

P-510

GENERAL

Purgemeter for medium and large flow rate. It is the same size as P-200 model of small flow rate type.

MAJOR APPLICATIONS

General purpose(Large flow rate)

STANDARD SPECIFICATION

Measuring object	Liquids and gases	
Measuring range	Air	Min. 2.5~25 L/min(nor). Max. 60~600 L/min(nor).
	Water	Min. 0.1~1 L/min. Max. 3~30 L/min.
Range ability	10:1	
Accuracy	±5 %F.S.	
Max. Op. Press.	0.8 MPa	
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
	Tapered tube	Heat-resistant glass
	Packing	NBR(max.80 °C) FPM(max.120 °C), CR(max.80 °C), EPDM(max.80 °C)
	Support	SPCC or C2801P
Cover	Acryl	
Connection	Std.	Rc3/8
	Opt.	Rc1/2,NPT3/8,NPT1/2,3/8SW, 3/8VCR,JIS10KFF etc.
Mounting	Std.	Thread(M3)mount onto panel front Lock-nut mount onto panel front
	Opt.	Bezel installation,Panel-rear installation, Stand provided Flange pipe tube installation
MASS(std. type)	2.0 kg	

*: It is general data, and the maximum temperature may change by terms of use and environment.

ALARM OUTPUT

Type	Availability
Reed switch type alarm unit	General
	CE, UL Version
PAU Optical alarm unit	

STANDARD FLOW RATE TABLE

(In case Op. Press of gas is not 0MPa, refer to page 1.)

In case alarm output code is 0,E		In case alarm output code is A to D			
Air (0 MPa,0 °C)	Water	Air (0 MPa,0 °C)	Alarm setting range	Water	Alarm setting range
2.5~25 L/min(nor)	0.1~1 L/min	/	/	/	/
3~30 L/min(nor)					
5~50 L/min(nor)	0.2~2 L/min	5~50 L/min(nor)*	10~40 L/min(nor)	0.2~2 L/min*	0.4~1.6 L/min
10~100 L/min(nor)	0.3~3 L/min	10~100 L/min(nor)	20~80 L/min(nor)	0.3~3 L/min	0.6~2.4 L/min
20~200 L/min(nor)	0.5~5 L/min	20~200 L/min(nor)	40~160 L/min(nor)	0.5~5 L/min	1~4 L/min
30~300 L/min(nor)	1~10 L/min	30~300 L/min(nor)	60~240 L/min(nor)	1~10 L/min	2~8 L/min
40~400 L/min(nor)	1.5~15 L/min	40~400 L/min(nor)	80~320 L/min(nor)	1.5~15 L/min	3~12 L/min
50~500 L/min(nor)	2~20 L/min	50~500 L/min(nor)	100~400 L/min(nor)	2~20 L/min	4~16 L/min
60~600 L/min(nor)	3~30 L/min**	60~600 L/min(nor)	120~480 L/min(nor)	3~30 L/min**	6~24 L/min

*1 Float material should be PVC

*2 Available for Viscosity 1.0 mPa·s only.

* In case of the specification other than the standard flow table, there may be the change in the flow range for certain reasons of production.

OTHER AVAILABLE OPTIONS

You can specify the following options:

Two point alarm, Alarm setting on the front face, reed switch lead wire length, double graduations, special graduations, built-in check valve type, built-in rubber joint type, built-in joint type, etc.

(For details, refer to [Other Option]).

ORDERING INFORMATION

Basic model code	Designation items for detailed specifications					
	①	②	③	④	⑤	⑥
P-51□-□□-□□-□□	Fluid name	Measuring range	Press.	Temp.	Mounting Option	Other Option
(Use model code table for selection)	(For details, refer to Advice for Your Product Selection.)					



