

Differential pressure transmitter

SPECIFICATIONS

testo 6321



A differential pressure transmitter with a good price/performance ratio for applications in air conditioning and ventilation technology. The automated building services must always be monitored precisely, whereby the requirements placed on the measuring technology are increased. **testo 6321** fulfills these requirements by ensuring the best possible system function, optimization of the climatic conditions and energy savings by means of highly accurate measurement, stable over the long-term, of the differential pressure.

Areas of application:

- Industrial and commercial buildings, e.g. in production and storage
- Offices and administrative buildings
- Sales areas and exhibition halls
- Museums and libraries
- School buildings, hotels, clinics etc.



PERFORMANCE FEATURES

testo 6321

- Measurement of differential pressure in the measuring range of 100 Pa to 2 bar
- Magnetic valve for automatic zero-point adjustment guarantees high temperature-independent accuracy and long-term stability
- Accuracy $\pm 1.2\%$ of measuring range + intrinsic error of 0.3 Pa – valid for zeroing cycle of 60 sec/nominal temperature +22 °C
- P2A software for parameterization, adjustment and analysis, saves time and costs in commissioning and maintenance
- Freely scalable: $\pm 50\%$ of measuring range final value and free scalability within the measuring range
- Diverse analog outputs and measuring ranges
- Display optional



Differential pressure transmitter

Technical data

Parameters		
Differential pressure		
Meas. range	0 to 100 Pa 0 to 10 hPa 0 to 20 hPa 0 to 50 hPa 0 to 100 hPa 0 to 500 hPa 0 to 1000 hPa 0 to 2000 hPa	-100 to 100 Pa -10 to 10 hPa -20 to 20 hPa -50 to 50 hPa -100 to 100 hPa -500 to 500 hPa -1000 to 1000 hPa -2000 to 2000 hPa
Measurement inaccuracy*	±1.2% of measuring range final value ±0.3 Pa Temperature gain drift: 0.05% of measuring range per Kelvin deviation from nominal temperature 22 °C Zero-point drift: 0% (due to cyclic zero-point adjustment)	
Sensor	Piezoresistive sensor	
Autom. zero-point adjustment	via magnetic valve	
Overload capacity	Meas. range	Overload
	0 to 100 Pa	20,000 Pa
	0 to 10 hPa	200 hPa
	0 to 20 hPa	200 hPa
	0 to 50 hPa	750 hPa
	0 to 100 hPa	750 hPa
	0 to 500 hPa	2500 hPa
	0 to 1000 hPa	2500 hPa
	0 to 2000 hPa	2500 hPa
	-100 to 100 Pa	20,000 Pa
	-10 to 10 hPa	200 hPa
	-20 to 20 hPa	200 hPa
	-50 to 50 hPa	750 hPa
	-100 to 100 hPa	750 hPa
	-500 to 500 hPa	2500 hPa
	-1000 to 1000 hPa	2500 hPa
	-2000 to 2000 hPa	2500 hPa

General		
Housing		
Material/colour	ABS/ pure white (RAL 9010) or light grey	
Weight	approx. 160 g	
Display		
Display	1-line LCD (optional)	
Resolution	Meas. range	Resolution
	0 to 100 Pa	0.1 Pa
	0 to 10 hPa	0.01 hPa
	0 to 20 hPa	0.01 hPa
	0 to 50 hPa	0.01 hPa
	0 to 100 hPa	0.1 hPa
	0 to 500 hPa	0.1 hPa
	0 to 1000 hPa	1 hPa
	0 to 2000 hPa	1 hPa
	-100 to 100 Pa	0.1 Pa
	-10 to 10 hPa	0.01 hPa
	-20 to 20 hPa	0.01 hPa
	-50 to 50 hPa	0.01 hPa
	-100 to 100 hPa	0.1 hPa
	-500 to 500 hPa	0.1 hPa
	-1000 to 1000 hPa	1 hPa
	-2000 to 2000 hPa	1 hPa
Miscellaneous		
Protection class	IP 65 only if the transmitter is wired and/or sealing plugs are inserted	
EMC	EC Directive: 2004/108/EC	
Automatic zero-point adjustment	Every 60 seconds in the factory setting	

Inputs and outputs

Analog outputs	
Output type	0 to 1/5/10 V (4-wire) 4 to 20 mA (4-wire)
Meas. cycle	1/sec
Resolution	12 bit
Accuracy of analog outputs	0 to 1 V ±2,5 mV 0 to 5 V ±12.5 mV 0 to 10 V ±25 mV 4 to 20 mA ±0.05 mA
Max. load	500 Ω
Additional outputs	
Other analog outputs	Mini-DIN for P2A software (adjustment and parameterization software)
Supply	
Voltage supply	20 to 30 V AC/DC
Current consumption	300 mA

Operating conditions

Humidity (sensors)	0 to 90% RH
Temperature (sensors)	-5 to +50 °C
Storage temperature	-40 to +80 °C

* Measurement inaccuracy according to GUM: ±1.2% of measuring range final value ±0.3 Pa

GUM (Guide to the Expression of Uncertainty in Measurement):
ISO guideline for the determination of measurement uncertainty, in order to make measurement results comparable worldwide.

