

Selection and Ordering data		Order No.
Pressure transmitter for gauge and absolute pressure, front-flush diaphragm, SITRANS P DS III HART		F) 7 MF 4 1 3 3 -
Measuring cell filling	Measuring cell cleaning	
Silicone oil	normal	1
Inert liquid	grease-free to cleanliness level 2	3
FDA compliant fill fluid		
• Neobee oil	normal	4
Measuring span (min. ... max.)		
0,01 ... 1 bar	(0.15 ... 14.5 psi)	B
0,04 ... 4 bar	(0.58 ... 58 psi)	C
0,16 ... 16 bar	(2.32 ... 232 psi)	D
0,63 ... 63 bar	(9.14 ... 914 psi)	E
13 ... 1300 mbar a ¹⁾	(0.62 ... 18.85 psia) ¹⁾	S
0,05 ... 5 bar a ¹⁾	(0.7 ... 72.5 psia) ¹⁾	T
0,3 ... 30 bar a ¹⁾	(4.35 ... 435 psia) ¹⁾	U
Wetted parts materials		
Seal diaphragm	Connection shank	
Stainless steel	Stainless steel	A
Hastelloy ²⁾	Stainless steel	B
Process connection		
• Flange version with Order Code M., N., R. or Q..		7
Non-wetted parts materials		
• Housing made of die-cast aluminium		0
• Housing stainless steel precision casting		3
Version		
• Standard versions		1
• International version, English label inscriptions, documentation in 5 languages on CD (no order code selectable)		2
Explosion protection		
• None		A
• With ATEX, Type of protection:		
- "Intrinsic safety (EEx ia)"		B
- "Explosion-proof (EExd)" ³⁾		D
- "Intrinsic safety, explosion-proof enclosure and dust explosion protection (EEx ia+ EEx d + Zone 1D/2D)" ⁴⁾		R
• With FM + CSA, Type of protection:		
- "Intrinsic Safe und Explosion Proof (is + xp)" ³⁾ (Available soon)		NC
Electrical connection/cable entry		
• Inner thread M20 x 1.5		B
• Female thread ½-14 NPT		C
• M12 connectors (metal) ⁵⁾		F
Display		
• Without display		0
• Without visible display (display concealed, setting: mA)		1
• with visible display, setting: mA		6
• with customer-specific display (setting as specified, Order Code "Y21" or "Y22" required)		7

► Available ex stock

Power supply units see Chap. 8 "Supplementary Components".

Included in delivery of the device:

- Brief instructions (Leporello)
- CD-ROM with detailed documentation

1) Not with temperature decoupler P00 and P10, not for process connections R02, R04, R10 and R11, and can only be ordered in conjunction with silicone oil.

2) Only possible for flange with M., N. and Q. option.

3) Without cable gland, with blanking plug

4) With enclosed cable gland EEx ia and blanking plug

5) M12 delivered without cable socket

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

Selection and Ordering data		Order No.
Pressure transmitter P for gauge and absolute pressure, front-flush diaphragm:		
SITRANS P DS III with PROFIBUS PA (PA)	F)	7 MF 4 1 3 4 -
SITRANS P DS III with FOUNDATION Fieldbus (FF)	F)	7 MF 4 1 3 5 -
■ ■ ■ ■ ■ - ■ ■ ■ ■ ■		
Measuring cell filling	Measuring cell cleaning	
Silicone oil	normal	1
Inert liquid	grease-free to cleanliness level 2	3
FDA compliant fill fluid		
• Neobee oil	normal	4
Nominal measuring range		
1 bar	(14.5 psi)	B
4 bar	(58 psi)	C
16 bar	(232 psi)	D
63 bar	(914 psi)	E
1300 mbar a ¹⁾	(18.85 psia) ¹⁾	N
		O
		T
		U
Wetted parts materials		
Seal diaphragm	Connection shank	
Stainless steel	Stainless steel	A
Hastelloy ²⁾	Stainless steel	B
Process connection		
• Flange version with Order Code M.., N.., R.. or Q..		7
Non-wetted parts materials		
• Housing made of die-cast aluminium		0
• Housing stainless steel precision casting		3
Version		
• Standard versions		1
• International version, English label inscriptions, documentation in 5 languages on CD (no order code selectable)		2
Explosion protection		
• None		A
• With ATEX, Type of protection:		
- "Intrinsic safety (EEx ia)"		B
- "Explosion-proof (EExd) ³⁾		D
- "Intrinsic safety, explosion-proof enclosure and dust explosion protection (EEx ia+ EEx d + Zone 1D/2D) ⁴⁾		R
• With FM + CSA, Type of protection:		
- "Intrinsic Safe und Explosion Proof (is + xp) ³⁾ (Available soon)		NC
Electrical connection/cable entry		
• Screwed gland M20 x 1.5		B
• Screwed gland ½-14 NPT		C
• Han 7D plug (plastic housing) incl. mating connector ⁵⁾		D
• M12 connectors (metal) ⁶⁾		F

