

Selection and Ordering data		Order No.	
<b>SITRANS P300 pressure transmitters for gage and absolute pressure</b> , single-chamber measuring housing, rating plate inscription in English			
<b>4 ... 20 mA/HART</b>		<b>7 MF 8 0 2 3 -</b>	
<b>PROFIBUS PA</b>		<b>7 MF 8 0 2 4 -</b>	
<b>FOUNDATION Fieldbus (FF)</b>		<b>7 MF 8 0 2 5 -</b>	
		■ ■ ■ ■ ■ - ■ ■ ■ ■ ■	
<b>Measuring cell filling</b>	<b>Measuring cell cleaning</b>		
Silicone oil	Standard	1	
Inert liquid	Cleanliness level 2 to DIN 25410	3	
<b>max. span</b>			
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	(5800 psi g)	G	
0.25 bar a	(3.63 psi a)	F) Q	
1.3 bar a	(18.9 psi a)	F) S	
5 bar a	(72.5 psi a)	F) T	
30 bar a	(435 psi a)	F) U	
<b>Wetted parts materials</b>			
Seal diaphragm	Measuring cell		
Stainless steel	Stainless steel	A	
Hastelloy	Stainless steel	F) B	
Hastelloy	Hastelloy	F) C	
Version for diaphragm seal <sup>1) 2)</sup>		Y	
<b>Process connection</b>			
• G½A to EN 837-1		0	
• 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>			
• St. steel, deep-drawn and electrolytically polished		4	
<b>Version</b>			
• Standard version		1	
<b>Explosion protection</b>			
• Without		A	
• With ATEX, Type of protection:			
- "Intrinsic safety (EEx ia)"		B	
• With FM „Intrinsic safe“ (cFM <sub>US</sub> )		M	
<b>Electrical connection / cable entry</b>			
• Screwed gland M20x1.5 (Polyamide) <sup>3)</sup>		A	
• Screwed gland M20x1.5 (metal)		B	
• Screwed gland M20x1.5 (stainless steel)		C	
• M12 connector (metal, without cable socket)		F	
• M12 connector (stainless steel, without cable socket)		G	
• ½-14 NPT thread, metal <sup>4)</sup>		H	
• ½-14 NPT thread, stainless steel <sup>4)</sup>		J	

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<b>PROFIBUS PA</b>		<b>7 MF 8 0 2 4 -</b>	
<b>FOUNDATION Fieldbus (FF)</b>		<b>7 MF 8 0 2 5 -</b>	
		■ ■ ■ ■ ■ - ■ ■ ■ ■ ■	
<b>Display</b>			
• Without display, with keys, closed lid <sup>3)</sup>			1
• With display and keys, closed lid			2
• With display and keys, lid with glass pane (setting on HART devices: mA, on PROFIBUS devices: pressure units)			6
• With display (setting acc. to specifications, Order code "Y21" or "Y22" required), lid with glass pane			7

**Power supply units** see "SITRANS I power supply units and isol. amplifiers".


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

Included in delivery of the device:

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

- <sup>1)</sup> 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.
- <sup>2)</sup> 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.
- <sup>3)</sup> Only together with HART electronics.
- <sup>4)</sup> Without cable gland.

F) Subject to export regulations AL: 9I999, ECCN: N.

Selection and Ordering data		Order No.
<b>SITRANS P300 pressure transmitters for gage pressure with front-flush membrane,</b> single-chamber measuring housing, rating plate inscription in English		
<b>4 ... 20 mA/HART</b>	F)	<b>7 MF 8 1 2 3 -</b>
<b>PROFIBUS PA</b>	F)	<b>7 MF 8 1 2 4 -</b>
<b>FOUNDATION Fieldbus (FF)</b>	F)	<b>7 MF 8 1 2 5 -</b>
		
