



Features

- Hysteresis adjustable.
- High accuracy and Resolution.
- Low cost.
- Pressure unit selectable: MPa, kgf/cm², bar, psi.

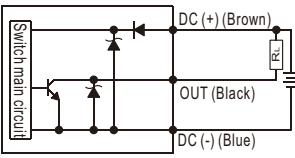
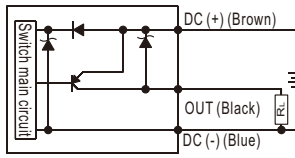
Specification

Model		MP41P (Positive)		
Rated pressure range		0.000 ~ 1.000 MPa		
Setting pressure range		-0.100 ~ 1.000 MPa		
Withstand pressure		1.5 MPa		
Fluid		Air, Non-corrosive gases, incombustible gases		
Set pressure resolution	MPa	0.001		
	kgf/cm ²	0.01		
	bar	0.01		
	psi	0.1		
Power supply voltage		12 to 24V DC $\pm 10\%$, Ripple (P-P) 10% or less		
Current consumption		$\leq 40\text{mA}$ (With no load)		
Switch output		<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;"> NPN open collector Max. load current : 125mA Max. supply voltage: 30V DC Residual voltage : $\leq 1.5\text{V}$ (load current 125mA) </td> <td style="width: 50%; text-align: center;"> PNP open collector Max. load current : 125mA Max. supply voltage: 24V DC Residual voltage : $\leq 1.5\text{V}$ (load current 125mA) </td> </tr> </table>	NPN open collector Max. load current : 125mA Max. supply voltage: 30V DC Residual voltage : $\leq 1.5\text{V}$ (load current 125mA)	PNP open collector Max. load current : 125mA Max. supply voltage: 24V DC Residual voltage : $\leq 1.5\text{V}$ (load current 125mA)
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Repeatability (Switch output)		$\leq \pm 0.2\%$ F.S. ± 1 digit		
Hysteresis	One point set mode	Adjustable		
	Hysteresis mode			
	Window com parat or mode			
Response time		Chattering-proof function: 0.05s, 0.25s, 0.5s, 1s ,2s and 3s selections		
Output short circuit protection		Yes		
7 segment LED display		Two color(Red/Green) main & unit display, Orange sub-display (Sampling rate: 5 times/1sec.)		
Indicator accuracy		$\leq \pm 2\%$ F.S. ± 1 digit (ambient temperature: 25 $\pm 3^\circ\text{C}$)		
Switch ON Indicator		Orange OUT 1 Indicator		
Environment	Enclosure	IP40		
	Ambient temp. range	Operation: 0 ~ 50 $^\circ\text{C}$, storage: -10 ~ 60 $^\circ\text{C}$ (No condensation or freezing)		
	Ambient humidity range	Operation/Storage: 35 ~ 85% RH (No condensation)		
	Withstand voltage	1000V AC in 1-min. (between case and lead wire)		
	Insulation resistance	50Mohm min. (at 500VDC between case and lead wire)		
	Vibration	Total amplitude 1.5mm or 10G,10Hz-150Hz-10Hz scan for 1 minute, two hours each direction of X,Y and Z		
Shock		100m/s ² (10G),3 times each in direction of X,Y and Z		
Temperature characteristic		$\leq \pm 2\%$ F.S. of detected pressure (25 $^\circ\text{C}$) at temp. Range of 0~50 $^\circ\text{C}$		
Lead wire		Oil-resistance cable(0.15mm ²)		
Weight		Approx 65 g (with 2-meter lead wire), Approx 30g (with male connector)		

