

Pressure Measurement

Single-range transmitters for general applications

SITRANS P Compact for gauge and absolute pressure

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Overview



The SITRANS P Compact pressure transmitter is designed for the special requirements of the food, pharmaceutical and biotechnology industries.

The use of high-grade materials guarantees compliance with hygiene regulations.

Particular value has been placed on a high surface quality. The system can be electropolished in addition.

A further important feature is the hygiene-based design of the process connection by means of various aseptic connections.

The completely welded stainless steel housing can be designed up to degree of protection IP67.

Using appropriate thermal decouplers, the SITRANS P Compact pressure transmitter can be used for process temperatures up to 200 °C (392 °F).

Benefits

- Measuring ranges from 0 to 160 mbar (0 to 2.32 psi) to 0 to 40 bar (0 to 580 psi)
- Linearity error including hysteresis < +0.2 % of full-scale value
- Piezo-resistive measurement system, vacuum-proof and overload-proof
- Hygiene-based design according to EHEDG, FDA and GMP recommendations
- Material and surface quality according to hygiene requirements
- Wetted parts made of stainless steel; completely welded
- Signal output 4 to 20 mA (0 to 20 mA as option)
- Stainless steel housing with degree of protection IP65 (IP67 as option)
- Process temperature up to 200 °C (392 °F)
- Explosion protection II 2G Ex [ib] IIC T6 to ATEX
- Easy and safe to clean

Application

The SITRANS P Compact pressure transmitter is designed for the special requirements of the food, pharmaceutical and biotechnology industries.

The use of high-grade materials guarantees compliance with hygiene regulations.

The SITRANS P Compact pressure transmitter is available in many versions. Exact adaptation of the pressure transmitter to conditions at the place of use is thus possible

Design

The electronics is potted to protect it against moisture, corrosive atmospheres and vibration.

Notes on operating the pressure transmitter

Compensation of internal atmospheric pressure

Compensation of the internal atmospheric pressure of the SITRANS P Compact pressure transmitters is performed as follows:

- in the plug versions by means of the screwed gland (IP65)
- in the field housings by means of an integral sintered filter (IP65) or a vented cable (IP67)
- in versions with cable outlet by means of a vented cable (IP67)

In the absolute pressure range there is no need for compensation with respect to atmospheric pressure.

Note: These degrees of protection are only achieved under the following conditions:

- if the pressure transmitter is installed correctly
- if the screwed glands are securely tightened
- if the cable diameters agree with the nominal diameters of the gaskets in the housing

Note: The integral EMC measures are only effective if the earth connection is made correctly.

CE marking

The CE marking of the pressure transmitter certifies compliance with the guidelines of the European Council (9/336/EC), the EMC law (13.11.1992), as well as the applicable generic standards.

Interference-free operation in systems and plants is achieved only if the specifications for shielding, earthing, cable routing and electrical isolation are observed during installation and assembly.

Hazardous areas

Note: Electrical equipment in hazardous areas must only be installed and operated by trained personnel.

Modifications to units and connections result in cancellation of the explosion protection and guarantee.

With intrinsically-safe circuits, make sure that equipotential bonding exists throughout the complete cabling inside and outside of the hazardous area. The limits specified in the ATEX approval must be observed.

Function

The process pressure acts on a piezo-resistive semiconductor measuring bridge through a remote seal and a transmission liquid. The pressure transmitter converts the pressure values into a load-independent current.

A compensation network makes the output signal largely independent of the ambient temperature. As a result of a specially adapted remote seal connection with minimized volume, the influence of the process temperature on the output signal is greatly reduced compared to a conventional screw connection.

The pressure transmitters can be powered with a non-regulated DC voltage of 10 to 30 V. Output signals common to measuring technology are available.

Technical specifications**Pressure transmitters for food, pharmaceuticals and biotechnology****Mode of operation**

Measuring principle	piezo-resistive
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Input

Measured variable	gauge or absolute pressure
Measuring range	0 ... 160 mbar (0 ... 2.32 psi) ... 0 ... 40 bar (0 ... 580 psi)

Output

Output signal	
• 2-wire system	4 ... 20 mA
• Three-wire system	0 ... 20 mA

Measuring accuracy

Acc. to IEC 60770-1	
Error in measurement at limit setting incl. hysteresis and reproducibility	≤ 0.2 % of full-scale value
Adjustment accuracy	≤ ± 0.2 % of full-scale value
Step response time	< 20 ms

Influence of ambient temperature

On the enclosure	
• Zero point	< 0.2 %/10 K of full-scale value
• Measuring span	< 0.2 %/10 K of full-scale value
On the process connection (remote seals)	Zero error (depends on design)
• Flange remote seal	
- DN 25 / 1"	4.8 mbar/10 K (0.069 psi/10 K)
- DN 32 / 1¼"	2.3 mbar/10 K (0.033 psi/10 K)
- DN 40 / 1½"	1.6 mbar/10 K (0.023 psi/10 K)
- DN 50 / 2"	0.6 mbar/10 K (0.009 psi/10 K)
• Clamp-on seal	
- DN 25 / 1"	9.5 mbar/10 K (0.14 psi/10 K)
- DN 32 / 1¼"	4.1 mbar/10 K (0.06 psi/10 K)
- DN 40 / 1½"	3.9 mbar/10 K (0.05 psi/10 K)
- DN 50 / 2"	3.9 mbar/10 K (0.05 psi/10 K)

The zero error specified for the process connection should be considered as a guideline for a standard design. We will produce a detailed system calculation on request. Systems with reduced remote seal errors are available on request.

