# Transmitters for basic requirements

SITRANS P200 for gauge and absolute pressure

### Overview



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

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

#### Benefits

- · High measuring accuracy
- Rugged stainless steel enclosure
- · High overload withstand capability
- · For aggressive and non-aggressive 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 used with a connector per EN 175301-803-A (IP65), a round plug M12 (IP67), a cable (IP67) or a cable quick screw connection (IP67) connected electrically. The output signal is between 4 and 20 mA or 0 and 10 V.

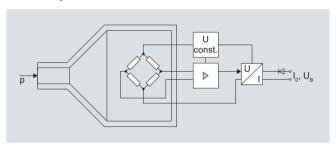
#### Device structure with explosion protection

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

### Function

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

#### Mode of operation



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

The ceramic measuring cell has a thin-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.

SITRANS P200 for gauge and absolute pressure

Technical specifications			
Application		Design	
Gauge and absolute pressure	Liquids, gases and vapors	Weight	Approx. 0.090 kg (0.198 lb)
measurement		Process connections	See dimension drawings
Mode of operation  Measuring principle	Piezo-resistive measuring cell (ceramic diaphragm)	Electrical connections	Connector per     EN 175301-803-A Form A with     cable inlet M16x1.5 or ½-14 NPT
Measured variable	Gauge and absolute pressure		or Pg 11
Inputs			<ul> <li>M12 connector</li> <li>2 or 3-wire (0.5 mm<sup>2</sup>) cable</li> </ul>
Measuring range			(∅ ± 5.4 mm)
<ul><li>Gauge pressure</li><li>Metric</li></ul>	1 60 hor (15 970 poi)		<ul> <li>Cable quick screw connection</li> </ul>
- US measuring range	1 60 bar (15 870 psi) 15 1000 psi	Wetted parts materials	
Absolute pressure		<ul> <li>Measuring cell</li> </ul>	Al <sub>2</sub> O <sub>3</sub> - 96 %
<ul><li>Metric</li><li>US measuring range</li></ul>	0.6 16 bar a (10 232 psia) 10 300 psia	Process connection	Stainless steel, mat. No. 1.4404 (SST 316 L)
Output		Gasket	• FPM (Standard)
Current signal	4 20 mA		<ul> <li>Neoprene</li> </ul>
• Load	(U <sub>B</sub> - 10 V) / 0.02 A		<ul><li>Perbunan</li></ul>
<ul> <li>Auxiliary power U<sub>B</sub></li> </ul>	DC 7 33 V (10 30 V for Ex)		• EPDM
Voltage signal	0 10 V DC	Non-wetted parts materials	
• Load	≥ 10 kΩ	• Enclosure	Stainless steel, mat. No. 1.4404 (SST 316 L)
<ul> <li>Auxiliary power U<sub>B</sub></li> </ul>	12 33 V DC	• Rack	Plastic
Power consumption	< 7 mA at 10 kΩ	• Cables	PVC
Characteristic curve	Linear rising	Certificates and approvals	1 VC
Measuring accuracy		Classification according to pressure	For gases of fluid group 1 and
Error in measurement at limit setting incl. hysteresis and reproducibility	Typical: 0.25 % of full-scale value  Maximum: 0.5 % of full-scale value	equipment directive (PED 97/23/EC)	liquids of fluid group 1; complies with requirements of article 3, paragraph 3 (sound engineering practice)
Stan raananaa tima T	lue < 5 ms	Lloyds Register of Shipping (LR)	Applied
Step response time T <sub>99</sub> Long-term stability	< 5 (1)(5	Germanischer Lloyds Register of	Applied
Lower range value and measuring	0.25 % of full-scale value/year	Shipping (GL)  American Bureau of Shipping (ABS)	Applied
span		Bureau Veritas (BV)	Applied
Influence of ambient temperature		Det Norske Veritas (DNV)	Applied
<ul> <li>Lower range value and measuring span</li> </ul>	0.25 %/10 K of full-scale value	Drinking water approval (ACS)	Applied
<ul> <li>Influence of power supply</li> </ul>	0.005 %/V	GOST	Applied
Conditions of use		Explosion protection	
Process temperature with gasket made of:		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
• FPM (Standard)	-15 +125 °C (+5 +257 °F)	EC type-examination certificate	Da/Db SEV 10 ATEX 0146
Neoprene	-35 +100 °C (-31 +212 °F)	Connection to certified intrinsically-	
Perbunan	-20 +100 °C (-4 +212 °F)	safe resistive circuits with maxi-	$U_i \le 30 \text{ V DC}; I_i \le 100 \text{ mA};$ $P_i \le 0.75 \text{ W}$
• EPDM	-40 +145 °C (-40 +293 °F), usable for drinking water	mum values:	1 0 nH 0 0 nF
Ambient temperature	-25 +85 °C (-13 +185 °F)	Effective internal inductance and capacity for versions with plugs per	$L_i = 0 \text{ nH}; C_i = 0 \text{ nF}$
Storage temperature	-50 +100 °C (-58 +212 °F)	EN 175301-803-A and M12	
Degree of protection (to EN 60529)	<ul> <li>IP 65 with connector per EN 175301-803-A</li> <li>IP 67 with M12 connector</li> <li>IP 67 with cable</li> <li>IP 67 with cable quick screw</li> </ul>		
	connection		
Electromagnetic compatibility	<ul> <li>acc. EN 61326-1/-2/-3</li> <li>acc. NAMUR NE21, only for ATEX versions and with a max. measuring deviation ≤ 1 %</li> </ul>		

Pressure Measurement
Transmitters for basic requirements
SITRANS P200
for gauge and absolute pressure