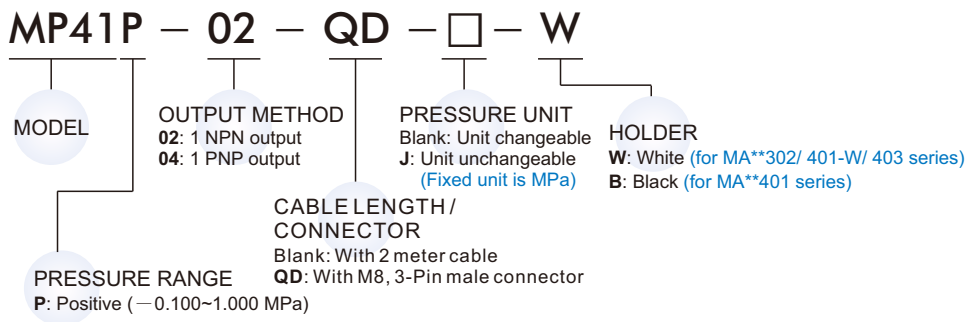
MP41 Order example

HIGH PRECISION DIGITAL PRESSURE SWITCH

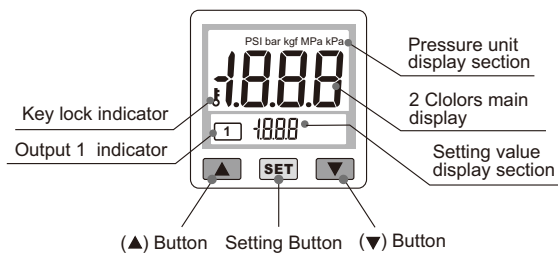
Output circuit wiring graph

Model	MP41P-02	MP41P-04
Connect diagram		
Output method	NPN output	PNP output

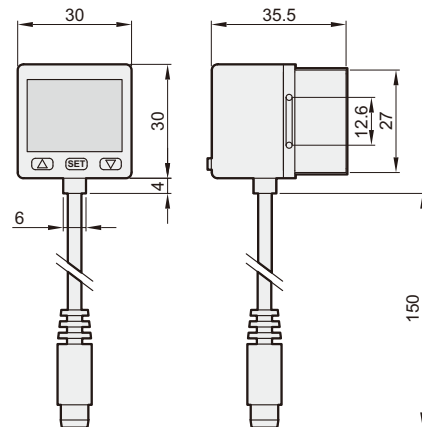
Order example



Panel instructions



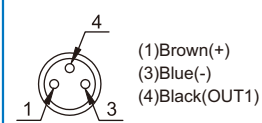
Unit dimension



Applicable model

Series	302	401	403
F.R.L.Unit	MACP302	MACP401	MACP403
F.R.L.Unit	MACT302	MACT401	MACT403
F.R.Unit	MAFR302	MAFR401	MAFR403
R. Unit	MAR302	MAR401	MAR403
F.R.Unit	—	MAFRF401	—
F.R.Unit	—	MATFR401	—

QD PINOUT

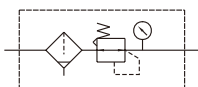


MP41 With MA**302

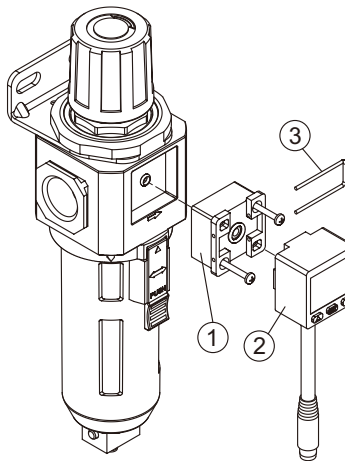
HIGH PRECISION DIGITAL PRESSURE SWITCH



Symbol



Mounting procedures



1. Fix the holder.
2. Assembly the digital pressure switch.
3. Button the n-ring.

Order example (Air unit)

MAFR302-8A-□-E3-□-G

MODEL
MACP302
MACT302
MAFR302
MAR302

BORE SIZE
8A: 1/4
10A: 3/8
15A: 1/2

(※1)
Blank: Standard type
D: auto drain valve (FMRF 300)
N: Nylon bowl

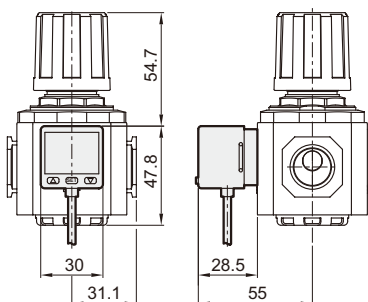
PRESSURE SWITCH
E1: MP41P-02
E2: MP41P-02-QD
E3: MP41P-02-J
E4: MP41P-02-QD-J
E5: MP41P-04
E6: MP41P-04-QD
E7: MP41P-04-J
E8: MP41P-04-QD-J

FILTER ELEMENT
Blank: 5 μm
40u: 40 μm (※1)

※1. Not applicable to MAR302

PORT THREAD
Blank: Rc thread
G: G thread
NPT: NPT thread

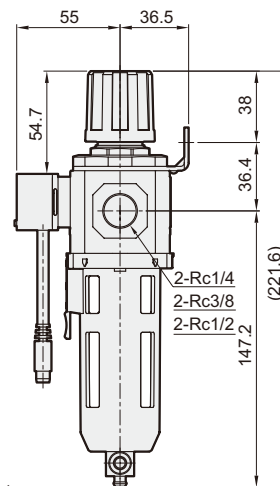
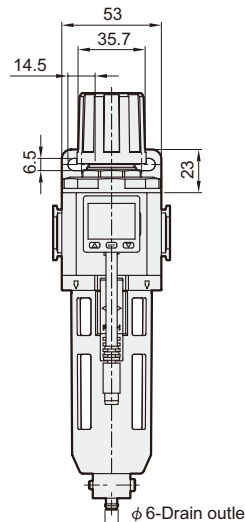
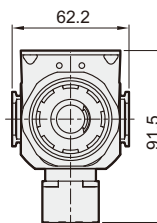
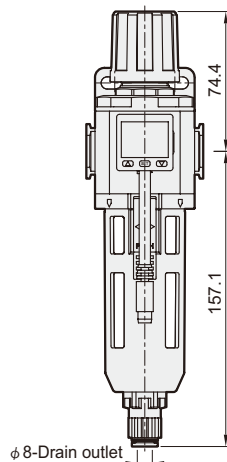
MAR302



