

# **Menu navigation**

Differential pressure sensor with display QBM78.2500/IV, QBM78.2525/IV, QBM78.5525/IV





# **Documentation for your unit**

- 1. Scan QR code or enter docs.ivprodukt.com in your web browser.
- 2. Enter your order number.
- 3. Press ENTER or click search.
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# Safety



For instructions and safety procedures during use, refer to the relevant assembly instructions, operation and maintenance for the unit and the manufacturer's product documentation.

We reserve the right to make any changes to the product that may not be updated in this product sheet. In the case of doubt, the manufacturer's information will apply.

# Spare parts

Spare parts list can be downloaded from IV Produkt's order portal. Order spare parts and accessories from IV Produkt. See contact information on the last page. Please state the order number and AHU designation from the type plate, located on the unit.

# **General information**

This differential pressure sensor is used in ventilation systems and air handling units to measure and monitor air flow and pressure in air ducts, and over filters and fans on the supply and extract air side. It is used to measure differential, over and under pressure of air and non-aggressive gases.

The device features a display for monitoring and two push buttons for configuration, located under the lid. This document is a guide to button functions, navigating the display menus and performing a quick installation.



# **Home Screen**

The Home screen displays all measured values, calculated flow, and I/O status. Values can be presented in standard view or in split view. The standard view has each value presented in an alternating way. The split view presents all values simultaneously in one window.

Standard view	Split view
– <b>1</b> <u>P1</u> Pa	-1 -1 Pa Pa 0.0 D

Values are presented in green except for when there is a sensor error identified in which case the values are presented in red.

# Navigation

The device is equipped with two push buttons. Button functionality is differentiated by "press" and "press and hold".

### **Button functions**

Symbol	Description	Function
	Left button	<ul><li>Navigate to the left</li><li>Decrease a value</li></ul>
	Right button	<ul><li>Navigate to the right</li><li>Increase a value</li></ul>
• • 1 s	Press and hold the right button for one second.	<ul><li>Move down one menu level</li><li>Make a selection</li></ul>
● 1 s X	Press and hold the left button for one second.	Move up one menu level
• • • • • • • • • • • • • • • • • • •	Press and hold both but- tons for two seconds.	Change scale for value change (1x, 5x, 10x) when editing values.
• • 5 s	From the Home Screen, press and hold the right button for five seconds.	Auto addressing
• • • • • • • • • • • • • • • • • • •	From the Home Screen, press and hold both but- tons for two seconds.	Quick install
● > 30 s X	Press and hold the left button for at least 30 se- conds	Factory reset

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#### **Change settings**

Press and hold the right button until the screen inverts colors (white to black). Change a numeric value:

- 1. Press and hold both push buttons for three seconds.
- 2. Edit the value with left and right buttons.
- 3. Press and hold the right button for one second to confirm.

#### Change values with multiple choices:

- 1. Use left and right buttons to view available options in the navigation bar under the value.
- 2. Select the desired option.

3. Press and hold the right button for one second to confirm.

Select menu option		Change menu option (multiple choice)
Unit	K-Value 0.00 1x	Pa

#### Main menu overview



\* Only available in mode **Output** \*\*Only available in mode **Input** with **NTC** as Analog function



Menu option	Function
0	Configure settings for pressure and flow.
Pressure	
<b>↓</b> I/O	<ul> <li>Configure the function of the two I/O:s:</li> <li>mode: input or output</li> <li>signal types (LG-Ni1000, PT1000, NTC10K, 0-10 V input/ output)</li> <li>scaling</li> </ul>
∑ Controller	<ul><li>Configure the two internal PID controllers:</li><li>PID parameters</li><li>signal source</li><li>output signal</li></ul>
∲ Calibrate zero	Execute a zero calibration of the pressure sensors.
ß	Configure all generic device settings such as language and screen display alternatives.
Configuration	

### **Menu options**

#### Pressure

- 1. Choose Pressure P1 or Pressure P2
- 2. Choose Unit or Flow.

