Ultra Low Differential Pressure Transmitter

NP785

- ✓ Available nominal ranges: **± 50 Pa (± 0.2 inH2O)** to **± 68 mbar (± 1 Psi)**
- ✓ Ranges fully **configurable by software** within rated range
- ✓ **Temperature** compensated for higher stability at low pressures
- ✓ Output signal DC **0 to 10 V** or **4 to 20 mA** and slave Modbus RTU, in **one-only-model**
- ✓ Resistant to overpressure
- ✓ Auto-zero Key
- ✓ Diagnostic LED

Ideal for industrial environments, clean rooms, HVAC, filtration systems, and pressurized stairwells, the **NP785** is an ultra low differential pressure transmitter for measuring very small over-pressure, under-pressure and differential pressure in neutral, non-corrosive gaseous media. It provides a pressure proportional linear signal output with configurable measuring range via USB using the configuration software.

NP785 can operate bi-directionally, providing the ability to measure differential pressure ranges from vacuum to positive pressure. It is housed in a DIN rail mountable ABS/PC enclosure and its nickel plated brass fittings accept pneumatic hoses with 4 or 6 mm internal diameter.

The analog output can be set to either 0-10 V or 4-20 mA while having an RS485 port with Modbus RTU communication protocol. Designed for HVAC and industrial environment, the **NP785** ensures temperature compensation for long-term stability and complies with EMC standards, providing robustness and reliability for a wide range of applications.

	NP785-50PA	NP785-100PA	NP785-05	NP785-20	NP785-68
Measurement Range	-50 to 50 Pa (0.2 inH2O)	-100 to 100 Pa (0.4 inH2O)	-5 to 5 mbar (2 inH2O)	-20 to 20 mbar (8 inH2O)	-68 to 68 mbar (1 Psi)
Proof Pressure*	6800 Pa (27.3 inH2O)	6800 Pa (27.3 inH2O)	100 mbar (40.1 inH2O)	300 mbar (120.4 inH2O)	136 mbar (2 Psi)
Burst Pressure	20000 Pa (80.3 inH2O)	20000 Pa (80.3 inH2O)	200 mbar (80.3 inH2O)	400 mbar (160.6 inH2O)	2000 mbar (29 Psi)
Line Pressure	6800 Pa (27.3 inH2O)	6800 Pa (27.3 inH2O)	100 mbar (40.1 inH2O)	300 mbar (120.4 inH2O)	136 mbar (2 Psi)
Accuracy	1.5 % of maximum range	1 % of maximum range	1 % of maximum range	0.5 % of maximum range	1 % of maximum range
Effective sensor resolution	0.005 % F.S.	0.002 % F.S.	0.008 % F.S.	0.008 % F.S.	0.032 % F.S.
Operating Temperature	-20 a 70 °C (-4 to 158 °F)		-5 a 65 °C (23 to 149 °F)	-20 a 70 °C (-4 to 158 °F)	
Power Supply Voltage	PWR terminals: 12 Vdc to 30 Vdc USB cable power: 4.75 Vdc to 5.25 Vdc Internal protection against reverse polarity				
Consumption	45 mA ± 10% @ 24Vdc				
Protection Rating	IP20				
Dimensions	19 x 77.9 x 72 mm				
Housing	ABS + PC				
EMC	EN/IEC 61326-1				
Certification	CE				

* **Proof Pressure** is defined as the maximum pressure at which the device can be subjected and which still maintains its performance within specifications after returning to the operating range.
** **Maximum Range** at 25°C.

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