Transmitters for general requirements

SITRANS P DS III for gauge pressure

Selection and Order	-		Art						
Pressure transmitte SITRANS P DS III wi	r for gauge pressure,		7 N						
OTTIANOT DO III WI	uiiiaiii						-		
Measuring cell filling	g Measuring cell clean ing	-							
Silicone oil	normal	>	1						
Inert liquid ¹⁾	grease-free to cleanliness level 2		3						
			L						
Measuring span (mi									
0.01 1 bar 0.04 4 bar	(0.15 14.5 psi) (0.58 58 psi)		E						
0.04 4 bar 0.16 16 bar	(0.36 36 psi) (2.32 232 psi)								
0.63 63 bar	(9.14 914 psi)		Ė						
1.6 160 bar	(23.2 2320 psi)	-	Ì						
4.0 400 bar	(58.0 5802 psi)	>	Ċ						
7.0 700 bar	(102.010153 psi)	>	١,						
Wetted parts materia									
Seal diaphragm	Process connection	_							
Stainless steel	Stainless steel	▶ •		A					
Hastelloy	Stainless steel			В					
Hastelloy	Hastelloy			C					
Version as diaphragn	n seal 4/ 3/ 4/ 3/			Y					
Process connection	N/D +- EN 007 4								
 Connection shank (Female thread ½-14 					1				
	flange with process con-	_			'				
nection (Oval flange	has no female thread)								
	/ ₁₆ -20 UNF to IEC 61518				2				
- Mounting thread N					3				
- Mounting thread N	/12 to DIN 19213				4				
 Male thread M20 x 	1.5				5				
 Male thread ½ -14 N 	NPT				6				
Non-wetted parts ma									
 Housing made of di 		>				0			
	teel precision casting ⁶⁾					3			
Version									
 Standard versions Interpotional version 	n, English label inscrip-						2		
tions, documentatio	n in 5 languages on CD						-		
(no Order code sele									
Explosion protection	า								
• None		•						Α	
• With ATEX, Type of								L	
- "Intrinsic safety (E								В	
- "Explosion-proof (EX (1)"' /							D	
(Ex ia + Ex d) ⁽⁸⁾	d flameproof enclosure"	_						P	
- "Ex nA/ic (Zone 2)	9)	•						Ε	
- "Intrinsic safety, ex	plosion-proof enclosure	>						R	
and dust explosion Zone 1D/2D)*8)	protection (Ex ia + Ex d -	+							
FM + CSA intrinsic	safe (is)							F	
 FM + CSA (is + ep) 	+ Ex ia + Ex d (ATEX)							S	
 With FM + CSA, Typ 		71							
- "Intrinsic Safe und	Explosion Proof (is + xp)	()						N	С
Flectrical connection	n / cable entry								
	ıತ.5 (adapter) '್								A B
 Screwed gland Pg 									
 Screwed gland Pg Screwed gland M20) x1 .5	-							
 Screwed gland Pg Screwed gland M20 Screwed gland ½-1) x1 .5 4 NPT	•							С
 Screwed gland Pg Screwed gland M20 Screwed gland ½-1) x1 .5	•							

Selection and Ordering data		Article No.	
Pressure transmitter for gauge pressure, SITRANS P DS III with HART		7 M F 4 0 3 3 -	
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
- We can offer shorter delivery times for configurations designated with the Quick Ship Symbol . For details see page 9/5 in the appendix.

Power supply units see Chap. 7 "Supplementary Components".

- Brief instructions (Leporello)
- CD-ROM with detailed documentation
- 1) For oxygen application, add Order code E10.
- When the manufacture's certificate (calibration certificate) has to be ordered for transmitters with diaphragm seals according to IEC 60770-2, 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.
- 3) If the acceptance test certificate 3.1.is ordered for the transmitter with mounted diaphragm seals this certificate must also be ordered with the respective remote seals.
- 4) The diaphragm seal is to be specified with a separate order number and must be included with the transmitter order number, for example 7MF403.-.Y.-.... and 7MF4900-1...-.B
- 5) The standard measuring cell filling of configurations with remote seals (Y) is silicone oil.
- 6) Not in conjunction with Electrical connection "Screwed gland Pg 13.5" and "Han7D plug".
- 7) Without cable gland, with blanking plug
- 8) With enclosed cable gland Ex ia and blanking plug
- 9) Configurations with HAN and M12 connectors are only available in Ex ic.
- $^{10)}\rm Not$ in conjunction with types of protection "Explosion-proof" and "Ex nA", "Intrinsic safety" and "Explosion-proof".
- ¹¹⁾M12 delivered without cable socket

Transmitters for general requirements

SITRANS P DS III for gauge pressure

Selection and Ordering	n data	Articl	o NI		
Proceure transmitter fo	•	Artici	6 1/0).	
Pressure transmitter fo					
SITRANS P DS III with	` ,	7 M F	403	34-	
	FOUNDATION Fieldbus	7 M F	403	3 5 -	
(FF)					
Measuring cell filling	Measuring cell clean-				
Silicone oil	ing normal	1			
Inert liquid ¹⁾	grease-free to	3			
	cleanliness level 2	3			
Nominal measuring ra	nge				
1 bar	(14.5 psi)	В			
4 bar	(58 psi)	С			
16 bar	(232 psi)	D			
63 bar	(914 psi)	E			
160 bar	(2320 psi)	F			
400 bar	(5802 psi)	G			
700 bar	(10153 psi)	J			
Wetted parts materials	, ,				
Seal diaphragm	Process connection				
Stainless steel	Stainless steel	А			
Hastelloy	Stainless steel	B			
•		C			
Hastelloy	Hastelloy	Y			
Version as diaphragm s	ear -, -, -, -,				
Process connection					
 Connection shank G½ 			0		
 Female thread ½-14 N 			1		
 Stainless steel oval fla 	nge with process connec-				
tion (Oval flange has r					
	₃ -20 UNF to IEC 61518		2		
 Mounting thread M1 	0 to DIN 19213		3		
- Mounting thread M1:	2 to DIN 19213		4		
 Male thread M20 x 1.5 	,		5		
 Male thread ½ -14 NP 	Т		6		
Non-wetted parts mate	erials				
 Housing made of die- 	cast aluminium		0		
 Housing stainless stee 	el precision casting		3		
Version	<u> </u>	_			
 Standard versions 				1	
 International version, E 	English label inscriptions,			2	
documentation in 5 lar (no Order code select	nguages on CD				
Explosion protection	- /				
• None				Α	
 With ATEX, Type of pro 	otection:				
- "Intrinsic safety (Ex i				В	
- "Explosion-proof (Ex				D	
- "Intrinsic safety and				P	
(Ex ia + Ex d) ⁽⁸⁾	nameproof enclosure				
- "Ex nA/ic (Zone 2)"9)				Е	
	osion-proof enclosure and			R	
dust explosion prote	ction (Ex ia + Ex d +				
Zone 1D/2D) ⁽⁸⁾ (not	for DS III FF)				
 FM + CSA intrinsic sat 				F	
• FM + CSA (is + ep) +	Ex ia + Ex d (ATEX)			s	
• With FM + CSA, Type	, ,				
- AAIRLI IAL & CYON TAND				N	С
- "Intrinsic Safe und E	xpiosion (15 + xp)				
- "Intrinsic Safe und E	cable entry				В
- "Intrinsic Safe und E	cable entry 1.5 NPT				

Selection and Ordering data	Article No.	
Pressure transmitter for gauge pressure		
SITRANS P DS III with PROFIBUS PA (PA)	7MF4034-	
SITRANS P DS III with FOUNDATION Fieldbus (FF)	7 M F 4 0 3 5 -	
Display		
Without display		0
 Without visible display (display concealed, setting: bar) 		1
With visible display		6
 with customer-specific display (setting as specified, Order code "Y21" required) 		7

- Brief instructions (Leporello)
- CD-ROM with detailed documentation
- 1) For oxygen application, add Order code E10.
- When the manufacture's certificate (calibration certificate) has to be ordered for transmitters with diaphragm seals according to IEC 60770-2, it is recommended only to order this certificate exclusively with the diaphragm seals. The measuring accuracy of the total combination is certified here.
- 3) If the acceptance test certificate 3.1.is ordered for the transmitter with mounted diaphragm seals this certificate must also be ordered with the respective remote seals.
- 4) The diaphragm seal is to be specified with a separate order number and must be included with the transmitter order number, for example 7MF403.-.Y.-.... and 7MF4900-1...-.B
- 5) The standard measuring cell filling of configurations with remote seals (Y) is silicone oil
- 6) M10 fastening thread: Max. span 160 bar (2320 psi) 7/16-20 UNF and M12 fastening thread: Max. span 400 bar (5802 psi)
- 7) Without cable gland, with blanking plug.
- 8) With enclosed cable gland Ex ia and blanking plug.
- $^{9)}$ Configurations with HAN and M12 connectors are only available in Ex ic.
- ¹⁰⁾M12 delivered without cable socket
- ¹¹⁾Not available with protection type "Ex d" bestellbar (Options D, P, N and R)
- 12) Not with protection types "Explosion-proof" and protection type "Ex nA", "Intrinsic safe" and "Explosion proof".

Transmitters for general requirements

SITRANS P DS III for gauge pressure

Selection and Ordering data		Order	code		
Further designs			HART	PA	FF
Add " -Z " to Article No. and specify Order code.					
Pressure transmitter with mounting					
bracket (1x fixing angle, 2 x nut, 2 x U-					
washer or 1 x bracket, 2 x nut, 2 x U-					
washer) made of:		A 0.1		,	,
• Steel	_	A01	√	√	٧,
• Stainless steel	_	A02	•	•	•
Plug		400	,		
• Han 7D (metal, gray)		A30 A31	∀		
• Han 8U (instead of Han 7D)		A32	√		
● Angled ● Han 8D (metal, gray)		A33	· /		
* * *			1	,	,
Cable sockets for M12 connectors (stainless steel)		A 50	V	✓	V
Rating plate inscription (instead of German)					
• English	•	B11	✓	✓	1
• French		B12	1	1	1
• Spanish	•		1	✓	
• Italian	•	B14	, /	<i>'</i>	•
			1	·	
English rating plate	•	B21	V	v	✓
Pressure units in inH ₂ 0 and/or psi Quality inspection certificate (Five-step	•	C11	1	✓	✓
factory calibration) to IEC 60770-2 ¹⁾ Inspection certificate ²⁾	•	C12	1	1	1
Acc. to EN 10204-3.1	_	CIZ	•	•	•
Factory certificate	•	C14	✓	✓	✓
Acc. to EN 10204-2.2					
Functional safety (SIL2) Devices suitable for use according to IEC 61508 and IEC 61511. Includes SIL conformity declaration	•	C20	√		
Functional safety (PROFIsafe) Certificate and PROFIsafe protocol		C21 ³⁾		✓	
Functional safety (SIL2/3) Devices suitable for use according to IEC 61508 and IEC 61511. Includes SIL conformity declaration	•	C23	~		
Device passport Russia (For price request please contact the technical support		C99	✓	✓	✓
www.siemens.com/automation/support- request)					
Setting of upper limit of output signal to 22.0 mA		D05	✓		
Manufacturer's declaration acc. to NACE (MR 0103-2012 and MR 0175-2009)		D07	1	✓	1
Degree of protection IP65/IP68 (only for M20x1.5 and ½-14 NPT)		D12	✓	✓	✓
Supplied with oval flange		D37	✓	✓	1
(1 item), PTFE packing and screws in thread of oval flange					
Use in or on zone 1D/2D		E01	✓	✓	✓
(only together with type of protection "Intrinsic safety" (transmitter 7ME4					
(transmitter 7MF4B Ex ia)")		E4.0	,	,	,
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	✓	1	1
CRN approval Canada		E22	√	✓	✓
(Canadian Registration Number)		F0.4	,	,	,
Dual seal		E24	V	V	V
Explosion-proof "Intrinsic safety" (Ex ia) to INMETRO (Brazil)		E25 ⁴⁾	√	√	✓

Selection and Ordering data	Order	code		
Further designs Add '-Z" to Article No. and specify Order code.		HART	PA	FF
"Flameproof" explosion protection according to INMETRO (Brazil) (only for transmitter 7MF4)	E26 ⁴⁾	✓	✓	✓
Explosion-proof "Intrinsic safety" (Ex ia + Ex d) to INMETRO (Brazil) (only for transmitter 7MF4P)	E28 ⁴⁾	✓	✓	
Ex Approval IEC Ex (Ex ia) (only for transmitter 7MF4B)	E45 ⁴⁾	✓	✓	✓
Ex Approval IEC Ex (Ex id) (only for transmitter 7MF4D)	E46 ⁴⁾	✓	✓	✓
Explosion-proof "Intrinsic safety" to NEPSI (China)	E55 ⁴⁾	✓	✓	✓
Explosion protection "Explosion-proof" to NEPSI (China) (only for transmitter 7MF4D)	E56 ⁴⁾	✓	✓	✓
Ex protection "Zone 2" to NEPSI (China) (only for transmitter 7MF4E)	E57 ⁴⁾	✓	✓	✓
"Intrinsic safety" and "Explosion-proof" explosion protection acc. to Kosha (Korea) (only for transmitter 7MF4[B, D]Z + E11)	E70 ⁴⁾	✓	✓	✓
Two coats of lacquer on casing and cover (PU on epoxy)	G10	✓	✓	✓
Transient protector 6 kV (lightning protection)	J01	✓	√	√

- We can offer shorter delivery times for configurations designated with the Quick Ship Symbol . For details see page 9/5 in the appendix.
- When the manufacture's certificate (calibration certificate) has to be ordered for transmitters with diaphragm seals according to IEC 60770-2, 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) If the acceptance test certificate 3.1 is ordered for the transmitter with mounted diaphragm seals this certificate must also be ordered with the respective remote seals.
- 3) Profisafe transmitters can only be operated with the S7 F Systems V6.1 configuration software in combination with S7-400H
- 4) Option does not include ATEX approval, but instead includes only the country-specific approval.

Transmitters for general requirements

SITRANS P DS III for gauge pressure

Calcation and Ordering data	Ordor			
Selection and Ordering data	Order		ъ.	
Additional data Please add "Z" to Article No. and specify Order code(s) and plain text.		HART		FF
Measuring range to be set Specify in plain text (max. 5 characters): Y01: up to mbar, bar, kPa, MPa, psi	Y01	✓	√ 1)	
, , , , , , , , , , , , , , , , , , , ,	Y15	✓	✓	✓
Measuring point text (entry in device variable)	Y16	✓	✓	✓
Max. 27 characters, specify in plain text: Y16:				
Entry of HART address (TAG)	Y17	✓		
Max. 8 characters, specify in plain text: Y17:				
Setting of pressure indication in pressure units	Y21	✓	✓	✓
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/cm², kg/cm², Torr, ATM or % *) ref. temperature 20 °C				
Setting of pressure indication in non-pressure units ²) Specify in plain text: Y22: up to //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		✓	1
Damping adjustment in seconds (0 100 s)	Y30	✓	✓	✓

We can offer shorter delivery times for configurations designated with the Quick Ship Symbol •. For details see page 9/5 in the appendix.

Only Y01, Y15, Y16, Y17, Y21, Y22, Y25 and D05 can be factory preset

✓ = available

Ordering example

Item line: 7MF4033-1EA00-1AA7-Z

A01 + Y01 + Y21 B line:

C line: Y01: 10 ... 20 bar (145 ... 290 psi)

Y21: bar (psi) C line:

Measuring accuracies for PROFIBUS PA transmitters with Option Y01 are calculated in the same way as for HART devices.
 Preset values can only be changed over SIMATIC PDM.

Transmitters for general requirements

SITRANS P DS III for gauge/absolute pressure, with front-flush diaphragm

Selection and Ordering data Article No 7MF4133-Pressure transmitter for gauge and absolute pressure, front-flush diaphragm, SITRANS P DS III HART Measuring cell filling Measuring cell cleaning Silicone oil norma grease-free to Inert liquid 3 cleanliness level 2 FDA compliant fill fluid • Neobee oil normal 4 Measuring span (min. ... max.) (0.15 ... 14.5 psi) 0.01 ... 1 bar В 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) Ε 13 ... 1300 mbar a¹⁾ (0.62 ... 18.85 psia)¹⁾ S 0.05 ... 5 bar a¹⁾ (0.7 ... 72.5 psia)¹⁾ 0.3 ... 30 bar a¹⁾ (4.35 ... 435 psia)¹⁾ U Wetted parts materials Seal diaphragm Connection shank Stainless steel Stainless steel Hastelloy²⁾ В Stainless steel **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 Standard versions • International version, English label inscriptions, documentation in 5 languages on CD (no Order code selectable) **Explosion protection** • None Α • With ATEX, Type of protection: - "Intrinsic safety (Ex ia)" В - "Explosion-proof (Ex d)" 3) D - "Ex nA/ic (Zone 2)"4) Ε • FM + CSA intrinsic safe (is) F • FM + CSA (is + ep) + Ex ia + Ex d (ATEX) s • With FM + CSA, Type of protection: - "Intrinsic Safe und Explosion Proof (is + xp)"3) NC Electrical connection/cable entry • Inner thread M20 x 1.5 В • Female thread 1/2-14 NPT C • M12 connectors (stainless steel)^{5) 6) 7)} Display Without display • Without visible display (display concealed, setting: mA) • with visible display, setting: mA • with customer-specific display (setting as specified, Order code "Y21" or "Y22"

Power supply units see Chap. 7 "Supplementary Components".

Included in delivery of the device:

Brief instructions (Leporello)

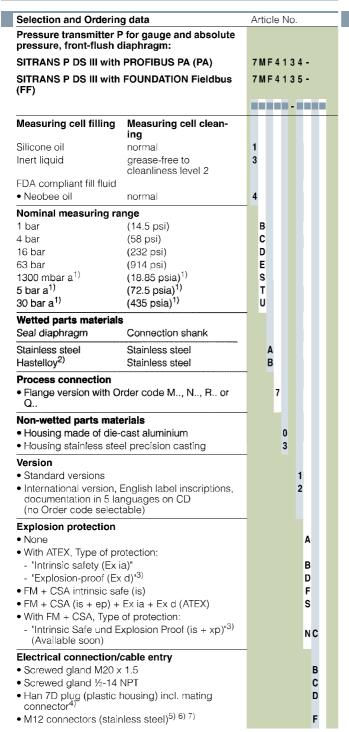
required)

CD-ROM with detailed documentation

- 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) Bei Konfiguration mit Stecker HAN und M12 ist nur Zündschutzart Ex ic möglich.
- ⁵⁾ M12 delivered without cable socket
- $^{6)}$ Not available with protection type "Ex d" (options D and N)
- 7) Not with protection types "Explosion-proof" and "Ex nA", "Intrinsic safe" and "Explosion proof".

