

Selection and Ordering data		Order No.
Pressure transmitter for gauge pressure, SITRANS P DS III HART		7MF4033 - ■ ■ ■ ■ ■ - ■ ■ ■ ■ ■
Measuring cell filling	Measuring cell cleaning	
Silicone oil	normal	▶ 1
Inert liquid ¹⁾	Grease-free	▶ 3
Measuring span		
0.01 ... 1 bar g	(0.15 ... 14.5 psi g)	▶ B
0.04 ... 4 bar g	(0.58 ... 58 psi g)	▶ C
0.16 ... 16 bar g	(2.32 ... 232 psi g)	▶ D
0.63 ... 63 bar g	(9.14 ... 914 psi g)	▶ E
1.6 ... 160 bar g	(23.2 ... 2320 psi g)	▶ F
4.0 ... 400 bar g	(58.0 ... 5802 psi g)	▶ G
7.0 ... 700 bar g	(102.0 ... 10153 psi g)	▶ 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⁾		Y
Process connection		
• Connection shank G½B to EN 837-1		▶ 0
• Female thread ½-14 NPT		1
• Stainless steel oval flange		
- Mounting thread 7/16-20 UNF to EN 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 ⁴⁾		▶ 3
Version		
• Standard versions		1
• International version, English label inscriptions, documentation in 5 languages on CD		▶ 2
Explosion protection		
• None		A
• With ATEX, Type of protection:		
- "Intrinsic safety (EEx ia)"		B
- "Explosion-proof (EExd)" ⁵⁾		D
- "Intrinsic safety and flameproof enclosure" (EEx ia + EEx d)" ⁶⁾		P
- "Ex nA/nL (Zone 2)"		E
- "Intrinsic safety, explosion-proof enclosure and dust explosion protection (EEx ia + EEx d + Zone 1D/2D)" ⁶⁾		▶ R
• With FM + CSA, Type of protection:		
- "Intrinsic Safe und Explosion Proof (is + xp)" ⁵⁾		NC
Electrical connection / cable entry		
• Screwed gland Pg 13.5 (adapter) ⁷⁾		A
• Screwed gland M20 x1 .5		▶ B
• Screwed gland ½-14 NPT		C
• Han 7D plug (plastic housing) incl. mating connector ⁷⁾		D
• M12 connectors (metal) ⁸⁾		F

Selection and Ordering data		Order No.
Pressure transmitter for gauge pressure, SITRANS P DS III HART		7MF4033 - ■ ■ ■ ■ ■ - ■ ■ ■ ■ ■
Display		
• Without indicator		0
• Without visible digital indicator (digital indicator concealed, setting: mA)		▶ 1
• With visible digital indicator, setting: mA		6
• with customer-specific digital indicator (setting as specified, Order Code "Y21" or "Y22" required)		▶ 7
▶ Available ex stock		

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

Included in delivery of the device:

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

- 1) For oxygen application, add Order code E10.
- 2) When the manufacturer'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) Not in conjunction with Electrical connection "Screwed gland Pg 13.5" and "Han7D plug".
- 5) Without cable gland, with blanking plug
- 6) With enclosed cable gland EEx ia and blanking plug
- 7) Not in conjunction with types of protection "Explosion-proof" and "Ex nA", "Intrinsic safety" and "Explosion-proof".
- 8) M12 delivered without cable socket

