



Air operated valve for chemical liquids, metal-free

AMD*1M Series

A valve designed to support strong acid (hydrochloric acid, hydrofluoric acid) lines in semiconductor manufacturing.

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



Export controlled items

*Eligibility: AMD51M

Specifications

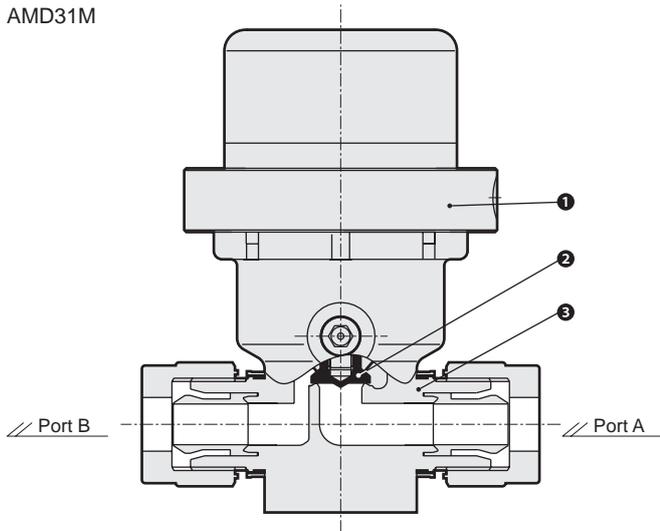
Item	AMD31M		AMD51M	
Actuation	NC (normally closed)			
Working fluid	Chemical liquids, pure water, air, N ₂ gas (*1)			
Fluid temperature °C	5 to 40			
Proof pressure MPa	1.0			
Working pressure (A→B)MPa	0 to 0.5			
Valve seat leakagecm ³ /min	0 (water pressure)			
Back pressure MPa	0 to 0.5			
Ambient temperature°C	0 to 40			
Frequency	20 cycle/min. or less		15 cycle/min. or less	
Mounting orientation	Unrestricted			
Connection	O.D. $\varnothing 3/8$ " tube connection O.D. $\varnothing 10$ tube connection	O.D. $\varnothing 1/2$ " tube connection O.D. $\varnothing 12$ tube connection	O.D. $\varnothing 3/4$ " tube connection	O.D. 1" tube connection O.D. $\varnothing 25$ tube connection
Orifice size	$\varnothing 8$	$\varnothing 10$	$\varnothing 16$	$\varnothing 22$
Cv value	1.25	1.8	5.5	9.5
Operating section	Operating pressure MPa	0.4 to 0.6		
	Operating port	Rc1/8		
Weight kg	0.33		1.0	

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

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

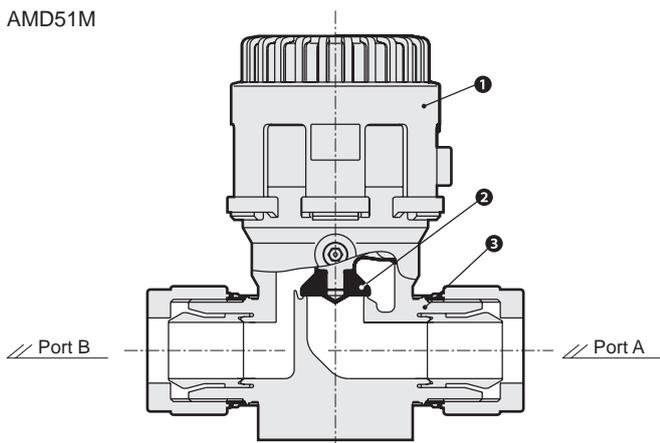
Internal structure and parts list

AMD31M



Part No.	Part name	Material
1	Actuator	PP, etc.
2	Diaphragm	PTFE
3	Body	PFA

AMD51M



Part No.	Part name	Material
1	Actuator	PVDF and others
2	Diaphragm	PTFE
3	Body	PFA

