Multi-range differential pressure transmitter Type 40.2005

EN

B40.2005 Operating instructions

JUMO

2010/-10-11/00550566

1 General

Do not blow into the pressure connections! This will damage the instrument.

The instrument must only be operated within its specifications!

It does not meet the requirements for “equipment with a safety function”, as defined by Pressure Equipment Directive 97/23/EC.

For hazardous media such as oxygen, acetylene, combustible and toxic substances, refrigerating plants, pressure vessels, etc., please comply with existing, pertinent regulations!

Disregarding these regulations may result in damage to property or personal injury.

Only suitably qualified personnel are allowed to work on this instrument.

Should you need detailed technical information about this instrument, please ask for data sheet 40.2005, or look on the Internet at: www.jumo.net

JUMO GmbH & Co. KG is certified according to DIN ISO 9001. The pressure transmitter described below complies with DIN and VDE requirements. You have acquired a product that in itself meets strict requirements and which complies with or exceeds all the stated specifications.

However, should you have any cause for complaint, please return the instrument to us, with an as accurate as possible description of the discovered defect.

Please read these operating instructions before placing the instrument in service.

We reserve the right to make technical changes to our products.

However, should you have any difficulties with starting up or using our products, do not hesitate to contact us.

Phone: (06 61) 60 03-7 15
Fax: (06 61) 60 03-6 06
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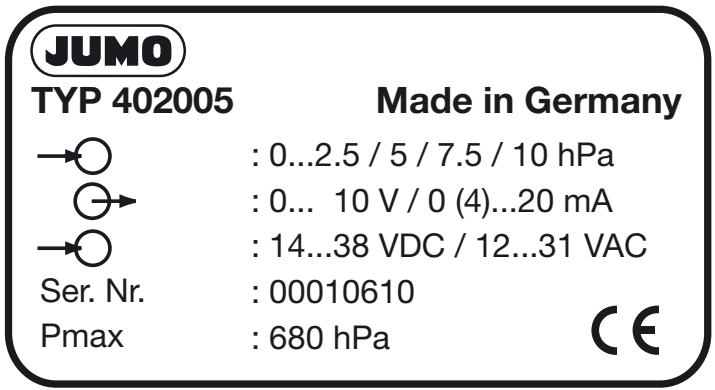
2 Instrument identification

The device version and the important data are located on the nameplate.



(1) Pressure input
(2) Output signal
(3) Supply voltage
(4) Serial number
(5) Maximum pressure

3 Mounting

3.1 Operating conditions

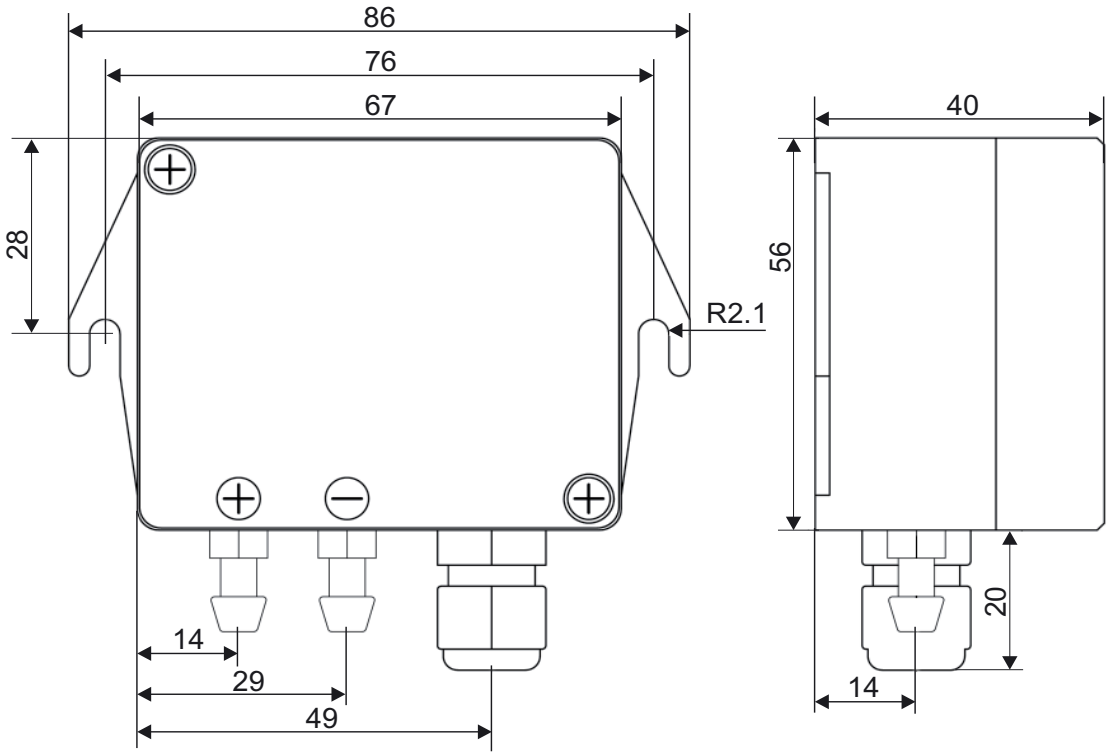
Differential pressure can be measured in dry, non-ionizing and aggressive gases with this measuring instrument.

