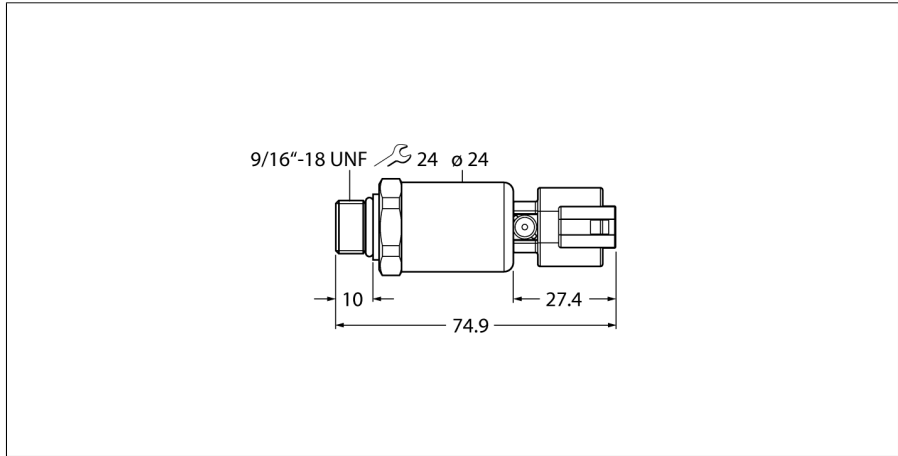


**Pressure Transmitter**  
**Ratiometric Output (3-wire)**  
**PT50000PSIG-2121-U6-DT043P**



- For mobile hydraulic applications
- Fully welded metal measuring cell
- Sealless
- With pressure tip orifice
- Compact and robust design
- Excellent EMC properties
- Excellent accuracy and long-term stability
- Kfz-Norm ISO 16750
- Pressure range 0...5000 psi rel.
- 5 VDC  $\pm$  10 %
- Ratiometric output 10...90 %
- Process connection 9/16"-18 UNF (SAE) male thread
- Plug-in device, Deutsch DT04-3P

**Type designation** PT50000PSIG-2121-U6-DT043P  
**Ident-No.** 100002003

**Pressure range**  
Relative pressure 0...344.7 bar rel.  
0...5000 psi  
0...34.47 MPa  
Admissible overpressure  $\leq$  1200 bar  
Burst pressure  $\geq$  2400 bar  
Response time  $<$  2 ms, typ. 1 ms  
Long-term stability 0.3% FS, , acc. to EN 61298-2

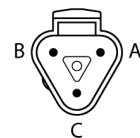
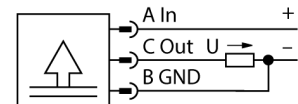
**Power supply**  
Operating voltage 4.5...5.5 VDC  
Current consumption  $\leq$  7 mA  
Short-circuit/reverse polarity protection yes / yes  
Protection type and class IP69K / III  
Insulation voltage 500 VDC

**Outputs**  
Output 1 Analog output

**Analog output**  
Voltage output 0.5...4.5V  
Operating range ratiom. 10...90 % (3-wire)  
Load  $\leq$  100 nF/ $>$ 10 k $\Omega$   
Accuracy LHR analog output  $\pm$  0.5 % FS BSL

**Temperature behaviour**  
Medium temperature -40...+125  $^{\circ}$ C  
Temperature coefficient  $\pm$  0.2 % of full scale/10 K

**Wiring Diagram**



**Functional principle**

The PT ... -2100 pressure sensors are especially developed for demanding mobile hydraulic applications and work with a fully welded metal measuring cell. Depending on the sensor type used, the processed signal is available either as analog current or voltage output.

# Pressure Transmitter

## Ratiometric Output (3-wire)

### PT50000PSIG-2121-U6-DT043P

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#### Ambient conditions

Ambient temperature	-40...+100 °C
Storage temperature	-50...+100 °C
Vibration resistance	Test VI (12 g, sinusoidal 18 g random vibration)
Shock resistance	50 g, 11 ms, half sine curve, 1000x/axis, acc. to ISO 16750-3

#### EMC

#### Interference Immunity/Interference Emission

EN 61326-2-3 - Pressure transducer  
 ISO 13766 - Earthmoving machinery  
 DIN EN 13309 - Construction machinery  
 DIN ISO 14982 - Forestry and agriculture  
 CISPR11

#### Immunity Motor Vehicle Directive

ISO 11452-2, HF (Field), 100 V/m (200...2000 MHz)  
 ISO 11452-4, HF (BCI), 100 mA (20...400 MHz)  
 ISO 10605, ESD, ±15 kV contact, ±15 kV air  
 ISO 7637-2 3), pulses 1, 2a, 2b, 3a, 3b (test level 4)  
 ISO 16750-2, load dump, 155 V (1 Ω, 300 ms)  
 Motor vehicle directive ECE R10  
 Motor vehicle directive 2004/104/EC

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#### Housing

Housing material	Stainless-steel/Plastic, 1.4404 (316L)/ Polyarylamide 50 % GF UL 94 V-0
Pressure connection material	Stainless steel 1.4404 (AISI 316L)
Pressure transducer material	Stainless steel 1.4404 (AISI 316L)
Process connection	9/16"-18 UNF male thread
Wrench size pressure connection / coupling nut	24
Electrical connection	Connector, Deutsch DT04-3P
Max. tightening torque housing nut	20 Nm

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#### Reference conditions acc. to IEC 61298-1

Temperature	15...+25 °C
Atmospheric pressure	860...1060 hPa abs.
Auxiliary power	24 VDC

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#### MTTF

1564 years acc. to SN 29500 (Ed. 99) 40 °C