Overview

The SITRANS P200 pressure transmitter measures the gauge and absolute pressure of liquids, gases and vapors.

- With ceramic measuring cell
- Gauge and absolute measuring ranges 1 to 60 bar (15 to 1000 psi)
- For general applications

Benefits

- High measurement accuracy
- Rugged stainless steel enclosure
- High overload withstand capability
- For corrosive and non-corrosive media
- For measuring the pressure of liquids, gases and vapors
- Compact design

Application

The SITRANS P200 pressure transmitter for gauge and absolute pressure is used in the following industrial areas:

- Mechanical engineering
- Shipbuilding
- Power engineering
- Chemical industry
- Water supply

Design

Device structure without explosion protection

The pressure transmitter consists of a piezoresistive measuring cell with a diaphragm, installed in a stainless steel enclosure. It can be connected electrically with a device plug to EN 175301-803-A (IP65), an M12 device plug (IP67), a cable (IP67) or a Quickon cable quick screw connection (IP67). The output signal is between 4 and 20 mA or 0 and 10 V

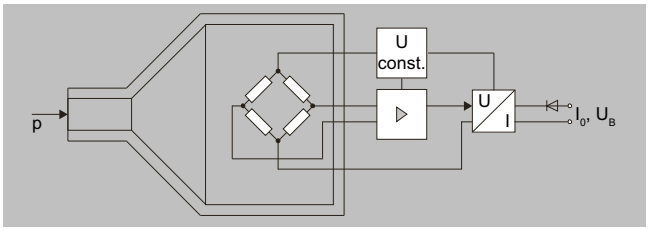
Device structure with explosion protection

The pressure transmitter consists of a piezoresistive measuring cell with a diaphragm, installed in a stainless steel enclosure. It can be connected electrically with a device plug fulfilling EN 175301-803-A (IP65) or an M12 device plug (IP67). The output signal is between 4 and 20 mA.

Function

The pressure transmitter measures the gauge and absolute pressure of liquids, gases and vapors.

Mode of operation



SITRANS P200 pressure transmitters (7MF1565-...), functional diagram

The ceramic measuring cell has a thick-film resistance bridge, to which the operating pressure p is transmitted through a ceramic diaphragm.

The voltage output from the measuring cell is converted by an amplifier into an output current of 4 to 20 mA or an output voltage of 0 to 10 V DC.

The output current and voltage are linearly proportional to the input pressure.

Selection and ordering data

SITRANS P200 pressure transmitter, for pressure and absolute pressure for general applications								Article No. 7MF1565-										Order code		
								●	●	●	●	●	-	●	●	●	●		●	●	●
Typical characteristic curve deviation 0.25 %, material of wetted parts: Ceramic and stainless steel + gasket material Material of non-wetted parts: Stainless steel																				
Click the article number for online configuration in the PIA Life Cycle Portal.																				
Measuring range		**Minimum overload limit**		**Maximum overload limit**		**Burst pressure**														
For gauge pressure																				
0 ... 1 bar	(0 ... 14.5 psi)	-1 bar	(-14.5 psi)	2.5 bar	(36.26 psi)	> 2.5 bar	(> 36.3 psi)	3	B	A										
0 ... 1.6 bar	(0 ... 23.2 psi)	-1 bar	(-14.5 psi)	4 bar	(58.02 psi)	> 4 bar	(> 58.0 psi)	3	B	B										
0 ... 2.5 bar	(0 ... 36.3 psi)	-1 bar	(-14.5 psi)	6.25 bar	(90.65 psi)	> 6.25 bar	(> 90.7 psi)	3	B	D										
0 ... 4 bar	(0 ... 58.0 psi)	-1 bar	(-14.5 psi)	10 bar	(145 psi)	> 10 bar	(> 145 psi)	3	B	E										
0 ... 6 bar	(0 ... 87.0 psi)	-1 bar	(-14.5 psi)	15 bar	(217 psi)	> 15 bar	(> 217 psi)	3	B	G										
0 ... 10 bar	(0 ... 145 psi)	-1 bar	(-14.5 psi)	25 bar	(362 psi)	> 25 bar	(> 362 psi)	3	C	A										
0 ... 16 bar	(0 ... 232 psi)	-1 bar	(-14.5 psi)	40 bar	(580 psi)	> 40 bar	(> 580 psi)	3	C	B										
0 ... 25 bar	(0 ... 363 psi)	-1 bar	(-14.5 psi)	62.5 bar	(906 psi)	> 62.5 bar	(> 906 psi)	3	C	D										
0 ... 40 bar	(0 ... 580 psi)	-1 bar	(-14.5 psi)	100 bar	(1450 psi)	> 100 bar	(> 1450 psi)	3	C	E										
0 ... 60 bar	(0 ... 870 psi)	-1 bar	(-14.5 psi)	150 bar	(2175 psi)	> 150 bar	(> 2175 psi)	3	C	G										
Other version; Add order code and plain text: Measuring range: ... to ... bar (psi)								9	A	A								H	1	Y
For absolute pressure																				
0 ... 0.6 bar a	(0 ... 8.7 psi a)	0 bar a	(0 psi a)	2.5 bar a	(36.26 psi a)	> 2.5 bar a	(> 36.3 psi a)	5	A	G										
0 ... 1 bar a	(0 ... 14.5 psi a)	0 bar a	(0 psi a)	2.5 bar a	(36.26 psi a)	> 2.5 bar a	(> 36.3 psi a)	5	B	A										
0 ... 1.6 bar a	(0 ... 23.2 psi a)	0 bar a	(0 psi a)	4 bar a	(58.02 psi a)	> 4 bar a	(> 58.0 psi a)	5	B	B										
0 ... 2.5 bar a	(0 ... 36.3 psi a)	0 bar a	(0 psi a)	6.25 bar a	(90.65 psi a)	> 6.25 bar a	(> 90.7 psi a)	5	B	D										
0 ... 4 bar a	(0 ... 58.0 psi a)	0 bar a	(0 psi a)	10 bar a	(145 psi a)	> 10 bar a	(> 145 psi a)	5	B	E										
0 ... 6 bar a	(0 ... 87.0 psi a)	0 bar a	(0 psi a)	15 bar a	(217 psi a)	> 15 bar a	(> 217 psi a)	5	B	G										
0 ... 10 bar a	(0 ... 145 psi)	0 bar a	(0 psi a)	25 bar a	(362 psi a)	> 25 bar a	(> 362 psi a)	5	C	A										
0 ... 16 bar a	(0 ... 232 psi)	0 bar a	(0 psi a)	40 bar a	(580 psi a)	> 40 bar a	(> 580 psi a)	5	C	B										
Other version; Add order code and plain text: Measuring range: ... to ... mbar a (psi a)								9	A	A								H	2	Y
Measuring ranges for gauge pressure																				
	0 ... 15 psi		-14.5 psi		35 psi		> 35 psi	4	B	B										
	3 ... 15 psi		-14.5 psi		35 psi		> 35 psi	4	B	C										
	0 ... 20 psi		-14.5 psi		50 psi		> 50 psi	4	B	D										
	0 ... 30 psi		-14.5 psi		80 psi		> 80 psi	4	B	E										
	0 ... 60 psi		-14.5 psi		140 psi		> 140 psi	4	B	F										
	0 ... 100 psi		-14.5 psi		200 psi		> 200 psi	4	B	G										
	0 ... 150 psi		-14.5 psi		350 psi		> 350 psi	4	C	A										
	0 ... 200 psi		-14.5 psi		550 psi		> 550 psi	4	C	B										
	0 ... 300 psi		-14.5 psi		800 psi		> 800 psi	4	C	D										
	0 ... 500 psi		-14.5 psi		1 400 psi		> 1400 psi	4	C	E										
	0 ... 750 psi		-14.5 psi		2 000 psi		> 2 000 psi	4	C	F										
	0 ... 1 000 psi		-14.5 psi		2 000 psi		> 2 000 psi	4	C	G										
Other version; Add order code and plain text: Measuring range: ... to ... psi								9	A	A								H	1	Y
Measuring ranges for absolute pressure																				
	0 ... 10 psi a		0 psi a		35 psi a		> 35 psi a	6	A	G										
	0 ... 15 psi a		0 psi a		35 psi a		> 35 psi a	6	B	A										
	0 ... 20 psi a		0 psi a		50 psi a		> 50 psi a	6	B	B										
	0 ... 30 psi a		0 psi a		80 psi a		> 80 psi a	6	B	D										
	0 ... 60 psi a		0 psi a		140 psi a		> 140 psi a	6	B	E										
	0 ... 100 psi a		0 psi a		200 psi a		> 200 psi a	6	B	G										
	0 ... 150 psi a		0 psi a		350 psi a		> 350 psi a	6	C	A										
	0 ... 200 psi a		0 psi a		550 psi a		> 550 psi a	6	C	B										
	0 ... 300 psi a		0 psi a		800 psi a		> 800 psi a	6	C	C										
Other version; Add order code and plain text: Measuring range: ... to ... psi a								9	A	A								H	2	Y
Output signal																				
4 ... 20 mA; 2-wire system; auxiliary power 7 ... 33 V DC (10 ... 30 V DC for ATEX devices)											0									
0 ... 10 V; 3-wire system; auxiliary power 12 ... 33 V DC											1	0								

Selection and ordering data (continued)

SITRANS P200 pressure transmitter, for pressure and absolute pressure for general applications	Article No. 7MF1565-											Order code			
	●	●	●	●	●	-	●	●	●	●		●	●	●	
0 ... 5 V; 3-wire system; auxiliary power 7 ... 33 V DC				2	0										
Ratiometric 10 ... 90%; 3-wire system; auxiliary power 5 V DC ± 10%				3	0										
Explosion protection (only 4 ... 20 mA)															
None					0										
With explosion protection Ex ia IIC T4					1										
Electrical connection															
Plug according to EN 175301-803-A, stuffing box thread M16 (with coupling)							1								
M12 device plug according to IEC 61076-2-101							2								
Connection via permanently installed cable, 2 m (6.6 ft); not for "Intrinsic safety" type of protection					0		3								
Quick-screw cable gland Quickon PG9; not for "Intrinsic safety" type of protection					0		4								
Plug according to EN 175301-803-A, stuffing box thread 1/2"-14 NPT (with coupling)							5								
Plug according to EN 175301-803-A, stuffing box thread PG11 (with coupling)							6								
Permanently installed cable, length 5 m (16.4 ft)					0		7								
Special design							9					N	1	Y	
Process connection															
G½" male according to EN 837-1 (½" BSP male): Standard for metric pressure ranges mbar, bar								A							
G½" male and G1/8" female								B							
G¼" male according to EN 837-1 (¼" BSP male)								C							
7/16"-20 UNF male								D							
¼"-18 NPT male: Standard for pressure ranges inH_2O and psi								E							
¼"-18 NPT female								F							
½"-14 NPT male								G							
½"-14 NPT female								H							
7/16"-20 UNF female								J							
M20×1.5 male								P							
G¼" according to EN ISO 1179-2 (formerly DIN 3852 form E)								Q							
G½" according to EN ISO 1179-2 (formerly DIN 3852 form E)								R							
Special design								Z				P	1	Y	
Gasket material between sensor and enclosure															
Viton (FPM, standard)									A						
Neoprene (CR)									B						
Perbunan (NBR)									C						
EPDM									D						
Special design									Z			Q	1	Y	
Version															
Standard version											1				

Options	Order code
Add **"-Z"** to article number and specify order code.	
Quality inspection certificate (5-point characteristic curve test) according to IEC 62828-2	**C11**
Oxygen version, free of oil and degreased, max. operating pressure 60 bar (870.2 psi), max. medium temperature +85 °C (185 °F)	**E10**
Notice	
Only with Viton gasket material between sensor and enclosure, and not with explosion protection version!	