It should not be installed near to sources of interference (transformers, signal sources, electric motors) or sources of heat.

Tremors or vibrations at the mounting location can lead to measurement errors.

The instrument was adjusted at an ambient temperature of 20°C, vertically, with the process connection pointing down. Any variation of this mounting position and ambient temperature can cause measurement errors.

3.2 Dimensions / attachment

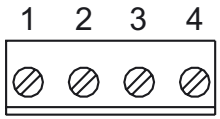


4 Electrical connection

Only suitable qualified professionals are allowed to connect the pressure transmitters!

Please comply with the regulations and safety requirements for electrical, weak current and power current installations, particularly taking into account pertinent national regulations, such as VDE 0100.

The supply voltage must not be connected to output signal terminals! This would result in an instrument fault.

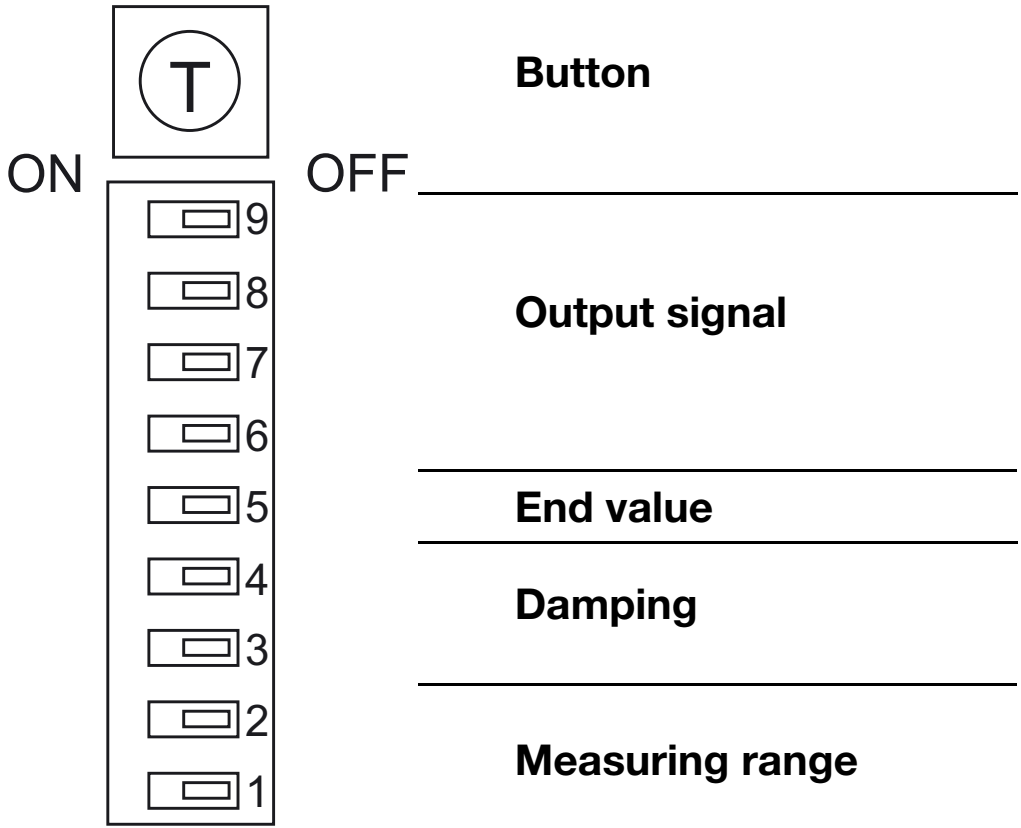
Connection		Terminal assignment
		 Screw terminal
0(4) - 20 mA, 3 wires, output 409		
Voltage supply 14 - 38 V DC, 12 - 31 V AC	U_B 0 V/S- S+	3 2/4 1
0 - 10 V DC, 3 wires, output 409		
Voltage supply 14 - 38 V DC, 12 - 31 V AC	U_B 0 V/S- S+	3 2/4 1

5 Start-up

5.1 Pressure connection

* Connect the tube with the higher pressure to "+".
* Connect the tube with the lower pressure to "-".

5.2 DIP switches



5.3 Setting the measuring range

Basic range 1	Basic range 2	S1	S2
Measuring range	Measuring range		
25 hPa	2.5 hPa	OFF	OFF
50 hPa	5 hPa	ON	OFF
75 hPa	7.5 hPa	OFF	ON
100 hPa	10 hPa	ON	ON

5.4 Setting the output signal

Output signal	S6	S7	S8	S9
0 - 10 V	OFF	OFF	OFF	ON
0 - 20 mA	OFF	ON	ON	OFF
4 - 20 mA	ON	ON	ON	OFF

5.5 Setting the damping

Time constant	S3	S4
10 ms	OFF	OFF
0.5 sec	OFF	ON
2 sec	ON	OFF
4 sec	ON	ON

6 Calibration

6.1 Setting the zero point

* Disconnect both pressure tubes from the instrument.
* Open the instrument.
* DIP switch S5 is set to "OFF".
* Press the "T" key.
* Close the instrument.
* Re-connect the pressure tubes to the instrument.

6.2 Setting the end value for the output signal

* Open the instrument.
* Set DIP switch S5 to "ON".
* Apply the nominal pressure to the instrument.
* Press the "T" key.
* Set DIP switch S5 to "OFF".
* Close the instrument.

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