

Relative pressure transmitter and electronic pressure switch programmable type 619

Pressure range
-1 ... 0 – 600 bar

www.btone-mro.com

The μ P-regulated, programmable pressure transmitter type 619 has a robust industry design. Parameters can easily be programmed with three different configuration menus with easy to operate keys. All systems are equipped with a diagnostic function. The large 4 digit LED display assures a good accuracy of reading.

- Robust industry design
- High over pressure
- 4-digit LED display
- Sensitive operation keys
- Ergonomic design
- Diagnostic function
- Front cover



Technical overview

Pressure range

Relative -1 ... 0 – 600 bar

Operating conditions

Medium		Liquids and gases
Temperature	Medium / ambient / storage	-20 ... +80 °C
	-1 ... 250 bar	4 x fs
Overload	-1 ... 400 bar	3 x fs
	-1 ... 600 bar	2 x fs
Rupture pressure		6 x fs (max. 1800 bar)

Materials

Case		Nickel plated, Zinc pressure die casting
Key protection		PC with lettering
	Sensor	Ceramic Al ₂ O ₃ (96%)
Materials in contact with medium	Pressure connection	Stainless steel 1.4305
	Sealing material	FPM

Electrical overview

Output		0 ... 10 V
		4 ... 20 mA
	Open-collector switching output for max. 200 mA, programmable NPN or PNP, contact NO or contact NC	
Power supply		17 ... 33 VDC
Load	0 ... 10 V	> 10 kOhm
	4 ... 20 mA	< 500 Ohm
Current consumption		typ. 50 mA, max. 200 mA
Polarity reversal protection	Short circuit proof and protected against polarity reversal. Each connection is protected against crossover up to max. supply voltage.	

Display

7 Segment LED, 4 digits for the indication of pressure measuring values, programming codes and parameter values.

Point-LED for state indication of switching points.

Point-LED for indication of programmed measuring unit.

Programming

All settings can be made in unpressurised state or during the operation. Ex works with standard setting. The diagnostic function is active in all menus.

Menus:

«PROG» Configuration of different system functions, input of switching point, diagnostic function

«USER» Input of switching point

«READ» Reading of all configuration- and input parameters

Display: Pressure unit in bar/psi or MPa/ psi. Reaction time eligible in steps 1% fs (slow), 0.5% fs (normal) or 10 ms (fast).

Analogue output: Response time adjustable of 5 ... 500 ms, output characteristic line adjustable of 75 ... 125% fs

Digital output: Measuring range

rising pressure 8 ... 100% fs

falling pressure 5 ... 97% fs

P or N-switching, open-close-contact, rise delay time eligible Rise delay time 0 – 50 s, Switch-off delay time 0 – 50 s, Response time 5 ... 500 ms.

Diagnostic function

Manual operation with keyboard: Test of sensor circuit and of ceramic cell as well as memorising peak pressure.

Version with diagnostic input (shunt-cal): feed-back with 50% fs signal 12 mA or 5 V.

Protection standard

IP 67

Electrical connection

Connector M12x1

Pressure connection

Inside thread G ¼

Installation arrangement

Unrestricted

Tests / Admissions

Electromagnetic compatibility CE conformity acc. EN 61326-2-3

UL

CSA

Weight

610 g

Packaging

Single packaging in cardboard

Accuracy

Parameter	Unit	-1 ... 600 bar ≤ 2-fold overload	-1 ... 400 bar ≤ 3-fold overload	-1 ... 250 bar ≤ 4-fold overload
Tolerance zero point	max. % fs	± 0.5	± 0.75	± 1.0
Toleranc full scale	max. % fs	± 0.5	± 0.75	± 1.0
Resolution	% fs	0.1	0.1	0.1
Total of linearity, hysteresis and repeatability	max. % fs	± 0.5	± 0.75	± 1.0
Long term stability acc. to DIN EN 60770	% fs	± 0.5	± 0.75	± 1.0
TC zero point ¹⁾	max. % fs/10K	± 0.5	± 0.75	± 1.0
TC sensitivity ¹⁾	max. % fs/10K	+ 0.15	+ 0.23	+ 0.3

