

Fine regulator (pilot operated)

PMP⁰₂⁰² Series

Changes in pressure of chemical liquids and pure water supply parts can be achieved with pilot air control, A regulator designed to adjust pressure for stability.



- Connection tube size: $\varnothing 6$, $\varnothing 10$, $\varnothing 12$, $\varnothing 25$, 1/4", 3/8", 1/2", 3/4", 1"

Export controlled items

* Eligibility: PMP402 (*4)

Specifications

Item	PMP002	PMP202	PMP402
Working fluid	Pure water, chemical liquids (*2)		Pure water (*3)
Fluid temperature °C	10 to 90		10 to 90
Proof pressure MPa	1.0		1.0
Max. working pressure MPa	0.5		0.5
Set pressure MPa	0.02 to 0.3		0.07 to 0.4
Operating pressure MPa	0 to 0.4		0 to 0.45
Recommended flow rate L/min	0.2 to 3	0.2 to 5	2 to 20
Operating port	Rc1/8		Rc1/8
Ambient temperature °C	10 to 60		10 to 60
Mounting orientation	Unrestricted		Unrestricted
Connection	O.D. $\varnothing 6$ tube connection (integrated fitting), OD1/4" tube connection (integrated fitting), O.D. $\varnothing 10$ tube connection (integrated fitting), O.D. 3/8" tube connection (integrated fitting)		O.D. 3/4" tube connection (Integrated fitting) (O.D. 1" and OD1/2" options available)
Weight kg	0.13	0.28	1.7

*1: Non-relief

*2: Check the compatibility of product structural materials, working fluids and atmosphere.

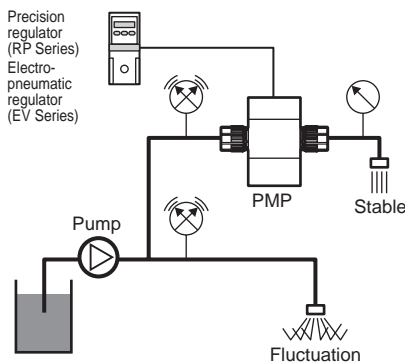
*3: Contact CKD when using chemical liquids.

*4: Excludes O.D. $\varnothing 12$ and 1/2" tube connection.

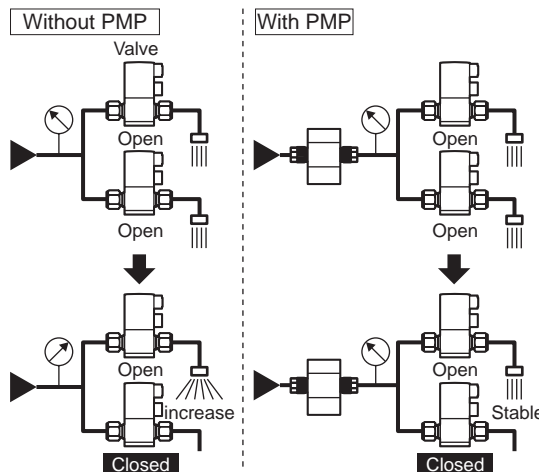
*5: When using chemical liquids with high permeability, permeated gas may contaminate the pilot mechanism, which may adversely affect the operating components. Consult with CKD if protection is needed for the operating components.

Application

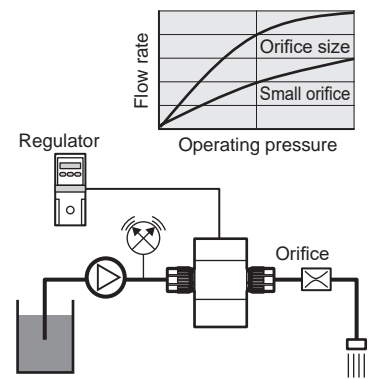
Stable discharge (pressure/flow rate)



Branched flow rate uniformizing

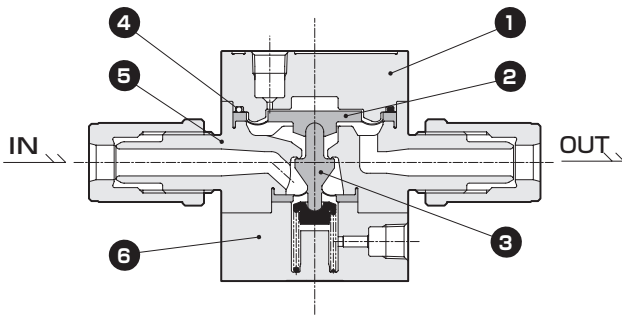


Remote flow rate setting



! Always read the precautions on Intro Pages 7 to 14 before use.

