

NIPRESS

PRESSURE SWITCHES, PRESSURE TRANSMITTERS
AND DIFFERENTIAL PRESSURE TRANSMITTERS



5 YEARS WARRANTY

NIVELCO

PRESSURE SENSORS

NIPRESS pressure switches are used in hydraulic and pneumatic applications for monitoring and controlling the pressure via switching outputs. Due to the simple handling as well as the variety of software features (*switching points and hysteresis freely configurable, delay function, storing min-/max-value, scalable display and analog output signal, etc.*) the pressure switches with display are especially suitable for general plant and machine construction and processing industry applications.

The DK-100 series are electronic pressure switches with silicon sensors for pneumatics and vacuum applications.

The DK-200 series, with ceramic sensor, is excellent for measuring, controlling, and processing technology applications in hydraulics and mechanical engineering.

The DK-100 and DK-200 series pressure switches can be configured and programmed with one of the two optionally available configuration kits (*CIS Set USB kit for PC or P6 programming device*).

The DK-300 series are electronic pressure switches with a stainless steel internal or flush sensor. This device is a successful combination of an intelligent pressure switch and a digital display.

The DK-400 series are electronic pressure switches with a welded stainless steel flush sensor. This device is a successful combination of an intelligent pressure switch and a digital display. This makes it suitable for numerous applications in various industrial sectors and is also ideal for viscous and pasty mediums.

The DK-500 series are electronic pressure switches with a stainless steel sensor. This device is a successful combination of an intelligent pressure switch and a digital display. This makes it suitable for numerous applications in various industrial sectors. It comes with a swiveling display and PNP contact outputs.

The DK-600 series are electronic pressure switches with a ceramic sensor. This device is a successful combination of an intelligent pressure switch and a digital display. This makes it suitable for numerous applications in various industrial sectors. Due to the flush diaphragm, it is suitable for viscous, pasty, and highly contaminated media. The robust swiveling stainless steel housing is designed for rough conditions and in harsh operating environments. The standard version of the device comes with PNP contact.

The DK-700 series are electronic pressure switches with a welded stainless steel flush sensor. This device is a successful combination of an intelligent pressure switch and a digital display. This pressure switch has been developed for the process industry, especially for the food and pharmaceutical industry. It comes with a swiveling display and with PNP contact outputs.

The DK-800 series are intelligent pressure switches and a digital display with a ceramic sensor designed for general industrial applications. Its flush diaphragm version is suitable for viscous, pasty, and highly contaminated media. The standard version comes with PNP contact outputs and a swiveling display.

SPECIFICATIONS

- Relative or absolute pressure switching
- -1...600 bar pressure range
- Piezoresistive or ceramic sensor
- With or without a display
- IP54, IP65, IP67
- 5 years warranty

APPLICATIONS

- Pressure switching of gases, steam, and fluids
- Overpressure measurement
- For tanks, pipes, and pressurized vessels
- Mobile hydraulics, dry-run protection, flow monitoring, grease monitoring, gas compressors, test and construction engineering



DK-100



DK-200



DK-700

TECHNICAL DATA

Type		DK-100	DK-200	DK-300
Measuring Range		-1...10 bar	0...400 bar	-1...600 bar
Overload capability		As per order code		
Accuracy		1%		p ≥ 0.4 bar: 0.25%; 0.5%
Process temperature		-25... +85 °C		-40...+125 °C
Ambient temperature				-40...+85 °C (with integrated cable -5...+70 °C)
Materials of the wetted parts	Sensor	Silicon	Ceramic	Stainless steel
	Sensor Seal	NBR	FKM (option: EPDM)	FKM, welded
	Process conn.	Aluminum	Stainless steel	
Housing		PA 6.6 black		
Output		1, 2 PNP (option: 1...5 V)	1, 2 PNP	1, 2 PNP 4...20 mA (optional: 0...10 V)
Supply voltage		12...30 V DC		2-wire: 13...36 V DC, Ex version* 15...28 V DC, 3-wire: 15...36 V DC
Load resistance		-	-	2-wire: $R_{max} = [(U_{Supply} - U_{Supply min.}) / 0.02 A], [Ω]$ 3-wire: $R_{min} = 10 kΩ$
Process connection		1/8" BSP (inner thread)	1/4" BSP	1/4", 1/2", 3/4" BSP; 1/4", 1/2" NPT; M20×1.5
Electrical connection		M8×1	M12×1	ISO 4400, M12×1, integrated cable
Ingress protection		IP54	IP67	IP65
Electrical protection		Class III (SELV)		
Weight		~35 g	~90 g	~160 g

Type		DK-400	DK-500	DK-600	DK-700	DK-800
Measuring Range		-1...40 bar		-1...600 bar	-1...40 bar	-1...600 bar
Overload capability		As per order code				
Accuracy		p ≥ 0.4 bar: 0.25%; 0.5%		0.5%	p ≥ 0.4 bar: 0.25%; 0.5%	0.5%
Process temperature		-40...+125 °C (silicone oil) -10...+125 °C (food grade oil)		-40...+125 °C	-40...+125 °C (silicone oil) -10...+125 °C (food grade oil)	-40...+125 °C
Ambient temperature		-40...+85 °C (with integrated cable -5...+70 °C)		-40...+85 °C		-40...+85 °C (with integrated cable -5...+70 °C)
Materials of the wetted parts	Sensor	Stainless steel (option: Hastelloy® C)	Stainless steel	Ceramic	Stainless steel	Ceramic
	Sensor Seal	FKM < 200 °C, FFKM > 200 °C	FKM, welded	FKM (option: EPDM, max. 160 bar)	FKM < 200 °C, FFKM > 200 °C	FKM (option: EPDM, max. 160 bar)
	Process connection	Stainless steel		Stainless steel (option: PVDF (1/2" BSP, max. 60 bar))	Stainless steel	Stainless steel (option: PVDF (1/2" BSP, max. 60 bar))
Housing		Stainless steel				
Output		1, 2 PNP, 4...20 mA (optional: 0...10 V)				
Supply voltage		2-wire: 13...36 V DC, Ex version*: 15...28 V DC, 3-wire: 15...36 V DC		2-wire: 13...36 V DC, Ex version*: 15...28 V DC, 3-wire: 24 V DC		2-wire: 13...36 V DC, Ex version*: 15...28 V DC, 3-wire (0...10 V): 15...36 V DC
Load resistance		2-wire: $R_{max} = [(U_{Supply} - U_{Supply min.}) / 0.02 A], [Ω]$ 3-wire: $R_{min} = 10 kΩ$			2-wire: $R_{max} = [(U_{Supply} - U_{Supply min.}) / 0.02 A], [Ω]$ 3-wire (0...10 V): $R_{min} = 10 kΩ$	
Process connection		As per order code		1/4", 1/2" BSP / NPT	As per order code	
Electrical connection		ISO 4400, M12×1, integrated cable		ISO 4400, M12×1 / 5		M12×1 / 5, M12×1 / 8, integrated cable
Ingress protection		IP65		IP67		IP65
Electrical protection		Class III (SELV)				
Weight		~160...250 g		~400 g	~500 g	~200 g

*Ex or SIL versions are available only on request for custom price.

NIPRESS DK-200

5 years

3- / 4-wire mini compact pressure switch for absolute and gauge pressure
 Output: PNP transistor, diaphragm: ceramic, measuring range: 0...400 bar

Measuring method

D A - 2 3 -

K Switch

Process connection

D K - 2 3 -

A 1/4" BSP

Range / Overpressure

D K A - 2 3 -

S 0...2 bar / 7 bar

M 0...5 bar / 12 bar

A 0...10 bar / 25 bar

T 0...20 bar / 50 bar

N 0...50 bar / 120 bar

F 0...100 bar / 250 bar

U 0...200 bar / 400 bar

J 0...400 bar / 600 bar

Accuracy

D K A - 2 -

3 1%

Output

D K A - 2 3 -

7 1 PNP switching output

9 2 PNP switching outputs

Available on request (must be specified in the text of the order)

EPDM seal

Absolute pressure measuring method

Oil and grease-free version

Oxygen application (max. 25 bar, FKM seal)

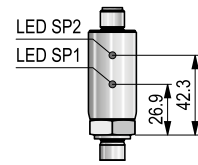
Custom switching points

Custom measuring range (based on prior negotiations)

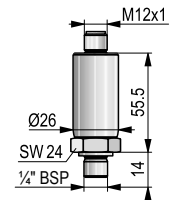
Accessories to order

JBD-P6D-S6N0 P6 programming device for DK-200 pressure switch

JBD-CIS-685U USB modem with software



DKA-200-□-□ front view



DKA-200-□-□ side view

NIPRESS DK-300

5 years

3- / 5- / 8-wire mini compact pressure switch for absolute and gauge pressure
 Output: 1, 2 PNP transistor, 4...20 mA or 0...10 V, with swiveling display,
 Diaphragm: stainless steel flush and inner, measuring range: -1...600 bar

Measuring method

D - 3 -

K Switch

Process connection

D **K** - 3 -

A	1/4" BSP
C	1/2" BSP
J	M20x1.5
D	3/4" BSP, flush membrane (max. 40 bar)
G	1/4" NPT
H	1/2" NPT

Range / Overpressure

D **K** - 3 -

0	-1...0 bar / 5 bar
1	0...0.1 bar / 0.5 bar
R	0...0.16 bar / 1 bar
2	0...0.25 bar / 1 bar
3	0...0.4 bar / 2 bar
4	0...0.6 bar / 5 bar
5	0...1 bar / 5 bar
6	0...1.6 bar / 10 bar
7	0...2.5 bar / 10 bar
8	0...4 bar / 20 bar
9	0...6 bar / 40 bar
A	0...10 bar / 40 bar
B	0...16 bar / 80 bar
C	0...25 bar / 80 bar
D	0...40 bar / 105 bar
E	0...60 bar / 210 bar
F	0...100 bar / 210 bar
G	0...160 bar / 600 bar
H	0...250 bar / 1000 bar
J	0...400 bar / 1000 bar
K	0...600 bar / 1000 bar

Accuracy

D **K** - 3 -

1	0.25% (p ≥ 0.4 bar)
2	0.5%

Output / Certificates

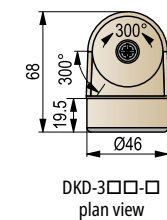
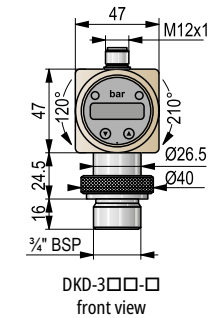
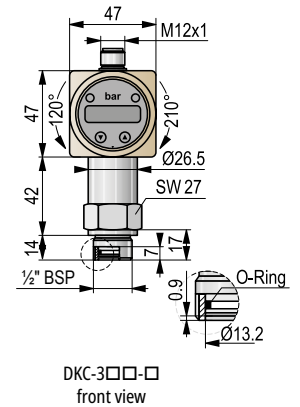
D **K** - 3 -

7	4...20 mA + 1 PNP switching output
9	4...20 mA + 2 PNP switching outputs (only with M12x1 (5-pin) electrical connection)
F *	4...20 mA + 1 PNP switching output / Ex ia G

* Ex or SIL versions are available on request.