Transmitters for general requirements

SITRANS P DS III for gauge/absolute pressure, with front-flush diaphragm



Selection and Ordering data	Article No.
Pressure transmitter P for gauge and absolute pressure, front-flush diaphragm:	
SITRANS P DS III with PROFIBUS PA (PA)	7MF4134-
SITRANS P DS III with FOUNDATION Fieldbus	7MF4135-
(FF)	
Display	
Without display	0
Without visible display	1
(display concealed, setting: bar)	
 With visible display 	6
With customer-specific display (setting)	7
as specified, Order code "Y21" required)	

- 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
- 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"

Transmitters for general requirements
SITRANS P DS III for gauge/absolute pressure,
with front-flush diaphragm

Selection and Ordering data	Order	code		
Further designs Add "-Z" to Article No. and specify Order code.		HART	PA	FF
Plug				
• Angled	A32	1		
Han 8D (metal, gray)	A33	1		
Cable sockets for M12 connectors (stainless steel)	A 50	1	✓	✓
Rating plate inscription (instead of German)				
• English	B11	1	✓	1
• French	B12	1	✓	1
• Spanish	B13	1	✓	1
• Italian	B14	✓	✓	✓
English rating plate	B21	✓	✓	✓
Pressure units in inH ₂ 0 and/or psi				
Quality inspection certificate (Five-step factory calibration) to IEC 60770-2	C11	1	✓	1
Inspection certificate	C12	1	✓	1
Acc. to EN 10204-3.1				
Factory certificate	C14	✓	✓	✓
Acc. to EN 10204-2.2				
Functional safety (SIL2) Devices suitable for use according to IEC	C20	✓		
61508 and IEC 61511. Includes SIL confor-				
mity declaration				
Functional safety (PROFIsafe) Certificate and PROFIsafe protocol	C21 ¹⁾		✓	
Functional safety (SIL2/3)	C23	1		
Devices suitable for use according to IEC	020	·		
61508 and IEC 61511. Includes SIL confor-				
mity declaration			,	,
Device passport Russia (For price request please contact the technical	C99	√	√	V
support				
www.siemens.com/automation/support-request.)				
Setting of upper limit of output signal to 22.0 mA	D05	1		
Degree of protection IP65/IP68 (only for M20x1.5 and ½-14 NPT)	D12	✓	✓	✓
Oxygen application	E10	1	✓	1
(In the case of oxygen measurement and inert				
iquid max. 100 bar (1450 psi) at 60°C (140 °F))				
Export approval Korea	E11	✓	✓	✓
CRN approval Canada	E22	✓	✓	✓
(Canadian Registration Number)				
Dual seal	E24	✓	✓	✓
Explosion-proof "Intrinsic safety" (Ex ia) to	E25 ²⁾	✓	✓	1
NMETRO (Brazil)				
(only for transmitter 7MF4B)	E002)		,	,
"Flameproof" explosion protection according to INMETRO (Brazil)	E26 ²)	•	V	V
(only for transmitter 7MF4D)				
Explosion-proof "Intrinsic safety" (Ex ia +	E28 ²⁾	1	1	
Ex d) to INMETRO (Brazil)				
(only for transmitter 7MF4P)				
Ex Approval IEC Ex (Ex ia)	E45 ²⁾	✓	✓	✓
(only for transmitter 7MF4B)				
Ex Approval IEC Ex (Ex id)	E46 ²⁾	✓	✓	✓
(only for transmitter 7MF4D)				
"Intrinsic safety" and "Explosion-proof" explosion protection acc. to Kosha (Korea)	E70 ²⁾	✓	✓	✓
only for transmitter				
7MF4[B, D]Z + E11)				

Selection and Ordering data	Order	code HART	DA	EE
Further designs Add "-Z" to Article No. and specify Order code.		HARI	PA	FF
Two coats of lacquer on casing and cover (PU on epoxy)	G10	✓	✓	✓
Transient protector 6 kV (lightning protection)	J01	1	✓	✓
Flanges to EN 1092-1, Form b1		,		
• DN 25, PN 40 ³⁾ • DN 25, PN 100 ³⁾	M11 M21	√	√	√
• DN 40, PN 40	M13	→	*	V
• DN 40, PN 100	M23	✓	✓	✓
• DN 50, PN 16	M04	✓	✓	✓
• DN 50, PN 40	M14	√	√	√
DN 80, PN 16DN 80, PN 40	M06 M16	√	∨	√
Flanges to ASME B16.5				
• Stainless steel flange 1" class 150 ³⁾	M40	√	√	√
 Stainless steel flange 1½" class 150 Stainless steel flange 2" class 150 	M41 M42	√	√	✓
• Stainless steel flange 3" class 150	M43	1	V	· /
• Stainless steel flange 4" class 150	M44	✓	✓	✓
 Stainless steel flange 1" class 300³⁾ 	M45	✓	✓	✓
• Stainless steel flange 1½" class 300	M46	1	√	✓
 Stainless steel flange 2" class 300 Stainless steel flange 3" class 300 	M47 M48	✓	√	✓
• Stainless steel flange 4" class 300	M49	✓	✓	1
Threaded connector to DIN 3852-2,				
form A, thread to ISO 228 ⁴⁾	D01	1	√	√
G ¾"-A, front-flushG 1"-A, front-flush	R01 R02	√	√	V
• G 2"-A, front-flush	R04	1	✓	1
Tank connection ⁵⁾				
Sealing is included in delivery				
• TG 52/50, PN 40	R10	√	✓.	V
• TG 52/150, PN 40 Sanitary process connection according	R11	•		· ·
DIN 11851 (Dairy connection with slotted				
union nut) • DN 50, PN 25	N04	1	✓	1
• DN 80, PN 25	N06	1	√	✓
Tri-Clamp connection according				
DIN 32676/ISO 2852	N14	1	./	./
• DN 50/2", PN 16 • DN 65/3", PN 10	N14 N15	√	√	V
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 ⁶⁾ for version with front-flush diaphragm	P00	✓	✓	✓
Temperature decoupler up to 250 °C	P10	1	1	✓
Measuring cell filling: High-temperature oil, only in conjunction with measuring cell filling silicone oil				
Bio-Control sanitary process connection				
Certified to EHEDGDN 50, PN 16	Q53	1	√	1
• DN 65, PN 16	Q54	√	√	✓
Sanitary process connection to DRD • DN 50, PN 40	M32	1	✓	✓
SMS socket with union nut				
• 2"	M67	✓	✓	✓
• 2½"	M68	V	V	V
• 3"	M69	√	V	V

Transmitters for general requirements
SITRANS P DS III for gauge/absolute pressure,
with front-flush diaphragm

Selection and Ordering data	Order			
Further designs Add "-Z" to Article No. and specify Order code.		HART	PA	FF
SMS threaded socket				
• 2"	M73	✓	✓	1
- • 2½"	M74	1	✓	1
• 3"	M75	✓	✓	✓
IDF socket with union nut ISO 2853				
• 2"	M82	✓	✓	1
• 21/2"	M83	✓	✓	✓
• 3"	M84	✓	✓	✓
IDF threaded socket ISO 2853				
• 2"	M92	✓	✓	✓
• 2½"	M93	✓,	✓	1
• 3"	M94	✓	✓	✓
Sanitary process connection to NEUMO Bio-Connect screw connection Certified to EHEDG				
• DN 50, PN 16	Q05	✓	1	1
• DN 65, PN 16	Q06	√	√	1
• DN 80, PN 16	Q07	✓	✓	✓
• DN 100, PN 16	Q08	✓	✓	1
• 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	1	✓	1
• DN 65, PN 16	Q24	✓	✓	✓
• DN 80, PN 16	Q25	✓	✓	✓
• DN 100, PN 16	Q26	✓	✓	✓
• DN 2", PN 16	Q31	√	√	1
• DN 2½", PN 16	Q32	1	1	√
DN 3", PN 16DN 4", PN 16	Q33 Q34	√	√	V
	Q 34	Ť	•	•
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	1	1	1
• DN 2½", PN 16	Q48	1	1	1
DN 3", PN 10DN 4", PN 10	Q49 Q50	√	√	*
,	QSU	,	•	•
Sanitary process connection to NEUMO Bio-Connect S flange connection Certified to EHEDG				
• DN 50, PN 16	Q63	✓	✓	1
• DN 65, PN 10	Q64	✓.	✓.	✓.
• DN 80, PN 10	Q65	✓.	✓.	✓.
• DN 100, PN 10	Q66	V	V	1
• DN 2", PN 16	Q72	1	1	✓
DN 2½", PN 10DN 3", PN 10	Q73	√	√	√
• DN 3 , PN 10 • DN 4", PN 10	Q74 Q75	∀	∨	v
- DIV 4 , LIV 10	Q, J		,	•

Selection and Ordering data	Order	code		
Further designs Add "-Z" to Article 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	1	✓	✓
• DN 65, PN 25	N34	1	· /	✓
• DN 80, PN 25	N35	1	√ √ √	·
• DN 100, PN 25	N36	✓	✓	✓
Aseptic flange with notch to DIN 11864-2 Form A approved according to EHEDG				
• DN 50, PN 16	N43	✓	✓	1
• DN 65, PN 16	N44	√	√	✓
• DN 80, PN 16	N45			✓
• DN 100, PN 16	N46	✓	✓	✓
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⁾ Profisafe transmitters can only be operated with the S7 F Systems V6.1 configuration software in combination with S7-400H.

 $^{^{\}rm 2)}$ Option does not include ATEX approval, but instead includes only the country-specific approval.

³⁾ Special seal in Viton included in the scope of delivery

⁴⁾ Lower measuring limit -100 mbar (1.45 psi).

⁵⁾ The weldable socket can be ordered under accessories.

⁶⁾ The maximum permissible temperatures of the medium depend on the respective cell fillings.

Transmitters for general requirements
SITRANS P DS III for gauge/absolute pressure,
with front-flush diaphragm

Selection and Ordering data		1 -		
A 1 1111 1 1 1 1	Order code			
Additional data		HART	PA	FF
Please add "-Z" to Article No. and specify Order code(s) and plain text.				
Measuring range to be set	Y01	✓	√ 1)	
Specify in plain text (max. 5 characters): Y01: up to mbar, bar, kPa, MPa, psi				
device variable (measuring point descrip-	Y15	✓	✓	✓
tion) Max. 16 characters, specify in plain text: Y15:				
	Y 16	✓	✓	✓
Max. 27 characters, specify in plain text: Y16:				
Entry of HART address (TAG)	Y 17	✓		
Max. 8 characters, specify in plain text:				
Setting of pressure indicator in pressure units	Y21	✓	✓	✓
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				
	Y22 +	1		
	Y01	•		
Specify in plain text: Y22: up to I/min, m³/h, m, USgpm, (specification of measuring range in pressure units "Y01" is essential, unit with max. 5 characters)				
Preset bus address	Y2 5		✓	1
possible between 1 and 126 Specify in plain text: Y25:				
	Y30	1	✓	1
(0 100 s)				

Only Y01, Y15, Y16, Y17, Y21, Y22, Y25 and D05 can be factory preset

✓ = available

ordering example

7MF4133-1DB20-1AB7-Z Item line:

B line: A22 + Y01 + Y21

C line: Y01: 1 ... 10 bar (14.5 ... 145 psi)

C line: Y21: bar (psi)

¹⁾ Measuring accuracies for PROFIBUS PA transmitters with Option Y01 are calculated in the same way as for HART devices.

²⁾ Preset values can only be changed over SIMATIC PDM.

Transmitters for general requirements

SITRANS P DS III for absolute pressure (from gauge pressure series)

	g data		Artio	cle	No	Э.	
Pressure transmitters f			7 M	F 4	2 :	3 3	-
from gauge pressure s SITRANS P.DS III with I	rom gauge pressure series SITRANS P DS III with HART						
Measuring cell filling	Measuring cell					H	
weasuring cen mining	cleaning						
Silicone oil	normal	•	1				
Inert liquid ¹⁾	grease-free to		3				
	cleanliness level 2						
Measuring span (min.	max.)						
8.3 250 mbar a	(0.12 3.62 psia)		D				
43 1300 mbar a	(0.62 18.85 psia)		F				
0.16 5 bar a	(2.32 72.5 psia)		G				
1 30 bar a	(14.5 435 psia)	•	Н				
Wetted parts materials	6						
Seal diaphragm	Process connection	_					
Stainless steel	Stainless steel			Α			
Hastelloy	Stainless steel			В			
Hastelloy	Hastelloy			С			
Version for diaphragm s	seal ^{2) 3) 4) 5) 6)}			Y			
Process connection							
 Connection shank G½ 	≨B to EN 837-1	•		0			
 Female thread ½-14 N 	NPT			1			
 Stainless steel oval fla 	ange with process con-						
nection (Oval flange h	nas no female thread)						
	₆ -20 UNF to EN 61518			2			
 Mounting thread M1 				3			
 Mounting thread M1 				4			
 Mole thread MOO v. 1.6 	5			5			
 Male thread M20 x 1.5 							
 Male thread M20 x 1.3 Male thread ½ -14 NP 				6			
	T		-				
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- 	erials cast aluminium	•			0		
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- 	erials cast aluminium	•	-		0		
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee 	erials cast aluminium	•	_				
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless steed Version Standard versions 	e rials cast aluminium el precision casting ⁷⁾	•				1	
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless steed Version Standard versions International version. 	erials cast aluminium el precision casting ⁷⁾ English label inscrip-		-			1 2	
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless steet Version Standard versions International version, tions, documentation 	erials cast aluminium el precision casting ⁷⁾ English label inscripin 5 languages on CD	•					
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless steet Version Standard versions International version, tions, documentation (no Order code select 	erials cast aluminium el precision casting ⁷⁾ English label inscripin 5 languages on CD	•	-				
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless steet Version Standard versions International version, tions, documentation (no Order code select Explosion protection 	erials cast aluminium el precision casting ⁷⁾ English label inscripin 5 languages on CD	•	- -				
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless steet Version Standard versions International version, tions, documentation (no Order code select Explosion protection None 	erials cast aluminium el precision casting ⁷⁾ English label inscripin 5 languages on CD table)	•	_				A
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless steet Version Standard versions International version, tions, documentation (no Order code select Explosion protection None With ATEX, Type of processing the part of the part of	erials cast aluminium el precision casting ⁷⁾ English label inscripin 5 languages on CD table) otection:	•	-				A
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee Version Standard versions International version, tions, documentation (no Order code select Explosion protection None With ATEX, Type of programmer of the part o	erials cast aluminium el precision casting ⁷⁾ English label inscripin 5 languages on CD table) otection: a)"	•	_				A B
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee Version Standard versions International version, tions, documentation (no Order code select Explosion protection None With ATEX, Type of properties of the properties of the	erials cast aluminium el precision casting ⁷⁾ English label inscripin 5 languages on CD table) otection: a)" c d) "8)	•					A B D
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee Version Standard versions International version, tions, documentation (no Order code select Explosion protection None With ATEX, Type of promotion in the property of the property of	erials cast aluminium el precision casting ⁷⁾ English label inscripin 5 languages on CD table) otection: a)"	•					A B
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee Version Standard versions International version, tions, documentation (no Order code selection) None With ATEX, Type of proper composition of the properties of the prop	erials cast aluminium el precision casting ⁷⁾ English label inscripin 5 languages on CD table) otection: a)" c d)"8) flameproof enclosure"	•					A B D
 Male thread ½ -14 NP-Non-wetted parts mate Housing made of die-Housing stainless steet Version Standard versions International version, tions, documentation (no Order code select Explosion protection None With ATEX, Type of proper the properties of the properties of	erials cast aluminium el precision casting ⁷⁾ English label inscripin 5 languages on CD table) otection: a)" (cd)"8) flameproof enclosure" (d))	•					A B D P
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee Version Standard versions International version, tions, documentation (no Order code selection) None With ATEX, Type of proper composition of the proper content of the p	erials cast aluminium el precision casting ⁷⁾ English label inscripin 5 languages on CD table) otection: a)" (cd)*8) flameproof enclosure"	•					A B D P
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee Version Standard versions International version, tions, documentation (no Order code select Explosion protection None With ATEX, Type of properation of the company of the com	erials cast aluminium el precision casting ⁷⁾ English label inscrip- in 5 languages on CD table) otection: a)" c d)" ⁸⁾ flameproof enclosure" o) losion-proof enclosure protection (Ex ia+ Ex d	•					A B D P E R
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee Version Standard versions International version, tions, documentation (no Order code selection) None With ATEX, Type of prediction in the properties of the properties	erials cast aluminium el precision casting ⁷⁾ English label inscrip- in 5 languages on CD table) otection: a)" c d)" ⁸⁾ flameproof enclosure" o) losion-proof enclosure protection (Ex ia+ Ex d -	•					A B D P E R
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee Version Standard versions International version, Itions, documentation (no Order code select Explosion protection None With ATEX, Type of properties after and (Ex ia + Ex d)**9 "Explosion-proof (Ex intrinsic safety, and (Ex ia + Ex d)**9 "Ex nA/ic (Zone 2)**10 "Intrinsic safety, and dust explosion properties and dust explosion properties and dust explosion properties and the safety and formal distributions and the safety and formal formal distributions and the safety and formal formal	erials cast aluminium el precision casting ⁷⁾ English label inscrip- in 5 languages on CD table) otection: a)" s d)"8) flameproof enclosure" o) losion-proof enclosure protection (Ex ia+ Ex d defection) fe (is) Ex ia + Ex d (ATEX)	•					A B D P E R
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee Version Standard versions International version, Itions, documentation (no Order code select Explosion protection None With ATEX, Type of properties and (Ex ia + Ex d)**9 - "Explosion-proof (Ex - "Intrinsic safety, and (Ex ia + Ex d)**9 - "Ex nA/ic (Zone 2)**1(- "Intrinsic safety, exp and dust explosion properties and the properties of the particular of the properties of	erials cast aluminium el precision casting ⁷⁾ English label inscrip- in 5 languages on CD table) otection: a)" (d)" ⁸⁾ flameproof enclosure" (D) losion-proof enclosure protection (Ex ia+ Ex defection) Ex ia + Ex d (ATEX) of protection:	•					A B D P E R
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee Version Standard versions International version, tions, documentation (no Order code select Explosion protection None With ATEX, Type of properties after the company of the	erials cast aluminium el precision casting ⁷⁾ English label inscrip- in 5 languages on CD table) otection: a)" c d)"8) flameproof enclosure" o) losion-proof enclosure protection (Ex ia+ Ex d fe (is) Ex ia + Ex d (ATEX) of protection: xplosion Proof (is + xp)"	•					A B D P E R
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee Version Standard versions International version, itions, documentation (no Order code select Explosion protection None With ATEX, Type of properties and (Ex ia + Ex d)**9 "Explosion-proof (Ex intrinsic safety and (Ex ia + Ex d)**9 "Ex nA/ic (Zone 2)**10 "Intrinsic safety, expand dust explosion part (20)**2 "Intrinsic safety (20)**9 FM + CSA intrinsic safety (20)**1 With FM + CSA, Type "Intrinsic Safe und Exterical connection/ 	erials cast aluminium el precision casting ⁷⁾ English label inscrip- in 5 languages on CD table) otection: a)" c) losion-proof enclosure" o) losion-proof enclosure erotection (Ex ia+ Ex description) Ex ia + Ex description (ATEX) of protection: explosion Proof (is + xp)" cable entry	•					A B D P E R F S NC
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee Version Standard versions International version, itions, documentation (no Order code selected) Explosion protection None With ATEX, Type of properties after and (Ex ia + Ex d)** "Explosion-proof (Ex intrinsic safety and (Ex ia + Ex d)** "Ex nA/ic (Zone 2)** "Intrinsic safety and dust explosion properties and dust explosion properties and dust explosion properties and first explosion propert	erials cast aluminium el precision casting ⁷⁾ English label inscrip- in 5 languages on CD table) otection: a)" c d)"8) flameproof enclosure" o) losion-proof enclosure protection (Ex ia+ Ex d description) fe (is) Ex ia + Ex d (ATEX) of protection: explosion Proof (is + xp)" cable entry .5 ¹¹	•					A B D P E R F S N C A
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee Version Standard versions International version, itions, documentation (no Order code selected) Explosion protection None With ATEX, Type of properties after a safety (Exingle) "Explosion-proof (Exingle) "Explosion-proof (Exingle) "Explosion-proof (Exingle) "Ex nA/ic (Zone 2) "Intrinsic safety and (Exingle) "Ex nA/ic (Zone 2) "Intrinsic safety and dust explosion proper and dust explosion proper and dust explosion proper and dust explosion proper intrinsic safe und Exingle *Emallo (Exingle) *Intrinsic Safe und Exingle *Electrical connection/ *Screwed gland Pg 13 *Screwed gland M20x 	erials cast aluminium el precision casting ⁷⁾ English label inscrip- in 5 languages on CD table) otection: a)" c d)"8) flameproof enclosure" o) losion-proof enclosure protection (Ex ia+ Ex d description) Ex ia + Ex d (ATEX) of protection: xplosion Proof (is + xp)" cable entry .5 ¹¹⁾ 1.5	•					A B D P E R F S N C A B
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee Version Standard versions International version, Itions, documentation (no Order code selection) None With ATEX, Type of properties and (Ex ia + Ex d)** "Explosion-proof (Ex intrinsic safety and (Ex ia + Ex d)** "Ex nA/ic (Zone 2)** "Intrinsic safety exp and dust explosion part (20)** FM + CSA intrinsic safe that the material safety in the materi	erials cast aluminium el precision casting ⁷⁾ English label inscrip- in 5 languages on CD table) otection: a)" c) losion-proof enclosure" o) losion-proof enclosure erotection (Ex ia+ Ex descriptions) Ex ia + Ex descriptions (ATEX) of protection: explosion Proof (is + exp)" cable entry .5 ¹¹ 1.5 NPT	•					A BDP ER FS NC A BC
 Male thread ½ -14 NP Non-wetted parts mate Housing made of die- Housing stainless stee Version Standard versions International version, itions, documentation (no Order code selected) Explosion protection None With ATEX, Type of properties after a safety (Exingle) "Explosion-proof (Exingle) "Explosion-proof (Exingle) "Explosion-proof (Exingle) "Ex nA/ic (Zone 2) "Intrinsic safety and (Exingle) "Ex nA/ic (Zone 2) "Intrinsic safety and dust explosion proper and dust explosion proper and dust explosion proper and dust explosion proper intrinsic safe und Exingle *Emallo (Exingle) *Intrinsic Safe und Exingle *Electrical connection/ *Screwed gland Pg 13 *Screwed gland M20x 	erials cast aluminium el precision casting ⁷⁾ English label inscrip- in 5 languages on CD table) otection: a)" c) losion-proof enclosure" o) losion-proof enclosure erotection (Ex ia+ Ex descriptions) Ex ia + Ex descriptions (ATEX) of protection: explosion Proof (is + exp)" cable entry .5 ¹¹ 1.5 NPT	•					A B D P E R F S N C A B

Selection and Ordering data		Article No.	
Pressure transmitters for absolute pressure from gauge pressure series SITRANS P DS III with HART		7 M F 4 2 3 3 -	
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" or "Y22" required) 	•		7

 We can offer shorter delivery times for configurations designated with the Quick Ship Symbol
 For details see page 9/5 in the appendix.