Selection and Ordering data		Order No.
Pressure transmitter P for gauge and absolute pressure, front-flush diaphragm:		
SITRANS P DS III with PROFIBUS PA (PA)	F)	7 MF 4 1 3 4 -
SITRANS P DS III with FOUNDATION Fieldbus (FF)	F)	7 MF 4 1 3 5 -
■ ■ ■ ■ ■ - ■ ■ ■ ■ ■		
Display		
• Without display		0
• Without visible display (display concealed, setting: mA)		1
• With visible display		6
• With customer-specific display (setting as specified, Order Code "Y21" required)		7
▶ Available ex stock		
Included in delivery of the device:		
• Brief instructions (Leporello)		
• CD-ROM with detailed documentation		
1) Not with temperature decoupler P00 and P10, not for process connections R01, R02, R04, R10 and R11, and can only be ordered in conjunction with silicone oil.		
2) Only possible for flange with M.., N.. and Q.. option.		
3) Without cable gland, with blanking plug		
4) With enclosed cable gland EEx ia and blanking plug		
5) Not in conjunction with types of protection "Explosion-proof" and "Ex nA", "Intrinsic safety" and "Explosion-proof".		
6) M12 delivered without cable socket		
F) Subject to export regulations AL: 91999, ECCN: N.		

Selection and Ordering data	Order code		
<i>Further designs</i> Add "-Z" to Order No. and specify Order Code.	HART	PA	FF
Plug • Angled • Han 8D (metal, gray)	A32 A33	✓ ✓	✓ ✓
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 and/or psi	B21	✓	✓
Quality inspection certificate (Five-step factory calibration) to IEC 60770-2	C11	✓	✓
Inspection certificate Acc. to EN 10204-3.1	C12	✓	✓
Factory certificate Acc. to EN 10204-2.2	C14	✓	✓
"Functional safety (SIL2)" certificate to IEC 61508	C20	✓	✓
PROFIsafe certificate and protocol	C21	✓	✓
"Functional safety (SIL2/3)" certificate to IEC 61508	C23	✓	✓
Device passport Russia (For price request please contact the technical support www.siemens.com/automation/support-request.)	C99	✓	✓
Export approval Korea	E11	✓	✓
Explosion-proof "Intrinsic safety" (Ex ia) to INMETRO (Brazil) (only for transmitter 7MF4...-.....-B..)	E25	✓	✓
Explosion-proof "Intrinsic safety" (Ex d) to INMETRO (Brazil) (only for transmitter 7MF4...-.....-D..)	E26	✓	✓
Explosion-proof "Intrinsic safety" (Ex ia + Ex d) to INMETRO (Brazil) (only for transmitter 7MF4...-.....-P..)	E28	✓	✓
Ex Approval IEC Ex (EEx ia) (only for transmitter 7MF4...-.....-B..)	E45	✓	✓
Ex Approval IEC Ex (EEx id) (only for transmitter 7MF4...-.....-D..)	E46	✓	✓
Two coats of lacquer on casing and cover (PU on epoxy)	G10	✓	✓
Flanges to EN 1092-1, Form b1 • DN 25, PN 40 ¹⁾ • DN 25, PN 100 ¹⁾ • DN 40, PN 40 • DN 40, PN 100 • DN 50, PN 16 • DN 50, PN 40 • DN 80, PN 16 • DN 80, PN 40	M11 M21 M13 M23 M04 M14 M06 M16	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Flanges to ASME B16.5 • Stainless steel flange 1" class 150 ¹⁾ • Stainless steel flange 1½" class 150 • Stainless steel flange 2" class 150 • Stainless steel flange 3" class 150 • Stainless steel flange 4" class 150 • Stainless steel flange 1" class 300 ¹⁾ • Stainless steel flange 1½" class 300 • Stainless steel flange 2" class 300 • Stainless steel flange 3" class 300 • Stainless steel flange 4" class 300	M40 M41 M42 M43 M44 M45 M46 M47 M48 M49	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

