



TECHNICAL GUIDANCE

Compact purgometer for measuring medium to large flow rates of gases and liquids

P-530 Purgometer

OUTLINE

The P-530, more compact than the P-510, is a purgometer for medium to large flow rates. Swagelok or VCR connection is available.

MAJOR APPLICATIONS

General purpose (large flow rate)

STANDARD SPECIFICATIONS

Measuring fluid	Gases Liquids		
Measuring range	Air	Min. 10 to 50 L/min (nor) Max. 50 to 250 L/min (nor)	
	Water	Min. 0.2 to 2 L/min Max. 1 to 10 L/min	
	<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 for liquids 10:2 for gases		
Indication accuracy	±5% F.S.		
Fluid pressure	Max. 0.8 Mpa Select the P-510 if the differential pressure is 0.05 MPa or less.		
Fluid temperature	Max. 120°C (Depends on the gasket material)		
Material	Wetted parts	SUS304, SUS316	
	Tapered tube	Heat-resistant glass	
	Gasket	Nitrile rubber (NBR) (Max.80°C) Chloroprene rubber(CR) (Max.80°C) Fluoro rubber (Max.120°C) Ethylene-propylene rubber (EPDM) (Max.80°C)	<ul style="list-style-type: none"> The maximum fluid temperature for each gasket material may vary depending on usage and ambient conditions.
		Support	Aluminum
	Cover	Acryl	
Process Connection	Rc : 3/8"(Standard) , 1/2" NPT : 3/8", 1/2" SW : 3/8", 1/2" VCR : 3/8", 1/2"		
Mounting	Screw mount on the panel front (Standard) Bezel installation or panel-rear installation can be specified. Panel embedded mounting		
Mass	approx. 0.6kg		

ALARM CONTACT AND OUTPUT

Type	Availability	
Reed switch alarm	General	X
	UL-approved	○
PAU optical alarm unit	X	

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).

For alarm output code of 0		For alarm output codes of A to D			
Air (0°C, 0 MPa)	Water	Air (0°C, 0 MPa)	Alarm setting range	Water	Alarm setting range
10 to 50 L/min (nor)	0.2 to 2 L/min	/	/	/	/
20 to 100 L/min (nor)	0.3 to 3 L/min	20 to 100 L/min (nor)	20 to 80 L/min (nor)	0.3 to 3 L/min	0.6 to 2.4 L/min
40 to 200 L/min (nor)	0.5 to 5 L/min	40 to 200 L/min (nor)	40 to 160 L/min (nor)	0.5 to 5 L/min	1 to 4 L/min
50 to 250 L/min (nor)	1 to 10 L/min	50 to 250 L/min (nor)	50 to 200 L/min (nor)	1 to 10 L/min	2 to 8 L/min

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



BASIC MODEL CODE

Model Code		Descriptions	Notes
P-53	□ - □ □ - □ □ - □ □ □ □		
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 Purgometers" (TG-S0001).
	- L	Inlet (gas for atmospheric pressure scale)	
	- U	Outlet (gas for pressure scale or for negative pressure on the secondary side)	
	- Z	Special	
Alarm output	0	Not provided	Refer to "Index & Quick Reference for P Series Purgometers" (TG-S0001).
	A	Reed switch (LO)	
	B	Reed switch (LC)	
	C	Reed switch (HO)	
	D	Reed switch (HC)	
	Z	Special	
Wetted parts material	- 4	SUS304 (Standard)	
	- 6	SUS316	
	- Z	Special	
Gasket material	N	Nitrile rubber (NBR) (Standard)	
	C	Chloroprene rubber (CR)	Select this code for ammonia gas.
	F	Fluoro rubber	
	E	Ethylene-propylene rubber (EPDM)	
	Z	Special	
Process connection type	- R	Rc (Standard)	Screw mounting on the panel front. Bezel mounting can be specified. For other mounting options, refer to "Index & Quick Reference for P Series Purgometers" (TG-S0001).
	- N	NPT female	
	- S	SW	
	- V	VCR (Male connector)	
	- Z	Special	
Process connection size	3	3/8" (Standard)	
	4	1/2"	
	Z	Special	

OTHER AVAILABLE OPTIONS

You can specify the following options:
Length of reed switch lead wire, double graduations, special graduations, etc. For details, refer to "Index & Quick Reference for P Series Purgometers" (TG-S0001).

