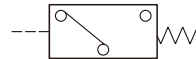




### Features

- Hysteresis adjustable.
- High accuracy and Resolution.
- Low cost.
- Pressure unit selectable: kPa, MPa, kgf/cm<sup>2</sup>, bar, psi, inHg, mmHg.

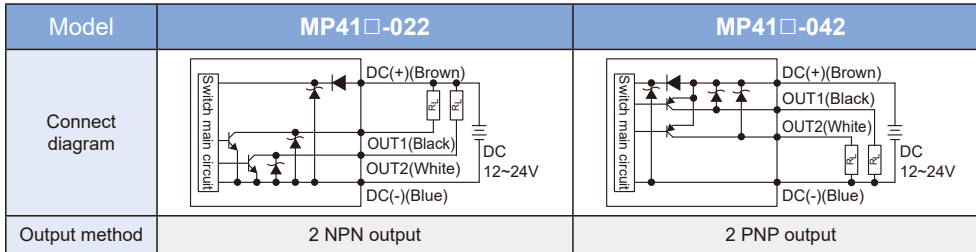
### Symbol



### Specification

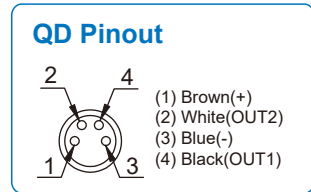
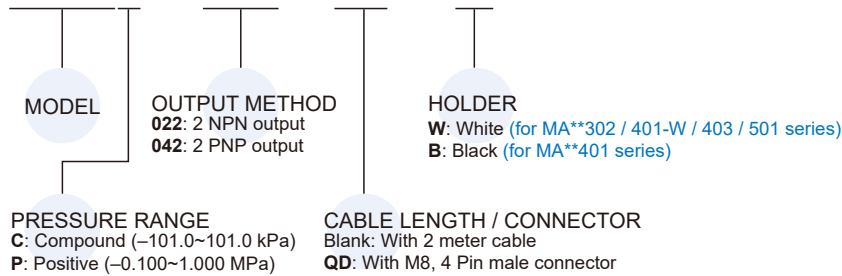
Model		MP41C (Compound)	MP41P (Positive)
Rated pressure range		- 100.0 ~ 100.0 kPa	0.0 ~ 1.0 MPa
Setting pressure range		- 101.0 ~ 101.0 kPa	- 0.1 ~ 1.0 MPa
Withstand pressure		300 kPa	1.5 MPa
Fluid		Filtered air, Non-corrosive / Non-flammable gas	
Set pressure resolution	kPa / MPa	0.1 / -	- / 0.001
	kgf/cm <sup>2</sup> / bar	0.001	0.01
	psi	0.01	0.1
	inHg / mmHg	0.1 / 1	-
Power supply voltage		12 to 24V DC ±10%, Ripple (P-P) 10% or less	
Current consumption		≤ 40mA (With no load)	
Switch output	Output type	2 NPN or 2 PNP open collector	
	Max. load current	125mA	
	Max. supply voltage	30V DC (at NPN output), 24V DC (at PNP output)	
	Residual voltage	≤1.5V	
Response time		Chattering-proof function: 50ms, 250ms, 500ms, 1000ms, 2000ms, 3000ms selections	
Output short circuit protection		Yes	
Display	LCD display	3½ digital, 7 segment LCD display (Red / Green / Orange) (Sampling rate: 5 times/sec.)	
	Switch on indicator	Orange indicator 1 : OUT1 & Orange indicator 2 : OUT2	
	Updates time	Adjustable	
	Indicator accuracy	±2% F.S. ±1 digit (ambient temperature: 25 ± 3°C)	
Repeatability (Switch output)		± 0.2% F.S. ±1digit	
Environment	Enclosure	IP40	
	Ambient temp. range	Operation: 0 ~ 50°C, storage : - 10 ~ 60°C ( No condensation or freezing)	
	Ambient humidity range	35 ~ 85% RH (No condensation)	
	Withstand voltage	1000V AC in 1-min. (between case and lead wire)	
	Insulation resistance	50M Ω min. (at 500V DC, 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 <sup>2</sup> (10G), 3 times each in direction of X,Y and Z	
Temperature characteristic		±2% F.S. of detected pressure (25°C) at temp. Range of 0~50°C	
Lead wire		ø4 Oil-resistance cable (PVC) - 26 AWG (0.15mm <sup>2</sup> ) - 4 cores	
Weight		Approx. 65 g (with 2 meter lead wire), Approx. 30g (with male connector )	