Internal structure and parts list



Part No.	Part name	Material
1	Cover	PVDF
2	Diaphragm	PTFE
3	Valve diaphragm	PTFE
4	O-ring	FKM
5	Body	PFA, PTFE
6	Bottom plate	PVDF

The material and structure may vary depending on the model number. Contact CKD for details.

How to order

PMP002 - 10BUP - X

Model No. ① Connection ② Mounting method

		① Connection			
		6UP	8BUP	10UP	10BUP
Code		Super 300 Pillar fitting P Series integrated			
Description		ø6 x ø4 tube connection	1/4" x 5/32" tube connection	ø10 x ø8 tube connection	3/8" x 1/4" tube connection
Body material		PFA		PFA	
		② Mounting method			
F	Flange mounting	●		●	
X	Bottom mounting	●		●	

PMP202 - 10UR - 1

Model No. ① Connection ② Bottom plate direction

		① Connection							
		6UP	8BUP	6UR	8BUR	10UP	10BUP	10UR	10BUR
Code		Super 300 Pillar fitting P series integrated		F-LOCK 60 Series Integrated fitting		Super 300 Pillar fitting P series integrated		F-LOCK 60 Series Integrated fitting	
Description		ø6 x ø4 tube connection	1/4" x 5/32" tube connection	ø6 x ø4 tube connection	1/4" x 5/32" tube connection	ø10 x ø8 tube connection	3/8" x 1/4" tube connection	ø10 x ø8 tube connection	3/8" x 1/4" tube connection
Body material		PFA		PFA		PFA		PFA	
		② Bottom plate direction							
Blank	Vertical	●		●		●		●	
1	Horizontal	●		●		●		●	

PMP402 - 20BUP - 1 N

Model No. ① Connection ② Bottom plate direction Fluid specification

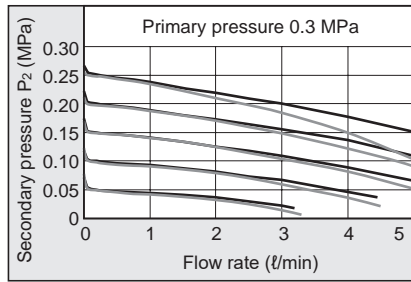
		① Connection				
		12UP	25UP	15BUP	20BUP	25BUP
Code		Super 300 Pillar fitting P Series integrated				
Description		ø12 x ø10 tube connection	25 x ø22 tube connection	1/2" x 3/8" tube connection	3/4" x 5/8" tube connection	1" x 7/8" tube connection
Body material		PTFE				
		② Bottom plate direction				
Blank	Vertical	●		●		
1	Horizontal	●		●		

Part3R	High pressure
Part2	Manual valve
Part1	High pressure
High pressure	Manual valve
Metah-free	Metah-free
Large bore size	Large bore size
Polyvinyl chloride	Polyvinyl chloride
Drainage	Drainage
Part3RR	High pressure
Part2	Manual valve
High pressure	Manual valve
Metah-free	Metah-free
Large bore size	Large bore size
Single unit	Single unit
Air operated	Air operated
Integrated	Integrated
Drip prevention valve	Drip prevention valve
Pilot	Pilot
Regulator	Regulator
Manual	Manual
Electric	Electric
Manual	Manual
Flow rate adjusting valve	Flow rate adjusting valve
Manual/Fine flow rate	Manual/Fine flow rate
Fine level Switch	Fine level Switch
Related products	Related products

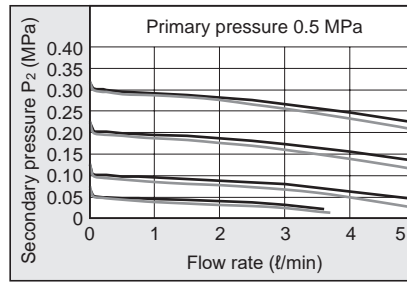
Flow characteristics / Pressure characteristics / Pressure adjustment characteristics