Selection an	d ordering data								Order No.	Order co
	200 pressure tran			and abso	lute pressure	for general	applications	D)	7MF1565-	
	ic curve deviation									
	materials: Cerami			sealing m	aterial					
Non-wetted p	parts materials: sta	inless stee	el							
Measuring ra	ange	Overloa	d limit			Burst press	sure			
		Min.		Max.						
For gauge pi	raccura							_		
• • •		0.45	( E O!)	0.5 6	(00.00:)	0.5.5	( 000:)		0.04	
) 1 bar ) 1.6 bar	(0 14.5 psi)		(-5.8 psi) (-5.8 psi)	2.5 bar 4 bar	(36.26 psi)	> 2,5 bar > 4 bar	(> 36.3 psi)		3 B A	
) 1.6 bar	(0 23.2 psi) (0 36.3 psi)		(-3.6 psi)	6.25 bar	(58.02 psi) (90.65 psi)	> 4 bai > 6,25 bar	(> 58.0 psi) (> 90.7 psi)	•	3 B B 3 B D	
) 2.5 bar	(0 58.0 psi)	-0.8 bar	(-11.6 psi)	10 bar	(90.65 psi) (145 psi)	> 0,25 bar	(> 90.7 psi) (> 145 psi)		3 B E	
0 4 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	
) 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 60 bar	(0 580 psi) (0 870 psi)	-1 bar	(-14.5 psi)	100 bar	(1450 psi)	> 100 bar	(> 1450 psi)		3 C E	
		-1 bar	(-14.5 psi)	150 bar	(2175 psi)	> 150 bar	(> 2175 psi)		3 C G	
Other version	n, add order code	and plain	text: Measur	ing range:	up to bar	(psi)			9 A A	H.
For absolute	pressure	<u> </u>		<u> </u>						
	(0 8.7 psia)	0 bar a	(0 psia)	3 bar a	(43.51 psia)	> 2,5 bar a	(> 36.3 psia)		5 A G	
0 1 bar a	(0 14.5 psia)	0 bar a	(0 psia)		(36.26 psia)		(> 36.3 psia)		5 B A	
0 1.6 bar a	(0 23.2 psia)	0 bar a	(0 psia)	4 bar a	(58.02 psia)	> 4 bar a	(> 58.0 psia)		5 B B	
0 2.5 bar a	(0 36.3 psia)	0 bar a	(0 psia)	6.25 bar a	a (90.65 psia)	> 6,25 bar a	(> 90.7 psia)	▶	5 B D	
0 4 bar a	(0 58.0 psia)	0 bar a	(0 psia)	10 bar a	(145 psia)	> 10 bar a	(> 145 psia)	▶	5 B E	
0 6 bar a	(0 87.0 psia)	0 bar a	(0 psia)	15 bar a	(217 psia)	> 15 bar a	(> 217 psia)	▶	5 B G	
0 10 bar a	(0 145 psi)	0 bar a	(0 psia)	25 bar a	(362 psia)	> 25 bar a	(> 362 psia)	▶	5 C A	
0 16 bar a	(0 232 psi)	0 bar a	(0 psia)	40 bar a	(580 psia)	> 40 bar a	(> 580 psia)	▶	5 C B	
Other version	n, add order code	and plain	text: Measuri	ing range:	up to mb	ar a (psia)			9 A A	H-
Measuring ra	anges for gauge	pressure (	only for US	market)						
	(0 15 psi)		(-5.8 psi)		(35 psi)	1	(> 35 psi)		4 B B	
	(3 15 psi)		(-5.8 psi)		(35 psi)		(> 35 psi)		4 B C	
	(0 20 psi)		(-5.8 psi)		(50 psi)		(> 50 psi)		4 B D	
	(0 30 psi)		(-5.8 psi)		(80 psi)		(> 80 psi)		4 B E	
	(0 60 psi)		(-11.5 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)								4 C D	
	(0 500 psi)		(-14.5 psi) (-14.5 psi)		(800 psi) (1400 psi)		(> 800 psi) (> 1400 psi)		4 C E	
	(0 750 psi)		(-14.5 psi) (-14.5 psi)		(2000 psi)		(> 2000 psi)		4 C F	
	(0 1000 psi)		(-14.5 psi)		(2000 psi)		(> 2000 psi)		4 C G	
Oth or coreion						1	(× 2000 po.)			
	n, add order code	•							9 A A	H.
vieasuring ra	anges for absolut	te pressui	` •	JS market	•	1	/- OF :!-\		242	
	(0 10 psia)		(0 psia)		(35 psia)		(> 35 psia)		6 A G	
	(0 15 psia)		(0 psia)		(35 psia)		(> 35 psia)		6 B A	
	(0 20 psia)		(0 psia)		(50 psia)		(> 50 psia)		6 B B	
	(0 30 psia)		(0 psia)		(80 psia)		(> 80 psia)		6 B D	
	(0 60 psia)		(0 psia)		(140 psia)		(> 140 psia)		6 B E	
	(0 100 psia)		(0 psia)		(200 psia)		(> 200 psia)		6 B G	
	(0 150 psia)		(0 psia)		(350 psia)		(> 350 psia)		6 C A	
	(0 200 psia)		(0 psia)		(550 psia)		(> 550 psia)		6 C B	
	(0 300 psia)		(0 psia)		(800 psia)		(> 800 psia)		6 C C	
Thor wording	n, add order code	and plain	toxt: Mooguri	na ronaci	to	_			9 A A	H-

Available ex stock

SITRANS P200 for gauge and absolute pressure

Selection and ordering data		Order No.		Orde	code
SITRANS P 200 pressure transmitters for pressure and absolute pressure for general applications Accuracy typ. 0.25 $\%$	D)	7MF1565-			
Wetted parts materials: Ceramic and stainless steel + sealing material					
Non-wetted parts materials: stainless steel					
Output signal					
4 20 mA; two-wire system; power supply 7 33 V DC (10 30 V DC for ATEX versions) 0 10 V; three-wire system; power supply 12 33 V DC	<b>&gt;</b>	0 1 (	)		
Explosion protection (only 4 20 mA)					
None	<b>&gt;</b>	(	)		
With explosion protection EEx ia IIC T4	•	1	l		
Electrical connection					
Connector per DIN EN 175301-803-A, stuffing box thread M16 (with coupling) Round connector M12 per DIN EN 60139-9 (not for gauge pressure ranges ≤ 16 bar) Connection via fixed mounted cable, 2m (not for type of protection "Intrinsic safety i") Cable quick screw connection PG9 (not for type of protection "Intrinsic safety i") Connector per DIN EN 175301-803-A, stuffing box thread 1/2"-14 NPT (with coupling) Connector per DIN EN 175301-803-A, stuffing box thread PG11 (with coupling) Special version	•	(			N 1 Y
Process connection					
G½" male per EN 837-1 (½" BSP male) (standard for metric pressure ranges mbar, bar) G½" male thread and G1/8" female thread G¼" male per EN 837-1 (¼" BSP male) 7/16"-20 UNF male	•			A B C D	
1/4"-18 NPT male (standard for pressure ranges inH <sub>2</sub> O and psi) 1/4"-18 NPT female 1/2"-14 NPT male 1/2"-14 NPT female 1/2"-10 UNF female 1/16"-20 UNF female 1/20 M20x1.5 male				E F G H J P	
Special version				z	P 1 Y
Sealing material between sensor and enclosure		-			
Viton (FPM, standard) Neoprene (CR) Perbunan (NBR) EPDM Special version	•			A B C D	Q1Y
Version Standard version	<b>&gt;</b>			1	
Further designs					
Supplement the order no. with "-Z" and add order code.					
Manufacturer's test certificate M per DIN 55340, Part 18 and ISO 8402 (calibration certificate) supplied		C11			
Oxygen application, oil and grease-free cleaning (only in conjunction with the sealing material Viton between sensor and enclosure)		E10			
Available av stock					