### Output circuit wiring graph



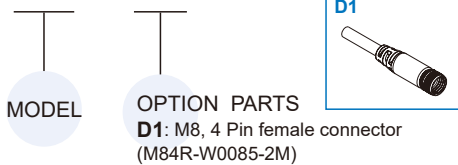
### Order example

**MP41P - 022 - QD - W**



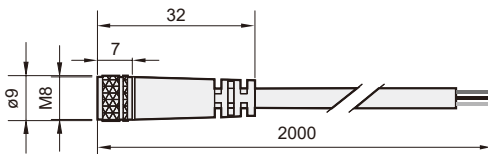
### Mounting accessories (Option)

**MP - D1**

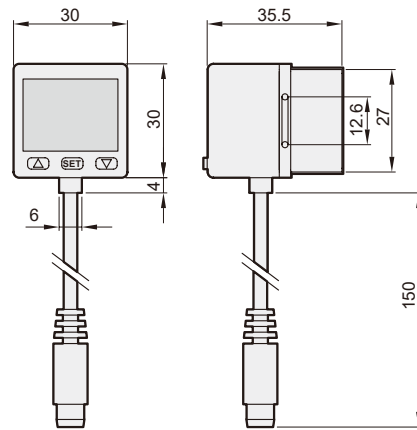


### MP-D1

M8, 4 Pin female connector



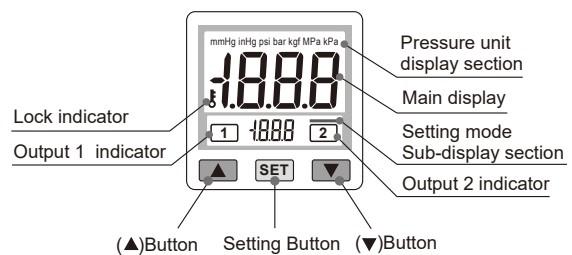
### Dimensions



### Applicable model

Series	302 / 403 / 501	401
F.R.L.Unit	MACP302 / 403 / 501	MACP401
F.R.L.Unit	MACT302 / 403 / 501	MACT401
F.R.Unit	MAFR302 / 403 / 501	MAFR401
R. Unit	MAR302 / 403 / 501	MAR401
F.R.Unit	—	MAFRF401
F.R.Unit	—	MATFR401

### Panel instructions



# MP41 With MA\*\*302

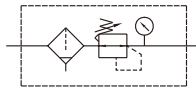
## HIGH PRECISION DIGITAL PRESSURE SWITCH



### Mounting procedures

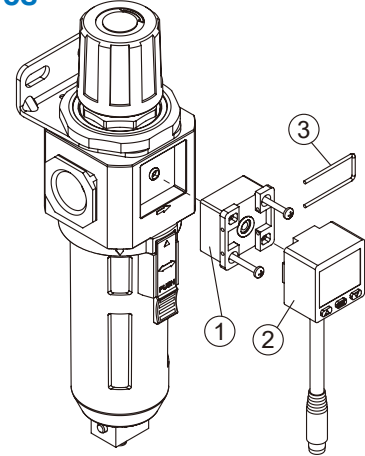
1. Fix the holder.
2. Assembly the digital pressure switch.
3. Button the n-ring.

### Symbol



### Order example of sensor holder set

Model	Description
A-MP41-W	White. Include part ①.