Rated conditions

Installation conditions	
• Mounting position	Any, vertical as standard
Ambient conditions	
• Ambient temperature	-10 ... +70 °C (14 ... 158 °F)
• Storage temperature	-10 ... +90 °C (14 ... 194 °F)
• Process temperature	Max. 200 °C (392 °F), depending on design
Vacuum-resistant	0 mbar (0 psi) absolute at max. 50 °C. Higher process temperatures on request.
• Degree of protection (to EN 60529)	IP65, optional IP67
• Electromagnetic Compatibility	
- Emitted interference	To EN 50081 Part 1, issue 1993 (residential and industrial areas). The unit has no own emissions.
- Noise immunity to	EN 50082 Part 2, issue March 1995 (industrial areas)

Design

Weight (without remote seal)	
• Field enclosure	≈ 460 G (≈ 1.01 (lb))
• Enclosure with plug	≈ 200 g (≈ 0.44 lb)
Enclosure	
• Designs	• Field housing IP65 or IP67, with screwed gland • Angled plug DIN 43650, IP65 • Cable connection, IP67 • M12 device plug, IP65
• Material	Stainless steel, mat. no. 1.4404/316L/1.4305
Material of union nut	Polyamide (with electrical connection using plug or cable) Electronics unit potted with silicone Internal ventilation for measuring ranges < 16 bar (< 232 psi), through housing thread or connection cable depending on design
Process connection	
• Versions	See ordering data
• Material of coupling	Stainless steel, mat. no. 1.4404/316L

Power supply

Terminal voltage on transmitter	10 ... 30 V DC
Rated voltage	24 V DC

Certificates and approvals

Classification according to pressure equipment directive (PED 2014/68/EU)	
• For 7MF8010-1... (with diaphragm seal)	For gases of fluid group 1 and liquids of fluid group 1; complies with requirements of article 4, paragraph 3 (sound engineering practice)
• For 7MF8010-2... (with clamp-on seal)	For gases of fluid group 1 and liquids of fluid group 1; complies with the requirements of article 4, paragraph 1 (appendix 1); assigned to category III, conformity evaluation module H by the TÜV Nord
Explosion protection	
• Intrinsic safety "i"	TÜV 03 ATEX 2099 X
- Marking	Ex II 2G Ex ib IIC T6

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SITRANS P Compact for gauge and absolute pressure

Selection and Ordering data	Article No.	Ord. code	Selection and Ordering data	Article No.	Ord. code
SITRANS P Compact pressure transmitters for pressure and absolute pressure with diaphragm flush at front 2-wire system Process temperature up to 140 °C (284 °F) Accuracy: 0.2 % of full-scale value Output 4 ... 20 mA ↗ Click on the Article No. for the online configuration in the PIA Life Cycle Portal.	7MF8010-		SITRANS P Compact pressure transmitters for pressure and absolute pressure with diaphragm flush at front 2-wire system Process temperature up to 140 °C (284 °F) Accuracy: 0.2 % of full-scale value Output 4 ... 20 mA	7MF8010-	
Diaphragm seal with quick-release clamp Milk pipe union to DIN 11851 with slotted union nut <ul style="list-style-type: none"> • DN 25 • DN 32 • DN 40 • DN 50 • DN 65 Milk pipe union to DIN 11851 with threaded socket <ul style="list-style-type: none"> • DN 25 • DN 32 • DN 40 • DN 50 • DN 65 Clamp connection to DIN 32676 <ul style="list-style-type: none"> • DN 25 • DN 40 • DN 50 Clamp connection to ISO 2852 <ul style="list-style-type: none"> • 1 inch • 1½ inch • 2 inch • 2½ inch IDF standard with slotted union nut <ul style="list-style-type: none"> • 1 inch • 1½ inch • 2 inch IDF standard with threaded socket <ul style="list-style-type: none"> • 1 inch • 1½ inch • 2 inch SMS standard with slotted union nut <ul style="list-style-type: none"> • 1 inch • 1½ inch • 2 inch SMS standard with threaded socket <ul style="list-style-type: none"> • 1 inch • 1½ inch • 2 inch DRD flange, without welding-type flange <ul style="list-style-type: none"> • DN 50, PN 40 Varivent connection (Tuchenhagen) <ul style="list-style-type: none"> • D = 50, for Varivent housing DN 25 and 1 inch • D = 68, for Varivent housing DN 40 ... DN 125 and 1½ ... 6 inch Special version (add Order code and plain text)	1 AD AE AF AG AH BD BE BF BG BH CD CF CG DM DN DP DQ EM EN EP FM FN FP GM GN GP HM HN HP JH KF KL ZA	J 1 Y L 1 Y M 1 Y	Diaphragm seal with aseptic connection Aseptic screwed gland to DIN 11864-1, form A, with slotted union nut <ul style="list-style-type: none"> • 1 inch • 1½ inch • 2 inch • 2½ inch Aseptic screwed gland to DIN 11864-1, form A with threaded socket <ul style="list-style-type: none"> • 1 inch • 1½ inch • 2 inch • 2½ inch Aseptic screwed NEUMO with slotted union nut ¹⁾ <ul style="list-style-type: none"> • DN 25 • DN 32 • DN 40 • DN 50 Aseptic screwed NEUMO with threaded socket ¹⁾ <ul style="list-style-type: none"> • DN 25 • DN 32 • DN 40 • DN 50 Aseptic screwed NEUMO with clamp connection, form R ¹⁾ <ul style="list-style-type: none"> • DN 25 • DN 32 • DN 40 • DN 50 Aseptic screwed NEUMO with clamp connection, form V ¹⁾ <ul style="list-style-type: none"> • DN 25 • DN 32 • DN 40 • DN 50 Male thread DIN 3852 Form A <ul style="list-style-type: none"> • G½", min. meas. span 1.6 bar (23.2 psi) • G¾", min. meas. span 1 bar (14.5 psi) • G1", min. meas. span 0.4 bar (5.8 psi) • G1½", min. meas. span 0.25 bar (3.63 psi) • G2", min. meas. span 0.16 bar (2.32 psi) Special version (add Order code and plain text)	1 PM PN PP PQ QM QN QP QQ RD RE RF RG SD SE SF SG TD TE TF TG UD UE UF UG XA XB XC XD XE ZA	J 1 Y L 1 Y M 1 Y
Filling liquid Food oil, FDA-listed Special version (add Order code and plain text)	3 9	L 1 Y	Filling liquid Food oil, FDA-listed Special version (add Order code and plain text)	3 9	L 1 Y
Output signal 4 ... 20 mA Special version (add Order code and plain text)	1 9	M 1 Y	Output signal 4 ... 20 mA Special version (add Order code and plain text)	1 9	M 1 Y