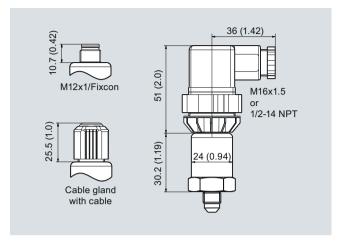
Available ex stock

D) Subject to export regulations AL: N, ECCN: EAR99H.

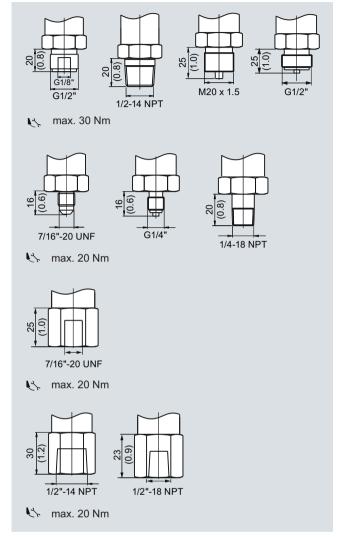
# Transmitters for basic requirements

SITRANS P200 for gauge and absolute pressure

# Dimensional drawings



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

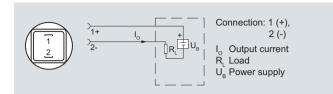


SITRANS P200, process connections, dimensions in mm (inch)

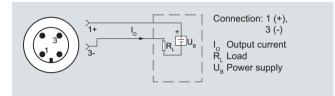
# Transmitters for basic requirements

SITRANS P200 for gauge and absolute pressure

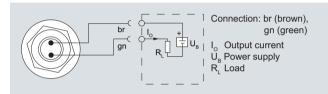
#### Schematics



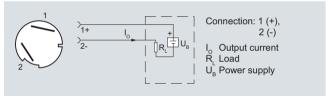
Connection with current output and connector per EN 175301



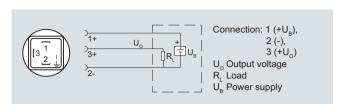
Connection with current output and connector M12x1



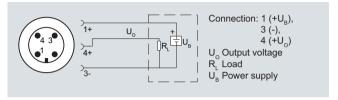
Connection with current output and cable



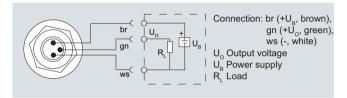
Connection with current output and cable quick screw connection



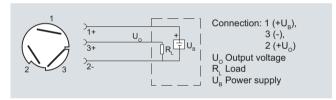
Connection with voltage output and connector per EN 175301



Connection with voltage output and connector M12x1



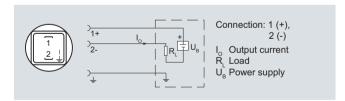
Connection with voltage output and cable



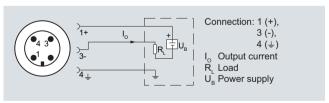
Connection with voltage output and cable quick screw connection

# Version with explosion protection: 4 ... 20 mA

The grounding connection is conductively bonded to the transmitter enclosure



Connection with current output and connector per EN 175301 (Ex)



Connection with current output and connector M12x1 (Ex)

# Transmitters for basic requirements

SITRANS P210 for gauge pressure

### Overview



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

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

### Benefits

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

# Application

The pressure transmitter SITRANS P210 for gauge 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 used with a connector per EN 175301-803-A (IP65), a round plug M12 (IP67), a cable (IP67) or a cable quick screw connection (IP67) connected electrically. The output signal is between 4 and 20 mA or 0 and 10 V.

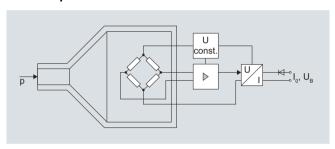
#### Device structure with explosion protection

The pressure transmitter consists of a piezoresistive measuring cell with a diaphragm installed in a stainless steel enclosure. It can be used with a connector per EN 175301-803-A (IP65) or a round plug M12 (IP67) connected electrically. 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 transmitters (7MF1566-...), functional diagram

The stainless steel measuring cell 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.