Power supply units see Chap. 7 "Supplementary Components".

- Brief instructions (Leporello)
- CD-ROM with detailed documentation
- 1) For oxygen application, add Order code E10.
- ²⁾ Version 7MF4233-1DY... only up to max. span 200 mbar a (80 inH₂O a).
- 3) When the manufacture's certificate (calibration certificate) has to be ordered for transmitters with diaphragm seals according to IEC 60770-2, it is recommended only to order this certificate exclusively with the diaphragm seals. The measuring accuracy of the total combination is certified here. If the acceptance test certificate 3.1. is ordered for the transmitter with mounted diaphragm seals this certificate must also be ordered with the respective remote seals.
- 4) If the acceptance test certificate 3.1 is ordered for the transmitter with mounted diaphragm seals this certificate must also be ordered with the respective remote seals.
- 5) The diaphragm seal is to be specified with a separate order number and must be included with the tranmitter order number, for example 7MF423.-.Y...... and 7MF4900-1...-.B
- 6) The standard measuring cell filling for configurations with remote seals (Y) is silicone oil.
- 7) Not in conjunction with Electrical connection "Screwed gland Pg 13.5" and "Han7D plug".
- 8) Without cable gland, with blanking plug.
- 9) With enclosed cable gland Ex ia and blanking plug.
- ¹⁰⁾Configurations with HAN and M12 connectors are only available in Ex ic.
- 11) Not in conjunction with types of protection "Explosion-proof" and "Ex nA", "Intrinsic safety" and "Explosion-proof".
- ¹²⁾M12 delivered without cable socket
- ¹³⁾Not available with protection type "Ex d" (optiones D, P, N and R)
- ¹⁴⁾Not with protection types "Explosion-proof" and "Ex nA", "Intrinsic safe" and "Explosion proof".

Transmitters for general requirements

SITRANS P DS III for absolute pressure (from gauge pressure series)

Selection and Orderin	g data	Article	e No.
Pressure transmitters from gauge pressure s			
SITRANS P DS III with	PROFIBUS PA (PA)	7 M F	4234-
SITRANS P DS III with	SITRANS P DS III with FOUNDATION Fieldbus		4 2 3 5 -
(,			
Management and filling	Managerine call		
Measuring cell filling	Measuring cell cleaning		
Silicone oil	normal	1	
Inert liquid ¹⁾	grease-free to cleanliness level 2	3	
Nominal measuring ra	nge		
250 mbar a	(3.62 psia)	D	
1300 mbar a	(18.85 psia)	F	
5 bar a	(72.5 psia)	G	
30 bar a	(435 psia)	Н	
Wetted parts materials			
Seal diaphragm	Process connection		
Stainless steel	Stainless steel	A	
Hastelloy	Stainless steel	B	
Hastelloy Version as diaphragm s	Hastelloy	Y	
Process connection	seal ·		
Connection shank G1/2	5B to EN 837-1		0
• Female thread ½-14 N			1
	inge with process connec-		
tion (Oval flange has i	no female thread)		
 Mounting thread ⁷/₁₆ 	₃ -20 UNF to IEC 61518	:	2
 Mounting thread M1 			3
- Mounting thread M1			4
Male thread M20 x 1.5			5
• Male thread ½ -14 NP			6
Non-wetted parts mate			
Housing made of die-Housing stainless stee			0 3
Version	or precioier eacting	-	
Standard versions			1
	English label inscriptions,		2
documentation in 5 la	nguages on CD		
(no Order code select	table)		
Explosion protection			
NoneWith ATEX, Type of presented in the second of the s	otootion:		A
- "Intrinsic safety (Ex i			В
- "Explosion-proof (Ex			D
- "Intrinsic safety and			P
(Ex ia + Ex d)" ⁸⁾			
- "Ex nA/ic (Zone 2)" ⁹			E
- "Intrinsic safety, expl	osion-proof enclosure and		R
Zone 1D/2D) ⁸ (not	ection (Ex ia + Ex d + for DS III FF)		
• FM + CSA intrinsic sa			F
• FM + CSA (is + ep) +	* *		S
• With FM + CSA, Type	of protection:		
- "Intrinsic Safe und E	xplosion Proof (is + xp)" ⁷⁾		NC
Electrical connection/			
• Screwed gland M20 x	: 1.5		В
• Screwed gland ½-14	NPT 10\ 11\		C
• M12 connectors (stair	nless steel) (U) 11)		F

Selection and Ordering data	Article No.
Pressure transmitters for absolute pressure from gauge pressure series	
SITRANS P DS III with PROFIBUS PA (PA)	7 M F 4 2 3 4 -
SITRANS P DS III with FOUNDATION Fieldbus (FF)	7 M F 4 2 3 5 -
Display	
Without display	0
Without visible display	1
(display concealed, setting: bar)	
 With visible display 	6
 with customer-specific display (setting as specified, Order code "Y21" or "Y22" required) 	7

- Included in delivery of the device:
 Brief instructions (Leporello)
 CD-ROM with detailed documentation
- 1) For oxygen application, add Order code E10.
- ²⁾ Version 7MF4233-1DY... only up to max. span 200 mbar a (2.9 psia).
- 3) When the manufacture's certificate (calibration certificate) has to be ordered for transmitters with diaphragm seals according to IEC 60770-2, 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.
- 4) If the acceptance test certificate 3.1 is ordered for the transmitter with mounted diaphragm seals this certificate must also be ordered with the respective remote seals.
- 5) The diaphragm seal is to be specified with a separate order number and must be included wiht the tranmitter order number, for example 7MF423,-..Y..-... and 7MF4900-1...-.B
- 6) The standard measuring cell filling for configurations with remote seals (Y) is silicone oil
- 7) Without cable gland, with blanking plug.
- 8) With enclosed cable gland Ex ia and blanking plug.
- $^{9)}\,$ Configurations with HAN and M12 connectors are only available in Ex ic.
- ¹⁰⁾M12 delivered without cable socket
- ¹¹⁾Not with protection types "Explosion-proof" and "Ex nA", "Intrinsic safe" and "Explosion proof".

Transmitters for general requirements

SITRANS P DS III for absolute pressure (from gauge pressure series)

Selection and Ordering data		Order	code		
Further designs			HART	PA	FF
Add "-Z" to Article No. and specify Order					
code.					
Pressure transmitter with mounting					
bracket (1x fixing angle, 2 x nut, 2 x U-					
washer or 1 x bracket, 2 x nut, 2 x U-					
washer) made of: • Steel	٠	A 0.1	,	,	,
Stainless steel	-	A01 A02	· /	√	1
	_	AUZ	,	•	•
Plug		400	,		
Han 7D (metal, gray) Lian 2L (instead of Lian 7D)		A30 A31	1		
Han 8U (instead of Han 7D) Angled		A32	√		
AngledHan 8D (metal, gray)		A33	, ✓		
- · · · · · · · · · · · · · · · · · · ·					
Cable sockets for M12 connectors (stainless steel)		A50	✓	✓	✓
Rating plate inscription (instead of German)					
• English	•	B11	1	1	1
• French	•	B12	1	1	1
• Spanish	•	B13	✓	✓	1
• Italian	•	B14	✓	✓	1
English rating plate	٠	B21	1	1	1
Pressure units in inH ₂ 0 and/or psi	_			·	·
Quality inspection certificate (Five-step	•	C11	1	√	_
factory calibration) to IEC 60770-2 ¹⁾	_	CII	,	•	•
Inspection certificate ²⁾	٠	C12	1	1	1
Acc. to EN 10204-3.1		0.2		•	•
	_	014			,
Factory certificate	_	C14	· •	•	•
Acc. to EN 10204-2.2					
Functional safety (SIL2) Devices suitable for use according to IEC	•	C20	~		
61508 and IEC 61511. Includes SIL confor-					
mity declaration					
Functional safety (PROFIsafe)		C21 ³⁾		✓	
Certificate and PROFIsafe protocol					
Functional safety (SIL2/3)	•	C23	✓		
Devices suitable for use according to IEC					
61508 and IEC 61511. Includes SIL conformity declaration					
•			,		
Device passport Russia (For price request please contact the technical		C99	✓	✓	✓
support					
www.siemens.com/automation/support-					
request)					
Setting of upper limit of output signal to		D05	✓		
22.0 mA			·		
Manufacturer's declaration acc. to NACE (MR 0103-2012 and MR 0175-2009)		D07	✓	1	✓
· ·		D44		,	,
Degree of protection IP65/IP68 (only for M20 x 1.5 and ½-14 NPT)		D12	✓	√	V
		D .			
Supplied with oval flange		D37	✓	✓	√
(1 item), PTFE packing and screws in thread of oval flange					
uneau ui uvai nange					

Selection and Ordering data	Order	code		
Further designs		HART	PA	FF
Add "-Z" to Article No. and specify Order				
code.				
Use in or on zone 1D/2D	E01	✓	✓	✓
(only together with type of protection "Intrinsic safety"				
(transmitter 7MF4B Ex ia)")				
Oxygen application	E10	✓	✓	✓
(In the case of oxygen measurement and				
inert liquid max. 100 bar (1450 psi) at 60°C (140 °F))				
Export approval Korea	E11	✓	✓	✓
CRN approval Canada	E22	✓	✓	✓
(Canadian Registration Number)				
Dual seal	E24	✓	✓	✓
Explosion-proof "Intrinsic safety" (Ex ia) to INMETRO (Brazil)	E25 ⁴⁾	✓	✓	✓
(only for transmitter 7MF4B)				
"Flameproof" explosion protection according to INMETRO (Brazil)	E26 ⁴⁾	✓	✓	✓
(only for transmitter 7MF4				
Explosion-proof "Intrinsic safety" (Ex ia + Ex d) to INMETRO (Brazil)	E28 ⁴⁾	✓	✓	
(only for transmitter 7MF4P)				
Ex Approval IEC Ex (Ex ia)	E45 ⁴⁾	✓	✓	✓
(only for transmitter 7MF4B)				
Ex Approval IEC Ex (Ex id)	E46 ⁴⁾	✓	✓	✓
(only for transmitter 7MF4				
Explosion-proof "Intrinsic safety" to	E55 ⁴⁾	✓	✓	✓
NEPSI (China) (only for transmitter 7MF4B)				
Explosion protection "Explosion-proof"	E56 ⁴⁾	1	1	1
to NEPSI (China)	L30 '	ľ	•	•
(only for transmitter 7MF4				
Explosion-proof "Zone 2" to NEPSI (China)	E57 ⁴⁾	✓	✓	✓
(only for transmitter 7MF4E)				
"Intrinsic safety" and "Explosion-proof"	E70 ⁴⁾	1	✓	✓
explosion protection acc. to Kosha (Korea)				
(only for transmitter 7MF4[B, D]Z + E11)				
Two coats of lacquer on casing and cover (PU on epoxy)	G10	✓	✓	✓
Transient protector 6 kV (lightning protection)	J01	✓	✓	✓
• We can offer shorter delivery times for conf	iauration	an danie	noto	ط+نید ل

- We can offer shorter delivery times for configurations designated with the Quick Ship Symbol . For details see page 9/5 in the appendix.
- When the manufacture's certificate (calibration certificate) has to be ordered for transmitters with diaphragm seals according to IEC 60770-2, 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) If the acceptance test certificate 3.1 is ordered for the transmitter with mounted diaphragm seals this certificate must also be ordered with the respective remote seals.
- 3) Profisafe transmitters can only be operated with the S7 F Systems V6.1 configuration software in combination with S7-400H
- 4) Option does not include ATEX approval, but instead includes only the country-specific approval.

Transmitters for general requirements

SITRANS P DS III for absolute pressure (from gauge pressure series)

Selection and Ordering data	Order	code		
Additional data		HART	PA	FF
Please add "-Z" to Article 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	✓	√ 1)	
Stainless steel tag plate and entry in device variable (measuring point description) Max. 16 characters, specify in plain text: Y15:	Y15	✓	✓	✓
variable) Max. 27 characters, specify in plain text:	Y 16	1	✓	✓
Y16: Entry of HART address (TAG) Max. 8 characters, specify in plain text: Y17:	Y 17	✓		
Setting of pressure indication 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/cm², kg/cm², Torr, ATM or % *) ref. temperature 20 °C	Y21	✓	√	~
Setting of pressure indication in non-pressure units ²) Specify in plain text: Y22: up to //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		✓	1
Damping adjustment in seconds (0 100 s)	Y30	✓	✓	✓

 We can offer shorter delivery times for configurations designated with the Quick Ship Symbol . For details see page 9/5 in the appendix.

Factory mounting of valve manifolds, see accessories.

Only Y01, Y15, Y16, Y17, Y21, Y22, Y25 and D05 can be factory preset

- ✓ = available
- 1) Measuring accuracies for PROFIBUS PA transmitters with Option Y01 are calculated in the same way as for HART devices.
- 2) Preset values can only be changed over SIMATIC PDM.

Transmitters for general requirements

SITRANS P DS III for absolute pressure (from differential pressure series)

(IIOIII dillerential	pressure series,				
Selection and Ordering data		Artic	le N	Э.	
Pressure transmitters		7 M F 4 3 3 3 -			
from differential press SITRANS P DS III with					
Measuring cell filling	Measuring cell clean-				
	ing				
Silicone oil	normal	1			
Inert liquid ¹⁾	grease-free to cleanliness level 2	3			
Measuring span (min.					
8.3 250 mbar a	(0.12 3.62 psia)	D			
43 1300 mbar a	(0.62 18.85 psia)	F			
0.16 5 bar a	(2.32 72.5 psia)	G			
1 30 bar a	(14.5 435 psia)	Н			
5.3 100 bar a	(76.9 1450 psia)	KE			
Wetted parts materials)				
Seal diaphragm	Parts of measuring cell				
Stainless steel	Stainless steel		١		
Hastelloy	Stainless steel	E	3		
Hastelloy	Hastelloy	(
Tantalum	Tantalum	E			
Monel	Monel	ŀ			
Gold Version for diaphragm s	Gold	L			
	Seal 7 7 7 7 7				
Process connection Female thread 1/-18 NE	T with flange connection				
Sealing screw opposit	9				
- Mounting thread ⁷ / ₁₆			2		
- Mounting thread M1			0		
(only for replacemen					
• Vent on side of proces					
 Mounting thread ⁷/₁₆ Mounting thread M1 			6 4		
only for replacemer			4		
Non-wetted parts mate					
process flange screws	Electronics housing				
Stainless steel	Die-cast aluminum		2		
Stainless steel	Stainless steel precision casting ⁸⁾		3		
	casting ⁸⁾				
Version					
 Standard versions 				1	
 International version, l documentation in 5 la 	English label inscriptions,			2	
(no Order code select					
Explosion protection	<u>`</u>				
• None				Α	
• With ATEX, Type of pro-	otection:				
- "Intrinsic safety (Ex i				В	
- "Explosion-proof (Ex	d)" ⁹⁾			D	
 "Intrinsic safety and (Ex ia + Ex d)" ¹⁰⁾ 	flameproof enclosure"			P	
- "Ex nA/ic (Zone 2)")			E	
 "Intrinsic safety, expl 	osion-proof enclosure and			R	
dust explosion prote Zone 1D/2D) ^{*10)}	ction (Ex ia+ Ex d +				
				_	
• FM + CSA intrinsic sa	· ·			F S	
FM + CSA (is + ep) +With FM + CSA, Type	· ·				
	xplosion Proof (is + xp)" ⁹⁾			NC	
Electrical connection/					
Screwed gland Pg 13				A	
Screwed gland M20 x				В	
• Screwed gland ½-14				С	
 Han 7D plug (plastic I connector¹²⁾ 	nousing) incl. mating			D	
 M12 connectors (stair 	aless steel (12) 13)			F	
- witz connectors (stair	11000 SIDDI) ' '				

Selection and Ordering data	Article No.				
Pressure transmitters for absolute pressure	7MF4333-				
from differential pressure series, SITRANS P DS III with HART					
Display					
Without display		0			
Without visible display		1			
(display concealed, setting: mA)					
 With visible display 		6			
 with customer-specific display (setting as specified, Order code "Y21" or "Y22" required) 		7			

Power supply units see Chap. 7 "Supplementary Components".

