



# TECHNICAL GUIDANCE

Corrosion-resistance type purgometer for measuring liquids and gases

## P-400 Purgometer

### ■ OUTLINE

The P-400 is a corrosion-resistance type purgometer with all stainless steel construction. Panel installation and flange connection are possible.

### ■ MAJOR APPLICATIONS

Corrosive services

### ■ STANDARD SPECIFICATIONS

Measuring fluid	Gases Liquids	
Measuring range	Air	Min. 80 to 800 mL/min (nor) Max. 6 to 60 L/min (nor)
	Water	Min. 5 to 50 mL/min Max. 0.2 to 2 L/min
	<ul style="list-style-type: none"> <li>When selecting a flow range, refer to "Index &amp; Quick Reference for P Series Purgometers" (TG-S0001).</li> <li>When selecting a flow range, refer to the standard flow rate table.</li> </ul>	
Range ability	10 : 1	
Indication accuracy	±3% F.S.	
Fluid pressure	Max. 1MPa(Max. 0.5MPa for PVC)	
Fluid temperature	Max. 120°C (Depends on the gasket material) (Max. 60°C for PVC)	
Material	Wetted part	SCS14/SUS304, SCS14/SUS316, PVC
	Tapered tube	Heat-resistant glass
	Gasket	Nitrile rubber (NBR) (Max. 80°C) Chloroprene rubber (CR) (Max. 80°C) Fluoro rubber (Max. 120°C) PTFE (Max. 120°C) not applicable to PVC body <ul style="list-style-type: none"> <li>The maximum fluid temperature for each gasket material may vary depending on usage and ambient conditions.</li> </ul>
	Mounting plate	SPCC, SUS304
	Cover	Acryl, SPCC, SUS304
Process Connection	Rc : 1/4" (Standard) , 1/8", 3/8", 1/2" NPT : 1/8", 1/4", 3/8", 1/2" Flange : 10A, 15A, 20A, 25A	
Mounting	Lock nut mount on panel front (Standard) Flange connection With stand	
Mass	approx. 0.9 kg	

### ■ ALARM CONTACT AND OUTPUT

Type	Availability	
Reed switch type alarm unit	General	×
	UL-approved	×
PAU optical alarm unit	×	

For CE approval, refer to "Index & Quick Reference for P Series Purgometers" (TG-S0001).

### ■ STANDARD FLOW RATE TABLE

When the fluid pressure is other than 0 MPa, refer to "Index & Quick Reference for P Series Purgometers" (TG-S0001).

Air (0MPa,0°C)	Pressure loss(kPa) <sup>☆1</sup>	Water
80 to 800 mL/min (nor)	0.5 or less	5 to 50 mL/min
0.1 to 1 L/min(nor)	0.5 or less	10 to 100 mL/min
0.2 to 2 L/min (nor)	0.5 or less	20 to 200 mL/min
0.3 to 3 L/min (nor)	0.5 or less	30 to 300 mL/min
0.5 to 5 L/min (nor)	0.5 or less	40 to 400 mL/min
1 to 10 L/min (nor)	1 or less	50 to 500 mL/min
2 to 20 L/min (nor)	3 or less	0.1 to 1 L/min
3 to 30 L/min (nor)	6 or less	0.12 to 1.2 L/min <sup>☆2</sup>
5 to 50 L/min (nor)	15 or less	0.15 to 1.5 L/min
6 to 60 L/min (nor)	20 or less	0.2 to 2 L/min

Although other flow rate specifications are available, some flow ranges need to be changed. Contact us for details.

Low pressure loss type of production and I are available. Contact us for details.

Pressure loss of liquid, please contact.

☆ 1 : It becomes the pressure loss during the valve fully open

☆ 2 : If body wetted parts materials made of PVC, can not be produced more than 0.12 ~ 1.2L/min.



