# HFJENSEN SENSOR TECHNOLOGY



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#### Pressure transducer PTA

food, chemical and pharmaceutical industries



Flush mounted installation Range: 10-1000 bar Overpressure: 400 % Certified material: Titanium grade 5 Non-linearity and hysteresis:  $< \pm 0.5$  % Output: 2 mV/V  $\pm$  2 % Temperature: -55 °C to +150 °C No oil filling Small size: ø19 mm diaphragm

### Pressure transducer PTAF

for tri-clamp mounting in sanitary applications



Fast 50 mm tri-clamp installation Range: 5, 10, 20 or 50 bar Overpressure: 400 % Certified material: Titanium grade 5 Non-linearity and hysteresis: < ±0.5 % Output: 2 mV/V ± 2 % Temperature: -40 °C to +120 °C No oil filling Surface roughness: < 0.4 microns

## **Pressure transducer PTI** food, chemical and pharmaceutical industries



Integrated electronics Range: 5-1000 bar Flush mounted installation Material: Titanium grade 5 Non-linearity and hysteresis: < ±0.5 % Output: 4-20 mA, 2-wire Supply voltage: 12-30 VDC Temperature: -25 °C to +85 °C Cable or connector termination

#### **Pressure transducer DPI** food, chemical and pharmaceutical industries



Range: 10-1000 bar Overpressure: 200 % Material: Titanium grade 5 Non-linearity and hysteresis: < ±0.5 % Multiple outputs including 2-wire 4-20 mA Supply voltage: 12-30 VDC or 9V BAT Temperature: -25 °C to +100 °C Cable or connector termination

#### **Pressure transmitter PS**

food, chemical and pharmaceutical industries



Piezoresistive measuring element Range: 0.2-10 bar gauge Overpressure: 200 % Material: Stainless steel AISI 316 Non-linearity and hysteresis: < ±0.25 % Output: 4-20 mA, 2-wire Supply voltage: 12-30 VDC Temperature: 0 °C to +50 °C Cable or connector termination

## **Pressure transmitter PTIP IE2** offshore and subsea industries



Strain gauge measuring principle Range: 10-1000 bar Overpressure: 400 % Material: Titanium grade 5 Non-linearity and hysteresis: < ±0.5 % Output: 4-20 mA, 2-wire Supply voltage: 12-30 VDC Temperature: -5 °C to +70 °C Submersible to 2500 m

## Differential pressure transducer PDR 0.1 D

level, filter and flow measurements - hydraulic systems



Piezoresistive measuring element Range: 0.1 bar Line pressure: max 10 bar Material: AISI 316L, VITON Painted AISi 12(Cu) enclosure- IP65 Non-linearity and hysteresis: < ±0.5 % Output: 4-20 mA 3-wire Supply voltage: 12-30 VDC or 9V BAT Temperature: -10 °C to +70 °C

**Differential pressure transmitter PDR** level, filter and flow measurements - hydraulic systems



Variable reluctance Range: ± 50 mbar to ± 10 bar Line pressure: max 200 bar Material: Stainless steel AISI 410 Painted AISi 12(Cu) enclosure- IP65 Non-linearity and hysteresis: < ±0.5 % Multiple outputs including 2-wire 4-20 mA Supply voltage: 12-30 VDC Temperature: -25 °C to +85 °C

H F Jensen A/S, Emdrupvej 70, DK-2400 Copenhagen NV, Denmark Tel +45 3953 6040 • Fax +45 3953 6048 • info@hfjensen.dk • www.hfjensen.dk

#### **Differential pressure transducer PDS**

level, filter and flow measurements



Piezoresistive measuring element Range: 50 mbar to 2 bar Line pressure: max 10 bar. Material: Stainless steel AISI 316L Non-linearity and hysteresis: < ±0.5 % Output: 4-20 mA Supply voltage: 12-30 VDC Temperature: -10 °C to +80 °C

#### Displacement transducer XHY 12

for hydraulic and pneumatic cylinder integration



Variable reluctance (single coil) Range: 50 mm to 1500 mm Working pressure: max 350 bar Non-linearity: < ±0.5 % Temperature: -40 °C to +155 °C Tube diameter: ø12 mm Core diameter: ø4 mm Short length to stroke Only 2-wire connection

#### **Displacement transducer XEH 6** for hydraulic cylinder integration

Eddy-current measuring principle Range: 50 to 1500 mm Non-linearity:  $< \pm 0.5 \%$  (typ.  $< \pm 0.3\%$ ) Temperature: -40 °C to +155 °C Working pressure: max 350 bar ø6 mm AISI 316L housing Target tube: ø10\*1 mm aluminium Shortest built-in length

#### **Displacement transducer LDW 16/x** general displacement applications



Differential variable reluctance Range: ± 15 mm to ± 300 mm Non-linearity: < ±0.5 % Supply voltage: 5 V, 5 kHz nominal Temperature: -40 °C to +150 °C Material: Stainless steel AISI 316L Tube diameter: ø16 mm Core diameter: ø4 mm