Menu option	Function
Unit	Choose Pressure unit: Pa or PSI.
Flow	<ul> <li>Choose flow unit: I/s, m3/h or m3/s</li> <li>Choose K-value</li> <li>Choose formula</li> </ul>

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#### I/O

- 1. Choose I/O-X1 or I/O-X2.
- 2. Choose mode as Input, Output, Auto or OFF

#### Menu structure if mode is chosen as Output

Menu option	Function
Analog function	Analog functions:
	Press1/Press 2
_	<ul> <li>Flow 1/Flow 2</li> <li>Temp 1/Temp 2</li> </ul>
	Temp 1/Temp 2     Controller
	External
Value	
_	
Scaling low	
_	
Scaling high	
_	
	I

#### Menu structure if mode is chosen as Input

Menu option	Function
Analog function	
LG-NI1000	
Value	
-	

#### Menu structure if mode is chosen as Input with NTC as analog function

Menu option	Function
Analog function	
NTC	
Value	
-	
NTC	Resistance
	• B



#### Controller

1. Choose Controller X1 or Controller X2

Source - X1/X2       Choose Pressure 1, Pressure 2, Flow 1, Flow 2 or Al X2         Enable - X1/X2       Choose ON/OFF         Set point X1/X2       Choose set point value         P - X1/X2       I - X1/X2         D - X1/X2       Diagnostics	Menu option	Function
Enable - X1/X2       Choose ON/OFF         Set point X1/X2       Choose set point value         P - X1/X2       I-X1/X2         D - X1/X2       Image: Choose set point value		
Set point X1/X2         Choose set point value           P - X1/X2		
Set point X1/X2         Choose set point value           P - X1/X2         I - X1/X2           D - X1/X2         IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		
Set point X1/X2     Choose set point value       P - X1/X2     I - X1/X2       D - X1/X2     I - X1/X2	Enable - X1/X2	
P - X1/X2 I - X1/X2 D - X1/X2		
P - X1/X2 I - X1/X2 D - X1/X2		
P - X1/X2 I - X1/X2 D - X1/X2	Sot point V1/V2	Chasses set point value
I - X1/X2 D - X1/X2		Choose set point value
I - X1/X2 D - X1/X2		
I - X1/X2 D - X1/X2		
D - X1/X2	P - X1/X2	
D - X1/X2		
D - X1/X2		
	I - X1/X2	
Diagnostics	D - X1/X2	
Diagnostics		
Diagnostics	_	
	Diagnostics	

#### Configuration

Menu option	Settings
Display	<ul> <li>Display mode (standard/split/controller)</li> <li>Unit (mV/V)</li> <li>Language</li> <li>Avg. pres (s)</li> </ul>
	<ul> <li>Avg. temp (s)</li> <li>Screensaver active (ON/OFF)</li> <li>Screensaver timer</li> </ul>
Modbus —	<ul> <li>Address</li> <li>Baud rate</li> <li>Parity (None/Even)</li> <li>Stop bits</li> </ul>
Reliability	<ul><li>Pressure (s)</li><li>Temperature (s)</li></ul>

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Firmware	
Factory reset	Factory setting: 9600 8-N-1 (8 data bits, No parity, 1 stop bit), address 40



# Quick install the differential pressure sensor

#### **Quick install**

Buttons	Description
●	<ol> <li>From the Home Screen, Press and hold both buttons for</li></ol>
X ← ⊕2s	two seconds.

#### Change the address

Buttons	Description
●	<ol> <li>Press and hold the right button for two seconds.</li> <li>Change the address with the left/right button. 40 is stan-</li></ol>
(+) ● 2 s	dard address. <li>Press and hold the right button for one second to confirm.</li>

### Calibrate zero

i	Disconnect the tubes before executing this action.

Buttons	Description
● ↓ ● 1 s	<ol> <li>Use the left/right buttons to move to the Calibrate zero menu.</li> <li>Press and hold the right button for one second to perform the calibration.</li> </ol>

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### Feel free to contact us



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