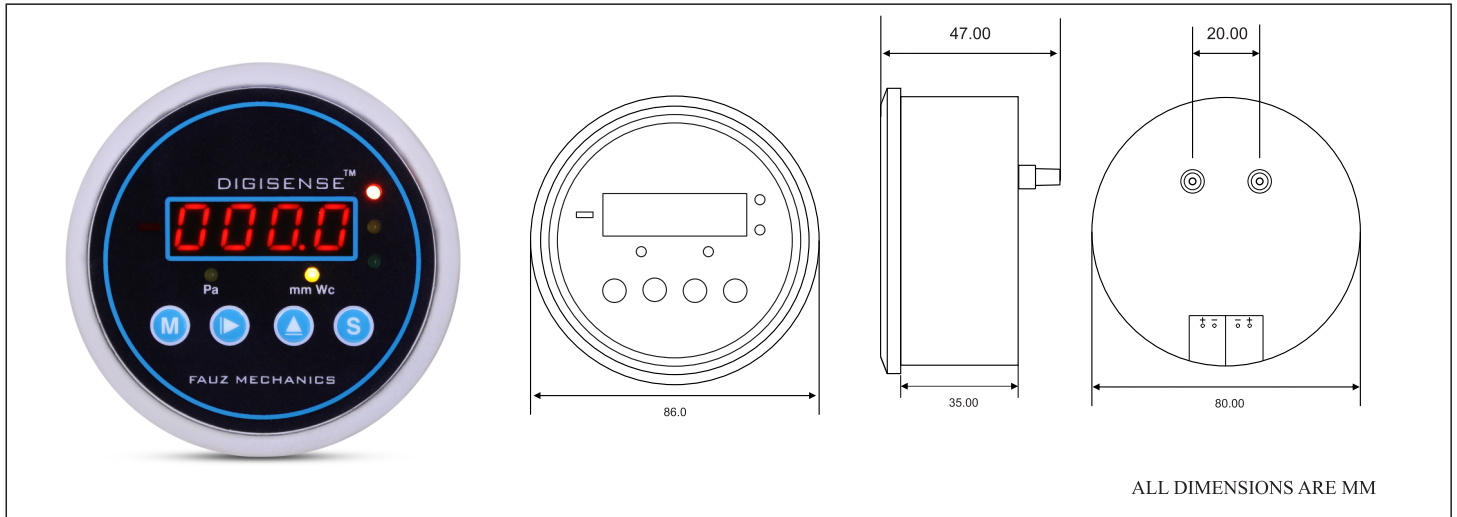


‘DIGISENSE™’, Differential Pressure Gauge

Specification, installation and Operating Manual



1. Introduction

FAUZ MECHANICS make DS Series **DIGISENSE™** Differential Pressure Switch is ideal monitoring pressure in HVAC systems, clean rooms or for a wide range of other low pressure pneumatic systems. Differential, Absolute and Vacuum Pressure Switch has Measuring ranges from 0 to 10 mm wc to 200

2. Specification

Media compatibility	: Air, non combustible, non corrosive gases
Supply Voltage	: 12 VDC
Accuracy	: ± 1.00% of F. S.
Display	: 4 Digit Seven Segment
Output Signals	: Low & High Audio Visual Alarm
Response Time	: 700 ms
Operating Temperature	: 10° to 60°C
Storage Temperature	: -30° to +100° C
Pressure Limit	: 1 PSI Maximum
Switch	: Digital push button.
Housing Material	: Poly Carbonate
Electrical Connections	: Screw terminals
Process Connection	: Push on connection for 3/16" ID tubing
Weight	: 110 Gram.
Dimensions	: 80.0Dia. X 35.0 mm depth

Note :

The Instrument can be powered 12 VDC (at different screw terminal shown in the above figure.)
For low and high pressure alarm connect wire as shown in the figure.

3. Installation

The **DIGISENSE™** should be mounted by making cutout of 80.00 mm diameter in the panel. Insert the **DIGISENSE™** through the hole and secure it to the panel with the provided mounting tabs and screws.

Positive Pressure : Connect tubing to HIGH PRESSURE port and vent LOW PRESSURE port to atmosphere.

Negative (Vacuum) Pressure - Connect tubing to LOW PRESSURE port and vent HIGH PRESSURE port to atmosphere.

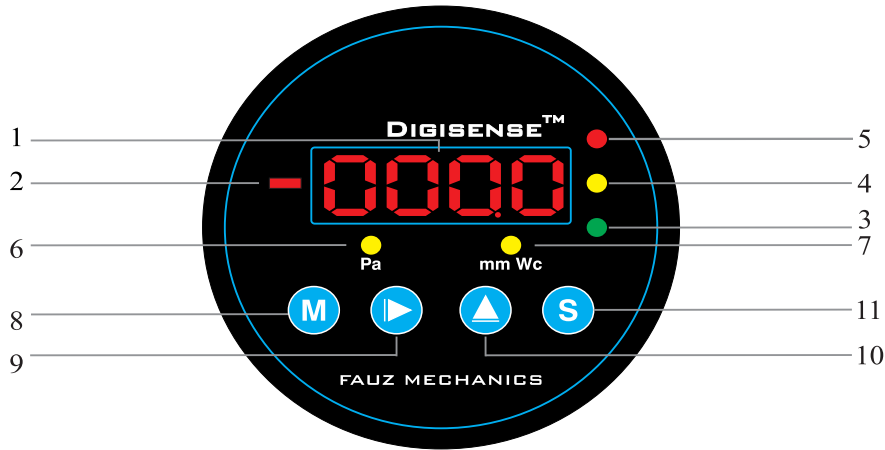
Differential Pressure - Connect tubing from the higher source to HIGH PRESSURE port and from the lower source to LOW PRESSURE port.

