

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

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 accuracy classes.

The design of the transmitter, its overload capability and wide range of temperature and the possibility to install the unit in any position allows 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 bar :0.25 %, or 0.5% according to the order code; p ≤ 0.4 bar: 0.5 %
Medium temperature	-40 °C ... +125 °C
Ambient temperature	-40 °C ... +85 °C
Sensor type	Piezoresistive
Materials of the wetted parts	Sensor: 1. 4435 stainless steel (internal membrane) Sensor sealing: FKM (Viton)* Process connection: 1.4404 stainless steel Housing: 1.4404 stainless steel
Output	4 ... 20 mA or 0 ... 10 V
Power supply	4 ... 20 mA output: 8 ... 32 V DC; 0 ... 10 V DC output: 14 ... 30 V DC
Load resistance	2-wire version $R_L \leq \frac{U_s - 12 V}{0.02 A} \Omega$ 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	SELV Class III
Mass	~ 0.14 kg

* NBR, EPDM sealing (p ≤ 160 bar) is available on special request

** units with integral cable

NIPRESS

D□□-3□□-□
PRESSURE TRANSMITTER

User's manual



NIVELCO

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2.1 ACCESSORIES

– User's manual, Warranty Card, Declaration of Conformity

2.2 ORDER CODE

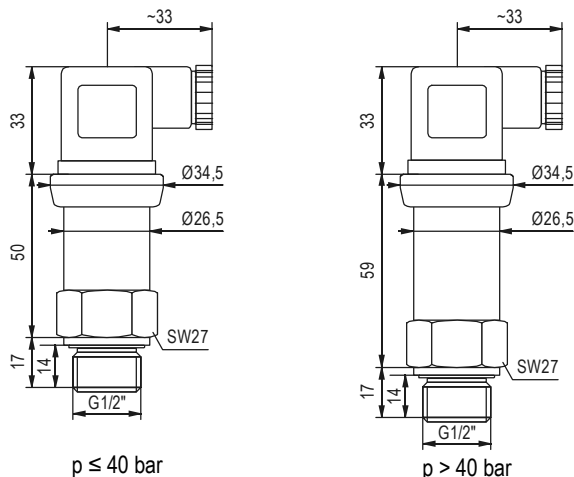
NIPRESS D □ □ - 3 □ □ - □

ORDER CODE	CODE	PROCESS CONNECTION	CODE	RANGE / (OVERLOAD CAPABILITY) BAR	CODE	RANGE / (OVERLOAD CAPABILITY) BAR	CODE	OUTPUT	CODE
Relative	R	1/4" BSP	A	-1 ... 0 (3)	0	0 ... 10 (20)	A	4 ... 20 mA	2
Absolute ⁽¹⁾	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 % ⁽²⁾	1
0.5 %	2

⁽¹⁾ Only above 0,1 bar
⁽²⁾ 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 the use of closing armature is recommended. A simple ball valve will be suitable for lower pressure and for higher pressure (above 6 bar g) 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 extends its lifetime.

Temperature of the condensation in the condensing devices (in the water lodge) is practically only $10 \dots 20^{\circ}\text{C}$ 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 pressure values in systems with substantial height difference between the transmitter and place of measurement the hydrostatic pressure of the medium in the impulse pipe should be taken into consideration. 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 SW27 open-end wrench should be used.

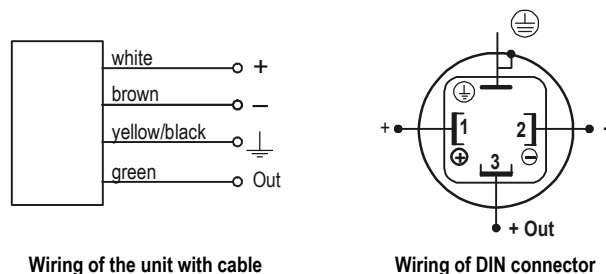
The cylindrical housing of the transmitter should not be gripped and tightened with pipe wrench!

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.

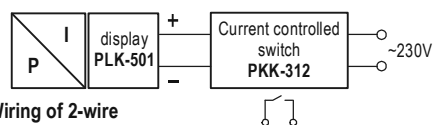
4. WIRING



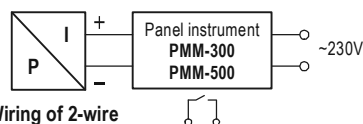
Wiring of the unit with cable

Wiring of DIN connector

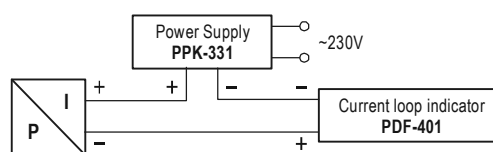
4.1 EXAMPLES OF ARRANGEMENTS



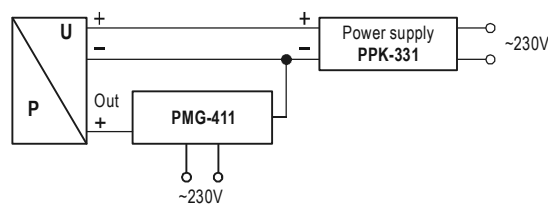
Wiring of 2-wire pressure transmitter



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

Storage temperature: $-40^{\circ}\text{C} \dots +85^{\circ}\text{C}$

Relative humidity: max. 98 %

7. WARRANTY

NIVELCO provides warranty of 3 (three) years in compliance with details described in the Warranty Card.

drc3612a0600h_02

February 2014

NIVELCO reserves the right to change technical data without notice.