SITRANS P210 for gauge pressure

Technical specifications			
Application		Design	
Gauge measurement	Liquids, gases and vapors	Weight	Approx. 0.090 kg (0.198 lb)
Mode of operation		Process connections	See dimension drawings
Measuring principle	Piezoresistive measuring cell (stainless steel diaphragm)	Electrical connections	<ul> <li>Connector per EN 175301-803-A Form A with cable inlet M16x1.5 or ½-14 NPT</li> </ul>
Measured variable	Gauge pressure		or Pg 11
Inputs			• M12 connector
Measuring range			<ul> <li>2 or 3-wire (0.5 mm<sup>2</sup>) cable (Ø ± 5.4 mm)</li> </ul>
Gauge pressure	100 600 mbar (1.5 8.7 psi)		Cable quick screw connection
Output		Wetted parts materials	
Current signal	4 20 mA	Measuring cell	Stainless steel, matNo. 1.4435
• Load	(U <sub>B</sub> - 10 V) / 0.02 A	<ul> <li>Process connection</li> </ul>	Stainless steel, mat. No. 1.4404 (SST 316 L)
<ul> <li>Auxiliary power U<sub>B</sub></li> </ul>	DC 7 33 V (10 30 V for Ex)	Gasket	• FPM (Standard)
Voltage signal	0 10 V DC	Gasket	Neoprene
• Load	≥ 10 kΩ		Perbunan
<ul> <li>Auxiliary power U<sub>B</sub></li> </ul>	12 33 V DC		• EPDM
<ul> <li>Power consumption</li> </ul>	< 7 mA at 10 k $\Omega$	Non-wetted parts materials	
Characteristic curve	Linear rising	• Enclosure	Stainless steel, mat. No. 1.4404
Measuring accuracy			(SST 316 L)
Error in measurement at limit setting	<ul> <li>Typical: 0.25 % of full-scale value</li> </ul>	• Rack	Plastic
incl. hysteresis and reproducibility	Maximum: 0.5 % of full-scale va-	• cables	PVC
	lue	Certificates and approvals	Fan area of fluid amount down
Step response time T <sub>99</sub>	< 5 ms	Classification according to pressure equipment directive	For gases of fluid group 1 and liquids of fluid group 1;
Long-term stability  • Lower range value and measuring	0.25 % of full-scale value/year	(PED 97/23/EC)	meets requirements as per article 3, paragraph 3 (good engineering practice)
span		Lloyds Register of Shipping (LR)	Applied
Influence of ambient temperature	- 0.0F 0/40 K - f full l l	Germanischer Lloyds Register of	Applied
<ul> <li>Lower range value and measuring span</li> </ul>	<ul><li>0.25 %/10 K of full-scale value</li><li>0.5 %/10K of full-scale value</li></ul>	Shipping (GL)	
·	for a measuring range	American Bureau of Shipping (ABS)	Applied
	100 400 mbar	Bureau Veritas (BV)	Applied
• Influence of power supply	0.005 %/V	Det Norske Veritas (DNV)	Applied
Conditions of use		Drinking water approval (ACS)	Applied
Process temperature with gasket made of:		GOST	Applied
• FPM (Standard)	-15 +125 °C (+5 +257 °F)	Explosion protection	
Neoprene	-35 +100 °C (-31 +212 °F)	Intrinsic safety "i" (only with current output)	Ex II 1/2 G Ex ia IIC T4 Ga/Gb
Perbunan	-20 +100 °C (-4 +212 °F)	output)	Ex II 1/2 D Ex ia IIIC T125 °C Da/Db
• EPDM	-40 +145 °C (-40 +293 °F), usable for drinking water	EC type-examination certificate	SEV 10 ATEX 0146
Ambient temperature	-25 +85 °C (-13 +185 °F)	Connection to certified intrinsically- safe resistive circuits with maxi-	$U_i \le 30 \text{ V DC}; I_i \le 100 \text{ mA};$
Storage temperature	-50 +100 °C (-58 +212 °F)	mum values:	$P_i \le 0.75 \text{ W}$
Degree of protection (to EN 60529)	IP 65 with connector per EN 175301-803-A	Effective internal inductance and capacity for versions with plugs per	$L_i = 0 \text{ nH}; C_i = 0 \text{ nF}$
	• IP 67 with M12 connector	EN 175301-803-A and M12	
	<ul> <li>IP 67 with cable</li> </ul>		
	IP 67 with cable quick screw connection		
Electromagnetic compatibility	• acc. EN 61326-1/-2/-3		
	<ul> <li>acc. NAMUR NE21, only for ATEX versions and with a max. measuring deviation ≤ 1 %</li> </ul>		
NA Alice access a latin co	2.13		