Available on request (must be specified in the text of the order)

- Absolute pressure measuring method (p ≥ 0.4 bar)
- M12x1 (5-pin) electronic connection, plastic
- M12x1 (5-pin) electronic connection, metal
- Integrated cable version (IP67), PVC cable (-5...+70 °C), with cable gland
- PVC cable add-on price per meter
- 4...20 mA with 3-wire adjustable output (max. 1 switching outputs, but with M12x1 (5 pin) electric connection)
- 0...10 V 3-wire (max. 2 switching outputs, but with M12x1 (5 pin) electric connection)
- Custom measuring range (based on prior negotiations)



NIPRESS DK-400

5 years

3- / 5- / 8-wire mini compact pressure switch for absolute and gauge pressure
 Output: 1, 2 PNP transistor, 4...20 mA or 0...10 V, with swiveling display, diaphragm: stainless steel flush,
 Measuring range: -1...40 bar

Measuring method / Temperature

D ■ ■ ■ - 4 ■ ■ ■ - ■ ■

K	Switch / up to +125 °C
L	Switch / up to +300 °C (in the case of vacuum, up to +150 °C, p ≤ 70 bar max +200 °C permanent)

Process connection

D ■ ■ ■ - 4 ■ ■ ■ - ■ ■

C	½" BSP (p > 2.5 bar)
J	M20x1.5 (p > 2.5 bar)
D	¾" BSP
E	1" BSP
F	1½" BSP
K	2" BSP
T	¾" TriClamp (4 bar ≤ p ≤ 8 bar)
L	1" TriClamp (0.25 bar ≤ p ≤ 16 bar)
M	1½" TriClamp (p ≤ 16 bar)
N	2" TriClamp (p ≤ 16 bar)
O	DN25 Pipe coupling (DIN 11851) 0.25...40 bar
P	DN40 Pipe coupling (DIN 11851) 0.25...40 bar
R	DN50 Pipe coupling (DIN 11851) 0.25...25 bar
I	DN40 / PN40 1.4404 flange (p ≤ 40 bar)
Q	DN50 / PN40 1.4404 flange (p ≤ 40 bar)
U	DN80 / PN16 1.4404 flange (p ≤ 16 bar)
V	VARIVENT® DN40/50 (p ≤ 25 bar)

Range / Overpressure

D ■ ■ ■ - 4 ■ ■ ■ - ■ ■

0	-1...0 bar / 5 bar
1	0...0.1 bar / 0.5 bar
R	0...0.16 bar / 1 bar
2	0...0.25 bar / 1 bar
3	0...0.4 bar / 2 bar
4	0...0.6 bar / 5 bar
5	0...1 bar / 5 bar
6	0...1.6 bar / 10 bar
7	0...2.5 bar / 10 bar
8	0...4 bar / 20 bar
9	0...6 bar / 40 bar
A	0...10 bar / 40 bar
B	0...16 bar / 80 bar
C	0...25 bar / 80 bar
D	0...40 bar / 105 bar

Accuracy

D ■ ■ ■ - 4 ■ ■ ■ - ■ ■

1	0.25% (p ≥ 0.4 bar)
2	0.5%

Output / Certificates

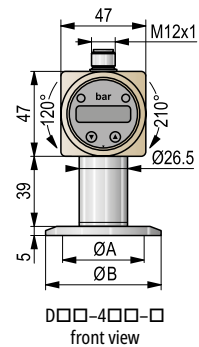
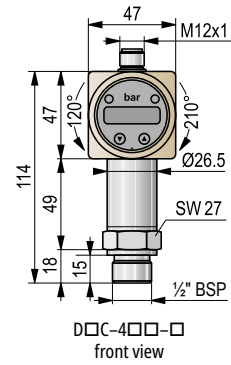
D ■ ■ ■ - 4 ■ ■ ■ - ■ ■

7	4...20 mA + 1 PNP switching output
9	4...20 mA + 2 PNP switching outputs (only with M12x1 (5-pin) electrical connection)
F *	4...20 mA + 1 PNP switching output / Ex ia G

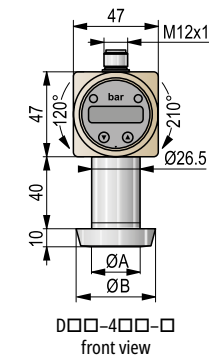
* Ex or SIL versions are available on request.

Available on request (must be specified in the text of the order)

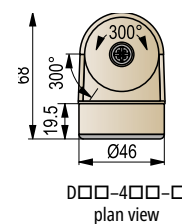
- Absolute pressure measuring method (p ≥ 0.4 bar)
- M12x1 (5-pin) electronic connection, metal
- Integrated cable version (IP67), PVC cable (-5...+70 °C), with cable gland
- PVC cable add-on price per meter
- 4...20 mA with 3-wire adjustable output (max. 1 switching outputs, but with M12x1 (5 pin) electric connection)
- 0...10 V 3-wire (max. 2 switching outputs, but with M12x1 (5 pin) electric connection)
- Hastelloy C membrane
- FFKM seal
- Filled with food compatible oil (up to +150 °C)
- Custom measuring range (based on prior negotiations)



TriClamp	¾"	1"	1½"	2"
A	14	23	32	45
B	25	50.5	64	



	DN25	DN40	DN50
A	23	32	45
B	44	56	68.5



NIPRESS DK-500

5 years

3- / 5-wire mini compact pressure switch for absolute and gauge pressure, with stainless steel housing
 Output: 1, 2 PNP transistor, 4...20 mA, with swiveling display, diaphragm: stainless steel,
 Measuring range: -1...600 bar

Measuring method

D - 5 -

K Switch

Process connection

D K - 5 -

A 1/4" BSP

C 1/2" BSP

G 1/4" NPT

H 1/2" NPT

Range / Overpressure

D K - 5 -

0 -1...0 bar / 5 bar

1 0...0.1 bar / 0.5 bar

R 0...0.16 bar / 1 bar

2 0...0.25 bar / 1 bar

3 0...0.4 bar / 2 bar

4 0...0.6 bar / 5 bar

5 0...1 bar / 5 bar

6 0...1.6 bar / 10 bar

7 0...2.5 bar / 10 bar

8 0...4 bar / 20 bar

9 0...6 bar / 40 bar

A 0...10 bar / 40 bar

B 0...16 bar / 80 bar

C 0...25 bar / 80 bar

D 0...40 bar / 105 bar

E 0...60 bar / 210 bar

F 0...100 bar / 210 bar

G 0...160 bar / 600 bar

H 0...250 bar / 1000 bar

J 0...400 bar / 1000 bar

K 0...600 bar / 1000 bar

Accuracy

D K - 5 -

1 0.25% (p ≥ 0.4 bar)

2 0.5%

Output / Certificates

D K - 5 -

7 4...20 mA + 1 PNP switching output

9 4...20 mA + 2 PNP switching outputs

F * 4...20 mA + 1 PNP switching output / Ex ia G

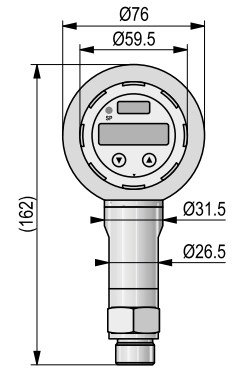
* Ex or SIL versions are available on special request.

Available on request (must be specified in the text of the order)

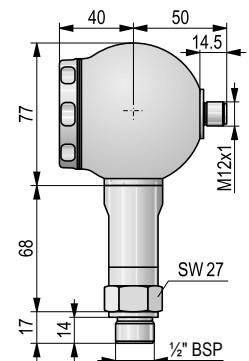
Absolute pressure measuring method (p ≥ 0.4 bar)

4...20 mA with 3-wire adjustable output (max. 1 switching outputs)

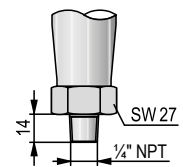
Custom measuring range (based on prior negotiations)



DKC-500□□□ with display, front view



DKC-500□□□ side view



DKG-500□□□ side view

NIPRESS DK-600

5 years

3- / 5-wire mini compact pressure switch for absolute and gauge pressure, with stainless steel housing
 Output: 1, 2 PNP transistor, 4...20 mA, with swiveling display, diaphragm: ceramic,
 Measuring range: -1...600 bar

Measuring method

D - 6 2 -

K Switch

Process connection

D K - 6 2 -

- A ¼" BSP
- C ½" BSP
- G ¼" NPT
- H ½" NPT

Range / Overpressure

D K - 6 2 -

- 0 -1...0 bar / 4 bar
- 3 0...0.4 bar / 1 bar
- 4 0...0.6 bar / 2 bar
- 5 0...1 bar / 2 bar
- 6 0...1.6 bar / 4 bar
- 7 0...2.5 bar / 4 bar
- 8 0...4 bar / 10 bar
- 9 0...6 bar / 10 bar
- A 0...10 bar / 20 bar
- B 0...16 bar / 40 bar
- C 0...25 bar / 40 bar
- D 0...40 bar / 100 bar
- E 0...60 bar / 100 bar
- F 0...100 bar / 200 bar
- G 0...160 bar / 400 bar
- H 0...250 bar / 400 bar
- J 0...400 bar / 600 bar
- K 0...600 bar / 800 bar

Accuracy

D K - 6 -

2 0.5%

Output / Certificates

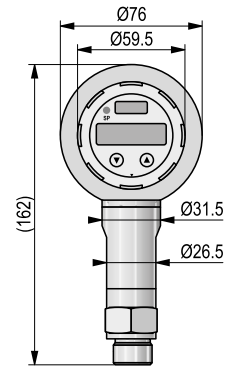
D K - 6 2 -

- 7 4...20 mA + 1 PNP switching output
- 9 4...20 mA + 2 PNP switching outputs
- F * 4...20 mA + 1 PNP switching output / Ex ia G

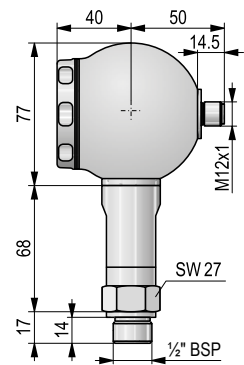
* Ex or SIL versions are available on request.

