

HT-PMP-S200 Weldless cell OEM pressure sensor



- Low cost OEM sensor
- Suitable for hydrogen applications (EC79)
- Compact design
- Up to 900 Bar
- Stainless Steel 316L wetted parts



Plant Engineering
Industrial machinery
Agricultural machinery
Hydraulics
Automotive

- 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
- Customisable designs possible
- Diagnostic function based on the output signal (optional)

DESCRIPTION

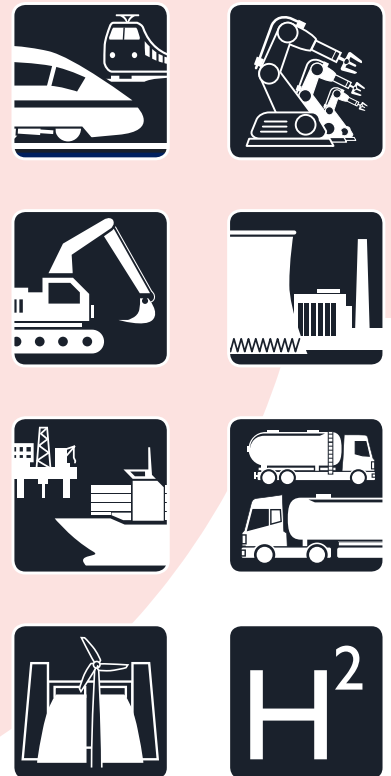
The piezoresistive, compact pressure transmitter (without oil reservoir) is based on a new type of two-chip technology (P2P), which enables the highest demands on robustness and performance such as stability, vibration/shock resistance. These are specially designed for OEM's for use in harsh environmental conditions, such as off-road sectors. All manufacturing steps from packaging in modern clean rooms to final calibration take place in our manufacturing plant in Germany. Special adaptations can be quickly evaluated and implemented.



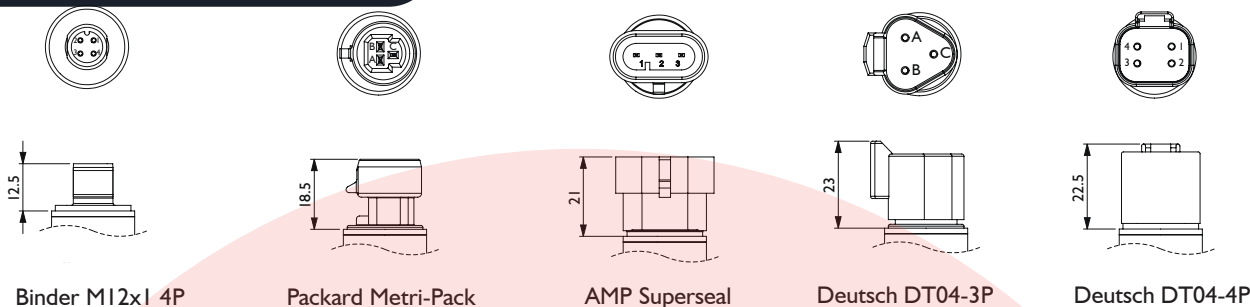
TECHNICAL SPECIFICATIONS

Input parameters																									
Pressure ranges* (in bar)	<table border="1"> <tr> <td>$P_{nominal}$</td> <td>60</td> <td>100</td> <td>160</td> <td>250</td> <td>400</td> <td>600</td> <td>900</td> </tr> <tr> <td>$P_{overload}$</td> <td>120</td> <td>200</td> <td>320</td> <td>500</td> <td>800</td> <td>1200</td> <td>1400</td> </tr> <tr> <td>P_{burst}</td> <td>250</td> <td>500</td> <td>750</td> <td>1000</td> <td>1400</td> <td>1800</td> <td>2000</td> </tr> </table>	$P_{nominal}$	60	100	160	250	400	600	900	$P_{overload}$	120	200	320	500	800	1200	1400	P_{burst}	250	500	750	1000	1400	1800	2000
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$P_{overload}$	120	200	320	500	800	1200	1400																		
P_{burst}	250	500	750	1000	1400	1800	2000																		
	*Relative pressure																								
Mechanical Connections	Various threads available G1/4" A form E; G3/8" form G; 1/4"-18 NPT; 7/16-20 UNF																								
Tightening torque	25Nm; max up to 50Nm																								
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...20mA, 1...5V ratiometric 0.5...4.5V at UB = 5VDC																								
Supply voltage	I2 = 10...32VDC; U5 = 8...32VDC; UR = 5VDC																								
Response time	< 1ms																								
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	1000g to IEC 60068-2-32																								
Vibration resistance	20g 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 350VDC																								
Short-circuit strength	KS Out+ / UB- (for Is)																								
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	~ 50g																								
Lifetime	> 10 million load cycles																								