Air operated valve	Part3R	High pressure	Metal-free	Large bore size	Polyvinyl chloride	Drainage
	Part2	High pressure	Metal-free	Large bore size		
	Part1	High pressure	Metal-free	Large bore size		
Manual valve	Part3RN	High pressure	Metal-free	Large bore size		
	Part2	High pressure	Metal-free	Large bore size		
	Part1	High pressure	Metal-free	Large bore size		
Drip prevention valve		High pressure	Metal-free	Large bore size		
		High pressure	Metal-free	Large bore size		
		High pressure	Metal-free	Large bore size		
Regulator		High pressure	Metal-free	Large bore size		
		High pressure	Metal-free	Large bore size		
		High pressure	Metal-free	Large bore size		
Flow rate adjusting valve		High pressure	Metal-free	Large bore size		
		High pressure	Metal-free	Large bore size		
		High pressure	Metal-free	Large bore size		
Fine level Switch		High pressure	Metal-free	Large bore size		
		High pressure	Metal-free	Large bore size		
		High pressure	Metal-free	Large bore size		
Related products						

AMD*1M Series

How to order

●AMD*1M Series



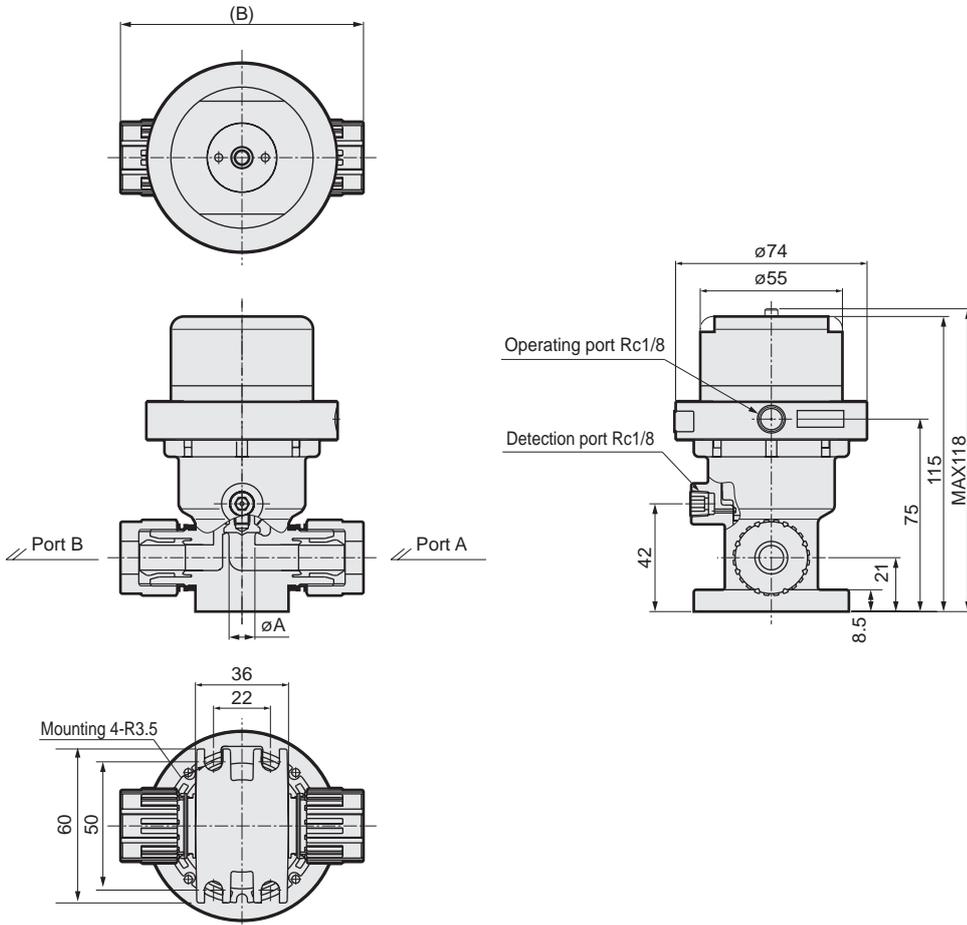
Model No.

