

*Thank you for choosing NIVELCO instrument
We are sure that you will be satisfied throughout its use!*



NIPRESS

D□□-3□□-□
PRESSURE
TRANSMITTER

1. APPLICATION

The NIPRESS D-300 series pressure transmitters measuring pressure and converting it into voltage and current output can be used in 2- and 3-wire systems. The wide choice of the models makes it suitable for the most pressure measurement tasks whether relative or absolute pressure, static or dynamic measurement is required. The series is available with two different grades of accuracy.

Design of the transmitter, its overload capability and wide range of temperature and the possibility to install the unit in any position allow their application in the most different industrial circumstances.

2. TECHNICAL SPECIFICATION

Type	D□□-3□□-□
Measurement range	-1 ... 600 bars according to the order code
Overload capability	according to the order code
Accuracy	p > 0,4 bars :0,25 %, or 0,5% according to the order code; p ≤ 0,4 bars: 0,5 %
Medium temperature	-25 °C ... +125 °C
Ambient temperature	-25 °C ... +85 °C
Sensor type	Piezoresistive
Materials of the wetted parts	Sensor: stainless steel DIN 1. 4435 (internal membrane) Sensor sealing: if p ≤ 25 bar FKM (Viton); if p >25 bar NBR Process connection: St. St. DIN 1.4571 Housing: St.St. DIN 1.4301
Output	4 ... 20 mA or 0 ... 10 V
Power supply	4 ... 20 mA output: 12 ... 36 V DC; 0 ... 10 V DC output: 14 ... 36 V DC
Load resistance	2-wire version $R_t \leq \frac{U_s - 12 V}{0,02 A} \Omega$ 3-wire version > 10 kΩ
Process connection	According to the order code
Electrical connection	Pg 9 DIN 43650 connector/with integral cable
Ingress protection	IP 65/IP67*
Shock-hazard protection	Extra-low voltage or shock-hazard protection class
Mass	~ 0,14 kg

* units with integral cables

USER'S MANUAL



Manufacturer:

NIVELCO Process Control Co.
1043 Budapest, Dugonics u. 11. HUNGARY
Telephone: 369-7575 ♦ Facsimile: 369-8585
e-mail: sales@nivelco.com ♦ www.nivelco.com

2.1 ACCESSORIES

– Operation instructions, Warranty certificate, Manufacturer's declaration

2.2 ORDER CODE

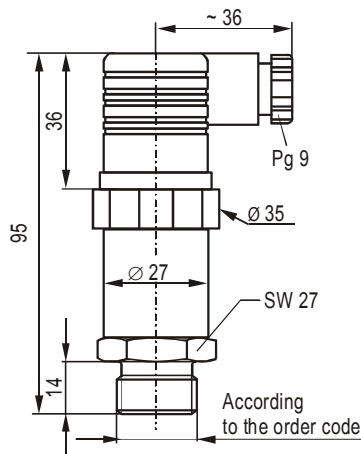
ORDER CODE		PROCESS CONNECTION		RANGE / (OVERLOAD CAPABILITY) BAR		RANGE / (OVERLOAD CAPABILITY) BAR		OUTPUT	
CODE		CODE		CODE		CODE		CODE	
Relative	R	1/4" BSP	A	-1 ... 0 (3)	0	0 ... 10 (20)	A	4 ... 20 mA	2
Absolute	E*	1/2" BSP	C	0 ... 0,1 (0,5)	1	0 ... 16 (60)	B	0 ... 10 V	3
		1/4" NPT	G	0 ... 0,25 (1)	2	0 ... 25 (100)	C		
		1/2" NPT	H	0 ... 0,4 (1)	3	0 ... 40 (100)	D		
				0 ... 0,6 (3)	4	0 ... 60 (140)	E		
				0 ... 1 (3)	5	0 ... 100 (340)	F		
				0 ... 1,6 (6)	6	0 ... 160 (340)	G		
				0 ... 2,5 (6)	7	0 ... 250 (600)	H		
				0 ... 4 (20)	8	0 ... 400 (600)	J		
				0 ... 6 (20)	9	0 ... 600 (1000)	K		

ACCURACY	CODE
0,25 %**	1
0,5 %	2

* Only above 0,1 bar

**Only above 0,4 bar

2.3 DIMENSIONS



3. MOUNTING

Due to its small size and weight NIPRESS D-300 can be directly installed on tanks, pipes, machines, etc without mounting device.