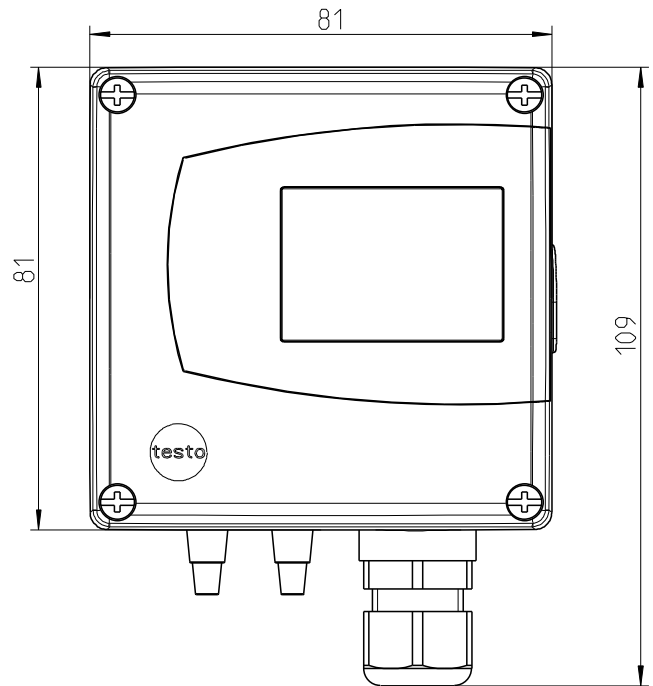
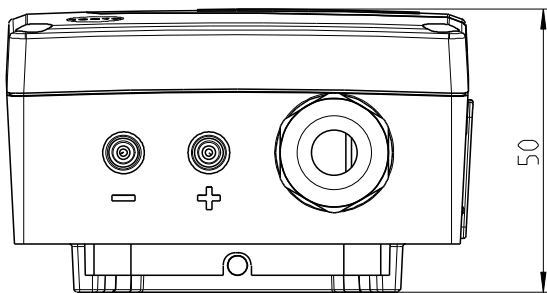
The following variables are taken into account in determining uncertainty:

- Hysteresis
- Linearity
- Reproduceability
- Long-term stability
- Adjustment site/works calibration
- Test site

Subject to misprints and change, including technical changes.

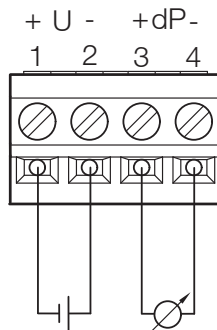
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Technical drawings

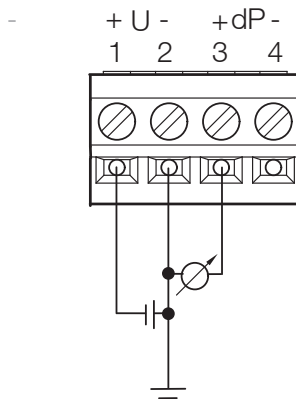


Pin assignment

4-Draht-Verdrahtung



Verdrahtung 3-Leiter





Differential pressure transmitter

The following options can be specified for the testo 6321:

AXX	Measuring range
BXX	Analog output/supply
CXX	Display
EXX	Housing colour
FXX	Unit
KXX	Language of the instruction manual (for bilingual paper instruction manual)

Delivery with wall bracket

AXX	Measuring range
A03	0 to 100 Pa
A05	0 to 10 hPa
A06	0 to 20 hPa
A07	0 to 50 hPa
A08	0 to 100 hPa
A09	0 to 500 hPa
A10	0 to 1000 hPa
A11	0 to 2000 hPa
A23	-100 to 100 Pa
A25	-10 to 10 hPa
A26	-20 to 20 hPa
A27	-50 to 50 hPa
A28	-100 to 100 hPa
A29	-500 to 500 hPa
A30	-1000 to 1000 hPa
A31	-2000 to 2000 hPa

BXX	Analog output/supply
B02	0 to 1 V (4-wire, 24 V AC/DC)
B03	0 to 5 V (4-wire, 24 V AC/DC)
B04	0 to 10 V (4-wire, 24 V AC/DC)
B06	4 to 20 mA (4-wire, 24 V AC/DC)

CXX	Display
C00	Without display
C01	With display

EXX	Housing colour
E01	Housing colour light grey, with testo logo (in colour)
E02	Neutral housing, pure white, without testo logo
E03	Neutral housing, pure white, with testo logo (black-and-white)

FXX	Unit
F01	Pa/Min/Max
F02	hPa/Min/Max
F03	kPa/Min/Max
F04	mbar/Min/Max
F05	bar/Min/Max
F06	mm H ₂ O/Min/Max
F07	inch H ₂ O/Min/Max
F08	inch HG/Min/Max
F09	kg/cm ² /Min/Max
F10	PSI/Min/Max

KXX	Language of the instruction manual
K01	German/English instruction manual
K02	French/English instruction manual
K03	Spanish/English instruction manual
K04	Italian/English instruction manual
K05	Dutch/English instruction manual
K06	Japanese/English instruction manual
K07	Chinese/English instruction manual
K08	Swedish/English instruction manual

Example:

Order code for testo 6321 transmitter with the following options:

- Measuring range 0 to 100 Pa
- Analog output 0 to 5 V
- Without display
- Housing colour light grey
- Unit mbar
- Language of instruction manual German/English

0555 6321 A03 B03 C00 E00 F04 K01