

Selection and Ordering data		Order No.	
Pressure transmitter for gauge pressure, SITRANS P DS III with HART		7MF4033 -	
Measuring cell filling	Measuring cell cleaning		
Silicone oil	normal	▶	1
Inert liquid ¹⁾	grease-free to cleanliness level 2		3
Measuring span (min. ... max.)			
0.01 ... 1 bar	(0.15 ... 14.5 psi)	▶	B
0.04 ... 4 bar	(0.58 ... 58 psi)	▶	C
0.16 ... 16 bar	(2.32 ... 232 psi)	▶	D
0.63 ... 63 bar	(9.14 ... 914 psi)	▶	E
1.6 ... 160 bar	(23.2 ... 2320 psi)	▶	F
4.0 ... 400 bar	(58.0 ... 5802 psi)	▶	G
7.0 ... 700 bar	(102.0 ... 10153 psi)	▶	J
Wetted parts materials			
Seal diaphragm	Process connection		
Stainless steel	Stainless steel	▶	A
Hastelloy	Stainless steel		B
Hastelloy	Hastelloy		C
Version as diaphragm seal ^{2) 3) 4) 5)}			Y
Process connection			
• Connection shank G½B to EN 837-1		▶	0
• Female thread ½-14 NPT			1
• Stainless steel oval flange with process connection female thread ¼-18 NPT			
- Mounting thread 7/16-20 UNF to IEC 61518			2
- Mounting thread M10 to DIN 19213			3
- Mounting thread M12 to DIN 19213			4
• Male thread M20 x 1.5			5
• Male thread ½ -14 NPT			6
Non-wetted parts materials			
• Housing made of die-cast aluminium		▶	0
• Housing stainless steel precision casting ⁶⁾			3
Version			
• Standard versions			1
• International version, English label inscriptions, documentation in 5 languages on CD (no order code selectable)		▶	2
Explosion protection			
• None			A
• With ATEX, Type of protection:			
- "Intrinsic safety (Ex ia)"			B
- "Explosion-proof (Ex d)" ⁷⁾			D
- "Intrinsic safety and flameproof enclosure (Ex ia + Ex d)" ⁸⁾			P
- "Ex nA/ic (Zone 2)" ⁹⁾			E
- "Intrinsic safety, explosion-proof enclosure and dust explosion protection (Ex ia + Ex d + Zone 1D/2D)" ⁸⁾		▶	R
• FM + CSA (is + ep) + Ex ia + Ex d (ATEX)			S
• With FM + CSA, Type of protection:			
- "Intrinsic Safe und Explosion Proof (is + xp)" ⁷⁾			NC
Electrical connection / cable entry			
• Screwed gland Pg 13.5 (adapter) ¹⁰⁾			A
• Screwed gland M20 x1 .5		▶	B
• Screwed gland ½-14 NPT			C
• Han 7D plug (plastic housing) incl. mating connector ¹⁰⁾			D
• M12 connectors (stainless steel) ¹⁰⁾¹¹⁾			F

Selection and Ordering data		Order No.	
Pressure transmitter for gauge pressure, SITRANS P DS III with HART		7MF4033 -	
Display			
• Without display			0
• Without visible display (display concealed, setting: mA)		▶	1
• With visible display, setting: mA			6
• with customer-specific display (setting as specified, Order Code "Y21" or "Y22" required)			7
▶ Available ex stock			
Power supply units see Chap. 7 "Supplementary Components".			
Included in delivery of the device:			
• Brief instructions (Leporello)			
• CD-ROM with detailed documentation			
1) For oxygen application, add Order code E10.			
2) 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) Not in conjunction with types of protection "Explosion-proof" and "Ex nA", "Intrinsic safety" and "Explosion-proof".			
11) M12 delivered without cable socket			