- 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 psia).
- 3) When the manufacture's certificate (calibration certificate) has to be ordered for transmitters with diaphragm seals according to IEC 60770-2, it is recommended only to order this certificate exclusively with the diaphragm seals. The measuring accuracy of the total combination is certified
- 4) If the acceptance test certificate 3.1 is ordered for the transmitter with mounted diaphragm seals this certificate must also be ordered with the
- 5) The diaphragm seal is to be specified with a separate order number and must be included with the tranmitter order number, for example 7MF433.-.Y..... und 7MF4900-1...-.B
- 6) The standard measuring cell filling for configurations with remote seals (Y) is silicone oil
- 7) Not for span "5.3 ... 100 bar a (76.9 ... 1450 psia)". Position of the top vent valve in the process flange (see dimensional drawing).
- 8) Not in conjunction with Electrical connection "Screwed gland Pg 13.5" and "Han7D plug".
- 9) Without cable gland, with blanking plug
- $^{10)}\mbox{With enclosed cable gland Ex}$ ia and blanking plug
- ¹¹⁾Configurations with HAN and M12 connectors are only available in Ex ic.
- ¹²⁾Not in conjunction with types of protection "Explosion-proof" and "Ex nA", "Intrinsic safety" and "Explosion-proof".
- ¹³⁾M12 delivered without cable socket

Transmitters for general requirements

SITRANS P DS III for absolute pressure (from differential pressure series)

Selection and Ordering	g data	Artic	le No).
Pressure transmitter for from differential press				
="		7 M F	433	R 4 -
	SITRANS P DS III with PROFIBUS PA (PA)			
SITRANS P DS III with (FF)	FOUNDATION Fieldbus	7MF	4 3 3	35-
(ГГ)				
Measuring cell filling	Measuring cell clean-			
Silicone oil	normal	1		
Inert liquid ¹⁾	grease-free to cleanliness level 2	3		
Nominal measuring ra	•			
250 mbar a	(3.62 psia)	D		
1300 mbar a	(18.85 psia)	F		
5 bar a	(72.5 psia)	G		
30 bar a	(435 psia)	Н		
100 bar a	(1450 psia)	KE		
Wetted parts materials Seal diaphragm	Parts of measuring cell			
Stainless steel	Stainless steel	А		
Hastelloy	Stainless steel	В		
Hastelloy	Hastelloy	c		
Tantalum	Tantalum	E		
Monel	Monel	Н		
Gold	Gold	L		
Version as diaphragm s	eal ^{2) 3) 4) 5) 6)}	Y		
Process connection				
	T with flange connection			
 Sealing screw opposit 			2	
 Mounting thread M1 (only for replacement Vent on side of process 	nt requirement)		0	
- Mounting thread ⁷ / ₁₆	₃ -20 UNF to IEC 61518		6	
 Mounting thread M1 (only for replacement 	nt requirement)		4	
Non-wetted parts mate process flange screws				
Stainless steel Stainless steel	Die-cast aluminum Stainless steel precision casting		2 3	
Version				
 Standard versions International version, I documentation in 5 lar (no Order code select 				1 2
Explosion protection	мания в настроина на простои на применения на применения на применения на применения на применения на применен			
None				Α
 With ATEX, Type of pre 				
- "Intrinsic safety (Ex i				В
- "Explosion-proof (Ex				D
 "Intrinsic safety and (Ex ia + Ex d)" ⁹⁾ 	nameproor enclosure"			P
- "Ex nA/ic (Zone 2)"10				E
- "Intrinsic safety, expl	osion-proof enclosure and ction (Ex ia + Ex d + for DS III FF)			R
FM + CSA intrinsic sat				F
• FM + CSA (is + ep) +	1 /			S
• With FM + CSA, Type	· · ·			NC
Electrical connection/o				110
 Screwed gland M20 x 	-			В
Screwed gland 1/2-14 I				C

Selection and Ordering data	Article No.
Pressure transmitter for absolute pressure from differential pressure series	
SITRANS P DS III with PROFIBUS PA (PA)	7 M F 4 3 3 4 -
SITRANS P DS III with FOUNDATION Fieldbus	7 M F 4 3 3 5 -
(FF)	
Display	
Without display	0
Without visible display	1
(display concealed, setting: bar)	
 With visible display 	6
 With customer-specific display (setting as specified, Order code "Y21" required) 	7

- Brief instructions (Leporello)
 CD-ROM with detailed documentation
- Sealing plug(s) or sealing screw(s) for the process flanges(s)
- 1) For oxygen application, add Order code E10.
- $^{2)}$ Version 7MF4334-1DY... only up to max. span 200 mbar a (80 in $\rm H_2O$ a).
- 3) When the manufacture's certificate (calibration certificate) has to be ordered for transmitters with diaphragm seals according to IEC 60770-2, it is recommended only to order this certificate exclusively with the dia-phragm seals. The measuring accuracy of the <u>total</u> combination is certified
- 4) If the acceptance test certificate 3.1.is ordered for the transmitter with mounted diaphragm seals this certificate must also be ordered with the respective remote seals.
- 5) The diaphragm seal is to be specified with a separate order number and must be included with the tranmitter order number, for example 7MF433.-..Y..-.... und 7MF4900-1...-.B
- 6) The standard measuring cell filling for configurations with remote seals (Y) is silicone oil
- 7) Not for nominal measuring range 100 bar a (1450 psia). Position of the top vent valve in the process flange (see dimensional drawing).
- 8) Without cable gland, with blanking plug
- 9) With enclosed cable gland Ex ia and blanking plug
- ¹⁰⁾Configurations with HAN and M12 connectors are only available in Ex ic.
- ¹¹⁾M12 delivered without cable socket
- $^{12)}\mbox{Not}$ available with protection type "Ex d" (options D, P, N and R)
- ¹³⁾Not in conjunction with types of protection "Explosion-proof" and "Ex nA", "Intrinsic safety" and "Explosion-proof"

Transmitters for general requirements

SITRANS P DS III for absolute pressure (from differential pressure series)

Selection and Ordering data	Order	code		
Further designs		HART	PA	FF
Add "-Z" to Article No. and specify Order code.				
Pressure transmitter with mounting bracket (1x fixing angle, 2 x nut, 2 x U-washer or 1 x bracket, 2 x nut, 2 x U-washer) made of:				
• Steel	A01	✓	✓	✓
Stainless steel	A02	✓	✓	1
O-rings for process flanges (instead of FPM (Viton)) • PTFE (Teflon)	A20	√	✓	√
• FEP (with silicone core, approved for food)	A21	✓	✓	1
FFPM (Kalrez, compound 4079)NBR (Buna N)	A22 A23	√	√	✓
plug				
Han 7D (metal, gray)Han 8U (instead of Han 7D)	A30 A31	√		
• Angled	A32	✓		
Han 8D (metal, gray)	A33	✓		
Sealing screw	A 40	✓	✓	1
1/4-18 NPT, with valve in mat. of process flanges			,	
Cable sockets for M12 connectors (stainless steel)	A 50	✓	V	•
Rating plate inscription (instead of German)				
• English	B11	✓	✓	1
• French	B12	1	√	√
SpanishItalian	B13 B14	∀	√	*
English rating plate	B21	1	1	1
Pressure units in inH ₂ 0 and/or psi				
Quality inspection certificate (Five-step factory calibration) to IEC 60770-2 ¹⁾	C11	✓	✓	✓
Inspection certificate ²⁾ Acc. to EN 10204-3.1	C12	✓	✓	✓
Factory certificate Acc. to EN 10204-2.2	C14	✓	✓	✓
Functional safety (SiL2) Devices suitable for use according to IEC 61508 and IEC 61511. Includes SIL conformity declaration	C20	✓		
Functional safety (PROFIsafe) Certificate and PROFIsafe protocol	C21 ³⁾		✓	
Functional safety (SIL2/3) Devices suitable for use according to IEC 61508 and IEC 61511. Includes SIL conformity declaration	C23	✓		
Device passport Russia (For price request please contact the technical support	C99	✓	✓	1
www.siemens.com/automation/support-request)	DAG	1		
Setting of upper limit of output signal to 22.0 mA	D05	V		
Manufacturer's declaration acc. to NACE (MR 0103-2012 and MR 0175-2009) (only together with seal diaphragm made of	D07	✓	✓	✓
Hastelloy and stainless steel) Degree of protection IP65/IP68	D12	,	1	1
(only for M20 x 1.5 and ½-14 NPT)	DIZ			
Supplied with oval flange (1 item), PTFE packing and screws in thread of process flange	D37	√	✓	✓

	0 :	,		
Selection and Ordering data	Order			
Further designs Add "-Z" to Article No. and specify Order code.		HART	PA	FF
Use in or on zone 1D/2D	E01	✓	✓	✓
(only together with type of protection "Intrinsic safety" (transmitter 7MF4B Ex ia)")				
Oxygen application	E10	✓	✓	✓
(In the case of oxygen measurement and inert liquid max. 100 bar (1450 psi) at 60°C (140 °F))				
Export approval Korea	E11	✓	✓	✓
CRN approval Canada (Canadian Registration Number)	E22	✓	✓	✓
Dual seal	E24	✓	✓	✓
Explosion-proof "Intrinsic safety" (Ex ia) to INMETRO (Brazil)	E25 ⁴⁾	✓	✓	✓
(only for transmitter 7MF4B)				
"Flameproof" explosion protection according to INMETRO (Brazil) (only for transmitter 7MF4D)	E26 ⁴⁾	✓	✓	✓
Explosion-proof "Intrinsic safety" (Ex ia +	E28 ⁴⁾	1	1	
Ex d) to INMETRO (Brazil) (only for transmitter 7MF4P)	E20 /	•	•	
Ex Approval IEC Ex (Ex ia) (only for transmitter 7MF4B)	E45 ⁴⁾	✓	✓	✓
Ex Approval IEC Ex (Ex id) (only for transmitter 7MF4D)	E46 ⁴⁾	✓	✓	✓
Explosion-proof "Intrinsic safety" to NEPSI (China)	E55 ⁴⁾	✓	✓	✓
(only for transmitter 7MF4B) Explosion protection "Explosion-proof" to	E56 ⁴⁾	✓	✓	✓
NEPSI (China) (only for transmitter 7MF4D)				
Explosion-proof "Zone 2" to NEPSI (China) (only for transmitter 7MF4E)	E57 ⁴⁾	✓	✓	✓
"Intrinsic safety" and "Explosion-proof" explosion protection acc. to Kosha (Korea) (only for transmitter 7MF4[B, D]Z + E11)	E70 ⁴⁾	✓	✓	✓
Two coats of lacquer on casing and cover (PU on epoxy)	G10	✓	✓	✓
Interchanging of process connection side	H01	✓	✓	✓
Vent on side for gas measurements	H02	✓	✓	✓
Transient protector 6 kV (lightning protection)	J01	✓	√	✓
Process flange				
Hastelloy	K01	✓	✓	✓
• Monel	K02	✓	✓	✓
• Stainless steel with PVDF insert max. PN 10 (MAWP 145 psi), max. temperature of medium 90 °C (194 °F) For ½-14 NPT inner process connection on the side in the middle of the process flange,	K04	✓	✓	✓
vent valve not possible				

When the manufacture's certificate (calibration certificate) has to be ordered for transmitters with diaphragm seals according to IEC 60770-2, it is recommended only to order this certificate exclusively with the diaphragm seals. The measuring accuracy of the total combination is certified here.

²⁾ If the acceptance test certificate 3.1.is ordered for the transmitter with mounted diaphragm seals this certificate must also be ordered with the respective remote seals.

³⁾ Profisafe transmitters can only be operated with the S7 F Systems V6.1 configuration software in combination with S7-400H

⁴⁾ Option does not include ATEX approval, but instead includes only the country-specific approval.

Pressure Measurement Transmitters for general requirements

SITRANS P DS III for absolute pressure (from differential pressure series)

Selection and Ordering data	Order	code		
Additional data		HART	PA	FF
Please add "-Z" to Article No. and specify Order code(s) and plain text.				
Measuring range to be set	Y01	1	√ 1)	
Specify in plain text (max. 5 characters): Y01: up to mbar, bar, kPa, MPa, psi				
Stainless steel tag plate and entry in device variable (measuring point description)	Y 15	✓	✓	✓
Max. 16 characters, specify in plain text:				
Measuring point text (entry in device variable)	Y 16	✓	✓	✓
Max. 27 characters, specify in plain text: Y16:				
Entry of HART address (TAG)	Y17	✓		
Max. 8 characters, specify in plain text: Y17:				
Setting of pressure indication in pressure units	Y21	✓	✓	✓
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				
Setting of pressure indication in	Y22 +	1		
non-pressure units ²⁾ Specify in plain text: Y22: up to I/min, m ³ /h, m, USgpm, (specification of measuring range in pressure units "Y01" is essential, unit with max. 5 characters)	Y01			
Preset bus address possible between 1 and 126 Specify in plain text: Y25:	Y2 5		✓	✓
Damping adjustment in seconds (0 100 s)	Y 30	✓	✓	✓

Factory mounting of valve manifolds, see accessories.

Only Y01, Y15, Y16, Y17, Y21, Y22, Y25 and D05 can be factory preset ✓ = available

Measuring accuracies for PROFIBUS PA transmitters with Option Y01 are calculated in the same way as for HART devices.
 Preset values can only be changed over SIMATIC PDM.

Transmitters for general requirements

SITRANS P DS III for differential pressure and flow

Selection and Ordering data SITRANS P DS III with HART pressure transmitters for differential pressure and flow, PN 32/160 (MAWP 464/2320 psi) Measuring cell filling Measuring cell cleaning Silicone oil normal preasure to cleanliness level 2 Measuring span (min max.) PN 32 (MAWP 464 psi) 1 20 mbar ² (0.4015 8.03 inH ₂ O) PN 160 (MAWP 2320 psi) 1 60 mbar (0.4015 24.09 inH ₂ O) 6 600 mbar (2.409 24.09 inH ₂ O) 6 600 mbar (2.409 240.9 inH ₂ O) 6 600 mbar (2.008 2008 inH ₂ O) 7 MF 4 4 3 3 - 1	
mitters for differential pressure and flow, PN 32/160 (MAWP 464/2320 psi) Measuring cell filling Measuring cell cleaning Silicone oil normal pressure and flow, or cleanling silicone oil normal pressure are to cleanliness level 2 Measuring span (min max.) PN 32 (MAWP 464 psi) 1 20 mbar ² (0.4015 8.03 inH ₂ O) PN 160 (MAWP 2320 psi) 1 60 mbar (0.4015 24.09 inH ₂ O) C 2,5 250 mbar (1.004 100.4 inH ₂ O) C 2,5 250 mbar (2.409 240.9 inH ₂ O) C 2,5 250 mbar (6.424 642.4 inH ₂ O) C 50 600 mbar (20.08 2008 inH ₂ O) C 70,3 30 bar (4.35 435 psi) Wetted parts materials (stainless steel process flanges) Seal diaphragm Parts of measuring cell Stainless steel Stainless steel Hastelloy Stainless steel Hastelloy Hastelloy Tantalum Monel Gold ³⁾ Gold Version for diaphragm seal ^(4) 5) 6) 7)	
PN 32/160 (MAWP 464/2320 psi) Measuring cell filling Measuring cell cleaning Silicone oil normal ↓ 1 Inert liquid¹¹) grease-free to cleanliness level 2 3 Measuring span (min max.) PN 32 (MAWP 464 psi) 5 1 20 mbar²² (0.4015 8.03 inH₂O) ↓ 6 PN 160 (MAWP 2320 psi) 1 60 mbar (0.4015 24.09 inH₂O) ↓ 6 2,5 250 mbar (1.004 100.4 inH₂O) ↓ 6 ↓ 6 6 600 mbar (2.409 240.9 inH₂O) ↓ 6 ↓ 6 16 1600 mbar (6.424 642.4 inH₂O) ↓ 7 ↓ 7 50 5000 mbar (20.08 2008 inH₂O) ↓ 6 ↓ 7 0,3 30 bar (4.35 435 psi) ↓ 7 Wetted parts materials (stainless steel process flanges) ↓ 8 Seal diaphragm Parts of measuring cell ↓ A Stainless steel ↓ A Hastelloy	
Measuring cell filling Measuring cell cleaning Silicone oil normal 1 Inert liquid¹¹) grease-free to cleanliness level 2 3 Measuring span (min max.) PN 32 (MAWP 464 psi) 6.4015 8.03 inH₂O) 6 PN 160 (MAWP 2320 psi) 1 60 mbar (0.4015 24.09 inH₂O) 6 0 1 60 mbar (0.4015 24.09 inH₂O) 6 6 0 0 0 6 600 mbar (2.409 240.9 inH₂O) 6 6 6 642.4 inH₂O) 6 6 6 642.4 inH₂O) 6 6 6 6 6 642.4 inH₂O) 6 <t< th=""><th></th></t<>	
Silicone oil normal grease-free to cleanliness level 2 3 3 Measuring span (min max.) PN 32 (MAWP 464 psi) 1 20 mbar² (0.4015 8.03 inH₂O) ↑	
Cleanliness level 2 Measuring span (min max.) PN 32 (MAWP 464 psi) (0.4015 8.03 inH₂O)	
Measuring span (min max.) PN 32 (MAWP 464 psi) (0.4015 8.03 inH₂O)	
PN 32 (MAWP 464 psi) 1 20 mbar ²) (0.4015 8.03 inH ₂ O) ▶ ■ B PN 160 (MAWP 2320 psi) 1 60 mbar (0.4015 24.09 inH ₂ O) ▶ ■ C 2,5 250 mbar (1.004 100.4 inH ₂ O) ▶ ■ D 6 600 mbar (2.409 240.9 inH ₂ O) ▶ ■ E 16 1600 mbar (6.424 642.4 inH ₂ O) ▶ ■ F 50 5000 mbar (20.08 2008 inH ₂ O) ▶ ■ G 0,3 30 bar (4.35 435 psi) ▶ ■ H Wetted parts materials (stainless steel process flanges) Seal diaphragm Parts of measuring cell Stainless steel Hastelloy Stainless steel Hastelloy Hastelloy Tantalum Monel Gold ³⁾ Monel Gold ³⁾ Gold Version for diaphragm seal ^{4) 5) 6) 7)}	
1 20 mbar ²⁾ (0.4015 8.03 inH ₂ O) ▶ ■ B PN 160 (MAWP 2320 psi) 1 60 mbar (0.4015 24.09 inH ₂ O) ▶ ■ C 2,5 250 mbar (1.004 100.4 inH ₂ O) ▶ ■ D 6 600 mbar (2.409 240.9 inH ₂ O) ▶ ■ E 16 1600 mbar (6.424 642.4 inH ₂ O) ▶ ■ F 50 5000 mbar (20.08 2008 inH ₂ O) ▶ ■ G 0,3 30 bar (4.35 435 psi) ▶ ■ H Wetted parts materials (stainless steel process flanges) Seal diaphragm Parts of measuring cell Stainless steel Hastelloy Stainless steel Hastelloy Hastelloy Tantalum ³⁾ Tantalum Monel Gold ³⁾ Gold Version for diaphragm seal ^{4) 5) 6) 7) B C C C Tantalum3 Hastelloy C C Tantalum3 Gold Version for diaphragm seal^{4) 5) 6) 7)}}	
PN 160 (MAWP 2320 psi) 1 60 mbar (0.4015 24.09 inH ₂ O) ▶ C 2,5 250 mbar (1.004 100.4 inH ₂ O) ▶ D 6 600 mbar (2.409 240.9 inH ₂ O) ▶ E 16 1600 mbar (6.424 642.4 inH ₂ O) ▶ F 50 5000 mbar (20.08 2008 inH ₂ O) ▶ G 0,3 30 bar (4.35 435 psi) ▶ D Wetted parts materials (stainless steel process flanges) Seal diaphragm Parts of measuring cell Stainless steel Stainless steel Hastelloy Stainless steel Hastelloy Hastelloy Tantalum Monel Monel Gold Version for diaphragm seal (4) 5) 6) 7) Y	
1 60 mbar (0.4015 24.09 inH₂O)	
2,5 250 mbar (1.004 100.4 inH₂O)	
6 600 mbar (2.409 240.9 inH₂O)	
16 1600 mbar (6.424 642.4 inH₂O)	
50 5000 mbar (20.08 2008 inH ₂ O)	
0,3 30 bar (4.35 435 psi)	
Wetted parts materials (stainless steel process flanges) Seal diaphragm Parts of measuring cell Stainless steel Stainless steel Hastelloy Stainless steel Hastelloy Hastelloy C Tantalum³) Tantalum E Monel³) Monel H Gold³) Gold L Version for diaphragm seal⁴ 5 6 7 7	
(stainless steel process flanges) Seal diaphragm Parts of measuring cell Stainless steel Stainless steel Hastelloy Stainless steel Hastelloy Hastelloy Tantalum Monel Gold³) Monel Gold³) Gold Version for diaphragm seal⁴ 5 6 7 7	
Seal diaphragm Parts of measuring cell Stainless steel Stainless steel Hastelloy Stainless steel Hastelloy Hastelloy Tantalum Monel Gold ³⁾ Gold Version for diaphragm seal ^{4) 5) 6) 7)} Stainless steel A A H B H C C Tantalum E H C Y	
Stainless steel Stainless steel B Hastelloy Stainless steel B Hastelloy Hastelloy C Tantalum ³⁾ Tantalum E Monel ³⁾ Monel H Gold ³⁾ Gold L Version for diaphragm seal ^{4) 5) 6) 7)} Y	
Hastelloy Stainless steel Hastelloy Hastelloy Tantalum Monel Gold Version for diaphragm seal Stainless steel B C C Tantalum E H H L Y	
Hastelloy Stainless steel Hastelloy Hastelloy Tantalum Monel Gold Version for diaphragm seal Stainless steel B C C Tantalum E H H L Y	
Hastelloy C Tantalum ³⁾ Tantalum E Monel ³⁾ Monel H Gold ³⁾ Gold L Version for diaphragm seal ^{4) 5) 6) 7)} Y	
Tantalum ³⁾ Tantalum E Monel ³⁾ Monel H Gold ³⁾ Gold L Version for diaphragm seal ^{4) 5) 6) 7)} Y	
Monel ³⁾ Monel H Gold ³⁾ Gold L Version for diaphragm seal ^{4) 5) 6) 7)} Y	
Gold ³⁾ Gold L Version for diaphragm seal ^{4) 5) 6) 7) Y}	
Version for diaphragm seal ^{4) 5) 6) 7)}	
Flocess connection	
 Mounting thread ⁷/₁₆-20 UNF to IEC 61518 Mounting thread M10 to DIN 19213 (only for replacement requirement) Vent on side of process flange ²⁾ Mounting thread ⁷/₁₆-20 UNF to IEC 61518 Mounting thread M10 to DIN 19213 (only for replacement requirement) 	
Non-wetted parts materials	
process flange screws Electronics housing	
Stainless steel Die-cast aluminum	
Stainless steel Stainless steel precision 3 casting ⁸⁾	
Version	
Standard versions 1	
 International version, English label inscrip- 2 	
tions, documentation in 5 languages on CD	
(no Order code selectable)	
Explosion protection	
• None	
With ATEX, Type of protection: - "Intrinsic safety (Ex ia)" B B	
- "Intrinsic safety (Ex ia)" B - "Explosion-proof (Ex d)" ⁹⁾ D	
- "Intrinsic safety and flameproof enclosure" P	
- "Intrinsic safety and flameproof enclosure" (Ex ia + Ex d)*10)	
- "Ex nA/ic (Zone 2)"11)	
- "Intrinsic safety, explosion-proof enclosure > • R	
and dust explosion protection (Ex ia+ Ex d +	
Zone 1D/2D) ⁽¹⁰⁾	
• FM + CSA intrinsic safe (is)	
• FM + CSA (is + ep) + Ex ia + Ex d (ATEX)	
 FM + CSA (is + ep) + Ex ia + Ex d (ATEX) With FM + CSA, Type of protection: "Intrinsic Safe und Explosion Proof (is + xp)"9) 	

	Article No.		
•	7 M F 4 4 3 3 -		
•	E (3	
•		0 1 6 7	
		7 M F 4 4 3 3 -	7 M F 4 4 3 3 - A B C D F

- Available ex stock
- We can offer shorter delivery times for configurations designated with the Quick Ship Symbol . For details see page 9/5 in the appendix.

