

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) Air at 0°C, 0 MPa (1atm)
	Water	Min. 5 to 50 mL/min Max. 0.2 to 2 L/min Water with a density of 1.0 g/cm ³ and viscosity of 1.0 mPa · s
	<ul style="list-style-type: none"> When selecting a flow range, refer to "Index & Quick Reference for P Series Purgometers" (TG-S0001). When selecting a flow range, refer to the standard flow rate table. 	
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 (Standard), 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 • The maximum fluid temperature for each gasket material may vary depending on usage and ambient conditions.
	Mounting plate	SUS304
	Cover	Acryl, 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 (1/2), 20A (3/4), 25A (1)	
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) ^{☆1}	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 ^{☆2}
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

Model Code										Descriptions	Notes		
P-40	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>			
Flow direction	0										Bottom rear → Top rear (Standard)	Select this code for normal conditions.	
	9										Special		
Valve	-	0									Not provided	Refer to "Index & Quick Reference for P Series Purgemeters" (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		
	-	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								Rc 1/8" (With R 1/4" × Rc 1/8" adapter)	Lock nut mounting on panel front For other mounting options, Refer to "Index & Quick Reference for P Series Purgemeters" (TG-S0001).	
			2								Rc 1/4" (Standard)		
			3										Rc 3/8" (With R 1/4" × Rc 3/8" adapter)
			4										Rc 1/2" (With R 1/4" × Rc 1/2" adapter)
			Z										Special (With R 1/4" × □" adapter)
	-	N	1									NPT 1/8" (F) (With R 1/4" × NPT 1/8" (F) adapter)	For "RZ," specify connection standard & size separately.
			2									NPT 1/4" (F)	
			3									NPT 3/8" (F) (With R 1/4" × NPT 3/8" (F) adapter)	
			4									NPT 1/2" (F) (With R 1/4" × NPT 1/2" (F) adapter)	
-	Z	Z								Special	Specify connection standard & size separately.		
Connection standard, rating & flange face							JR				JIS 10K RF	For "ZR" or "ZF," specify connection standard & rating separately.	
							JF				JIS 10K FF		
							AR				ASME Class 150 RF		
							AF				ASME Class 150 FF		
							PR				JPI Class 150 RF		
							PF				JPI Class 150 FF		
							ZR				Special (RF)		
							ZF				Special (FF)		
Connection size											3	10A	
											4	15A (1/2)	
											5	20A (3/4)	
											6	25A (1)	

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 Purgemeters" (TG-S0001).

Model Code										Descriptions	Notes	
P-40	1	-	□	□	-	□	□	-	□			□
Flow direction	1										Bottom → Top	For PVC, only this code is selectable but no valve can be installed.
Valve		-	0								Not provided	A valve will be installed externally. Refer to "Index & Quick Reference for P Series Purgemeters" (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	Rc 1/8"								Piping installation
			2	Rc 1/4" (Standard)								
			3	Rc 3/8"								
			4	Rc 1/2" (With R 3/8" × Rc 1/2" adapter)								
			Z	Special (With R 3/8" × □" adapter)								
	-	N	1	NPT 1/8" (F)								For "RZ," specify connection standard & size separately.
			2	NPT 1/4" (F)								
			3	NPT 3/8" (F)								
			4	NPT 1/2" (F) (With R 3/8" × NPT 1/2" (F) adapter)								
	-	Z	Z	Special							Specify connection standard & size separately.	
Connection standard, rating & flange face	-	JR	JIS 10K RF								For "ZR" or "ZF," specify connection standard & rating separately.	
		JF	JIS 10K FF									
		AR	ASME Class 150 RF									
		AF	ASME Class 150 FF									
		PR	JPI Class 150 RF									
		PF	JPI Class 150 FF									
		ZR	Special (RF)									
		ZF	Special (FF)									
Connection size			3	10A								
			4	15A (1/2)								
			5	20A (3/4)								
			6	25A (1)								

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 Purgemeters" (TG-S0001).

ORDERING INFORMATION

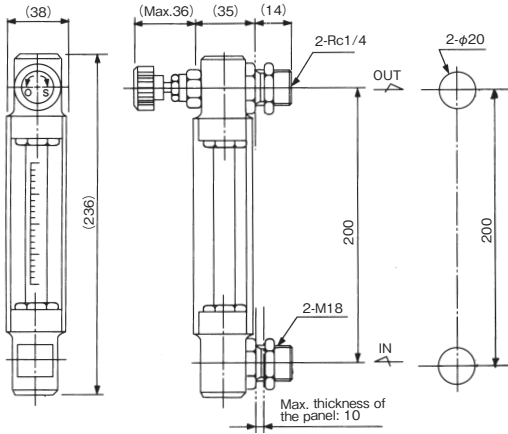
Basic model code	Items to be specified
P-40 □ - □□ - □□ - □□	① Fluid name - ② Flow range - ③ Press. - ④ Temp. - ⑤ Mounting option - ⑥ Other options
(Select in the model code table.)	(Refer to "Index & Quick Reference for P Series Purgemeters" (TG-S0001).)

DIMENSIONS

● Standard type

P - 400 - U0 - 4N - R2

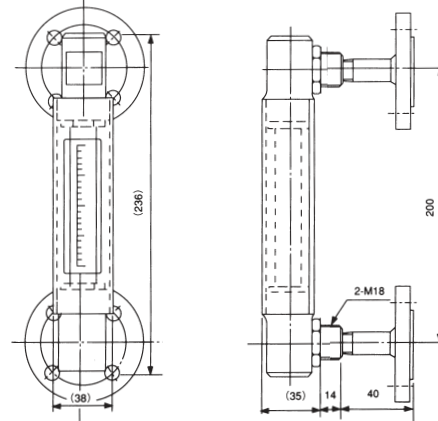
- Lock nut mounting on the panel front
- Valve at the outlet



● Flange-ended type

P - 400 - 00 - 4N - JR4

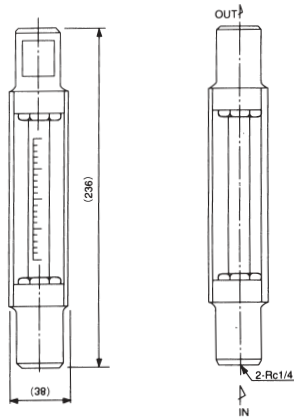
- Flange connection (Mounting option code: E)
- No valve



● Straight-through type

P - 401 - 00 - 4N - R2

- Bottom to Top
- Screw connection



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

● Standard material

Parts name	Standard material	Available material
Body	○ SCS14	PVC
Tapered tube	○ Heat-resistant glass	—
Float * 1	○ SUS316, Glass, PTFE, Ruby	—
Gasket	○ Nitrile rubber (NBR)	Fluoro rubber, Chloroprene rubber (CR), PTFE
Fitting	○ SUS304	SUS316
Valve	○ SUS304	SUS316
Mounting plate	SUS304	—
Cover	Acryl * 2	SUS304

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

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

* 2 SUS304 is the standard material for the following specifications:

- When the connection standard is flange.
- When the flow direction is Bottom to Top and the process connection is Rc or NPT1/2" or larger.

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.

* Specification is subject to change without notice.

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