4. Model Configuration

DS	↑	↑	Example :DS-01-101
Output Signals	↑	↑	Range(mm wc)
00) None			101) 0 - 10
01) Alarm			102) 0 - 25
			103) 0 - 50
			104) 0 - 100
			105) 0 - 150
			106) 0 - 200

5. Display:

The DIGISENSE™ pressure gauge were designed to give the user maximum feedback and flexibility. Negative pressure will be indicated by the negative sign before the numerical indication. The 4 digit LED displays the numerical pressure reading and will show various parameter and set points. The Green, Yellow and Red LED shows the Alarm condition. Four easy to operate keys help to access and modify various parameter.


















6. Front Panel Description:

Sr No	DISPLAY	DESCRIPTION
1	0000	LED Pressure indication
2	Red LED	Negative Indication
3	Green LED	Will Glow When Pressure in Normal Condition
4	Yellow LED	Will Glow When Pressure delay time Condition
5	Red LED	Will Glow When Pressure in faulty Condition
6	Yellow LED	Will Glow When Pressure unit Selected in Pa
7	Yellow LED	Will Glow When Pressure unit Selected in mm Wc

7. Key Function:

Sr No.	8	9	10	11
Display	M	▶	▲	S
Description	Mode Key	Shift Key	Increment Key	Set Key
Normal Mode	Press to access the Programming Menu	Press to save Zero	_____	_____
Programing Menu	Press to exit from programing menu	Down key to select parameter	Up key to select parameter	_____
Editing Menu	Press to exit from editing menu	Press to move cursor to select digit	Press to Increase selected Digit	Press to accept the entered value
Keypad Locked (Mode)	Press to Enable/ Disable Alarm	_____	_____	_____


8. Programing Mode:

Sr. No.	Description	Key to Press	Display	Action	Note
1	To Unlock keypad	Simultaneously press  &  key	ULOC	Keypad Unlocked	
2	To enter in to programming mode		-LOR	Low Alarm	Press Set To Enter
3	To edit & save		007.0	Rightmost Digit will start blinking. Use  key for selection and  for change digit	Press SET to Save
4	To enter in to High Alarm		-HIR	High Alarm	Press Set To Enter
5	To edit & save		017.0	Using  /  Combination of edit the value	Press Set To Save
6	To enter in to Delay Alarm		-DLR	Delay Alarm	Press Set To Enter
7	To edit & save		0001	Using  /  Combination of edit the value	Press Set To Save
8	To Select Pressure Unit		-URT	Unit	Press Set To Enter
9	To edit & save Press Set To Save		mmWC	 / 	Using Combination of
10	To Enter into Calibration Mode		-CAL	Calibration	Press SET To Enter
11	Zero	Disconnect both pressure connections so that they ΣΠΑΝ are open to atmospheric	ZERO	Press SET to Save	The display will advanced to
12	Span	To Span the gauge, apply the full scale pressure to the high pressure port and let the pressure stabilized.	SPAN	Press and hold the SET key until ΣαΥδ is displayed	Calibration done Press Mode to exit from Calibration menu



9. Symbols:

Sr. No.	Symbols	Description
1	DIS	Alarm Disabled
2	EN	Alarm Enabled
3	POFL	Positive Pressure Overflow
4	NOFL	Negative Pressure Overflow
5	INVL	Entered Invalid Value

10. Zeroing the Gauge:

To re-zero the **DIGISENSE™** Pressure Gauge, disconnect both pressure connections so they are open to atmospheric pressure and press and hold the  for about 3- 4 seconds. This will reset Zero point of Gauge.

11. Restoring Factory Calibration

The factory defaults can be easily restored by simultaneously press both the  and  key and holding them for approximately 3-4 seconds. Once you have press both keys “FCR” is display that can restore the factory calibration setting.

12. Alarm Enable and Disable

For using this feature **KEYPAD must be in LOCK mode.**

Alarm Enable: This can be done by pressing  key until “EN” is displayed.

Alarm Disable: This can be done by pressing  key until “DIS” is displayed.

13. Instructions and Maintenance:

Occasionally disconnect pressure lines to vent both sides of gauge to atmosphere and re-zero. When making tubing connection DO NOT apply torque to tube fitting that can cause fitting to turn of twist with respect to plastic enclosure. Doing so will damage the product and void the warranty. The Applied pressure should not exceed the specified upper limit of the pressure gauge. The electrical connection must be firm and proper. Instrument should not be subjected to excessive temperature. In case of malfunctioning of the instrument, please contact the manufacturer.

14. Warranty:

FAUZ MECHANICS warrants its products to be free from defects in materials and workmanship for a period of 1 years from the date of shipment, subject to the following terms and conditions: Without charge, we will repair, replace the product found to be defective in materials or workmanship within the warranty period, provided that:

- 1)The product has not been subjected to abuse, neglect, accident, incorrect wiring not our own, improper installation or servicing.
- 2) The product has not been repaired or altered by anyone.
- 3) The product is returned to our factory, transportation prepaid before expiration of the warranty.

FAUZ MECHANICS

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