ORDERING INFORMATION

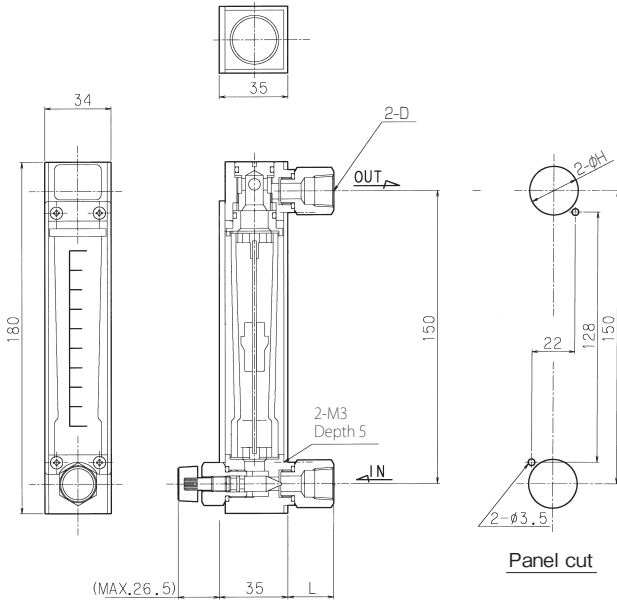
Basic model code	Items to be specified
P-53 □ - □□ - □□ - □□	① Fluid name - ② Flow range - ③ Press. - ④ Temp. - ⑤ Mounting option - ⑥ Other options
(Select in the model code table.)	(Refer to "Index & Quick Reference for P Series Purgemeters" (TG-S0001).)

DIMENSIONS

Standard type

P - 530 - L0 - 4N - R3

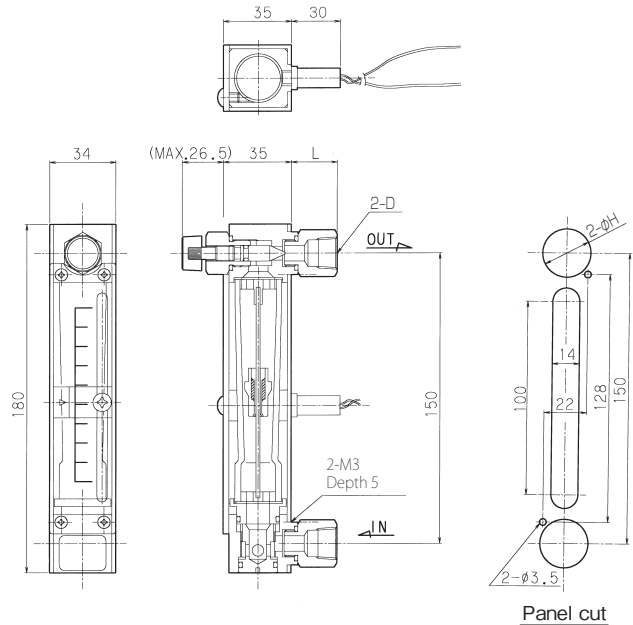
- Screw mounting on the panel front
- Valve at the inlet



Reed switch alarm type

P - 530 - UA - 4N - R3

- Screw mounting on the panel front
- Valve at the outlet



Panel cut dimension

Connection size	Diameter (mm)	Rear dimension (mm)
D	H	L
Rc3/8	25	23.5
3/8NPT	25	23.5
Rc1/2	25	28.5
1/2NPT	25	28.5
3/8SW	25	(30.9)
1/2SW	25	(32.8)
3/8VCR	29	(34.5)
1/2VCR	29	(34.5)

Note : Use non-magnetic material for the panel when the alarm output code is one of A to D.

Standard material

Parts name	Standard material	Available material
Body	○ SUS304	SUS316
Tapered tube	○ Heat-resistant glass	—
Float	○ SUS304	SUS316
Gasket	○ Nitrile rubber	Fluoro rubber, Chloroprene rubber (CR), Ethylene-propylene rubber (EPDM)
Float rod	○ SUS316	—
Float stopper	○ POM	—
Valve	○ SUS304	SUS316
Fitting	○ SUS304	SUS316
Mounting board	Aluminum	—
Cover	Acryl	—

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