Attractive price, accuracy, flexibility thanks to membrane technology

WITH AUTOMATIC ZERO-POINT CALIBRATION

novasina
The Art of Precision Measurement

*Pascal-*STD/Z

DIFFERENTIAL PRESSURE MEASUREMENT INSTRUMENT FOR CLEAN ROOMS, LAMINAR FLOWBOXES AND FILTER SYSTEMS

General information

With the Pascal-ST/Z product line Novasina expands its offer for clean room applications. The measurement devices operate following the static measurement principle with membrane technology. Hence they can be installed, where instruments with dynamic differential pressure (mass flow) cannot be used.

State-of-the-art electronic and software combined with an automatic zero-point and gain calibration enable accurate and reproducible measurements.

The Pascal-ST/Z are available for 2 measurement ranges, from 0 to 50 and 0 to 200 Pa. For its setting the PascalTool-WIN configuration software is available. The communication between PC and instrument is carried out by a RS-232 interface at the front side of the device housing.

Depending on the application, various instrument types are available. With alarm relays or analogue outputs, with our without display. All devices are designed for a unidirectional measurement (e.g. 0...+50 Pa).

The instruments can be checked and adjusted with the PascalTool-WIN configuration software. A password system protects any access to the configuration parameters.

The Pascal-STD/Z disposes of a scalable and adjustable analogue output (mA or V). This makes it fit for integration and adaptation to controlling systems (PLC). A digital output (RS-232) is also integrated by default.

Features

☑ High cost efficiency

☑ Excellent accuracy and reproducibility

☑ Automatic Zero-Point calibration

☑ No position dependency

☑ Long term stable

☑ Easy adjustable and configurable by PC

☑ Password protection

☑ Easy mounting and startup

☑ Scalable & adjustable analogue outputs

☑ Alarm visualisation by LED

☑ Possibility to measure the air velocity

☑ SWISS-MADE Quality

Applications

Measurement and control of low differential air pressures and air velocities:

● Industrial HVAC installations for processes

● Clean rooms applications

● Isolators, Laminar Flowboxes

● Hospitals, operating rooms

● Laboratories, Testing rooms

● Monitoring systems

Configuration software PascalTool-WIN

Versions :

Pascal-STD 50 Z : P/N 260 0034
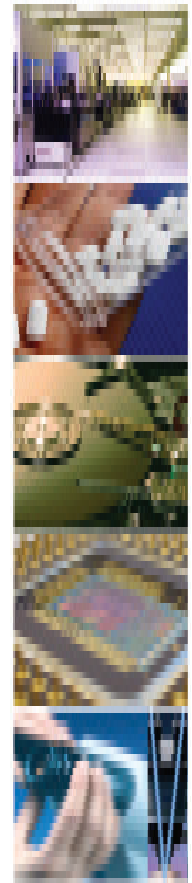
Meas. range :	0...50 Pa (unidirectional)
Power supply :	24VDC
Signal output :	0/4...20mA, 0/2...10V, RS-232

Pascal-STD 200 Z : P/N 260 0038

Meas. range :	0...200 Pa (unidirectional)
Power supply :	24VDC
Signal output :	0/4...20mA, 0/2...10V, RS-232

Pa	in H_2O
65	0.26
60	0.24
55	0.22
50	0.20
45	0.18
40	0.16
35	0.14
30	0.12
25	0.10
20	0.08
15	0.06
10	0.04
5	0.02
0 Pa	0 in H_2O

Technical data

Type	Pascal-STD 50 Z	Pascal-STD 200 Z
Part no.	**260 0034**	**260 0038**
Measurement range	0 ... +50 Pa	0 ... +200 Pa
Max. permissible op. pressure	+ 50 Pa	+ 200 Pa
Accuracy at 20°C	± 0.3 % FS ± *1 digit*	± 0.1 % FS ± *1 digit* *(FS=full scale)*
Temperature effect	< 0.01 Pa/°C	< 0.03 Pa/°C
Max. resolution	0.1 Pa	
Measurement interval	approx. 20 measurements / second	
Hysteresis	± 0.15 Pa *(at constant temperature)*	
Offset-Drift	± 0.15 Pa *(with automatic zero-point calibration)*	
Max. permissible overpressure	± 20'000 Pa	
Operating temperature	5 ... 45°C	
Analogue outputs	0 ... 10 V / 2 ... 10 V *(burden to ground >10 kOhm)*	
(scalable and adjustable)	0 ... 20 mA / 4 ... 20 mA *(burden <500 Ohm)*	
Digital interface	RS-232 *(ASCII-string, complex protocol)*	
Power supply	10.5....35 VDC	
Power consumption	max. 2.5 W *(in operation)*	
Protection	IP 54 / EMC	
Measurement medium	dry, not condensing, not aggressive gases	

Accessories + Spare parts

	Article-No.
External power supply 90...260 VAC 50/60 Hz -> 24VDC EUR plug	**252 4210**
External power supply 90...260 VAC 50/60 Hz -> 24VDC US/JP plug	**111 5967**
PascalTool Win CD (SW free download from Novasina homepage)	**111 6848**
Configuration cable PC <-> Pascal instrument	**111 6849**
Factory calibration certificate	**111 7603**
Customer specific configuration	**111 6074**
Mobile dP calibrator CALIBOX 200 (range 0....200 Pa)	**260 0538**

US/JP - P/N 111 5967

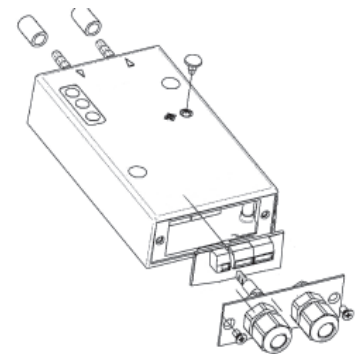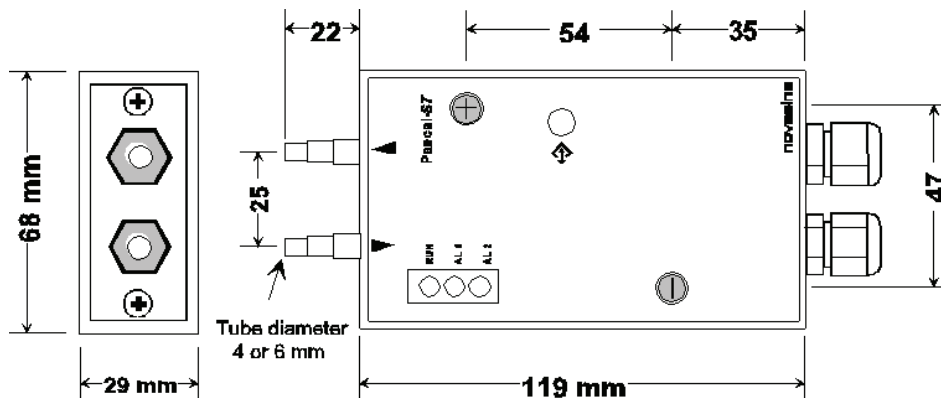EUR - P/N 252 4210

RS-232 cable 1.5m with D-Sub 9 - P/N 111 6849

CALIBOX 200 - P/N 260 0538

Pascal-STD 50 / 200 Z

22   **54**   **35**

68 mm   **25**   **47**

Tube diameter 4 or 6 mm

29 mm   **119 mm**

Pascal-STD 50 / 200 Z

Technical data subject to changes without notice

200180.325.03

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