

SITRANS P measuring instruments for pressure

Transmitters for gage, absolute and differential pressure, flow and level

DS III series for differential pressure and flow

2

Selection and Ordering data	Order code		
<i>Further designs</i> Add "-Z" to Order No. and specify Order code.	HART	PA	FF
Pressure transmitter with mounting bracket made of:			
• Steel	A01	✓	✓
• Stainless steel	A02	✓	✓
O-rings for process flanges (instead of FPM (Viton))			
• PTFE (Teflon)	A20	✓	✓
• FEP (with silicone core, approved for food)	A21	✓	✓
• FPM (Kalrez, compound 4079)	A22	✓	✓
• NBR (Buna N)	A23	✓	✓
Plug			
• Han 7D (metal, gray)	A30	✓	
• Han 8U (instead of Han 7D)	A31	✓	
	A40	✓	✓
Sealing screws ¼-18 NPT, with valve in mat. of process flanges			
Cable sockets for M12 connectors (metal)	A50	✓	✓
Rating plate inscription (instead of German)			
• English	B11	✓	✓
• French	B12	✓	✓
• Spanish	B13	✓	✓
• Italian	B14	✓	✓
English rating plate (calibration certificate)	B21	✓	✓
Pressure units in inH ₂ O or psi			
Quality inspection certificate (Factory calibration) to IEC 60770-2¹⁾	C11	✓	✓
Acceptance test certificate²⁾ To EN 10 204-3.1	C12	✓	✓
Factory certificate To EN 10 204-2.2	C14	✓	✓
"Functional Safety (SIL)" certificate	C20	✓	
"PROFIsafe" certificate and protocol	C21		✓
Setting of upper limit of output signal to 22.0 mA	D05	✓	
Manufacturer's declaration acc. to NACE (only together with seal diaphragm made of Hastelloy and stainless steel)	D07	✓	✓
Type of protection IP68 (not together with 7D/ Han 8U plug, cable gland Pg 13.5)	D12	✓	✓
Digital indicator alongside the input keys (only together with the devices 7MF4433-...-2-.A.6 or -.A.7-Z, Y21 or Y22 + Y01)	D27	✓	✓
Process flange screws made of Monel (max. nominal pressure PN20)	D34	✓	✓
	D37	✓	✓
Supplied with oval flange set (2 items), PTFE packings and stainless steel screws in thread of process flanges	D37	✓	✓
Use in or on zone 1D/2D (only together with type of protection "Intrinsic safety (EEx ia)")	E01	✓	✓
Use on zone 0 (only together with type of protection "Intrinsic safety (EEx ia)")	E02	✓	✓
TÜV approval to AD/TRD (only together with type of protection "Intrinsic safety (EEx ia)")	E06	✓	
Overfilling safety device for flammable and non-flammable liquids (max. PN 32 (MVWP 464 psi), basic device with type of protection "Intrinsic safety (EEx ia)", to WHG and VbF, not together with measuring cell filling "inert liquid")	E08	✓	✓

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Oxygen application (max. 120 bar (1740 psi) at 60°C (140 °F) with oxygen measurement and inert liquid)	E10	✓	✓
Explosion-proof "Intrinsic safety" to INMETRO (Brazil) (only for transmitter 7MF4...-.....-B..)	E25	✓	✓
Explosion-proof "Intrinsic safety" to NEPSI (China) (only for transmitter 7MF4...-.....-B..)	E55	✓	✓
Explosion protection "Explosion-proof" to NEPSI (China) (only for transmitter 7MF4...-.....-D..)	E56	✓	✓
Explosion-proof "Zone 2" to NEPSI (China) (only for transmitter 7MF4...-.....-E..)	E57	✓	✓
Interchanging of process connection side	H01	✓	✓
Vent on side for gas measurements	H02	✓	✓
Stainless steel process flanges for vertical differential pressure lines (not together with K01, K02 and K04 ³⁾)	H03	✓	✓
Process flange			
• Hastelloy	K01	✓	✓
• Monel	K02	✓	✓
• Stainless steel with PVDF insert max. PN 10 (MWP 145 psi), max. temperature of medium 90 °C (194 °F)	K04	✓	✓
For ½-14 NPT inner process connection on the side in the middle of the process flange, vent valve not possible			

✓ = available

1) When the manufacture's certificate M (calibration certificate) has to be ordered for transmitters with diaphragm seals, it is recommended only to order this certificate exclusively with the diaphragm seals. The measuring accuracy of the total combination is certified here.

2) When the acceptance test certificate 3.1 for transmitters with direct-connected diaphragm seals is ordered, this certificate must also be ordered with the corresponding seals.

3) Not suitable for connection of remote seal

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Selection and Ordering data	Order code		
<i>Additional data</i>	HART	PA	FF
Add "-Z" to Order No. and specify Order code.			
Measuring range to be set Specify in plain text:			
• With linear characteristic (max. 5 digits): Y01: ... up to ... mbar, bar, kPa, MPa, psi	Y01	✓	
• With square-rooted characteristic (max. 5 digits): Y02: ... up to ... mbar, bar, kPa, MPa, psi	Y02	✓	
Measuring point number (TAG No.) Max. 16 char., specify in plain text: Y15:	Y15	✓	✓
Measuring point text Max. 27 char., specify in plain text: Y16:	Y16	✓	✓
Entry of HART address (TAG) Max. 8 char., specify in plain text: Y17:	Y17	✓	
Setting of pressure indicator in pressure units Specify in plain text (standard setting: mA): Y21: mbar, bar, kPa, MPa, psi, ... Note: The following pressure units can be selected: bar, mbar, mm H ₂ O ¹⁾ , inH ₂ O ¹⁾ , ftH ₂ O ¹⁾ , mmHG, inHG, psi, Pa, kPa, MPa, g/cm ² , kg/cm ² , Torr, ATM oder %) ref. temperature 20 °C	Y21	✓	✓
Setting of pressure indicator in non-pressure units Specify in plain text: Y22: up to l/min, m ³ /h, m, USgpm, ... (specification of measuring range in pressure units "Y01" or "Y02" is essential, unit with max. 5 characters)	Y22 ¹⁾ + Y01 or Y02	✓	
Preset bus address (possible between 1 and 126) Specify in plain text: Y25:	Y25		✓

Only "Y01", "Y21", "Y22", "Y25" and "D05" can be factory preset

✓ = available

¹⁾ Not together with over-filling safety device for flammable and non-flammable liquids (Order code "E08")