Selection and Ordering data	Order code		
<i>Further designs</i> Add "-Z" to Order No. and specify Order Code.	HART	PA	FF
Threaded connector to DIN 3852-2, form A, thread to ISO 228 • G ¾"-A, front-flush ²⁾ • G 1"-A, front-flush ²⁾ • G 2"-A, front-flush ²⁾	R01 R02 R04	✓ ✓ ✓	✓ ✓ ✓
Tank connection³⁾ Sealing is included in delivery • TG 52/50, PN 40 • TG 52/150, PN 40	R10 R11	✓ ✓	✓ ✓
Sanitary process connection according DIN 11851 (Dairy connection) • DN 50, PN 25 • DN 80, PN 25	N04 N06	✓ ✓	✓ ✓
Tri-Clamp connection according DIN 32676/ISO 2852 • DN 50/2", PN 16 • DN 65/3", PN 10	N14 N15	✓ ✓	✓ ✓
Varivent connection Certified to EHEDG • Type N = 68 for Varivent housing DN 40 ... 125 und 1½" ... 6", PN 40	N28	✓	✓
Temperature decoupler up to 200 °C⁴⁾ for version with front-flush diaphragm	P00	✓	✓
Temperature decoupler up to 250 °C Measuring cell filling: High-temperature oil, only in conjunction with measuring cell filling silicone oil	P10	✓	✓
Bio-Control sanitary process connection Certified to EHEDG • DN 50, PN 16 • DN 65, PN 16	Q53 Q54	✓ ✓	✓ ✓
Sanitary process connection to DRD • DN 50, PN 40	M32	✓	✓
SMS socket with union nut • 2" • 2½" • 3"	M67 M68 M69	✓ ✓ ✓	✓ ✓ ✓
SMS threaded socket • 2" • 2½" • 3"	M73 M74 M75	✓ ✓ ✓	✓ ✓ ✓
IDF socket with union nut ISO 2853 • 2" • 2½" • 3"	M82 M83 M84	✓ ✓ ✓	✓ ✓ ✓
IDF threaded socket ISO 2853 • 2" • 2½" • 3"	M92 M93 M94	✓ ✓ ✓	✓ ✓ ✓
Sanitary process connection to NEUMO Bio-Connect screw connection Certified to EHEDG • DN 50, PN 16 • DN 65, PN 16 • DN 80, PN 16 • DN 100, PN 16 • DN 2", PN 16 • DN 2½", PN 16 • DN 3", PN 16 • DN 4", PN 16	Q05 Q06 Q07 Q08 Q13 Q14 Q15 Q16	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

Selection and Ordering data	Order code		
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Further designs

Add "-Z" to Order No. and specify Order Code.

		HART	PA	FF
Sanitary process connection to NEUMO Bio-Connect flange connection Certified to EHEDG				
• DN 50, PN 16	Q23	✓	✓	✓
• DN 65, PN 16	Q24	✓	✓	✓
• DN 80, PN 16	Q25	✓	✓	✓
• DN 100, PN 16	Q26	✓	✓	✓
• DN 2", PN 16	Q31	✓	✓	✓
• DN 2½", PN 16	Q32	✓	✓	✓
• DN 3", PN 16	Q33	✓	✓	✓
• DN 4", PN 16	Q34	✓	✓	✓

Selection and Ordering data	Order code		
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Further designs

Add "-Z" to Order No. and specify Order Code.

		HART	PA	FF
Sanitary process connection to NEUMO Bio-Connect clamp connection Certified to EHEDG				
• DN 50, PN 16	Q39	✓	✓	✓
• DN 65, PN 10	Q40	✓	✓	✓
• DN 80, PN 10	Q41	✓	✓	✓
• DN 100, PN 10	Q42	✓	✓	✓
• DN 2½", PN 16	Q48	✓	✓	✓
• DN 3", PN 10	Q49	✓	✓	✓
• DN 4", PN 10	Q50	✓	✓	✓

Selection and Ordering data	Order code		
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Further designs

Add "-Z" to Order No. and specify Order Code.