Available on request (must be specified in the text of the order)

- Absolute pressure measuring method
- EPDM seal (max. 160 bar)
- PVDF process connection (only ½" BSP, max. 60 bar)
- Oxygen application (max. 25 bar, FKM seal)
- 4...20 mA with 3-wire adjustable output (max. 1 switching outputs)
- Custom measuring range (based on prior negotiations)



DKC-6□2-□ with display, front view



DKC-6□2-□ side view

NIPRESS DK-800

5 years

5- / 8-wire mini compact pressure switch for absolute and gauge pressure
 Output: 1, 2 PNP transistor, with swiveling display, diaphragm: ceramic, 4...20 mA or 0...10 V
 Measuring range: -1...600 bar

Measuring method

D - 8 2 -

K Switch

Process connection

D K - 8 2 -

A	¼" BSP
C	½" BSP
D	¾" BSP, flush membrane (0.6 bar ≤ p ≤ 60 bar)
G	¼" NPT
H	½" NPT

Range / Overpressure

D K - 8 2 -

0	-1...0 bar / 4 bar
3	0...0.4 bar / 1 bar
4	0...0.6 bar / 2 bar
5	0...1 bar / 2 bar
6	0...1.6 bar / 4 bar
7	0...2.5 bar / 4 bar
8	0...4 bar / 10 bar
9	0...6 bar / 10 bar
A	0...10 bar / 20 bar
B	0...16 bar / 40 bar
C	0...25 bar / 40 bar
D	0...40 bar / 100 bar
E	0...60 bar / 100 bar
F	0...100 bar / 200 bar
G	0...160 bar / 400 bar
H	0...250 bar / 400 bar
J	0...400 bar / 600 bar
K	0...600 bar / 800 bar

Accuracy

D K - 8 -

2 0.5%

Output / Certificates

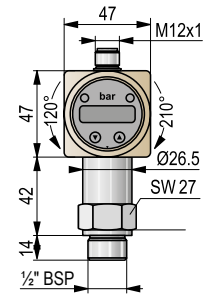
D K - 8 2 -

7	4...20 mA + 1 PNP switching output
9	4...20 mA + 2 PNP switching outputs (only with M12x1 (5-pin) electrical connection)
F *	4...20 mA + 1 PNP switching output / Ex ia G

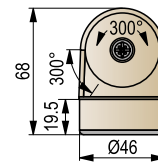
* Ex or SIL versions are available on request.

Available on request (must be specified in the text of the order)

- Absolute pressure measuring method
- EPDM (p ≤ 160 bar), NBR seal
- PVDF process connection (only ½" BSP, max. 60 bar)
- Oxygen application (max. 25 bar, FKM seal)
- Integrated cable version (IP67), PVC cable (-5...+70 °C), with cable gland
- PVC cable add-on price per meter
- M12x1 (5-pin) electrical connection, metal
- 4...20 mA with 3-wire adjustable output (max. 1 switching outputs, but with M12x1 (5 pin) electric connection)
- 0...10 V 3-wire (max. 2 switching outputs, but with M12x1 (5 pin) electric connection)
- Custom measuring range (based on prior negotiations)



DKC-8□2-□ with display, front view



DKC-8□2-□ with display, plan view

Pressure Transmitters

NIPRESS pressure transmitters with multiple sensor technologies combined with various housing materials can be used for almost all relative or absolute fluid or gas pressure measurement tasks requiring different accuracy. Their design, high overload capability and the possibility to install the units in any physical position makes them suitable for a wide range of industrial applications.

D-200 series with a ceramic internal sensor is suitable for the measurement of aggressive gases, steam and fluids, but not recommended for materials that are prone to sediment, crystallize, or stiffen. It's not recommended for dynamic overpressure either. The transmitters measure overpressure and can be used in 2-wire system.

D-300 series with a stainless steel internal sensor is suitable for static or dynamic stress, but not recommended for materials that are prone to sediment, crystallize, or stiffen. Absolute pressure measurement is feasible at ranges over 0.1 bar.

D-400 series with a stainless steel flush sensor is especially suitable for contaminated liquids and measuring bottom pressure in containers. The high-temperature versions of the family can be used for process temperature up to +150 °C or up to +300 °C. Absolute pressure measurement is feasible over 0.4 bar. The standard pressure-transmitting liquid of the sensors is silicone oil, but the units can also be ordered with a pressure transferring liquid suitable for food industry.

D-500 series with a ceramic flush sensor is suitable for the measurement of aggressive, contaminated, pasty media, and low pressure oxygen applications.

D-600 series screw-in pressure transmitters with a ceramic flush sensor are suitable for measuring the pressure of fluids, oils, and gases. Due to their flush sensor, they are ideal for measuring viscose and polluted media. For aggressive media, we recommend a PVDF process connection.

D-700 series screw-in pressure transmitters with a ceramic flush sensor can be used for low pressure measurements. Due to their flush sensor, they are ideal for the measurement of viscose and pasty media. With PVDF housing and process connection they are suitable for using in aggressive media. For special applications they can be ordered with PTFE-coating.

D-800 series with stainless steel flush sensor consist of robust screw-in pressure transmitters with excellent performance. Its modular construction provides high flexibility to the user.

D-900 series with ceramic internal sensor was designed especially for applications in plant and machine engineering as well as laboratory equipment. The pressure transmitter is suitable for measuring small system pressure, however due to its optional 99.9% Al₂O₃ sensor it also offers high-temperature, overpressure, and media resistance.

D-A00 series with a stainless steel internal or flush sensor is ideal for the process industry as well as for pharmaceutical usage. It can be used for measuring the pressure of gases and steam up to 600 bar. The pressure transmitter provides HART® communication, and is available with several process connections and housing materials (*internal or external threads, flanges*). It's high-temperature version with cooling elements is applicable up to +300 °C.

D-B00 series with a ceramic flush sensor has a really high overpressure resistance due to its 99.9% Al₂O₃ sensor. It is ideal for the measurement of gases, steam, and fluids. The pressure transmitter is equipped with HART® communication and is available with several process connections and housing materials.

D-C00 series with a stainless steel internal sensor can be used for measuring extremely high pressures (*up to 2200 bar*), which makes it suitable for hydraulic applications. The base element of the device is a thin film sensor, which is welded to the pressure port. The series offers high reliability, and easy handling.

The standard pressure transmitting liquid of the NIPRESS transmitters is silicone oil, but the units can also be ordered with a pressure transferring liquid suitable for food industry. Depending on the type the pressure transmitters can be applied both in 2 and 3-wire systems. Some transmitters can be equipped with the loop-powered, programmable, plug-in display UNICONT PLK-501, which is ordered separately.



D-400

SPECIFICATIONS

- Relative or absolute pressure measurement
- -1...2200 bar pressure range
- Piezoresistive or capacitive, ceramic or stainless steel sensors
- Compact tubular housing devices
- Stainless steel or cast aluminum
- Chemical resistant seal
- Optional plug-in display (*for certain devices*)
- IP65, IP67, IP68
- 5 years warranty

APPLICATIONS

- Pressure measurement of gases, steam, and fluids
- Vacuum, overpressure or absolute pressure measurement
- In tanks, pipes, and pressurized vessels
- HVAC, hydraulics, pneumatics, mechanical and plant engineering, energy industry, food and beverage industry, pharmaceutical industry, chemical industry, oil- and gas industry

TECHNICAL DATA

		D-200	D-300	D-400	D-500
Measuring range		-1...400 bar	-1...600 bar	-1...400 bar	-1...600 bar
Overload capability		As per order code			
Accuracy		0.5%; -1...0 bar: 1%	0.5%; p ≥ 0.5 bar: 0.25%	(0.4 bar ≤ p ≤ 40 bar): ±0.25%; 0.5%; 0.1%	0.5%; 1%
Process temperature		-25...+125 °C	-40...+125 °C	-40...+125 °C (silicone oil, high-temperature version up to +300 °C, up to max. 160 bar), -10...+125 °C (food grade oil, high-temperature version up to +250 °C, up to max. 160 bar)	-40...+125 °C
Ambient temperature		-25...+85 °C	-40...+85 °C (with integrated cable -5...+70 °C)		
Materials of the wetted parts	Sensor	Ceramic	Stainless steel		Ceramic
	Sensor seal	FKM (Viton®) (option: EPDM)	FKM (Viton®, max. 40 bar), NBR (60...600 bar) (option: EPDM (max. 160 bar), FFKM (max. 40 bar))	FKM (Viton®, max. +200 °C) (option: FFKM)	FKM (Viton®) (option: EPDM (p ≤ 160 bar))
	Process conn.	Stainless steel			Stainless steel (option: PVDF)
Housing		Stainless steel			
Output		2-wire: 4...20 mA, 3-wire: 0...10 V			
Supply voltage		2-wire: 8...32 V DC, 3-wire: 14...30 V DC	2-wire: standard version 8...32 V DC, Ex variant* 10...28 V DC, SIL variant* 14...28 V DC, 3-wire: 14...30 V DC		
Load resistance		2-wire: $R_{max} = [(U_{Supply} - U_{Supply min}) / 0.02 A]$, [Ω]; 3-wire: $R_{min} = 10 kΩ$			
Process connection		As per order code			
Electrical connection		ISO 4400, M12x1 /4	ISO 4400, M12x1 /4, integral cable version		
Ingress protection		IP65 / IP67	IP65 / IP67 / IP68		
Electrical protection		Class III (SELV)			
Weight		~120 g	~140 g	~200 g	~140 g

		D-600	D-700	D-800	D-900
Measuring range		0...60 bar	0...20 bar	0...40 bar	0...20 bar
Overload capability		As per order code			
Accuracy		0.5%	±0.5%; p ≥ 0.6 bar: ±0.25%; ±1% (PTFE-coated)	p ≤ 0.4 bar: 0.5%; p ≥ 0.4 bar: 0.25%;	p ≥ 0.6 bar: 0.25%; 0.5%
Process temperature		-40...+125 °C			
Ambient temperature		-25...+85 °C (with integrated cable: -5...+70 °C)	-40...+85 °C (with integrated cable: -5...+70 °C)		
Materials of the wetted parts	Sensor	Ceramic		Stainless steel	Ceramic
	Sensor seal	FKM (Viton®) (option: EPDM, NBR)	FKM (Viton®) (option: EPDM, FFKM)	FKM (Viton®) (option: EPDM)	
	Process conn.	Stainless steel (option: PVDF)		Stainless steel	
Housing		Stainless steel			
Output		2-wire: 4...20 mA, 3-wire: 0...10 V			
Supply voltage		2-wire: 8...32 V DC, Ex variant*: 10...28 V DC, SIL variant*: 14...28 V DC, 3-wire: 14...30 V DC	2-wire: 9...32 V DC, Ex variant*: 14...28 V DC, 3-wire: 12.5...32VDC	2-wire: 8...32 V DC, Ex variant*: 10...28 V DC, SIL variant*: 14...28 V DC, 3-wire: 14...30 V DC	2-wire: 9...32 V DC, Ex variant*: 14...28 V DC, 3-wire: 12.5...32 V DC
Load resistance		2-wire: $R_{max} = [(U_{Supply} - U_{Supply min}) / 0.02 A]$, [Ω] 3-wire: $R_{min} = 10 kΩ$			
Process connection		¾" BSP	1½" BSP	¾" BSP	½" BSP / NPT; ¼" BSP; M20x1.5
Electrical connection		ISO 4400, M12x1 /4, integral cable version			
Ingress protection		IP65 / IP67 / IP68			
Electrical protection		Class III (SELV)			
Weight		~150 g		~200 g	

*Ex or SIL versions are available only on request for custom price.