Power supply units see Chap. 7 "Supplementary Components".

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 application, add Order code E10.
- 2) Not suitable for connection of remote seal. Position of the top vent valve in the process flange (see dimensional drawing).
- $^{3)}$ Not in conjunction with max. span 20 and 60 mbar (8.03 und 24.09 inH $_2$ O))
- 4) When the manufacture's certificate (calibration certificate) has to be ordered for transmitters with diaphragm seals according to IEC 60770-2, 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.
- 5) If the acceptance test certificate 3.1 is ordered for the transmitter with mounted diaphragm seals this certificate must also be ordered with the respective remote seals.
- $^{6)}$ The diaphragm seal is to be specified with a separate order number and must be included with the tranmitter order number, for example 7MF443.-..Y..-.... und 7MF4900-1...-.B
- 7) The standard measuring cell filling for configurations with remote seals (Y) is silicone oi
- 8) Not in conjunction with Electrical connection "Screwed gland Pg 13.5" and "Han7D plug"
- 9) Without cable gland, with blanking plug
- $^{10)}$ With enclosed cable gland Ex ia and blanking plug
- ¹¹⁾Configurations with HAN and M12 connectors are only available in Ex ic.
- ¹²⁾Not in conjunction with types of protection "Explosion-proof" and "Ex nA", "Intrinsic safety" and "Explosion-proof".
- $^{13)}$ Permissible only for crimp-contact of conductor cross-section 1 mm 2
- ¹⁴⁾M12 delivered without cable socket. Not available with protection type

Transmitters for general requirements

SITRANS P DS III for differential pressure and flow

Selection and Orderin	a data	Artic	lo NI	0
Pressure transmitters and flow PN 32/160 (M	for differential pressure	Artic	ie IV	U
SITRANS P DS III with	• •	7 M F	4 4	3 4 -
	FOUNDATION Fieldbus			35-
(FF)				
				-
Measuring cell filling	Measuring cell cleaning			
Silicone oil	normal	1		
Inert liquid ¹⁾	grease-free to cleanliness level 2	3		
Nominal measuring ra	inge			
PN 32 (MAWP 464 psi) 20 mbar ²⁾	(8.03 inH ₂ O)	В		
PN 160 (MAWP 2320 p				
60 mbar	(24.09 inH ₂ O)	С		
250 mbar	(100.4 inH ₂ O)	D		
600 mbar	(240.9 inH ₂ O)	E		
1600 mbar 5 bar	(642.4 inH ₂ O)	F G		
30 bar	(2008 inH ₂ O) (435 psi)	Н		
Wetted parts materials				
(stainless steel process				
Seal diaphragm	Parts of measuring cell			
Stainless steel	Stainless steel	A		
Hastelloy	Stainless steel	В		
Hastelloy 3	Hastelloy	C		
Tantalum ³⁾ Monel ³⁾	Tantalum Monel	E		
Gold ³⁾	Gold	H		
Version as diaphragm s		Y		
 Sealing screw oppositions - Mounting thread ⁷/₁ Mounting thread M¹ (only for replacement Venting on side of processing thread of the control of the control	6-20 UNF to IEC 61518 10 to DIN 19213 nt requirement) coess flanges ²⁾ 6-20 UNF to IEC 61518 10 to DIN 19213		2 0 6 4	
(only for replacement	· · · · · · · · · · · · · · · · · · ·			
Non-wetted parts mat				
Non-wetted parts mat process flange screws	Electronics housing			
			2 3	
process flange screws Stainless steel Stainless steel Version • Standard versions	Electronics housing Die-cast aluminum Stainless steel precision casting English label inscriptions, nguages on CD			1 2
process flange screws Stainless steel Stainless steel Version • Standard versions • International version, documentation in 5 la	Electronics housing Die-cast aluminum Stainless steel precision casting English label inscriptions, nguages on CD	-		
process flange screws Stainless steel Stainless steel Version Standard versions International version, documentation in 5 la (no Order code selection) Standard version, documentation in 5 la (no Order code selection) None	Electronics housing Die-cast aluminum Stainless steel precision casting English label inscriptions, nguages on CD table)	-		
process flange screws Stainless steel Stainless steel Version Standard versions International version, documentation in 5 la (no Order code selection) Company of the comp	Electronics housing Die-cast aluminum Stainless steel precision casting English label inscriptions, nguages on CD table) otection: ia)"			2 A B
process flange screws Stainless steel Stainless steel Version Standard versions International version, documentation in 5 la (no Order code selection) Company of the compa	Electronics housing Die-cast aluminum Stainless steel precision casting English label inscriptions, nguages on CD table) otection: ia)" (d) *8)			2 A
process flange screws Stainless steel Stainless steel Version Standard versions International version, documentation in 5 la (no Order code selection) None With ATEX, Type of proper intrinsic safety (Ex - "Explosion-proof (Ex in the Ex d)")	Electronics housing Die-cast aluminum Stainless steel precision casting English label inscriptions, inguages on CD table) otection: ia)" (c d)"8) flameproof enclosure"	-		A B D P
process flange screws Stainless steel Stainless steel Version Standard versions International version, documentation in 5 la (no Order code select Explosion protection None With ATEX, Type of pr - "Intrinsic safety (Ex - "Explosion-proof (Ex) - "Explosion-proof (Ex) (Ex ia + Ex d)" - "Ex nA/ic (Zone 2)" - "Intrinsic safety, exp	Electronics housing Die-cast aluminum Stainless steel precision casting English label inscriptions, nguages on CD table) otection: ia)" (d)"8) flameproof enclosure"	_		2 A B D
process flange screws Stainless steel Stainless steel Version Standard versions International version, documentation in 5 la (no Order code selection) None With ATEX, Type of proper intrinsic safety (Ex - "Explosion-proof (Ex - "Intrinsic safety and (Ex ia + Ex d)") - "Ex nA/ic (Zone 2)" "Intrinsic safety, exp dust explosion prote Zone 1D/2D)" (not	Electronics housing Die-cast aluminum Stainless steel precision casting English label inscriptions, nguages on CD table) otection: ia)" (c d)*8) flameproof enclosure" io) losion-proof enclosure and action (Ex ia + Ex d + for DS III FF)			A B D P E R
process flange screws Stainless steel Stainless steel Version Standard versions International version, documentation in 5 la (no Order code selection) None With ATEX, Type of proper interior in safety (Ex - "Explosion-proof (Ex - "Intrinsic safety, and (Ex ia + Ex d)") - "Ex nA/ic (Zone 2)" - "Intrinsic safety, and (Ex ia + Ex d)") - "Ex nA/ic (Zone 2)" - "Intrinsic safety, and (Ex ia + Ex d)") - "Ex nA/ic (Zone 2)" - "Intrinsic safety, and (Ex ia + Ex d)") - "Ex nA/ic (Zone 2)" - "Intrinsic safety, and (Ex ia + Ex d)") - "Ex nA/ic (Zone 2)" - "Intrinsic safety, and (Ex ia + Ex d)") - "With FM + CSA (is + ep) + With FM + CSA, Type	Electronics housing Die-cast aluminum Stainless steel precision casting English label inscriptions, nguages on CD table) otection: ia)" (c d)"8) flameproof enclosure" IO) losion-proof enclosure and section (Ex ia + Ex d + for DS III FF) Ife (is) Ex ia + Ex d (ATEX)	-		A B D P

·		
Selection and Ordering data	Article No.	
Pressure transmitters for differential pressure and flow PN 32/160 (MAWP 464/2320 psi)		
SITRANS P DS III with PROFIBUS PA (PA)	7 M F 4 4 3 4 -	
SITRANS P DS III with FOUNDATION Fieldbus (FF)	7 M F 4 4 3 5 -	
Electrical connection/cable entry		
Screwed gland M20 x 1.5	В	
• Screwed gland ½-14 NPT	C	
M12 connectors (stainless steel) ^{11) 12) 13)}	F	
Display		
Without display	0	
Without visible display	1	
(display concealed, setting: bar)		
With visible display	6	
With customer-specific display	7	
(setting as specified, Order code "Y21" required)		

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 application, add Order code E10.
- 2) Not suitable for connection of remote seal. Position of the top vent valve in the process flange (see dimensional drawing)
- $^{\rm 3)}$ Not in conjunction with max. span 20 and 60 mbar (8.03 und 24.09 in $\rm H_2O))$
- 4) When the manufacture's certificate (calibration certificate) has to be ordered for transmitters with diaphragm seals according to IEC 60770-2, 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.
- 5) If the acceptance test certificate 3.1 is ordered for the transmitter with mounted diaphragm seals this certificate must also be ordered with the respective remote seals.
- 6) The diaphragm seal is to be specified with a separate order number and must be included wiht the tranmitter order number, for example 7MF443.-..Y..-... und 7MF4900-1...-.B
- 7) The standard measuring cell filling for configurations with remote seals (Y) is silicone oil.
- 8) Without cable gland, with blanking plug.
- 9) With enclosed cable gland Ex ia and blanking plug.
- $^{10)}\mbox{Configurations}$ with HAN and M12 connectors are only available in Ex ic.
- ¹¹⁾M12 delivered without cable socket
- ¹²⁾Not available with protection type "Ex d" (options D, P, N and R)
- $^{13)}\mbox{Not}$ in conjunction with types of protection "Explosion-proof" and "Ex nA", "Intrinsic safety" and "Explosion-proof".

Transmitters for general requirements SITRANS P DS III for differential pressure and flow

Selection and Ordering data	Order			
Further designs Add "- Z " to Article No. and specify Order code.		HART	PA	FF
Pressure transmitter with mounting bracket (1x fixing angle, 2 x nut, 2 x U-washer or 1 x bracket, 2 x nut, 2 x U-washer) made of:				
SteelStainless steel	A01 A02	√	√	1
O-rings for process flanges (instead of FPM (Viton))				
 PTFE (Teflon) FEP (with silicone core, approved for food) FFPM (Kalrez, compound 4079) 	A20 A21 A22	√ √	√ ✓	✓
• NBR (Buna N)	A23	✓	✓	✓
PlugHan 7D (metal, gray)Han 8U (instead of Han 7D)	A30 A31	√		
AngledHan 8D (metal, gray)	A32 A33	√		
Sealing screws (2 unit(s) 1/4-18 NPT, with valve in mat. of process flanges	A40	✓	✓	✓
Cable sockets for M12 connectors (stainless steel)	A 50	✓	✓	✓
Rating plate inscription (instead of German)				
• English	B11	✓	✓	1
• French	B12	✓	✓	✓
• Spanish	B13	√	√	√
• Italian		✓ .	✓.	✓
English rating plate Pressure units in inH ₂ O and/or psi	B21	✓	✓	✓
Quality inspection certificate (Five-step factory calibration) to IEC 60770-2 ¹⁾	C11	1	✓	✓
Inspection certificate ²⁾ to EN 10204-3.1 ●	C12	✓	✓	1
Factory certificate to EN 10204-2.2	C14	✓	✓	1
Functional safety (SIL2) Devices suitable for use according to IEC 61508 and IEC 61511. Includes SIL conformity declaration	C20	1		
Functional safety (PROFIsafe) Certificate and PROFIsafe protocol	C21 ⁵⁾		✓	
Functional safety (SIL2/3) Devices suitable for use according to IEC 61508 and IEC 61511. Includes SIL conformity declaration	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	✓		
Manufacturer's declaration acc. to NACE (MR 0103-2012 and MR 0175-2009) (only together with seal diaphragm made of Hastelloy and stainless steel)	D07	✓	✓	1
Degree of protection IP65/IP68 (only for M20 x 1.5 and ½-14 NPT)	D12	1	✓	✓
Process flange screws made of Monel (max. nominal pressure PN20)	D34	✓	✓	✓
Supplied with oval flange set (2 items), PTFE packings and screws in thread of process flanges	D37	✓	✓	✓
3				

Selection and Ordering data	Order			
Further designs Add "-Z" to Article No. and specify Order code.		HART	PA	FF
Use in or on zone 1D/2D (only together with type of protection "Intrinsic safety" (transmitter 7MF4B Ex ia)")	E01	✓	✓	✓
TÜV approval to AD/TRD (only together with type of protection "Intrinsic safety (Ex ia)")	E06	✓		
Overfilling safety device for flammable and non-flammable liquids (max. PN 32 (MAWP 464 psi), basic device with type of protection "Intrinsic safety (Ex ia)", to WHG and VbF, not together with measuring cell filling "inert liquid")	E08	√		
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	✓	✓	✓
CRN approval Canada (Canadian Registration Number)	E22	✓	✓	✓
Dual seal	E24	✓	✓	✓
Explosion-proof "Intrinsic safety" (Ex ia) to INMETRO (Brazil) (only for transmitter 7MF4B)	E25 ⁴⁾	✓	✓	✓
"Flameproof" explosion protection according to INMETRO (Brazil) (only for transmitter 7MF4D)	E26 ⁴⁾	✓	✓	✓
Explosion-proof "Intrinsic safety" (Ex ia + Ex d) to INMETRO (Brazil) (only for transmitter 7MF4P)	E28 ⁴⁾	✓	✓	
Ex Approval IEC Ex (Ex ia) (only for transmitter 7MF4B)	E45 ⁴⁾	✓	✓	✓
Ex Approval IEC Ex (Ex id) (only for transmitter 7MF4D)	E46 ⁴⁾	✓	✓	✓
Explosion-proof "Intrinsic safety" to NEPSI (China) (only for transmitter 7MF4B)	E55 ⁴⁾	✓	✓	✓
Explosion protection "Explosion-proof" to NEPSI (China) (only for transmitter 7MF4D)	E56 ⁴⁾	✓	✓	✓
Explosion-proof "Zone 2" to NEPSI (China)	E57 ⁴⁾	✓	✓	✓
(only for transmitter 7MF4E) "Intrinsic safety" and "Explosion-proof" explosion protection acc. to Kosha (Korea) (only for transmitter 7MF4[B, D]Z + E11)	E70 ⁴⁾	✓	✓	✓
Two coats of lacquer on casing and cover (PU on epoxy)	G10	✓	✓	✓
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	✓	✓	✓

We can offer shorter delivery times for configurations designated with the Quick Ship Symbol . For details see page 9/5 in the appendix.

Transmitters for general requirements

SITRANS P DS III for differential pressure and flow

Selection and Ordering data	Order	code		
Further designs Add "-Z" to Article No. and specify Order code.		HART	PA	FF
Process flange				
 Hastelloy Monel Stainless steel with PVDF insert max. PN 10 (MAWP 145 psi), max. temperature of medium 90 °C (194 °F) For ½-14 NPT inner process connection on the side in the middle of the process flange, vent valve not possible 	K01 K02 K04	* * * * * * * * * * * * * * * * * * *	√ √ √	< < <

Factory mounting of valve manifolds, see accessories.

Supplementary electronics for 4-wire connection, see accessories.

✓ = available

- 1) When the manufacture's certificate (calibration certificate) has to be ordered for transmitters with diaphragm seals according to IEC 60770-2, it is recommended only to order this certificate exclusively with the diaphragm seals. The measuring accuracy of the total combination is certified here.
- 2) If the acceptance test certificate 3.1.is ordered for the transmitter with mounted diaphragm seals this certificate must also be ordered with the respective remote seals.
- 3) Not suitable for connection of remote seal
- 4) Option does not include ATEX approval, but instead includes only the country-specific approval.
- 5) Profisafe transmitters can only be operated with the S7 F Systems V6.1 configuration software in combination with S7-400H

Selection and Ordering data	Order	code		
Additional data Please add "-Z" to Article No. and specify Order code(s) and plain text.		HART	PA	FF
Measuring range to be set				
Specify in plain text: • in the case of linear characteristic curve (max. 5 characters): Y01: up to mbar, bar, kPa, MPa, psi	Y01	✓	√ 1)	
• in the case of square rooted characteristic ● (max. 5 characters): Y02: up to mbar, bar, kPa, MPa, psi	Y02	✓		
Stainless steel tag plate and entry in device variable (measuring point description)	Y15	✓	✓	✓
Max. 16 characters, specify in plain text: Y15:				
Measuring point text (entry in device variable)	Y16	✓	✓	✓
Max. 27 char., specify in plain text: Y16:				
Entry of HART address (TAG)	Y17	✓		
Max. 8 char., specify in plain text: Y17:				
Setting of pressure indicator in	Y21	✓	✓	✓
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_2O^*), inH_2O^*), ftH_2O^*), mmHG, $inHG$, psi, Pa, kPa, MPa, g/cm^2 , kg/cm², Torr, ATM or % *) ref. temperature 20 °C				
Setting of pressure indicator in non-	122	✓		
pressure units ²⁾ Specify in plain text: Y22: up to I/min, m ³ /h, m, USgpm, (specification of measuring range in pressure units "Y01" or "Y02" is essential, unit with	† Y01 or Y02			
max. 5 characters)				
Preset bus address	Y25		✓	✓
possible between 1 and 126 Specify in plain text: Y25:				
Damping adjustment in seconds (0 100 s)	Y30	✓	✓	✓

 We can offer shorter delivery times for configurations designated with the Quick Ship Symbol . For details see page 9/5 in the appendix.

Factory mounting of valve manifolds, see accessories.