### ■ BASIC MODEL CODE

P-40	Model Code								Descriptions	Notes
Flow direction	0								Bottom rear → Top rear (Standard)	Select this code for normal conditions.
	1								Bottom → Top	A valve will be installed externally. For PVC, only this code is selectable but no valve can be installed
	9								Special	
Valve		0							Not provided	Refer to "Index & Quick Reference for P Series Purgometers" (TG-S0001).
		L							Inlet (gas for atmospheric pressure scale)	
		U							Outlet (gas for pressure scale or for negative pressure on the secondary side)	
Alarm output	0								Not provided	
Wetted parts material		4							SCS14/SUS304 (Standard)	
		6							SCS14/SUS316	
		P							PVC	
		Z							Special	
Gasket material		N							Nitrile rubber (NBR) (Standard)	
		C							Chloroprene rubber (CR)	Select this code for ammonia gas.
		F							Fluoro rubber	
		T							PTFE	
		Z							Special	
	Process connection	R	1							Rc1/8 (With R1/4×Rc1/8 adapter)
2									Rc1/4 (Standard)	
3									Rc3/8 (With R1/4×Rc3/8 adapter)	
4									Rc1/2 (With R1/4×Rc1/2 adapter)	
N		1							1/8NPT (With R1/4×1/8NPT adapter)	
		2							1/4NPT	
		3							3/8NPT (With R1/4×3/8NPT adapter)	
		4							1/2NPT (With R1/4×1/2NPT adapter)	
Z		3							Flange connection (10A)	Specify a standard separately.
		4							Flange connection (15A)	
		5							Flange connection (20A)	
		6							Flange connection (25A)	
	Z							Special		

### ■ OTHER AVAILABLE OPTIONS

You can specify the following options:

Double graduations, special graduations, rubber joint type, other joint types, etc. For details, refer to "Index & Quick Reference for P Series Purgometers" (TG-S0001).

## ORDERING INFORMATION

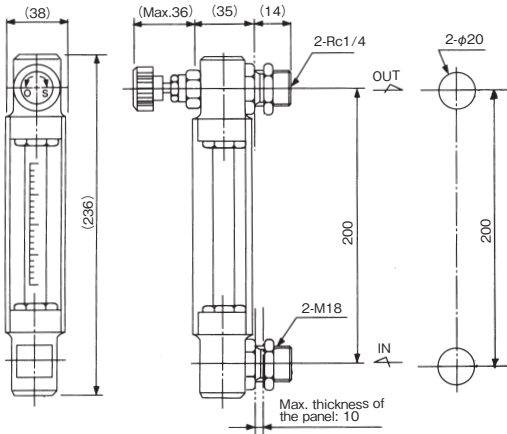
Basic model code	Items to be specified
P-40 □ - □□ - □□ - □□	① Fluid name - ② Flow range - ③ Press. - ④ Temp. - ⑤ Mounting option - ⑥ Other options
(Select in the model code table.)	(Refer to "Index & Quick Reference for P Series Purgemeters" (TG-S0001).)

## DIMENSIONS

### Standard type

P-400-U0-4N-R2

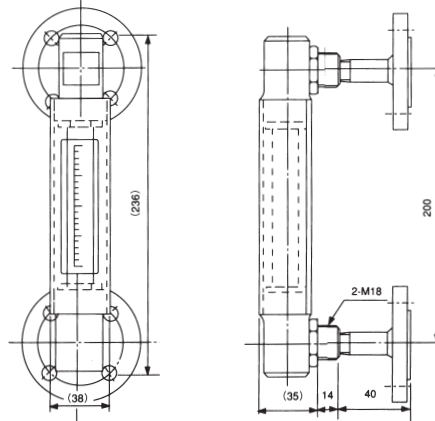
- Lock nut mounting on the panel front
- Valve at the outlet



### Flange-ended type

P-400-00-4N-Z4

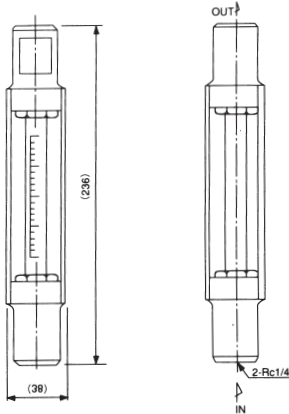
- Flange connection (Mounting option code: E)
- No valve



### Straight-through type

P-401-00-4N-R2

- Bottom to Top
- Screw connection



### Standard material

Parts name	Standard material	Available material
Body	○ SCS14	PVC
Tapered tube	○ Heat-resistant glass	—
Float *	○ SUS316, Glass, PTFE, Ruby	—
Gasket	○ Nitrile rubber (NBR)	Fluoro rubber, Chloroprene rubber (CR), PTFE
Fitting	○ SUS304	SUS316
Valve	○ SUS304	SUS316
Mounting plate	SPCC	SUS304
Cover	Acryl	SPCC, SUS304

Parts marked "○" come in contact with the measuring fluid.

\*We will select a proper material for your application.

SUS316 may be used instead of SUS304 due to production reasons.

ASTM or AISI materials equivalent to JIS materials may be used due to production reasons.

Note: An R3/8×Rc1/2 adapter is attached for Rc1/2 or larger connection.

\* Specification is subject to change without notice.

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