Technical specifications

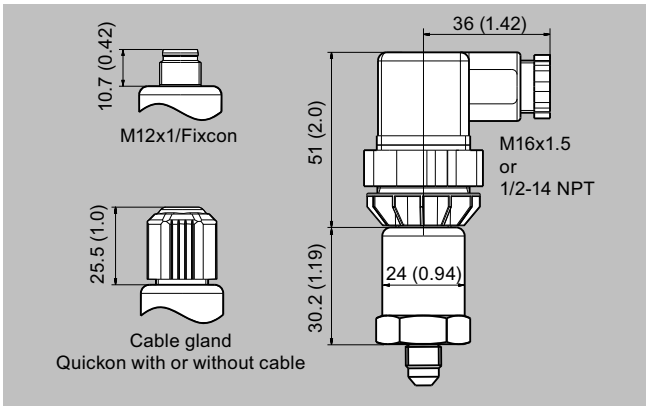
SITRANS P200 for gauge and absolute pressure	
Area of application	
Gauge and absolute pressure measurement	Liquids, gases and vapors
Mode of operation	
Measuring principle	Piezo-resistive measuring cell (ceramic diaphragm)
Measured variable	Gauge and absolute pressure
Input	
Measuring range	
• Gauge pressure	
- Metric	1 ... 60 bar (15 ... 870 psi)
- US measuring range	15 ... 1000 psi
• Absolute pressure	
- Metric	0.6 ... 16 bar a (10 ... 232 psi a)
- US measuring range	10 ... 300 psi a
Output	
Current signal	4 ... 20 mA
• Load	(U_B - 10 V)/0.02 A
• Auxiliary power U_B	7 ... 33 V DC (10 ... 30 V for Ex)
Voltage signal	0 ... 10 V DC
• Load	≥ 10 kΩ
• Auxiliary power U_B	12 ... 33 V DC
• Current consumption	< 7 mA at 10 kΩ
Radiometric output	10 ... 90%
• Load	≥ 10 kΩ
• Auxiliary power U_B	DC 5 V ± 10%
• Current consumption	< 7 mA at 10 Ω
Characteristic curve	Linear rising
Measuring accuracy	
Measurement deviation at limit setting including hysteresis and reproducibility	• Typical: 0.25% of measuring span • Maximum: 0.5% of measuring span
Step response time T_{99}	< 5 ms
Long-term stability	
• Lower range value and measuring span	0.25% of measuring span/year
Effect of ambient temperature	
• Lower range value and measuring span	0.25%/10 K of measuring span
• Influence of power supply	0.005%/V
Operating conditions	
Process temperature with gasket made of:	
• FPM (standard)	-15 ... +125 °C (5 ... 257 °F)
• Neoprene	-35 ... +100 °C (-31 ... +212 °F)
• Perbunan	-20 ... +100 °C (-4 ... +212 °F)
• EPDM	-40 ... +125 °C (-40 ... +257 °F), usable for drinking water
Ambient temperature	-25 ... +85 °C (-13 ... +185 °F)
Storage temperature	-50 ... +100 °C (-58 ... +212 °F)
Degree of protection according to IEC 60529	• IP65 with plug according to EN 175301-803-A • IP67 with M12 device plug • IP67 with cable • IP67 with cable quick screw connection
Electromagnetic compatibility	• According to IEC 61326-1/-2/-3 • According to NAMUR NE21 for ATEX devices only, and with a max. measurement error of ≤ 1%
Structural design	
Weight	Approx. 0.090 kg (0.198 lbs)
Process connections	See dimension drawings

Technical specifications (continued)

SITRANS P200 for gauge and absolute pressure	
Electrical connections	• Plug according to EN 175301-803-A Form A with cable entry M16x1.5 or ½-14 NPT or Pg 11 • Device plug M12 • 2 or 3-wire (0.5 mm²) cable (Ø ± 5.4 mm) • Quickon cable quick screw connection
Material of wetted parts	
• Measuring cell	Al_2O_3 - 96%
• Process connection	Stainless steel, mat. no. 1.4404 (SST 316 L)
• Gasket	• FPM (standard) • Neoprene • Perbunan • EPDM
Material of non-wetted parts	
• Enclosure	Stainless steel, mat. no. 1.4404 (SST 316 L)
• Connector housing	Plastic
• Cable	PVC
Certificates and approvals	
Classification according to pressure equipment directive (PED 2014/68/EU)	For gases of fluid group 1 and liquids of fluid group 1; complies with requirements of article 4, paragraph 3 (sound engineering practice)
Lloyd's Register of Shipping (LR)[1)]	12/20010
Germanischer Lloyd (GL)[1)]	GL19740 11 HH00
American Bureau of Shipping (ABS)[1)]	ABS_11_HG 789392_PDA
Bureau Veritas (BV)[1)]	BV 271007A0 BV
Det Norske Veritas (DNV)[1)]	A 12553
Drinking water approval (ACS)[1)]	ACS 15 ACC NY 360
EAC[1)]	№ ТС RU C-DE.ГБ05.В.00732 ОС НАНИО «ЦСВЭ»
Underwriters Laboratories (UL)[1)]	
• For USA and Canada	UL 20110217 - E34453
• Worldwide	IEC UL DK 21845
Explosion protection	
Intrinsic safety "i" (only with current output)	Ex II 1/2 G Ex ia IIC T4 Ga/Gb Ex II 1/2 D Ex ia IIIC T125 °C Da/Db
EC type-examination certificate	SEV 10 ATEX 0146
Connection to certified intrinsically safe ohmic circuits with maximum values	U_i ≤ DC 30 V; I_i ≤ 100 mA; P_i ≤ 0.75 W
Effective internal inductance and capacity for versions with plugs according to EN 175301-803-A and M12	L_i = 0 nH; C_i = 0 nF

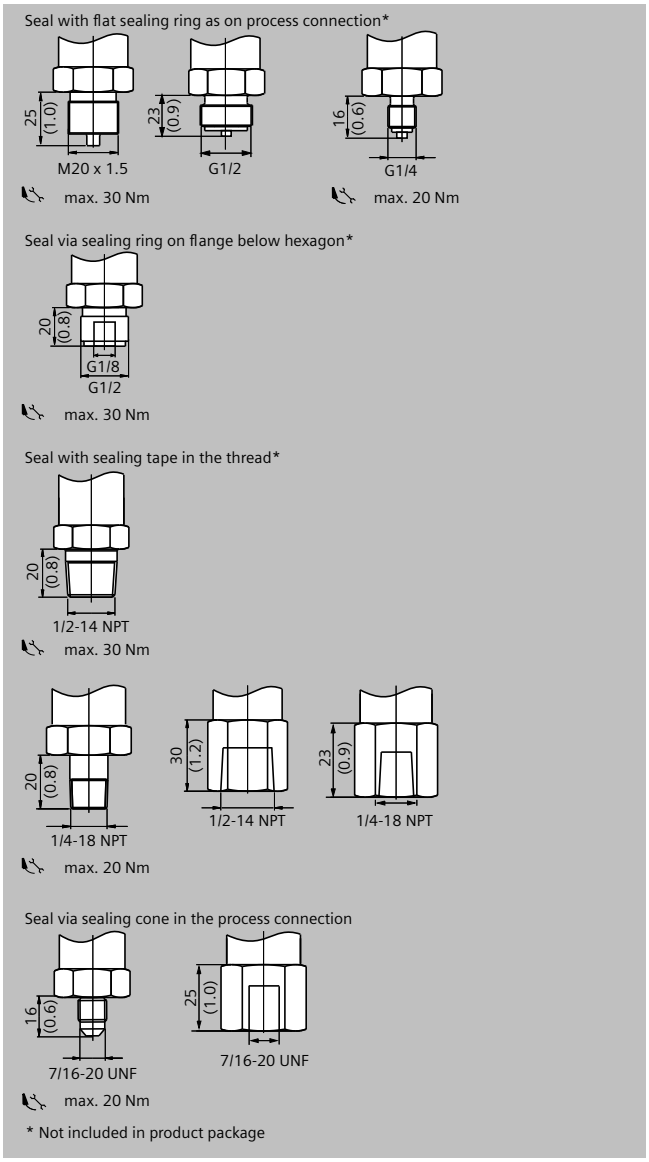
[1)] For variants with output signal 0 ... 5 V and radiometric output available soon.

Dimensional drawings



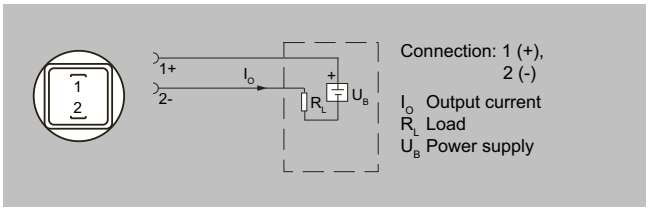
SITRANS P200, electrical connections, dimensions in mm (inch)

Dimensional drawings (continued)

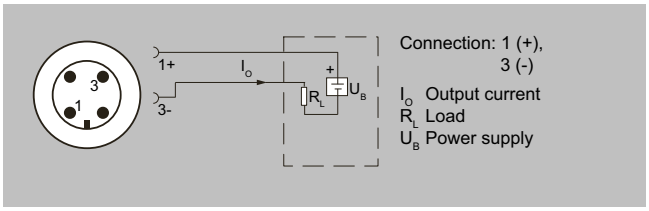


SITRANS P200, process connections, dimensions in mm (inch)

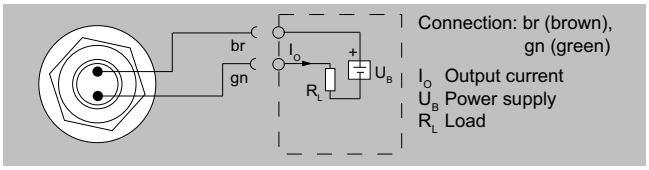
Circuit diagrams



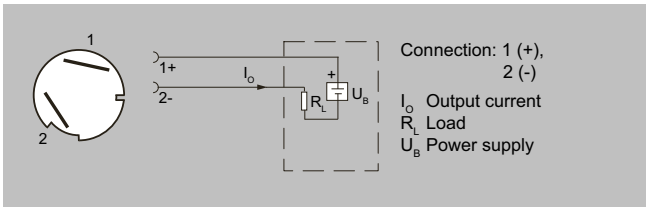
Connection with current output and plug according to EN 175301



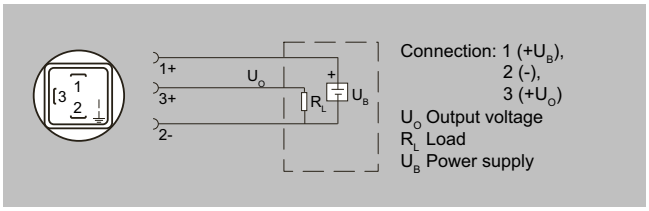
Connection with current output and M12x1 device plug



Connection with current output and cable

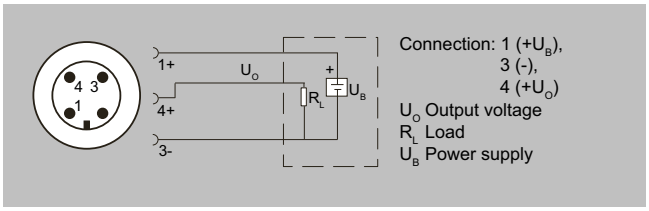


Connection with current output and Quickon cable quick screw connection

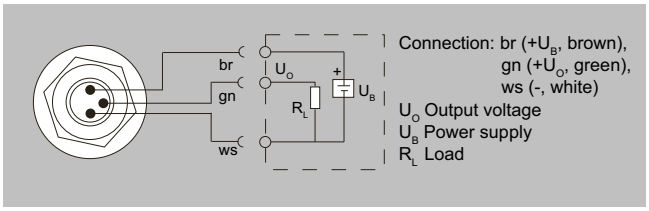


Connection with voltage output, ratiometric output and plug according to EN 175301

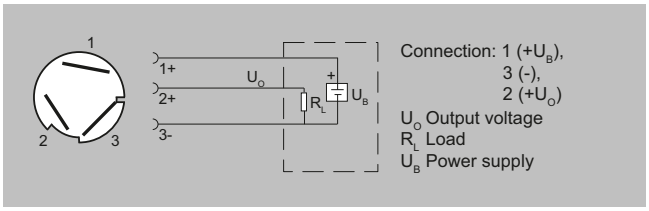
Circuit diagrams (continued)



Connection with voltage output, ratiometric output and M12x1 device plug



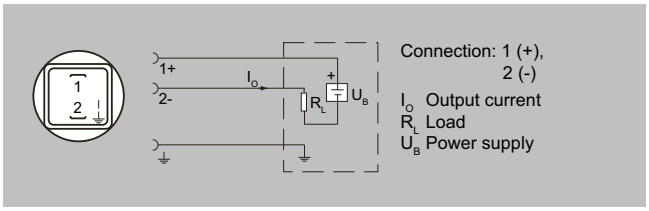
Connection with voltage output, ratiometric output and cable



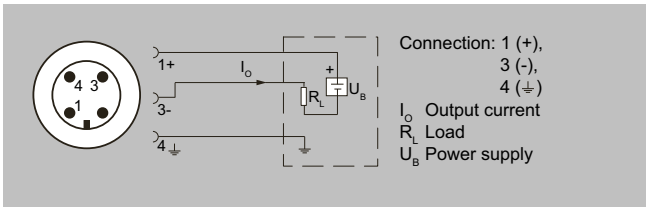
Connection with voltage output, ratiometric output and Quickon fast cable termination

Device design with explosion protection: 4 to 20 mA

The grounding connection is conductively bonded to the transmitter enclosure.



Connection with current output and plug according to EN 175301 (Ex)



Connection with current output and M12x1 (Ex) device plug

Overview

The SITRANS P210 pressure transmitter measures the gauge pressure of liquids, gases and vapors.