Only Y01, Y15, Y16, Y17, Y21, Y22, Y25 und D05 can be factory preset

✓ = available

- Measuring accuracies for PROFIBUS PA transmitters with Option Y01 are calculated in the same way as for HART devices.
 Preset values can only be changed over SIMATIC PDM.
- 3) Not in conjunction with over-filling safety device for flammable and non-flammable liquids (Order code "E08")

Transmitters for general requirements

SITRANS P DS III for differential pressure and flow

for differential pl	ressure and now				
Selection and Orderin	g data	Artic	le No).	
	HART pressure trans-	7 M F	453	3 3 -	
mitters for differential	pressure and flow,				
PN 420 (MAWP 6092 p					
Measuring cell filling	Measuring cell cleaning				
Silicone oil	normal	1			
-					
Measuring span (min.	•				
2.5 250 mbar	(1.004 100.4 inH ₂ O)	D			
6 600 mbar 16 1600 mbar	(2.409 240.9 inH ₂ O) (6.424 642.4 inH ₂ O)	E F			
50 5000 mbar	(20.08 2008 inH ₂ O)	Ġ			
0.3 30 bar	(4.35 435 psi)	Н			
Wetted parts materials					
(stainless steel process					
Seal diaphragm	Parts of measuring cell				
Stainless steel Hastelloy	Stainless steel Stainless steel	E			
Gold ¹⁾	Gold	ī			
Ausführung als Membra		Ŋ			
Process connection					
	T with flange connection				
Sealing screw opposi	~				
	_s -20 UNF to IEC 61518		3		
- Mounting thread M1			1		
(only for replacement					
	cess flanges, location of				
vent valve at top of pr sional drawing)	ocess flanges (see dimen-				
	₆ -20 UNF to IEC 61518		7		
 Mounting thread M1 Mounting thread M1 			5		
(only for replacement					
Non-wetted parts mate	erials	-			
process flange screws					
Stainless steel	Die-cast aluminum		2		
Stainless steel	Stainless steel precision casting ⁶⁾		3		
Version					
 Standard versions 				1	
	English label inscriptions,			2	
documentation in 5 la (no Order code selec	nguages on CD				
***	table)	-			
Explosion protection					
NoneWith ATEX, Type of pr	otection:			Α	
- "Intrinsic safety (Ex i				В	
- "Explosion-proof (Ex					
	flameproof enclosure"			D P	
(Ex ia + Ex d)*8)	nameproor enclosure				
- "Ex nA/ic (Zone 2)"9)				E	
 "Intrinsic safety, expl 	osion-proof enclosure and			R	
dust explosion prote	ection (Ex ia+ Ex d +				
• FM + CSA intrinsic sa	fo (ie)			F	
• FM + CSA (is + ep) +				S	
• With FM + CSA, Type					
				N C	
 "Intrinsic safety and (is + xp)" ⁷), max PN 	360			IV C	
Electrical connection/					
 Screwed gland Pg 13 				Δ	4
• Screwed gland M20x				E	3
0 1 1 147 14	NPT			C	;
 Screwed gland ½-14 					
				C	ו
 Screwed gland ½-14 Han 7D plug (plastic leannector 10)11) M12 connectors (stair 	housing) incl. mating				

Calastian and Ordering data	Article No.
Selection and Ordering data	Article No.
SITRANS P DS III with HART pressure trans-	7 M F 4 5 3 3 -
mitters for differential pressure and flow, PN 420 (MAWP 6092 psi)	
Display	
Without display	0
Without visible display	1
(display concealed, setting: mA)	
 With visible display 	6
with customer-specific display (setting as specified, Order code "Y21" or "Y22" required)	7

Power supply units see Chap. 7 "Supplementary Components".

Scope of delivery: Pressure transmitter as ordered (Instruction Manual is extra ordering item)

- 1) Not in conjunction with max. span 600 mbar (240.9 inH₂O)
- When the manufacture's certificate (calibration certificate) has to be ordered for transmitters with diaphragm seals according to IEC 60770-2, 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.
- 3) If the acceptance test certificate 3.1 is ordered for the transmitter with mounted diaphragm seals this certificate must also be ordered with the respective remote seals.
- 4) The diaphragm seal is to be specified with a separate order number and must be included with the tranmitter order number, for example 7MF453.-.Y...... und 7MF4900-1....-.B
- 5) The standard measuring cell filling for configurations with remote seals (Y) is silicone oil.
- 6) Not in conjunction with Electrical connection "Screwed gland Pg 13.5" and "Han7D plug".
- 7) Without cable gland, with blanking plug
- $^{8)}\,$ With enclosed cable gland Ex ia and blanking plug
- 9) Configurations with HAN and M12 connectors are only available in Ex ic.
- ¹⁰⁾Not in conjunction with types of protection "Explosion-proof" and "Ex nA", "Intrinsic safety" and "Explosion-proof".
- $^{11)}\mbox{Permissible}$ only for crimp-contact of conductor cross-section 1 \mbox{mm}^2
- ¹²⁾M12 delivered without cable socket
- ¹³⁾Not available with protection type "Ex d" (options D, P, N and R)
- ¹⁴⁾Not in conjunction with types of protection "Explosion-proof" and "Ex nA", "Intrinsic safety" and "Explosion-proof".

Transmitters for general requirements

SITRANS P DS III for differential pressure and flow

Selection and Orde	ring data	Artic	le N	Ο.	
	ers for differential pressure	1 11 11 10			
•	ith PROFIBUS PA (PA)	7 M F	4 5	34-	
	ith FOUNDATION Fieldbus			35-	
(FF)	III I GONDANON I IOIGIGG		. •	• •	
		1		-	
Nominal measuring	ı range				
250 mbar	(100.4 inH ₂ O)	D			
600 mbar	(240.9 inH ₂ O)	E			
1600 mbar	(642.4 inH ₂ O)	F			
5 bar	(2008 inH ₂ O)	G			
30 bar	(435 psi)	Н			
Wetted parts mater					
(stainless steel proce					
Seal diaphragm	Parts of measuring cell				
Stainless steel	Stainless steel	A			
Hastelloy Gold ¹⁾	Stainless steel	E			
	Gold abrandruckmittler ^{2) 3) 4) 5)}	L			
Process connection	n NPT with flange connection				
	osite process connection				
	⁷ / ₁₆ -20 UNF to IEC 61518		3		
- Mounting thread			1		
	ment requirement)				
	process flanges, location of				
vent valve at top of sional drawing).	process flanges (see dimen-				
	⁷ / ₁₆ -20 UNF to IEC 61518				
- Mounting thread	· =		7 5		
	ment requirement)		3		
Non-wetted parts m					
•	ws Electronics housing				
Stainless steel	Die-cast aluminum		2		
Stainless steel	Stainless steel precision		3		
Stainless steel	Stainless steel precision casting	_	3		
Version		_	3		
Version • Standard versions	casting	-	3	1	
Version • Standard versions • International versic	casting casting on, English label inscriptions,	_	3	1 2	
Version ■ Standard versions ■ International versic	casting on, English label inscriptions, stanguages on CD	_	3		
Version • Standard versions • International versic documentation in 5 (no Order code se	casting on, English label inscriptions, blanguages on CD ectable)	-	3		
Version • Standard versions • International versic documentation in 5 (no Order code sei	casting on, English label inscriptions, blanguages on CD ectable)		3		
Version • Standard versions • International versic documentation in 5 (no Order code see Explosion protection) • None • With ATEX, Type of	casting on, English label inscriptions, blanguages on CD ectable) on		3	2 A	
Version • Standard versions • International versic documentation in 5 (no Order code see Explosion protectic • None • With ATEX, Type of - "Intrinsic safety (forms)	casting on, English label inscriptions, stanguages on CD ectable) on protection: Ex ia)"		3	2 A B	
Version • Standard versions • International versic documentation in 5 (no Order code set Explosion protectic • None • With ATEX, Type of - "Intrinsic safety (F - "Explosion-proof	casting on, English label inscriptions, slanguages on CD ectable) on protection: Ex ia)" (Ex d)"6)		3	A B D	
Version Standard versions International versic documentation in surface (no Order code seino Protection None With ATEX, Type of "Intrinsic safety (surface)" intrinsic safety (surface) intrinsic safety and intrinsic safety are standard versions.	casting on, English label inscriptions, stanguages on CD ectable) on protection: Ex ia)"		3	2 A B	
Version Standard versions International versic documentation in 5 (no Order code sei Explosion protection None With ATEX, Type of - "Intrinsic safety (France of the company of the com	casting on, English label inscriptions, languages on CD lectable) on iprotection: Ex ia)" (Ex d)"6) nd flameproof enclosure"		3	A B D	
Version Standard versions International versic documentation in 5 (no Order code sei Explosion protectio None With ATEX, Type of "Intrinsic safety (For the code in the code i	casting on, English label inscriptions, a languages on CD ectable) on in protection: Ex ia)" (Ex d)"6) and flameproof enclosure" ()"8) xplosion-proof enclosure and		3	A B D P	
Version Standard versions International versic documentation in 5 (no Order code sei Explosion protectic None With ATEX, Type of "Intrinsic safety (For the code in the code i	casting on, English label inscriptions, a languages on CD ectable) on in protection: Ex ia)" (Ex d)"6) and flameproof enclosure" ()"8) xplosion-proof enclosure and		3	A B D P	
Version Standard versions International version documentation in Standard versions International version documentation in Standard version protection None With ATEX, Type of large and large and large affects at Explosion-proof large intrinsic safety at Ex nA/ic (Zone 2 "Intrinsic safety, edust explosion product and large and	casting on, English label inscriptions, stanguages on CD ectable) on protection: Ex ia)" (Ex d)"6) nd flameproof enclosure" on on xplosion-proof enclosure and objection (Ex ia + Ex d + not for DS III FF)		3	A B D P E R	
Version Standard versions International version documentation in Standard versions International versions International versions International version None With ATEX, Type of "Intrinsic safety (Italian in Standard in Intrinsic safety at (Ex ia + Ex d)")" "Ex nA/ic (Zone 2 intrinsic safety, edust explosion produst explosion product in Intrinsic safety, edust explosion product in Intrinsic safety, eduction in Intrinsic safety in Intri	casting on, English label inscriptions, stanguages on CD ectable) on protection: Ex ia)" (Ex d)*6) nd flameproof enclosure" open (Ex ia + Ex d + not for DS III FF) safe (is)	_	3	A B D P E R	
documentation in 5 (no Order code sei Explosion protectic None With ATEX, Type of "Intrinsic safety (I "Explosion-proof "Intrinsic safety a (Ex ia + Ex d)"" "Ex nA/ic (Zone 2 "Intrinsic safety, e dust explosion produst explosion product e	casting on, English label inscriptions, stanguages on CD ectable) on protection: Ex ia)" (Ex d)*6) nd flameproof enclosure" on on xplosion-proof enclosure and olection (Ex ia + Ex d + not for DS III FF) safe (is)) + Ex ia + Ex d (ATEX)		3	A B D P E R	
Version ◆ Standard versions ◆ International version documentation in 5 (no Order code set Explosion protection of the version of the versi	casting on, English label inscriptions, stanguages on CD ectable) on protection: Ex ia)" (Ex d)"6) nd flameproof enclosure" on on xplosion-proof enclosure and otection (Ex ia + Ex d + not for DS III FF) safe (is) ye and (ATEX) pe of protection:		3	A B D P E R	C
Version Standard versions International versic documentation in 5 (no Order code sei Explosion protection None With ATEX, Type of "Intrinsic safety (Explosion-proof" "Intrinsic safety a (Ex ia + Ex d)")" "Ex nA/ic (Zone 2" "Intrinsic safety, e dust explosion profered to the complete of	casting on, English label inscriptions, sanguages on CD ectable) on is protection: Ex ia)" (Ex d)"6) and flameproof enclosure" on xplosion-proof enclosure and rotection (Ex ia + Ex d + not for DS III FF) safe (is)) + Ex ia + Ex d (ATEX) pe of protection: and explosion-proof		3	A B D P E R	С
Version ◆ Standard versions ◆ International version documentation in 5 (no Order code set Explosion protection of the version of the versi	casting on, English label inscriptions, stanguages on CD ectable) on protection: Ex ia)" (Ex d)"6) nd flameproof enclosure" on on xplosion-proof enclosure and otection (Ex ia + Ex d + not for DS III FF) safe (is) y + Ex ia + Ex d (ATEX) pe of protection: nd explosion-proof PN 360		3	A B D P E R	С
Version ◆ Standard versions ◆ International version documentation in 5 (no Order code set Explosion protection of the version of the versi	casting on, English label inscriptions, stanguages on CD ectable) on protection: Ex ia)" (Ex d)"6) nd flameproof enclosure" on on xplosion-proof enclosure and otection (Ex ia + Ex d + not for DS III FF) safe (is)) + Ex ia + Ex d (ATEX) pe of protection: nd explosion-proof PN 360 on/cable entry		3	A B D P E R	С
Version Standard versions International versic documentation in 5 (no Order code sei Explosion protection None With ATEX, Type of large la	casting on, English label inscriptions, stanguages on CD ectable) on protection: Ex ia)" (Ex d)"6) nd flameproof enclosure" on on in the control of		3	A B D P E R	

Selection and Ordering data	Article No.
Pressure transmitters for differential pressure and flow, PN 420 (MAWP 6092 psi)	
SITRANS P DS III with PROFIBUS PA (PA)	7MF4534-
SITRANS P DS III with FOUNDATION Fieldbus	7 M F 4 5 3 5 -
(FF)	
	1-1-1-1
Display	
Without (display hidden)	0
Without visible display	1
(display concealed, setting: bar)	
With visible display	6
 With customer-specific display (setting as specified, Order code "Y21" required) 	7
specified Urder code Y21" reduired)	

- Brief instructions (Leporello)CD-ROM with detailed documentation
- Sealing plug(s) or sealing screw(s) for the process flanges(s)
- $^{1)}$ Not in conjunction with max. span 600 mbar (240.9 inH $_2$ O)
- When the manufacture's certificate (calibration certificate) has to be ordered for transmitters with diaphragm seals according to IEC 60770-2, 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.
- 3) If the acceptance test certificate 3.1 is ordered for the transmitter with mounted diaphragm seals this certificate must also be ordered with the respective remote seals.
- 4) The diaphragm seal is to be specified with a separate order number and must be included with the tranmitter order number, for example 7MF453,-..Y..-... und 7MF4900-1....-.B
- 5) The standard measuring cell filling for configurations with remote seals (Y) is silicone oil
- 6) Without cable gland, with blanking plug.
- 7) With enclosed cable gland Ex ia and blanking plug.
- 8) Configurations with HAN and M12 connectors are only available in Ex ic.
- 9) M12 delivered without cable socket
- $^{10)}\mbox{Not}$ available with protection type "Ex d" (options D, P, N and R)
- $^{11)}$ Not in conjunction with types of protection "Explosion-proof" and "Ex nA", "Intrinsic safety" and "Explosion-proof".

Transmitters for general requirements

SITRANS P DS III for differential pressure and flow

Selection and Ordering data	Order			
Further designs		HART	PA	FF
Add "-Z" to Article No. and specify Order code.				
Pressure transmitter with mounting bracket (1x fixing angle, 2 x nut, 2 x Uwasher or 1 x bracket, 2 x nut, 2 x Uwasher) made of:				
• Steel	A01	✓	✓	✓
 Stainless steel 	A02	✓	✓	✓
O-rings for process flanges (instead of FPM (Viton)) PTFE (Teflon) FEP (with silicone core, approved for food) FFPM (Kalrez, compound 4079) NBR (Buna N)	A20 A21 A22 A23	* * * * *	\[\lambda \lambda \] \[\lambda \] \[\lambda \]	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
PlugHan 7D (metal, gray)Han 8U (instead of Han 7D)Angled	A30 A31 A32	·	Ť	
• Han 8D (metal, gray)	A33			
Sealing screws (2 unit(s) 1/4-18 NPT, with valve in mat. of process flanges	A40	✓	✓	✓
Cable sockets for M12 conn. (stainless steel)	A50	✓	✓	✓
Rating plate inscription (instead of German) • English • French • Spanish	B11 B12 B13	√ √ √	✓ ✓ ✓	* *
• Italian	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	1	✓	✓
Inspection certificate Acc. to EN 10204-3.1	C12	✓	✓	✓
Factory certificate Acc. to EN 10204-2.2	C14	✓	✓	✓
Functional safety (SIL2) Devices suitable for use according to IEC 61508 and IEC 61511. Includes SIL conformity declaration	C20	✓		
Functional safety (PROFIsafe) Certificate and PROFIsafe protocol	C21 ¹⁾		✓	
Functional safety (SIL2/3) Devices suitable for use according to IEC 61508 and IEC 61511. Includes SIL conformity declaration	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	✓		
Manufacturer's declaration acc. to NACE (MR 0103-2012 and MR 0175-2009) (only together with seal diaphragm made of Hastelloy and stainless steel)	D07	✓	✓	✓
Degree of protection IP65/IP68 (only for M20 x 1.5 and ½-14 NPT)	D12	✓	✓	✓
Nom. press. rating PN 500 (MAWP 7250 psi) (Only for measuring cell 600 mbar 30 bar (240 in $\rm H_2O$ 435 psi), SIL- und Ex-options not possible)) ²⁾	D56	✓		

Selection and Ordering data	Order	code		
Further designs	3.00	HART	PA	FF
Add "-Z" to Article No. and specify Order code.				
Use in or on zone 1D/2D	E01	✓	✓	✓
(only together with type of protection				
"Intrinsic safety" (transmitter 7MF4B Ex ia)")				
Export approval Korea	E11	1	✓	1
Dual seal	E24	✓	1	1
Explosion-proof "Intrinsic safety" (Ex ia) to	E25 ³⁾	✓	✓	✓
INMETRO (Brazil) (only for transmitter 7MF4B)				
"Flameproof" explosion protection accord-	E26 ³⁾	1	1	1
ing to INMETRO (Brazil)	L20 ·	•	•	Ť
(only for transmitter 7MF4D)				
Explosion-proof "Intrinsic safety" (Ex ia +	E28 ³⁾	✓	✓	
Ex d) to INMETRO (Brazil) (only for transmitter 7MF4P)				
Ex Approval IEC Ex (Ex ia)	E45 ³⁾	✓	1	1
(only for transmitter 7MF4B)				
Ex Approval IEC Ex (Ex id)	E46 ³⁾	✓	✓	✓
(only for transmitter 7MF4D)				
Explosion-proof "Intrinsic safety" to NEPSI (China)	E55 ³⁾	✓	✓	✓
(only for transmitter 7MF4B)				
Ex prot. "Explosion-proof" to NEPSI (China)	E56 ³⁾	✓	✓	✓
(only for transmitter 7MF4				
Explosion-proof "Zone 2" to NEPSI (China)	E57 ³⁾	✓	✓	✓
(only for transmitter 7MF4E)				
"Intrinsic safety" and "Explosion-proof"	E70 ³⁾	✓	✓	✓
explosion protection acc. to Kosha (Korea) (only for transmitter				
7MF4[B, D]Z + E11)				
Two coats of lacquer on casing and cover	G10	✓	✓	✓
(PU on epoxy)				
Interchanging of process connection side	H01	✓	✓	✓
Stainless steel process flanges for vertical differential pressure lines	H03	✓	✓	✓
Transient protector 6 kV (lightning protec-	J01	✓	✓	✓
tion)				

<sup>Profisale transmitters can only be operated with the S7 F Systems V6.1 configuration software in combination with S7-400H

Tested according to IEC 61010. Only for measuring materials of the group of fluids 2 in accordance with PED permissible. Not for use with dangerous</sup> media suitable.

Option does not include ATEX approval, but instead includes only the country-specific approval.

Transmitters for general requirements

SITRANS P DS III for differential pressure and flow

Selection and Ordering data	Order	code		
Additional data		HART	PA	FF
Please add "-Z" to Article No. and specify Order code(s) and plain text.				
Measuring range to be set				
Specify in plain text: • in the case of linear characteristic curve (max. 5 characters):	Y01	✓	√ 1)	
Y01: up to mbar, bar, kPa, MPa, psi • in the case of square rooted characteristic (max. 5 characters):	Y02	✓		
Y02: up to mbar, bar, kPa, MPa, psi				
Stainless steel tag plate and entry in device variable (measuring point description)	Y15	✓	✓	✓
Max. 16 characters, specify in plain text: Y15:				
Measuring point text (entry in device vari-	Y16	✓	✓	✓
able) Max. 27 char., specify in plain text: Y16:				
Entry of HART address (TAG)	Y17	1		
Max. 8 char., specify in plain text: Y17:	117	·		
Setting of pressure indication in pressure	Y21	✓	✓	1
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_2O^* , inH_2O^* , itH_2O^* ,				
mmHG, inHG, psi, Pa, kPa, MPa, g/cm²,				
kg/cm ² , Torr, ATM or % *) ref. temperature 20 °C				
Setting of pressure indication in	Y22 +	1		
non-pressure units ²⁾	Y01 or			
Specify in plain text: Y22: up to I/min, m ³ /h, m, USgpm,	Y02			
(specification of measuring range in pressure				
units "Y01" or "Y02" is essential, unit with max. 5 characters)				
Preset bus address	Y25		✓	✓
possible between 1 and 126				
Specify in plain text: Y25:				
Damping adjustment in seconds (0 100 s)	Y30	√	✓	√

Factory mounting of valve manifolds, see accessories.