TECHNICAL DATA

		D-A00	D-B00	D-C00
Measuring Range		0...600 bar (optionally also from -1 bar)	0...20 bar	0...2200 bar
Overload capability		As per order code		
Accuracy		0.1%	p ≥ 1 bar: 0.1%; p < 1 bar: 0.2%; 1% (PTFE-coated)	0.5%
Process temperature		-40...+125 °C (silicone oil) -10...+125 °C (food grade oil)	-25...+125 °C	-40...+140 °C
Ambient temperature		-40...+70 °C (without display) -20...+70 °C (with display)		-25...+85 °C
Materials of the wetted parts	Sensor	Stainless steel (option: Hastelloy® C)	Ceramic	Stainless steel
	Sensor Seal	FKM (option: FFKM (p ≤ 100 bar))	FKM (option: EPDM)	-
	Process conn.	Stainless steel	Stainless Steel (optional: PVDF (1½" BSP))	Stainless steel
Housing		Cast aluminum or stainless steel		Stainless steel
Output		4...20 mA, HART®		2-wire: 4...20 mA, 3-wire: 0...10 V
Supply voltage		2-wire standard version and Ex ia variant*: 12...28 V DC, Ex d variant*: 13...28 V DC		2-wire: 12...36 V DC, Ex variant*: 14...28 V DC, 3-wire: 14...30 V DC
Load resistance		2-wire: $R_{max} = [(U_{Supply} - U_{Supply min.}) / 0.02 A]$, [Ω], load during HART® communication: $R_{min.}$: 250 Ω		2-wire: $R_{max} = [(U_{Supply} - U_{Supply min.}) / 0.02 A]$, [Ω], 3-wire: $R_{min.} = 10 kΩ$
Process connection		As per order code		
Electrical connection		M20x1.5 (for cable Ø5...Ø14 mm)		ISO 4400, M12x1 /4, integral cable version
Ingress protection		IP67		IP65 / IP67 / IP68
Electrical protection		Class III (SELV)		
Weight		~400 g		~240 g

*Ex or SIL versions are available only on request for custom price.



NIPRESS D-200

5 years

2- / 3-wire mini compact pressure transmitter for gauge pressure measurement
 Output: 4...20 mA, diaphragm: ceramic, measuring range: 0...400 bar

Measuring method

D - 2 -

R Gauge
 E Absolute

Process connection

D - 2 -

A 1/4" BSP according to EN837 (manometer)
 C 1/2" BSP according to EN837 (manometer)
 G 1/4" NPT

Range / Overpressure

D - 2 -

0 -1...0 bar / 3 bar (only with 1% accuracy)
 5 0...1 bar / 3 bar
 6 0...1.6 bar / 5 bar
 7 0...2.5 bar / 5 bar
 8 0...4 bar / 12 bar
 9 0...6 bar / 12 bar
 A 0...10 bar / 20 bar
 B 0...16 bar / 50 bar
 C 0...25 bar / 50 bar
 D 0...40 bar / 120 bar
 E 0...60 bar / 120 bar
 F 0...100 bar / 200 bar
 G 0...160 bar / 400 bar
 H 0...250 bar / 400 bar
 J 0...400 bar / 650 bar

Accuracy

D - 2 -

2 0.5%
 3 1% (only -1...0 bar)

Output

D - 2 -

2 4...20 mA, 2-wire
 3 0...10 V mA, 3-wire

Available on request (must be specified in the text of the order)

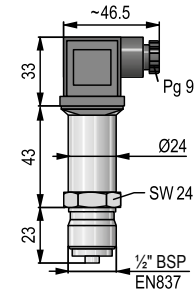
EPDM seal
 M12x1 (4-pin) IP67 electrical connection, plastic
 Oil and grease-free version
 Oxygen application (max. 25 bar, FKM seal)
 Custom measuring range (based on prior negotiations)

Accessories * (sold separately)

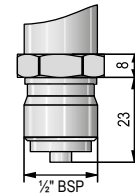
PLK - 5 0 1 - 2 Plug-in display
 PLK - 5 0 1 - 3 Plug-in display with PNP output

* Only for 2-wire version and ISO 4400 connector.

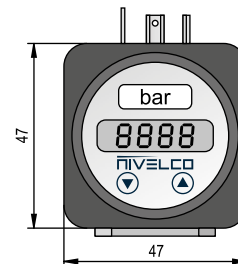
JBD-TTR-04SA 1/2" BSP / 1/2" BSP shock absorber



DRC-202



1/2" BSP EN 837



PLK-501

NIV24

- DRC-252-2
- DRC-272-2
- DRC-292-2
- DRC-2A2-2
- DRC-2B2-2
- PLK-501-2

NIPRESS D-300 **5 years**

2- / 3-wire mini compact pressure transmitter for absolute and gauge pressure measurement
 Output: 4...20 mA or 0...10 V, diaphragm: stainless steel, measuring range: -1...600 bar

Measuring method

D <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - 3 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/>	
R	Gauge
E	Absolute (p ≥ 0.4 bar)

Process connection

D <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - 3 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/>	
A	¼" BSP
C	½" BSP
G	¼" NPT (max. 40 bar)
H	½" NPT
J	M20x1.5

Range / Overpressure

D <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - 3 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/>	
0	-1...0 bar / 5 bar
1	0...0.1 bar / 0.5 bar
R	0...0.16 bar / 1 bar
2	0...0.25 bar / 1 bar
3	0...0.4 bar / 2 bar
4	0...0.6 bar / 5 bar
5	0...1 bar / 5 bar
6	0...1.6 bar / 10 bar
7	0...2.5 bar / 10 bar
8	0...4 bar / 20 bar
9	0...6 bar / 40 bar
A	0...10 bar / 40 bar
B	0...16 bar / 80 bar
C	0...25 bar / 80 bar
D	0...40 bar / 105 bar
E	0...60 bar / 210 bar
F	0...100 bar / 600 bar
G	0...160 bar / 600 bar
H	0...250 bar / 1000 bar
J	0...400 bar / 1000 bar
K	0...600 bar / 1000 bar

Accuracy

D <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - 3 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/>	
1	0.25% (p ≥ 0.5 bar)
2	0.5%

Output / Certificates

D <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - 3 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/>	
2	4...20 mA, 2-wire
3	0...10 V, 3-wire
6 *	4...20 mA, 2-wire / Ex ia G
C *	4...20 mA, 2-wire, SIL 2
D *	4...20 mA, 2-wire, SIL 2 / Ex ia G

* Ex or SIL versions are available on request.

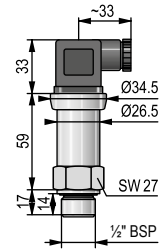
Available on request (must be specified in the text of the order)

- EPDM, FKM, NBR seal
- M12x1 (4-pin) IP67 electrical connection, metal
- Integrated cable version (IP68), PVC cable (-5...+70 °C)
- PVC cable sold separately by the meter
- Blue Ex PVC cable sold separately by the meter
- Custom measuring range (based on prior negotiations)

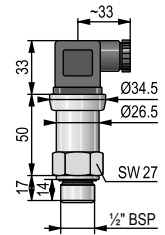
Accessories ** (ordered separately)

P L K - 5 0 1 - 2	Plug-in display
P L K - 5 0 1 - 3	Plug-in display with PNP output

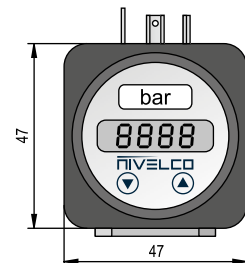
** Only for 2-wire version and ISO 4400 connector.



DR□-3□□, DE□-3□□
p □ 40 bar



DR□-3□□, DE□-3□□
p ≥ 60 bar



PLK-501

NIV24

- DRC-3A2-2
- DRC-3B2-2
- PLK-501-2

NIPRESS D-400

5 years

2- / 3-wire mini compact pressure transmitter for absolute and gauge pressure measurement
Output: 4...20 mA or 0...10 V, diaphragm: stainless steel flush, measuring range: -1...400 bar

Measuring method

D ■ ■ - 4 ■ ■ - ■	
R	Gauge up to +125 °C
E	Absolute up to +70 °C (p ≥ 0.6 bar)
H	Gauge up to +150 °C (p ≤ 160 bar)
J	Gauge up to +300 °C (p ≤ 160 bar, p ≤ 70 bar max. +200 °C permanent)

Process connection

D ■ ■ - 4 ■ ■ - ■	
B	½" BSP (p > 1.5 bar)
C	½" BSP (sensor: 1.4404) max. +125 °C, -1...40 bar; without media separator
J	M20x1.5 (p > 2.5 bar)
D	¾" BSP (p > 0.6 bar)
E	1" BSP (p > 0.25 bar)
S	1" NPT (0.25...40 bar)
F	1½" BSP
T	¾" TriClamp (4...8 bar)
L	1" TriClamp (0.25...16 bar)
M	1½" TriClamp (p ≤ 16 bar)
N	2" TriClamp (p ≤ 16 bar)
O	DN25 Pipe coupling (DIN 11851; 0.25...40 bar)
P	DN40 Pipe coupling (DIN 11851; 0.25...40 bar)
R	DN50 Pipe coupling (DIN 11851; 0.25...25 bar)
I	DN25 / PN40 1.4404 flange (p ≤ 40 bar)
Q	DN50 / PN40 1.4404 flange (p ≤ 40 bar)
U	DN80 / PN16 1.4404 flange (p ≤ 16 bar)
K	DN100 / PN16 1.4404 flange (p ≤ 16 bar)
V	VARIVENT® DN40 / 50 (p ≤ 10 bar)