PMP002

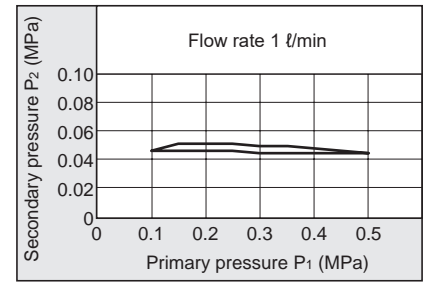
Flow characteristics 1 (water) — 3/8" — 1/4"



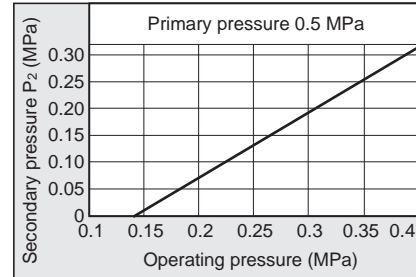
Flow characteristics 2 (water) — 3/8" — 1/4"



Pressure characteristics (water)

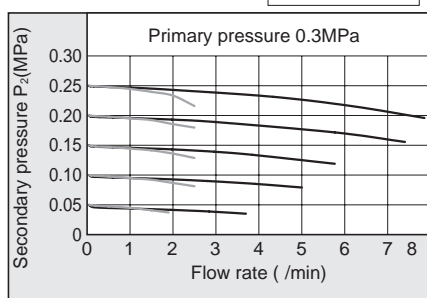


Pressure adjustment characteristics (water)

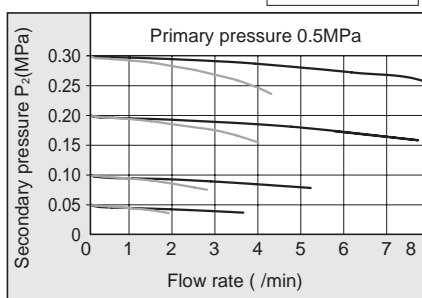


PMP202

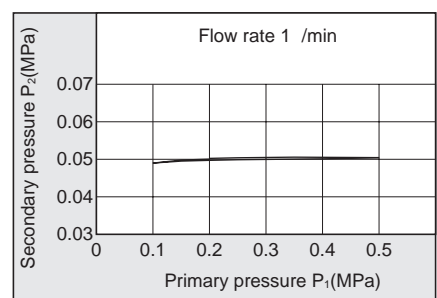
Flow characteristics 1 (water) — OD ø10,3/8" — OD ø6,1/4"



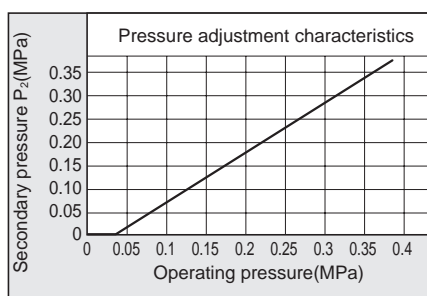
Flow characteristics 2 (water) — OD ø10,3/8" — OD ø6,1/4"



Pressure characteristics (water)

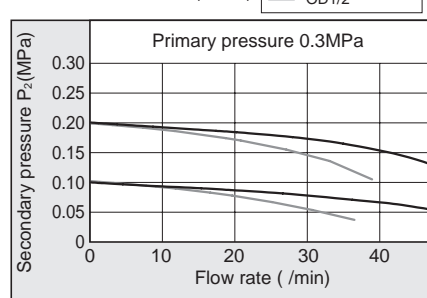


Pressure adjustment characteristics (water)

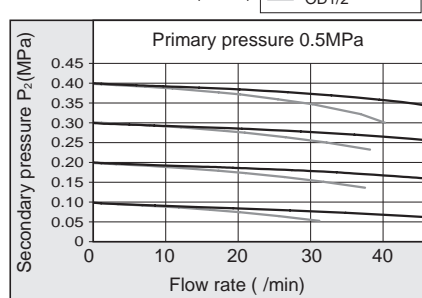


PMP402

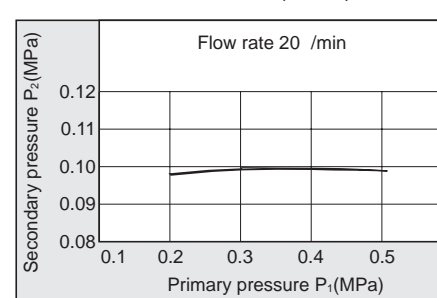
Flow characteristics 1 (water) — OD3/4",OD1" — OD1/2"



Flow characteristics 2 (water) — OD3/4",OD1" — OD1/2"