Mounting position

upright

# Pressure Measurement Transmitters for basic requirements SITRANS P210 for gauge pressure

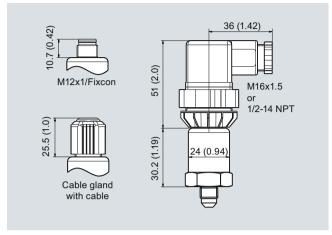
SITRANS P 210 pres								-			0.1	der cod
Accuracy typ. 0.25 %		nitters for	gauge press	sure for low p	ressure app	lications		D)	7MF1566			
Wetted parts material		steel + sea	aling material									
Non-wetted parts ma												
Measuring range		Overload	limit			Burst r	ressure					
modouring range		min.		max.		Duiot p						
For gouge process				max.								
For gauge pressure	i	10 mb ar	( 0 E0 mai)	QEO mb or	(0.00 mai)	l O E box	(7.05 noi)			2 4 4		
0 100 mbar (0.58 0 160 mbar (2.32		40 mbar 40 mbar	(-0.58 psi) (-0.58 psi)	250 mbar 400 mbar	(3.63 psi) (5.8 psi)	0.5 bar 0.5 bar	(7.25 psi) (7.25 psi)	<b>&gt;</b>		3 A A 3 A B		
0 250 mbar (3.63	1 /	-80 mbar	(-1.16 psi)	625 mbar	(9.06 psi)	1 bar	(14.5 psi)			3 A C		
0 400 mbar (5.8		-80 mbar	(-1.16 psi)	1000 mbar	(14.5 psi)	1 bar	(14.5 psi)	▶		3 A D		
0 600 mbar (8.7	psi) -	100 mbar	(-1.45 psi)	1500 mbar	(21.76 psi)	2.5 bar	(36.26 psi)	•		3 A G		
Other version, add or Measuring range: (			rt:	,		'				9 A A		H 1
Output signal												
4 20 mA; two-wire	system; pow	er supply	7 33 V DC	(10 30 V DC	C for ATEX ve	ersions)		<b></b>		0		
0 10 V; three-wire s						-,		•		1 0		
Explosion protection	n (only 4 2	20 mA)										
None	- *	-						<b></b>		O		
With explosion protec	ction EEx ia II	IC T4						•		1		
Electrical connectio	n											
Connector per DIN E	N 175301-80	3-A. stuffii	na box threac	d M16 (with co	uplina)			•			1	
Round connector M1			•	•	. 0,	ır)					2	
Connection via fixed						")				0	3	
Cable quick screw co		•			. ,					0	-	
Connector per DIN El			•		•	g)					5	
Connector ner i IIIVI EI	N 1 /5:3(11-8f)	J3-A. STUTTII	na nox thread								6	
•	11 175501-00	,	ng box imout	d PG11 (with c	oupling)						9	N 1
Special version				d PG11 (with c	oupling)						9	N 1
Special version  Process connection	ı				. 0,	oor)		_				N 1
Special version  Process connection  G½" male per EN 837	7-1 (½" BSP r	male) (star			. 0,	oar)		•			A	N 1
Special version  Process connection  G½" male per EN 837  G½" male thread and	7-1 (½" BSP r G1/8" femal	male) (star e thread			. 0,	oar)		•			A B	N 1
Special version  Process connection  G½" male per EN 837  G½" male thread and  G¼" male per EN 837	7-1 (½" BSP r G1/8" femal	male) (star e thread			. 0,	oar)		•			A	N 1
Special version  Process connection  G½" male per EN 837  G½" male thread and  G¼" male per EN 837  7/16"-20 UNF male	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP	male) (star e thread male)	ndard for met	ric pressure ra	. 0,	oar)		•			A B C	N 1
Special version  Process connection  G½" male per EN 837  G½" male thread and  G¼" male per EN 837  7/16"-20 UNF male  ½"-18 NPT male (star	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP	male) (star e thread male)	ndard for met	ric pressure ra	. 0,	oar)		•			A B C D	N 1
Special version  Process connection  G½" male per EN 837  G½" male thread and  G¼" male per EN 837  7/16"-20 UNF male  ½"-18 NPT male (star  ½"-18 NPT female	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP	male) (star e thread male)	ndard for met	ric pressure ra	. 0,	oar)		•			A B C D	N1
Special version  Process connection  G½" male per EN 837  G½" male thread and  G¼" male per EN 837  7/16"-20 UNF male  ½"-18 NPT male (star  ½"-18 NPT female  ½"-14 NPT male  ½"-14 NPT male	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP	male) (star e thread male)	ndard for met	ric pressure ra	. 0,	oar)		•			A B C D E F G	N 1
Special version  Process connection  G½" male per EN 837  G½" male thread and  G¼" male per EN 837  7/16"-20 UNF male  ½"-18 NPT male (star  ½"-18 NPT female  ½"-14 NPT male  ½"-14 NPT female  7/16"-20 UNF female	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP	male) (star e thread male)	ndard for met	ric pressure ra	. 0,	oar)		•			A B C D E F G H	N 1
Special version  Process connection  G½" male per EN 837  G½" male thread and  G¼" male per EN 837  7/16"-20 UNF male  ½"-18 NPT male (star  ½"-18 NPT female  ½"-14 NPT male  ½"-14 NPT female  7/16"-20 UNF female  M20x1.5 male	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP	male) (star e thread male)	ndard for met	ric pressure ra	. 0,	oar)		•			A B C D E F G H J	
Special version  Process connection  G½" male per EN 837  G½" male thread and  G¼" male per EN 837  7/16"-20 UNF male  ½"-18 NPT male (star  ½"-14 NPT male  ½"-14 NPT male  ½"-14 NPT female  7/16"-20 UNF female  M20x1.5 male  Special version	7-1 (½" BSP r G1/3" femal 7-1 (¼" BSP ndard for pre	male) (star e thread male) ssure ranç	ndard for met ges inH <sub>2</sub> O an	ric pressure ra	. 0,	oar)		•			A B C D E F G H	
Special version  Process connection  G1/2" male per EN 837  G1/2" male thread and  G1/4" male per EN 837  7/16"-20 UNF male  1/4"-18 NPT male (star  1/4"-18 NPT female  1/2"-14 NPT male  1/2"-14 NPT female  7/16"-20 UNF female  M20x1.5 male  Special version  Sealing material bet	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP ndard for pre	male) (star e thread male) ssure ranç	ndard for met ges inH <sub>2</sub> O an	ric pressure ra	. 0,	oar)		•			A B C D E F G H J	
Special version  Process connection  G½" male per EN 837  G½" male thread and  G¼" male per EN 837  7/16"-20 UNF male  ½"-18 NPT male (star  ½"-18 NPT female  ½"-14 NPT male  ½"-14 NPT female  7/16"-20 UNF female  M20x1.5 male  Special version  Sealing material bet  Viton (FPM, standard	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP ndard for pre	male) (star e thread male) ssure ranç	ndard for met ges inH <sub>2</sub> O an	ric pressure ra	. 0,	par)		<b>•</b>			A B C D E F G H J P Z	P 1
Special version  Process connection  G½" male per EN 837  G½" male thread and  G¼" male per EN 837  7/16"-20 UNF male  ½"-18 NPT male (star  ½"-18 NPT female  ½"-14 NPT male  ½"-14 NPT female  ½"-150 UNF female  M20x1.5 male  Special version  Sealing material bet  Viton (FPM, standard  Neoprene (CR)	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP ndard for pre	male) (star e thread male) ssure ranç	ndard for met ges inH <sub>2</sub> O an	ric pressure ra	. 0,	oar)					A B C D E F G H J P Z	P 1
Special version  Process connection  G1/2" male per EN 837  G1/2" male thread and  G1/4" male per EN 837  7/16"-20 UNF male  1/4"-18 NPT male (star  1/4"-18 NPT female  1/2"-14 NPT male  1/2"-14 NPT female  1/2"-15 male  Special version  Sealing material bet  Viton (FPM, standard  Neoprene (CR)  Perbunan (NBR)	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP ndard for pre	male) (star e thread male) ssure ranç	ndard for met ges inH <sub>2</sub> O an	ric pressure ra	. 0,	oar)					A B C D E F G H J P Z	P 1
Special version  Process connection  G1/2" male per EN 837  G1/2" male thread and  G1/4" male per EN 837  7/16"-20 UNF male  1/4"-18 NPT male (star  1/4"-18 NPT female  1/2"-14 NPT male  1/2"-14 NPT female  1/2"-14 NPT female  1/16"-20 UNF female  M20x1.5 male  Special version  Sealing material bet  Viton (FPM, standard  Neoprene (CR)	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP ndard for pre	male) (star e thread male) ssure ranç	ndard for met ges inH <sub>2</sub> O an	ric pressure ra	. 0,	oar)					A B C D E F G H J P Z	P 1
Special version  Process connection  G1/2" male per EN 837  G1/2" male thread and  G1/4" male per EN 837  7/16"-20 UNF male  1/4"-18 NPT male (star  1/4"-18 NPT female  1/2"-14 NPT male  1/2"-14 NPT female  1/2"-14 NPT female  1/2"-15 male  Special version  Sealing material bet  Viton (FPM, standard  Neoprene (CR)  Perbunan (NBR)  EPDM	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP ndard for pre	male) (star e thread male) ssure ranç	ndard for met ges inH <sub>2</sub> O an	ric pressure ra	. 0,	oar)					A B C D E F G H J P Z	P 1
Special version  Process connection  G1/2" male per EN 837  G1/2" male thread and  G1/4" male per EN 837  7/16"-20 UNF male  1/4"-18 NPT male (star  1/4"-18 NPT female  1/2"-14 NPT female  1/2"-14 NPT female  1/2"-14 NPT female  1/2"-14 NPT female  1/2"-15 UNF female  1/2"-16"-20 UNF female  1/2"-14 NPT female  1/4"-15 NPT f	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP ndard for pre	male) (star e thread male) ssure ranç	ndard for met ges inH <sub>2</sub> O an	ric pressure ra	. 0,	oar)					A B C D E F G H J P Z	P 1
Special version  Process connection  G1/2" male per EN 837  G1/2" male thread and  G1/4" male per EN 837  7/16"-20 UNF male  1/4"-18 NPT male (star  1/4"-18 NPT male  1/2"-14 NPT male  1/2"-14 NPT male  1/2"-14 NPT female  1/16"-20 UNF female  1/2"-14 NPT male  1/4"-15 NPT male	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP ndard for pre	male) (star e thread male) ssure ranç	ndard for met ges inH <sub>2</sub> O an	ric pressure ra	. 0,	oar)		<b>•</b>			A B C D E F G H J P Z	P 1
Special version  Process connection  G½" male per EN 837  G½" male thread and  G¼" male per EN 837  7/16"-20 UNF male  ½"-18 NPT male (star  ½"-18 NPT male  ½"-14 NPT male  ½"-14 NPT male  ½"-14 NPT female  M20x1.5 male  Special version  Sealing material bet  Viton (FPM, standard, Neoprene (CR)  Perbunan (NBR)  EPDM  Special version  Version  Standard version  Further designs	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP ndard for pre	male) (star e thread male) ssure rang	ndard for met	ric pressure ra	. 0,	oar)		<b>•</b>			A B C D E F G H J P Z	P 1
Special version  Process connection  G1/2" male per EN 837  G1/2" male thread and  G1/4" male per EN 837  7/16"-20 UNF male  /4"-18 NPT male (star  /4"-18 NPT male  /2"-14 NPT male  /2"-14 NPT female  /2"-14 NPT female  M20x1.5 male  Special version  Sealing material bet  Viton (FPM, standard  Neoprene (CR)  Perbunan (NBR)  EPDM  Special version  Version  Standard version	7-1 (½" BSP r G1/8" femal 7-1 (¼" BSP andard for pre	male) (star e thread male) ssure rang or and enc	ges inH <sub>2</sub> O and	ric pressure ra	inges mbar, t		sunnliad	<b>•</b>	C11		A B C D E F G H J P Z	P1