		HART	PA	FF
Sanitary process connection to NEUMO Bio-Connect S flange connection Certified to EHEDG				
• DN 50, PN 16	Q63	✓	✓	✓
• DN 65, PN 10	Q64	✓	✓	✓
• DN 80, PN 10	Q65	✓	✓	✓
• DN 100, PN 10	Q66	✓	✓	✓
• DN 2", PN 16	Q72	✓	✓	✓
• DN 2½", PN 10	Q73	✓	✓	✓
• DN 3", PN 10	Q74	✓	✓	✓
• DN 4", PN 10	Q75	✓	✓	✓

Selection and Ordering data	Order code		
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Further designs

Add "-Z" to Order No. and specify Order Code.

		HART	PA	FF
Aseptic threaded socket to DIN 11864-1 Form A approved according to EHEDG				
• DN 50, PN 25	N33	✓	✓	✓
• DN 65, PN 25	N34	✓	✓	✓
• DN 80, PN 25	N35	✓	✓	✓
• DN 100, PN 25	N36	✓	✓	✓

Selection and Ordering data	Order code		
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Further designs

Add "-Z" to Order No. and specify Order Code.

		HART	PA	FF
Aseptic flange with notch to DIN 11864-2 Form A approved according to EHEDG				
• DN 50, PN 16	N43	✓	✓	✓
• DN 65, PN 16	N44	✓	✓	✓
• DN 80, PN 16	N45	✓	✓	✓
• DN 100, PN 16	N46	✓	✓	✓

Selection and Ordering data	Order code		
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Further designs

Add "-Z" to Order No. and specify Order Code.

		HART	PA	FF
Aseptic flange with groove to DIN 11864-2 Form A approved according to EHEDG				
• DN 50, PN 16	N43 + P11	✓	✓	✓
• DN 65, PN 16	N44 + P11	✓	✓	✓
• DN 80, PN 16	N45 + P11	✓	✓	✓
• DN 100, PN 16	N46 + P11	✓	✓	✓

Selection and Ordering data	Order code		
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Further designs

Add "-Z" to Order No. and specify Order Code.

		HART	PA	FF
Aseptic clamp with groove to DIN 11864-3 Form A approved according to EHEDG				
• DN 50, PN 25	N53	✓	✓	✓
• DN 65, PN 25	N54	✓	✓	✓
• DN 80, PN 16	N55	✓	✓	✓
• DN 100, PN 16	N56	✓	✓	✓

- 1) Special seal in Viton included in the scope of delivery.
- 2) Lower measuring limit -100 mbar (1.45 psi).
- 3) The weldable socket can be ordered under accessories.
- 4) The maximum permissible temperatures of the medium depend on the respective cell fillings.

Selection and Ordering data	Order code		
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Additional data

Please add "-Z" to Order No. and specify Order code(s) and plain text.

		HART	PA	FF
Measuring range to be set Specify in plain text (max. 5 characters): Y01: ... up to ... mbar, bar, kPa, MPa, psi	Y01	✓		

		HART	PA	FF
Stainless steel tag plate (measuring point description) Max. 16 characters, specify in plain text: Y15:	Y15	✓	✓	✓

		HART	PA	FF
Measuring point text Max. 27 characters, specify in plain text: Y16:	Y16	✓	✓	✓

		HART	PA	FF
Entry of HART address (TAG) Max. 8 characters, specify in plain text: Y17:	Y17	✓		

		HART	PA	FF
Setting of pressure indicator in pressure units Specify in plain text (standard setting: bar): 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 or %) ref. temperature 20 °C	Y21	✓	✓	✓

		HART	PA	FF
Preset bus address possible between 1 and 126 Specify in plain text: Y25:	Y25		✓	

Only "Y01" and "Y21" can be factory preset
✓ = available

ordering example
Item line: 7MF4133-1DB20-1AB7-Z
B line: A22 + Y01 + Y21
C line: Y01: 1 ... 10 bar (14.5 ... 145 psi)
C line: Y21: bar (psi)