

MP41 High Precision Digital Pressure Switch



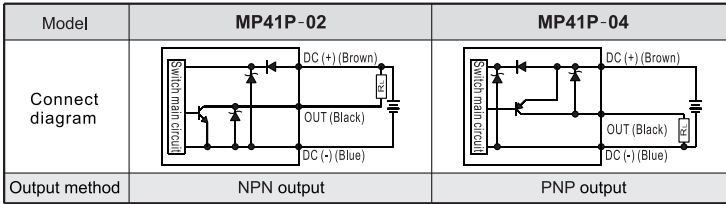
Features

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

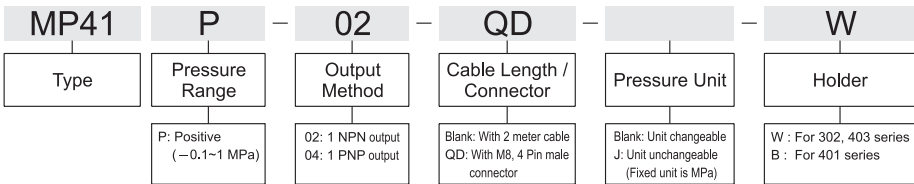
Specification

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		≤ 40 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 : ≤ 1.5V (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 : ≤ 1.5V (load current 125mA) </td> </tr> </table>	NPN open collector Max. load current : 125mA Max. supply voltage: 30V DC Residual voltage : ≤ 1.5 V (load current 125mA)	PNP open collector Max. load current : 125mA Max. supply voltage: 24V DC Residual voltage : ≤ 1.5 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 $\pm 3^\circ$ C)		
Switch ON Indicator		Orange OUT 1 Indicator		
Environment	Enclosure	IP40		
	Ambient temp. range	Operation: 0 ~ 50°C, storage: -10 ~ 60°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°C) at temp. Range of 0~50°C		
Lead wire		Oil-resistance cable(0.15mm ²)		
Weight		Approx 6 g (with 2-meter lead wire), Approx 30g (with male connector)		

Output circuit wiring graph



How to order

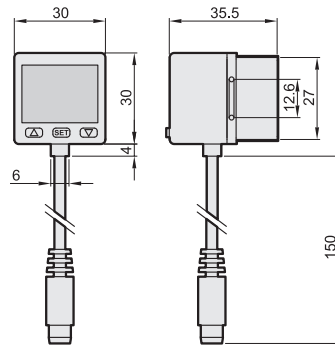


- UVSC
- UACP
- UAFR
- UAR
- ADV FMRF
- MP PG

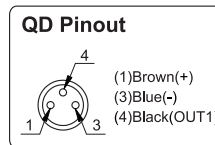
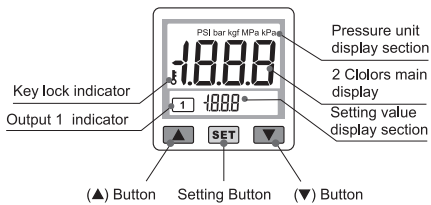
Applicable model

Series	302	401	403
F.R.L.Unit	UACP302	UACP401	UACP403
F.R.Unit	UAFR302	UAFR401	UAFR403
R. Unit	UAR302	UAR401	UAR403

Unit dimension



Panel instructions

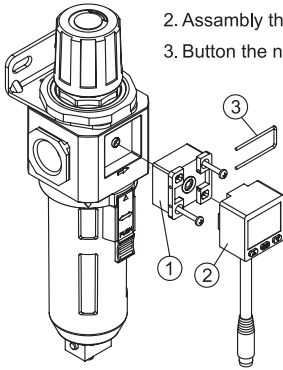


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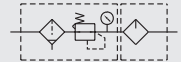


Mounting procedures

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



Symbol

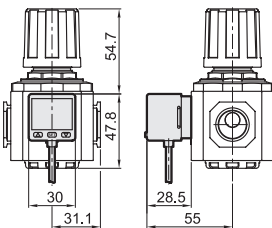


How to order (Air Units)

UACP302	8A		E3		G
Type	Bore		Pressure Switch	Filter Element	Port Thread
UACP302 UAFR302 UAR302	8A : 1/4 10A : 3/8 15A : 1/2	Blank: standard type D: auto drain valve (FMRF300)	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	Blank: 5 μ m 40 μ : 40 μ m	Blank: Rc thread G: G thread NPT: NPT thread

