


Selection and Ordering data		Order No.	
<b>SITRANS P pressure transmitters for gage pressure, series DS III HART</b>		<b>7 MF 4 0 3 3 -</b>	
		■ ■ ■ ■ ■ - ■ ■ ■ ■ ■	
<b>Measuring cell filling</b>	<b>Measuring cell cleaning</b>		
Silicone oil	Standard	▶	1
Inert liquid <sup>1)</sup>	Grease-free		3
<b>Span</b>			
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
<b>Wetted parts materials</b>			
Seal diaphragm	Process connection		
Stainless steel	Stainless steel	▶	A
Hastelloy	Stainless steel	F)	B
Hastelloy	Hastelloy	F)	C
Version as diaphragm seal <sup>2) 3)</sup>			Y
<b>Process connection</b>			
• Connection shank G½A to EN 837-1		▶	0
• Female thread ½-14 NPT			1
• Oval flange made of stainless steel			
- 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
<b>Non-wetted parts materials</b>			
• Housing made of die-cast aluminium		▶	0
• Housing stainless steel precision casting <sup>4)</sup>			3
<b>Version</b>			
• Standard version			1
• International version, English label inscriptions, documentation in 5 languages on CD		▶	2
<b>Explosion protection</b>			
• Without			A
• With ATEX, Type of protection:			
- "Intrinsic safety (EEx ia)"			B
- "Explosion-proof (EEx d)" <sup>5)</sup>	F)		D
- "Intrinsic safety and explosion-proof enclosure F (EEx ia + EEx d)" <sup>6)</sup>			P
- "Ex nA/nL (zone 2)"			E
- "Intrinsic safety, explosion-proof enclosure and dust explosion protection (EEx ia + EEx d + Zone 1D/2D)" <sup>6)</sup>	▶		R
• With FM + CSA, Type of protection:			
- "Intrinsic safety and explosion-proof (is + xp)" <sup>5)</sup>	F)		NC
<b>Electrical connection / cable entry</b>			
• Screwed gland Pg 13.5 (adapter) <sup>7)</sup>			A
• Screwed gland M20x1.5	▶		B
• Screwed gland ½-14 NPT			C
• Han 7D plug (plastic housing) incl. mating connector <sup>7)</sup>	F)		D
• M12 connector (metall) <sup>8)</sup>			F
<b>Display</b>			
• Without (digital indicator hidden, 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 "SITRANS I power supply units and isolation amplifiers".

Selection and Ordering data	Order No.
<b>SITRANS P pressure transmitters for gage pressure, series DS III HART</b>	<b>7MF4033 -</b> 
<b>Power supply units</b> see "SITRANS I power supply units and isolation amplifiers".	
Factory-mounting of shut-off valves and valve manifolds see page 2/133.	
Included in delivery of the device:	
<ul style="list-style-type: none"><li>• Brief instructions (Leporello)</li><li>• CD-ROM with detailed documentation</li></ul>	
<p>1) For oxygen application, add Order code E10.</p> <p>2) When the manufacture's certificate M (calibration certificate) has to be ordered for transmitters with diaphragm seals, 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.</p> <p>3) Whe the acceptance test certificate 3.1 for transmitters with direct-connected diaphragm seals is ordered, this certificate must also be ordered with the corresponding seals.</p> <p>4) Not together with Electrical connection „Screwed gland Pg 13.5" and „Han7D plug".</p> <p>5) Without cable gland, with blanking plug</p> <p>6) With enclosed cable gland EEx ia and blanking plug</p> <p>7) Not together with type of protection "Explosion-proof" and type of protection "Ex nA".</p> <p>8) Cannot be used together with the following types of protection: "Explosion-proof" and "Intrinsic safety and explosion-proof"</p> <p>F) Subject to export regulations AL: 9I999, ECCN: N.</p>	