<b>Measuring cell filling</b>	<b>Measuring cell cleaning</b>	
Silicone oil	Standard	1
Inert liquid	Cleanliness level 2 to DIN 25410	3
FDA compliant fill fluid		
• Neobee oil	Standard	4
<b>max. span</b>		
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
<b>Wetted parts materials</b>		
Seal diaphragm	Measuring cell	
Stainless steel	Stainless steel	A
<b>Process connection</b>		
• Flange version with Order code M..., N..., R... or Q... (see "Further designs")		7
<b>Non-wetted parts materials</b>		
• Stainless steel, deep-drawn and electrolytically polished		4
<b>Version</b>		
• Standard version		1
<b>Explosion protection</b>		
• Without		A
• With ATEX, Type of protection: - "Intrinsic safety (Ex ia)"		B
• With FM „Intrinsic safe“ (cFM <sub>US</sub> )		M
<b>Electrical connection / cable entry</b>		
• Screwed gland M20x1.5 (Polyamide) <sup>1)</sup>		A
• Screwed gland M20x1.5 (metal)		B
• Screwed gland M20x1.5 (stainless steel)		C
• M12 connector (without cable socket)		F
• M12 connector (stainless steel, without cable socket)		G
• ½-14 NPT thread, metal <sup>2)</sup>		H
• ½-14 NPT thread, stainless steel <sup>2)</sup>		J
<b>Display</b>		
• Without display, with keys, closed lid <sup>1)</sup>		1
• With display and keys, closed lid		2
• With display and keys, lid with macrolon washer (setting on HART devices: mA, on PROFIBUS PA and FOUNDATION Fieldbus devices: pressure units)		4
• With display (setting acc. to specifications, Order code "Y21" or "Y22" required), lid with macrolon washer		5
• With display and keys, lid with glass pane (setting on HART devices: mA, on PROFIBUS PA and FOUNDATION Fieldbus devices: pressure units)		6
• With display (setting acc. to specifications, Order code "Y21" or "Y22" required), lid with glass pane		7

**Power supply units** see "SITRANS I power supply units and isol. amplifiers".

Included in delivery of the device:

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

<sup>1)</sup> Only together with HART electronics.

<sup>2)</sup> Without cable gland.

F) Subject to export regulations AL: 9I999, ECCN: N.

Selection and Ordering data		Order code			
Further designs			HART	PA	FF
Add "-Z" to Order No. and specify Order code.					
<b>Mounting bracket</b> made completely of stainless steel, for wall or pipe mounting		A02	✓	✓	✓
<b>Cable socket for M12 plug</b>					
• Metal		A50		✓	✓
• Stainless steel		A51		✓	✓
<b>Rating plate inscription</b> (instead of English)					
• German		B10	✓	✓	✓
• French		B12	✓	✓	✓
• Spanish		B13	✓	✓	✓
• Italian		B14	✓	✓	✓
<b>English rating plate</b> Pressure units in inH <sub>2</sub> O or psi		B21	✓	✓	✓
<b>Manufacturer's test certificate M<sup>1)</sup></b> <b>(calibration certificate)</b> to DIN 55350, Part 18 and to ISO 8402		C11	✓	✓	✓
<b>Acceptance test certificate<sup>2)</sup></b> to EN 10204-3.1		C12	✓	✓	✓
<b>Factory certificate</b> to EN 10204-2.2		C14	✓	✓	✓
<b>Type of protection IP68</b>		D12	✓	✓	✓
<b>Only for SITRANS P300 with front-flush diaphragm (7MF81...-...)</b>					
<b>Flange to EN 1092-1</b>					
• DN 25, PN 40		M11	✓	✓	✓
• DN 25, PN 100		M21	✓	✓	✓
• DN 40, PN 40		M13	✓	✓	✓
• DN 40, PN 100		M23	✓	✓	✓
• DN 50, PN 16		M04	✓	✓	✓
• DN 50, PN 40		M14	✓	✓	✓
• DN 80, PN 25		M06	✓	✓	✓
• DN 80, PN 40		M16	✓	✓	✓
<b>Flanges to ASME B16.5</b>					
• 1", class 150		M40	✓	✓	✓
• 1½", class 150		M41	✓	✓	✓
• 2", class 150		M42	✓	✓	✓
• 3", class 150		M43	✓	✓	✓
• 4", class 150		M44	✓	✓	✓
• 1", class 300		M45	✓	✓	✓
• 1½", class 300		M46	✓	✓	✓
• 2", class 300		M47	✓	✓	✓
• 3", class 300		M48	✓	✓	✓
<b>Threaded connection</b>					
• G 2", flush-mounted		R04	✓	✓	✓
<b>Tank connection</b>					
• TG 52/50, PN 40		R10	✓	✓	✓
<b>Tri-Clamp connection according DIN 32676/ISO 2852</b> certified to 3A <sup>3)</sup>					
• DN 50/2", PN 16		N14	✓	✓	✓
• DN 65/3", PN 10		N15	✓	✓	✓
<b>Varivent connection</b> certified to 3A and EHEDG <sup>3)</sup>					
• Type N = 68 for Varivent housing DN 40 ... 125 and 1½" ... 6", PN 40		N28	✓	✓	✓
<b>Temperature decoupler up to 200 °C<sup>3)</sup></b> for version with front-flush diaphragm		P00	✓	✓	✓
<b>Bio-Control (Neumo) sanitary connection</b> certified to 3A and EHEDG <sup>3)</sup>					
• DN 50, PN 16		Q53	✓	✓	✓
• DN 65, PN 16		Q54	✓	✓	✓