※ Not applicable to UAR302

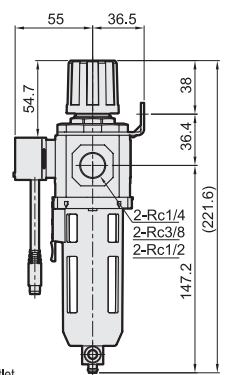
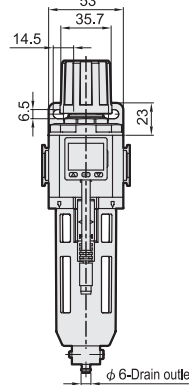
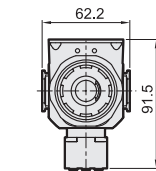
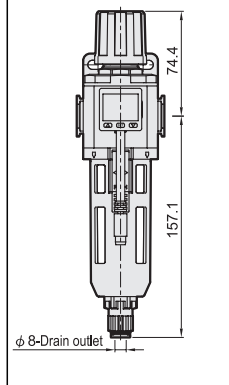
● UAR302



● UAFR302

● UAFR302-D

Auto drain valve
Operating pressure range:
0.15~1 MPa

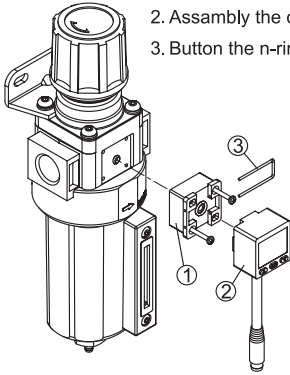


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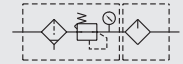


Mounting procedures

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



Symbol



UVSC

UACP

UAFR

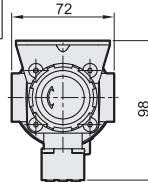
UAR

ADV
FMRF

MP
PG

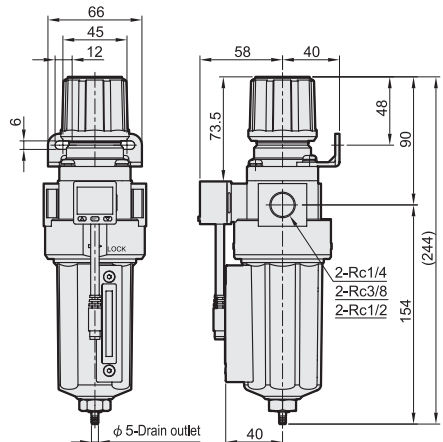
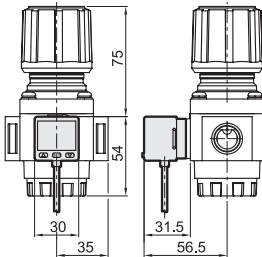
How to order (Air Units)

UACP401	8A		E3	G
Type	Bore		Pressure Switch	Filter Element
UACP401 UAFR401 UAR401	8A : 1/4 10A : 3/8 15A : 1/2	Blank: standard type D: auto drain valve (FMRF300) ※ Not applicable to UAR401	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	Blank: 40 μm 5u: 5 μm Blank: Rc thread G: G thread NPT: NPT thread



● UAR401

● UAFR401

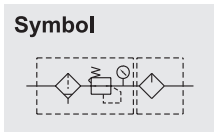
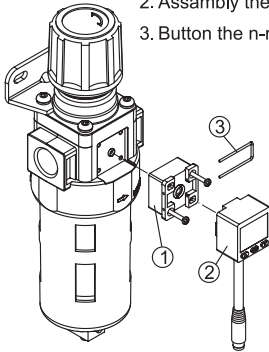


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Mounting procedures

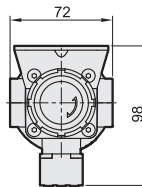
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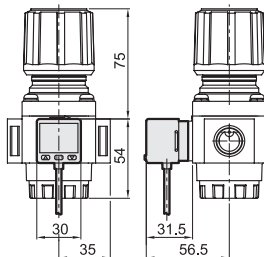
How to order (Air Units)

UACP403	8A		E3		G
Type	Bore		Pressure Switch	Filter Element	Port Thread
UACP403 UAFR403 UAR403	8A : 1/4 10A : 3/8 15A : 1/2	Blank: standard type D: auto drain valve (FMRF300)	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	Blank: 40 μm 5u: 5 μm	Blank: Rc thread G: G thread NPT: NPT thread