¹⁾ TC = Temperature coefficient

Order Code Selection Table

619.9 X X X X X X X X X X

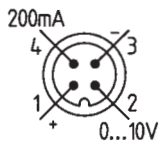
Pressure range ¹⁾	bar	psi	MPa																			
	-1 ... 0	-14.5 ... 0	-0.1 ... 0	0	0																	
	0 ... 1	0 ... 14.5	0 ... 0.1	1	1																	
	0 ... 2.5	0 ... 36.25	0 ... 0.25	1	4																	
	0 ... 10	0 ... 145	0 ... 1.0	3	0																	
	0 ... 16	0 ... 232	0 ... 1.6	3	1																	
	0 ... 25	0 ... 362.5	0 ... 2.5	3	2																	
	0 ... 40	0 ... 580	0 ... 4.0	3	3																	
	0 ... 70	0 ... 1015	0 ... 7.0	4	0																	
	0 ... 100	0 ... 1450	0 ... 10.0	4	1																	
	0 ... 160	0 ... 2320	0 ... 16.0	4	2																	
	0 ... 250	0 ... 3625	0 ... 25.0	4	3																	
	0 ... 400	0 ... 5800	0 ... 40.0	5	4																	
	0 ... 600	0 ... 8700	0 ... 60.0	5	5																	
Pressure indication	bar / psi	factory calibration in bar																			0	
	MPa / psi	factory calibration in bar																				1
Electrical connection	Connector M12x1																				0	
Sealing material	FPM																					0
Output	1 Analogue output	4 ... 20 mA	diagnostic input (Shunt-cal)																			1
	1 Analogue output	4 ... 20 mA	1 digital output																			2
	1 Analogue output	0 ... 10 V	diagnostic input (Shunt-cal)																			3
	1 Analogue output	0 ... 10 V	1 digital output																			4
	2 digital outputs																					5
Pressure connection	Inside thread G 1/4																					0
Material pressure connection	Stainless stelle 1.4305																					1
Pressure range variation	Indicate W and state on order (e.g.: W0... + 8 bar/OUT4...20mA)																					W

Accessories ²⁾

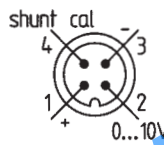
Mounting flange inclusive 2 screws	Order number
Female connector 90° M12x1	108718
Calibration certificate	108892
	104551

Dimensions in mm / Electrical connections

1 Analogue output
0...10V
1 digital output



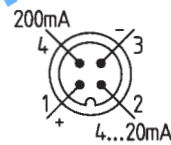
1 Analogue output
0...10V
diagnostic input



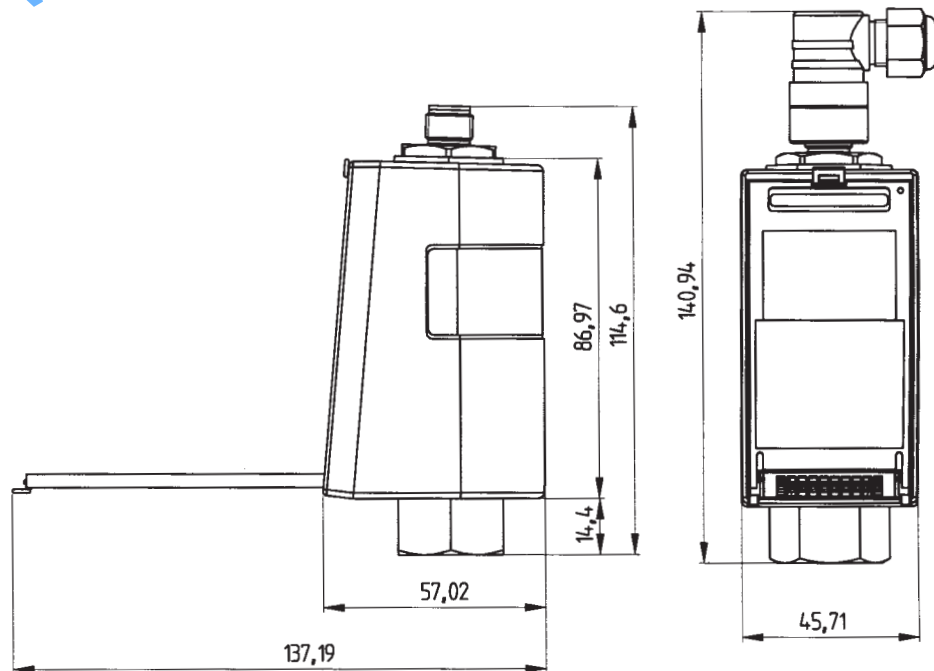
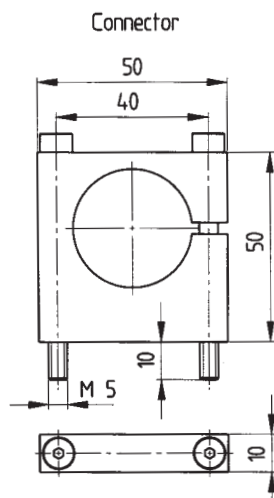
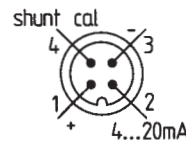
2 Digital outputs



1 Analogue output
4...20mA
1 digital output



1 Analogue output
4...20mA
diagnostic input



¹⁾ Other pressure range on request

²⁾ Accessories supplied loose

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