¹⁾ Please specify as well:
 Connections for pipes: R01, R02 or R03, see table "Further designs" on next page

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Selection and Ordering data	Article No.	Ord. code
SITRANS P Compact pressure transmitters for pressure and absolute pressure with clamp-on remote seal	7MF8010 -	
2-wire system Process temperature up to 140 °C (284 °F) Accuracy: 0.2 % of full-scale value Output 4 ... 20 mA	2	
➤ Click on the Article No. for the online configuration in the PIA Life Cycle Portal.		
Clamp-on remote seal (screwed gland at both ends) with quick-release clamps		
Milk pipe union to DIN 11851 with threaded socket		
• DN 25	AD	
• DN 32	AE	
• DN 40	AF	
• DN 50	AG	
• DN 65	AH	
Clamp connection to DIN 32676		
• DN 25	CD	
• DN 32	CE	
• DN 40	CF	
• DN 50	CG	
• DN 65	CH	
Clamp connection to ISO 2852 ¹⁾		
• 1 inch	DM	
• 1½ inch	DN	
• 2 inch	DP	
• 2½ inch	DQ	
Special version (add Order code and plain text)	ZA	J 1 Y
Filling liquid		
Food oil, FDA-listed	3	
Special version (add Order code and plain text)	9	L 1 Y
Output signal		
4 ... 20 mA	1	
Special version (add Order code and plain text)	9	M 1 Y

¹⁾ Please note the internal diameter of the pipe. Please specify pipe classes (see "Further designs")

Selection and Ordering data	Article No.	Ord. code
SITRANS P Compact pressure transmitters for pressure and absolute pressure with clamp-on remote seal	7MF8010 -	
2-wire system Process temperature up to 140 °C (284 °F) Accuracy: 0.2 % of full-scale value Output 4 ... 20 mA	2	
Clamp-on seal with aseptic connection		
Aseptic screwed gland to DIN 11864-1, form A with threaded socket		
• 1 inch	QM	
• 1½ inch	QN	
• 2 inch	QP	
Aseptic screwed NEUMO with threaded socket ¹⁾		
• DN 25	SD	
• DN 32	SE	
• DN 40	SF	
• DN 50	SG	
• DN 65	SH	
Aseptic screwed NEUMO with clamp connection, form R ¹⁾		
• DN 25	TD	
• DN 32	TE	
• DN 40	TF	
• DN 50	TG	
Aseptic screwed gland SÜDMO with threaded socket W 501 ¹⁾		
• 1 inch	VM	
• 1½ inch	VN	
• 2 inch	VP	
Aseptic screwed gland SÜDMO with clamp connection W 601 ¹⁾		
• 1 inch	WM	
• 1½ inch	WN	
• 2 inch	WP	
Special version (add Order code and plain text)	ZA	J 1 Y
Filling liquid		
Food oil, FDA-listed	3	
Medicinal white oil	2	
Special version (add Order code and plain text)	9	L 1 Y
Output signal		
4 ... 20 mA	1	
Special version (add Order code and plain text)	9	M 1 Y

¹⁾ Please specify as well: Connections for pipes: R01, R02 or R03, see table "Further designs" on next page

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SITRANS P Compact for gauge and absolute pressure