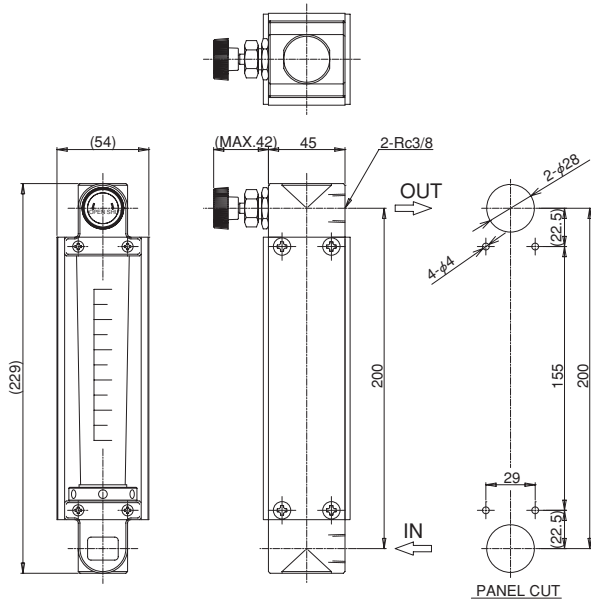
BASIC MODEL CODE

FLOW DIRECTION	VALVE	ALARM OUTPUT	WETTED PARTS MATERIAL	PACKING MATERIAL	CONNECTION TYPE	CONNECTION SIZE	EXAMPLE	DESCRIPTION
P-51	0	-L	0	-4	N	-R	3	
							3 Rc3/8(Standard)	Front thread (M3) of panel, mounting or pipe
							4 Rc1/2	"Flow direction code 1(bottom→top) only can be selected."
							5 Rc3/4	
							6 Rc1	
							3 Rc3/8	Lock-nut mounting onto panel front.
							4 Rc1/2	
							5 Rc3/4	
							3 NPT3/8	Front thread (M3) of panel, mounting or pipe
							4 NPT1/2	
							5 NPT3/4	
							6 NPT1	"Flow direction code 1(bottom→top) only can be selected."
							3 NPT3/8	
							4 NPT1/2	
							5 NPT3/4	Lock-nut mounting onto panel front.
							3 3/8 SW	
							3 3/8 VCR	
							4 1/2 VCR	Front thread (M3) of panel, mounting or pipe
							5 3/4 VCR	
							3 Flange (10A)	
							4 Flange (15A)	Specify the standard separately.
							5 Flange (20A)	
							6 Flange (25A)	
							Z Special	
							N NBR(Standard)	
							C CR	Select it for ammonia gas.
							F FPM	
							E EPDM	
							Z Special	
							4 SUS304(Standard)	Select P-520 model for PVC and
							6 SUS316	PTFE. Select P-7□□ series for
							Z Special	fluorine resin made tapered tube.
							0 Not provided	
							A Reed switch alarm (LO)	See the page describing functions.
							B Reed switch alarm (LC)	
							C Reed switch alarm (HO)	
							D Reed switch alarm (HC)	
							E PAU ALARM UNIT provided	
							Z Special	
							0 Not provided	
							L Bottom(gas for atmospheric pressure scale)	Refer to valve location selection guide.
							U Top(gas for pressure scale or for negative pressure on the secondary side)	
							Z Special	
							0 Bottom rear→Top rear(Standard)	Select this code normally.
							1 Bottom→Top	Valve should be installed externally.
							9 Special	