- Stainless steel measuring cell
- Measuring ranges 100 to 600 mbar (1.45 to 8.7 psi) relative
- For low-pressure applications

Benefits

- High measurement accuracy
- Rugged stainless steel enclosure
- High overload withstand capability
- For corrosive and non-corrosive media
- For measuring the pressure of liquids, gases and vapors
- Compact design

Application

The SITRANS P210 pressure transmitter for gauge pressure is used in the following industrial areas:

- Mechanical engineering
- Shipbuilding
- Energy development
- Chemical industry
- Water supply

Design

Device structure without explosion protection

The pressure transmitter consists of a piezoresistive measuring cell with a diaphragm, installed in a stainless steel enclosure. It can be connected electrically with a device plug to EN 175301-803-A (IP65), an M12 device plug (IP67), a cable (IP67) or a Quickon cable quick screw connection (IP67). The output signal is between 4 and 20 mA or 0 and 10 V

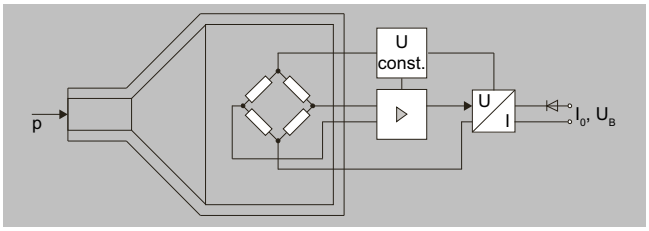
Device structure with explosion protection

The pressure transmitter consists of a piezoresistive measuring cell with a diaphragm, installed in a stainless steel enclosure. It can be connected electrically with a device plug fulfilling EN 175301-803-A (IP65) or an M12 device plug (IP67). The output signal is between 4 and 20 mA.

Function

The pressure transmitter measures the gauge pressure of liquids and gases as well as the level of liquids.

Mode of operation



SITRANS P210 pressure transmitter (7MF1566-...), functional diagram

The stainless steel measuring cell with silicone oil filling has a thin-film resistance bridge to which the operating pressure p is transmitted through a stainless steel diaphragm.

The voltage output from the measuring cell is converted by an amplifier into an output current of 4 to 20 mA or an output voltage of 0 to 10 V DC.

The output current and voltage are linearly proportional to the input pressure.

Selection and ordering data

SITRANS P210 pressure transmitter for gauge pressure, for low-pressure applications								Article No. 7MF1566-										Order code		
								●	●	●	●	●	-	●	●	●	●	●	●	●
Measurement deviation typ. 0.25% Material of wetted parts: Stainless steel + gasket material Material of non-wetted parts: Stainless steel																				
Click the article number for online configuration in the PIA Life Cycle Portal.																				
Measuring range		**Minimum overload limit**		**Maximum overload limit**		**Burst pressure**														
For gauge pressure																				
0...100 mbar	(1.45 psi)	-400 mbar	(-5.8 psi)	400 mbar	(5.8 psi)	1 bar	(14.5 psi)	3	A	A										
0...160 mbar	(2.32 psi)	-400 mbar	(-5.8 psi)	400 mbar	(5.8 psi)	1 bar	(14.5 psi)	3	A	B										
0...250 mbar	(3.63 psi)	-800 mbar	(-11.6 psi)	1 000 mbar	(14.5 psi)	2 bar	(29.0 psi)	3	A	C										
0...400 mbar	(5.8 psi)	-800 mbar	(-11.6 psi)	1 000 mbar	(14.5 psi)	2 bar	(29.0 psi)	3	A	D										
0...600 mbar	(8.7 psi)	-1 000 mbar	(-14.5 psi)	2 000 mbar	(29.0 psi)	3 bar	(43.5 psi)	3	A	G										
Other version; Add order code and plain text: Measuring range: ... to ... mbar (psi)								9	A	A								H	1	Y
Output signal																				
4 ... 20 mA; 2-wire system; auxiliary power 7 ... 33 V DC (10 ... 30 V DC for ATEX devices)											0									
0 ... 10 V; 3-wire system; auxiliary power 12 ... 33 V DC											1	0								
0 ... 5 V; 3-wire system; auxiliary power 7 ... 33 V DC											2	0								
Ratiometric 10 ... 90%; 3-wire system; auxiliary power 5 V DC ± 10%											3	0								
Explosion protection (only 4 ... 20 mA)																				
None												0								
With explosion protection Ex ia IIC T4												1								
Electrical connection																				
Plug according to EN 175301-803-A, stuffing box thread M16 (with coupling)														1						
M12 device plug according to IEC 61076-2-101														2						
Connection via permanently installed cable, 2 m (6.6 ft); not for "Intrinsic safety" type of protection												0		3						
Quick-screw cable gland Quickon PG9; not for "Intrinsic safety" type of protection												0		4						
Plug according to EN 175301-803-A, stuffing box thread 1/2"-14 NPT (with coupling)														5						
Plug according to EN 175301-803-A, stuffing box thread PG11 (with coupling)														6						
Permanently installed cable, length 5 m (16.4 ft)												0		7						
Special design														9				N	1	Y
Process connection																				
G½" male according to EN 837-1 (½" BSP male): Standard for metric pressure ranges mbar, bar															A					
G½" male and G1/8" female															B					
G¼" male according to EN 837-1 (¼" BSP male)															C					
7/16"-20 UNF male															D					
¼"-18 NPT male: Standard for pressure ranges inH_2O and psi															E					
¼"-18 NPT female															F					
½"-14 NPT male															G					
½"-14 NPT female															H					
7/16"-20 UNF female															J					
M20×1.5 male															P					
G¼" according to EN ISO 1179-2 (formerly DIN 3852 form E)															Q					
G½" according to EN ISO 1179-2 (formerly DIN 3852 form E)															R					
Special design															Z			P	1	Y
Gasket material between sensor and enclosure																				
Viton (FPM, standard)																A				
Neoprene (CR)																B				
Perbunan (NBR)																C				
EPDM																D				
Special design																Z		Q	1	Y
Version																				
Standard version																	1			

Options	Order code
Add **"-Z"** to article number and specify order code.	
Quality inspection certificate (5-point characteristic curve test) according to IEC 62828-2	**C11**

Technical specifications

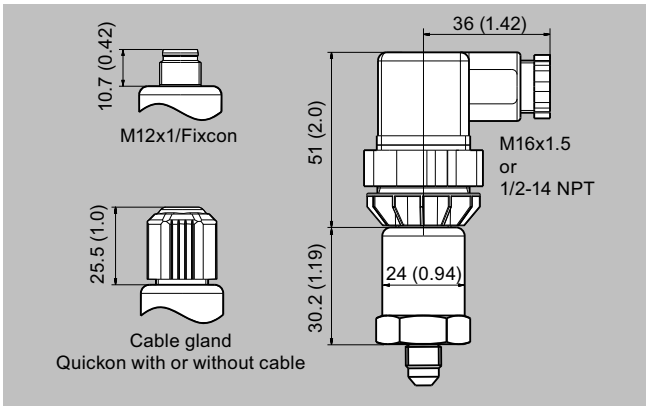
SITRANS P210 for gauge pressure	
Area of application	
Gauge pressure measurement	Liquids, gases and vapors
Mode of operation	
Measuring principle	Piezoresistive measuring cell (stainless steel diaphragm)
Measured variable	Gauge pressure
Input	
Measuring range	
• Gauge pressure	100 ... 600 mbar (1.45 ... 8.7 psi)
Output	
Current signal	4 ... 20 mA
• Load	(U_B - 10 V)/0.02 A
• Auxiliary power U_B	7 ... 33 V DC (10 ... 30 V for Ex)
Voltage signal	0 ... 10 V DC
• Load	≥ 10 kΩ
• Auxiliary power U_B	12 ... 33 V DC
• Current consumption	< 7 mA at 10 kΩ
Radiometric output	10 ... 90%
• Load	≥ 10 kΩ
• Auxiliary power U_B	DC 5 V ± 10%
• Current consumption	< 7 mA at 10 kΩ
Characteristic curve	Linear rising
Measuring accuracy	
Measurement deviation at limit setting including hysteresis and reproducibility	• Typical: 0.25% of measuring span • Maximum: 0.5% of measuring span
Step response time T_{99}	< 5 ms
Long-term stability	
• Lower range value and measuring span	0.25% of measuring span/year
Effect of ambient temperature	
• Lower range value and measuring span	• 0.25%/10 K of measuring span • 0.5%/10 K of measuring span for a measuring range 100 ... 400 mbar (40 ... 240 inH_2O)
• Influence of power supply	0.005%/V
Operating conditions	
Process temperature with gasket made of:	
• FPM (standard)	-15 ... +125 °C (5 ... 257 °F)
• Neoprene	-35 ... +100 °C (-31 ... +212 °F)
• Perbunan	-20 ... +100 °C (-4 ... +212 °F)
• EPDM	-40 ... +125 °C (-40 ... +257 °F), usable for drinking water
Ambient temperature	-25 ... +85 °C (-13 ... +185 °F)
Storage temperature	-50 ... +100 °C (-58 ... +212 °F)
Type of protection according to IEC 60529	• IP65 with plug according to EN 175301-803-A • IP67 with M12 device plug • IP67 with cable • IP67 with cable quick screw connection
Electromagnetic compatibility	• According to IEC 61326-1/-2/-3 • According to NAMUR NE21 for ATEX devices only, and with a max. measurement error of ≤ 1%
Mounting position	Vertical, facing up
Structural design	
Weight	Approx. 0.090 kg (0.198 lbs)
Process connections	See dimension drawings

Technical specifications (continued)

SITRANS P210 for gauge pressure	
Electrical connections	• Plug according to EN 175301-803-A Form A with cable entry M16x1.5 or ½-14 NPT or Pg 11 • Device plug M12 • 2 or 3-wire (0.5 mm²) cable (Ø ± 5.4 mm) • Quickon cable quick screw connection
Material of wetted parts	
• Measuring cell	Stainless steel, mat. no. 1.4435
• Process connection	Stainless steel, mat. no. 1.4404 (SST 316 L)
• Gasket	• FPM (standard) • Neoprene • Perbunan • EPDM
Material of non-wetted parts	
• Enclosure	Stainless steel, mat. no. 1.4404 (SST 316 L)
• Connector housing	Plastic
• Cable	PVC
Certificates and approvals	
Classification according to pressure equipment directive (PED 2014/68/EU)	For gases of fluid group 1 and liquids of fluid group 1; meets requirements as per article 4, paragraph 3 (sound engineering practice)
Lloyd's Register of Shipping (LR)[1]	12/20010
Germanischer Lloyd (GL)[1]	GL19740 11 HH00
American Bureau of Shipping (ABS)[1]	ABS_11_HG 789392_PDA
Bureau Veritas (BV)[1]	BV 271007A0 BV
Det Norske Veritas (DNV)[1]	A 12553
Drinking water approval (ACS)[1]	ACS 15 ACC NY 360
EAC[1]	№ ТС RU C-DE.ГБ05.В.00732 ОС НАНИО «ЦСВЭ»
Underwriters Laboratories (UL)[1]	
• For the USA and Canada	UL 20110217 - E34453
• Worldwide	IEC UL DK 21845
Explosion protection	
Intrinsic safety "i" (only with current output)	Ex II 1/2 G Ex ia IIC T4 Ga/Gb Ex II 1/2 D Ex ia IIIC T125 °C Da/Db
EC type-examination certificate	SEV 10 ATEX 0146
Connection to certified intrinsically safe ohmic circuits with maximum values	U_i ≤ DC 30 V; I_i ≤ 100 mA; P_i ≤ 0.75 W
Effective internal inductance and capacity for versions with plugs according to EN 175301-803-A and M12	L_i = 0 nH; C_i = 0 nF

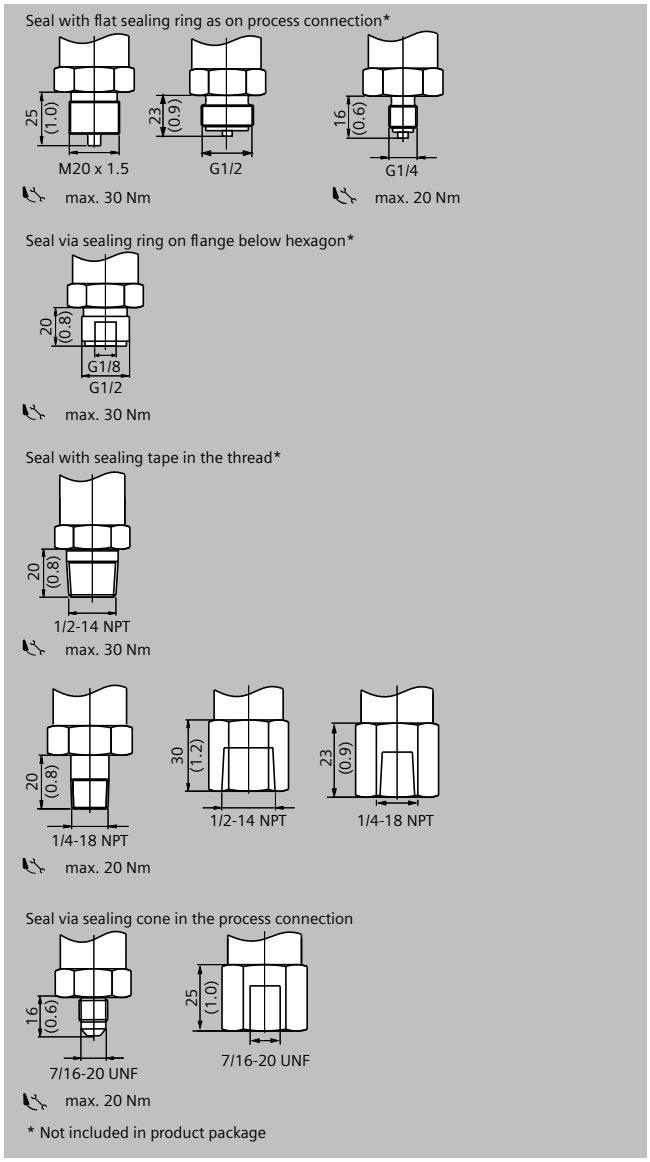
[1] For variants with output signal 0 ... 5 V and radiometric output available soon.

