

Selection and Ordering data		Order No.	
SITRANS P pressure transmitters for absolute pressure, from the differential pressure, series DS III HART		7 MF 4 3 3 3 -	
Measuring cell filling	Measuring cell cleaning		
Silicone oil	Standard	1	
Inert liquid ¹⁾	Grease-free	3	
Span			
8.3 ... 250 mbar a	(0.12 ... 3.63 psi a)	E)	D
43 ... 1300 mbar a	(0.62 ... 18.9 psi a)	E)	F
0.16 ... 5 bar a	(2.32 ... 72.5 psi a)	E)	G
1 ... 30 bar a	(14.5 ... 435 psi a)		H
5.3 ... 100 bar a	(76.9 ... 1450 psi a)		KE
Wetted parts materials			
Seal diaphragm	Parts of measuring cell		
Stainless steel	Stainless steel		A
Hastelloy	Stainless steel		B
Hastelloy	Hastelloy		C
Tantalum	Tantalum		E
Monel	Monel	E)	H
Gold	Gold		L
Version for diaphragm seal ²⁾³⁾⁴⁾			Y
Process connection			
Female thread 1/4-18 NPT with flange connection			
• Sealing screw opposite process connection			
- Mounting thread M10 to DIN 19213			0
- Mounting thread 7/16-20 UNF to EN 61518			2
• Vent on side of process flange ⁵⁾			
- Mounting thread M10 to DIN 19213			4
- Mounting thread 7/16-20 UNF to EN 61518			6
Non-wetted parts materials			
Process flange screws	Electronics housing		
Stainless steel	Die-cast aluminium		2
Stainless steel	Stainless steel precision casting ⁶⁾		3
Version			
• Standard version			1
• International version, English label inscriptions, documentation in 5 languages on CD			2
Explosion protection			
• Without			A
• With ATEX, Type of protection:			
- "Intrinsic safety (Ex ia)"			B
- "Explosion-proof (Ex d)" ⁷⁾			D
- "Intrinsic safety and explosion-proof enclosure (Ex ia + Ex d)" ⁸⁾			P
- "Ex nA/nL (zone 2)"			E
- "Intrinsic safety, explosion-proof enclosure and dust explosion protection (Ex ia + Ex d + Zone 1D/2D)" ⁸⁾			R
• With FM + CSA, Type of protection:			
- "Intrinsic safety and explosion-proof (is + xp)" ⁷⁾			NC
Electrical connection / cable entry			
• Screwed gland Pg 13.5 ⁹⁾			A
• Screwed gland M20x1.5			B
• Screwed gland 1/2-14 NPT			C
• Han 7D plug (plastic housing) incl. mating connector ⁹⁾			D
• Plug M12 (metal) ¹⁰⁾			F

Selection and Ordering data		Order No.	
SITRANS P pressure transmitters for absolute pressure, from the differential pressure, series DS III HART		7 MF 4 3 3 3 -	
Display			
• Without (digital indicator hidden, setting: mA)			1
• With visible digital indicator			6
• With customer-specific digital indicator (setting as specified, Order code "Y21" or required)			7

Power supply units see "SITRANS I power supply units and isolation amplifiers".

Factory-mounting of shut-off valves and valve manifolds see page 2/133.


Included in delivery of the device:

- Brief instructions (Leporello)
- CD-ROM with detailed documentation
- Sealing plug(s) or sealing screw(s) for the process flanges(s)

- 1) For oxygen applications, add Order code E10.
- 2) Version 7MF4333-1DY... only up to max. span 200 mbar a (2.9 psi a).
- 3) 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.
- 4) 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.
- 5) Not for span "5.3 ... 100 bar a (76.9 ... 1450 psi a)". Position of the top vent valve in the process flange (see dimensional drawing).
- 6) Not together with Electrical connection „Screwed gland Pg 13.5" and „Han7D plug".
- 7) Without cable gland, with blanking plug
- 8) With enclosed cable gland EEx ia and blanking plug
- 9) Not together with type of protection "Explosion-proof" and and type of protection "Ex nA".
- 10) Not together with types of protection "Explosion-proof" or "Intrinsic safety and explosion-proof"

E) Combinations of the versions marked with E) are subject to the export regulations AL: 2B230, ECCN: N.

F) Subject to export regulations AL: 91999, ECCN: N.