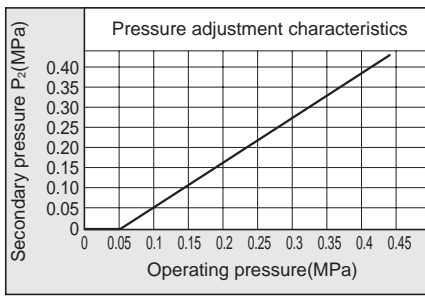


Pressure characteristics (water)



PMP402

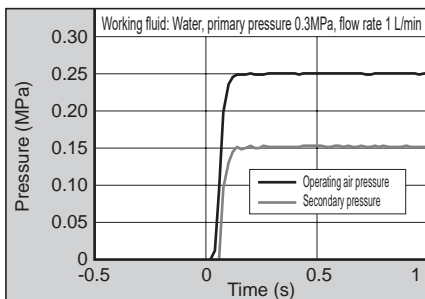
Pressure adjustment characteristics (water)



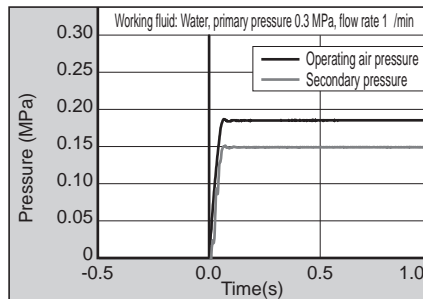
Reference data

Responsivity Tracking of secondary side pressure for operating air

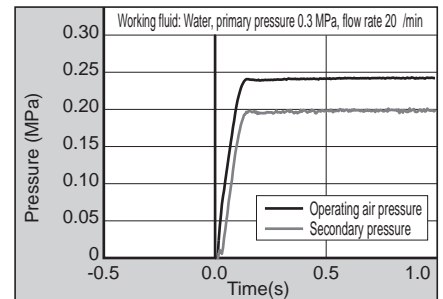
PMP002



PMP202

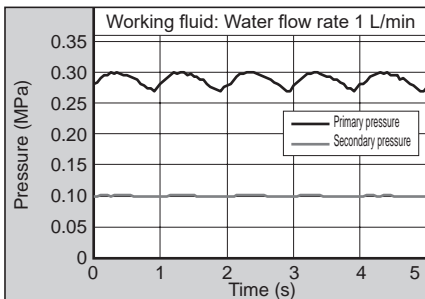


PMP402

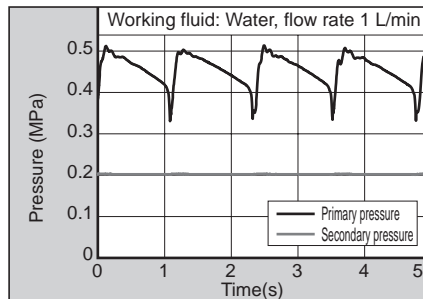


Pulsation absorption Stability of secondary pressure against pulsation of primary pressure

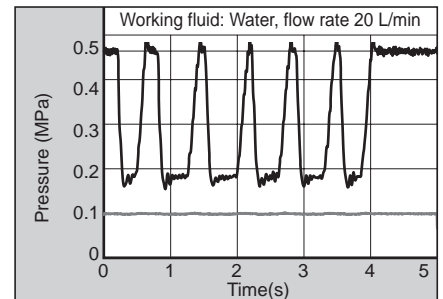
PMP002



PMP202

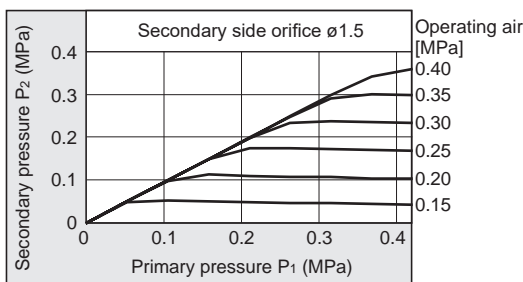


PMP402



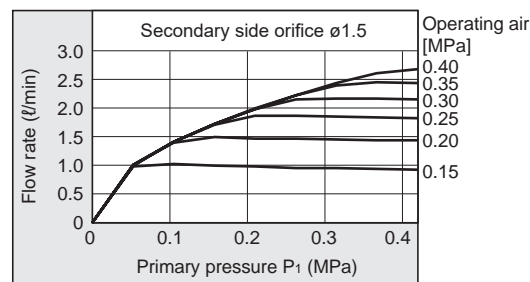
Operating air pressure - secondary pressure characteristics (water)