Selection and Ordering data	Article No.	Ord. code
SITRANS P Compact pressure transmitters for pressure and absolute pressure with clamp-on remote seal	7MF8010-	
2-wire system Process temperature up to 140 °C (284 °F) Accuracy: 0.2 % of full-scale value Output 4 ... 20 mA	2	
Housing design (stainless steel mat. No. 1.4404/316L) / electr. connection		
Housing with angled plug to DIN 43650, IP65, union nut made of polyamide		1
Housing with M12 device plug, IP65, union nut made of polyamide		2
Housing with M12 device plug, IP65, union nut made of stainless steel		3
Stainless steel field housing (small) with cable gland, IP65		4
Stainless steel field housing (small) with cable gland, IP67 Internal ventilation for measuring ranges < 16 bar (< 232 psi)		5
Measured range Overload pressure		
0 ... 160 mbar (0 ... 2.32 psi)	2 bar (29 psi)	BB
0 ... 250 mbar (0 ... 3.63 psi)	2 bar (29 psi)	BC
0 ... 400 mbar (0 ... 5.8 psi)	6 bar (87 psi)	BD
0 ... 600 mbar (0 ... 8.7 psi)	6 bar (87 psi)	BE
0 ... 1 bar (0 ... 14.5 psi)	10 bar (145 psi)	CA
0 ... 1.6 bar (0 ... 23.2 psi)	10 bar (145 psi)	CB
0 ... 2.5 bar (0 ... 36.3 psi)	16 bar (232 psi)	CC
0 ... 4 bar (0 ... 58 psi)	16 bar (232 psi)	CD
0 ... 6 bar (0 ... 87 psi)	30 bar (435 psi)	CE
0 ... 10 bar (0 ... 145 psi)	30 bar (435 psi)	DA
0 ... 16 bar (0 ... 232 psi)	50 bar (725 psi)	DB
0 ... 25 bar (0 ... 363 psi)	50 bar (725 psi)	DC
0 ... 40 bar (0 ... 580 psi)	70 bar (1015 psi)	DD
-160 ... 0 mbar (-2.32 ... 0 psi)	2 bar (29 psi)	EB
-250 ... 0 bar (-3.73 ... 0 psi)	2 bar (29 psi)	EC
-400 ... 0 bar (-5.8 ... 0 psi)	6 bar (87 psi)	ED
-600 ... 0 bar (-8.7 ... 0 psi)	6 bar (87 psi)	EE
-1 ... 0 bar (-14.5 ... 0 psi)	10 bar (145 psi)	FA
-1 ... 0.6 bar (-14.5 ... 8.7 psi)	10 bar (145 psi)	FB
-1 ... 1.5 bar (-14.5 ... 21.8 psi)	16 bar (232 psi)	FC
-1 ... 3 bar (-14.5 ... 43.5 psi)	16 bar (232 psi)	FD
-1 ... 5 bar (-14.5 ... 72.5 psi)	30 bar (435 psi)	FE

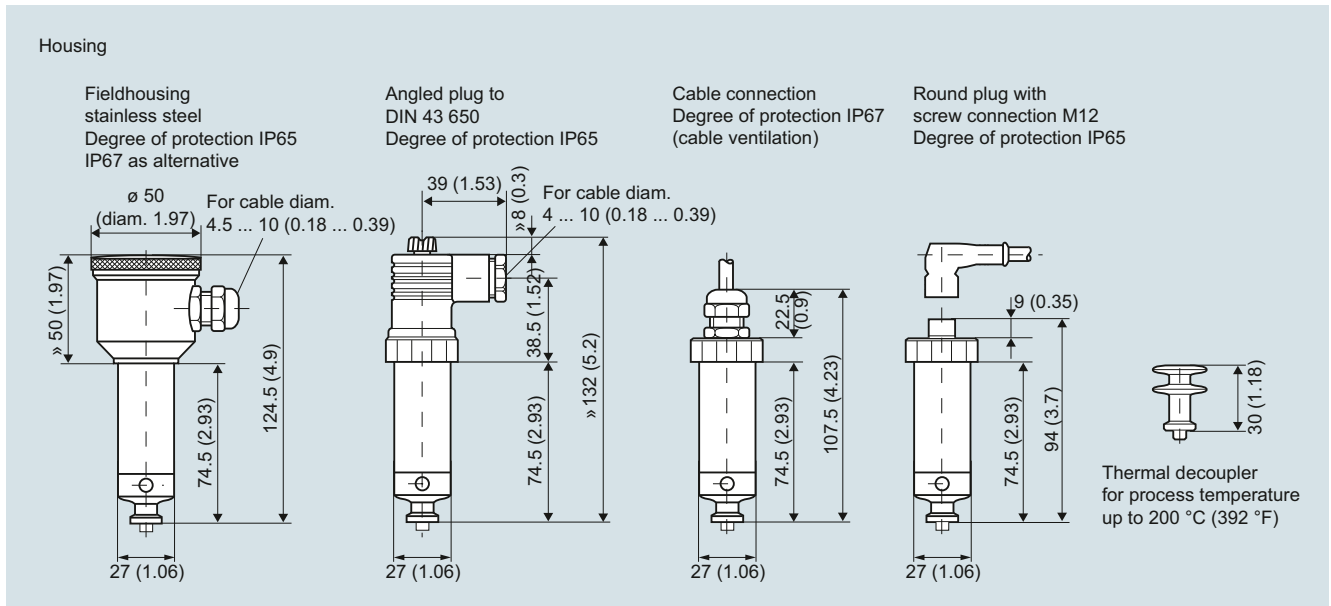
Selection and Ordering data	Article No.	Ord. code
SITRANS P Compact pressure transmitters for pressure and absolute pressure with clamp-on remote seal	7MF8010-	
2-wire system Process temperature up to 140 °C (284 °F) Accuracy: 0.2 % of full-scale value Output 4 ... 20 mA	2	
Measured range Overload pressure (continued)		
-1 ... 9 bar (-14.5 ... 130.5 psi)	30 bar (435 psi)	GA
-1 ... 15 bar (-14.5 ... 217.6 psi)	50 bar (725 psi)	GB
0 ... 1 bar a (0 ... 14.5 psi a)	10 bar a (145 psi a)	HA
0 ... 1.6 bar a (0 ... 23.2 psi a)	10 bar a (145 psi a)	HB
0 ... 2.5 bar a (0 ... 36.3 psi a)	16 bar a (232 psi a)	HC
0 ... 4 bar a (0 ... 58 psi a)	16 bar a (232 psi a)	HD
0 ... 6 bar a (0 ... 87 psi a)	30 bar a (435 psi a)	HE
0 ... 10 bar a (0 ... 145 psi a)	30 bar a (435 psi a)	JA
Special version (add Order code and plain text)		ZA P 1 Y
Explosion protection		
without		1
with, to ATEX 100a, II 2 G, Ex ib IIC T6		2
Further designs	Order code	
Please add "-Z" to Article No. and specify Order code		
Hygiene version	P01	
Roughness of process connection: Foil $R_a < 0.8 \mu\text{m}$ ($3.15 \cdot 10^{-8}$ inch); Welded seams $R_a < 1.5 \mu\text{m}$ ($5.9 \cdot 10^{-8}$ inch)		
Integral cooling element	K01	
Process temperature max. 200 °C (392 °F) instead of 140 °C (284 °F)		
Connections for pipe	R01	
Pipes to DIN 11850	R02	
ISO pipes to ISO 2463	R03	
Pipes to O. D. Tubing "BS 4825 Part 1"		
Certificates	C11	
Quality Inspection Certificate (5-point characteristic curve test) according to IEC 60770-2	C12	
Inspection certificate to EN 10204-3.1	C17	
Use of FDA-listed remote seal filling liquids certified by test report to EN 10204-2.2		
Roughness depth measurement R_a certified by test report to EN 10204-3.1	C18	
Certification to EHEDG for clamp-on seals with aseptic screwed gland to DIN 11864	C19	

