Up to 5000 bar pressure range
- High strength, rugged stainless steel design
- CAN - Protocol: CANopen (CiA 404), J1939 (SAE-J1939)
- Temperature range from -40°C to + 125°C
- IP65 up to IP69K rating

The EPT31CN pressure transducer offers intelligent sensing capabilities that can be adjusted and managed within the switching circuit. The robust housing is resistant to shock and vibration and assures trouble free operation even in harsh environments.

The integrated CAN Controller meets the CAN-Protocol CANopen (CiA 404) and J1939 (SAE-J1939), which specifically allows the use in the automotive industry. Other applications are general and heavy duty industries, hydraulics and pneumatics, OEM, automation, environmental engineering, air-conditioning and agricultural.

### Specifications

#### Pressure ranges

<table>
<thead>
<tr>
<th>Measuring range</th>
<th>p [bar]</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.6</td>
<td>1.0</td>
</tr>
<tr>
<td>1.6</td>
<td>2.5</td>
</tr>
<tr>
<td>4.0</td>
<td>6.0</td>
</tr>
<tr>
<td>10.0</td>
<td>16.0</td>
</tr>
</tbody>
</table>

Pressure overload:

<table>
<thead>
<tr>
<th>p [bar]</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>40</td>
</tr>
</tbody>
</table>

Burst pressure:

<table>
<thead>
<tr>
<th>p [bar]</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>60</td>
</tr>
</tbody>
</table>

**Measuring range e.g. -1...0 bar, -1..9/24 bar and absolute pressure available. >1000 bar with thread M18 x 1.5**

#### Electronics

- **Output**: 4-conductors
- **Supply voltage**: U [V DC] 10...32
- **CAN Interface**: acc. DIN ISO 11898: CAN; SAE J1939
- **CAN Protocol**: CANopen
- **Set-up time**: t [ms] < 1
- **Max. current consumption**: I [mA] < 30
- **Electrical Strength**: U [V DC] 50

#### Accuracies

- **Accuracy only valid for up to 2000 bar; above 2000 bar is 1%**
- **Accuracy @ RT**: ≤ 0.50%**
- **BFSL**: ≤ 0.125
- **Non-linearity**: % of range ≤ 0.15
- **Stability / year**: % of range ≤ 0.10

**Accuracy only valid for up to 2000 bar; above 2000 bar is 1%**

- **Accuracy at RT**: % of range ≤ 0.50**
- **BFSL**: ≤ 0.125
- **Non-linearity**: % of range ≤ 0.15
- **Stability / year**: % of range ≤ 0.10

**BFSL** includes Non-linearity, Hysteresis, Repeatability, deviation from zero and end value (acc. IEC 61298-2)

#### Temperature range

- **Medium to be measured**: T [°C] -40...125
- **Environment**: T [°C] -40...105
- **Storage**: T [°C] -40...125
- **Compens. range**: T [°C] 20...85
- **Mod. 1K Offset**: % of range ≤ 0.15 / 10K
- **Mod. 1K Range**: % of range ≤ 0.15 / 10K
- **Total Error**: % of range 40°C 2.00%
- **Electrical Strength**: % of range 105°C 2.00%

#### Mechanics

- **Wetted parts**: stainless steel
- **Housing**: stainless steel
- **Weight**: m [g] 80-120 depending on model
- **Shock resistance**: g 1000 acc. to DIN EN 60068-2-32 (free fall)
- **Vibration resistance**: g 20 acc. to DIN EN 60068-2-6 (swinging)
- **Shock load**: g 50 acc. to DIN EN 60068-2-27 (permanent shock)

#### Certifications

- CE-Richtlinien 2014/30/EU, 2014/68/EU
- IP Sealing (IEC60529) bis IP69K

The listed IP ratings are only valid with fitted connector and vary depending on specification.

### Ordering Information

Please use the characters in the chart below to construct your product code.

#### Example Code:

**EPT31CN - A - 01000 - B - 4 - A**

<table>
<thead>
<tr>
<th>Series</th>
<th>Port Configuration</th>
<th>Pressure Range</th>
<th>Pressure Unit</th>
<th>Output Signal</th>
<th>Electric Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPT 31CN</td>
<td>A* - G 1/4&quot; Male</td>
<td>Bar</td>
<td>A - Absolute</td>
<td>7 = CANopen</td>
<td>A - 600 mm cable</td>
</tr>
<tr>
<td></td>
<td>B - 1/4&quot; NPT Male</td>
<td></td>
<td>B - Relative / gauge</td>
<td>8 = CAN J1939</td>
<td>F - M12x1 Pin connector</td>
</tr>
<tr>
<td></td>
<td>C - 1/8&quot; NPT Male</td>
<td></td>
<td>V - Vacuum and bi-directional</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D - 7/16&quot; -20 UNF Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E - 9/16&quot; -18 UNF Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>F - M14x1.5 Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G - 1/4&quot; SAE Female</td>
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<td></td>
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<td></td>
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</tbody>
</table>

* Custom options available on request

Please use code from the table below.
Dimensions and Connections

Pressure Sensor - EPT31CN with CAN Signal

Pressure Connections

Flanschstecker male socket M12x1

Gehäuse housing

Druckstutzen pressure port

M10x1 Form A

G1/4A Form E

Kalibrieradapter male adapter

Gehäuse housing

Druckstutzen pressure port

ø14.0

ø22.0

max. 76

min. 26