Dimensional drawings



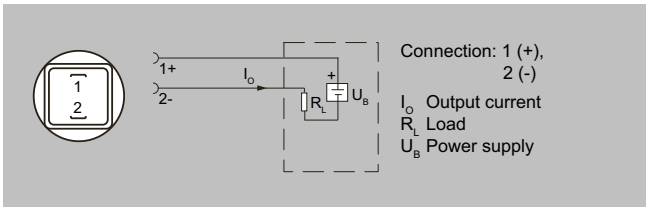
SITRANS P210, electrical connections, dimensions in mm (inch)

Dimensional drawings (continued)

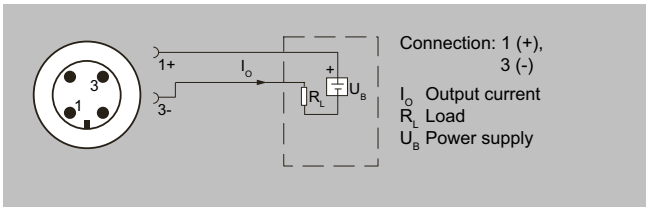


SITRANS P210, process connections, dimensions in mm (inch)

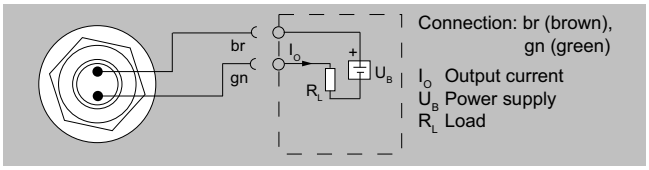
Circuit diagrams



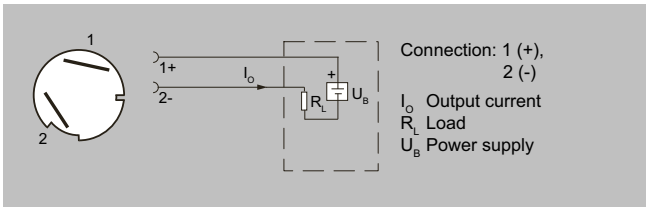
Connection with current output and plug according to EN 175301



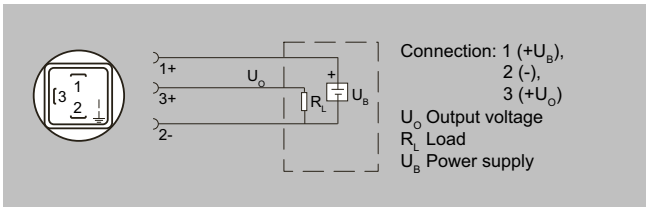
Connection with current output and M12x1 device plug



Connection with current output and cable

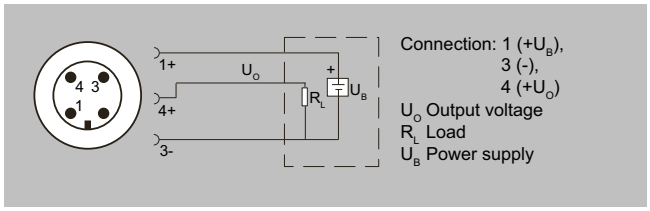


Connection with current output and Quickon cable quick screw connection

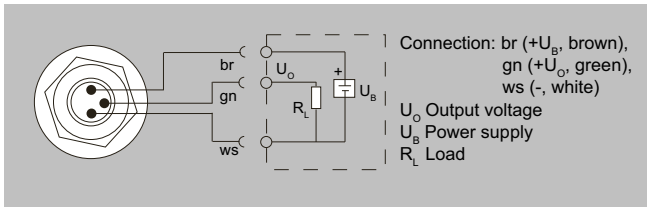


Connection with voltage output, ratiometric output and plug according to EN 175301

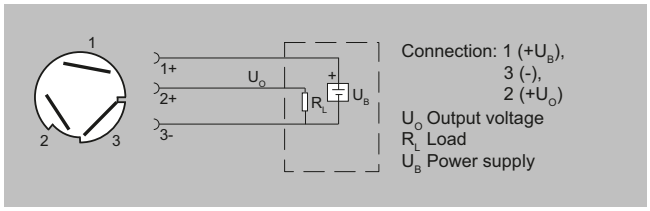
Circuit diagrams (continued)



Connection with voltage output, ratiometric output and M12x1 device plug



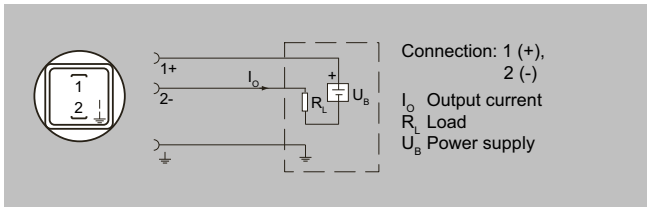
Connection with voltage output, ratiometric output and cable



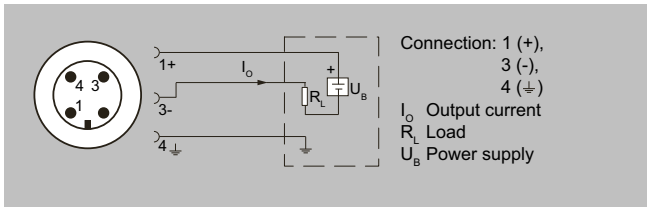
Connection with voltage output, ratiometric output and Quickon fast cable termination

Device design with explosion protection: 4 to 20 mA

The grounding connection is conductively bonded to the transmitter enclosure.



Connection with current output and plug according to EN 175301 (Ex)



Connection with current output and M12x1 (Ex) device plug

Overview

The SITRANS P220 pressure transmitter measures the gauge pressure of liquids, gases and vapors.

- Stainless steel measuring cell, fully welded
- Measuring ranges 2.5 to 1 000 bar (36.3 to 14 500 psi) relative
- For high-pressure applications and refrigeration technology

Benefits

- High measurement accuracy
- Rugged stainless steel enclosure
- High overload withstand capability
- For corrosive and non-corrosive media
- For measuring the pressure of liquids, gases and vapors
- Compact design
- Gasket-less

Application

The SITRANS P220 pressure transmitter for gauge pressure is used in the following industrial areas:

- Mechanical engineering
- Shipbuilding
- Energy development
- Chemical industry
- Water supply

Design

Device structure without explosion protection

The pressure transmitter consists of a piezoresistive measuring cell with a diaphragm, installed in a stainless steel enclosure. It can be connected electrically with a device plug to EN 175301-803-A (IP65), an M12 device plug (IP67), a cable (IP67) or a Quickon cable quick screw connection (IP67). The output signal is between 4 and 20 mA or 0 and 10 V

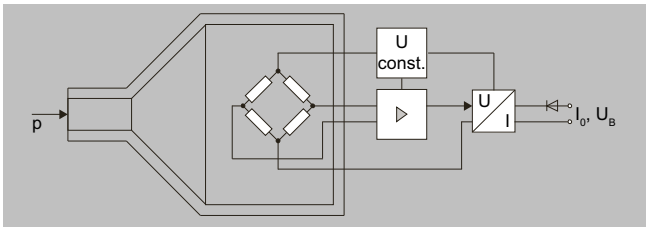
Device structure with explosion protection

The pressure transmitter consists of a piezoresistive measuring cell with a diaphragm, installed in a stainless steel enclosure. It can be connected electrically with a device plug fulfilling EN 175301-803-A (IP65) or an M12 device plug (IP67). The output signal is between 4 and 20 mA.

Function

The pressure transmitter measures the gauge pressure of liquids and gases as well as the level of liquids.

Mode of operation



SITRANS P220 pressure transmitters (7MF1567-...), functional diagram

The stainless steel measuring cell has a thick-film resistance bridge to which the operating pressure p is transmitted through a stainless steel diaphragm.

The voltage output from the measuring cell is converted by an amplifier into an output current of 4 to 20 mA or an output voltage of 0 to 10 V DC.

The output current and voltage are linearly proportional to the input pressure.

Selection and ordering data

SITRANS P220 pressure transmitter for gauge pressure, for high-pressure and cold applications, fully-welded version								Article No. 7MF1567-												Order code		
								●	●	●	●	●	-	●	●	A	●			●	●	●
Measurement deviation typ. 0.25% Material of wetted parts: Stainless steel Material of non-wetted parts: Stainless steel																						
Click the article number for online configuration in the PIA Life Cycle Portal.																						
Measuring range		**Minimum overload limit**		**Maximum overload limit**		**Burst pressure**																
For gauge pressure																						
0 ... 2.5 bar	(0 ... 36.3 psi)	-1 bar	(-14.5 psi)	6.25 bar	(90.7 psi)	25 bar	(363 psi)	3	B	D												
0 ... 4 bar	(0 ... 58 psi)	-1 bar	(-14.5 psi)	10 bar	(145 psi)	40 bar	(580 psi)	3	B	E												
0 ... 6 bar	(0 ... 87 psi)	-1 bar	(-14.5 psi)	15 bar	(217 psi)	60 bar	(870 psi)	3	B	G												
0 ... 10 bar	(0 ... 145 psi)	-1 bar	(-14.5 psi)	25 bar	(362 psi)	60 bar	(870 psi)	3	C	A												
0 ... 16 bar	(0 ... 232 psi)	-1 bar	(-14.5 psi)	40 bar	(580 psi)	96 bar	(1 392 psi)	3	C	B												
0 ... 25 bar	(0 ... 363 psi)	-1 bar	(-14.5 psi)	62.5 bar	(906 psi)	150 bar	(2 176 psi)	3	C	D												
0 ... 40 bar	(0 ... 580 psi)	-1 bar	(-14.5 psi)	100 bar	(1 450 psi)	240 bar	(3 481 psi)	3	C	E												
0 ... 60 bar	(0 ... 870 psi)	-1 bar	(-14.5 psi)	150 bar	(2 175 psi)	360 bar	(5 221 psi)	3	C	G												
0 ... 100 bar	(0 ... 1450 psi)	-1 bar	(-14.5 psi)	250 bar	(3 625 psi)	600 bar	(8 702 psi)	3	D	A												
0 ... 160 bar	(0 ... 2320 psi)	-1 bar	(-14.5 psi)	400 bar	(5 801 psi)	960 bar	(13 924 psi)	3	D	B												
0 ... 250 bar	(0 ... 3625 psi)	-1 bar	(-14.5 psi)	625 bar	(9 064 psi)	1 500 bar	(21 756 psi)	3	D	D												
0 ... 400 bar	(0 ... 5801 psi)	-1 bar	(-14.5 psi)	1 000 bar	(14 503 psi)	2 400 bar	(34 809 psi)	3	D	E												
0 ... 600 bar	(0 ... 8702 psi)	-1 bar	(-14.5 psi)	1 500 bar	(21 755 psi)	3 600 bar	(52 200 psi)	3	D	G												
0 ... 1000 bar	(0 ... 14500 psi)	-1 bar	(-14.5 psi)	1 500 bar	(21 755 psi)	5 000 bar	(72 520 psi)	3	E	A												
Other version; Add order code and plain text: Measuring range: ... to ... bar (psi)								9	A	A										H	1	Y
Measuring ranges for gauge pressure																						
	0 ... 30 psi		-14.5 psi		75 psi		360 psi	4	B	E	1)											
	0 ... 60 psi		-14.5 psi		150 psi		580 psi	4	B	F	1)											
	0 ... 100 psi		-14.5 psi		250 psi		580 psi	4	B	G	1)											
	0 ... 150 psi		-14.5 psi		375 psi		870 psi	4	C	A	1)											
	0 ... 200 psi		-14.5 psi		500 psi		1 390 psi	4	C	B	1)											
	0 ... 300 psi		-14.5 psi		750 psi		2 170 psi	4	C	D	1)											
	0 ... 500 psi		-14.5 psi		1 250 psi		3 481 psi	4	C	E	1)											
	0 ... 750 psi		-14.5 psi		1 875 psi		5 220 psi	4	C	F	1)											
	0 ... 1 000 psi		-14.5 psi		2 500 psi		5 220 psi	4	C	G	1)											
	0 ... 1 500 psi		-14.5 psi		3 750 psi		8 700 psi	4	D	A	1)											
	0 ... 2 000 psi		-14.5 psi		5 000 psi		13 920 psi	4	D	B	1)											
	0 ... 3 000 psi		-14.5 psi		7 500 psi		21 750 psi	4	D	D	1)											
	0 ... 5 000 psi		-14.5 psi		12 500 psi		34 800 psi	4	D	E	1)											
	0 ... 6 000 psi		-14.5 psi		15 000 psi		34 800 psi	4	D	F	1)											
	0 ... 8 700 psi		-14.5 psi		21 755 psi		52 200 psi	4	D	G	1)											
	0 ... 14 500 psi		-14.5 psi		21 755 psi		72 520 psi	4	E	A												
Other version; Add order code and plain text: Measuring range: ... to ... psi								9	A	A										H	1	Y
Output signal																						
4 ... 20 mA; 2-wire system, auxiliary power 7 ... 33 V DC (10 ... 30 V DC for ATEX devices)1)											0											
0 ... 10 V; 3-wire system; auxiliary power 12 ... 33 V DC											1	0										
0 ... 5 V; 3-wire system; auxiliary power 7 ... 33 V DC											2	0										
Ratiometric 10 ... 90%; 3-wire system; auxiliary power 5 V DC ± 10%											3	0										
Explosion protection (only 4 ... 20 mA)																						
None												0										
With explosion protection Ex ia IIC T41)												1										
Electrical connection																						
Plug according to EN 175301-803-A, stuffing box thread M16 (with coupling)1)														1								
M12 device plug according to IEC 61076-2-101														2								
Connection via permanently installed cable, 2 m (6.6 ft); not for "Intrinsic safety" type of protection												0		3								
Quick-screw cable gland Quickon PG9; not for "Intrinsic safety" type of protection												0		4								
Plug according to EN 175301-803-A, stuffing box thread 1/2"-14 NPT (with coupling)1)														5								
Plug according to EN 175301-803-A, stuffing box thread PG11 (with coupling)1)														6								
Permanently installed cable, length 5 m (16.4 ft)												0		7								
Special design														9						N	1	Y

