


- Dry ceramic sensor
- Ranges from 40 mbar to 250 bar
- Accuracy $\leq 0,2\%$
- High overload capability
- Analog output: 4...20 mA, 2-wire
0...10 V, 3-wire
-  I M2 Ex ia I
II 1G Ex ia IIC T4 Ga
BVS 03 ATEX E 222 X



Pressure Transmitter P 121

Technical data:

Range:	0...40 mbar to 0...250 bar
Output signal:	4...20 mA, 2-wire, 0...10V 3-wire
Accuracy:	$\leq \pm 0,2\%$ FS ≥ 100 mbar @ 25°C
Time constant T ₉₀ :	200 ms (other on request)
Supply voltage:	9...30V DC, 20 mA output 15...30V DC, 10 V output (12...30V Ex-version)
Ambient temperature:	-25...80 °C (-20...80 °C at EX ia IIC T4 Ga)
Process temperature:	-40...100 °C (125 °C < 0,5h) (-20...80 °C at EX ia IIC T4 Ga)
Temperature coeff.:	$\leq \pm 0,015\%$ FS/K (zero) $\leq \pm 0,01\%$ FS/K (span)
Long term stability:	$\leq \pm 0,15\%$ FS p. a.
Housing:	stainless steel, 1.4404
Sensor:	ceramic AL ₂ O ₃
Electrical connection:	connector EN 175301-803A, IP65 cable PE, IP 67

Nöding

Meßtechnik

Ranges

range	gauge	absolut	overload (bar)
0...40 mbar / 0...4 kPa *	A8		- 0,3 / 4
0...50 mbar / 0...5 kPa *	B0		- 0,3 / 4
0...60 mbar / 0...6 kPa *	A9		- 0,3 / 4
0...100 mbar / 0...10 kPa	00		- 0,3 / 4
0...160 mbar / 0...16 kPa	01		- 0,6 / 5
0...200 mbar / 0...20 kPa	B1	B2	- 1 / 6
0...250 mbar / 0...25 kPa	02		- 1 / 6
0...0,4 bar / 0...40 kPa	03	28	- 1 / 6
0...0,5 bar / 0...50 kPa	B7		- 1 / 6
0...0,6 bar / 0...60 kPa	04		- 1 / 10
0...1 bar / 0...100 kPa	05	30	- 1 / 10
0...1,6 bar / 0...160 kPa	06	31	- 1 / 18
0...2 bar / 0...200 kPa	B3	B4	- 1 / 18
0...2,5 bar / 0...250 kPa	07	32	- 1 / 18
0...4 bar / 0...400 kPa	08	33	- 1 / 25
0...5 bar / 0...500 kPa	F1	F2	- 1 / 40
0...6 bar / 0...600 kPa	09	34	- 1 / 40
0...10 bar / 0...1 MPa	10	35	- 1 / 40
0...16 bar / 0...1,6 MPa	11	36	- 1 / 40
0...20 bar / 0...2 MPa	B5	B6	- 1 / 40
0...25 bar / 0...2,5 MPa	12	37	- 1 / 40
0...40 bar / 0...4 MPa	13	38	- 1 / 60
0...50 bar / 0...5 MPa	F3	F4	- 1 / 100
0...60 bar / 0...6 MPa	14	39	- 1 / 100
0...100 bar / 0...10 MPa * / **	15	40	- 1 / 250
0...160 bar / 0...16 MPa * / **	16	41	- 1 / 400
0...250 bar / 0...25 MPa * / **	17	42	- 1 / 600
-100...0 mbar / -10...0 kPa	C4		- 0,3 / 4
-100...100 mbar / -10...10 kPa	C5		- 1 / 6
-200...0 mbar / -20...0 kPa	D2		- 1 / 6
-200...200 mbar / -20...20 kPa	D3		- 1 / 6
-1...1 bar / -100...100 kPa	D6		- 1 / 10
-1...3 bar / -100...300 kPa	D8		- 1 / 25
-1...5 bar / -100...500 kPa	D9		- 1 / 40
-1...9 bar / -100...900 kPa	E1		- 1 / 40
-1...15 bar / -0,1...1,5 MPa	E2		- 1 / 40
-1...19 bar / -0,1...1,9 MPa	E3		- 1 / 40
0,8...1,2 bar / 80...120 kPa		B9	- 1 / 10

* Global error 0,5% F.S., ** Delivery on request

Range ≥ 400mbar without Ex optional also in Protection class IP 67

Ordering code

Output signal

- 1 0...10V 3-wire
- 4 4...20 mA 2-wire
- H 4...20 mA 2-wire Hightemp -25°C...120°C
- EX 4...20 mA 2-wire (Ex) II 1G Ex ia IIC T4 Ga (> 60 bar on request)
- MX 4...20 mA 2-wire (Ex) I M2 Ex ia I (> 60 bar on request)
- C 20...4 mA 2-wire

