

- **Innovative stainless steel measuring cell with two-chip technology (P2P)**
- **High media resistance, no internal seals, without weld**
- **Compact design, high integration**
- **Diagnostic function based on the output signal (optional)**
- **Customising possible**

The piezoresistive, very compact pressure transmitter (without oil reservoir) is based on a new type of two-chip technology (P2P), which enables the highest demands on robustness and performance such as stability, vibration/ shock resistance. The OEM series was specially designed for use in harsh environmental conditions, such as those that prevail in the off-road sector. Other application areas are transportation, renewable energies, special purpose vehicles and machine engineering. Customer-specific adaptations are possible.

The ruggedness, stability, vibration and shock resistance of sensor EPT 9200 are achieved by the new P2P Technology used in its manufacture. This technology belongs to the strain gauge technologies.

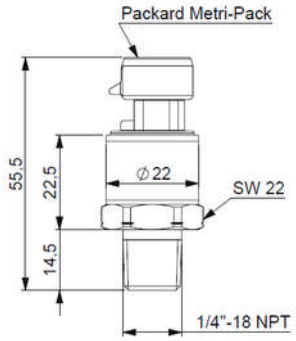
The innovative difference to the competition is the use of two full bridges, which are interconnected in such a way that undesirable external force influences on the sensor signal (e.g. torques during installation) are largely compensated.

A monolithic steel body without any welding and without any oil-filled cavities is used for this purposes.

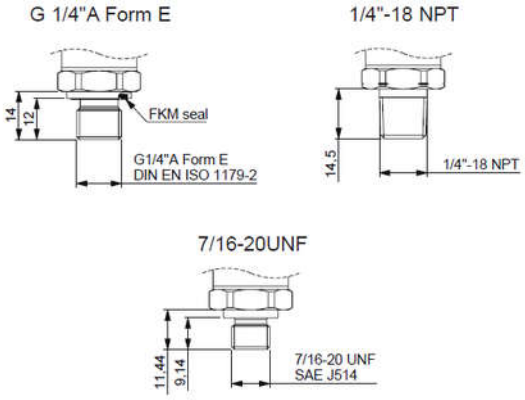
Sensors made with P2P Technology are:
- well suited for harsh environments and critical environments.
- suitable for: vacuum, gases, chemicals, hydraulic, hydrogen
- long term stability with high accuracy
no material fatigue due to embrittlement and
- provides a wide range of custom solutions

Specifications									
Performence									
Pressure ranges	(in bar) relative pressure								
P_{normal}	10	25	60	100	160	250	400	600	900
$P_{overload}$	20	50	120	200	320	500	800	1200	1400
P_{burst}	50	100	250	500	750	1000	1400	1800	2000
Accuracy	≤ 0,5% FS limit point settings (≤ 0,35% FS BFSL) at 25°C								
Overall accuracy	1,50% -5°C...85°C								
Long-term stability	≤ 0,1% FS/year at reference conditions								
Shock resistance	1000 g to IEC 60068-2-32								
Vibration resistance	20 g to IEC 60068-2-6								
Environment									
Temperature [°C]: Ambient temperature Medium temperature Storage temperature	 -40...+105° -40...+125° -40...+125°								
CE-Conformity									
EMV guideline	2014/30/EU acc. DIN EN 61326-1, DIN EN 61326-2-3								
RoHS guideline	2011/65/EU								
Electronic									
Output signals	4...20 mA 0.5...4.5 V ratiometric 0,5...4,5V at UB = 5 V DC								
Supply voltage	2 = 10...32 V DC, 4 = 8...32 V DC, 5 = 5 V DC								
Electrical connections	various elec. connections - see ordering information								
Response time	1ms								
Reverse polarity	present UB+ / UB								
Dielectric strength	HV 350 V DC								
Short-circuit strength	KS Out+ / UB- (for 1s)								
Mechanic									
Mechanical connections	various threads - see ordering information								
Tightening torque	typ. 25 Nm, max. up to 50 Nm								
Wetted parts	stainless steel 1.4404/316L								
Body material	stainless steel 1.4301/AISI 304								
Protection class	IP 65/IP 67 (depending on electrical connection)								
Weight	ca. 50 g								
Lifetime	> 10 million load cycles								

Dimensions in mm



Process Connections



Integrated snubber on request

Wiring

Type		Output	PIN A	PIN B	PIN C	
	Packard Metripac	0,5 - 4,5V	- Supply	+ Supply	V/I out	
		4..20 mA	Current output -	+ Supply	N/A	
		Output	PIN 1	PIN 2	PIN 3	PIN 4
	Round connector M12 x 1	0,5 - 4,5V	+ Supply	V/I out	- Supply	N/A
		4..20 mA	+ Supply	N/A	Current output	N/A
		Output	PIN A	PIN B	PIN C	
	DT04-3P	0,5 - 4,5V	+ Supply	- Supply	V/I out	
		4..20 mA	+ Supply	Current output -	N/A	
		Output	PIN 1	PIN 2	PIN 3	PIN 4
	DT04-4P	0,5 - 4,5V	- Supply	+ Supply	N/A	V/I out
		4..20 mA	Current output -	+ Supply	N/A	N/A
		Output	PIN A	PIN B	PIN C	
	AMP Superseal	0,5 - 4,5V	V/I out	- Supply	Output +	
		4..20 mA	N/A	Current output -	+ Supply	

Ordering information

(Please use the characters in the chart below to create your product code)

Sample Code EPT9200 - A - 10000 - B - 5 - F

Port Configuration

A	G 1/4" A-E male
B	1/4 " NPT male
D	7/16" 20 UNF male

Pressure Range

See table below

Pressure Unit

B	Gauge Pressure
V	Vaccum Pressure

Output Signal

2	4...20 mA
4	0,5...4,5 V (with 8-32 V supply)
5	0.5...4.5 V DC (with 5V supply, ratiometric)

Electrical Connection

C	Packard Metripack
G	AMP Superseal 3Pin
F	M12x1 round connector, plastic, 4pin
H	Deutsch DT04-3P
J	Deutsch DT04-4P

Pressure Range

Bar	10	25	60	100	160	250	400	600	900
Order Code	01000	02500	06000	10000	16000	25000	40000	60000	90000

The EPT9200 series is backed by a 1 Year Warranty. The purchaser is responsible for compatibility of the media, functional adequacy and correct installation of the transmitter.

If you require a customized solution for your program contact our sales team.