Selection and ordering data (continued)

SITRANS P220 pressure transmitter for gauge pressure, for high-pressure and cold applications, fully-welded version	Article No. 7MF1567-													Order code		
	●	●	●	●	●	-	●	●	A	●						
Process connection																
G½" male according to EN 837-1 (½" BSP male) (standard for metric pressure ranges mbar, bar)								A								
G½" male and G1/8" female								B								
G¼" male according to EN 837-1 (¼" BSP male)								C								
7/16"-20 UNF male								D								
¼"-18 NPT male (standard for pressure ranges inH_2O and psi)[1]								E								
¼"-18 NPT female								F								
½"-14 NPT male								G								
½"-14 NPT female								H								
7/16"-20 UNF female								J								
M20×1.5 male								P								
G¼" according to EN ISO 1179-2 (formerly DIN 3852 form E)								Q								
G½" according to EN ISO 1179-2 (formerly DIN 3852 form E)								R								
Special design								Z						P	1	Y
Version																
Standard version[1]										1						

[1] Order code E21 required for complete configurations with CRN and $_cCSA_{us}$ Ex approval.

Options	Order code
Add **"-Z"** to article number and specify order code.	
Quality inspection certificate (5-point characteristic curve test) according to IEC 62828-2 (not possible for measuring ranges > 0 ... 600 bar/0 ... 8 702 psi)	**C11**
Oxygen version, free of oil and degreased (not in combination with explosion protection version!)	**E10**
With CRN and $_cCSA_{us}$ Ex approval (only for measuring ranges 0 ... 30 psi to 0 ... 8 700 psi)	**E21**

Technical specifications

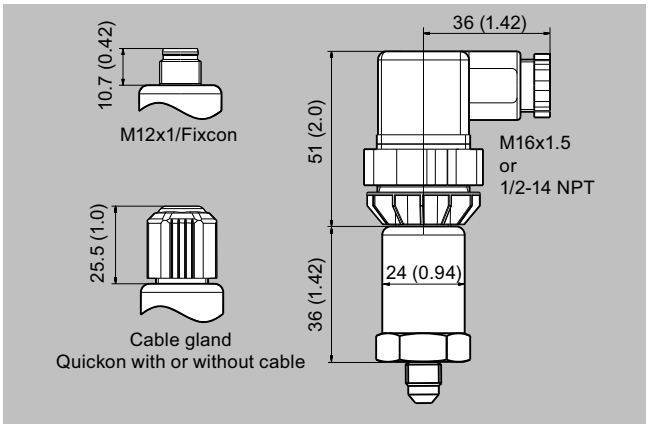
SITRANS P220 for gauge pressure	
Area of application	
Gauge pressure measurement	Liquids, gases and vapors
Mode of operation	
Measuring principle	Piezoresistive measuring cell (stainless steel diaphragm)
Measured variable	Gauge pressure
Input	
Measuring range	
• Gauge pressure	
- Metric	2.5 ... 1 000 bar (36 ... 14 500 psi)
- US measuring range	30 ... 14 500 psi
Output	
Current signal	4 ... 20 mA
• Load	(U_B - 10 V)/0.02 A
• Auxiliary power U_B	7 ... 33 V DC (10 ... 30 V for Ex)
Voltage signal	0 ... 10 V DC
• Load	≥ 10 kΩ
• Auxiliary power U_B	12 ... 33 V DC
• Current consumption	< 7 mA at 10 kΩ
Radiometric output	10 ... 90%
• Load	≥ 10 kΩ
• Auxiliary power U_B	DC 5 V ± 10%
• Current consumption	< 7 mA at 10 kΩ
Characteristic curve	Linear rising
Measuring accuracy	
Measurement deviation at limit setting including hysteresis and reproducibility	• Typical: 0.25% of measuring span • Maximum: 0.5% of measuring span
Step response time T_{99}	< 5 ms
Long-term stability	
• Lower range value and measuring span	0.25% of measuring span/year
Effect of ambient temperature	
• Lower range value and measuring span	0.25%/10 K of measuring span
• Influence of power supply	0.005%/V
Operating conditions	
Process temperature	-40 ... +120 °C (-40 ... +248 °F)
Ambient temperature	-25 ... +85 °C (-13 ... +185 °F)
Storage temperature	-50 ... +100 °C (-58 ... +212 °F)
Degree of protection according to IEC 60529	• IP65 with plug according to EN 175301-803-A • IP67 with M12 device plug • IP67 with cable • IP67 with cable quick screw connection
Electromagnetic compatibility	• According to IEC 61326-1/-2/-3 • According to NAMUR NE21 for ATEX devices only, and with a max. measurement error of ≤ 1%
Structural design	
Weight	Approx. 0.090 kg (0.198 lbs)
Process connections	See dimension drawings
Electrical connections	• Plug according to EN 175301-803-A Form A with cable entry M16x1.5 or ½-14 NPT or PG 11 • Device plug M12 • 2 or 3-wire (0.5 mm²) cable (Ø ± 5.4 mm) • Quickon cable quick screw connection
Material of wetted parts	
• Measuring cell	Stainless steel, mat. no. 1.4016

Technical specifications (continued)

SITRANS P220 for gauge pressure	
• Process connection	Stainless steel, mat. no. 1.4404 (SST 316 L)
Material of non-wetted parts	
• Enclosure	Stainless steel, mat. no. 1.4404 (SST 316 L)
• Connector housing	Plastic
• Cable	PVC
Certificates and approvals	
Classification according to pressure equipment directive (PED 2014/68/EU)	For gases of fluid group 1 and liquids of fluid group 1; complies with requirements of article 4, paragraph 3 (sound engineering practice)
Lloyd's Register of Shipping (LR)[1]	12/20010
Germanischer Lloyd (GL)[1]	GL19740 11 HH00
American Bureau of Shipping (ABS)[1]	ABS_11_HG 789392_PDA
Bureau Veritas (BV)[1]	BV 271007A0 BV
Det Norske Veritas (DNV)[1]	A 12553
Drinking water approval (ACS)[1]	ACS 15 ACC NY 360
EAC[1]	№ TC RU C-DE.ГБ05.В.00732 ОС НАНИО «ЦСВЭ»
CRN[2]	0F18659.5C
Underwriters Laboratories (UL)[1]	
• For USA and Canada	UL 20110217 - E34453
• Worldwide	IEC UL DK 21845
Explosion protection	
Intrinsic safety "i" (only with current output)	Ex II 1/2 G Ex ia IIC T4 Ga/Gb Ex II 1/2 D Ex ia IIIC T125 °C Da/Db
EC type-examination certificate	SEV 10 ATEX 0146
Connection to certified intrinsically safe ohmic circuits with maximum values	U_i ≤ DC 30 V; I_i ≤ 100 mA; P_i ≤ 0.75 W
Effective internal inductance and capacity for versions with plugs according to EN 175301-803-A and M12	L_i = 0 nH; C_i = 0 nF
CSA[2]	70006348 Class I, Division I, Groups A, B, C&D; Class II, Division 1, Groups E, F and G, Class III Class I, Division 2,Groups A, B, C and D; Class II, Division 2, Groups F and G, Class III A/Ex ia IIC T4 Ga/Gb A/Ex ia IIIC T125°C Da/Db

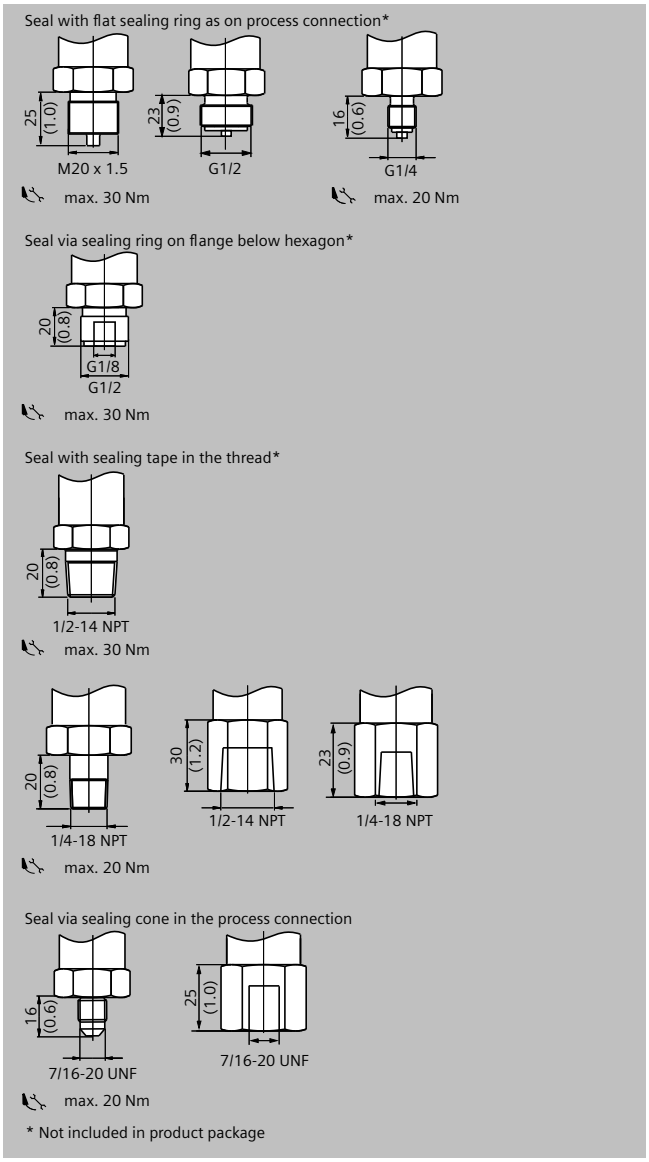
1) For variants with output signal 0 ... 5 V and radiometric output available soon.
2) See ordering data for available versions.