Range

Measurement range see table

99 non-standard range (on request)

Process connection and material

- 2 ½ - 14 NPT, 1.4404
- D G ¼ A DIN 3852 1.4404
- DN ¼ - 18 NPT, 1.4404
- 3 G ½ B DIN EN 837 1.4404
- G G ½ and 11,8 mm drill hole, 1.4404
- GL G ½ and 11,8 mm drill hole, 1.4539
- 4 G ½ and G ¼ female, 1.4404
- 9 others (on request)

Sensor seal

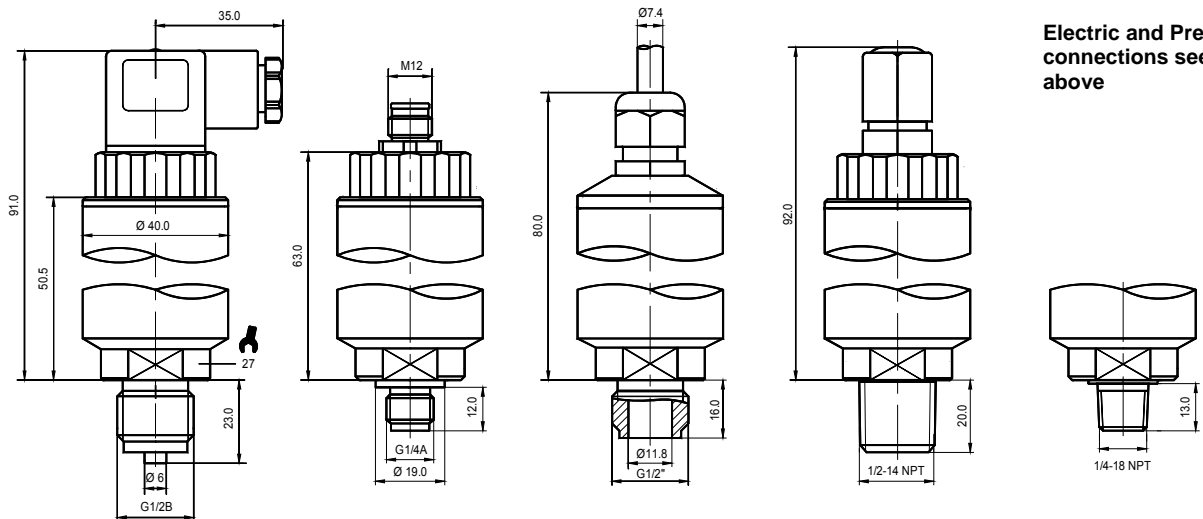
- 1 FPM (Viton) Standard
- 2 NBR (Nitril)
- 3 EPDM
- 5 Chemraz 505
- 9 others (on request)

Electrical connection

- 1 connector EN 175301-803A, IP 65
 - 4 connector EN 175301-803A, IP 65, potted electronic
 - A Connector M12x1
 - B Connector M12x1, potted electronic
 - F Quickon Connector
 - G Quickon Connector, potted electronic
 - 0 5m cable, IP 67
 - 5 5m cable, IP 67, potted electronic
 - 6 2m cable, IP 67,
 - 7 2m cable, IP 67, potted electronic
- Options**
- R Ceramic sensor 99,9% Al₂O₃
 - T Minimized case volume
 - RT Ceramic sensor 99,9% Al₂O₃ with minimized case volume

P121 - 

Dimensions (mm)

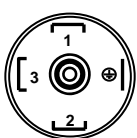


Electric and Pressure connections see above

Electrical connections

Connector

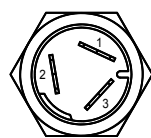
EN 175301-803A



4...20 mA 2-wires
PIN1 Signal +
PIN2 Signal -

0...10V 3-wires
PIN1 in +
PIN2 in -
PIN3 out +

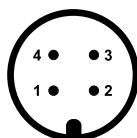
Quickon-Connector



4...20 mA 2-wires
PIN1 Signal +
PIN2 Signal -

0...10V 3-wires
PIN1 in +
PIN2 in -
PIN3 out +

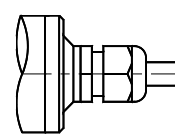
M12x1, 4-pin Connector



4...20 mA 2-wires
PIN1 (brown) Signal +
PIN3 (blue) Signal -

0...10V 3-wires
PIN1 (brown) in +
PIN3 (blue) in -
PIN4 (black) out +

Cable connection



4...20 mA 2-wires
red Signal +
black Signal -

0...10V 3-wires
red in +
black in -
white out +

Modifications reserved without notice, 03.20