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Dimensional drawings



SITRANS P Compact, dimensions in mm (inch)

Process connections

Diaphragm seal with quick-release clamp

Milk pipe union to DIN 11851 with slotted union nut

DN	PN	H mm (inch)	G
25	40	24 (0.95)	Rd. 52 x 1/6"
32	40	24 (0.95)	Rd. 58 x 1/6"
40	40	24 (0.95)	Rd. 65 x 1/6"
50	25	25.1 (0.99)	Rd. 78 x 1/6"
65	25	28.6 (1.13)	Rd. 95 x 1/6"

Milk pipe union to DIN 11851 with threaded socket

DN	PN	H mm (inch)	G
25	40	-	Rd. 52 x 1/6"
32	40	20 (0.79)	Rd. 58 x 1/6"
40	40	20 (0.79)	Rd. 65 x 1/6"
50	25	20 (0.79)	Rd. 78 x 1/6"
65	25	22 (0.87)	Rd. 95 x 1/6"

Clamp connection to DIN 32676

DN	PN	H mm (inch)	D mm (inch)
25	16	14 (0.55)	50.5 (2)
40	16	14 (0.55)	50.5 (2)
50	16	14 (0.55)	64 (2.52)

Clamp connection to ISO 2852

DN	PN	H mm (inch)	D mm (inch)
1"	16	14 (0.55)	50.5 (2)
1½"	16	12 (0.47)	50.5 (2)
2"	16	14 (0.55)	64 (2.52)
2½"	16	14 (0.55)	77.5 (3.05)

IDF standard with slotted union nut

DN	PN	H mm (inch)	G inch (IDF thread)
1"	40	21 (0.83)	1"
1½"	40	13.5 (0.53)	1½"
2"	25	15 (0.59)	2"

IDF standard with threaded socket

DN	PN	H mm (inch)	G inch (IDF thread)
1"	40	21 (0.83)	1"
1½"	40	13.5 (0.53)	1½"
2"	25	15 (0.59)	2"

SMS standard with slotted union nut

DN	PN	H mm (inch)	G
1"	40	16 (0.63)	Rd 40 x 1.6"
1½"	40	16 (0.63)	Rd 60 x 1.6"
2"	25	16 (0.63)	Rd 70 x 1.6"

SMS standard with threaded socket

DN	PN	H mm (inch)	G
1"	40	16 (0.63)	Rd 40 x 1.6"
1½"	40	20 (0.79)	Rd 60 x 1.6"
2"	25	20 (0.79)	Rd 70 x 1.6"

DRD flange, without welding-type flange

DN	PN	H mm (inch)	D mm (inch)
50	40	16.7 (0.66)	65.5 (2.58)

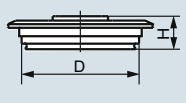
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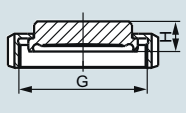
Varivent connection



DN	PN	H mm (inch)	D mm (inch)
25	25	19 (0.75)	50 (1.97)
40 ... 125	25/10	19 (0.75)	68 (2.68)