#### Displacement transducer XLW 16/x

general displacement applications



Variable reluctance (single coil) Range: 15 mm to 600 mm Non-linearity: < ±0.5 % Temperature: -40 °C to +150 °C Material: Stainless steel AISI 316L Tube diameter: ø16 mm Core diameter: ø4 mm Short built-in length

#### **Displacement transmitter LDW 16/x-IE** general displacement applications



Differential variable reluctance Range: 30 mm to 600 mm Supply voltage: 12-30 VDC Non-linearity: < ±0.5 % Output: 4-20 mA, 0-20 mA, 0-5 V or ±2.5 V Temperature: -25 °C to +85 °C Material: Stainless steel AISI 316L Painted AISi 12(Cu) enclosure- IP65 Electrical connection: Screw terminals

**Displacement transmitter XLW 16/x-E** general displacement applications



Variable reluctance (single coil) Range: 15 mm to 600 mm Supply voltage: 12-30 VDC Non-linearity: < ±0.5 % Output: 4-20 mA, 0-20 mA, 0-5 V or ±2.5 V Temperature: -25 °C to +85 °C Material: Stainless steel AISI 316L Short built-in length

### **Displacement transducer LDTW 5 LS** general displacement applications



Linear variable differential transformer Range: ± 5 mm Non-linearity: < ±0.5 % Supply voltage: 5 V, 5 kHz nominal Sensitivity: 67 mV/V/mm Material: Stainless steel Temperature: -40 °C to +150°C Working pressure: 40 bar (optional)

#### **Displacement transducer LDT 5 HRWS**

applications in nuclear environment

Linear variable differential transformer Range: ± 5 mm Non-linearity:  $< \pm 1 \%$ Supply voltage: 5 V, 5 kHz nominal Material: Stainless steel Pressure: max 200 bar Radiation: < 70.000 Megarads Temperature: -200 °C to +400 °C Non organic materials

## Displacement transmitter XLW 16/25 TAC E

pneumatically actuated for automatic testing of dimensions



Variable reluctance (single coil) Range: 10 mm Pre-travel: 15 mm Non-linearity: < ±0.5 % Supply voltage: 12-30 VDC Output: 3-5 VDC Material: Stainless steel AISI 316L Gauging force: 200 p at 2 bar Air supply through ø6 mm nylon tube

## Level transmitter PSLME (ø16mm)

applications in bore holes with small diameter



Piezoresistive measuring element Range: 0.5, 1, 2, 5, 10 bar Non-linearity:  $< \pm 0.2$  % Certified material: Titanium grade 5 Supply voltage: 5, 9-30 or 12-30 VDC Output: 0-20mA, 4-20 mA, 0-5 V, 1-5 V or 100 mV to 3400 mV Improved accuracy over temperature Range selection and calibration through cable (ventilated PUR cable)

#### **Industrial Carrier Amplifier - ICAB** for sensors based on LVDT or differential coil



Supply voltage: 12-30 VDC Output: 0-20 mA, 4-20 mA, 0-5 V or ± 2.5 V Non-linearity:  $< \pm 0.01 \%$ Temperature: -25 °C to +85 °C Carrier frequency: 525 Hz, 5 kHz or 10 kHz Painted AISi 12(Cu) enclosure - IP65 PG7 (ø4 to ø7mm) Brass cable glands

## Level transmitter PSL (ø20mm)

applications in bore holes, lakes and rivers



Piezoresistive measuring element Range: 2 mWC to 100 mWC Non-linearity:  $< \pm 0.25 \%$  (typ.  $\pm 0.1 \%$ ) Temperature(comp.): 0 °C to 70 °C Material: Stainless steel AISI 316L Supply voltage: 12-30 VDC Output: 4-20 mA or 1-5 V Ventilated PUR cable Increased temperature range

## Level transmitter PSLM (ø16 mm)

applications in bore holes with small diameter



Piezoresistive measuring element Range: 2 mWC to 100 mWC Non-linearity: < ±0.25 % Temperature(comp.): -2 °C to 30 °C Material: Stainless steel AISI 316L Supply voltage: 12-30 VDC Output: 4-20 mA, 1-5 V or 100 mV to 3400 mV Ventilated PUR cable Smallest diameter

## **Transducer Conditioner Amplifier - TCAB**

works with all our single coil displacement transducers



Supply voltage: 12-30 VDC Output: 0-20 mA, 4-20 mA, 0-5 V or ± 2.5 V Non-linearity: < ±0.01 % Temperature: -25 °C to +85 °C Screw terminal connections Painted AISi 12(Cu) enclosure- IP65 PG7 (ø4 to ø7mm) Brass cable glands Trimpot ZERO and SPAN adjustments

## About us

We devote our resources to working together with our customers, providing effective and reliable solutions to their needs. H F Jensen A/S is ISO 9001 certified by Bureau Veritas for development, production and sales of transducers and transmitters, and gualified in the Achilles Joint Qualification System, for delivery to the Oil and Gas industry.



Go to our website for certification/qualification documentation