Only Y01, Y15, Y16, Y17, Y21, Y22, Y25 and D05 can be factory preset.

✓ = available

Measuring accuracies for PROFIBUS PA transmitters with Option Y01 are calculated in the same way as for HART devices.
 Preset values can only be changed over SIMATIC PDM.

Transmitters for general requirements

SITRANS P DS III for level

Pressure transmitter for level, SITRANS P DS III with HART Measuring cell filling Measuring cell cleaning Silicone oil normal Measuring span (min max.) 25 250 mbar (10 240 inH ₂ O) 25 600 mbar (10 240 inH ₂ O) 53 1600 mbar (21 642 inH ₂ O) 0.16 5 bar (64.3 2000 inH ₂ O) Process connection of low-pressure side Female thread ¼-18 NPT with flange connection • Mounting thread M10 to DIN 19213 (only for replacement requirement) Non-wetted parts materials process flange screws Electronics housing Stainless steel Die-cast aluminum Stainless of Die-cast aluminum	ion	7 M F				
Measuring cell filling cleaning normal Measuring span (min max.) 25 250 mbar (10 100 inH ₂ O) 25 600 mbar (10 240 inH ₂ O) 53 1600 mbar (21 642 inH ₂ O) 0.16 5 bar (64.3 2000 inH ₂ O) Process connection of low-pressure side Female thread ¼-18 NPT with flange connection Mounting thread ¾-18 NPT with flange connection Mounting thread M10 to DIN 19213 (only for replacement requirement) Non-wetted parts materials process flange screws Electronics housing Stainless steel Die-cast aluminum	ion	1 D E F	2 0			
Cleaning normal Measuring span (min max.) 25 250 mbar (10 100 inH ₂ O) 25 600 mbar (10 240 inH ₂ O) 53 1600 mbar (21 642 inH ₂ O) 0.16 5 bar (64.3 2000 inH ₂ O) Process connection of low-pressure side Female thread ¼-18 NPT with flange connection Mounting thread ¾-18 NPT with flange connection Mounting thread M10 to DIN 19213 (only for replacement requirement) Non-wetted parts materials process flange screws Electronics housing Stainless steel Die-cast aluminum Stainless steel Stainless steel precis casting 1) Version • Standard versions • International version, English label inscription documentation in 5 languages on CD (no Order code selectable)	ion	D E F	2			
Measuring span (min max.) 25 250 mbar (10 100 inH ₂ O) 25 250 mbar (10 240 inH ₂ O) 25 600 mbar (21 642 inH ₂ O) 0.16 5 bar (64.3 2000 inH ₂ O) Process connection of low-pressure side Female thread ¼-18 NPT with flange connection Mounting thread ¼-18 NPT with flange connection Mounting thread M10 to DIN 19213 (only for replacement requirement) Non-wetted parts materials process flange screws Electronics housing Stainless steel Die-cast aluminum Stainless steel Die-cast aluminum Stainless steel Stainless steel precis casting 1 Version Standard versions International version, English label inscription documentation in 5 languages on CD (no Order code selectable)	ion	D E F	2			
25 250 mbar (10 100 inH ₂ O) 25 600 mbar (10 240 inH ₂ O) 53 1600 mbar (21 642 inH ₂ O) 0.16 5 bar (64.3 2000 inH ₂ O) Process connection of low-pressure side Female thread ¼-18 NPT with flange connectie Mounting thread ¾-18 NPT with flange connectie Mounting thread ¾-18 NPT with flange connectie Mounting thread № 10 to DIN 19213 (only for replacement requirement) Non-wetted parts materials process flange screws Electronics housing Stainless steel Die-cast aluminum Stainless steel precis casting ¹) Version Standard versions International version, English label inscription documentation in 5 languages on CD (no Order code selectable)	ion	E F	2			
25 600 mbar (10 240 inH ₂ O) 53 1600 mbar (21 642 inH ₂ O) 0.16 5 bar (64.3 2000 inH ₂ O) Process connection of low-pressure side Female thread ¼-18 NPT with flange connectie Mounting thread ¾-18 NPT with flange connectie Mounting thread № 10 to DIN 19213 (only for replacement requirement) Non-wetted parts materials process flange screws Electronics housing Stainless steel Die-cast aluminum Stainless steel Die-cast aluminum Stainless steel precis casting 1) Version Standard versions International version, English label inscription documentation in 5 languages on CD (no Order code selectable)	ion	E F	2			
53 1600 mbar (21 642 inH ₂ O) 0.16 5 bar (64.3 2000 inH ₂ O) Process connection of low-pressure side Female thread ¼-18 NPT with flange connection Mounting thread ¾-18 NPT with flange connection Mounting thread M10 to DIN 19213 (only for replacement requirement) Non-wetted parts materials process flange screws Electronics housing Stainless steel Die-cast aluminum Stainless steel Die-cast aluminum Stainless steel Stainless steel precise casting 1) Version Standard versions International version, English label inscription documentation in 5 languages on CD (no Order code selectable)	ion	F	2			
O.16 5 bar (64.3 2000 inH ₂ O) Process connection of low-pressure side Female thread ¼-18 NPT with flange connection Mounting thread flac-20 UNF to IEC 61518 Mounting thread M10 to DIN 19213 (only for replacement requirement) Non-wetted parts materials process flange screws Electronics housing Stainless steel Die-cast aluminum Stainless steel Stainless steel precise casting 1 Version Standard versions International version, English label inscription documentation in 5 languages on CD (no Order code selectable)	ion		2			
Process connection of low-pressure side Female thread ¼-18 NPT with flange connection Mounting thread 7/ ₁₆ -20 UNF to IEC 61518 Mounting thread M10 to DIN 19213 (only for replacement requirement) Non-wetted parts materials process flange screws Electronics housing Stainless steel Die-cast aluminum Stainless steel Stainless steel precise casting 1) Version Standard versions International version, English label inscription documentation in 5 languages on CD (no Order code selectable)	ion	G	2			
Female thread ¼-18 NPT with flange connection Mounting thread 7/ ₁₆ -20 UNF to IEC 61518 Mounting thread M10 to DIN 19213 (only for replacement requirement) Non-wetted parts materials process flange screws Electronics housing Stainless steel Die-cast aluminum Stainless steel Stainless steel precise casting 1) Version Standard versions International version, English label inscription documentation in 5 languages on CD (no Order code selectable)	ion		2			
Mounting thread 7/ ₁₆ -20 UNF to IEC 61518 Mounting thread M10 to DIN 19213 (only for replacement requirement) Non-wetted parts materials process flange screws Electronics housing Stainless steel Die-cast aluminum Stainless steel Stainless steel precis casting 1) Version Standard versions International version, English label inscription documentation in 5 languages on CD (no Order code selectable)	ion		2			
Mounting thread M10 to DIN 19213 (only for replacement requirement) Non-wetted parts materials process flange screws			2			
Mounting thread M10 to DIN 19213 (only for replacement requirement) Non-wetted parts materials process flange screws			2			
Non-wetted parts materials process flange screws						
process flange screws Electronics housing Stainless steel Die-cast aluminum Stainless steel Stainless steel precis casting 1) Version Standard versions International version, English label inscription documentation in 5 languages on CD (no Order code selectable)						
Stainless steel Die-cast aluminum Stainless steel Stainless steel precis casting 1) Version Standard versions International version, English label inscription documentation in 5 languages on CD (no Order code selectable)						
Stainless steel Stainless steel precis casting 1) Version Standard versions International version, English label inscription documentation in 5 languages on CD (no Order code selectable)						
casting ¹⁾ Version Standard versions International version, English label inscription documentation in 5 languages on CD (no Order code selectable)			3			
casting ¹⁾ Version Standard versions International version, English label inscription documentation in 5 languages on CD (no Order code selectable)						
 Standard versions International version, English label inscription documentation in 5 languages on CD (no Order code selectable) 	ns,					
 International version, English label inscription documentation in 5 languages on CD (no Order code selectable) 	ns,					
documentation in 5 languages on CD (no Order code selectable)	ns,			1		
(no Order code selectable)				2		
Evaluation protection						
Explosion protection						
• None					Α	
With ATEX, Type of protection:						
- "Intrinsic safety (Ex ia)"					В	
- "Explosion-proof (Ex d)" ²⁾					D	
- "Intrinsic safety and flameproof enclosure" (Ex ia + Ex d)*3)					Р	
(Ex ia + Ex d)" ³⁾ - "Ex nA/ic (Zone 2)" ⁴⁾						
	and				E	
 "Intrinsic safety, explosion-proof enclosure a dust explosion protection (Ex ia+ Ex d + Zone 1D/2D)"³⁾ 	ano				R	
• FM + CSA intrinsic safe (is)					F	
• FM + CSA (is + ep) + Ex la + Ex d (ATEX)					s	
 With FM + CSA, Type of protection: 						
- "Intrinsic Safe und Explosion Proof (is + xp) ⁿ¹⁾				NC	
Electrical connection/cable entry						
Screwed gland Pg 13.5 ⁵⁾					Α	
Screwed gland M20x1.5					В	
 Screwed gland ½-14 NPT 					С	
 Han 7D plug (plastic housing) incl. mating 					D	
connector ⁵⁾						
• M12 connectors (stainless steel) ^{5) 6) 7)}					F	
Display						
Without display						0
Without visible display						1
(display concealed, setting: mA)						
With visible display						6
With customer-specific display (setting as	۱۱ ا					7
specified, Order code "Y21" or "Y22" required	u)					

Ordering information

1st order item: Pressure transmitter 7MF4633-... 2nd order item: Mounting flange 7MF4912-3...

ordering example

Item line 1: 7MF4633-1EY20-1AA1-Z

B line:

Y01 Y01: 80 to 143 mbar (1.16 to 2.1 psi) 7MF4912-3GE01 C line:

Item line 2:

Power supply units see Chap. 7 "Supplementary Components".

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) Not in conjunction with electrical connection "Screwed gland Pg 13.5" and "Han7D plug"
- 2) Without cable gland, with blanking plug.
- 3) With enclosed cable gland Ex ia and blanking plug.
- 4) Configurations with HAN and M12 connectors are only available in Ex nL.
- $^{5)}\,$ Not in conjunction with types of protection "Explosion-proof" and "Ex nA", "Intrinsic safety" and "Explosion-proof".
- 6) M12 delivered without cable socket
- 7) Not available with protection type "Ex d" (optiones D, P, N and R)

Transmitters for general requirements

SITRANS P DS III for level

Selection and Orde	ring data	Artic	le N	lo.			
Pressure transmitte	ers for level						
SITRANS P DS III w	rith PROFIBUS PA (PA)	7 M F	4 6	3 4	٠.		
	rith FOUNDATION Fieldbus	7 M F	4 6	3 5	; -		
(FF)							
		1 \		-			
Nominal measuring							
250 mbar 600 mbar	(100 inH ₂ O) (240 inH ₂ O)	D E					
1600 mbar	(642 inH ₂ O)	F					
5 bar	(2000 inH ₂ O)	G					
Female thread 1/4-18	n of low-pressure side NPT with flange connection						
 Mounting thread '/ Mounting thread M (only for replacem 			0				
Non-wetted parts m							
Stainless steel	Die-cast aluminum		2				
Stainless steel	Stainless steel precision casting		3				
Version							
Standard versions				1 2			
documentation in 5	on, English label inscriptions, 5 languages on CD						
(no Order code se	lectable)						
Explosion protection	on						
None None	· protection.				Α		
 With ATEX, Type of "Intrinsic safety (Exercise) 					В		
- "Explosion-proof	(Ex d)" ¹⁾				D		
- "Intrinsic safety a	nd flameproof enclosure"				Р		
- "Ex nA/ic (Zone 2	xplosion-proof enclosure and				E R		
dust explosion pr Zone 1D/2D)" ²⁾ (r	rotection (Ex ia + Ex d + not for DS III FF)						
• FM + CSA intrinsic	` '				F		
FM + CSA (is + epWith FM + CSA, Ty) + Ex ia + Ex d (ATEX)				S		
- "Intrinsic Safe un	d Explosion Proof (is + xp)" ¹⁾				NC	;	
Electrical connection							
Screwed gland M2					E	3	
Screwed gland ½-M12 connectors (s	14 NPT tainless steel) ^{4) 5)}				F		
Display						_	
Without displayWithout visible disp	olav					0	
(display concealed	d, setting: bar)					ľ	
• With visible display						6	
 With customer-spe specified, Order co 	cific display (setting as ode "Y21" required)					7	

Ordering information

1st order item: Pressure transmitter 7MF4634-... 2nd order item: Mounting flange 7MF4912-...

ordering example

Item line 1: 7MF4634-1EY20-1AA1 Item line 2: 7MF4912-3GE01

- Brief instructions (Leporello)
- CD-ROM with detailed documentation
- Sealing plug(s) or sealing screw(s) for the process flanges(s)
- 1) Without cable gland, with blanking plug.
- $^{2)}$ With enclosed cable gland Ex ia and blanking plug.
- $^{\rm 3)}$ Configurations with HAN and M12 connectors are only available in Ex nL.
- $^{4)}\,$ M12 delivered without cable socket
- 5) Not in conjunction with types of protection "Explosion-proof" and "Ex nA", "Intrinsic safety" and "Explosion-proof".

Transmitters for general requirements SITRANS P DS III for level

Selection and Ordering data	Order	code		
Further designs		HART	PA	FF
Add "-Z" to Article No. and specify Order code.				
O-rings for process flanges on low-pressure side (instead of FPM (Viton)) • PTFE (Teflon) • FEP (with silicone core, approved for food) • FFPM (Kalrez, compound 4079) • NBR (Buna N) Plug • Han 7D (metal, gray)	A20 A21 A22 A23 A30 A31	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	√ √ √	✓ ✓ ✓
Han 8U (instead of Han 7D)AngledHan 8D (metal, gray)	A32 A33	<i>* * *</i>		
Sealing screw 1/4-18 NPT, with valve in mat. of process flanges		√	√	√
Cable sockets for M12 connectors (stain- less steel)	A50	✓	✓	✓
Rating plate inscription (instead of German)				
EnglishFrenchSpanish	B11 B12 B13	√ √	√ √	√ √
• Italian	B14	✓	✓	1
English rating plate Pressure units in inH ₂ 0 and/or psi	B21	✓	✓	✓
Quality inspection certificate (Five-step factory calibration) to IEC 60770-2	C11	1	✓	1
Inspection certificate Acc. to EN 10204-3.1	C12	1	✓	✓
Factory certificate Acc. to EN 10204-2.2	C14	✓	✓	✓
Functional safety (SIL2) Devices suitable for use according to IEC 61508 and IEC 61511. Includes SIL conformity declaration	C20	✓		
Functional safety (PROFIsafe) Certificate and PROFIsafe protocol	C21 ¹⁾		✓	
Functional safety (SIL2/3) Devices suitable for use according to IEC 61508 and IEC 61511. Includes SIL conformity declaration	C23	✓		
Device passport Russia (For price request please contact the technical support www.siemens.com/automation/support-request)	C 99	✓	✓	✓
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	✓	✓	✓
Supplied with oval flange (1 item), PTFE packing and screws in thread of process flange	D37	✓	✓	✓

Selection and Ordering data	Order	code		
Further designs	Oluei	HART	PA	FF
		ПАП	FA	FF
Add "-Z" to Article No. and specify Order code.				
Use on zone 1D / 2D (only together with type of protection	E01	✓	✓	✓
"Intrinsic safety" (transmitter 7MF4B Ex ia)")				
Overfilling safety device for flammable and non-flammable liquids	E08	✓		
(max. PN 32 (MAWP 464 psi), basic device with type of protection "Intrinsic safety (Ex ia)", to WHG and VbF, not together with measuring cell filling "inert liquid")				
Export approval Korea	E11	✓	✓	✓
CRN approval Canada (Canadian Registration Number)	E22	✓	✓	✓
Dual seal	E24	✓	✓	✓
Explosion-proof "Intrinsic safety" (Ex ia) to INMETRO (Brazil)	E25 ²⁾	✓	✓	✓
(only for transmitter 7MF4B)				
"Flameproof" explosion protection according to INMETRO (Brazil)	E26 ²⁾	✓	✓	✓
(only for transmitter 7MF4D)	2)			
Explosion-proof "Intrinsic safety" (Ex ia + Ex d) to INMETRO (Brazil)	E28 ²⁾	✓	✓	
(only for transmitter 7MF4P)	E45 ²⁾	1	./	1
Ex Approval IEC Ex (Ex ia) (only for transmitter 7MF4B)		•	•	•
Ex Approval IEC Ex (Ex id) (only for transmitter 7MF4D)	E46 ²⁾	✓	✓	✓
Explosion-proof "Intrinsic safety" to NEPSI (China)	E55 ²⁾	✓	✓	✓
(only for transmitter 7MF4B)				
Explosion protection "Explosion-proof" to NEPSI (China)	E56 ²⁾	✓	✓	✓
(only for transmitter 7MF4D)				
Ex protection "Zone 2" to NEPSI (China) (only for transmitter 7MF4E)	E57 ²⁾	✓	✓	✓
"Intrinsic safety" and "Explosion-proof" explosion protection acc. to Kosha (Korea)	E70 ²⁾	✓	✓	✓
(only for transmitter 7MF4[B, D]Z + E11)				
Two coats of lacquer on casing and cover (PU on epoxy)	G10	✓	✓	√
Replacement of process connection side	H01	✓	✓	✓
Transient protector 6 kV (lightning protection)	J01	✓	✓	✓

Profisafe transmitters can only be operated with the S7 F Systems V6.1 configuration software in combination with S7-400H
 Option beinhaltet keine ATEX-Zulassung, sondern nur die landesspezifische Zulassung.