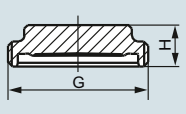
Diaphragm seal with aseptic connection

Aseptic screwed gland to DIN 11864-1, form A, with slotted union nut



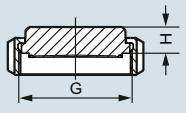
DN	PN	H mm (inch)	G
1"	40	20 (0.79)	Rd 52 x 1/6"
1½"	40	20 (0.79)	Rd 58 x 1/6"
2"	25	20 (0.79)	Rd 65 x 1/6"
2½"	25	20 (0.79)	Rd 78 x 1/6"

Aseptic screwed gland to DIN 11864-1, form A, with threaded socket



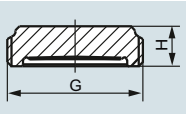
DN	PN	H mm (inch)	G
1"	40	15 (0.59)	Rd 52 x 1/6"
1½"	40	15 (0.59)	Rd 58 x 1/6"
2"	25	15 (0.59)	Rd 65 x 1/6"
2½"	25	15 (0.59)	Rd 78 x 1/6"

Aseptic screwed NEUMO BioConnect with slotted union nut



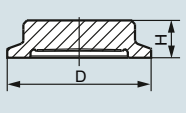
DN	PN	H mm (inch)	G
25	16	15 (0.59)	M 42 x 2
32	16	15 (0.59)	M 52 x 2
40	16	15 (0.59)	M 56 x 2
50	16	15 (0.59)	M 68 x 2

Aseptic screwed NEUMO BioConnect with threaded socket



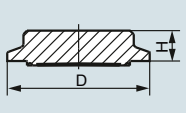
DN	PN	H mm (inch)	G
25	16	20 (0.79)	M 42 x 2
32	16	20 (0.79)	M 52 x 2
40	16	20 (0.79)	M 56 x 2
50	16	20 (0.79)	M 68 x 2

Aseptic screwed NEUMO BioConnect with clamp connection, form R



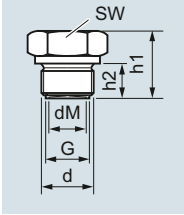
DN	PN	H mm (inch)	D mm (inch)
25	40	20 (0.79)	50.5 (2)
32	40	20 (0.79)	50.5 (2)
40	40	20 (0.79)	64 (2.52)
50	25	20 (0.79)	77.4 (3.05)

Aseptic screwed NEUMO BioConnect with clamp connection, form V



DN	PN	H mm (inch)	D mm (inch)
25	40	15 (0.59)	50.5 (2)
32	40	15 (0.59)	50.5 (2)
40	40	15 (0.59)	64 (2.52)
50	25	15 (0.59)	77.4 (3.05)

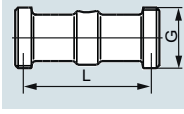
Male thread DIN 3852, form A



G	d mm (inch)	d _M mm (inch)	h ₁ mm (inch)	h ₂ mm (inch)	SW mm (inch)
G½A	26 (1.02)	17.5 (0.69)	27 (1.06)	14 (0.55)	27 (1.06)
G¾A	32 (1.26)	22.6 (0.89)	31 (1.22)	16 (0.63)	32 (1.26)
G1A	39 (1.54)	27 (1.06)	33 (1.30)	18 (0.71)	51 (2.01)
G1½A	55 (2.17)	40 (1.57)	40 (1.57)	22 (0.87)	55 (2.17)
G2A	68 (2.68)	51 (2.00)	42 (1.65)	24 (0.94)	70 (2.76)

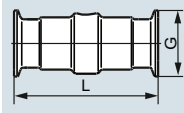
Clamp-on remote seal (screwed gland at both ends) with quick-release clamps

Milk pipe union to DIN 11851 with threaded socket



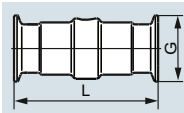
DN	PN	L mm (inch)	G
25	40	110 (4.33)	Rd 52 x 1/6"
32	40	110 (4.33)	Rd 58 x 1/6"
40	40	110 (4.33)	Rd 65 x 1/6"
50	25	110 (4.33)	Rd 78 x 1/6"
65	25	110 (4.33)	Rd 95 x 1/6"

Clamp connection to DIN 32676



DN	PN	L mm (inch)	D mm (inch)
25	16	110 (4.33)	50.5 (2)
32	16	110 (4.33)	50.5 (2)
40	16	110 (4.33)	50.5 (2)
50	16	110 (4.33)	64 (2.52)
65	10	110 (4.33)	91 (3.58)

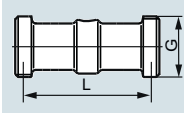
Clamp connection to ISO 2852



DN	PN	L mm (inch)	D mm (inch)
1"	16	110 (4.33)	50.5 (2)
1½"	16	110 (4.33)	50.5 (2)
2"	16	110 (4.33)	64 (2.52)
2½"	16	110 (4.33)	91 (3.58)

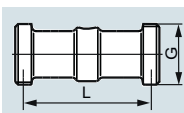
Clamp-on seal with aseptic connection

Aseptic screwed gland to DIN 11864-1, form A, with threaded socket



DN	PN	L mm (inch)	G
1"	40	110 (4.33)	Rd 52 x 1/6"
1½"	40	110 (4.33)	Rd 65 x 1/6"
2"	25	110 (4.33)	Rd 78 x 1/6"