Selection and Ordering data		Order No.
Pressure transmitter for gauge pressure		
SITRANS P DS III with PROFIBUS PA (PA)		7 MF 4 0 3 4 -
SITRANS P DS III with FOUNDATION Fieldbus (FF)		7 MF 4 0 3 5 -
		■ ■ ■ ■ ■ - ■ ■ ■ ■ ■
Measuring cell filling	Measuring cell cleaning	
Silicone oil Inert liquid ¹⁾	normal grease-free to cleanliness level 2	1 3
Nominal measuring range		
1 bar	(14.5 psi)	B
4 bar	(58 psi)	C
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	A
Hastelloy	Stainless steel	B
Hastelloy	Hastelloy	C
Version as diaphragm seal ^{2) 3) 4) 5)}		Y
Process connection		
• Connection shank G ½B to EN 837-1		0
• Female thread ½-14 NPT		1
• Stainless steel oval flange with process connection female thread ¼-18 NPT ⁶⁾		
- Mounting thread 7/16-20 UNF to IEC 61518		2
- Mounting thread M10 to DIN 19213		3
- Mounting thread M12 to DIN 19213		4
• Male thread M20 x 1.5		5
• Male thread ½ -14 NPT		6
Non-wetted parts materials		
• Housing made of die-cast aluminium		0
• Housing stainless steel precision casting		3
Version		
• Standard versions		1
• International version, English label inscriptions, documentation in 5 languages on CD (no order code selectable)		2
Explosion protection		
None		A
With ATEX, Type of protection:		
"Intrinsic safety (Ex ia)"		B
"Explosion-proof (Ex d)" ⁷⁾		D
"Intrinsic safety and flameproof enclosure" (Ex ia + Ex d) ⁸⁾		P
"Ex nA/ic (Zone 2)" ⁹⁾		E
"Intrinsic safety, explosion-proof enclosure and dust explosion protection (Ex ia + Ex d + Zone 1D/2D)" ⁸⁾ (not for DS III FF)		R
FM + CSA (is + ep) + Ex ia + Ex d (ATEX)		S
With FM + CSA, Type of protection:		
"Intrinsic Safe und Explosion Proof (is + xp)" ⁷⁾		NC
Electrical connection/cable entry		
• Screwed gland M20 x 1.5		B
• Screwed gland ½-14 NPT		C
• M12 connectors (stainless steel) ^{10) 11) 12)}		F

Selection and Ordering data	Order No.
Pressure transmitter for gauge pressure	
SITRANS P DS III with PROFIBUS PA (PA)	7MF4034 -
SITRANS P DS III with FOUNDATION Fieldbus (FF)	7MF4035 -
	
Display	
• Without display • Without visible display (display concealed, setting: bar) • With visible display • with customer-specific display (setting as specified, Order Code "Y21" required)	0 1 6 7
▶ Available ex stock	
Included in delivery of the device:	
• Brief instructions (Leporello) • CD-ROM with detailed documentation	
1) For oxygen application, add Order code E10. 2) 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) 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“.	