Selection and Ordering data		Order No.
Pressure transmitter for gauge pressure		
SITRANS P DS III PA (PROFIBUS PA)		7MF4034 -
SITRANS P DS III FF (FOUNDATION Fieldbus)		7MF4035 -
		■ ■ ■ ■ - ■ ■ ■ ■
Measuring cell filling	Measuring cell cleaning	
Silicone oil	normal	1
Inert liquid ¹⁾	Grease-free	3
Nominal measuring range		
1 bar g	(14.5 psi g)	B
4 bar g	(58 psi g)	C
16 bar g	(232 psi g)	D
63 bar g	(914 psi g)	E
160 bar g	(2320 psi g)	F
400 bar g	(5802 psi g)	G
700 bar g	(10153 psi g)	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⁾		Y
Process connection		
• Connection shank G½B to EN 837-1		0
• Female thread ½-14 NPT		1
• Stainless steel oval flange		
- Mounting thread 7/16-20 UNF to EN 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		2
Explosion protection		
None		A
With ATEX, Type of protection:		
"Intrinsic safety (EEx ia)"		B
"Explosion-proof (EExd)" ⁴⁾		D
"Intrinsic safety and flameproof enclosure" (EEx ia + EEx d) ⁵⁾		P
"Ex nA/nL (Zone 2)"		E
"Intrinsic safety, explosion-proof enclosure and dust explosion protection (EEx ia + EExd + Zone 1D/2D)" ⁶⁾ (not for DS III FF)		R
With FM + CSA, Type of protection:		
"Intrinsic Safe und Explosion Proof (is + xp)" ⁵⁾		NC
Electrical connection / cable entry		
• Screwed gland M20 x 1.5		B
• Screwed gland ½-14 NPT		C
• M12 connectors (metal) ⁶⁾		F

Selection and Ordering data		Order No.
Pressure transmitter for gauge pressure		
SITRANS P DS III PA (PROFIBUS PA)		7MF4034 -
SITRANS P DS III FF (FOUNDATION Fieldbus)		7MF4035 -
		■ ■ ■ ■ - ■ ■ ■ ■
Display		
• Without indicator		0
• Without visible digital indicator(digital indicator concealed, setting: bar)	▶	1
• With visible digital indicator		6
• with customer-specific digital indicator (setting as specified, Order Code "Y21" 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) 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) Without cable gland, with blanking plug.		
5) With enclosed cable gland EEx ia and blanking plug.		
6) M12 delivered without cable socket		

Selection and Ordering data	Order code		
	HART	PA	FF
Further designs Add "-Z" to Order No. and specify Order Code.			
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 (metal)	A50	✓	✓
Rating plate inscription (instead of German)			
• English	B11	✓	✓
• French	B12	✓	✓
• Spanish	B13	✓	✓
• Italian	B14	✓	✓
English rating plate Pressure units in inH ₂ O and/or psi	B21	✓	✓
Quality inspection certificate (factory calibration) to IEC 60770-2¹⁾	C11	✓	✓
Inspection certificate²⁾ Acc. to EN 10204-3.1	C12	✓	✓
Factory certificate Acc. to EN 10204-2.2	C14	✓	✓
"Functional safety (SIL2)" certificate	C20	✓	
PROFIsafe certificate and protocol	C21		✓
"Functional safety (SIL2/3)" certificate	C23	✓	
Setting of upper limit of output signal to 22.0 mA	D05	✓	
Manufacturer's declaration acc. to NACE	D07	✓	✓
Degree of protection 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 (EEx ia)")	E01	✓	✓
Oxygen application (In the case of oxygen measurement and inert liquid max. 120 bar G (1740 psi G) at 60°C (140 °F))	E10	✓	✓
Explosion-proof "Intrinsic safety" to INMETRO (Brazil) (only for transmitter 7MF4...-.....-B..)	E25	✓	✓
Ex Approval IEC Ex (EEx ia) (only for transmitter 7MF4...-.....-B..)	E45	✓	✓
Ex Approval IEC Ex (EEx id) (only for transmitter 7MF4...-.....-D..)	E46	✓	✓
Explosion-proof "Intrinsic safety" to NEPSI (China) (only for transmitter 7MF4...-.....-B..)	E55	✓	✓
Explosion protection "Explosion-proof" to NEPSI (China) (only for transmitter 7MF4...-.....-D..)	E56	✓	✓
Ex protection "Zone 2" to NEPSI (China) (only for transmitter 7MF4...-.....-E..)	E57	✓	✓
Two coats of lacquer on casing and cover (PU on epoxy)	G10	✓	✓

Selection and Ordering data	Order code		
	HART	PA	FF
Additional data 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", "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 <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) Preset values can only be changed over SIMATIC PDM.			