Selection and Ordering data		Order No.	
<b>SITRANS P pressure transmitters for gage pressure</b>			
<b>DS III PA (PROFIBUS PA) series</b>		7 M F 4 0 3 4 -	
<b>DS III FF series (FOUNDATION Fieldbus)</b>		7 M F 4 0 3 5 -	
		- - - - -	
<b>Measuring cell filling</b>	<b>Measuring cell cleaning</b>		
Silicone oil	Standard	1	
Inert liquid <sup>1)</sup>	Grease-free	3	
<b>Nominal measuring range</b>			
1 bar g	(14.5 psi g)	F)	B
4 bar g	(58 psi g)	F)	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
<b>Wetted parts materials</b>			
Seal diaphragm	Process connection		
Stainless steel	Stainless steel		A
Hastelloy	Stainless steel		B
Hastelloy	Hastelloy		C
Version as diaphragm seal <sup>2) 3)</sup>			Y
<b>Process connection</b>			
• Connection shank G½A to EN 837-1			0
• Female thread ½-14 NPT			1
• Oval flange made of stainless steel			
- Mounting thread 7/16-20 UNF to EN 61518			2
- Mounting thread M10 to DIN 19213			3
- Mounting thread M12 nach DIN 19213			4
• Male thread M20 x 1,5			5
• Male thread ½-14 NPT			6
<b>Non-wetted parts materials</b>			
• Housing made of die-cast aluminium			0
• Housing stainless steel precision casting			3
<b>Version</b>			
• Standard version			1
• International version, English label inscriptions, documentation in 5 languages on CD			2
<b>Explosion protection</b>			
• Without			A
• With CENELEC, Type of protection:			
- "Intrinsic safety (EEx ia)"			B
- "Explosion-proof (EEx d)" <sup>4)</sup>		F)	D
- "Intrinsic safety and explosion-proof enclosure F) (EEx ia + EEx d)" <sup>5)</sup>			P
- "Ex nA/nL (zone 2)"			E
- "Intrinsic safety, explosion-proof enclosure and F) dust explosion protection (EEx ia + EEx d + Zone 1D/2D)" <sup>6)</sup> (not for DS III FF)			R
• With FM + CSA, Type of protection:			
- "Intrinsic safety and explosion-proof (is + xp)" <sup>5)</sup>		F)	NC
<b>Electrical connection / cable entry</b>			
• Screwed gland M20x1.5			B
• Screwed gland ½-14 NPT			C
• Plug M12 (metal) <sup>6)</sup>			F
<b>Display</b>			
• Without (digital display hidden)			1
• With visible digital indicator			6
• With customer-specific digital indicator (setting as specified, Order code "Y21" or required)			7

Factory-mounting of shut-off valves and valve manifolds see page 2/133.

The device is delivered together with brief instructions (Leporello) and a CD-ROM containing detailed documentation.

- 1) For oxygen application, add Order code E10.
- 2) When the manufacture's certificate M (calibration certificate) has to be ordered for transmitters with diaphragm seals, it is recommended only to order this certificate exclusively with the diaphragm seals. The measuring accuracy of the total combination is certified here.
- 3) Whe the acceptance test certificate 3.1 for transmitters with direct-connected diaphragm seals is ordered, this certificate must also be ordered with the corresponding seals.
- 4) Without cable gland, with blanking plug.
- 5) With enclosed cable gland EEx ia and blanking plug.
- 6) Cannot be used together with the following types of protection: "Explosion-proof" and "Intrinsic safety and explosion-proof"

