

Selection and Ordering data		Order No.
Pressure transmitter for gauge and absolute pressure, front-flush diaphragm, SITRANS P DS III HART		7MF4133-
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 (Ex ia)"		B
- "Explosion-proof (Ex d)" ³⁾		D
• FM + CSA (is + ep) + Ex ia + Ex d (ATEX)		S
• With FM + CSA, Type of protection:		
- "Intrinsic Safe und Explosion Proof (is + xp)" ³⁾ (Available soon)		N C
Electrical connection/cable entry		
• Inner thread M20 x 1.5		B
• Female thread ½-14 NPT		C
• M12 connectors (stainless steel) ^{4) 5) 6)}		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. 7 "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 available for flanges with options M.., N.. and Q..
- ³⁾ Without cable gland, with blanking plug
- ⁴⁾ M12 delivered without cable socket
- ⁵⁾ Not available with protection type „Ex d“ (options D and N)
- ⁶⁾ Not with protection types "Explosion-proof" and "Ex nA", „Intrinsic safe“ and „Explosion proof“.

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)		7 M F 4 1 3 4 -	
SITRANS P DS III with FOUNDATION Fieldbus (FF)		7 M F 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⁾	S	
5 bar a ¹⁾	(72.5 psia) ¹⁾	T	
30 bar a ¹⁾	(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 (Ex ia)"		B	
- "Explosion-proof (Ex d)" ³⁾		D	
• FM + CSA (is + ep) + Ex ia + Ex d (ATEX)		S	
• With FM + CSA, Type of protection:			
- "Intrinsic Safe und Explosion Proof (is + xp)" ³⁾ (Available soon)		N C	
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 ⁴⁾		D	
• M12 connectors (stainless steel) ^{5) 6) 7)}		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)		7 M F 4 1 3 4 -	
SITRANS P DS III with FOUNDATION Fieldbus (FF)		7 M F 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 available for flanges with options M.., N.. and Q..			
3) Without cable gland, with blanking plug			
4) Not in conjunction with types of protection "Explosion-proof" and "Ex ic", "Intrinsic safety" and "Explosion-proof".			
5) M12 delivered without cable socket			
6) Not available with protection type „Ex d“ (optionen D and N)			
7) Not with protection types "Explosion-proof" and "Ex nA", „Intrinsic safe" and „Explosion proof".			

Selection and Ordering data		Order code			
Further designs Add "-Z" to Order No. and specify Order Code.			HART	PA	FF
Plug					
• Angled	A32	✓			
• Han 8D (metal, gray)	A33	✓			
Cable sockets for M12 connectors (stainless steel)		A50	✓	✓	✓
Rating plate inscription (instead of German)					
• English	B11	✓	✓	✓	✓
• French	B12	✓	✓	✓	✓
• Spanish	B13	✓	✓	✓	✓
• Italian	B14	✓	✓	✓	✓
English rating plate		B21	✓	✓	✓
Pressure units in inH ₂ O and/or psi					
Quality inspection certificate (Five-step factory calibration) to IEC 60770-2		C11	✓	✓	✓
Inspection certificate		C12	✓	✓	✓
Acc. to EN 10204-3.1					
Factory certificate		C14	✓	✓	✓
Acc. to EN 10204-2.2					
"Functional safety (SIL2)" certificate to IEC 61508		C20	✓		
"Functional safety" certificate (PROFIsafe) and PROFIsafe 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	✓	✓	✓
Setting of upper limit of output signal to 22.0 mA		D05	✓		
Degree of protection IP65/IP68 (only for M20x1.5 and ½-14 NPT)		D12	✓	✓	✓
Oxygen application (In the case of oxygen measurement and inert liquid max. 100 bar (1450 psi) at 60°C (140 °F))		E10	✓	✓	✓
Export approval Korea		E11	✓	✓	✓
Explosion-proof "Intrinsic safety" (Ex ia) to INMETRO (Brazil) (only for transmitter 7MF4...-.....-B..)		E25	✓	✓	✓
"Flameproof" explosion protection according 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 (Ex ia) (only for transmitter 7MF4...-.....-B..)		E45	✓	✓	✓
Ex Approval IEC Ex (Ex id) (only for transmitter 7MF4...-.....-D..)		E46	✓	✓	✓
"Intrinsic safety" and "Explosion-proof" explosion protection acc. to Kosha (Korea) (only for transmitter 7MF4...-.....-[B, D]..-Z + E11)		E70	✓	✓	✓
Two coats of lacquer on casing and cover (PU on epoxy)		G10	✓	✓	✓

