

# P-100

● Old model P-115

## GENERAL

Standard type purgemeter. Widely accepted in the market. Suitable for both liquids and gases.

Applicable from built-in use for equipments up to purging monitoring of industrial processes. Available for PTFE sealing.

## MAJOR APPLICATIONS

General purpose, built-in use for equipments (Small flow rate)

## STANDARD SPECIFICATION

Measuring object		Liquids and gases	
Measuring range	Air	※1 Min. 4~20 NmL/min. Max. 5~50 NL/min.	<ul style="list-style-type: none"> <li>Air at 0°C, 1atm</li> <li>When selecting flow range, refer to standard flow rate table.</li> <li>In case Op. Press. at gas is not 1atm, refer to page 1.</li> </ul>
	Water	Min. 5~50 mL/min. Max. 0.4~2 L/min. ※2	
Range ability	10:1		10:2 occasionally
Accuracy	±5%F.S.		
Max. Op. Press.	8kgf/cm <sup>2</sup> G(0.8MPa)	When packing PTFE is used, Max. Op. Press. is 5kgf/cm <sup>2</sup> G	
Max. Op. Temp.	120°C	Standard products have the packing materials made of NBR, so Max. Temp. is 80°C	
Material	Std.	Option(Specify by model code)	
Body	SUS304	SUS316,BS	
	Pyrex glass	Products by ZEONEX are also available. Consult factory separately.	
Packing	NBR(max.80°C)	Viton(max.120°C), CR(max.80°C), PTFE(max.120°C), EPDM(max.80°C)	
Support	Aluminium		
Cover	Poly-carbonate		
Connection	Std.	Rc1/4	Refer to Basic model code for details.
	Opt.	Rc1/8,NPT1/4,NPT1/8	
Mounting	Std.	Lock-nut mount onto panel front	
	Opt.	Bezel installation, Panel-rear installation, Stand provided etc.	
Weight(std. type)	0.5kg		

※1 1~5NmL/min is available. Consult factory for details.

※2 0.5~5L/min is available. Consult factory for details.

## ALARM AND ANALOG OUTPUT

Type	Availability	Reference pages
Reed switch type alarm unit	General	○ 49, 50 page
	CE, UL Version	○ 49, 50 page
PAU Optical alarm unit	○	51 page
Optical alarm unit	○	52 page
Analog output unit	○	53 ~ 56 page

## STANDARD FLOW RATE TABLE (In case Op. Press at gas is not 1atm, refer to page 1.)

In case alarm output code is O or E		In case alarm output code is A to D			
AIR(1atm,0°C)	Water	AIR(1atm,0°C)	Alarm setting range	Water	Alarm setting range
4~20 NmL/min					
6~30 NmL/min					
10~50 NmL/min					
10~100 NmL/min					
20~200 NmL/min					
30~300 NmL/min					
50~500 NmL/min	5~50 mL/min	50~500 NmL/min	100~400 NmL/min	5~50 mL/min	10~40 mL/min
0.1~1 NL/min	10~100 mL/min	0.1~1 NL/min	0.2~0.8 NL/min	10~100 mL/min	20~80 mL/min
0.2~2 NL/min	20~200 mL/min	0.2~2 NL/min	0.4~1.6 NL/min	20~200 mL/min	40~160 mL/min
0.3~3 NL/min	30~300 mL/min	0.3~3 NL/min	0.6~2.4 NL/min	30~300 mL/min	60~240 mL/min
0.5~5 NL/min	50~500 mL/min	0.5~5 NL/min	1~4 NL/min	50~500 mL/min	100~400 mL/min
1~10 NL/min		1~10 NL/min	2~8 NL/min		
2~20 NL/min	0.1~1 L/min	3~15 NL/min	3~12 NL/min		
3~30 NL/min		4~20 NL/min	4~16 NL/min		
		6~30 NL/min	6~24 NL/min	0.1~1 L/min	0.2~0.8 L/min
5~50 NL/min	0.3~1.5 L/min	8~40 NL/min	8~32 NL/min		
	0.4~2 L/min	10~50 NL/min <sup>※1</sup>	10~40 NL/min <sup>※1</sup>		

※1 1~5NmL/min is available. Consult factory for details.