PMP002



Operating air pressure - flow characteristics (water)

PMP002



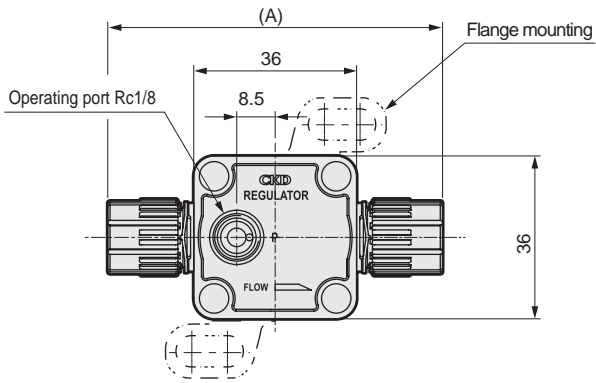
How to use

- Set the temperature, pressure, flow rate and other use conditions within the specification range of the product.
- If the product will be out of use for long periods, stop the supply pressure on the primary side.
- This product is a non-relief-type, and if used with the secondary side closed, it may retain the high pressure generated by water hammer, etc.
- Do not use as a residual pressure exhaust valve.

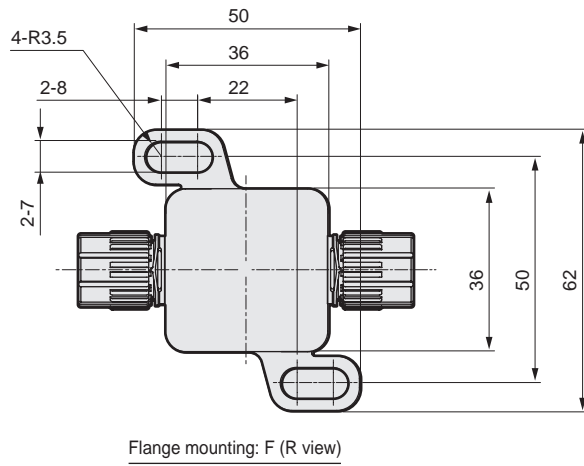
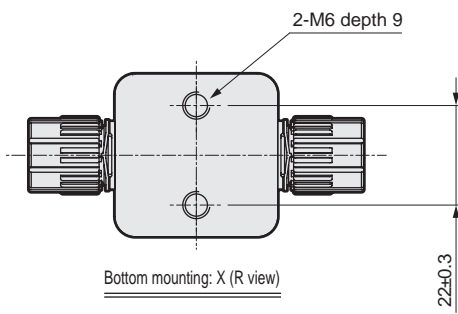
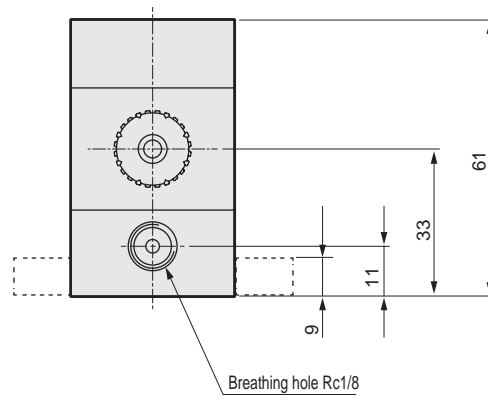
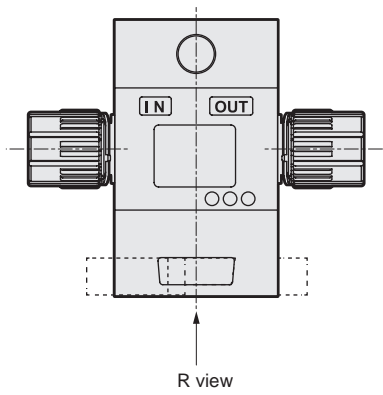
Part3R
Part2
Part1
High pressure
Metar-free
Large bore size
Polyvinyl chloride
Drainage
Part3RN
Part2
High pressure
Metar-free
Large bore size
Single unit
Drp prevention valve
Air operated Integrated
Regulator
Manual
Electric
Flow rate adjusting valve
Manual/Fine flow rate
Manual/Fine Switch
Related products