Selection and Ordering data		Order No.
SITRANS P pressure transmitters for absolute pressure (from the differential pressure series)		
DS III PA series (PROFIBUS PA)	F)	7MF4334 -
DS III FF series (FOUNDATION Fieldbus)	F)	7MF4335 -
		
Display		
• Without (digital display hidden)		1
• With visible digital indicator		6
• With customer-specific digital indicator (setting as specified, Order code "Y21" or required)		7
Factory-mounting of shut-off valves and valve manifolds see page 2/133.		
Included in delivery of the device:		
<ul style="list-style-type: none"> • Brief instructions (Leporello) • CD-ROM with detailed documentation • Sealing plug(s) or sealing screw(s) for the process flanges(s) 		
<p>1) For oxygen application, add Order code E10.</p> <p>2) Version 7MF4334-1DY... only up to max. span 200 mbar a (2.9 psi a).</p> <p>3) 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 <u>total</u> combination is certified here.</p> <p>4) 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.</p> <p>5) Not for nominal measuring range 100 bar a (1450 psi a). Position of the top vent valve in the process flange (see dimensional drawing).</p> <p>6) Without cable gland, with blanking plug</p> <p>7) With enclosed cable gland EEx ia and blanking plug</p> <p>8) Cannot be used together with the following types of protection: "Explosion-proof" and "Intrinsic safety and explosion-proof".</p> <p>E) Combinations of the versions marked with E) are subject to the export regulations AL: 2B230, ECCN: N.</p> <p>F) Subject to export regulations AL: 9I999, ECCN: N.</p>		

Selection and Ordering data		Order code		
<i>Further designs</i>		HART	PA	FF
Add "-Z" to Order No. and specify Order code.				
Pressure transmitter with mounting bracket made of: • Steel • Stainless steel	A01	✓	✓	✓
	A02	✓	✓	✓
O-rings for process flanges (instead of FPM (Viton)) • PTFE (Teflon) • FEP (with silicone core, approved for food) • FFKM (Kalrez, compound 4079) • NBR (Buna N)	A20	✓	✓	✓
	A21	✓	✓	✓
	A22	✓	✓	✓
	A23	✓	✓	✓
Plug • Han 7D (metal, gray) • Han 8U (instead of Han 7D)	A30	✓		
	A31	✓		
Sealing screws 1/4-18 NPT, with valve in material of process flanges	A40	✓	✓	✓
Cable sockets for M12 connectors (metal)	A50	✓	✓	✓
Rating plate inscription (instead of German) • English • French • Spanish • Italian	B11	✓	✓	✓
	B12	✓	✓	✓
	B13	✓	✓	✓
	B14	✓	✓	✓
English rating plate Pressure units in inH ₂ O or psi	B21	✓	✓	✓
Manufacturer's test certificate M (calibration certificate)¹⁾ To DIN 55350, Part 18 and to ISO 8402	C11	✓	✓	✓
Acceptance test certificate²⁾ To EN 10204-3.1	C12	✓	✓	✓
Factory certificate To EN 10204-2.2	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 Han 7D/Han 8U plug, cable gland PG 13.5)	D12	✓	✓	✓
Digital indicator alongside the input keys (only together with the devices 7MF4333-....2-.A.6 or -.A.7-Z, Y21 or Y22 + Y01)	D27	✓	✓	✓
Supplied with oval flange (1 item), PTFE packing and stainless steel screws in thread of process flange	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	✓	✓	✓
Oxygen application (max. 160 bar a (2320 psi a) with oxygen measurement and inert liquid)	E10	✓	✓	✓
Explosion-proof "Intrinsic safety" to INMETRO (Brazil) (only for transmitter 7MF4...-.....-B..)	E25	✓	✓	✓

Selection and Ordering data		Order code		
<i>Further designs</i>		HART	PA	FF
Add "-Z" to Order No. and specify Order code.				
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	✓	✓	✓
Process flange • Hastelloy • Monel • Stainless steel with PVDF insert max. PN 10 (MWP 145 psi), max. temperature of medium 90 °C (194 °F) For 1/2-14 NPT inner process connection on the side in the middle of the process flange, vent valve not possible	K01	✓	✓	✓
	K02	✓	✓	✓
	K04	✓	✓	✓
Additional data				
Add "-Z" to Order No. and specify Order code.				
Measuring range to be set Specify in plain text (max. 5 digits): Y01: ... up to ... mbar, bar, kPa, MPa, psi	Y01	✓		
Measuring point number (TAG No.) Max. 16 characters, specify in plain text: Y15:	Y15	✓	✓	✓
Measuring point text Max. 27 characters, specify in plain text: Y16:	Y16	✓	✓	✓
Entry of HART address (TAG) Max. 8 characters, specify in plain text: Y17:	Y17	✓		
Setting of pressure indication 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 [°] , inH ₂ O [°] , ftH ₂ O [°] , mmHG, inHG, psi, Pa, kPa, MPa, g/cm ² , kg/cm ² , Torr, ATM oder %) ref. temperature 20 °C	Y21	✓	✓	✓
Setting of pressure indication 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" is essential, unit with max. 5 characters)	Y22 + Y01	✓		
Preset bus address Specify in plain text: Y25:	Y25		✓	
Only "Y01", "Y21", "Y22", "Y25" and "D05" can be factory preset				
✓ = 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 <u>total</u> combination is certified here. ²⁾ Whe 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.				