Range / Overpressure

D ■ ■ - 4 ■ ■ - ■	
0	-1...0 bar / 5 bar (max. +70 °C)
1	0...0.1 bar / 0.5 bar
R	0...0.16 bar / 1 bar
2	0...0.25 bar / 1 bar
3	0...0.4 bar / 2 bar
4	0...0.6 bar / 5 bar
5	0...1 bar / 5 bar
6	0...1.6 bar / 10 bar
7	0...2.5 bar / 10 bar
8	0...4 bar / 20 bar
9	0...6 bar / 40 bar
A	0...10 bar / 40 bar
B	0...16 bar / 80 bar
C	0...25 bar / 80 bar
D	0...40 bar / 105 bar
E	0...60 bar / 100 bar
F	0...100 bar / 200 bar
G	0...160 bar / 400 bar
H	0...250 bar / 400 bar
J	0...400 bar / 600 bar

Accuracy

D ■ ■ - 4 ■ ■ - ■	
1	0.25% (0.4 bar ≤ p ≤ 40 bar)
2	0.5%

Output / Certificates

D ■ ■ - 4 ■ ■ - □	
2	4...20 mA, 2-wire
3	0...10 V, 3-wire
6 *	4...20 mA, 2-wire / Ex ia G
C *	4...20 mA, 2-wire, SIL 2
D *	4...20 mA, 2-wire, SIL 2 / Ex ia G

* Ex or SIL versions are available on request.

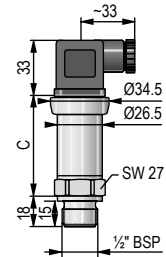
Available on request (must be specified in the text of the order)

- Filled with food grade oil (not available for D_C_...; max. +150 °C)
- EPDM seal (max. 160 bar)
- FFKM seal (max. 100 bar)
- M12x1 (4-pin) IP67 electrical connection, metal
- Integrated cable version (IP68), PVC cable (-5...+70 °C; max. 40 bar)
- PVC cable add-on price per meter
- Custom measuring range (based on prior negotiations)

Accessories ** (sold separately)

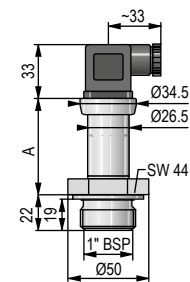
P L K - 5 0 1 - 2	Plug-in display
P L K - 5 0 1 - 3	Plug-in display with PNP output

** Only for 2-wire version and ISO 4400 connector.



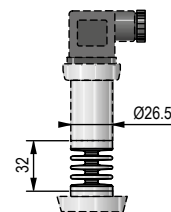
DRB-4□□, DEB-4□□

Pressure	p ≤ 40 bar	p > 40 bar
C	60	59.5

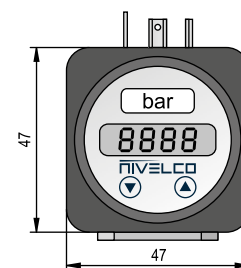


DRE-4□□, DEE-4□□

Pressure	p ≤ 40 bar	p > 40 bar
A	60	59



Cooling element (+300°C)



PLK-501

NIV24

PLK-501-2

NIPRESS D-500 **5 years**

2- / 3-wire mini compact pressure transmitter, with inner or flush diaphragm ceramic sensor, for absolute and gauge pressure measurement
 Output: 4...20 mA or 0...10 V, diaphragm: ceramic flush or inner, measuring range: -1...600 bar

Measuring method

D - 5 -

- R Gauge
- E Absolute

Process connection

D - 5 -

- A 1/4" BSP (inner diaphragm version only)
- C 1/2" BSP (inner or optional flush diaphragm version)
- G 1/4" NPT (inner diaphragm version only)
- H 1/2" NPT (inner diaphragm version only)
- J M20x1.5 (inner diaphragm version only)

Range / Overpressure / Membrane design

D - 5 -

- 0 -1...0 bar / 4 bar / inner (only with 1% accuracy)
- 3 0...0.4 bar / 1 bar / inner or optional flush diaphragm
- 4 0...0.6 bar / 2 bar / inner or optional flush diaphragm
- 5 0...1 bar / 2 bar / inner or optional flush diaphragm
- 6 0...1.6 bar / 4 bar / inner or optional flush diaphragm
- 7 0...2.5 bar / 4 bar / inner or optional flush diaphragm
- 8 0...4 bar / 10 bar / inner or optional flush diaphragm
- 9 0...6 bar / 10 bar / inner or optional flush diaphragm
- A 0...10 bar / 20 bar / inner or optional flush diaphragm
- B 0...16 bar / 40 bar / inner or optional flush diaphragm
- C 0...25 bar / 40 bar / inner or optional flush diaphragm
- D 0...40 bar / 100 bar / inner
- E 0...60 bar / 100 bar / inner
- F 0...100 bar / 200 bar / inner
- G 0...160 bar / 400 bar / inner
- H 0...250 bar / 400 bar / inner
- J 0...400 bar / 600 bar / inner
- K 0...600 bar / 800 bar / inner

Accuracy

D - 5 -

- 2 0.5%
- 3 1% (only with PTFE coated version or underpressure ranges)

Output / Certificates

D - 5 -

- 2 4...20 mA, 2-wire
- 3 0...10 V, 3-wire
- 6 * 4...20 mA, 2-wire / Ex ia G
- C * 4...20 mA, 2-wire, SIL 2
- D * 4...20 mA, 2-wire, SIL 2 / Ex ia G

* Ex or SIL versions are available on request.

Available on request (must be specified in the text of the order)

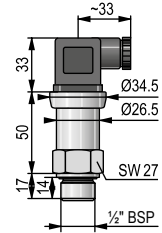
- Flush diaphragm design (1/2" BSP only, max. 25 bar)
- PVDF process connection (only with 1/2" BSP, max. 60 bar, open port)
- EPDM seal (p ≤ 160 bar)
- FFKM seal
- PTFE coating on the sensor (only with 1% accuracy, p ≥ 0 bar)
- Oxygen application (max. 25 bar, FKM seal)
- M12x1 (4-pin) IP67 electrical connection, metal
- Integrated cable version (IP68), PVC cable (-5...+70 °C)
- PVC cable add-on price per meter
- Custom measuring range (based on prior negotiations)

Accessories ** (sold separately)

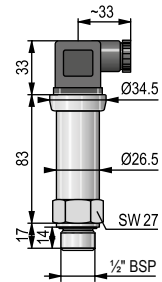
- P L K - 5 0 1 - 2 Plug-in display
- P L K - 5 0 1 - 3 Plug-in display with PNP output

** Only for 2-wire version and ISO 4400 connector.

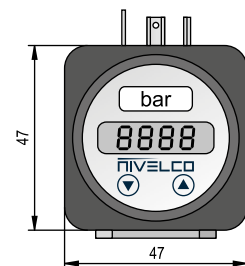
- JBD-TTR-04SA 1/2" BSP / 1/2" BSP shock absorber



D□C-5□2-□



D□C-5□2-□
for SIL and SIL / Ex ia versions



PLK-501

NIPRESS D-600

5 years

2- / 3-wire mini compact pressure transmitter for gauge pressure measurement
 Output: 4...20 mA or 0...10 V, diaphragm: ceramic flush, measuring range: 0...60 bar

Measuring method

D **D** - 6 -

R Gauge

Process connection

D **R** - 6 -

D 3/4" BSP

Range / Overpressure

D **R** **D** - 6 -

3	0...0.4 bar / 1 bar
4	0...0.6 bar / 2 bar
5	0...1 bar / 2 bar
6	0...1.6 bar / 4 bar
7	0...2.5 bar / 4 bar
8	0...4 bar / 10 bar
9	0...6 bar / 20 bar
A	0...10 bar / 20 bar
B	0...16 bar / 40 bar
C	0...25 bar / 40 bar
D	* 0...40 bar / 100 bar
E	* 0...60 bar / 200 bar

* Only available with stainless steel process connection

Accuracy

D **R** **D** - 6 -

2 0.5%

Output / Certificates

D **R** **D** - 6 -

2	4...20 mA, 2-wire
3	0...10 V, 3-wire
6 **	4...20 mA / Ex ia G
C **	4...20 mA, SIL 2
D **	4...20 mA, SIL 2 / Ex ia G

** Ex or SIL versions are available on request.

Available on request (must be specified in the text of the order)

PVDF process connection (p ≤ 25 bar)

EPDM, NBR seal

M12x1 (4-pin) IP67 electrical connection, metal

Integrated cable version (IP68), PVC cable (-5...+70 °C)

PVC cable add-on price per meter

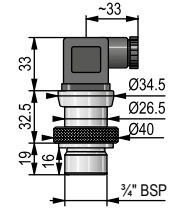
Custom measuring range (based on prior negotiations)

Accessories * (sold separately)**

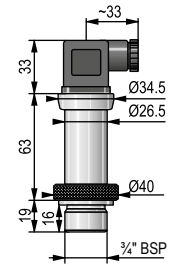
P L K - 5 0 1 - 2 Plug-in display

P L K - 5 0 1 - 3 Plug-in display with PNP output

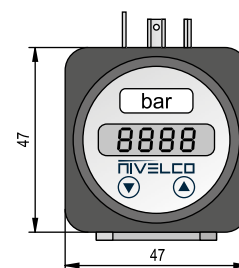
*** Only for 2-wire version and ISO 4400 connector.



DRD-6□2-□



DRD-6□2-□
for SIL and SIL / Ex ia versions



PLK-501

NIPRESS D-700

5 years

2- / 3-wire mini compact pressure transmitter for gauge pressure measurement
 Output: 4...20 mA or 0...10 V, diaphragm: ceramic flush, measuring range: 0...20 bar

Process connection

D R - **7** - -
F 1½" BSP

Range / Overpressure

D R F <input type="checkbox"/> - 7 <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/>	
O	0...0.04 bar / 2 bar
P	0...0.06 bar / 2 bar
1	0...0.1 bar / 4 bar
R	0...0.16 bar / 4 bar
2	0...0.25 bar / 6 bar
3	0...0.4 bar / 6 bar
4	0...0.6 bar / 8 bar
5	0...1 bar / 8 bar
6	0...1.6 bar / 15 bar
7	0...2.5 bar / 25 bar
8	0...4 bar / 25 bar
9	0...6 bar / 35 bar
A	0...10 bar / 35 bar
B	0...16 bar / 45 bar
T	0...20 bar / 45 bar

Accuracy

D R F - 7 <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/>	
1	0.25% (p ≥ 0.6 bar)
2	0.5%
3	1% (only with PTFE-coated version)

Output / Certificates

D R F - 7 <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/>	
2	4...20 mA, 2-wire
3	0...10 V, 3-wire
6 *	4...20 mA, 2-wire / Ex ia G

* Ex or SIL versions are available on request.

