

Programmierbarer Drucktransmitter und elektronischer Druckschalter

Pressure transmitter and electronic pressure switch programmable

Transmetteur de pression et pressostat électronique programmable

-1 ... 0 – 600 bar



Huba Control

FEINE MESSIDEEN FÜR DRUCK UND STRÖMUNG
FOR FINE PRESSURE AND FLOW MEASUREMENT
LA FINESSE DES MESURES DE PRESSION ET DE DEBIT

Technical overview

The µP-regulated, programmable pressure transmitter type 619 has a robust industry design. Parameters can easily be programmed with three different configuration menus.

All systems are equipped with a diagnostic function. Pressure is measured by a high resistant ceramic element. Normed analogue- and / or open collector outputs are available depending on the version chosen.

The distinct advantages

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

Medium

Fluids and gases

Pressure Range

-1 ... 0 – 600 bar

Overload

-1 ... 250 bar

4 x measuring range full scale (FS)

-1 ... 400 bar

3 x measuring range full scale (FS)

-1 ... 600 bar

2 x measuring range full scale (FS)

Rupture pressure

6 x measuring range full scale (FS)

max. 1800 bar

Materials in contact with medium

Diaphragm: Ceramic Al₂O₃ (96%)

Stainless steel 1.4305

Sealing material: FPM

Housing material

Nickel-plated, Zinc pressure die-casting

Key protection: PC with lettering

Temperature

Media and ambient -20 ... +80 °C

Storage -20 ... +80 °C

Power supply

17 ... 33 VDC

Output

0 ... 10 V

4 ... 20 mA

Open-collector switching output for max. 200 mA, programmable NPN or PNP, contact NO or contact NC

Load

0 ... 10 V

> 10 kOhm

4 ... 20 mA

< 500 Ohm

Programming

All settings can made in unpressurized 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 memorizing of pressure peak.

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

Displays

7 Segment LED, 4 digits for the indication of • pressure measuring values

- programming codes
- parameter values

Point-LED for state indication of switching points

Point-LED for indication of programmed measuring unit

Currents consumption

typ. 50 mA, max. 200 mA

Electrical connection

Circular connector M12x1

Polarity reversal protection

Short circuit proof, and protected against polarity reversal. Each connection against other with max. supply voltage.

Protection class

IP 67

Pressure connection

Inside thread G1/4

Installation arrangement

Unrestricted

Admission

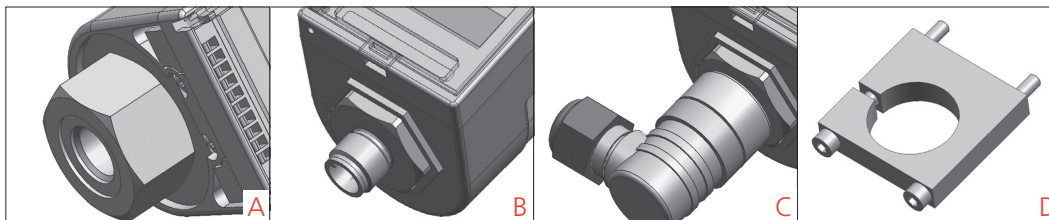
UL, CSA

Weight

610 g

Packaging

Single packaging



Versions

- A – Inside thread G 1/4
- B – Connector M12x1
- C – Female connector 90° for M12x1
- D – Mounting flange

Accuracy

Parameter		Unit	Versions with ≤ 2-fold overload	Versions with ≤ 3-fold overload	Versions with ≤ 4-fold overload
Tolerance zero point	max.	% FS	± 0.5	± 0.75	± 1.0
Tolerance 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 IEC 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

Order code selection table

619. 9 X X X X X X X X X X

Pressure range ²⁾	bar	psi	MPa															
-1... 0	0	-14.5 ... 0	-0.1 ... 0	0	0													
0 ... 1	1	0 ... 14.5	0 ... 0.1	1	1													
0 ... 2.5	2.5	0 ... 36.25	0 ... 0.25	1	4													
0 ... 10	10	0 ... 145	0 ... 1.0	3	0													
0 ... 16	16	0 ... 232	0 ... 1.6	3	1													
0 ... 25	25	0 ... 362.5	0 ... 2.5	3	2													
0 ... 40	40	0 ... 580	0 ... 4.0	3	3													
0 ... 70	70	0 ... 1015	0 ... 7.0	4	0													
0 ... 100	100	0 ... 1450	0 ... 10.0	4	1													
0 ... 160	160	0 ... 2320	0 ... 16.0	4	2													
0 ... 250	250	0 ... 3625	0 ... 25.0	4	3													
0 ... 400	400	0 ... 5800	0 ... 40.0	5	4													
0 ... 600	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	Female connector M12x1								0									
Sealing material	FPM								0									
Outputs	1 Analogue output	4 ... 20 mA	with diagnostic input (Shunt-cal)															1
	1 Analogue output	4 ... 20 mA	with 1 digital output															2
	1 Analogue output	1 ... 10 V	with diagnostic input (Shunt-cal)															3
	1 Analogue output	1 ... 10 V	with 1 digital output															4
	2 digital outputs																	5
Pressure connection	Inside thread G1/4																	0
	Stainless steel 1.4305																	1
Pressure range variation	Indicate W and state pressure rang on order																	W