※2 0.5~5L/min is available. Consult factory for details.

※3 PTFE(packing material) : Unacceptable

※4 Below value position : 15~40 NL/min

※May be different depending on the scale length.  
※In case alarm output code is G, flow range differs. Consult factory for details.

## ORDERING INFORMATION

Basic model code	Designation items for detailed specifications					
P-10 □-□□-□□-□□	①	②	③	④	⑤	⑥
(Use Model Code Table for selection)	Fluid name	Measuring range	Press.	Temp.	Mounting option	Other option
	(For specification procedure, refer to page 57)					



## BASIC MODEL CODE

SERIES NAME	VALVE	ALARM ANALOG OUTPUT	WETTED PARTS MATERIAL	PACKING MATERIAL	CONNECTION TYPE	CONNECTION SIZE	EXAMPLE	DESCRIPTION
P-10	0	-L	0	-4	Z	2		
		VALVE	ALARM ANALOG OUTPUT	WETTED PARTS MATERIAL	PACKING MATERIAL	CONNECTION TYPE	CONNECTION SIZE	
							1	1/8
							2	1/4(Standard)
							Z	Special
							R	Rc thread(Standard)
							N	NPT thread
							Z	Special
							N	NBR(Standard)
							C	CR
							F	VITON
							E	EPDM
							T	PTFE
							Z	Special
							4	SUS304(Standard)
							6	SUS316
							B	BS
							Z	Special
							0	Not provided
							A	Reed switch alarm (LO)
							B	Reed switch alarm (LC)
							C	Reed switch alarm (HO)
							D	Reed switch alarm (HC)
							E	PAU ALARM UNIT provided
							F	E3C Separate Type Optical alarm unit provided
							G	PAS/IAU analog output unit
							Z	Special
							0	Not provided
							L	Bottom (gas for atmospheric pressure scale)
							U	Top (gas for pressure scale or for negative pressure on the secondary side)
							Z	Special
							0	Bottom rear → Top rear (Standard)
							1	Select this code normally.
							9	Special

## OTHER AVAILABLE OPTIONS

You can specify the following options:

Variable type on the front of alarm contact, reed switch lead wire length, double graduations, special graduations, built-in check valve type, built-in valve lock mechanism type, built-in rubber joint type, built-in joint type, etc.

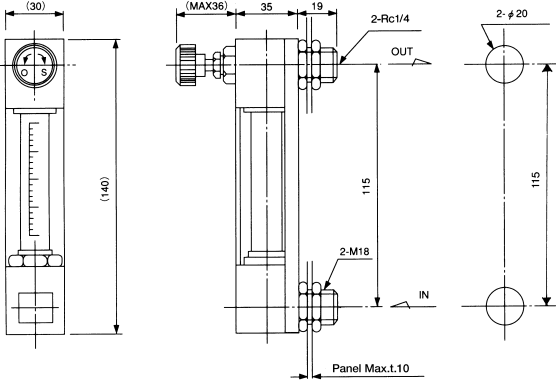
(For details, refer to ⑥ Other Option and One-Point Advice on page 60)