Aseptic screwed NEUMO BioConnect with threaded socket



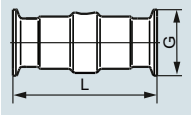
DN	PN	L mm (inch)	G
25	16	110 (4.33)	M 42 x 2
32	16	110 (4.33)	M 52 x 2
40	16	110 (4.33)	M 56 x 2
50	16	110 (4.33)	M 68 x 2
65	16	110 (4.33)	M 90 x 3

Pressure Measurement

Single-range transmitters for general applications

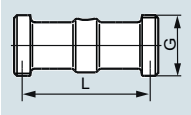
SITRANS P Compact for gauge and absolute pressure

Aseptic screwed NEUMO BioConnect with clamp connection, form R



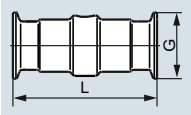
DN	PN	L mm (inch)	D mm (inch)
25	16	110 (4.33)	50.4 (2)
32	16	110 (4.33)	50.4 (2)
40	16	110 (4.33)	64 (2.52)
50	16	110 (4.33)	77.4 (3.05)

Aseptic screwed gland SÜDMO with threaded socket W 501



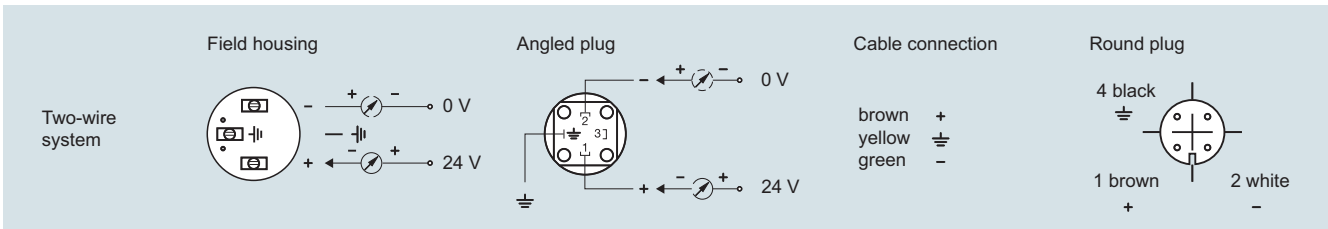
DN	PN	L mm (inch)	G
1"	25	110 (4.33)	Rd 44 x 1/6"
1½"	25	110 (4.33)	Rd 58 x 1/6"
2"	20	110 (4.33)	Rd 78 x 1/6"

Aseptic screwed gland SÜDMO with threaded socket W 601



DN	PN	L mm (inch)	D mm (inch)
1"	16	110 (4.33)	50.5 (2)
1½"	16	110 (4.33)	64 (2.52)
2"	16	110 (4.33)	77.5 (3.05)

Schematics



SITRANS P Compact, connection diagram

EU Declaration of Conformity
 EU-Konformitätserklärung
 EU-Déclaration de Conformité



No. A5E38499210A/002

Manufacturer: Siemens AG
 Hersteller:
 Fabricant:
 Address: DE-76181 Karlsruhe
 Anschrift:
 Adresse:
 Product description: **Pressure transmitter / Druckmessumformer**
 Produktbezeichnung: **SITRANS P compact**
 Identificateur: Type / Typ 7MF8010-xxxxx-xxxa -Z
 a = see tables annex A / siehe Tabellen Anhang A

The product described above in the form as delivered is in conformity with the provisions of the following European Directives:

Das bezeichnete Produkt stimmt in der von uns in Verkehr gebrachten Ausführung mit den Vorschriften folgender Europäischer Richtlinien überein:

Le produit mentionné ci-dessus, tel qu'il est livré, est conforme aux dispositions des Directives Européennes suivantes :

- | | |
|--------------------|---|
| 2014/30/EU
EMC | Directive of the European Parliament and of the Council on the harmonisation of the laws of the Member States relating to electromagnetic compatibility
<i>Richtlinie des Europäischen Parlaments und des Rates zur Harmonisierung der Rechtsvorschriften der Mitgliedstaaten über die elektromagnetische Verträglichkeit</i>
<i>Directive du parlement Européen et du conseil relative à l'harmonisation des législations des États membres concernant la compatibilité électromagnétique</i> |
| 2014/34/EU
ATEX | Directive of the European Parliament and the Council on the harmonisation of the laws of the Member States relating to equipment and protective systems intended for use in potentially explosive atmospheres
<i>Richtlinie des Europäischen Parlaments und des Rates zur Harmonisierung der Rechtsvorschriften der Mitgliedstaaten für Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen</i>
<i>Directive du parlement Européen et du conseil relative à l'harmonisation des législations des États membres concernant les appareils et les systèmes de protection destinés à être utilisés en atmosphères explosibles</i> |
| 2014/68/EU
PED | Directive of the European Parliament and of the Council on the harmonisation of the laws of the Member States relating to the making available on the market of pressure equipment
<i>Richtlinie des Europäischen Parlaments und des Rates zur Harmonisierung der Rechtsvorschriften der Mitgliedstaaten über die Bereitstellung von Druckgeräten auf dem Markt</i>
<i>Directive du parlement Européen et du conseil relative à l'harmonisation des législations des États membres concernant la mise à disposition sur le marché des équipements sous pression</i> |
| 2011/65/EU
RoHS | Directive of the European Parliament and the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment.
<i>Richtlinie des Europäischen Parlaments und des Rates zur Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten.</i>
<i>Directive du parlement Européen et du conseil relative à la limitation de l'utilisation de certaines substances dangereuses dans les équipements électriques et électroniques</i> |

