

# PMP-S200

OEM pressure transmitter with monolithic stainless steel measuring cell

- **Innovative stainless steel measuring cell with two-chip technology (P2P) / (Patent pending)**
- **High media resistance, no internal seals, without weld seam**
- **Compact design, high integration density**
- **High added value Made in Germany**
- **Customizing possible**
- **Diagnostic function based on the output signal (optional)**



## DESCRIPTION

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. It was specially designed for OEM series use in harsh environmental conditions, such as those that prevail in the off-road sector. All manufacturing steps from packaging in modern clean rooms to final calibration take place in Prignitz.

Customer-specific adaptations can be quickly evaluated and implemented.

## TECHNICAL SPECIFICATIONS – PMP-S200

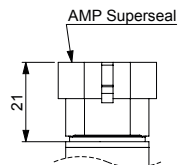
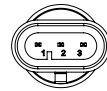
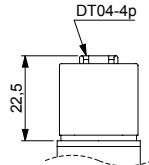
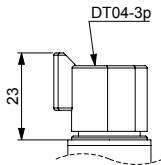
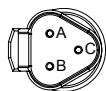
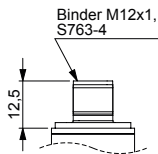
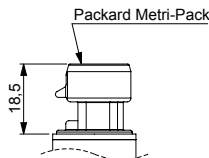
Input parameters								
Pressure ranges* (in bar)	P <sub>nominal</sub>	60	100	160	250	400	600	900
	P <sub>overload</sub>	120	200	320	500	800	1200	1400
	P <sub>burst</sub>	250	500	750	1000	1400	1800	2000
* Relative pressure								
Mechanical connections	various threads e.g. G1/4"A form E; G3/8" form G; 1/4"-18 NPT; 7/16-20 UNF							
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							
Output sizes								
Electrical connections	various el. connections e.g. Packard Metri-Pack; Binder M12x1 (plastic) 4P; DT 04-3P; DT 04-4P; AMP Superseal							
Output signals	4...20 mA, 1...5 V ratiometric 0.5...4.5 V at UB = 5V DC							
Supply voltage	I2 = 10...32 V DC; U5 = 8...32 V DC; UR = 5 V DC							
Response time	< 1 ms							
Performance characteristics								
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							
Ambient temperature	- 40 ... + 105°C							
Medium temperature	- 40 ... + 125°C							
Storage temperature	- 40 ... + 125°C							
Shock resistance	1000 g to IEC 60068-2-32							
Vibration resistance	20 g to IEC 60068-2-6							
Protection class	IP 65/IP 67 (depending on electrical connection)							
Electrical protection								
Reverse polarity	present UB+ / UB							
Dielectric strength	HV 350 V DC							
Short-circuit strength	KS Out+ / UB- (for 1 s)							
CE-conformity								
EMV guideline	2014/30/EU acc. to DIN EN 61326-1, DIN EN 61326-2-3							
RoHS guideline	2011/65/EU							
Other								
Weight	~ 50 g							
Lifetime	> 10 million load cycles							

## MARKETS/APPLICATION



ELECTRICAL CONNECTIONS

Packard Metri-Pack      Binder M12x1 (S763-4)\*      DT04-3P      DT04-4P      AMP Superseal



	Pin A	Pin B	Pin C
0,5-4,5 V; 1-5 V	-	+	V/I out
4-20 mA	-	+	nc

	Pin 1	Pin 2	Pin 3	Pin 4
	+	V/I out	-	nc
	+	nc	-	nc

	Pin A	Pin B	Pin C
	+	-	V/I out
	+	-	nc

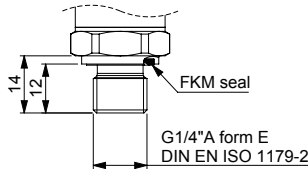
	Pin 1	Pin 2	Pin 3	Pin 4
	-	+	nc	V/I out
	-	+	nc	nc

	Pin A	Pin B	Pin C
	V/I out	-	+
	nc	-	+

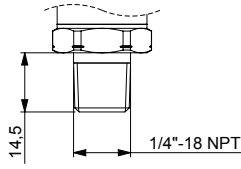
\* Plastic PBT-GF30      < 60 bar vented; different connector colours on request

PROCESS CONNECTIONS

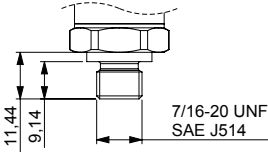
G 1/4"A form E



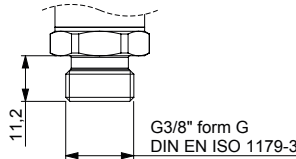
1/4"-18 NPT



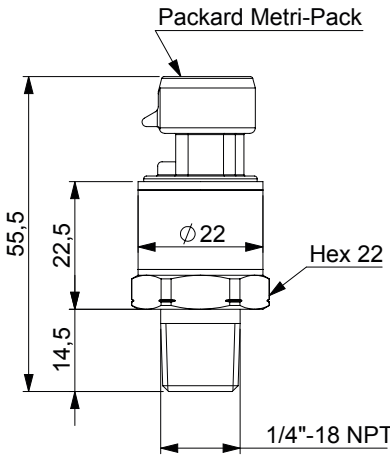
7/16-20UNF



G 3/8", form G



PRODUCT CONSTRUCTION



Integrated snubber on request

ORDER CODE – PMP-S200

PMP-S200-XXXX-XXX-(XX...XXXXX)-XX-XX-XX-XX-XXX

Series

S200 = SPT series

Approvals

0 = No approvals  
H = EC 79/2009 (only up to 600 bar)

Output signals

UR = 0,5...4,5 V (ratiometric)  
I2 = 4...20 mA (2L)  
U5 = 1...5 V

Measuring ranges

0...60/100/160/250/400/600/900

Unit

00 = Special unit  
01 = bar  
16 = psi

Type of Pressure

g = Relative pressure

Customised

Article number

Electrical connections

00 = Special connector  
01 = Packard Metri-Pack  
05 = Binder M12x1 (plastic); 4P  
06 = DT 04-3P  
14 = DT 04-4P  
11 = AMP Superseal

Process connections

00 = special connection  
01 = G 1/4"A form E  
06 = G 3/8" form G  
08 = 1/4"-18 NPT  
09 = 7/16-20 UNF

Ordering information for OEM:  
The PMP-S200 pressure transmitter series has been specially developed for series use and is available from an order quantity of 500 units per version.