Transmitters for general requirements

SITRANS P DS III for level

Selection and Ordering data	Order	code		
Additional data		HART	PA	FF
Please add "-Z" to Article No. and specify Order code(s) and plain text.				
Measuring range to be set	Y01	✓	√ 1)	
Specify in plain text (max. 5 characters): Y01: up to mbar, bar, kPa, MPa, psi				
Stainless steel tag plate and entry in device variable (measuring point description)	Y 15	✓	✓	✓
Max. 16 characters, specify in plain text: Y15:				
Measuring point text (entry in device variable)	Y 16	✓	✓	✓
Max. 27 characters, specify in plain text: Y16:				
Entry of HART address (TAG)	Y17	✓		
Max. 8 characters, specify in plain text: Y17:				
Setting of pressure indicator in pressure units	Y21	✓	✓	✓
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 Setting of pressure indicator in	Y22 ³⁾	1		
non-pressure units ²⁾	+ Y01	,		
Specify in plain text: Y22: up to I/min, m³/h, m, USgpm, (specification of measuring range in pressure units "Y01" is essential, unit with max. 5 characters)				
Preset bus address possible between 1 and 126 Specify in plain text: Y25:	Y25		✓	✓
Damping adjustment in seconds (0 100 s)	Y30	1	✓	1

Only Y01, Y15, Y16, Y17, Y21, Y22, Y25 and D05 can be factory preset

✓ = available

Measuring accuracies for PROFIBUS PA transmitters with Option Y01 are calculated in the same way as for HART devices.
 Preset values can only be changed over SIMATIC PDM.
 Not in conjunction with over-filling safety device for flammable and non-flammable liquids (Order code "E08")

Pressure Measurement Transmitters for general requirements SITRANS P DS III for level

Selection and Order	ng data	Art	icl	e l	No. Orc	l. c	00	dε
Mounting flange	<u> </u>	7 N	۱F	4	912-			
Directly mounted on the transmitter (converter series	ne SITRANS P pressure part) for level, for DS III	3						
Connection to EN 10	92-1							
Nominal diameter DN 50	Nominal pressure PN 40	A						
DN 80	PN 100 PN 40	E)					
DN 100	PN 16 PN 40	H						
Connection to ASME	B16.5							
Nominal diameter	Nominal pressure							
2 inch	class 150 class 300	L						
	class 400/600	N						
	class 900/1500	F	•					
3 inch	Class 150	G						
4 in ab	Class 300	F						
4 inch	Class 150 Class 300	ť						
Other version, add Or Nominal diameter:;	der code and plain text:	Z				J	1	Υ
Wetted parts materia	· · · · · · · · · · · · · · · · · · ·							
 Stainless steel 316L 	110		Α					
- Coated with PFA			D					
- Coated with PTFE			Ε	0				
 Coated with ECTFE 	1)		F					
 Monel 400, mat. no. 			G					
Hastelloy C276, mat			J					
Hastelloy C4, mat. rTantalum	0. 2.4610		U K					
Duplex 2205, mat. r	o. 1.4462		Q					
	o. 1.4462, incl. main body		R					
• Stainless steel 316L	, gold plated,		s	0				
thickness approx. 2	5 μm							
Tube length								
None50 mm	(1.07 in ala)			0				
• 100 mm	(1.97 inch) (3,94 inch)			1				
• 150 mm	(5.90 inch)			3				
• 200 mm	(7.87 inch)			4				
	der code and plain text:		Z	8		K	1	Υ
material of parts in co tubus length:	ntact with medium:,							
Filling liquid								
• Silicone oil M5					1			
• Silicone oil M50					2			
• High-temperature oi					3			
Halocarbon oil (for 0)	O ₂ -measurement)				4			
Glycerin/water ²⁾					6			
 Food oil (FDA-listed)				7			
Other version, add	toxt				9	M	1	Υ
Order code and plain filling liquid:	IGAL.							
· 3 · · · · · · · · · · · · · · · · · ·								

¹⁾ For vacuum on request

Selection and Ordering data	Order	code		
Further designs		HART	PA	FF
Add " -Z" to Article No. and specify Order code.				
Spark arrester	A01	✓	✓	✓
For mounting on zone 0 (incl. documentation)	DOO			
Remote seal nameplate attached out of stainless steel, contains Article No. and order number of the remote seal supplier	B20	•	•	•
2.2 Certificate for oil-free and grease-free cleaning For inert filling liquid, <u>not for operation with oxygen</u> , Option E10 cannot be selected.	C10	✓	✓	✓
Quality inspection certificate (Five-step factory calibration) to IEC 60770-2	C11	✓	✓	✓
Inspection certificate Acc. to EN 10204-3.1	C12	✓	✓	✓
2.2 Certificate of FDA approval of fill oil Only in conjunction with filling liquid "Food oil" (FDA listed)"	C17	✓	✓	✓
"Functional safety (SIL2)" certificate to IEC 61508	C20	✓	✓	
only for conjunction with the Order code "C20" n the case of SITRANS P DS III transmitter) 'Functional safety (SIL2/3)" certificate	C23	1	1	
to IEC 61508 (only for conjunction with the Order code "C23" in the case of SITRANS P DS III transmitter)	020		·	
Certification acc. to NACE MR-0175 ncludes acceptance test certificate 3.1 acc. to EN 10204 (only for wetted parts made of stain- ess steel 1.4404/316L and Hastelloy C276)	D07	✓	√	✓
Certification acc. to NACE MR-0103 includes acceptance test certificate 3.1 acc. to EN 10204 (only for wetted parts made of stainess steel 1.4404/316L and Hastelloy C276)	D08	✓	✓	✓
Epoxy painting Not possible with vacuum-proof design	E15	✓	✓	✓
Color: transparent, coverage: front and rear of the remote seal, capillary(ies) or connecting ube, process connection of the transmitter. With transmitters 7MF40 and 7MF42, only possible with process connection G½B according to EN837-1.				
Sealing surface B1 or ASME B16.5 RF 125 250 AA Instead of sealing surface B2 or RFSF (only for wetted parts made of Hastelloy C276 (2.4819), tantalum and Duplex 2205 (1.4462) and for nominal sizes 2", 3", DN 50 and DN 80)	J12	✓	✓	✓
Sealing surface groove, EN 1092-1, form D instead of sealing surface B1 (only for wetted parts made of stainless steel 316L)	J14	✓	✓	✓
Sealing surface RJF (groove) ASME B16.5 nstead of sealing surface ASME B16.5 RF 125 250 AA (only for wetted parts made of stainless steel 316L)	J24	✓	✓	✓
Elongated pipe, 150 mm instead of 100 mm, max. medium temperature 250 °C, observe the maximum permissible media temperature of the filling liquid.	R15	✓	✓	✓
Elongated pipe, 200 mm instead of 100 mm, max. medium temperature 300 °C, observe the maximum permissible media temperature of the filling liquid.	R20	✓	✓	✓
Vacuum-proof design (for use in low-pressure range)	V04	✓	✓	✓

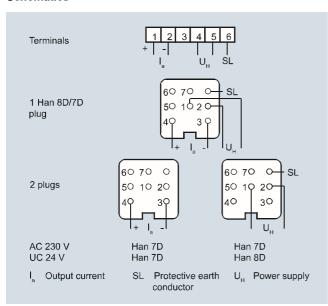
✓ = available

²⁾ Not suitable for use in low-pressure range

Transmitters for general requirements

SITRANS P DS III
Supplementary electronics for 4-wire connection

Schematics



Supplementary electronics for 4-wire connection, connection diagram

Selection and Ordering data		С)rc	der	code
connection Article No. of th	y electronics for 4-wire e transmitter B. add "-Z" and Order code.	٧			
Power supply	Electrical connection				
24 V AC/DC	Terminals; 2 Pg screwed glands, to left		1		
	2 Han 7D/Han 8U plugs incl. mating connector, to left		3		
	1 Han 7D plug incl. mating connector, angled		5		
	Terminals; 1 Pg screwed gland, downwards		6		
	1 Han 8U plug incl. mating connector, downwards (observe arrangement of plug and differential pressure line)		9		
230 V AC	Terminals; 2 Pg screwed glands, to left		7		
	2 Han 7D plugs incl. mating connector, to left		8		
Output current	ı				
0 20 mA				0	
4 20 mA				1	
Accessories	·				
Instruction Ma German/English		A	5E	ΞΟ:	0322799

Pressure Measurement Transmitters for general requirements SITRANS P DS III Accessories/Spare Parts

Selection and Ordering data		Article No.		
Replacement measuring cell for pressure		7MF4990-		
for SITRANS P DS III		0 - 0 DB		
Measuring cell filling Silicone oil Inert liquid	Measuring cell cleaning Normal grease-free to cleanliness level 2	1 3		
Measured span (min.	max.)			
0.01 1 bar 0.04 4 bar 0.16 16 bar 0.63 63 bar 1.6 160 bar 4.0 400 bar 7.0 700 bar	(0.15 14.5 psi) (0.6 58 psi) (2.32 232 psi) (9.14 914 psi) (23.2 2320 psi) (58.0 5802 psi) (102.0 10153 psi)	B C D E F G		
Wetted parts materials				
Seal diaphragm	Process connection			
Stainless steel Hastelloy Hastelloy	Stainless steel Stainless steel Hastelloy		A B C	
Process connection Connection shank G Female thread ½-14 Oval flange made of max. span 160 bar (½ Mounting thread 7/ Mounting thread M	NPT stainless steel, 2320 psi) ₁₆ -20 UNF to IEC 61518		223	
Further designs		Ord	er	code
Please add "-Z" to Artic Order code.	cle No. and specify			
Inspection certificate to EN 10204-3.1		C12	:	

Selection and Ordering data		Α	Article No.		
Replacement measuring cell for absolute pressure for SITRANS P DS III (from the pressure series)					992- 0-0DB0
Measuring cell fillin	g Measuring cell cleaning				
Inert liquid	Normal grease-free to cleanliness level 2	3			
Measured span (mi	n max.)				
8.3 250 mbar a 43 1300 mbar a 0.16 5 bar a 1 30 bar a	(0.12 3.62 psia) (0.62 18.85 psia) (2.32 72.5 psia) (14.5 435 psia)		D F G H		
Wetted parts materials					
Seal diaphragm	Process connection				
Stainless steel Hastelloy Hastelloy	Stainless steel Stainless steel Hastelloy		A B C		
Process connection Connection shank Female thread ½-1 Oval flange made max. span 160 bar Mounting thread Mounting thread	G½B to EN 837-1 4 NPT of stainless steel, (2320 psi) 7/ ₁₆ -20 UNF to IEC 61518			0 1 2 3	
Further designs		С	rde	er o	code
Please add "-Z" to Ar Order code.	ticle No. and specify				
Inspection certificate to EN 10204-3.1	te	С	12		

Transmitters for general requirements

SITRANS P DS III Accessories/Spare Parts

).
3 -
0 D C 0
de

¹⁾ Not for span "5.3 ... 100 bar (76.9 ... 1450 psi)"

21 11 12 1		A .: 1	N.1
Selection and Orde		Article	
	uring cell for differential /160 (MAWP 464/2320 psi) for		994-
SITRANS P DS III wit	h HART, DS III with PROFIBUS		- 0 DC 0
PA and DS III with FC	DUNDATION Fieldbus series		
-	g Measuring cell cleaning		
Silicone oil	Normal	1 3	
Inert liquid	grease-free to cleanliness level 2	3	
Measured span (mi			
PN 32 (MAWP 464 p			
1 20 mbar ¹⁾	(0.4 8 inH ₂ O)	В	
PN 160 (MAWP 2320			
1 60 mbar	(0.4 24 inH ₂ O)	С	
2.5 250 mbar	(1 100 inH ₂ O)	D	
6 600 mbar 16 1600 mbar	(2.4 240 inH ₂ O) (6.4 642 inH ₂ O)	E F	
50 5000 mbar	(20 2000 inH ₂ O)	Ġ	
0.3 30 bar	(4.35 435 psi)	Н	
Wetted parts materi	. ,		
(stainless steel proce			
Seal diaphragm	Parts of measuring cell		
Stainless steel	Stainless steel	Λ	
Hastelloy	Stainless steel	В	
Hastelloý	Hastelloy	B C E	
Tantalum ²⁾ Monel ²⁾	Tantalum Monel	H	
Gold ²⁾	Gold	Ľ	
Process connection	1		
Female thread 1/4-18	NPT with flange connection		
	osite process connection		
- Mounting thread	M10 to DIN 19213 ⁷ / ₁₆ -20 UNF to IEC 61518	0	
Vent on side of pro		_	
- Mounting thread	M10 to DIN 19213	4	
- Mounting thread	⁷ / ₁₆ -20 UNF to IEC 61518	6	
Non-wetted parts m Stainless steel proce			2
·	ss hange screws	01	
Further designs Please add "-Z" to Ar	ticle No. and specify Order	Order	code
code.	note that and appearly area.		
O-rings for process	flanges		
(instead of FPM (Vito			
PTFE (Teflon)	16 6 15	A20	
 FEP (with silicone of FFPM (Kalrez, com 	core, approved for food)	A21 A22	
NBR (Buna N)	podna 4079)	A23	
Inspection certifica	te	C12	
to EN 10204-3.1			
Remote seal flange	s	D20	
(not together with KC	1, K02 and K04)		
Vent on side for gas	s measurements	H02	
Stainless steel prod	ess flanges for vertical	H03	
differential pressure	e lines		
(not together with KC	11, KU2 and KU4)		
Process flanges		V.O.C	
with process flanger	a made of	K00	
 with process flange Hastelloy 	= maue oi	K01	
- Monel		K02	
- Stainless steel wi	th PVDF insert	K04	
max. PN 10 (MAV	VP 145 psi)		
max. temperature	e of medium 90 °C (194 °F)		
rur /2-14 NPT INC side in the middle	er process connection on the e of the process flange, vent		
valve not possible			
Not suitable for cor	nnection of remote seal		

Not suitable for connection of remote seal
 Only together with max. spans 250, 1600, 5000 and 30000 mbar (100 inH₂O, 642 inH₂O, 2000 inH₂O und 435 psi).

Pressure Measurement Transmitters for general requirements SITRANS P DS III Accessories/Spare Parts

Selection and Ordering data		Article No.		
Replacement measuring cell for differential pressure and PN 420 (MAWP 6092 psi) for		7MF4995-		
SITRANS P DS III with H	MAWP 6092 psi) for ART, DS III with PROFIBUS NDATION Fieldbus series			- 0 D C 0
Measuring cell filling Silicone oil	Measuring cell cleaning Normal	1		
Measured span (min 2.5 250 mbar 6 600 mbar 16 1600 mbar 50 5000 mbar 0.3 30 bar	max.) (1 100 inH ₂ O) (2.4 240 inH ₂ O) (6.4 642 inH ₂ O) (20 2000 inH ₂ O) (4.35 435 psi)	D E F G		
Wetted parts materials (stainless steel process				
Seal diaphragm	Parts of measuring cell			
Stainless steel Hastelloy Gold ¹⁾	Stainless steel Stainless steel Gold	A B L		
 Sealing screw opposit Mounting thread M12 Mounting thread ⁷/₁₆ Vent on side of proces Mounting thread M12 Mounting thread ⁷/₁₆ Non-wetted parts mate	2 to DIN 19213 -20 UNF to IEC 61518 s flange 2 to DIN 19213 -20 UNF to IEC 61518	_	1 3 5 7	
Stainless steel process			2	
Further designs		Order code		
Please add "-Z" to Article No. and specify Order code.				
O-rings for process fla (instead of FPM (Viton)) • PTFE (Teflon) • FEP (with silicone core • FFPM (Kalrez, compou • NBR (Buna N)	e, approved for food)	A20 A21 A22 A23		
Inspection certificate to EN 10204-3.1		C12		
Stainless steel process differential pressure lie		H03		
without process flange	18	K00		

 $^{^{1)}}$ Not together with max. span 600 mbar (240.9 inH $_2$ O)

Pressure Measurement Transmitters for general requirements SITRANS P DS III Accessories/Spare Parts

Accessories/Spare Parts	
Selection and Ordering data	Article No.
Spare parts/Accessories	
Mounting bracket and fastening parts for pressure transmitters	
SITRANS P DS III with HART, DS III with PROFIBUS PA and DS III with FOUNDATION Fieldbus (7MF403C.) For absolute pressure transmitters SITRANS P DS III with HART, DS III with PROFIBUS PA and DS III with FOUNDATION Fieldbus (7MF423C.)	
• made of steel	7MF4997-1AB
made of stainless steel	7MF4997-1AH
Mounting bracket and fastening parts for pressure transmitters SITRANS P DS III with HART, DS III with PROFIBUS PA and DS III with FOUNDATION Fieldbus (7MF403A.,B.,D. andF.) For absolute pressure transmitters SITRANS P DS III with HART, DS III with PROFIBUS PA and DS III with FOUNDATION Fieldbus 7MF423A.,B.,D. andF.)	
 made of steel made of stainless steel 	7MF4997-1AC 7MF4997-1AJ
Mounting and fastening brackets For differential pressure transmitters with flange thread M10 SITRANS P DS III with HART, DS III with PROFIBUS PA and DS III with FOUNDATION Fieldbus (7MF433 and 7MF443)	
 made of steel made of stainless steel Mounting and fastening brackets 	7MF4997-1AD 7MF4997-1AK
For differential pressure transmitters with flange thread M12 SITRANS P DS III with HART, DS III with PROFIBUS PA and DS III with FOUNDATION Fieldbus (7MF453) • made of steel • made of stainless steel Mounting and fastening brackets For differential and absolute pressure transmitters with flange thread 7/16 -20 UNF SITRANS P DS III with HART, DS III with	7MF4997-1AE 7MF4997-1AL
PROFIBUS PA and DS III with FOUNDATION Fieldbus (7MF453, 7MF443 and 7MF453) • made of steel • made of stainless steel Cover made of die-cast aluminum, including gasket, for SITRANS P DS III with HART, DS III with PROFIBUS PA and DS III with FOUNDATION	7MF4997-1AF 7MF4997-1AM
Fieldbus • without window • with window Cover	7MF4997-1BB 7MF4997-1BE
made of stainless steel, including gasket, for SITRANS P DS III with HART, DS III with PROFIBUS PA and DS III with FOUNDATION Fieldbus • without window • with window	7MF4997-1BC 7MF4997-1BF
Digital indicator Including mounting material for SITRANS P DS III with HART, DS III with PROFIBUS PA and DS III with FOUNDATION Fieldbus	7MF4997-1BR
Measuring point label • without inscription (5 units) • Printed (1 unit) Data according to Y01 or Y02, Y15, Y16 and Y99 (see "Pressure transmitters")	7MF4997-1CA 7MF4997-1CB-Z Y:

Selection and Ordering data	Article No.
Mounting screws	
For measuring point label, grounding and con- nection terminals or for display (50 units)	7MF4997-1CD
Sealing screws	
(1 set = 2 units) for process flange	
made of stainless steel	7MF4997-1CG
made of Hastelloy	7MF4997-1CH
Sealing screws with vent valve Complete (1 set = 2 units)	
made of stainless steel	7MF4997-1CP
made of Hastelloy	7MF4997-1CQ
Electronics	
• for SITRANS P DS III with HART	7MF4997-1DK
• for SITRANS P DS III with PROFIBUS PA	7MF4997-1DL
• for SITRANS P DS III with FOUNDATION	7MF4997-1DM
Fieldbus	
Connection board	
• for SITRANS P DS III	7MF4997-1DN
 for SITRANS P DS III PROFIBUS PA and FOUNDATION Fieldbus 	7MF4997-1DP
O-rings for process flanges made of:	
• FPM (Viton)	7MF4997-2DA
• PTFE (Teflon)	7MF4997-2DB
 FEP (with silicone core, approved for food) 	7MF4997-2DC
 FFPM (Kalrez, compound 4079) 	7MF4997-2DD
• NBR (Buna N)	7MF4997-2DE
Sealing ring for process connection	see "Fittings"
Weldable sockets for PMC connection	
PMC Style Standard: Thread 1½"	7MF4997-2HA
PMC Style Minibolt: front-flush 1"	7MF4997-2HB
Gaskets for PMC connection (packing unit = 5 units)	
PTFE seal for PMC Style Standard:	7MF4997-2HC
Thread 11/2"	
Gasket made of Viton for PMC Style Minibolt: front-flush 1"	7MF4997-2HD
Weldable socket for TG52/50 and TG52/150	
connection • TG52/50 connection	7MF4997-2HE
• TG52/150 connection	7MF4997-2HF
Seals for TG 52/50 and TG 52/150 made of	7MF4997-2HG
silicone (FDA compliant)	
Seals for flange connection with front-flush diaphragm Material FPM (Viton), 10 units	
• DN 25, PN 40 (M11)	7MF4997-2HH
• DN 25, PN 100 (M21)	7MF4997-2HJ
• 1", class 150 (M40)	7MF4997-2HK
• 1", class 300 (M45)	7MF4997-2HL
Available ex stock	

Transmitters for general requirements SITRANS P DS III Accessories/Spare Parts

Selection and Ordering data	Article No.
Operating Instructions ¹⁾	
for SITRANS DS III with HART German English French Spanish Italian for SITRANS DS III with PROFIBUS PA German English French Spanish Italian for SITRANS DS III with FOUNDATION Fieldbus	A5E00047090 A5E00047092 A5E00053218 A5E00053219 A5E00053220 A5E00053275 A5E00053276 A5E00053277 A5E00053278 A5E00053279
- German - English	A5E00279629 A5E00279627
Compact operating instructions The compact operating instructions are available in 21 EU languages on the product CD supplied with each transmitter. They can also be downloaded from the SITRANS P web page.	
Brief instruction (Leporello) German, English	
• for SITRANS DS III with HART - German, English	A5E00047093
 for SITRANS DS III with PROFIBUS PA German, English 	A5E00053274
 for SITRANS DS III with FOUNDATION Fieldbus German, English 	A5E00282355
CD with SITRANS P documentation	A5E00090345
German, English, French, Spanish, Italian incl. compact operating instructions in 21 EU languages	A3L00090343
Certificates (order only via SAP)	
instead of Internet downloadhard copy (to order)on CD (to order)	A5E03252406 A5E03252407
Operating Instructions for replacement of electronics, measuring cell and connection board (only available from the Internet) ¹⁾	A5E00078060
HART modem	
with RS232 interfacewith USB interface	7MF4997-1DA 7MF4997-1DB
Supplementary electronics for 4-wire connection	See page 1/159

Available ex stock

Power supply units see Chap. 7 "Supplementary Components".

You can download these operating instructions free-of-charge from our Internet site at www.siemens.com/sitransp.