Dimensional drawings



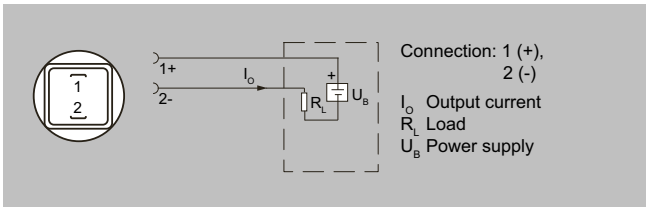
SITRANS P220, electrical connections, dimensions in mm (inch)

Dimensional drawings (continued)

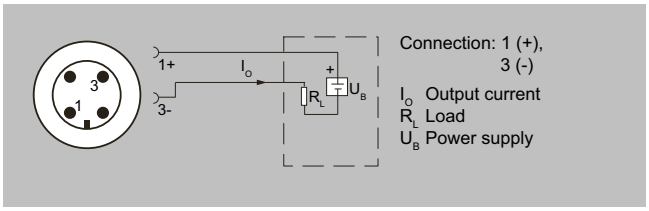


SITRANS P220, process connections, dimensions in mm (inch)

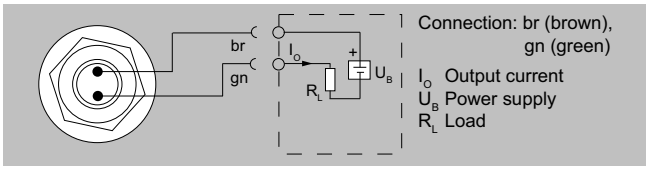
Circuit diagrams



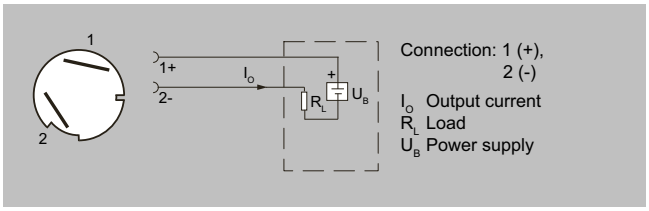
Connection with current output and plug according to EN 175301



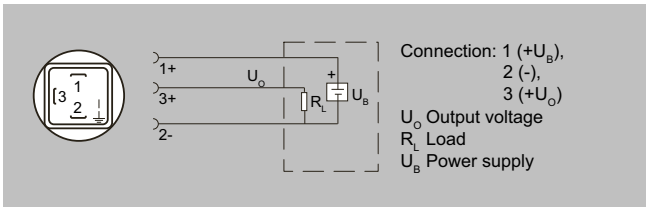
Connection with current output and M12x1 device plug



Connection with current output and cable

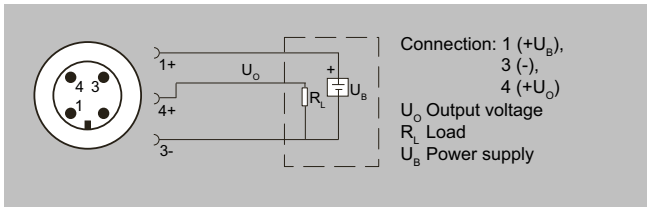


Connection with current output and Quickon cable quick screw connection

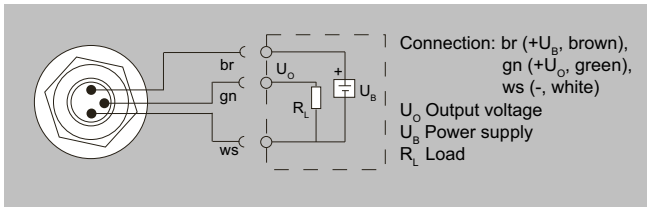


Connection with voltage output, ratiometric output and plug according to EN 175301

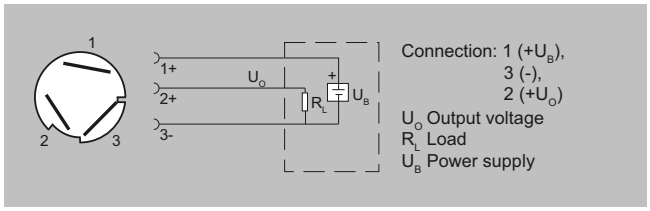
Circuit diagrams (continued)



Connection with voltage output, ratiometric output and M12x1 device plug



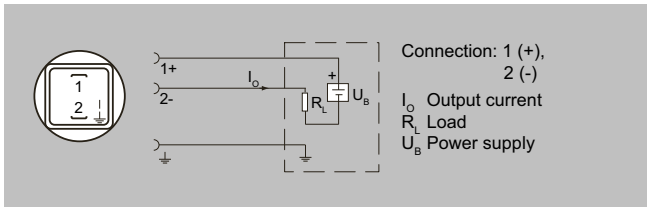
Connection with voltage output, ratiometric output and cable



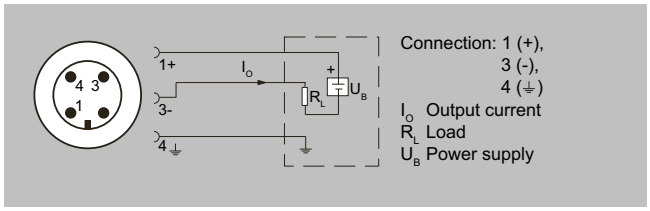
Connection with voltage output, ratiometric output and Quickon fast cable termination

Device design with explosion protection: 4 to 20 mA

The grounding connection is conductively bonded to the transmitter enclosure.



Connection with current output and plug according to EN 175301 (Ex)



Connection with current output and M12x1 (Ex) device plug

Overview

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

The use of high-quality materials guarantees adherence to hygiene provisions.

Particular importance was placed on high surface quality. In addition, the system can be electropolished.

A further important feature is the hygienic design of the process connection with different aseptic connections.

The fully welded stainless steel enclosure can be designed with degree of protection up to IP67.

By means of corresponding temperature decouplers, the SITRANS P Compact transmitter can be used for 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 incl. hysteresis < +0.2% of the 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 enclosure with degree of protection IP65 (IP67 as option)
- Process temperature up to 200 °C (392 °F)
- Explosion protection II 2G EEx [ib] IIC T6 to ATEX
- Easy and safe to clean

Application

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

The use of high-quality materials guarantees adherence to hygiene provisions.

The SITRANS P Compact pressure transmitter can be ordered in a large number of different variants. This enables precise adaptation of the pressure transmitter to the conditions of the usage location.

Design

The electronics are potted for protection against humidity, corrosive atmospheres and vibrations.

Operating instructions for the pressure transmitter

Atmospheric internal pressure compensation

The atmospheric internal pressure compensation of the SITRANS P Compact pressure transmitter is designed as follows in the over-pressure measuring range:

- With connector designs via plug cable gland (IP65)
- In field enclosures via an integrated sinter filter (IP65) or a ventilated connecting cable (IP67)
- In versions with cable outlet via ventilated connecting cable (IP67)

In the absolute pressure area, no internal pressure compensation to the atmosphere is necessary.

Note: The degrees of protection specified above are only achieved under the following conditions:

- Proper mounting of the pressure transmitter
- Firmly tightened plug cable glands
- Cable diameters match nominal diameters of sealing inserts in the enclosure

Note: The integrated measures for EMC are only effective with a properly connected ground connection.

CE marking

The CE marking of the pressure transmitter certifies adherence with the guidelines of the European Council (9/336/EEC), the EMC legislation (13 Nov. 1992) and the applicable generic standards.

Problem-free operation in systems and plants is only achieved when the conditions for shielding, grounding, cable routing and electrical isolation are complied with during installation and mounting.

Hazardous areas

Note: In hazardous areas, electrical equipment can only be installed and operated by qualified expert personnel.

Changes at devices and connections void the Ex protection and the warranty.

In intrinsically safe circuits, equipotential bonding must be ensured over the entire course of the cable run, within and outside of the hazardous area. The limit values listed in the ATEX approval need to be considered.

Function

Process pressure acts on a piezo-resistive semi-conductor measuring bridge via a remote seal diaphragm by means of a transfer fluid. The pressure transmitter converts the measured pressure values into a load-independent current signal.

A compensation network achieves a large degree of independence of the output signal from the ambient temperature. With a specially adapted remote seal connection with minimized system volume, the influence of the process temperature on the output signal is reduced significantly as compared to a conventional screw connection.

The pressure transmitters can be supplied with an unregulated DC voltage of 10 to 30 V. The output signals common in measuring technology are available.

Selection and ordering data

SITRANS P Compact pressure transmitter for gauge and absolute pressure, with flush-mounted diaphragm	Article No. 7MF8010-												Order code		
	1	●	●	●	●	-	●	●	●	●	●		●	●	●
2-wire system, process temperature up to 140 °C (284 °F), measurement deviation: 0.2% of full-scale value, output 4 ... 20 mA															
Click the article number for online configuration in the PIA Life Cycle Portal.															
Diaphragm seal with quick-release															
Milk pipe union acc. to DIN 11851 with slotted union nut															
• DN 25		A	D												
• DN 32		A	E												
• DN 40		A	F												
• DN 50		A	G												
• DN 65		A	H												
Dairy connection according to DIN 11851 with screwed connector															
• DN 25		B	D												
• DN 32		B	E												
• DN 40		B	F												
• DN 50		B	G												
• DN 65		B	H												
Clamp connection acc. to DIN 32676															
• DN 25		C	D												
• DN 40		C	F												
• DN 50		C	G												
Clamp connection acc. to ISO 2852															
• 1 inch		D	M												
• 1½ inches		D	N												
• 2 inches		D	P												
• 2½ inches		D	Q												
IDF standard with slotted union nut															
• 1 inch		E	M												
• 1½ inches		E	N												
• 2 inches		E	P												
IDF standard with screwed connector															
• 1 inch		F	M												
• 1½ inches		F	N												
• 2 inches		F	P												
SMS standard with slotted union nut															
• 1 inch		G	M												
• 1½ inches		G	N												
• 2 inches		G	P												
SMS standard with screwed connector															
• 1 inch		H	M												
• 1½ inches		H	N												
• 2 inches		H	P												
DRD flange without welded flange															
• DN 50, PN 40		J	H												
Varivent connection (Tuchenhagen Co.)															
• D = 50 for Varivent enclosure DN 25 and 1 inch		K	F												
• D = 68 for Varivent enclosure DN 40 ... DN 125 and 1½ ... 6 inches		K	L												
Special design (specify order code and plain text)		Z	A										J	1	Y
Filling liquid															
Food-grade oil, FDA-listed				3											
Special design (specify order code and plain text)				9									L	1	Y

Selection and ordering data (continued)

SITRANS P Compact pressure transmitter for gauge and absolute pressure, with flush-mounted diaphragm	Article No. 7MF8010- 1 ● ● ● ● - ● ● ● ● ●	Order code ● ● ●
Output signal		
4 ... 20 mA	1	
Special design (specify order code and plain text)	9	M 1 Y
Diaphragm seal with aseptic connection		
Aseptic screw gland according to DIN 11864-1, Form A, with slotted union nut		
• 1 inch	P M	
• 1½ inches	P N	
• 2 inches	P P	
• 2½ inches	P Q	
Aseptic screw gland according to DIN 11864-1, Form A, with screwed connector		
• 1 inch	Q M	
• 1½ inches	Q N	
• 2 inches	Q P	
• 2½ inches	Q Q	
NEUMO BioConnect aseptic screw gland with slotted union nut[1)]		
• DN 25	R D	
• DN 32	R E	
• DN 40	R F	
• DN 50	R G	
NEUMO BioConnect aseptic screw gland with screwed connector[1)]		
• DN 25	S D	
• DN 32	S E	
• DN 40	S F	
• DN 50	S G	
NEUMO BioConnect aseptic clamp connection, form R[1)]		
• DN 25	T D	
• DN 32	T E	
• DN 40	T F	
• DN 50	T G	
NEUMO BioConnect aseptic clamp connection, form V[1)]		
• DN 25	U D	
• DN 32	U E	
• DN 40	U F	
• DN 50	U G	
Male thread according to DIN 3852, form A		
• G1", min. measuring span. 0.4 bar (5.8 psi)	X C	
• G1½", min. measuring span. 0.25 bar (3.63 psi)	X D	
• G2", min. measuring span. 0.16 bar (2.32 psi)	X E	
Special design (specify order code and plain text)	Z A	J 1 Y
Filling liquid		
Food-grade oil, FDA-listed	3	
Special design (specify order code and plain text)	9	L 1 Y
Output signal		
4 ... 20 mA	1	
Special design (specify order code and plain text)	9	M 1 Y
Enclosure version (stainless steel, mat. no. 1.4404/316L) / electrical connection		
Enclosure with angled device plug according to DIN 43650, IP65	1	
Enclosure with M12 device plug, IP65, fastening union nut made of polyamide	2	
Enclosure with M12 device plug, IP65, fastening union nut made of stainless steel	3	
Field enclosure (small) made of stainless steel with cable gland, IP65	4	
Field enclosure (small) made of stainless steel with cable gland, IP67, internal ventilation for measuring ranges < 16 bar (< 232 psi)	5	

Selection and ordering data (continued)

