragms and various process connections. These "All Stainless" transmitters series 8000-SAN, are fully temperature compensated. Ranges are available from 0,1 bar till 60 bar. Zero and span are internally adjustable over wide ranges. The series 8000-SAN is also available in an "Intelligent" version, Series 2000-SAN (see above). From both series a detailed brochure is available.