To provide chance for replacement of the instrument during operation to the use of closing armature is recommended. A simple ball valve will be suitable for lower pressures and for higher pressures (above 6 barg) a three-way blow-off needle-valve can be suggested. With pressure measurements of medium with temperature over 75°C, the application of condensing device would protect the instrument against overheating and extend its lifetime.

Temperature of the condensate in the condensing devices (in the water lodge) is practically only 10 ... 20 °C higher than the ambient temperature.

Using longer impulse tube its proper sloping for the necessary de-aerating and emptying has to be ensured.

Measuring low pressures in systems with substantial height difference between the transmitter and place of measurement the hydrostatic pressure of the medium in the impulse pipe should not be forgotten. In the case of outside installation the unit is supposed to be protected against rain or splash water.

3.1 INSTALLATION

For mounting and dismantling SW32 open-end wrench should be used.

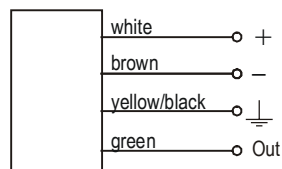
The cylindrical housing of the transmitter should not be gripped and tightened with pipe wrench!

The plug-in electric connector can be unplugged after releasing and removing its fastening screw. The connection insert can be pushed out by a screw driver from the direction of the screw.

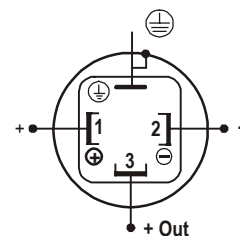
Pushing electric cable through the cable gland it can be connected to the relevant points of the connector. Make sure that the cable gland and sealing plate of the connector will be tight.

For the sake of noise suppression the transmitter housing is grounded. If the grounding of the appliance with the pressure transmitter is appropriate no further action will be needed. If not, the grounding should be performed.

4. WIRING

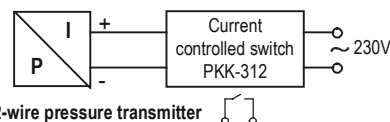


Wiring of the unit with cable

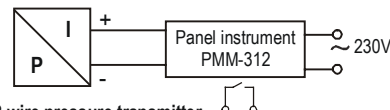


Wiring of DIN connector

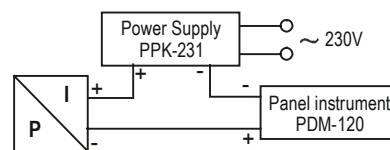
4.1 EXAMPLES OF ARRANGEMENTS



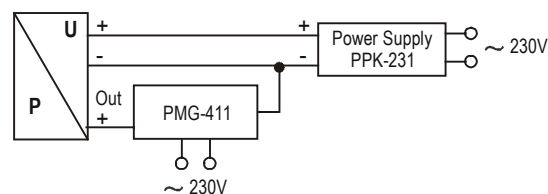
Wiring of 2-wire pressure transmitter



Wiring of 2-wire pressure transmitter



Wiring of 2-wire pressure transmitter



Wiring of 3-wire pressure transmitter

5. MAINTENANCE AND REPAIR

The instrument does not require regular maintenance. If necessary possible dirt deposited should be cleaned off.

All repairs will be carried out at the Manufacturer's premises.

6. STORAGE CONDITIONS

Ambient temperature: -20 °C ... +85 °C

Relative humidity: max. 98 %

7. WARRANTY

Nivelco undertakes warranty of 2 (two) years in compliance with details described on the Warranty Certificate.

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NIVELCO reserves the right to change technical data without notice.