D) Subject to export regulations AL: N, ECCN: EAR99H.

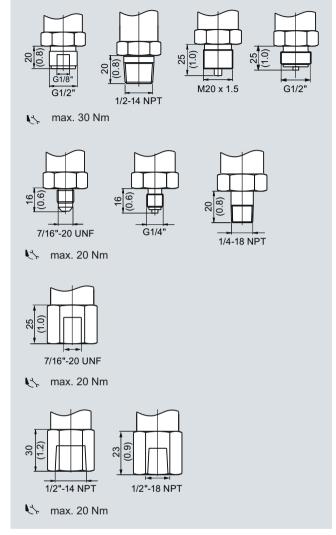
# Transmitters for basic requirements

SITRANS P210 for gauge pressure

# Dimensional drawings



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

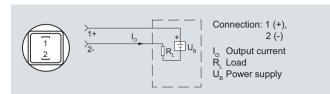


SITRANS P210, process connections, dimensions in mm (inch)

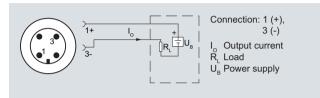
# Transmitters for basic requirements

SITRANS P210 for gauge pressure

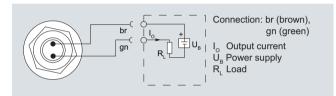
# Schematics



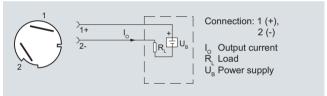
Connection with current output and connector per EN 175301



Connection with current output and connector M12x1



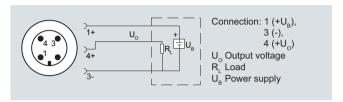
Connection with current output and cable



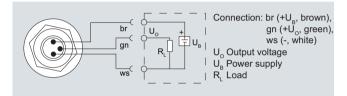
Connection with current output and cable quick screw connection

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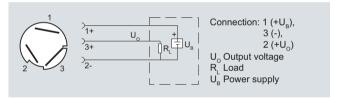
Connection with voltage output and connector per EN 175301



Connection with voltage output and connector M12x1



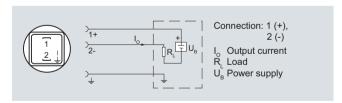
Connection with voltage output and cable



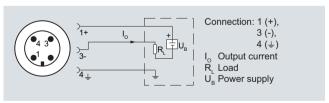
Connection with voltage output and cable quick screw connection

# Version with explosion protection: 4 ... 20 mA

The grounding connection is conductively bonded to the transmitter enclosure



Connection with current output and connector per EN 175301 (Ex)



Connection with current output and connector M12x1 (Ex)

# Transmitters for basic requirements

SITRANS P220 for gauge pressure

#### Overview



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

- · Stainless steel measuring cell, fully welded
- Measuring ranges 2.5 to 600 bar (36.3 to 8702 psi) relative
- For high-pressure applications and refrigeration technology division

#### Benefits

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

# Application

The pressure transmitter SITRANS P220 for gauge 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 used with a connector per EN 175301-803-A (IP65), a round plug M12 (IP67), a cable (IP67) or a cable quick screw connection (IP67) connected electrically. The output signal is between 4 and 20 mA or 0 and 10 V.

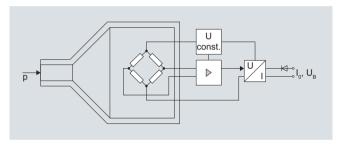
#### Device structure with explosion protection

The pressure transmitter consists of a piezoresistive measuring cell with a diaphragm installed in a stainless steel enclosure. It can be used with a connector per EN 175301-803-A (IP65) or a round plug M12 (IP67) connected electrically. 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.