MAFR302

MAFR302-D

Auto drain valve
Operating pressure range
0.15~1 MPa



MP41 With MA**401

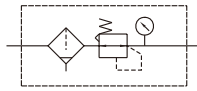
HIGH PRECISION DIGITAL PRESSURE SWITCH



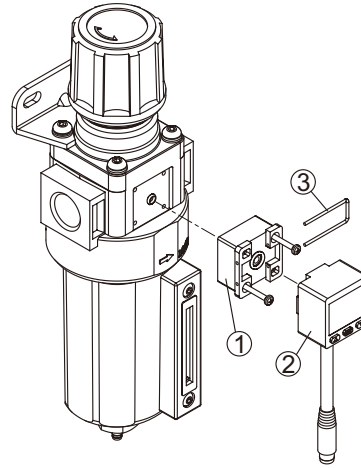
Mindman



Symbol



Mounting procedures



1. Fix the holder.
2. Assembly the digital pressure switch.
3. Button the n-ring.

Order example (Air unit)

MAFR401 - 8A - □ - □ - E3 - □ - G

MODEL

MACP401
MACT401
MAFR401
MAR401

EXTERIOR COLOR

Blank: Black & silver
W: Grey & white

BORE SIZE

8A: 1/4
10A: 3/8
15A: 1/2

Blank: Standard type
D: auto drain valve (FMRF 300)

PRESSURE SWITCH

E1: MP41P-02
E2: MP41P-02-QD
E3: MP41P-02-J
E4: MP41P-02-QD-J
E5: MP41P-04
E6: MP41P-04-QD
E7: MP41P-04-J
E8: MP41P-04-QD-J

PORT THREAD

Blank: Rc thread
G: G thread
NPT: NPT thread

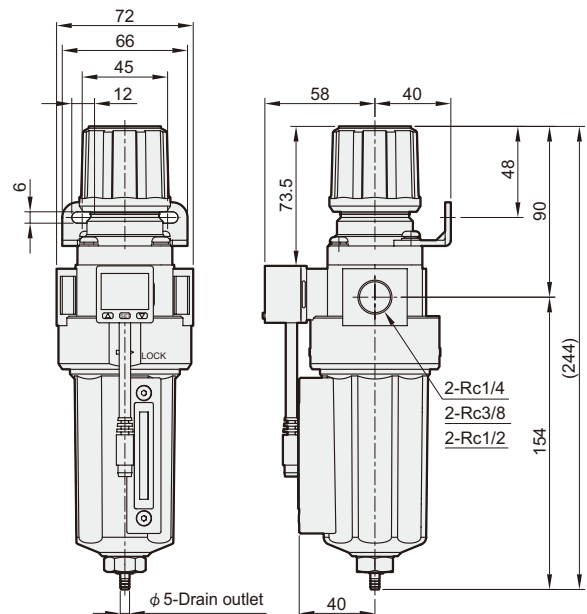
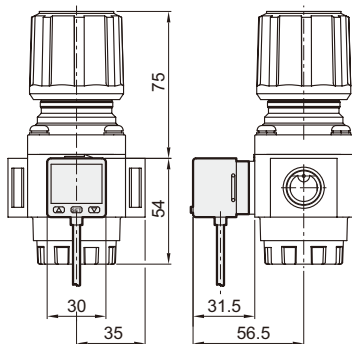
FILTER ELEMENT

Blank: 40 μm
5u: 5 μm

※1. Not applicable to MAR401

MAFR401

MAR401



MP41 With MA**403

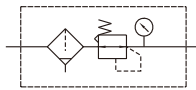
HIGH PRECISION DIGITAL PRESSURE SWITCH



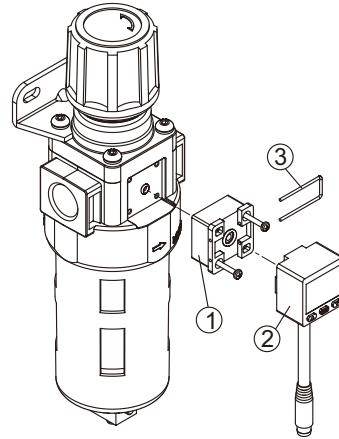
mindman



Symbol



Mounting procedures



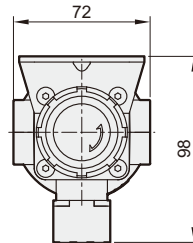
1. Fix the holder.
2. Assembly the digital pressure switch.
3. Button the n-ring.

Order example (Air unit)

MAFR403-8A-□-E3-□-G

<p>MODEL</p> <p>MACP403 MACT403 MAFR403 MAR403</p>	<p>BORE SIZE</p> <p>8A: 1/4 10A: 3/8 15A: 1/2</p>	<p>PRESSURE SWITCH</p> <p>E1: MP41P-02 E2: MP41P-02-QD E3: MP41P-02-J E4: MP41P-02-QD-J E5: MP41P-04 E6: MP41P-04-QD E7: MP41P-04-J E8: MP41P-04-QD-J</p>	<p>FILTER ELEMENT</p> <p>Blank: 40 μm 5u: 5 μm</p>	<p>PORT THREAD</p> <p>Blank: Rc thread G: G thread NPT: NPT thread</p>
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※1. Not applicable to MAR403



MAR403

MAFR403