SITRANS P Compact pressure transmitter for gauge and absolute pressure, with flush-mounted diaphragm		Article No. 7MF8010- 1 ● ● ● ● - ● ● ● ●										Order code ● ● ●		
Measuring range	**Overload pressure**													
0 ... 160 mbar (0 ... 2.32 psi)	1 bar (14.5 psi)							B	B					
0 ... 250 mbar (0 ...3.63 psi)	1 bar (14.5 psi)							B	C					
0 ... 400 mbar (0 ... 5.8 psi)	3 bar (43.5 psi)							B	D					
0 ... 600 mbar (0 ... 8.7 psi)	3 bar (43.5 psi)							B	E					
0 ... 1 bar (0 ... 14.5 psi)	3 bar (43.5 psi)							C	A					
0 ... 1.6 bar (0 ... 23.2 psi)	10 bar (145 psi)							C	B					
0 ... 2.5 bar (0 ... 36.3 psi)	10 bar (145 psi)							C	C					
0 ... 4 bar (0 ... 58 psi)	20 bar (290 psi)							C	D					
0 ... 6 bar (0 ... 87 psi)	60 bar (870 psi)							C	E					
0 ... 10 bar (0 ... 145 psi)	60 bar (870 psi)							D	A					
0 ... 16 bar (0 ... 232 psi)	60 bar (870 psi)							D	B					
0 ... 25 bar (0 ... 363 psi)	60 bar (870 psi)							D	C					
0 ... 40 bar (0 ... 580 psi)	100 bar (1450 psi)							D	D					
-160 ... 0 mbar (-2.32 ... 0 inH_2O)	1 bar (14.5 psi)							E	B					
-250 ... 0 mbar (-3.73 ... 0 inH_2O)	1 bar (14.5 psi)							E	C					
-400 ... 0 mbar (-5.8 ... 0 inH_2O)	3 bar (43.5 psi)							E	D					
-600 ... 0 mbar (-8.7 ... 0 inH_2O)	3 bar (43.5 psi)							E	E					
-1 ... 0 bar (-14.5 ... 0 psi)	3 bar (43.5 psi)							F	A					
-1 ... 0.6 bar (-14.5 ... 8.7 psi)	10 bar (145 psi)							F	B					
-1 ... 1.5 bar (-14.5 ... 21.8 psi)	10 bar (145 psi)							F	C					
-1 ... 3 bar (-14.5 ... 43.5 psi)	20 bar (290 psi)							F	D					
-1 ... 5 bar (-14.5 ... 72.5 psi)	20 bar (290 psi)							F	E					
-1 ... 9 bar (-14.5 ... 130.5 psi)	60 bar (870 psi)							G	A					
-1 ... 15 bar (-14.5 ... 217.6 psi)	60 bar (870 psi)							G	B					
0 ... 1 bar a (0 ... 14.5 psi a)	3 bar a (43.5 psi a)							H	A					
0 ... 1.6 bar a (0 ... 23.2 psi a)	10 bar a (145 psi a)							H	B					
0 ... 2.5 bar a (0 ... 36.3 psi a)	10 bar a (145 psi a)							H	C					
0 ... 4 bar a (0 ... 58 psi a)	10 bar a (145 psi a)							H	D					
0 ... 6 bar a (0 ... 87 psi a)	60 bar a (870 psi a)							H	E					
0 ... 10 bar a (0 ... 145 psi a)	60 bar a (870 psi a)							J	A					
Special design (specify order code and plain text)								Z	A			P	1	Y
Explosion protection														
None										1				
With, according to ATEX 100a, II 2 G, Ex ib IIC T6										2				

1) Please make sure to also specify: Connections for pipes: R01, R02 or R03, see "Options" table.

SITRANS P Compact pressure transmitter for gauge and absolute pressure, with inline seal 2-wire system, process temperature up to 140 °C (284 °F), measurement deviation: 0.2% of full-scale value, output 4 ... 20 mA	Article No. 7MF8010- 2 ● ● ● ● - ● ● ● ●										Order code ● ● ●		
Click the article number for online configuration in the PIA Life Cycle Portal.													
Inline seal (screw gland at each end) with quick-release clamps													
Dairy connection according to DIN 11851 with screwed connector													
• DN 25		A	D										
• DN 32		A	E										
• DN 40		A	F										
• DN 50		A	G										
• DN 65		A	H										
Clamp connection acc. to DIN 32676													
• DN 25		C	D										
• DN 32		C	E										
• DN 40		C	F										
• DN 50		C	G										

Selection and ordering data (continued)

SITRANS P Compact pressure transmitter for gauge and absolute pressure, with inline seal 2-wire system, process temperature up to 140 °C (284 °F), measurement deviation: 0.2% of full-scale value, output 4 ... 20 mA	Article No. 7MF8010- 2 ● ● ● ● - ● ● ● ●	Order code ● ● ●
• DN 65	C H	
Clamp connection acc. to ISO 2852[1]		
• 1 inch	D M	
• 1½ inches	D N	
• 2 inches	D P	
• 2½ inches	D Q	
Special design (specify order code and plain text)	Z A	J 1 Y
Filling liquid		
Food-grade oil, FDA-listed	3	
Special design (specify order code and plain text)	9	L 1 Y
Output signal		
4 ... 20 mA	1	
Special design (specify order code and plain text)	9	M 1 Y
Inline seals with aseptic connection		
Aseptic screw gland according to DIN 11864-1, Form A, with screwed connector		
• 1 inch	Q M	
• 1½ inches	Q N	
• 2 inches	Q P	
NEUMO BioConnect aseptic screw gland with screwed connector[2]		
• DN 25	S D	
• DN 32	S E	
• DN 40	S F	
• DN 50	S G	
• DN 65	S H	
NEUMO BioConnect aseptic clamp connection, form R[2]		
• DN 25	T D	
• DN 32	T E	
• DN 40	T F	
• DN 50	T G	
SÜDMO aseptic screw gland with W 501 screwed connector[2]		
• 1 inch	V M	
• 1½ inches	V N	
• 2 inches	V P	
SÜDMO aseptic screw gland with W 601 clamp connection[2]		
• 1 inch	W M	
• 1½ inches	W N	
• 2 inches	W P	
Special design (specify order code and plain text)	Z A	J 1 Y
Filling liquid		
Food-grade oil, FDA-listed	3	
Special design (specify order code and plain text)	9	L 1 Y
Output signal		
4 ... 20 mA	1	
Special design (specify order code and plain text)	9	M 1 Y
Enclosure version (stainless steel, mat. no. 1.4404/316L) / electrical connection		
Enclosure with angled device plug according to DIN 43650, IP65, securing union nut made of polyamide	1	
Enclosure with M12 device plug, IP65, fastening union nut made of polyamide	2	
Enclosure with M12 device plug, IP65, fastening union nut made of stainless steel	3	
Field enclosure (small) made of stainless steel with cable gland, IP65	4	
Field enclosure (small) made of stainless steel with cable gland, IP67, internal ventilation for measuring ranges < 16 bar (< 232 psi)	5	

Selection and ordering data (continued)

SITRANS P Compact pressure transmitter for gauge and absolute pressure, with inline seal 2-wire system, process temperature up to 140 °C (284 °F), measurement deviation: 0.2% of full-scale value, output 4 ... 20 mA		Article No. 7MF8010- 2 ● ● ● ● - ● ● ● ●				Order code ● ● ●
Measuring range	**Overload pressure**					
0 ... 160 mbar (0 ... 2.32 psi)	1 bar (14.5 psi)	B	B			
0 ... 250 mbar (0 ...3.63 psi)	1 bar (14.5 psi)	B	C			
0 ... 400 mbar (0 ... 5.8 psi)	3 bar (43.5 psi)	B	D			
0 ... 600 mbar (0 ... 8.7 psi)	3 bar (43.5 psi)	B	E			
0 ... 1 bar (0 ... 14.5 psi)	3 bar (43.5 psi)	C	A			
0 ... 1.6 bar (0 ... 23.2 psi)	10 bar (145 psi)	C	B			
0 ... 2.5 bar (0 ... 36.3 psi)	10 bar (145 psi)	C	C			
0 ... 4 bar (0 ... 58 psi)	20 bar (290 psi)	C	D			
0 ... 6 bar (0 ... 87 psi)	60 bar (870 psi)	C	E			
0 ... 10 bar (0 ... 145 psi)	60 bar (870 psi)	D	A			
0 ... 16 bar (0 ... 232 psi)	60 bar (870 psi)	D	B			
0 ... 25 bar (0 ... 363 psi)	60 bar (870 psi)	D	C			
0 ... 40 bar (0 ... 580 psi)	100 bar (1450 psi)	D	D			
-160 ... 0 mbar (-2.32 ... 0 psi)	1 bar (14.5 psi)	E	B			
-250 ... 0 mbar (-3.63 ... 0 psi)	1 bar (14.5 psi)	E	C			
-400 ... 0 mbar (-5.8 ... 0 psi)	3 bar (43.5 psi)	E	D			
-600 ... 0 mbar (-8.7 ... 0 psi)	3 bar (43.5 psi)	E	E			
-1 ... 0 bar (-14.5 ... 0 psi)	3 bar (43.5 psi)	F	A			
-1 ... 0.6 bar (-14.5 ... 8.7 psi)	10 bar (145 psi)	F	B			
-1 ... 1.5 bar (-14.5 ... 21.8 psi)	10 bar (145 psi)	F	C			
-1 ... 3 bar (-14.5 ... 43.5 psi)	20 bar (290 psi)	F	D			
-1 ... 5 bar (-14.5 ... 72.5 psi)	20 bar (290 psi)	F	E			
-1 ... 9 bar (-14.5 ... 130.5 psi)	60 bar (870 psi)	G	A			
-1 ... 15 bar (-14.5 ... 217.6 psi)	60 bar (870 psi)	G	B			
0 ... 1 bar a (0 ... 14.5 psi a)	3 bar a (43.5 psi a)	H	A			
0 ... 1.6 bar a (0 ... 23.2 psi a)	10 bar a (145 psi a)	H	B			
0 ... 2.5 bar a (0 ... 36.3 psi a)	10 bar a (145 psi a)	H	C			
0 ... 4 bar a (0 ... 58 psi a)	10 bar a (145 psi a)	H	D			
0 ... 6 bar a (0 ... 87 psi a)	60 bar (870 psi a)	H	E			
0 ... 10 bar a (0 ... 145 psi a)	60 bar (870 psi a)	J	A			
Special design (specify order code and plain text)		Z	A		P 1	Y
Explosion protection						
None			1			
With explosion protection according to ATEX 100a, II 2 G, Ex ib IIC T6			2			

1) Observe inside diameter of the pipe. Please specify pipe classes (see "Options").
2) Please make sure to also specify: Connections for pipes: R01, R02 or R03, see "Options" table.

Options Add "-Z" to article number, specify order code and plain text or entry from drop-down list.	Order code
Hygiene version Roughness process connection: Foil R_a < 0.8 µm ($3.15 \cdot 10^{-8}$ inches); welding seams R_a < 1.5 µm ($5.9 \cdot 10^{-8}$ inches)	**P01**
Integrated cooling element Process temperature max. 200 °C (392 °F) instead of 140 °C (284 °F)	**K01**
Connections for pipes	
Pipes according to DIN 11850	**R01**
ISO pipes according to DIN 2463	**R02**
Pipes acc. to >>O. D. Tubing "BS 4825 Part 1"<<	**R03**
Certificates	
Quality inspection certificate (5-point characteristic curve test) according to IEC 62828-2	**C11**
Inspection certificate according to EN 10204-3.1	**C12**

Selection and ordering data (continued)

Options Add "-Z" to article number, specify order code and plain text or entry from drop-down list.	Order code
Use of FDA-listed remote seal filling liquids certified with a factory certificate according to EN 10204-2.2	**C17**
Roughness depth measurement R_a certified with a factory certificate according to EN 10204-3.1	**C18**
Certification according to EHEDG for inline seal with aseptic screw gland according to DIN 11864	**C19**

