

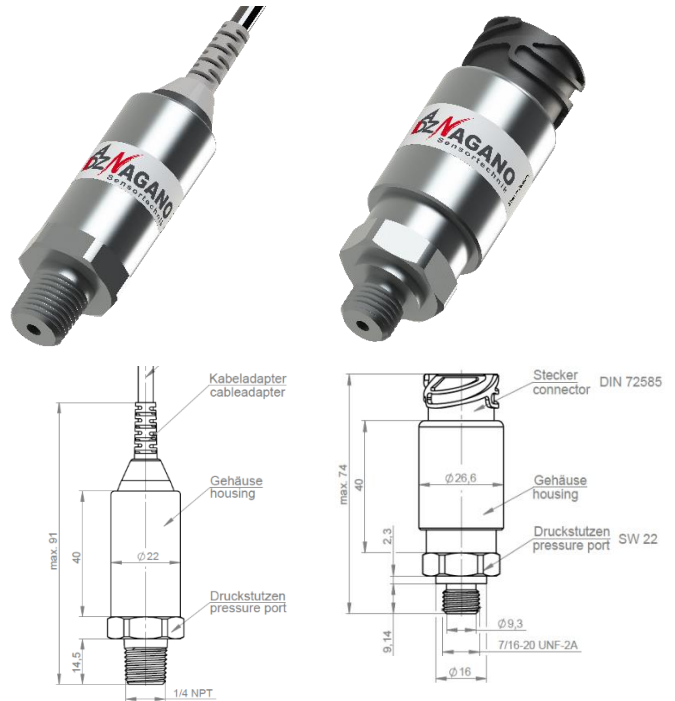
Combined pressure and temperature transmitter with internal temperature sensor

Combined pressure and temperature transmitter with internal temperature sensor and for all pressure measuring ranges in the limits between vacuum and 5000 bar.

Typical application areas

Railway	
Vehicle technology	
Trucks	
Construction machinery, special machines	✓
Forest -, agricultural machines	✓
Aerospace	
Medical technology	✓
Marine	
Environmental engineering	✓
Mechanical engineering and automation technology	✓
Process technology	✓
Motorsport	✓

Examples



Certificates and Tests

CE-Directive 2014/30/EU

The overview overleaf shows all adjustable parameters of this sensor. The displayed values describe the standard limit values.

Each parameter can be adjusted according to actual customer needs. The large number of parameter-specific options is compiled in detail and with examples in the following document and is available as a further download.

Do you need an individual solution?

Our strengths are the development and manufacture of the optimal solution for every customer-specific requirement. From the limitless variety of possibilities that sensor technology offers you, we will develop exactly the right one.

We produce your request 100% customized.

Give us a call or write to us ...we can do it!

Combined pressure and temperature transmitter with internal temperature sensor

Basic specification

min. ... max. Values (guaranteed)

min. ... max. Values (guaranteed)

Druck Pressure

Measuring range limits	vacuum ... 5000 bar (nominal pressure)
Over pressures (depending on upper measuring range limit)	<500 bar: $\geq 2x$ nominal pressure; 500-700 bar: $\geq 1,5x$ nominal pressure; >700 bar: $\geq 1,2x$ nominal pressure;(others possible)

Burst pressures (depending on upper measuring range limit)	<500 bar: $\geq 3x$ nominal pressure; 500-700 bar: $\geq 2x$ nominal pressure; >700 bar: $\geq 1,5$ nominal pressure;(others possible)
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Temperatur-Einsatzbereich Operating temperature range

Medium	-40 °C ... +125 °C
Ambient	-40 °C ... +105 °C
compensated area	-20 °C ... +85 °C

Mechanics

Shock resilience (DIN EN 60068-2-32)	... 1000 g [g; 9,81m/s ²]
Vibration resilience (DIN EN 60068-2-6)	... 20 g [g; 9,81m/s ²]
Shock load capacity (DIN EN 60068-2-27)	... 50 g [g; 9,81m/s ²]
Material in media contact	Stainless steel, titanium, silicon, NBR, PA66
Housing material	Stainless steel, titanium
Process connections	according to customer requirements
Electrical connections	according to customer requirements
Electrical output assignment	according to customer requirements
Weight	80 g ... 120 g
Protection classes (DIN EN 60529)	... IP69K

Status 14.12.2020

*1: including non-linearity, hysteresis, repeatability, zero point- and final value deviation (according to IEC 61298-2)

*2: Best Fit Straight Line

Electronics and electrical parameters

Output

@Pressure measurement 2-wire Current loop, voltage (non-/ratiometric), digital

@Temperature measurement 2-wire Current loop, voltage (non-/ratiometric), digital; PT100, PT1000

@Force measurement

Response time 10-90% (typical)

@Pressure measurement 1 ms ... 2 ms

@Temperatur-Messung 60 s ... 120 s
@Temperature measurement

Input

Supply depending on the o

Load resistance depending on the output signal

Power consumption (typical) depending on the o

Dielectric strength 30 VDC

Accuracy

Total error*1 @RT (typical) $\pm 0,50$ % FS

Non-linearity (BFSL*2) $\pm 0,15$ % FS

Stability / year $\pm 0,15$ % FS

Compensated area

mean temperature coefficient offset ... $\pm 0,15$ %/10K

mean temperature coefficient range ... $\pm 0,15$ %/10K

Outside of the compensated area

Total error*1 @lower limit temperature ... $\pm 2,00$ %

Total error*1 @upper limit temperature ... $\pm 2,00$ %