SITRANS P220 for gauge pressure

Technical specifications			
Application		Design	
Gauge pressure measurement	Liquids, gases and vapors	Weight	Approx. 0.090 kg (0.198 lb)
Mode of operation		Process connections	See dimension drawings
Measuring principle	Piezoresistive measuring cell (stainless steel diaphragm)	Electrical connections	Connector per     EN 175301-803-A Form A with     Solar M1001 For 1/ 14 NDT
Measured variable	Gauge pressure		cable inlet M16x1.5 or ½-14 NPT or Pg 11
Inputs			M12 connector
Measuring range			<ul> <li>2 or 3-wire (0.5 mm<sup>2</sup>) cable (Ø ± 5.4 mm)</li> </ul>
Gauge pressure     Metric	2.5 600 bar		Cable quick screw connection
- Wettie	(36 8700 psi)	Wetted parts materials	
- US measuring range	30 8700 psi	Measuring cell	Stainless steel, matNo. 1.4016
Output		Process connection	Stainless steel, mat. No. 1.4404
Current signal	4 20 mA		(SST 316 L)
• Load	(U <sub>B</sub> - 10 V) / 0.02 A	Non-wetted parts materials	
<ul> <li>Auxiliary power U<sub>B</sub></li> </ul>	DC 7 33 V (10 30 V for Ex)	• Enclosure	Stainless steel, mat. No. 1.4404 (SST 316 L)
Voltage signal	0 10 V DC	• Rack	Plastic
• Load	≥ 10 kΩ	• cables	PVC
<ul> <li>Auxiliary power U<sub>B</sub></li> </ul>	12 33 V DC	Certificates and approvals	1 40
<ul> <li>Power consumption</li> </ul>	$<$ 7 mA at 10 k $\Omega$		For some of fluid around 1 and
Characteristic curve	Linear rising	Classification according to pressure equipment directive	For gases of fluid group 1 and liquids of fluid group 1; complies
Measuring accuracy	- Turisal 0.05 0/ affull assis	(PED 97/23/EC)	with requirements of article 3, paragraph 3 (sound engineering
Error in measurement at limit setting incl. hysteresis and reproducibility	<ul> <li>Typical: 0.25 % of full-scale value</li> </ul>		practice)
	• Maximum: 0.5 % of full-scale va-	Lloyds Register of Shipping (LR)	Applied
Step response time T <sub>99</sub>	lue < 5 ms	Germanischer Lloyds Register of Shipping (GL)	Applied
Long-term stability		American Bureau of Shipping (ABS)	Applied
Lower range value and measuring	0.25 % of full-scale value/year	Bureau Veritas (BV)	Applied
span	o.zo /o or rail odalo valdo, your	Det Norske Veritas (DNV)	Applied
Influence of ambient temperature		Drinking water approval (ACS)	Applied
<ul> <li>Lower range value and measuring span</li> </ul>	0.25 %/10 K of full-scale value	GOST  Explosion protection	Applied
Influence of power supply	0.005 %/V	Intrinsic safety "i" (only with current	Ex II 1/2 G Ex ia IIC T4 Ga/Gb
Conditions of use	00 100 00 / 00 040 05	output)	Ex II 1/2 D Ex ia IIIC T125 °C Da/Db
Process temperature	-30 +120 °C (-22 +248 °F)	EC type-examination certificate	SEV 10 ATEX 0146
Ambient temperature	-25 +85 °C (-13 +185 °F)	Connection to certified intrinsically-	$U_i \le 30 \text{ V DC}; I_i \le 100 \text{ mA};$
<ul><li>Storage temperature</li><li>Degree of protection (to EN 60529)</li></ul>	-50 +100 °C (-58 +212 °F) • IP 65 with connector per	safe resistive circuits with maximum values:	P <sub>i</sub> ≤ 0.75 W
,	EN 175301-803-A  • IP 67 with M12 connector  • IP 67 with cable	Effective internal inductance and capacity for versions with plugs per EN 175301-803-A and M12	$L_i = 0 \text{ nH}; C_i = 0 \text{ nF}$
	<ul> <li>IP 67 with cable quick screw</li> </ul>		

connection

• acc. EN 61326-1/-2/-3

• acc. NAMUR NE21, only for ATEX versions and with a max. measuring deviation ≤ 1 %

Electromagnetic compatibility

SITRANS P220 for gauge pressure

Selection an	d ordering data								Order No.	Orde	r code
SITRANS P 2 applications Accuracy typ	220 pressure transı , fully-welded versi . 0.25 %	nitters for on	r gauge pres	ssure, high	n-pressure an	d refrigera	tion	D)	7MF1567-	A	
Vetted parts	materials: stainless	steel									
Non-wetted p	arts materials: stain	less steel									
Measuring ra	ange	Overloa	d limit			Burst pre	essure				
	-	Mini- mum		Max.							
or gauge pi	ressure	1									
2.5 bar 4 bar 6 bar 10 bar	(0 36.3 psi) (0 58 psi) (0 87 psi) (0 145 psi)		(-11.6 psi) (-11.6 psi) (-14.5 psi) (-14.5 psi)	6.25 bar 10 bar 15 bar 25 bar	(90.7 psi) (145 psi) (217 psi) (362 psi)	25 bar 40 bar 60 bar 60 bar	(363 psi) (870 psi) (522 psi) (870 psi)	<b>* * * *</b>	3 B D 3 B E 3 B G 3 C A		
16 bar 25 bar 40 bar	(0 232 psi) (0 363 psi) (0 580 psi)	-1 bar -1 bar -1 bar	(-14.5 psi) (-14.5 psi) (-14.5 psi)	40 bar 62.5 bar 100 bar	(580 psi) (906 psi) (1450 psi)	96 bar 150 bar 240 bar	(1392 psi) (2176 psi) (3481 psi)	<b>* * *</b>	3 C B 3 C D 3 C E		
0 60 bar 0 100 bar 1 160 bar 1 250 bar 1 400 bar 1 600 bar	(0 870 psi) (0 1450 psi) (0 2320 psi) (0 3625 psi) (0 5801 psi) (0 8702 psi)	-1 bar -1 bar -1 bar -1 bar -1 bar -1 bar	(-14.5 psi) (-14.5 psi) (-14.5 psi) (-14.5 psi) (-14.5 psi) (-14.5 psi)	150 bar 250 bar 400 bar 625 bar 1000 bar 1500 bar	(2175 psi) (3625 psi) (5801 psi) (9064 psi) (14503 psi) (21755 psi)	360 bar 600 bar 960 bar 1500 bar 2400 bar 2500 bar	(5221 psi) (8702 psi) (13924 psi) (21756 psi) (34809 psi) (36260 psi)	•	3 C G 3 D A 3 D B 3 D D 3 D E 3 D G		
Neasuring ra	n, add order code ar .nge: up to bar ( anges for gauge pr	psi)							9 A A		H1
Other version Output signa	(0 30 psi) (0 60 psi) (0 100 psi) (0 150 psi) (0 200 psi) (0 300 psi) (0 500 psi) (0 750 psi) (0 1500 psi) (0 1500 psi) (0 2000 psi) (0 2000 psi) (0 2000 psi) (0 3000 psi) (0 5000 psi) (0 6000 psi (0 8700 psi) a, add order code ar	nd plain te	(-5.8 psi) (-11.5 psi) (-14.5 psi)	g range:	(75 psi) (150 psi) (250 psi) (250 psi) (375 psi) (500 psi) (750 psi) (1250 psi) (2500 psi) (3750 psi) (5000 psi) (7500 psi) (15000 psi) (15000 psi) (21000 psi) up to psi		(360 psi) (580 psi) (580 psi) (580 psi) (870 psi) (1390 psi) (2170 psi) (3480 psi) (5220 psi) (5220 psi) (8700 psi) (13920 psi) (21750 psi) (34800 psi) (34800 psi) (52200 psi)		4 B E 4 B F 4 B G 4 C A 4 C B 4 C D 4 C E 4 C F 4 C G 4 D A 4 D B 4 D D 4 D E 4 D F 4 D G 9 A A		Н1
10 V; thre	wo-wire system; powee-wire system; powerotection (only 4	er supply			V DC for ATE	(versions)		<b>&gt;</b>	0 1 0		
one	n protection EEx ia I	•						<b>A</b>	0 1		
lectrical co	nnection	-		-		-					
ound connection versions able quick stonnector pe	er DIN EN 175301-80 ector M12 per DIN El ria fixed mounted ca screw connection PC er DIN EN 175301-80 er DIN EN 175301-80	N 60139-9 ble, 2 m (r 39 (not for 03-A, stuff	(not for gau not for type of type of prot- ing box threa	ge pressur of protection ection "Intri ad 1/2"-14 i	e ranges ≤ 16 n "Intrinsic safe nsic safety i") NPT (with coup	ety i")		•	1 2 0 3 0 4 5 6		N 1
poolal voisil	011										.,

