Thin-film sensor technology

Wing Union Pressure Transmitter
Model 5WU1502-20 & 5WU2202-20

- Long term stability, durable and reliable design
- Technology based on extensive sub-sea experience
- Intrinsically safe
- 0.2% accuracy
- Hastelloy C22 and Inconel X-750 or 17-4PH material
- RFI/EMI protected
- 1502 & 2202, 2” wing union fitting
- Integrated PT-1000 temperature transmitter
- Standard pressure ranges up to 20,000 psi

Applications
- Mud Logging
- Drilling
- Cementing
- Wellhead Measurements
- Fracturing
- Acidizing

Description

The Wing Union Pressure Transmitter is an extremely rugged sensor designed for use with the two-inch wing union in the rough and demanding environment of high-pressure applications for both the on- and offshore industry. The transmitter includes a diaphragm with a thin film single bridge Strain Gauge and a PT-1000 temperature sensor, electro beam welded to a sensor bed. The sensing diaphragm design eliminate zero shift during hammer-up and eliminates long-term signal drift in the field. The electronic circuits are calibrated and temperature compensated in digital mode with an analogue 4-20mA output signal.

The transmitter is designed to withstand vibration and shock as well as pressure peaks during operation. The union compatible fittings are machined of Hastelloy C22 & Inconel X-750 providing service with highly abrasive and corrosive media. Both configurations comply with international accepted standards for materials operating in corrosive environments.

The Scan-Sense AS' after sales organization and supply chain is ready to support customers needing fast response and quick delivery of transmitters damaged during use or in need of recalibration.
## Specifications

### Wing Union Pressure Transmitter

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td><strong>Pressure Ranges</strong></td>
<td>0-5000psi, 0-6000psi, 0-7500psi, 0-10,000psi, 0-15,000psi, 20,000 psi</td>
</tr>
<tr>
<td><strong>Safe Overpressure</strong></td>
<td>1,5 x Rated Pressure</td>
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<tr>
<td><strong>Bursting Pressure</strong></td>
<td>2,5 x Rated Pressure</td>
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<tr>
<td><strong>Pressure Connection</strong></td>
<td>1502 &amp; 2202 Wing Union, 2” Pipe, Male Sub end</td>
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<tr>
<td><strong>Drift</strong></td>
<td>&lt; ± 0,1% FS/year</td>
</tr>
<tr>
<td><strong>Repeatability</strong></td>
<td>0,02 % Full Scale Output</td>
</tr>
<tr>
<td><strong>Hysteresis</strong></td>
<td>&lt; ±0,05% FS</td>
</tr>
<tr>
<td><strong>Linearity</strong></td>
<td>&lt; ±0,1% FS BSL</td>
</tr>
<tr>
<td><strong>Operating Temperature, comp.</strong></td>
<td>-20ºC - 80ºC</td>
</tr>
<tr>
<td><strong>Operating Temperature, medium</strong></td>
<td>-40ºC - 140ºC</td>
</tr>
<tr>
<td><strong>Operating Temperature, storage</strong></td>
<td>-40ºC - 125ºC</td>
</tr>
<tr>
<td><strong>TCO (thermal effect on zero point)</strong></td>
<td>&lt; ±0,004% FS/ºC</td>
</tr>
<tr>
<td><strong>Supply Voltage</strong></td>
<td>10 – 28 VDC</td>
</tr>
<tr>
<td><strong>Output Signal</strong></td>
<td>4- 20 mA. (two wire)</td>
</tr>
<tr>
<td><strong>Response time</strong></td>
<td>&lt; 2ms</td>
</tr>
</tbody>
</table>

### Electrical Connection

- Glenair type GC379-2-14S-2P, 4 pin connector
- Pin B (S-), Pin C (S+)

### Ingressive protection

- IP68

### CE Marking

- Approved according to EU’s EMC directives

### Ex classification

- EEx ia IIC T4, II 2 G, ATEX directive 94/9/EC

### Options:

- Other electrical connectors on request
- Temperature output PT-1000 3,85 ohm/°C

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**Further Information:**
You can get further information on our internet web page: [www.scansense.no](http://www.scansense.no)
**Dimensions**

Wing Union Pressure Transmitter

**Modell 1502**

Part no:
- 5WU1502-20-05-x (5000psi)
- 5WU1502-20-06-x (6000psi)
- 5WU1502-20-075-x (7500psi)
- 5WU1502-20-10-x (10000psi)
- 5WU1502-20-15-x (15000psi)
- 5WU1502-20-20-x (20000psi)

0= Glenair 4 pin (GC379-2-14S-2P)
1= Lemo 10 pin (4K, EGG, 310)
2= Jupiter 3 pin (REC 10 M)
3= Fixed cable, Draka BFOU(i) 250V
   - Mud resistant NEK 606 (type: S7)
   - Halogen free NEK 606 (type: S3)
   - Fire resistant IEC:60331
Modell 2202

Part no:
5WU2202-20-15-x (15000psi)
5WU2202-20-20-x (20000psi)

0= Glenair 4 pin (GC379-2-14S-2P)
1= Lemo 10 pin (4K, EGG, 310)
2= Jupiter 3 pin (REC 10 M)
3= Fixed cable, Draka BFOU(i) 250V
   - Mud resistant NEK 606 (type: S7)
   - Halogen free NEK 606 (type: S3)
   - Fire resistant IEC:60331

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