Selection and Ordering data	Order code			
<i>Further designs</i> Add "-Z" to Order No. and specify Order Code.		HART	PA	FF
Pressure transmitter with mounting bracket (2 shackles, 4 nuts, 4 U-plates, 1 angle) made of:				
• Steel	A01	✓	✓	✓
• Stainless steel	A02	✓	✓	✓
Plug				
• Han 7D (metal, gray)	A30	✓		
• Han 8U (instead of Han 7D)	A31	✓		
• Angled	A32	✓		
• Han 8D (metal, gray)	A33	✓		
Cable sockets for M12 connectors (stainless steel)	A50	✓	✓	✓
Rating plate inscription (instead of German)				
• English	B11	✓	✓	✓
• French	B12	✓	✓	✓
• Spanish	B13	✓	✓	✓
• Italian	B14	✓	✓	✓
English rating plate	B21	✓	✓	✓
Pressure units in inH ₂ O and/or psi				
Quality inspection certificate (Five-step factory calibration) to IEC 60770-2¹⁾	C11	✓	✓	✓
Inspection certificate²⁾	C12	✓	✓	✓
Acc. to EN 10204-3.1				
Factory certificate	C14	✓	✓	✓
Acc. to EN 10204-2.2				
"Functional safety (SIL2)" certificate to IEC 61508	C20	✓		
"Functional safety" certificate (PROFIsafe) and PROFIsafe protocol	C21		✓	
"Functional safety (SIL2/3)" certificate to IEC 61508	C23	✓		
Device passport Russia (For price request please contact the technical support www.siemens.com/automation/support-request)	C99	✓	✓	✓
Setting of upper limit of output signal to 22.0 mA	D05	✓		
Manufacturer's declaration acc. to NACE	D07	✓	✓	✓
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 oval flange	D37	✓	✓	✓
Use in or on zone 1D/2D (only together with type of protection "Intrinsic safety" (transmitter 7MF4...-.....-B.. Ex ia)“)	E01	✓	✓	✓
Oxygen application (In the case of oxygen measurement and inert liquid max. 100 bar (1450 psi) at 60°C (140 °F))	E10	✓	✓	✓
Export approval Korea	E11	✓	✓	✓
Explosion-proof "Intrinsic safety" (Ex ia) to INMETRO (Brazil) (only for transmitter 7MF4...-.....-B..)	E25	✓	✓	✓
"Flameproof" explosion protection according to INMETRO (Brazil) (only for transmitter 7MF4...-.....-D..)	E26	✓	✓	✓
Explosion-proof "Intrinsic safety" (Ex ia + Ex d) to INMETRO (Brazil) (only for transmitter 7MF4...-.....-P..)	E28	✓	✓	
Ex Approval IEC Ex (Ex ia) (only for transmitter 7MF4...-.....-B..)	E45	✓	✓	✓
Ex Approval IEC Ex (Ex id) (only for transmitter 7MF4...-.....-D..)	E46	✓	✓	✓

Selection and Ordering data	Order code			
<i>Further designs</i> Add "-Z" to Order No. and specify Order Code.		HART	PA	FF
Explosion-proof "Intrinsic safety" to NEPSI (China)	E55	✓	✓	✓
Explosion protection "Explosion-proof" to NEPSI (China) (only for transmitter 7MF4...-.....-D..)	E56	✓	✓	✓
Ex protection "Zone 2" to NEPSI (China) (only for transmitter 7MF4...-.....-E..)	E57	✓	✓	✓
"Intrinsic safety" and "Explosion-proof" explosion protection acc. to Kosha (Korea) (only for transmitter 7MF4...-.....-[B, D]..-Z + E11)	E70	✓	✓	✓
Two coats of lacquer on casing and cover (PU on epoxy)	G10	✓	✓	✓

Selection and Ordering data	Order code			
Additional data		HART	PA	FF
Please add "-Z" to Order No. and specify Order code(s) and plain text.				
Measuring range to be set Specify in plain text (max. 5 characters): Y01: ... up to ... mbar, bar, kPa, MPa, psi	Y01	✓		
Stainless steel tag plate (measuring point description) Max. 16 characters, specify in plain text: Y15:	Y15	✓	✓	✓
Measuring point text Max. 27 characters, specify in plain text: Y16:	Y16	✓	✓	✓
Entry of HART address (TAG) Max. 8 characters, specify in plain text: Y17:	Y17	✓		
Setting of pressure 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/cm ² , kg/cm ² , Torr, ATM or % *) ref. temperature 20 °C	Y21	✓	✓	✓
Setting of pressure indication in non-pressure units³⁾ Specify in plain text: Y22: up to l/min, m ³ /h, m, USgpm, ... (specification of measuring range in pressure units "Y01" is essential, unit with max. 5 characters)	Y22 + Y01	✓		
Preset bus address possible between 1 and 126 Specify in plain text: Y25:	Y25		✓	✓

Factory mounting of valve manifolds, see accessories.

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

✓ = available

ordering example

Item line: 7MF4033-1EA00-1AA7-Z
B line: A01 + Y01 + Y21
C line: Y01: 10 ... 20 bar (145 ... 290 psi)
C line: Y21: bar (psi)

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⁾ Preset values can only be changed over SIMATIC PDM.