Available ex stock

for gauge pressure

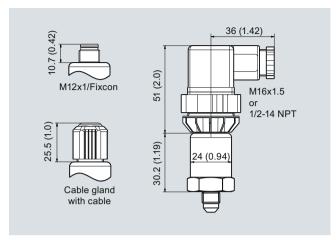
Selection and ordering data		Order No.	Orde	er code
SITRANS P 220 pressure transmitters for gauge pressure, high-pressure and refrigeration applications, fully-welded version Accuracy typ. 0.25 %	D)	7MF1567-	A	
Wetted parts materials: stainless steel				
Non-wetted parts materials: stainless steel				
Process connection				
$G\frac{1}{2}$ " male per EN 837-1 ( $\frac{1}{2}$ " BSP male) (standard for metric pressure ranges mbar, bar) $G\frac{1}{2}$ " male thread and G1/8" female thread $G\frac{1}{4}$ " male per EN 837-1 ( $\frac{1}{4}$ " BSP male) 7/16"-20 UNF male	•		A B C D	
$1/4$ "-18 NPT male (standard for pressure ranges inH $_2$ O and psi) $1/4$ "-18 NPT female (Only for measuring ranges ≤ 60 bar (870 psi)) $1/2$ "-14 NPT male $1/2$ "-14 NPT female (Only for measuring ranges ≤ 60 bar (870 psi)) $1/2$ "-20 UNF female M20x1.5 male			E F G H J P	
Special version			Z	P 1 Y
Version Standard version	<b>&gt;</b>		1	
Further designs				
Supplement the order no. with "-Z" and add order code.				
Manufacturer's test certificate M per DIN 55340, Part 18 and ISO 8402 (calibration certificate) supplied		C11		
Oxygen application, oil and grease-free cleaning		E10		
► Available ex stock				

D) Subject to export regulations AL: N, ECCN: EAR99H.

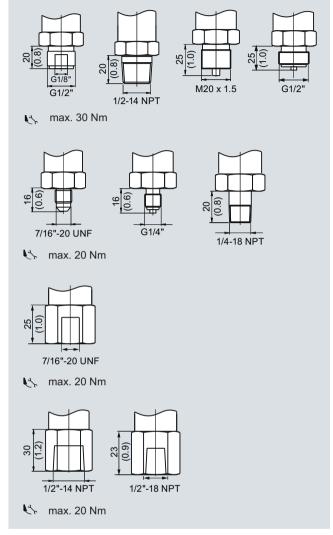
# Transmitters for basic requirements

SITRANS P220 for gauge pressure

# Dimensional drawings



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

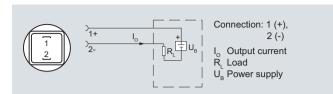


SITRANS P220, process connections, dimensions in mm (inch)

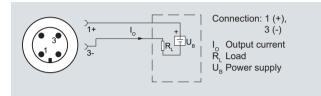
# Transmitters for basic requirements

SITRANS P220 for gauge pressure

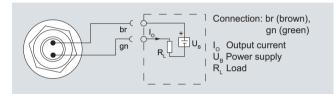
# Schematics



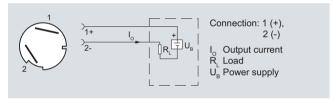
Connection with current output and connector per EN 175301



Connection with current output and connector M12x1



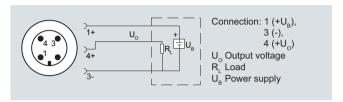
Connection with current output and cable



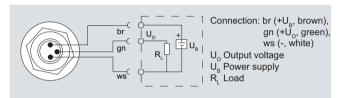
Connection with current output and cable quick screw connection

# 

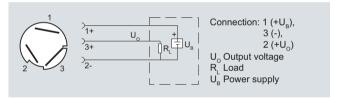
Connection with voltage output and connector per EN 175301



Connection with voltage output and connector M12x1



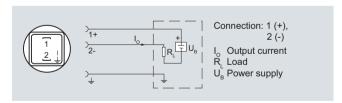
Connection with voltage output and cable



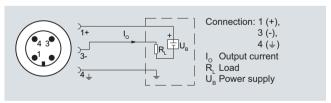
Connection with voltage output and cable quick screw connection

# Version with explosion protection: 4 ... 20 mA

The grounding connection is conductively bonded to the transmitter enclosure



Connection with current output and connector per EN 175301 (Ex)



Connection with current output and connector M12x1 (Ex)