Accessories

Mounting flange inclusive 2 screws
Female connector 90° for M12x1

Order number
108718
108892

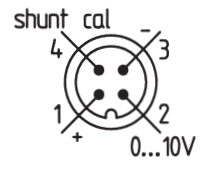
¹⁾ TC = Temperature coefficient

²⁾ Other pressure ranges on request

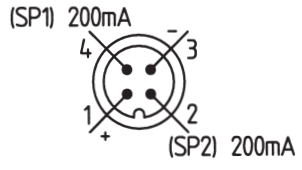
1 Analogue output
0...10V
1 digital output



1 Analogue output
0...10V
diagnostic input



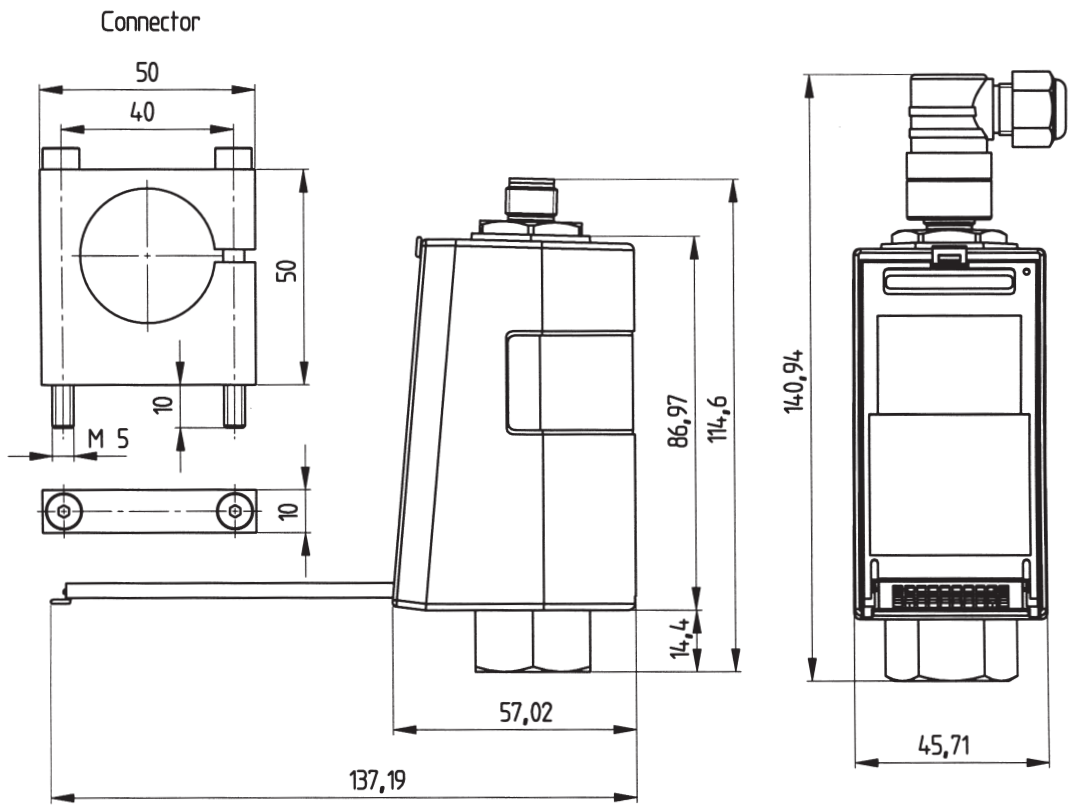
2 Digital outputs



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



1 Analogue output
4...20mA
diagnostic input



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

Headquarters

Huba Control Schweiz

Industriestrasse 17
CH-5436 Würenlos
Telefon ++41 (0) 56 436 82 00
Telefax ++41 (0) 56 436 82 82
info.ch@hubacontrol.com

Huba Control Deutschland

Schlattgrabenstrasse 24
72141 Walddorfhäslach
Telefon ++49 (0) 7127 23 93-00
Telefax ++49 (0) 7127 23 93-20
info.de@hubacontrol.com

Huba Control France

Technopôle Forbach-Sud
57602 Forbach Cedex
Téléphone ++33 (0) 387 847 300
Télécopieur ++33 (0) 387 847 301
info.fr@hubacontrol.com

Huba Control Nederland

Hamseweg 20A
3828 AD Hoogland
Telefoon ++31 (0) 33 433 03 66
Telefax ++31 (0) 33 433 03 77
info.nl@hubacontrol.com

Huba Control United Kingdom

Unit 3 Network Point, Range Road
Witney Oxfordshire OX29 0YD
Phone ++44 (0) 1993 776 667
Fax ++44 (0) 1993 776 671
info.uk@hubacontrol.com

Huba Control Singapur

Rep Office Singapore, No. 16 Ayer Rajah Crescent Witney
#06-06B Tempco Technominium, SG-139965 Singapore
Phone ++65 (0) 61 004 822
Fax ++44 (0) 63 994 822
info.sg@hubacontrol.com

Huba Control China

Rep Office Shanghai, CBC Building
49A Wuyi Road, CN-Shanghai 200050
Phone ++86 (0) 21 511 808 21
Fax ++86 (0) 21 515 520 99
info.cn@hubacontrol.com

www.hubacontrol.com

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