DIMENSIONS

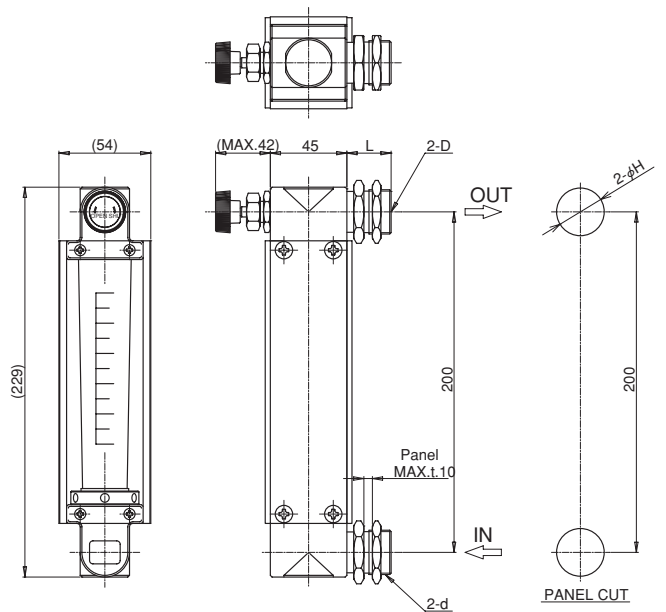
● STANDARD TYPE

(P-510-U0-4N-R3 Valve provided at Outlet, panel front thread (M3) mounting type)



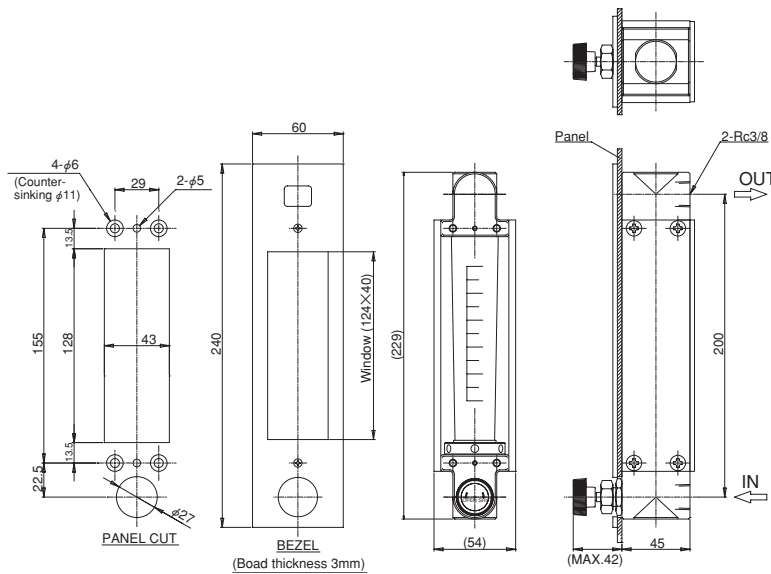
● PANEL-FRONT INSTALLATION TYPE

(P-510-U0-4N-L3, Valve provided at Outlet, panel front lock-nut fixing)



● BEZEL INSTALLATION TYPE

(P-510-L0-4N-R3, Valve provided at Outlet, Bezel installation.)
(Mounting Option code **[D]**)



● PANEL CUT SIZE

For PANEL-FRONT INSTALLATION TYPE, Panel cut dimension may differ depending on connection size and rating. Refer to following table.

Connection size		Hole diameter	Rear length L
D	d	H	L
Rc 3/8	M26	28	26
NPT 3/8	M26	28	26
Rc 1/2	M30	32	26
NPT 1/2	M30	32	26
Rc 3/4	M36	38	28
3/8 SW	M20	22	(34)
3/8 VCR	M28	32	(38)
1/2 VCR	M28	32	(38)

Caution)

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

● Standard Material

Parts name	Standard materl	Available material
Body	○ SCS14	—
Tapered tube	○ Heat-resistant glass	—
Float#1	○ SUS304, PTFE	SUS316
Packing	○ NBR	FPM, CR, EPDM
Spindle	○ SUS304	SUS316
Valve	○ SUS304	SUS316
Mounting board#2	SPCC	SUS304
Cover	Acryl	—

Parts with "○" touch the measuring fluid.

*1: Proper material is to be selected, depending on the specifications.

*2: In case of alarm output code from "A" to "D," the standard material to be used is C2801P.

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

Material like ASTM, or AIS equivalent to JIS material may be used due to certain production reasons.

● In case alarm output code is A to D

A	Reed switch alarm(LO)	See the page describing functions.
B	Reed switch alarm(LC)	
C	Reed switch alarm(HO)	
D	Reed switch alarm(HC)	

● In case alarm output code is E

E	PAU ALARM UNIT provided	See the page describing functions.
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