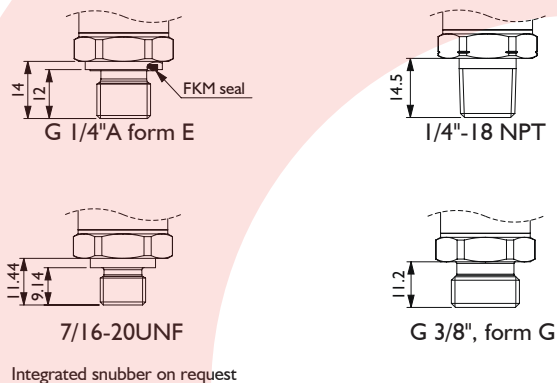
MARKETS/APPLICATION



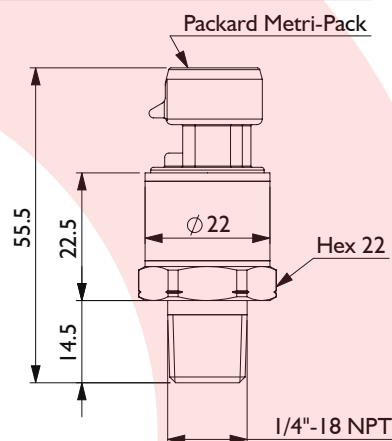
ELECTRICAL CONNECTIONS



PROCESS CONNECTIONS



PRODUCT CONSTRUCTION



ORDERING CODE

HT-PMP-S200- A - BB - CCC - DD - g - EE - FF

Replace **A** with the code for the approval required
0 = No approvals
H = EC 79/2009 (up to 600 bar)

Replace **BB** with the code for output signals required
UR = 0.5...4.5 V (ratiometric)
I2 = 4...20 mA (2L)
U5 = 1...5 V

Replace **CCC** with the code for measuring ranges required (bar/psi)
060 = 0...60 / 0...870
100 = 0...100 / 0...1450
160 = 0...160 / 0...2320
250 = 0...250 / 0...3626
400 = 0...400 / 0...5802
600 = 0...600 / 0...8702
900 = 0...900 / 0...13053

Replace **DD** with the code for unit required
01 = bar
16 = psi

Other units available on request

Replace **EE** with the code for electrical connections required
01 = Binder M12x1 4P
02 = Packard Metri-Pack
03 = AMP Superseal
04 = Deutsch DT04-3P
05 = Deutsch DT04-4P

Other connections available on request

Replace **FF** with the process connections required
01 = G1/4 A form E
06 = G3/8 form G
08 = 1/4-18 NPT
09 = 7/16-20 UNF

Other connections available on request

Other configurations available on request.

Ordering information for OEMS:

The HT-PMP-S200 pressure transmitter series has been specially developed for OEM use and is available from an order quantity of minimum 500 units per version (low quantities available for trial purposes).

ORDERING EXAMPLE

HT-PMP-S200-H-UR-600-01-05-01

HT-PMP-S200 with EC 79/2009 approval, 0.5...4.5V (ratiometric) output signal, 0...600 bar pressure range, Binder M12x1 (plastic); 4P electrical connections and G1/4"A form E.