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

Selection and Ordering data		Order code			Selection and Ordering data		Order code				
Further designs			HART	PA	FF	Additional data			HART	PA	FF
Add "-Z" to Order No. and specify Order code.						Add "-Z" to Order No. and specify Order code.					
Pressure transmitter with mounting bracket made of:						Measuring range to be set		Y01	✓		
• Steel	A01	✓	✓	✓		Specify in plain text (max. 5 digits): Y01: ... up to ... mbar, bar, kPa, MPa, psi					
• Stainless steel	A02	✓	✓	✓		Measuring point number (TAG No.)		Y15	✓	✓	✓
Plug						Max. 16 characters, specify in plain text: Y15: .....					
• Han 7D (metal, gray)	A30	✓				Measuring point text		Y16	✓	✓	✓
• Han 8U (instead of Han 7D)	A31	✓				Max. 27 characters, specify in plain text: Y16: .....					
Cable sockets for M12 connectors (metal)	A50	✓	✓	✓		Entry of HART address (TAG)		Y17	✓		
Rating plate inscription (instead of German)						Max. 8 characters, specify in plain text: Y17: .....					
• English	B11	✓	✓	✓		Setting of pressure indication in pressure units		Y21	✓	✓	✓
• French	B12	✓	✓	✓		Specify in plain text (standard setting: mA): Y21: mbar, bar, kPa, MPa, psi, ...					
• Spanish	B13	✓	✓	✓		Note:					
• Italian	B14	✓	✓	✓		The following pressure units can be selected: bar, mbar, mm H <sub>2</sub> O <sup>1)</sup> , inH <sub>2</sub> O <sup>1)</sup> , ftH <sub>2</sub> O <sup>1)</sup> , mmHG, inHG, psi, Pa, kPa, MPa, g/cm <sup>2</sup> , kg/cm <sup>2</sup> , Torr, ATM oder % ) ref. temperature 20 °C					
English rating plate	B21	✓	✓	✓		Setting of pressure indication in non-pressure units		Y22 + Y01	✓		
Pressure units in inH <sub>2</sub> O or psi						Specify in plain text: Y22: ..... up to ..... l/min, m <sup>3</sup> /h, m, USgpm, ... (specification of measuring range in pressure units "Y01" is essential, unit with max. 5 characters)					
Manufacturer's test certificate M (calibration certificate) <sup>1)</sup>	C11	✓	✓	✓		Preset bus address		Y25		✓	
To DIN 55350, Part 18 and to ISO 8402						Specify in plain text: Y25: .....					
Acceptance test certificate <sup>2)</sup>	C12	✓	✓	✓		Only "Y01", "Y21", "Y22", "Y25" and "D05" can be factory preset					
To EN 10204-3.1						✓ = available					
Factory certificate	C14	✓	✓	✓		Ordering example					
To EN 10204-2.2						Item line: 7MF4033-1EA00-1AA7-Z					
"Functional Safety (SIL)" certificate	C20	✓				B line: A01 + Y01 + Y21					
"PROFIsafe" certificate and protocol	C21		✓			C line: Y01: 10 ... 20 bar (145 ... 290 psi)					
Setting of upper limit of output signal to 22.0 mA	D05	✓				C line: Y21: bar (psi)					
Manufacturer's declaration acc. to NACE	D07	✓	✓	✓		F) Subject to export regulations AL: 9l999, ECCN: N.					
Type of protection IP68	D12	✓	✓	✓							
(not together with 7D/ Han 8U plug, cable gland Pg 13.5)											
Digital indicator alongside the input keys	D27	✓	✓	✓							
(only together with the devices 7MF4033- ....0-.A.6 or -.A.7-Z, Y21 or Y22 + Y01)											
Supplied with oval flange	D37 <sup>F)</sup>	✓	✓	✓							
(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 (EEx ia)")											
Use on zone 0	E02	✓	✓	✓							
(only together with type of protection "Intrinsic safety (EEx ia)")											
Oxygen application	E10	✓	✓	✓							
(max. 160 bar g (2320 psi g) for oxygen measurement and inert liquid)											
Explosion-proof "Intrinsic safety" to INMETRO (Brazil)	E25	✓	✓	✓							
(only for transmitter 7MF4...-.....-B..)											
Explosion-proof "Intrinsic safety" to NEPSI (China)	E55	✓	✓	✓							
(only for transmitter 7MF4...-.....-B..)											
Explosion protection "Explosion-proof" to NEPSI (China)	E56	✓	✓	✓							
(only for transmitter 7MF4...-.....-D..)											
Explosion-proof "Zone 2" to NEPSI (China)	E57	✓	✓	✓							
(only for transmitter 7MF4...-.....-E..)											

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

2) Whe the acceptance test certificate 3.1 for transmitters with direct-connected diaphragm seals is ordered, this certificate must also be ordered with the corresponding seals.