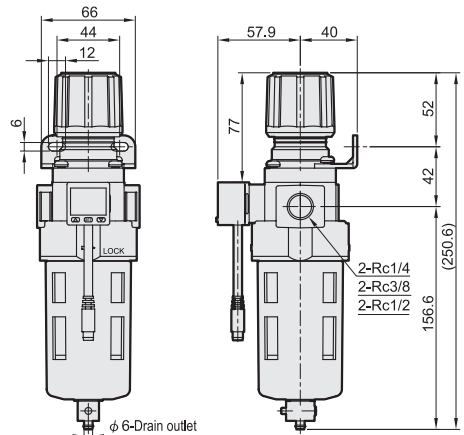
※Not applicable to UAR403



● UAR403



● UAFR403

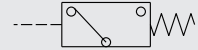


Specification

Model	MPS-6A	MPS-6A-R
Fitting method	PT 1/8 (for pipe-thread fitting)	O-ring: S4 (for O-ring fitting)
Ambient temperature	-5~+60°C (No freezing)	
Operating pressure range	0.8 MPa	
Test pressure	1 MPa	
Pressure setting range	0.1~0.7 MPa	
Operation output	Normal open ON (Red led lighting up) above value	
Sensor switch	RCE Reed switch / Normal open Voltage range: 5~220V DC/AC Max. Current: 50mA	
Weight	185 g	189 g



Symbol



UVSC

UACP

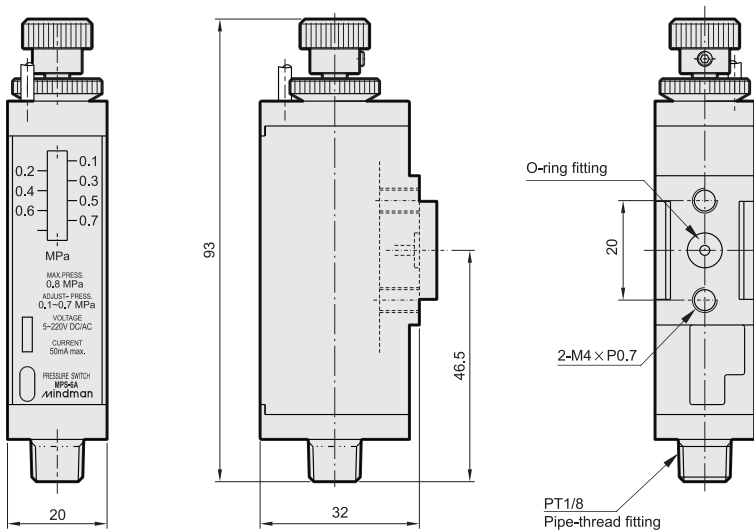
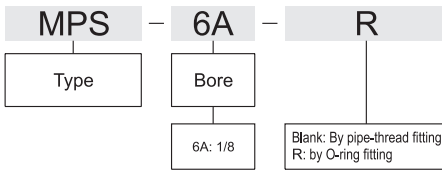
UAFR

UAR

ADV
FMRF

MP
PG

How to order



Specification

Model	PG-20	PG-40
Bore No.	—	6A
Port size	—	1/8
Medium	Air	
Operating pressure range	By order specifications	
Ambient temperature	-5~+60°C (No freezing)	
Precision	JIS 4.0 Class	
Weight	11 g	54 g



PG-40



PG-20

How to order

PG - **40** - **S** - **1K** - **NPT**

Type Gauge Size Case Material Press. Range Port Thread

Code Model	—	W	S	Note
PG-20	○	○	×	W(White)
PG-40	○	○	○	W(Electroplating)

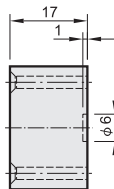
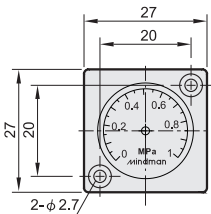
※ Blank: Standard type (Black)
 ※ S: Stainless steel

Blank: 0~1 MPa
 1K : 0~0.1 MPa
 2K : 0~0.2 MPa
 3K : 0~0.3 MPa
 4K : 0~0.4 MPa
 5K : 0~0.5 MPa
 20K : 0~2 MPa

Pressure Range

Code Model	—	1K	2K	3K	4K	5K	20K
PG-20	○	×	×	×	×	×	×
PG-20W	○	×	×	×	×	×	×
PG-40	○	○	○	○	○	○	○
PG-40W	○	○	○	○	○	○	○
PG-40S	○	×	○	×	○	×	×

● PG-20



● PG-40