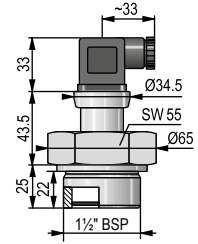
Available on request (must be specified in the text of the order)

- With PVDF process connection and housing (only with 0.5% accuracy)
- PTFE-coating on sensor (only with 1% accuracy, p ≥ 0.4 bar)
- EPDM seal
- FFKM seal
- M12x1 (4-pin) IP67 electrical connection, metal
- Oxygen application
- Integrated cable version (IP68), PVC cable (-5...+70 °C)
- PVC cable add-on price per meter
- Custom measuring range (based on prior negotiations)

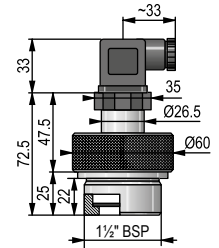
Accessories ** (sold separately)

P L K - 5 0 1 - 2	Plug-in display
P L K - 5 0 1 - 3	Plug-in display with PNP output

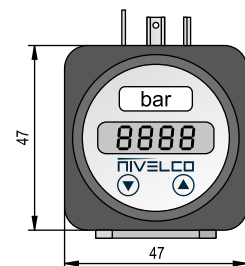
** Only for 2-wire version and ISO 4400 connector.



DRF-700-□



DRF-700-□ / PVDF



PLK-501

NIV24
 PLK-501-2

NIPRESS D-800

5 years

2- / 3-wire mini compact pressure transmitter for gauge pressure measurement
 Output: 4...20 mA or 0...10 V, diaphragm: stainless steel flush, measuring range: 0...40 bar

Measuring method

D **D** - 8 -

R Gauge

Process connection

D **R** - 8 -

D 3/4" BSP

Range / Overpressure

D **R** **D** - 8 -

1	0...0.1 bar / 0.5 bar
R	0...0.16 bar / 1 bar
2	0...0.25 bar / 1 bar
3	0...0.4 bar / 2 bar
4	0...0.6 bar / 5 bar
5	0...1 bar / 5 bar
6	0...1.6 bar / 10 bar
7	0...2.5 bar / 10 bar
8	0...4 bar / 20 bar
9	0...6 bar / 40 bar
A	0...10 bar / 40 bar
B	0...16 bar / 80 bar
C	0...25 bar / 80 bar
D	0...40 bar / 105 bar

Accuracy

D **R** **D** - 8 -

1	0.25% (p ≥ 0.4 bar)
2	0.5% (p ≤ 0.4 bar)

Output / Certificates

D **R** **D** - 8 -

2	4...20 mA, 2-wire
3	0...10 V, 3-wire
6 *	4...20 mA, 2-wire / Ex ia G
C *	4...20 mA, 2-wire, SIL 2
D *	4...20 mA, 2-wire, SIL 2 / Ex ia G

* Ex or SIL versions are available on request.

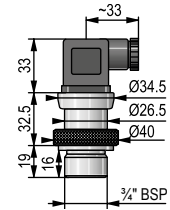
Available on request (must be specified in the text of the order)

- EPDM seal
- M12x1 (4-pin) IP67 electrical connection, metal
- Integrated cable version (IP68), PVC cable (-5...+70 °C)
- PVC cable add-on price per meter
- Custom measuring range (based on prior negotiations)

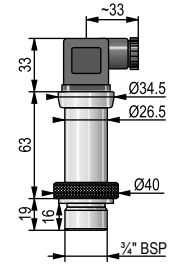
Accessories ** (sold separately)

- P L K - 5 0 1 - 2** Plug-in display
- P L K - 5 0 1 - 3** Plug-in display with PNP output

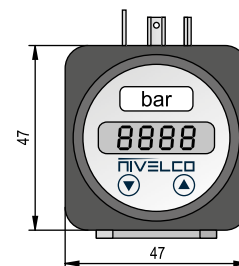
** Only for 2-wire version and ISO 4400 connector.



DRD-8□□-□



DRD-8□□-□
for SIL and SIL / Ex ia versions



PLK-501

NIV24

PLK-501-2

NIPRESS D-900 **5 years**

2- / 3-wire mini compact pressure transmitter for absolute and gauge pressure measurement
 Output: 4...20 mA or 0...10 V, diaphragm: ceramic, measuring range: 0...20 bar

Measuring method

D	□	-	9	□	-	□
R	Gauge					
E	Absolute (p ≥ 1 bar)					

Process connection

D	□	-	9	□	-	□
A	¼" BSP					
C	½" BSP					
H	½" NPT					
J	M20x1.5					

Range / Overpressure

D	□	-	9	□	-	□
O	0...0.04 bar / 2 bar					
P	0...0.06 bar / 2 bar					
1	0...0.1 bar / 4 bar					
R	0...0.16 bar / 4 bar					
2	0...0.25 bar / 6 bar					
3	0...0.4 bar / 6 bar					
4	0...0.6 bar / 8 bar					
5	0...1 bar / 8 bar					
6	0...1.6 bar / 15 bar					
7	0...2.5 bar / 25 bar					
8	0...4 bar / 25 bar					
9	0...6 bar / 35 bar					
A	0...10 bar / 35 bar					
B	0...16 bar / 45 bar					
T	0...20 bar / 45 bar					

Accuracy

D	□	-	9	□	-	□
1	0.25% (p ≥ 0.6 bar)					
2	0.5%					

Output / Certificates

D	□	-	9	□	-	□
2	4...20 mA, 2-wire					
3	0...10 V, 3-wire					
6	* 4...20 mA / Ex ia G, 2-wire					

* Ex or SIL versions are available on request.

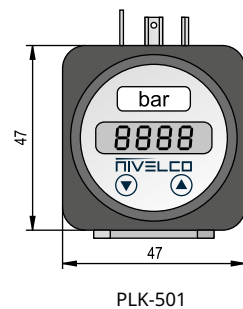
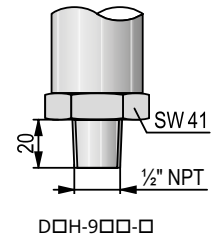
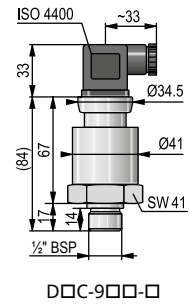
Available on request (must be specified in the text of the order)

- PVDF process connection (only ½" BSP, p ≤ 10 bar)
- EPDM seal (max. 160 bar)
- M12x1 (4-pin) IP67 electrical connection, metal
- Integrated cable version (IP68), PVC cable (-5...+70 °C)
- PVC cable add-on price per meter
- Custom measuring range (based on prior negotiations)

Accessories ** (sold separately)

P L K - 5 0 1 - 2	Plug-in display
P L K - 5 0 1 - 3	Plug-in display with PNP output

** Only for 2-wire version and ISO 4400 connector.



NIPRESS D-A00

5 years

2-wire compact pressure transmitter for absolute and gauge pressure measurement
 Output: 4...20 mA + HART®, with display, diaphragm: stainless steel flush and inner, measuring range: 0...600 bar

Measuring method / Temperature

D <input type="checkbox"/> <input type="checkbox"/> - A <input type="checkbox"/> 4 - <input type="checkbox"/>	
R	Gauge / max. +125 °C
E	Absolute / max. +125 °C (p ≥ 1 bar)
H	Gauge / max. +150 °C
J	Gauge / max. +300 °C (p ≤ 70 bar, max. +200 °C permanent)

Process connection

D <input type="checkbox"/> <input type="checkbox"/> - A <input type="checkbox"/> 4 - <input type="checkbox"/>	
A	¼" BSP (max. +125 °C)
C	½" BSP (max. +125 °C)
H	½" NPT (max. +125 °C)
J	M20x1.5 (max. +125 °C)
E	1" BSP (0.25...400 bar)
S	1" NPT (p > 0.25 bar)
F	1½" BSP (max. 40 bar)
T	¾" TriClamp (4...8 bar)
L	1" TriClamp (0.25...16 bar)
M	1½" TriClamp (p ≤ 16 bar)
N	2" TriClamp (p ≤ 16 bar)
O	DN25 Pipe coupling (DIN 11851) 0.25...40 bar
P	DN40 Pipe coupling (DIN 11851) 0.25...40 bar
R	DN50 Pipe coupling (DIN 11851) 0.25...25 bar
I	DN25 / PN40 1.4404 flange (p ≤ 40 bar)
Q	DN50 / PN40 1.4404 flange (p ≤ 40 bar)
U	DN80 / PN16 1.4404 flange (p ≤ 16 bar)
K	DN100 / PN16 1.4404 flange (p ≤ 16 bar)
W	2" RF / 150 psi 1.4404 flange (p ≤ 10 bar)
Z	3" RF / 150 psi 1.4404 flange (p ≤ 10 bar)
V	VARIVENT® DN40 / 50 (p ≤ 25 bar)

Range / Overpressure

D <input type="checkbox"/> <input type="checkbox"/> - A <input type="checkbox"/> 4 - <input type="checkbox"/>	
3	0...0.4 bar / 2 bar
5	0...1 bar / 5 bar
S	0...2 bar / 10 bar
8	0...4 bar / 20 bar
A	0...10 bar / 40 bar
T	0...20 bar / 80 bar
D	0...40 bar / 105 bar
F	0...100 bar / 210 bar
U	0...200 bar / 600 bar
J	0...400 bar / 1000 bar
K	0...600 bar / 1000 bar

Accuracy

D <input type="checkbox"/> <input type="checkbox"/> - A <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/>	
4	0.1%

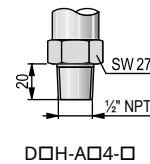
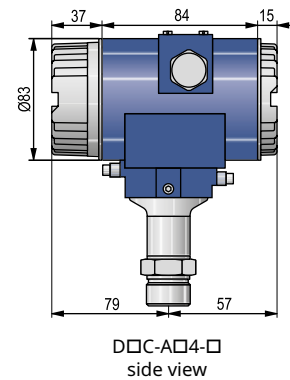
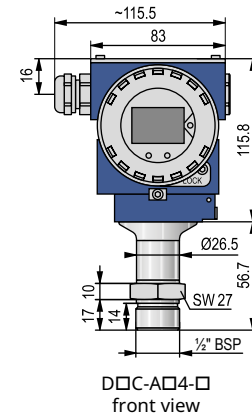
Output / Certificates

D <input type="checkbox"/> <input type="checkbox"/> - A <input type="checkbox"/> 4 - <input type="checkbox"/>	
4	4...20 mA + HART®
8 *	4...20 mA + HART® / Ex ia G
B *	4...20 mA + HART® / Ex d G (stainless steel housing not available)
E *	4...20 mA + HART®, SIL 2 / Ex ia G
F *	4...20 mA + HART®, SIL 2 / Ex d G (stainless steel housing not available)

* Ex or SIL versions are available on request.