### Order example

MAFR302 — 8A — □□□ — E1 — □ — G

**MODEL**  
MACP302  
MACT302  
MAFR302  
MAR302

**PORT SIZE**  
8A: 1/4  
10A: 3/8  
15A: 1/2

**PRESSURE SWITCH**  
E1: MP41P-022  
E2: MP41P-022-QD  
E5: MP41P-042  
E6: MP41P-042-QD

**FILTER ELEMENT**  
Blank: 5μm  
40u: 40μm

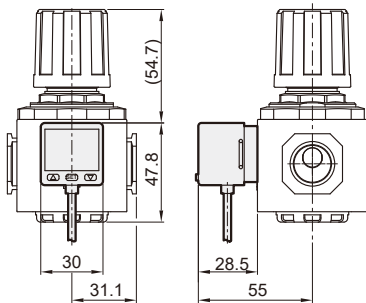
**PORT THREAD**  
Blank: Rc thread  
G: G thread  
NPT: NPT thread

(Option) ACCESSORIES

Bowl	Drain valve (*)	Flow direction
Blank: PC bowl M: Metal bowl N: Nylon bowl	Blank: Semi-auto drain D: Auto drain valve (FMRF300)	Blank: Left to right R: Right to left

\* Not applicable to MAR302

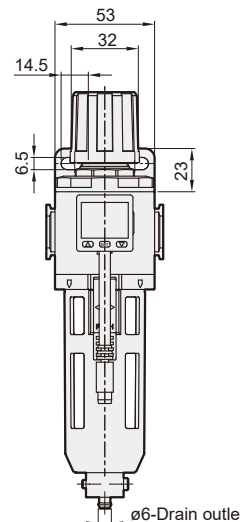
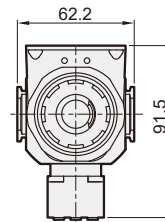
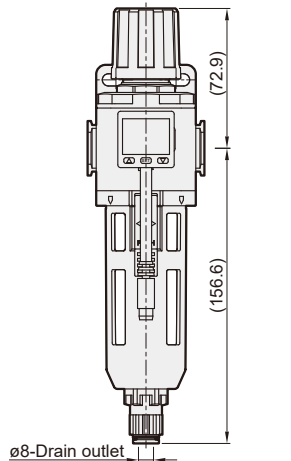
### MAR302



### MAFR302

#### MAFR302-D

**Auto drain valve**  
Operating pressure range  
0.15~1 MPa



# MP41 With MA\*\*401

## HIGH PRECISION DIGITAL PRESSURE SWITCH

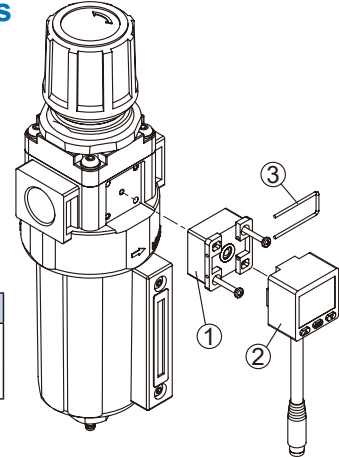


### Mounting procedures

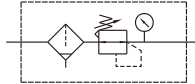
1. Fix the holder.
2. Assembly the digital pressure switch.
3. Button the n-ring.

### Order example of sensor holder set

Model	Description	
A-MP41-W	White	Include part ①
A-MP41-B	Black	①



### Symbol



### Order example

MAFR401 — 8A — □ — □□□ — E1 — □ — □ — G

MODEL  
MACP401  
MACT401  
MAFR401  
MAR401

EXTERIOR COLOR  
Blank: Black & Silver  
W: Gray & white

PRESSURE SWITCH  
E1: MP41P-022  
E2: MP41P-022-QD  
E5: MP41P-042  
E6: MP41P-042-QD

(\*) FILTER ELEMENT  
Blank: 40µm  
5u: 5µm

(Option) BRACKET  
Blank: Without  
B2: Screw fixed (MAFR, MAR only)

