HYDRO-WELL
Submersible pressure transmitter with ceramic measuring cell
4...20 mA

Application Area
The HYDRO-WELL is suitable for continuous level measurement of liquids. Typical applications are measurements in water/waste water facilities, deep wells and in the shipbuilding industry.

Your Benefit
- High reliability through maximum overload and vacuum resistance of the ceramic measuring cell
- High plant availability through integrated overvoltage protection
- Versatile use thanks to robust housing and cable version

Function
The ceramic CERTEC® measuring cell is the heart of The HYDRO-WELL. The hydrostatic pressure of the liquid column causes a capacitance change in the measuring cell via the ceramic diaphragm. This change is converted into a standard 4 ... 20 mA signal. The entire measuring cell consists of high purity ceramic and is characterised, apart from its excellent long-term stability, by very high overload resistance.

Technical Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Smallest measuring range</td>
<td>+0.1 ... +60 bar/+10 ... +6000 kPa (+1.45 ... +870.2 psig)</td>
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<tr>
<td>Deviation in characteristics</td>
<td>0.1%</td>
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<tr>
<td>Process fitting</td>
<td>Straining clamp, threaded fitting unassembled from G1 (ISO 228-1) or from 1 NPT, thread G1½ (ISO 228-1) or from 1½ NPT on the housing</td>
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<tr>
<td>Process temperature</td>
<td>-20 ... +80 °C (-4 ... +176 °F)</td>
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<tr>
<td>Ambient, storage and transport temperature</td>
<td>-40 ... +80 °C (-40 ... +176 °F)</td>
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<tr>
<td>Operating voltage</td>
<td>8 ... 35 V DC</td>
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Materials
The transmitter of the instrument is made of 316L, Duplex (1.4462), Titanium or PVDF. The process seal consists of FKM, FFKM or EPDM, the suspension cable of PE, PUR or FEP.

Housing Versions
Apart from the version with unassembled cable end, there is also a version with single chamber housing and thread available. The housing in protection rating IP 66/IP 67 is available in plastic or stainless steel precision casting.

Electronics Versions
The instruments are available in different electronics versions. Apart from the analogue/digital two-wire electronics 4 ... 20 mA/HART Pt 100, a pure analogue version 4 ... 20 mA is also possible.
Operation

An adjustment of the instrument is not necessary and not possible. The measuring range corresponds to the value set at the factory.

Electrical Connection

Wire assignment, suspension cable
1 Blue (-): to power supply or to the processing system
2 Brown (+): to power supply or to the processing system
3 Shielding
4 Breather capillaries with filter element

Dimensions HYDRO-WELL

1 Standard version
2 Version with adjustable screw connection for suspension cable G1½ A, with impact protection
3 Version with straining clamp and detachable plastic basket guard