## DIMENSIONS

### STANDARD TYPE

P-100-U0-4N-R2

- Panel front lock-nut fixing
- Valve provided at Outlet



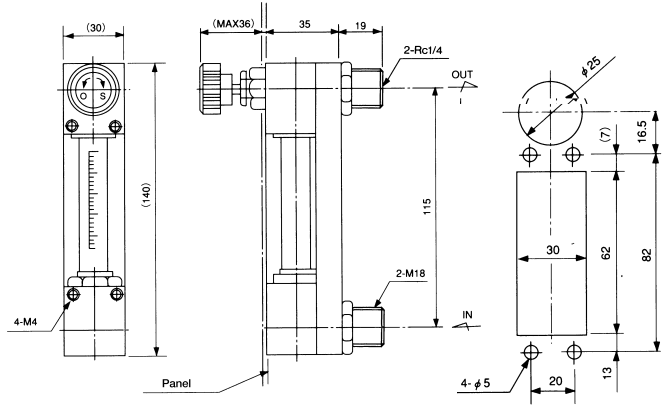
PANEL CUT

### PANEL-REAR INSTALLATION TYPE

P-100-U0-4N-R2 — N2 — 10NL/min — 0.01kgf/cm<sup>2</sup>G — C

Dimensions for P-100-U0-4N-R2.

- Panel-rear installation (Mounting Option code C)
- Valve provided at Outlet
- The others are standard type



PANEL CUT

### Panel cut dimension

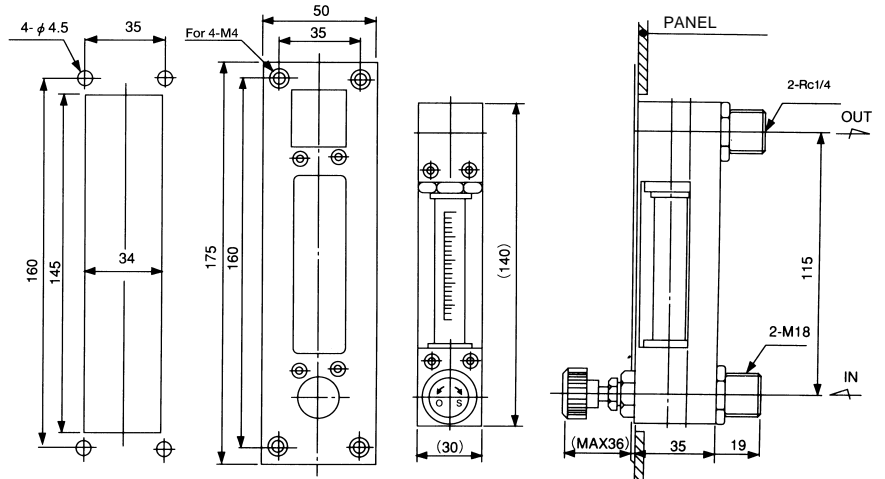
Connection Size	Hole diameter(mm)
Rc1/4, 1/4NPT	φ 20
Rc1/8, 1/8NPT	φ 16

Caution) Use non-magnetize material for panel when ALARM ANALOG OUTPUT code is A-D.

### BEZEL INSTALLATION TYPE

P-100-L0-4N-R2 — N2 — 10NL/min — D

- Bezel fixing (Installation option code D)
- Valve provided at Inlet
- The others are standard type



PANEL CUT

### Standard Material

Parts name	Standard material	Available material
Support	Aluminium	—
<b>Body</b>	SUS304	SUS316,C3604
<b>Tapered tube</b>	Pyrex glass	ZEONEX*
<b>Float</b>	SUS316/Glass	PTFE,Ruby
<b>Packing</b>	NBR	Viton, CR, EPDM, PTFE
<b>Fitting</b>	SUS304	SUS316,C3604
<b>Valve</b>	SUS304	SUS316
Cover	Poly-carbonate	—

Parts whose names are described in **bold letters** are in contact with fluids to be measured.

\* When selecting ZEONEX, the confirmation on the corrosion resistance shall be made in advance with factory.

### In case alarm output code is A to D

A	Reed switch alarm (LO)	Refer to page 49, 50.
B	Reed switch alarm (LC)	
C	Reed switch alarm (HO)	
D	Reed switch alarm (HC)	

### In case alarm output code is E to G

E	PAU ALARM UNIT provided	Refer to page 51.
F	E3C Separate Type Optical alarm unit provided	Refer to page 52.
G	PAS/IAU Purgemeter, Analog output unit provided	Refer to page 53.