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

PORT SIZE (Option) ACCESSORIES

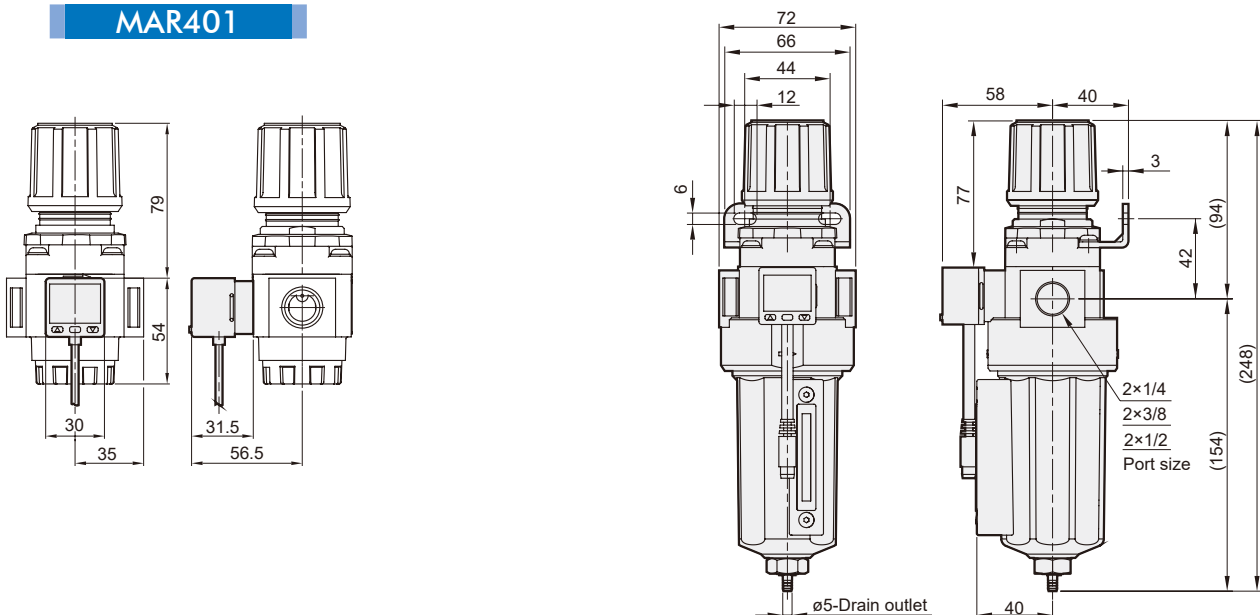
8A: 1/4  
10A: 3/8  
15A: 1/2

Bowl	Drain valve (*)	Flow direction
Blank: Metal bowl	Blank: Semi-auto drain D: Auto drain valve (FMRF300)	Blank: Left to right R: Right to left

\* Not applicable to MAR401

MAFR401

MAR401

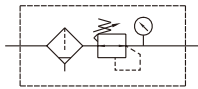


# MP41 With MA\*\*403

## HIGH PRECISION DIGITAL PRESSURE SWITCH



### Symbol

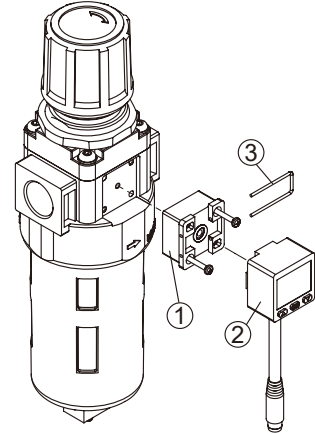


### Mounting procedures

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

### Order example of sensor holder set

Model	Description
A-MP41-W	White. Include part ①.



### Order example

MAFR403 — 8A — □□□ — E1 — □ — □ — G

**MODEL**  
MACP403  
MACT403  
MAFR403  
MAR403

**PORT SIZE**  
8A: 1/4  
10A: 3/8  
15A: 1/2

**PRESSURE SWITCH**  
E1: MP41P-022  
E2: MP41P-022-QD  
E5: MP41P-042  
E6: MP41P-042-QD

**(\*) FILTER ELEMENT**  
Blank: 40µm  
5u: 5µm

**(Option) BRACKET**  
Blank: Without  
B2: Screw fixed  
(MAFR, MAR only)

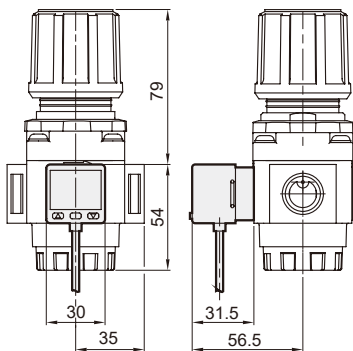
**PORT THREAD**  
Blank: Rc thread  
G: G thread  
NPT: NPT thread