Dimensions

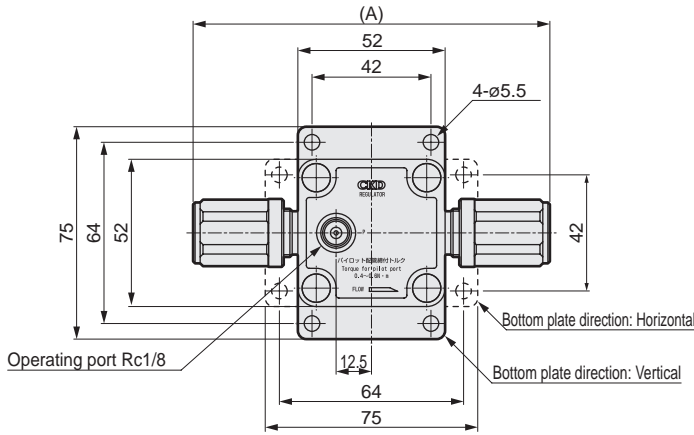
●PMP002- *1 -*



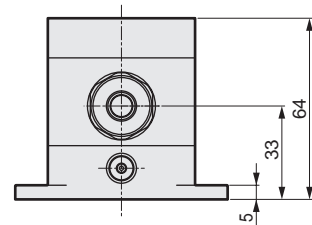
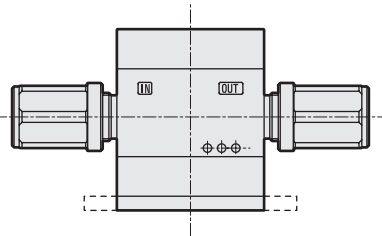
Dimensions		A
*1	Connector No.	
	6UP	74
	8BUP	74
	10UP	86
	10BUP	86



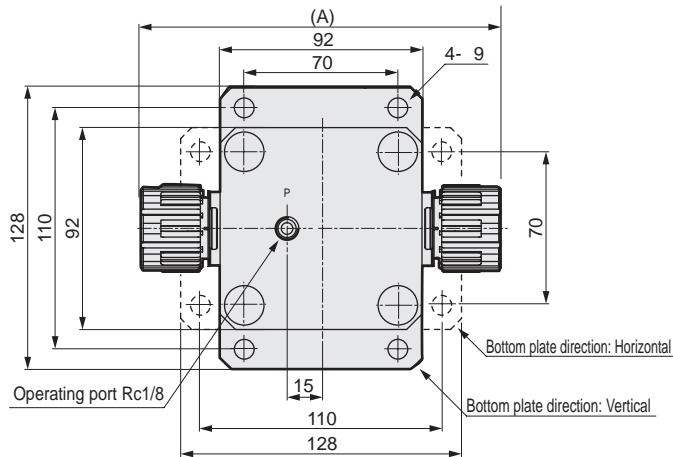
●PMP202- *1 -*



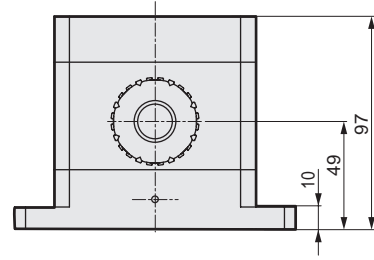
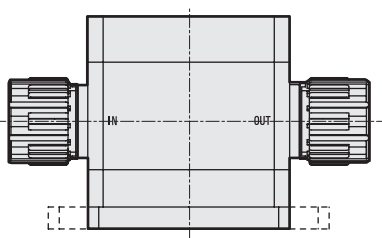
Dimensions	
*1 (Connector No.)	A
6UP	90
8BUP	90
6UR	112
8BUR	114
10UP	102
10BUP	102
10UR	126
10BUR	130



●PMP402- *1 -*N



Dimensions	
*1 (Connector No.)	A
12UP, 15BUP	150
20BUP	164
25UP, 25BUP	178



Part3R	Part2	Part1	Air operated valve	High pressure	6UP	90
				High pressure	8BUP	90
				High pressure	6UR	112
				High pressure	8BUR	114
			Manual valve	High pressure	10UP	102
				High pressure	10BUP	102
				High pressure	10UR	126
				High pressure	10BUR	130
			Regulator	High pressure	12UP, 15BUP	150
				High pressure	20BUP	164
				High pressure	25UP, 25BUP	178
				High pressure		
			Flow rate adjusting valve	Flow rate		
				Flow rate		
				Flow rate		
			Fine level Switch	Fine level		
				Fine level		
			Related products			