Selection and Ordering data		Order code			
Further designs Add "-Z" to Order No. and specify Order code.			HART	PA	FF
<b>Sanitary process connection to DRD</b> • 50 mm, PN 40		M32	✓	✓	✓
<b>Sanitary process connection to NEUMO Bio-Connect screw connection</b> certified to 3A and EHEDG <sup>3)</sup>					
• DN 40, PN 16	Q04	✓	✓	✓	
• DN 50, PN 16	Q05	✓	✓	✓	
• DN 65, PN 16	Q06	✓	✓	✓	
• DN 80, PN 16	Q07	✓	✓	✓	
• DN 100, PN 16	Q08	✓	✓	✓	
• DN 2", PN 16	Q13	✓	✓	✓	
• DN 2½", PN 16	Q14	✓	✓	✓	
• DN 3", PN 16	Q15	✓	✓	✓	
• DN 4", PN 16	Q16	✓	✓	✓	
<b>Sanitary process connection to NEUMO Bio-Connect flange connection</b> certified to 3A and EHEDG <sup>3)</sup>					
• DN 50, PN 16	Q23	✓	✓	✓	
• DN 65, PN 16	Q24	✓	✓	✓	
• DN 80, PN 16	Q25	✓	✓	✓	
• DN 100, PN 16	Q26	✓	✓	✓	
• DN 2", PN 16	Q31	✓	✓	✓	
• DN 2½", PN 16	Q32	✓	✓	✓	
• DN 3", PN 16	Q33	✓	✓	✓	
• DN 4", PN 16	Q34	✓	✓	✓	
<b>Sanitary process connection to NEUMO Bio-Connect clamp connection</b> certified to 3A and EHEDG <sup>3)</sup>					
• DN 50, PN 16	Q39	✓	✓	✓	
• DN 65, PN 10	Q40	✓	✓	✓	
• DN 80, PN 10	Q41	✓	✓	✓	
• DN 100, PN 10	Q42	✓	✓	✓	
• DN 2½", PN 16	Q48	✓	✓	✓	
• DN 3", PN 10	Q49	✓	✓	✓	
• DN 4", PN 10	Q50	✓	✓	✓	
<b>Sanitary process connection to NEUMO Connect S flange connection</b> certified to 3A and EHEDG					
• DN 50, PN 16	Q63	✓	✓	✓	
• DN 65, PN 10	Q64	✓	✓	✓	
• DN 80, PN 10	Q65	✓	✓	✓	
• DN 100, PN 10	Q66	✓	✓	✓	
• DN 2", PN 16	Q72	✓	✓	✓	
• DN 2½", PN 10	Q73	✓	✓	✓	
• DN 3", PN 10	Q74	✓	✓	✓	
• DN 4", PN 10	Q75	✓	✓	✓	

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.

3) Certified to 3A.  
The maximum temperatures of the medium depend on the respective cell fillings.

Selection and Ordering data		Order code		
<b>Additional data</b> Add "-Z" to Order No. and specify Order code.		HART	PA	FF
<b>Measuring range to be set</b> Specify in plain text V (max. 5 digits): Y01: ... up to ... mbar, bar, kPa, MPa, psi	Y01	✓		
<b>Measuring point number (TAG No.)</b> Max. 16 characters, specify in plain text: Y15: .....	Y15	✓	✓	✓
<b>Measuring point text</b> Max. 27 characters, specify in plain text: Y16: .....	Y16	✓	✓	✓
<b>Entry of HART TAG</b> Max. 8 characters, specify in plain text: Y17: .....	Y17	✓		
<b>Setting of pressure indication in pressure units</b> Specify in plain text (standard setting: mA): Y21: mbar, bar, kPa, MPa, psi, ... Note: The following pressure units can be selected: bar, mbar, mm H <sub>2</sub> O <sup>*)</sup> , inH <sub>2</sub> O <sup>*)</sup> , ftH <sub>2</sub> O <sup>*)</sup> , mmHG, inHG, psi, Pa, kPa, MPa, g/cm <sup>2</sup> , kg/cm <sup>2</sup> , Torr, ATM or % *) ref. temperature 20 °C	Y21	✓	✓	✓

Selection and Ordering data		Order code		
		HART	PA	FF
<b>Setting of pressure indicator in non-pressure units</b> Specify in plain text: Y22: ..... up to ..... l, m <sup>3</sup> , m, USg, ... (specification of measuring range in pressure units "Y01" is essential, unit with max. 5 characters)	Y22 + Y01	✓		
<b>Preset bus address</b> Specify in plain text: Y25: .....	Y25		✓	✓

Only "Y01" and "Y21" can be factory preset

✓ = available

#### Ordering example

Item line: 7MF8023-1DB24-1AB7-Z  
 B line: A02 + Y01 + Y21  
 C line: Y01: 1 ... 10 bar (14.5 ... 145 psi)  
 C line: Y21: bar (psi)