Available on request (must be specified in the text of the order)

- Filled with food compatible oil (max. +150 °C)
- EPDM seal
- FFKM seal (p ≤ 100 bar, max. +200 °C)
- Hastelloy sensor (p ≥ 1 bar)
- Tantalum sensor (p ≥ 1 bar, not available with the internal diaphragm version)
- Stainless steel housing
- Custom measuring range (based on prior negotiations)



NIPRESS D-B00 **5 years**

2-wire compact pressure transmitter for gauge pressure measurement
 Output: 4...20 mA + HART®, with display, diaphragm: ceramic flush, measuring range: 0...20 bar

Measuring method

D <input type="checkbox"/> <input type="checkbox"/> - B <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/>	
R	Gauge

Process connection

D R <input type="checkbox"/> - B <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/>	
C	½" BSP
H	½" NPT
J	M20x1.5 (EN 837)
F	1½" BSP
P	DN40 Pipe coupling (DIN 11851)
R	DN50 Pipe coupling (DIN 11851)
I	DN25 / PN40 1.4404 flange
Q	DN50 / PN40 1.4404 flange
U	DN80 / PN16 1.4404 flange
W	2" RF / 150 psi 1.4404 flange (p ≤ 10 bar)
Z	3" RF / 150 psi 1.4404 flange (p ≤ 10 bar)

Range / Overpressure

D R <input type="checkbox"/> - B <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/>	
P	0...0.06 bar / 2 bar
R	0...0.16 bar / 4 bar
3	0...0.4 bar / 6 bar
5	0...1 bar / 8 bar
S	0...2 bar / 15 bar
I	0...5 bar / 25 bar
A	0...10 bar / 35 bar
T	0...20 bar / 45 bar

Accuracy

D R <input type="checkbox"/> - B <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/>	
4	* 0.1% (p ≥ 1 bar)
6	0.2% (p < 1 bar)
3	1% (only with PTFE-coated version)

* versions under 1 bar are available on request

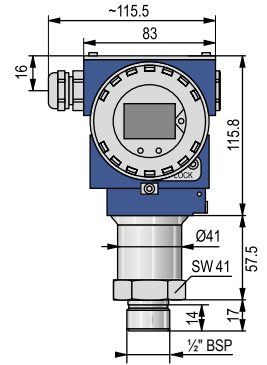
Output / Certificates

D R <input type="checkbox"/> - B <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/>	
4	4...20 mA + HART®
8 **	4...20 mA + HART® / Ex ia G (min. 60 mbar range)
B **	4...20 mA + HART® / Ex d G (stainless steel housing not available)

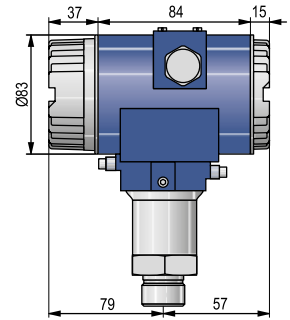
** Ex or SIL versions are available on request.

Available on request (must be specified in the text of the order)

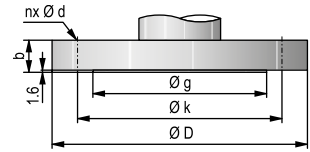
- Stainless steel housing
- PVDF process connection (only 1½" BSP)
- PTFE-coating on sensor (only with 1% accuracy, p ≥ 0.4 bar)
- EPDM seal
- Oxygen medium application
- Custom measuring range (based on prior negotiations)



DRC-B□□-□ front view



DRC-B□□-□ side view



DRW-B□□-□ / DRZ-B□□-□

	2" / 150	3" / 150
D	152.4	190.5
g	91.9	127
k	120.7	152.4
b	19.1	23.9
n	4	
d	19.1	

NIPRESS D-C00

5 years

2- / 3-wire mini compact pressure transmitter for gauge pressure measurement
 Output: 4...20 mA or 0...10 V, diaphragm: stainless steel, measuring range: 0...2200 bar

Measuring method

D - **C** **2** -

R Gauge

Process connection

D R - **C** **2** -

A 1/4" BSP (EN 837, p ≤ 1000 bar)

C 1/2" BSP (EN 837, p ≤ 1000 bar)

J M20x1.5 (inner thread)

Range / Overpressure

D R - **C** **2** -

K * 0...600 bar / 800 bar

L 0...1000 bar / 1400 bar

M 0...1600 bar / 2200 bar

N 0...2000 bar / 2800 bar

V 0...2200 bar / 2800 bar

* Available only with BSP 1/2" process connection EN 837

Accuracy

D R - **C** -

2 0.5%

Output / Certificates

D R - **C** **2** -

2 4...20 mA, 2-wire, 2-wire

3 0...10 V, 3-wire

6 ** 4...20 mA, 2-wire / Ex ia G

** Ex or SIL versions are available on request.

Available on request (must be specified in the text of the order)

M12x1 (4-pin) IP67 electrical connection, metal

Integrated cable version (IP67), PVC cable (-5...+70 °C), with cable gland

PVC cable add-on price per meter

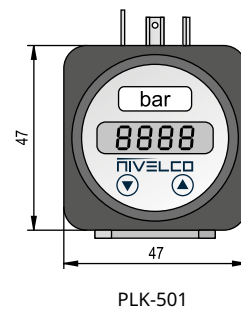
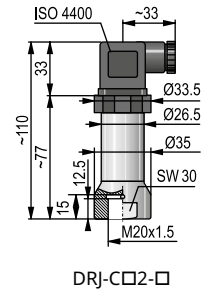
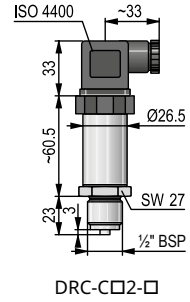
Custom measuring range (based on prior negotiations)

Accessories to order***

P L K - 5 0 1 - 2 Plug-in display

P L K - 5 0 1 - 3 Plug-in display with PNP output

*** Only for 2-wire version and ISO 4400 connector.



NIV24
 PLK-501-2

NIPRESS differential pressure transmitters are available with different sensor technologies combined with compact stainless steel or cast aluminum or plastic housings. The wide variety of the product range can measure the pressure of numerous fluids and gases, monitor ventilation ducts, filters and fans in HVAC areas as well as measure the level in closed, pressurized tanks.

DD-200 series with a stainless steel (optionally Hastelloy® C-276) sensor is for 2-wire systems with HART® communication. The differential pressure transmitter's main application area is the process industry, and can be used in closed, pressurized tanks. The device also has a display and operating module.



DD-200

DD-300 series with a stainless steel sensor can be pressurized on both sides with fluids or gases. The differential pressure transmitter measures the difference between the positive and negative side. Due to its compact size, it can be installed in tight spaces.

DD-400 series with two piezoresistive stainless steel sensors and with swiveling display. The process connection can be used for measuring the pressure difference between gases and fluids.

DD-600 family uses a silicon sensor, has various measuring ranges between 0...1 bar. It is a wall-mountable design, suitable for measuring dry, non-aggressive gases and compressed air. This device has short circuit protection and inverse polarity protection.

The NIPRESS DD-600 can be used for a wide range of different HVAC applications. Its robust design makes it excellent for laboratory and industrial use. The preferred areas of use are in heating, ventilation and air conditioning systems; clean rooms and medical technology, filter technology and draft-metering.

SPECIFICATIONS

- Relative or absolute pressure difference measurement
- -1...70 bar pressure range
- Piezoresistive or capacitive sensor
- Stainless steel, cast aluminum or plastic housing
- Optional swiveling display
- IP65, IP67
- 5 years warranty

APPLICATIONS

- Differential pressure measurement of gases, steam, and fluids
- Overpressure measurement
- Filter and vent controlling
- In tanks, pipes, and pressurized vessels
- HVAC, mechanical and plant engineering, oil- and gas industry, chemical industry, energy industry, food and beverage industry

Type		DD-200	DD-300	DD-400	DD-600
Measuring Range		0...20 bar	0...16 bar	0...70 bar	0...1 bar
Overload capability		As per order code			
Accuracy		0.1%; 0.075%	0.5%; 1%	2%	1% (p ≥ 6 mbar) 2% (p < 6 mbar)
Process temperature		-40...+100 °C (with silicone oil filling)	-25...+125 °C	-40...+125 °C	0...+50 °C
Ambient temperature		Without display: -40...+85 °C With display: -20...+65 °C	-25...+85 °C		0...+50 °C
Materials of the wetted parts	Sensor	Stainless steel (option: Hastelloy® C)	Stainless steel		Silicon
	Sensor seal	FKM (option: EPDM, PTFE)	FKM		-
	Process conn.	Stainless steel			Brass nickel plated
Housing		Cast aluminum	Aluminum, black anodized	PA 6.6 polycarbonate	ABS
Output		4...20 mA, HART®	2-wire: 4...20 mA, 3-wire: 0...10 V	3-wire: 4...20 mA	2-wire: 4...20 mA, 3-wire: 0...5 V / 0...10 V / 0...20 mA / 4...20 mA (adjustable)
Supply voltage		Ex ia variant ⁽¹⁾ : 12...28 V DC, Ex d variant ⁽¹⁾ : 13...28 V DC	2-wire: 12...36 V DC, Ex ia variant ⁽¹⁾ : 14...28 V DC, 3-wire: 14...36 V DC	24 V DC ±10%	2-wire: 11...32 V DC ⁽²⁾ 3-wire: 19...32 V DC ⁽²⁾
Load resistance		Load during HART® communication: R _{min} : 250 Ω	2-wire: R _{max} = [(U _{Supply} - U _{Supply min}) / 0.02 A], [Ω], 3-wire: R _{min} = 10 kΩ	500 Ω	2-wire: R _{max} = [(U _{Supply} - U _{Supply min}) / 0.02 A], [Ω] 3-wire: R _{min} = 10 kΩ
Process connection		¼" NPT (inner thread)	As per order code		
Electrical connection		M20x1.5 (for cable Ø5...Ø14 mm)	ISO 4400	M12x1 /5	M12x1.5
Ingress protection		IP67	IP65		IP54
Electrical protection		Class III (SELV)			
Weight		~3.5 kg	~250 g	~350 g	~165 g

⁽¹⁾Ex or SIL versions are available only on request for custom price.

