CANbus Digital Output Pressure Transducers & Transmitters

HT-SMC Series

- High accuracy & reliability
- Ranges 0.2 bar to 5,000 bar
- CANopen 2.0A/2.0B interface
- Wide choice of connectors
- Temperature -40°C + 125°C
- Compact and rugged design

For digital process control systems an integrated CANbus pressure measurement solution. This sensor features a CANopen interface (DIN ISO 11898) and CAN controller compliant with CANopen 2.0A or 2.0B protocol. SAE J1939 is also available. This high speed interface permits data sampling rates of up to 1 Mbit/sec.
CANbus Digital Output
Pressure Transducers & Transmitters
HT-SMC Series

TECHNICAL SPECIFICATIONS
Standard pressure ranges & signal outputs

<table>
<thead>
<tr>
<th>Measuring range *(bar)</th>
<th>0.2</th>
<th>1</th>
<th>1.6</th>
<th>2</th>
<th>2.5</th>
<th>4</th>
<th>6</th>
<th>10</th>
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<tbody>
<tr>
<td>Overload pressure</td>
<td>0.5</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>10</td>
<td>20</td>
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<tr>
<td>Burst pressure</td>
<td>1</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>15</td>
<td>30</td>
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<tr>
<td>Measuring range *(bar)</td>
<td>16</td>
<td>20</td>
<td>25</td>
<td>40</td>
<td>60</td>
<td>100</td>
<td>160</td>
<td>200</td>
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<tr>
<td>Overload pressure</td>
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<td>100</td>
<td>100</td>
<td>200</td>
<td>200</td>
<td>400</td>
<td>400</td>
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<tr>
<td>Burst pressure</td>
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<td>60</td>
<td>150</td>
<td>150</td>
<td>300</td>
<td>300</td>
<td>600</td>
<td>600</td>
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<tr>
<td>Measuring range *(bar)</td>
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<td>400</td>
<td>600</td>
<td>1000</td>
<td>1600</td>
<td>2000</td>
<td>4000</td>
<td>5000</td>
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<tr>
<td>Overload pressure</td>
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<td>840</td>
<td>1200</td>
<td>2400</td>
<td>2400</td>
<td>5000</td>
<td>6000</td>
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<tr>
<td>Burst pressure</td>
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<td>1000</td>
<td>1050</td>
<td>1500</td>
<td>3000</td>
<td>3000</td>
<td>6000</td>
<td>7000</td>
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<table>
<thead>
<tr>
<th>Electrical</th>
<th>Standard</th>
<th>Option*</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANopen interface acc to DIN ISO 11898</td>
<td>CAN 2.0A</td>
<td>CAN 2.0B</td>
</tr>
<tr>
<td>Supply voltage</td>
<td>2&lt;30 mA</td>
<td>2&lt;30 mA</td>
</tr>
</tbody>
</table>

*Gauge ranges shown - vacuum and absolute ranges available on request

- Media temperature range: -40°C to +125°C
- Compensated temperature range: -20°C to +85°C
- Ambient temperature range: -40°C to +105°C

Performance
- Accuracy: Non-linearity, hysteresis and non-repeatability at room temperature according to IEC 61298-2 (or BSFL/Best Fit Straight Line)
- Ranges up to 2000 bar:
  - <0.5% FS range (<0.25% BSL)
  - Optional <0.25% FS range (<0.15% BSL)
- Ranges above 2000 bar:
  - <1.0% FS range (<0.5% BSL)
- Temperature effects: Zero/Span typical thermal coefficients <0.15% FS range/10°C
- Total Error Band: 2% FS from room temperature to -40°C or +105°C
- Long term stability: <0.1% FS range/year
- Response time: <1 ms (from 10% to 90% FS range)
- Vibration resistance: 20g (according to IEC 68-2-6 and IEC 68-2-36)
- Shock resistance: 1000g (according to IEC 68-2-32)

Physical
- Material: body - stainless steel pressure inlet port - stainless steel (stainless steel and silicon for absolute pressure ranges)
- Process connection: G 1/4 A, G 1/4 B, 1/4NPT, G1/2 B
- Other connections available on request
- Electrical connection: integral cable, M12 x 1 male socket
- Other connections available on request
- Weight: approximately 80-120g (dependent upon configuration)
- Ingress protection: IP65 (for connector versions with their mating plug fitted)

Options
1) Improved accuracy <0.25% FS (<0.15% BSL)
2) Additional cable (per metre - specify length)
For further options or customised products please contact us.

Related products
Hydrotechnik manufactures a wide range of sensors, test and measurement equipment.

Contact us for further information or visit www.hydrotechnik.co.uk
Continuing development can necessitate specification changes without notice
## HT-SMC Series

### ORDER CODES

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<th>Series</th>
<th>Output Signal</th>
<th>Pressure Range</th>
<th>Unit</th>
<th>Pressure Type</th>
<th>Process Connection</th>
<th>HEX</th>
<th>Electrical Connection</th>
<th>Extras</th>
</tr>
</thead>
<tbody>
<tr>
<td>HT-SMC</td>
<td>60.0</td>
<td>0000400</td>
<td>MPA</td>
<td>(a)</td>
<td>G12B</td>
<td>27</td>
<td>BJD</td>
<td>O2C</td>
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</table>

### Output Signal
- CANopen 2.0A
- Others AAA

### Pressure Range
- Absolute Pressure (a)
- Relative Pressure (g)
- Sealed Pressure (sr)

### Units
- bar, BAR
- kPa, KPA
- MPa, MPA
- PSI, PSI
- kg/cm2, KG
- m WC, MWS
- in WC, IWS
- others, CCC

### Pressure Type
- Process
- Connection
- HEX
- Electrical
- Connection
- Extras

### Process
- G 1/8 A Shape A
- G 1/4 A Shape A
- G 1/4 A Shape E
- G 1/4 B (Manom.)
- G 1/2 B (Manom.)
- G 1/2 A Shape E
- G 1/8 NPT
- G 1/4 NPT
- 7/16-20 UNF-2A
- 7/16-20 UNF-2A/C
- 3/8-24 UNF-2A
- 3/8-24 UNF-2A/C
- 1/2-20 UNF-2A
- M 8 x 1 Male
- M 10 x 1 Shape A
- M 12 x 1 Shape E
- M 12 x 1 konical
- M 12 x 1.5 Cx-Ring
- M 14 x 1.5 Shape A
- M 14 x 1.5 Shape E
- M 14 x 1.5 IS0
- M 16 x 1.5 Shape A
- M 16 x 1.5 female
- M 18 x 1.5 male
- M 20 x 1.5 Manom
- R 1/4 male
- Others

### Electrical
- LEMO EWB 1S
- IS9 Industrial Socket
- Male Socket M 5 /5707
- Male Socket M 12 / 5763
- Male Socket M 16 / 5723
- Male Socket M 18 / 5714
- Bayonet DIN 71585
- 2AMO
- Deutsch 4-poles
- QUICK ON
- Flying Leads 1.0*
- Cable Gland Plastic
- Cable Plastic 1.0 *
- Others

### Extras
- Absolute Pressure (a)
- Relative Pressure (g)
- Sealed Pressure (sr)

### Notes
- CANopen 2.0A
- Others (see below) BBB
- Various options for electrical connection and pressure types.
- *e.g. with cable length 1 metre

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### Additional Notes
- Restrictor 0.6 mm
- Restrictors others
- Total Error others
- Cleaned for Oxygen Use
- Metal Cone
- Schrader Opener 2.9
- Others (see below)