Selection and Ordering data		Order code			
Flanges to EN 1092-1, Form b1					
• DN 25, PN 40 ¹⁾	M11	✓	✓	✓	
• DN 25, PN 100 ¹⁾	M21	✓	✓	✓	
• DN 40, PN 40	M13	✓	✓	✓	
• DN 40, PN 100	M23	✓	✓	✓	
• DN 50, PN 16	M04	✓	✓	✓	
• DN 50, PN 40	M14	✓	✓	✓	
• DN 80, PN 16	M06	✓	✓	✓	
• DN 80, PN 40	M16	✓	✓	✓	
Flanges to ASME B16.5					
• Stainless steel flange 1" class 150 ¹⁾	M40	✓	✓	✓	
• Stainless steel flange 1½" class 150	M41	✓	✓	✓	
• Stainless steel flange 2" class 150	M42	✓	✓	✓	
• Stainless steel flange 3" class 150	M43	✓	✓	✓	
• Stainless steel flange 4" class 150	M44	✓	✓	✓	
• Stainless steel flange 1" class 300 ¹⁾	M45	✓	✓	✓	
• Stainless steel flange 1½" class 300	M46	✓	✓	✓	
• Stainless steel flange 2" class 300	M47	✓	✓	✓	
• Stainless steel flange 3" class 300	M48	✓	✓	✓	
• Stainless steel flange 4" class 300	M49	✓	✓	✓	
Threaded connector to DIN 3852-2, form A, thread to ISO 228					
• G ¾"-A, front-flush ²⁾	R01	✓	✓	✓	
• G 1"-A, front-flush ²⁾	R02	✓	✓	✓	
• G 2"-A, front-flush ²⁾	R04	✓	✓	✓	
Tank connection ³⁾ Sealing is included in delivery					
• TG 52/50, PN 40	R10	✓	✓	✓	
• TG 52/150, PN 40	R11	✓	✓	✓	
Sanitary process connection according DIN 11851 (Dairy connection with slotted union nut)					
• DN 50, PN 25	N04	✓	✓	✓	
• DN 80, PN 25	N06	✓	✓	✓	
Tri-Clamp connection according DIN 32676/ISO 2852					
• DN 50/2", PN 16	N14	✓	✓	✓	
• DN 65/3", PN 10	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 °C ⁴⁾ 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	Q53	✓	✓	✓	
• DN 65, PN 16	Q54	✓	✓	✓	
Sanitary process connection to DRD					
• DN 50, PN 40	M32	✓	✓	✓	
SMS socket with union nut					
• 2"	M67	✓	✓	✓	
• 2½"	M68	✓	✓	✓	
• 3"	M69	✓	✓	✓	
SMS threaded socket					
• 2"	M73	✓	✓	✓	
• 2½"	M74	✓	✓	✓	
• 3"	M75	✓	✓	✓	

Selection and Ordering data	Order code			
<i>Further designs</i> Add " Z " to Order No. and specify Order Code.		HART	PA	FF
IDF socket with union nut ISO 2853				
• 2"	M82	✓	✓	✓
• 2½"	M83	✓	✓	✓
• 3"	M84	✓	✓	✓
IDF threaded socket ISO 2853				
• 2"	M92	✓	✓	✓
• 2½"	M93	✓	✓	✓
• 3"	M94	✓	✓	✓
Sanitary process connection to NEUMO Bio-Connect screw connection Certified to EHEDG				
• DN 50, PN 16	Q05	✓	✓	✓
• DN 65, PN 16	Q06	✓	✓	✓
• DN 80, PN 16	Q07	✓	✓	✓
• DN 100, PN 16	Q08	✓	✓	✓
• DN 2", PN 16	Q13	✓	✓	✓
• DN 2½", PN 16	Q14	✓	✓	✓
• DN 3", PN 16	Q15	✓	✓	✓
• DN 4", PN 16	Q16	✓	✓	✓
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	✓	✓	✓
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	✓	✓	✓
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	✓	✓	✓
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	✓	✓	✓
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			
<i>Further designs</i> 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	✓	✓	✓
Aseptic clamp with groove to DIN 11864-3 FormA 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			
Additional data		HART	PA	FF
Please add "-Z" to Order No. and specify Order code(s) and plain text.				
Measuring range to be set Specify in plain text (max. 5 characters): Y01: ... up to ... mbar, bar, kPa, MPa, psi	Y01	✓		
Stainless steel tag plate (measuring point description) 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 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 ¹⁾ , inH ₂ O ¹⁾ , ftH ₂ O ¹⁾ , mmHG, inHG, psi, Pa, kPa, MPa, g/cm ² , kg/cm ² , Torr, ATM or % ¹⁾ ref. temperature 20 °C	Y21	✓	✓	✓
Setting of pressure indication in non-pressure units¹⁾ 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 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)

¹⁾ Preset values can only be changed over SIMATIC PDM.