Annex A is integral part of this declaration.
 Anhang A ist integraler Bestandteil dieser Erklärung.
 L'annexe A fait partie intégrante de la présente déclaration

This declaration certifies the conformity to the specified directives but contains no assurance of properties.
 The safety documentation accompanying the product shall be considered in detail.
 Diese Erklärung bescheinigt die Übereinstimmung mit den genannten Richtlinien, ist jedoch keine Beschaffenheits- oder Haltbarkeitsgarantie nach §443 BGB.
 Die Sicherheitshinweise der mitgelieferten Produktdokumentation sind zu beachten.
 La présente déclaration atteste la conformité aux Directives citées. Elle n'est pas assimilable à un descriptif justifiant certaines propriétés.
 La documentation relative à la sécurité accompagnant le produit doit être examinée en détail.

Siemens Aktiengesellschaft: Chairman of the Supervisory Board: Gerhard Cromme; Managing Board: Joe Kaeser, Chairman, President and Chief Executive Officer; Roland Busch, Lisa Davis, Klaus Helmrich, Janina Kugel, Cedrik Neike, Michael Sen, Ralf P. Thomas; Registered offices: Berlin and Munich, Germany; Commercial registries: Berlin Charlottenburg, HRB 12300, Munich, HRB 6684; WEEE-Reg.-No. DE 23691322

EU Declaration of Conformity *EU-Konformitätserklärung* *EU-Déclaration de Conformité*

No. A5E38499210A/002

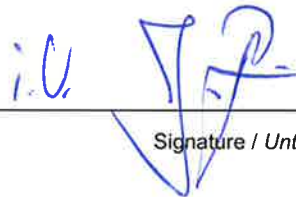
Karlsruhe, 25.01.2017
Siemens Aktiengesellschaft

Volker Rissland,
Research & Development / *Entwicklung / Développement*
(Name, function / *Name, Funktion, / Nom, fonction*)



Signature / Unterschrift / Signature

Jürgen Pflaum,
Quality / *Qualität / Qualité*
(Name, function / *Name, Funktion, / Nom, fonction*)



Signature / Unterschrift / Signature

Annex A is integral part of this declaration.
Anhang A ist integraler Bestandteil dieser Erklärung.
L'annexe A fait partie intégrante de la présente déclaration

This declaration certifies the conformity to the specified directives but contains no assurance of properties.
The safety documentation accompanying the product shall be considered in detail.
Diese Erklärung bescheinigt die Übereinstimmung mit den genannten Richtlinien, ist jedoch keine Beschaffenheits- oder Haltbarkeitsgarantie nach §443 BGB.
Die Sicherheitshinweise der mitgelieferten Produktdokumentation sind zu beachten.
La présente déclaration atteste la conformité aux Directives citées. Elle n'est pas assimilable à un descriptif justifiant certaines propriétés.
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Annex A to the EU Declaration of Conformity
Anhang A zur EU-Konformitätserklärung
Annexe A de la Déclaration de conformité

No. A5E38499210A/002

Product description: **Pressure transmitter / Druckmessumformer**
 Produktbezeichnung: **SITRANS P compact**
 Identificateur: Type / Typ 7MF8010-xxxxx-xxxa –Z
 a = see tables annex A / siehe Tabellen Anhang A

Conformity to the Directives indicated on page 1 is assured through the application of the following standards (depending on versions):

Die Konformität mit den auf Blatt 1 angeführten Richtlinien wird nachgewiesen durch die Einhaltung folgender Normen (variantenabhängig):

La conformité aux Directives indiquées sur la page 1 est garantie par l'application des normes suivantes (selon les versions):

Directive Richtlinie Directive	Standard / Reference number Norm / Referenznummer Norme / référence	Edition Ausgabedatum Edition	a=	
2014/30/EU	EN 61326-1 *	2013	1, 2	
2014/30/EU	EN 55011	2009/A1:2010		
2014/34/EU	EN 60079-0	2012/A11:2013	2	
2014/34/EU	EN 60079-11	2012		
2014/68/EU	AD-2000 Merkblätter (A4)	2000/2003	1, 2	Diameter of pipeline > DN25 Rohrdurchmesser > DN25

Note 1: The manufacturer declares that this product complies with the requirements of the new editions of the standards. The changes of the new editions have been checked and do not affect this product.

* all environments included / beinhaltet alle Umgebungen / dans tout type d'environnement

Certificates:

Zertifikate:

Certificat:

EC-type examination certificate EG-Baumusterprüfbescheinigung Certificat évaluation de type	Marking Kennzeichnung Marquage	a=
TÜV 03 ATEX 2099 X	II 2 G	2
07/202/1201/Z/0157/17/D/0111		

Inspection / Surveillance:

Kontrolle / Überwachung:

Contrôle / Supervision:

Directive Richtlinie Directive		Notified Body Product Quality Assurance Benannte Stelle Qualitätssicherung Produktion Organisme notifié	No.:
2014/34/EU	ATEX	Sira Certification Service, CSA Group Testing UK Ltd – Unit 6, Hawarden Industrial Park, Hawarden, Deeside, CH5 3US, United Kingdom	0518
2014/68/EU	PED	TÜV Nord Systems GmbH & Co. KG, Gr. Bahnstr. 31 D-22525 Hamburg	0045