Technical specifications

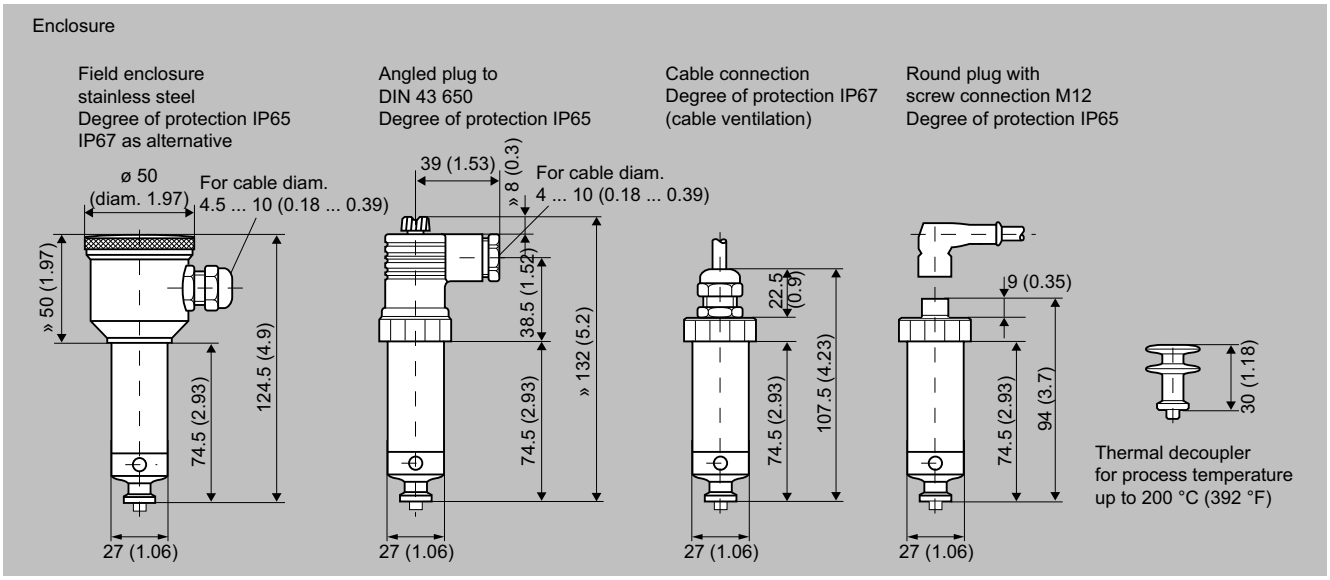
Pressure transmitters for food, pharmaceuticals and biotechnology	
Mode of operation	
Measuring principle	Piezo-resistive
Input	
Measured variable	Gauge or absolute pressure
Measuring range	0 ... 160 mbar (0 ... 2.32 psi) ... 0 ... 40 bar (0 ... 580 psi)
Output	
Output signal	
• 2-wire system	4 ... 20 mA
• 3-wire system	0 ... 20 mA
Measuring accuracy	According to IEC 62828-1
Measurement deviation at limit setting including hysteresis and reproducibility	≤ 0.2% of full-scale value
Adjustment accuracy	≤ ±0.2% of full-scale value
Step response time	< 20 ms
Effect 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-point error (dependent on design)[1]
• 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)
• Inline seal	
- DN 25/1"	9.5 mbar/10 K (0.138 psi/10 K)
- DN 32/1¼"	4.1 mbar/10 K (0.060 psi/10 K)
- DN 40/1½"	3.9 mbar/10 K (0.057 psi/10 K)
- DN 50/2"	3.9 mbar/10 K (0.057 psi/10 K)
Operating 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 according to IEC 60529	IP65, optional IP67

Technical specifications (continued)

Pressure transmitters for food, pharmaceuticals and biotechnology	
• Electromagnetic Compatibility	
- Emitted interference	To EN 50081 Part 1, issue 1993 (residential and industrial areas). The device has no own emissions.
- Noise immunity to	EN 50082 Part 2, issue March 1995 (industrial areas)
Structural design	
Weight (without remote seal)	
• Field enclosure	≈ 460 G (≈ 1.01 lb)
• Enclosure with plug	≈ 200 g (≈ 0.44 lb)
Enclosure	
• Designs	• Field enclosure IP65 or IP67, with screw gland • Angled device 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 enclosure thread or connecting cable depending on design
Process connection	
• Versions	See ordering data
• Material of coupling	Stainless steel, mat. no. 1.4404/316L
Auxiliary power	
Terminal voltage on transmitter	10 ... 30 V DC
Nominal 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 inline seal)	For gases of fluid group 1 and liquids of fluid group 1; complies with the requirements of article 4, paragraph 1 (annex 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 EEx ib IIC T6

[1] The zero-point error specified for the process connection should be considered as a guide value for a standard design. We will make a detailed system calculation on request. Systems with reduced remote seal error are available on request.

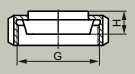
Dimensional drawings

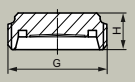


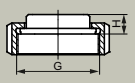
SITRANS P Compact, dimensions in mm (inch)

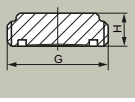
Process connections

Quick-release diaphragm seals

Dairy connection according to DIN 11851 with slotted union nut				
	**DN**	**PN**	**H mm (inch)**	**G**
	25	40	24 (0.95)	Radius 52 x 1/6 inch
	32	40	24 (0.95)	Radius 58 x 1/6 inch
	40	40	24 (0.95)	Radius 65 x 1/6 inch
	50	25	25.1 (0.99)	Radius 78 x 1/6 inch
	65	25	28.6 (1.13)	Radius 95 x 1/6 inch

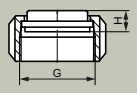
Dairy connection according to DIN 11851 with screwed connector				
	**DN**	**PN**	**H mm (inch)**	**G**
	25	40	-	Radius 52 x 1/6 inch
	32	40	20 (0.79)	Radius 58 x 1/6 inch
	40	40	20 (0.79)	Radius 65 x 1/6 inch
	50	25	20 (0.79)	Radius 78 x 1/6 inch
	65	25	22 (0.87)	Radius 95 x 1/6 inch

SMS standard with union nut				
	**DN**	**PN**	**H mm (inch)**	**G**
	1 inch	40	16 (0.63)	Radius 40 x 1.6 inches
	1½ inches	40	16 (0.63)	Radius 60 x 1.6 inches
	2 inches	25	16 (0.63)	Radius 70 x 1.6 inches

SMS standard with threaded socket				
	**DN**	**PN**	**H mm (inch)**	**G**
	1 inch	40	16 (0.63)	Radius 40 x 1.6 inches
	1½ inches	40	20 (0.79)	Radius 60 x 1.6 inches
	2 inches	25	20 (0.79)	Radius 70 x 1.6 inches

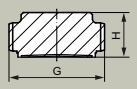
Dimensional drawings (continued)

IDF standard with union nut



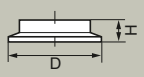
DN	PN	H mm (inch)	G
1 inch	40	21 (0.83)	1 inch
1½ inches	40	13.5 (0.53)	1½ inches
2 inches	25	15 (0.59)	2 inches

IDF standard with screwed connector



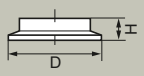
DN	PN	H mm (inch)	G
1 inch	40	21 (0.83)	1 inch
1½ inches	40	13.5 (0.53)	1½ inches
2 inches	25	15 (0.59)	2 inches

Clamp connection according to DIN 32676



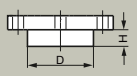
DN	PN	H mm (inch)	D mm (inches)
25	16	14 (0.55)	50.5 (2)
40	16	14 (0.55)	50.5 (2)
50	16	14 (0.55)	64 (2.52)

Clamp connection according to ISO 2852



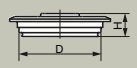
DN	PN	H mm (inch)	D mm (inches)
1 inch	16	14 (0.55)	50.5 (2)
1½ inches	16	12 (0.47)	50.5 (2)
2 inches	16	14 (0.55)	64 (2.52)
2½ inches	16	14 (0.55)	77.5 (3.05)

DRD flange without welded flange



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

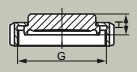
Varivent connection



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

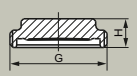
Diaphragm seal with aseptic connection

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



DN	PN	H mm (inch)	D mm (inches)
1 inch	40	20 (0.79)	Radius 52 x 1/6 inch
1½ inches	40	20 (0.79)	Radius 58 x 1/6 inch
2 inches	25	20 (0.79)	Radius 65 x 1/6 inch
2½ inches	25	20 (0.79)	Radius 78 x 1/6 inch

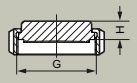
Aseptic screw gland according to DIN 11864-1, form A, with screwed connector



DN	PN	H mm (inch)	D mm (inches)
1 inch	40	15 (0.59)	Radius 52 x 1/6 inch
1½ inches	40	15 (0.59)	Radius 58 x 1/6 inch
2 inches	25	15 (0.59)	Radius 65 x 1/6 inch
2½ inches	25	15 (0.59)	Radius 78 x 1/6 inch

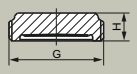
Dimensional drawings (continued)

NEUMO BioConnect aseptic screw gland with slotted union nut



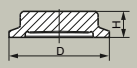
DN	PN	H mm (inch)	D mm (inches)
25	16	15 (0.59)	M 42 x 2
32	16	15 (0.59)	M 52 x 2
40	16	15 (0.59)	M 56 x 2
50	16	15 (0.59)	M 68 x 2

NEUMO BioConnect aseptic screw gland with screwed connector



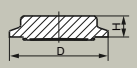
DN	PN	H mm (inch)	D mm (inches)
25	16	20 (0.79)	M 42 x 2
32	16	20 (0.79)	M 52 x 2
40	16	20 (0.79)	M 56 x 2
50	16	20 (0.79)	M 68 x 2

NEUMO BioConnect aseptic clamp connection, form R



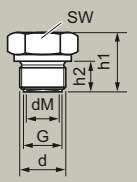
DN	PN	H mm (inch)	D mm (inches)
25	40	20 (0.79)	50.5 (2)
32	40	20 (0.79)	50.5 (2)
40	40	20 (0.79)	64 (2.52)
50	25	20 (0.79)	77.4 (3.05)

NEUMO BioConnect aseptic clamp connection, form V



DN	PN	H mm (inch)	D mm (inches)
25	40	15 (0.59)	50.5 (2)
32	40	15 (0.59)	50.5 (2)
40	40	20 (0.79)	64 (2.52)
50	25	20 (0.79)	77.4 (3.05)

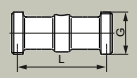
Connecting socket for screw-in thread according to DIN 3852, form A



G	d mm (inches)	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)

Inline seal (screw gland at each end) with quick-release clamps

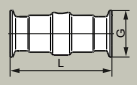
Dairy connection according to DIN 11851 with screwed connector



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

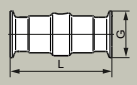
Dimensional drawings (continued)

Clamp connection according to DIN 32676



DN	PN	L mm (inch)	D mm (inches)
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)

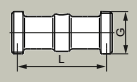
Clamp connection according to ISO 2852



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

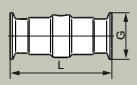
Inline seals with aseptic connection

Aseptic screwed gland according to DIN 11864-1, form A, with screwed connector



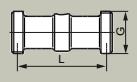
DN	PN	L mm (inch)	G
1 inch	40	110 (4.33)	Radius 52 x 1/6 inch
1½ inches	40	110 (4.33)	Radius 65 x 1/6 inch
2 inches	25	110 (4.33)	Radius 78 x 1/6 inch

NEUMO BioConnect aseptic screwed gland with screwed connector



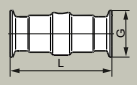
DN	PN	L mm (inch)	G
25	16	110 (4.33)	M 42 x 2
32	16	110 (4.33)	M 52 x 2
40	16	110 (4.33)	M 56 x 2
50	16	110 (4.33)	M 68 x 2
65	16	110 (4.33)	M 90 x 3

SÜDMO aseptic screwed gland with W 501 screwed connector



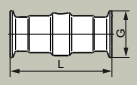
DN	PN	L mm (inch)	G
1 inch	25	110 (4.33)	Radius 44 x 1/6 inch
1½ inches	25	110 (4.33)	Radius 58 x 1/6 inch
2 inches	20	110 (4.33)	Radius 78 x 1/6 inch

NEUMO BioConnect aseptic screwed gland clamp connection, form R



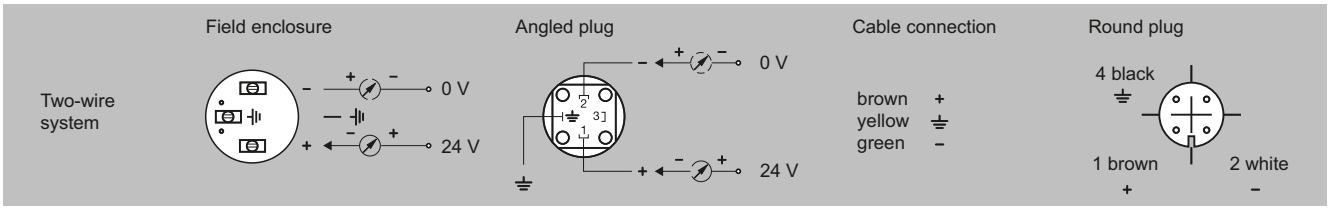
DN	PN	L mm (inch)	D mm (inches)
25	16	110 (4.33)	50.4 (2)
32	16	110 (4.33)	50.4 (2)
40	16	110 (4.33)	64 (2.52)
50	16	110 (4.33)	77.4 (3.05)

SÜDMO aseptic screwed gland with W 601 screwed connector



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

Circuit diagrams



SITRANS P Compact, connection diagram