① Connection

	AMD31M				AMD51M		
	① Connection						
	3BJ	10J	4BJ	12J	6BJ	8BJ	25J
	Super 300 Pillar fitting P series integrated						
	3/8" x 1/4" tube connection	ø10 x ø8 tube connection	1/2" x 3/8" tube connection	ø12 x ø10 tube connection	3/4" x 5/8" tube connection	1" x 7/8" tube connection	ø25 x ø22 tube connection
Orifice size	ø8		ø10		ø16		ø22
Cv	1.25		1.8		5.5		9.5

Dimensions

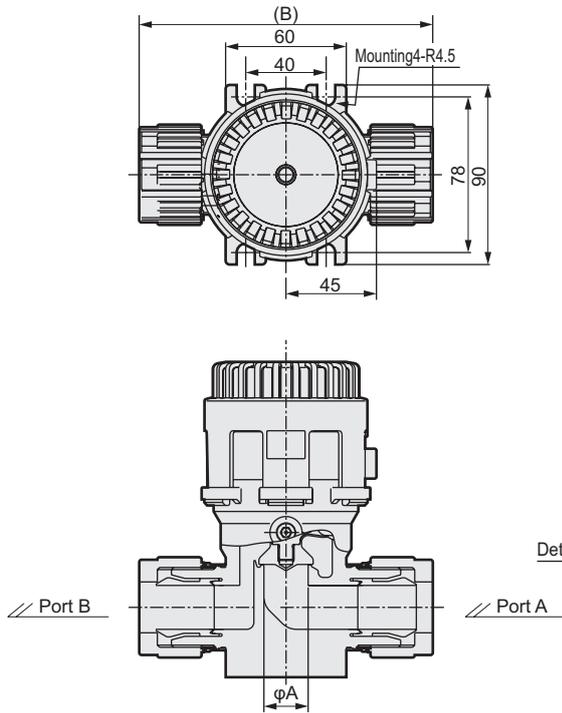
●AMD31M-*1



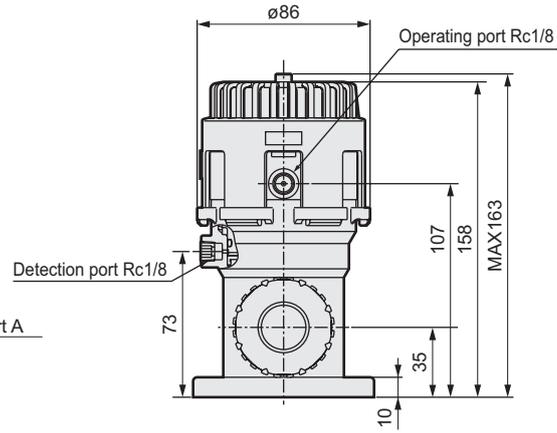
*1 (connector No.)	øA	B
3BJ	8	86
4BJ	10	94

Dimensions

●AMD51M- * 1



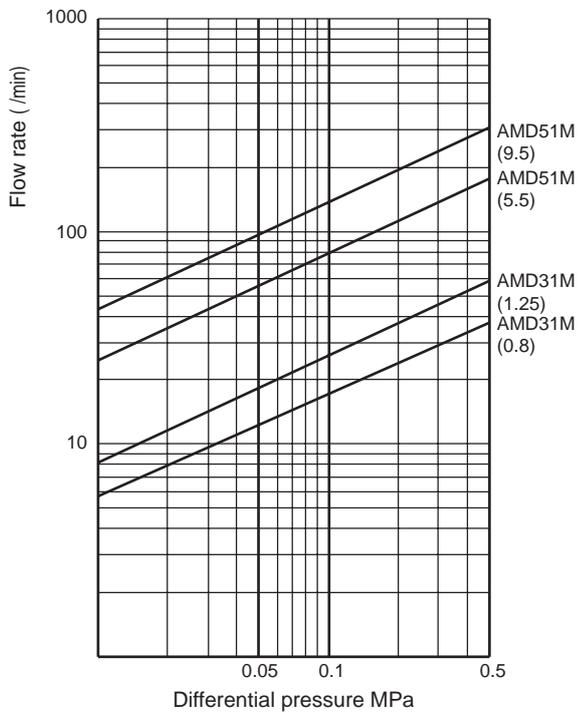
*1 (connector No.)	øA	B
6BJ	16	132
8BJ	22	146



Flow characteristics

● Flow characteristics (water)

Differential pressure - internal flow rate () : Cv



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