⁽²⁾With automatic zero adjustment: 24...32 V DC.

NIPRESS DD-200

5 years

2-wire compact differential pressure transmitter for gauge pressure measurement, with dual-compartment housing
 Output: 4...20 mA + HART®, with display, diaphragm: stainless steel, measuring range: 0...20 bar

Measuring method

D **G** - 2 -

D Differential

Process connection

D **D** - 2 -

G 1/4" NPT (inner thread)

Range / Max. static pressure

D **D** **G** - 2 -

7 0...0.06 bar / 160 bar

D 0...0.4 bar / 160 bar

H 0...2.5 bar / 160 bar

M 0...20 bar / 160 bar

Accuracy

D **D** **G** - 2 -

4 0.1%

7 0.075%

Output / Certificates

D **D** **G** - 2 -

4 4...20 mA + HART®

8 * 4...20 mA + HART® / Ex ia G

B * 4...20 mA + HART® / Ex d G

* Ex or SIL versions are available on request.

Available on request (must be specified in the text of the order)

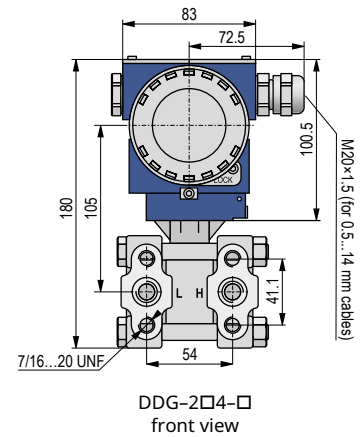
EPDM seal

PTFE seal

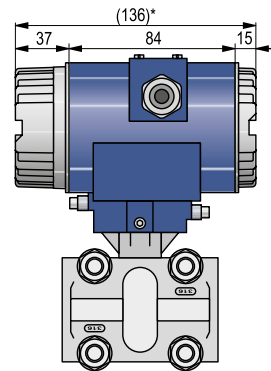
Hastelloy C sensor

Special version up to 400 bar static pressure (p ≥ 0.4 bar)

Custom measuring range (based on prior negotiations)



DDG-2□4-□
front view



DDG-2□4-□
side view

* Without display and control module
 marked size is 19 mm smaller

NIPRESS DD-300

5 years

2 or 3-wire mini compact differential pressure transmitter for gauge pressure measurement
Output: 4...20 mA or 0...10 V, diaphragm: stainless steel, measuring range: 0...16 bar

Measuring method

D - **3** -

D Differential

Process connection

D **D** - **3** -

- C** 1/2" BSP
- J** M20x1.5
- O** 7/16" UNF DIN 3866
- A** 1/4" BSP (inner thread)

Range / Nominal pressure

D **D** - **3** -

- 4** 0...0.02 bar / 0.2 bar
- 6** 0...0.04 bar / 0.4 bar
- 9** 0...0.1 bar / 1 bar
- B** 0...0.2 bar / 1 bar
- C** 0...0.25 bar / 2.5 bar
- D** 0...0.4 bar / 2.5 bar
- E** 0...0.6 bar / 6 bar
- F** 0...1 bar / 6 bar
- I** 0...1.6 bar / 16 bar
- H** 0...2.5 bar / 16 bar
- Q** 0...4 bar / 16 bar
- J** 0...6 bar / 16 bar
- T** 0...10 bar / 16 bar
- L** 0...16 bar / 16 bar

Accuracy

D **D** - **3** -

- 2** 0.5% (available up to 1:5 DP/PN)
- 3** 1%

Output / Certificates

D **D** - **3** -

- 2** 4...20 mA
- 3** 0...10 V
- 6 *** 4...20 mA / Ex ia

* Ex or SIL versions are available on request.

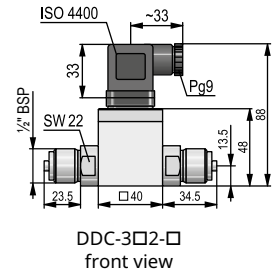
Available on request (must be specified in the text of the order)

Custom measuring range (based on prior negotiations)

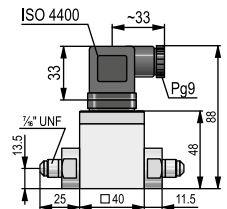
Accessories ** (sold separately)

- P L K - 5 0 1 - 2** Plug-in display
- P L K - 5 0 1 - 3** Plug-in display with PNP output

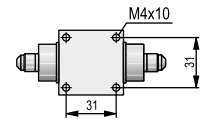
** Only for 2-wire version and ISO 4400 connector.



DDC-3□2-□ front view

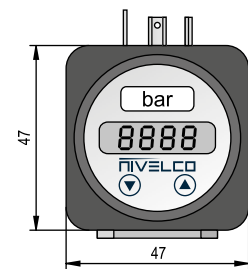


DDO-3□2-□ front view



DDO-3□2-□ bottom view

Differential pressure range, P _D [bar]	Nominal pressure, P _N (Max. static pressure, P _{max}) [bar]					
	0.2 (0.5)	0.4 (1)	1 (3)	2.5 (6)	6 (20)	16 (60)
0...0.02	±1%					
0...0.04	±1%	±1%				
0...0.1	±0.5%	±1%	±1%			
0...0.2	±0.5%	±0.5%	±1%	±1%		
0...0.25		±0.5%	±1%	±1%		
0...0.4		±0.5%	±1%	±0.5%		
0...0.6			±0.5%	±0.5%	±1%	
0...1.0			±0.5%	±0.5%	±1%	
0...1.6				±0.5%	±0.5%	±1%
0...2.5				±0.5%	±0.5%	±1%
0...4					±0.5%	±0.5%
0...6					±0.5%	±0.5%
0...10						±0.5%
0...16						±0.5%
Accuracy, p > 1 bar:	±0.5%, or 1/5 ≤ p ₀ /p ≤ 1/1					
	±1%, or 1/10 ≤ p ₀ /p ≤ 1/5					
Accuracy, p ≤ 1 bar:	±0.5%, or 1/2 ≤ p ₀ /p ≤ 1/1					
	±1%, or 1/10 ≤ p ₀ /p ≤ 1/2					



PLK-501

NIV24
PLK-501-2

NIPRESS DD-400

5 years

3-wire mini compact differential pressure transmitter for gauge pressure measurement

Output: 4...20 mA + PNP transistor output, with display, diaphragm: stainless steel, measuring range: 0...70 bar

Measuring method

D - 4 5 - 2

D Differential

Process connection

D D - 4 5 - 2

A 1/4" BSP

C 1/2" BSP

G 1/4" NPT

H 1/2" NPT

Range / Max. static pressure

D D - 4 5 - 2

F 0...0.1 bar ...1 bar adjustable / 7 bar

G 0...0.2 bar ...2 bar adjustable / 20 bar

O 0...0.35 bar ...3.5 bar adjustable / 35 bar

K 0...0.7 bar ...7 bar adjustable / 70 bar

M 0...2 bar ...20 bar adjustable / 70 bar

N 0...3.5 bar ...35 bar adjustable / 70 bar

P 0...7 bar ...70 bar adjustable / 70 bar

Accuracy

D D - 4 - 2

5 2%

Output

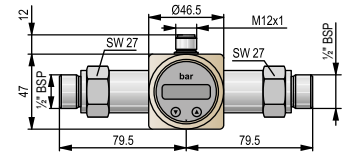
D D - 4 5 -

2 4...20 mA

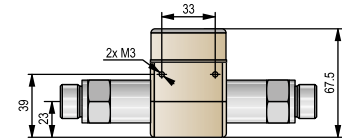
Available on request (must be specified in the text of the order)

Second PNP switching output

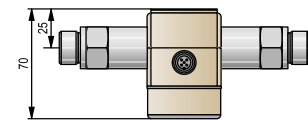
Custom measuring range (based on prior negotiations)



DDC-4□3-□
front view



DDC-4□3-□
bottom view



DDC-4□3-□
plan view

NIPRESS DD-600

5 years

2- / 3-wire wall-mountable differential pressure transmitter for gauge pressure measurement
 Output: 4...20 mA or 0...10 V, silicon sensor element, measuring range: 0...1000 mbar

Measuring method

D - 6 -

D Differential

Process connection

D D - 6 -

P Ø6.6 x 11, for Ø6 flexible tube

R Ø4.45 x 10, for Ø4 flexible tube

Range / Overpressure

D D - 6 -

R 0...1.6 mbar / 200 mbar

S 0...4 mbar / 200 mbar

2 0...10 mbar / 200 mbar

6 0...40 mbar / 345 mbar

C 0...250 mbar / 1000 mbar

F 0...1000 mbar / 3000 mbar

Accuracy

D D - 6 -

3 1% (p ≥ 6 mbar)

5 2% (p < 6 mbar)

Output / Certificates

D D - 6 -

2 4...20 mA

3 0...5 V / 0...10 V / 0...20 mA / 4...20 mA 3-wire (adjustable)

Available on request (must be specified in the text of the order)

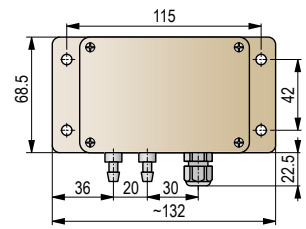
Display

2x switching outputs (2-wire system: PNP; 3-wire system: relay; only with display version)

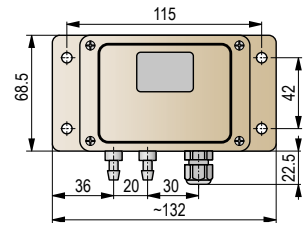
Automatic zero adjustment

Square root extraction function for flow measurement (only with display version)

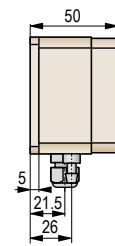
Custom measuring range (based on prior negotiations)



DD□-6□□-□
front view



DD□-6□□-□
with display



DD□-6□□-□
side view