#### (Option) ACCESSORIES

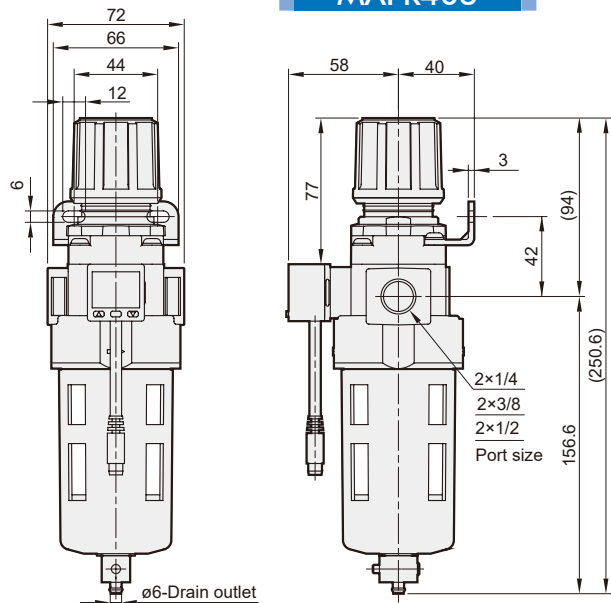
Bowl	Drain valve (*)	Flow direction
Blank: PC bowl N: Nylon bowl	Blank: Semi-auto drain D: Auto drain valve (FMRF300)	Blank: Left to right R: Right to left

\* Not applicable to MAR403

### MAR403



### MAFR403



# MP41 With MA\*\*501

## HIGH PRECISION DIGITAL PRESSURE SWITCH



### Symbol

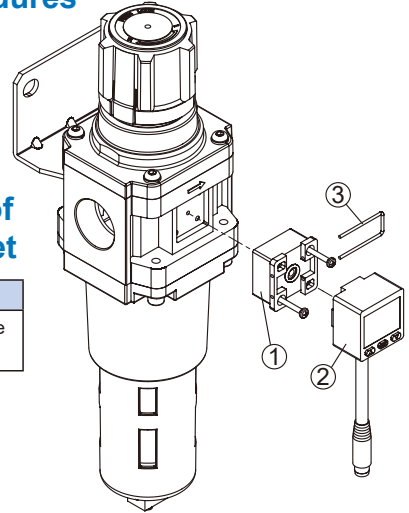


### Mounting procedures

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

### Order example of sensor holder set

Model	Description
A-MP41-W	White. Include part ①.



### Order example

MAFR501 – 8A – □□□ – E1 – G

#### MODEL

MACP501  
MACT501  
MAFR501  
MAR501

#### PORT SIZE

20A: 3/4  
25A: 1

#### (Option) ACCESSORIES

Bowl	Drain valve	Flow direction
Blank: PC bowl M: Metal bowl N: Nylon bowl	Blank: Semi-auto drain D: Auto drain valve (FMRF300) * Not applicable to MAR501	Blank: Left to right R: Right to left

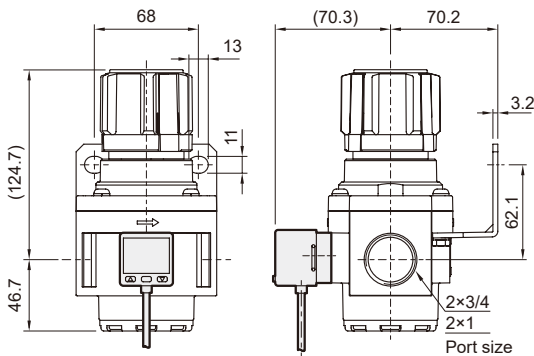
#### PRESSURE SWITCH

E1: MP41P-022  
E2: MP41P-022-QD  
E5: MP41P-042  
E6: MP41P-042-QD

#### PORT THREAD

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

### MAR501



### MAFR501

