

Series AS

Series

Series	Applicable tube O.D.													Applicable cylinder bore size	
	Metric size						Inch size							(inch)	(mm)
	2	3.2	4	6	8	10	12	1/8"	5/32"	1/4"	5/16"	3/8"	1/2"		
AS1002F	●													1/4"	2.5, 4, 6
AS2002F		●	●	●				●	●					1/4", 3/8", 5/8", 3/4"	6, 10, 16, 20
AS2052F				●	●					●	●			3/4", 1", 1 1/4"	20, 25, 32
AS3002F				●	●	●	●			●	●	●		1 1/2", 2", 2 1/2"	40, 50, 63
AS4002F						●	●					●	●	2 1/2", 3 1/4", 4"	63, 80, 100

Specifications

Fluid	Air
Proof pressure	218 psi (1.5 MPa) 152 psi (Note 1) (1.05 MPa (Note 1))
Max. operating pressure	145 psi (1 MPa) 102 psi (Note 1) (0.7 MPa (Note 1))
Min. operating pressure	15 psi (0.1 MPa)
Ambient and fluid temperature	23 to 140°F (-5 to 60°C) (No freezing)
Applicable tube material (Note 2)	Nylon, Soft nylon, Polyurethane

Note 1) In case of AS1002F-02

Note 2) Use caution at the max. operating pressure when using soft nylon or polyurethane tubing.

(Refer to pages 371 and 372 of Best Pneumatics Vol. 6)

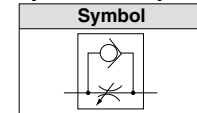
Note 3) Brass parts are all electroless nickel plated.

Flow Rate and Flow Coefficient

Series		AS1002F		AS2002F		AS2052F		AS3002F			AS4002F	
Tube O.D.	Metric size	ø2	ø3.2, ø4, ø6	ø4	ø6	ø6	ø8	ø6	ø8	ø10, ø12	ø10	ø12
	Inch size	—	ø1/8", ø5/32" ø1/4"	ø5/32"	ø1/4"	—	ø1/4" ø5/16"	ø1/4"	ø5/16"	ø3/8"	ø3/8"	ø1/2"
Controlled flow (Free flow)	Flow rate (scfm)	0.7	3.5	4.6	8.1	10.2	16.3	13.8	23.3	32.5	32.5	55.8
	Cv	0.02	0.08	0.11	0.19	0.25	0.39	0.33	0.56	0.78	0.78	1.33

Note) Flow rate values are measured at 73 psi and 70°F.

Flow Direction Symbol on Body



How to Order

RoHS

AS 400 2F - 12 - [] - []

Body size

100	M3, M5 standard
200	1/8 standard
205	1/4 standard
300	3/8 standard
400	1/2 standard

With one-touch fittings

Made to Order

Applicable tube O.D.

Metric size	Inch size
02	ø2
23	ø3.2*
04	ø4
06	ø6
08	ø8
10	ø10
12	ø12
01	ø1/8"
03	ø5/32"
07	ø1/4"
09	ø5/16"
11	ø3/8"
13	ø1/2"

* Use ø1/8" tube.

Lock nut option

Nil	Hexagon lock nut
J	Round lock nut

Made to Order

Made to Order

Lubricant: Vaseline

-X12

Ex.) AS2002F-04-X12

Grease-free (Sealant: Fluoro coated) + Restrictor (Without Check Valve)

-X21

Ex.) AS2002F-04-X21

Note) Not particle-free

Restrictor (Without Check Valve)

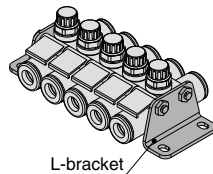
-X214

Ex.) AS2002F-04-X214

Options

L-bracket

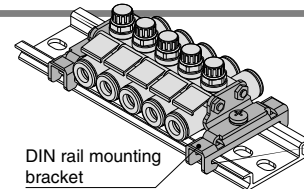
Part no.	Applicable series
AS-12L	AS1002F-02
AS-10L	AS1002F
AS-20L	AS2002F
AS-25L	AS2052F
AS-30L	AS3002F
AS-40L	AS4002F



L-bracket

DIN rail mounting bracket

Part no.	Applicable series
AS-10D	AS1002F
AS-20D	AS2002F
AS-25D	AS2052F
AS-30D	AS3002F
AS-40D	AS4002F



DIN rail mounting bracket

* Bracket for AS1002F-02 is not available.

* Prepare DIN rail by user.

Part no. list of threaded stud kit for manifold

Model	4 stations	6 stations	8 stations	10 stations
Metric size	Inch size			
AS1002F-02	—	AS-31B	AS-32B	AS-33B
AS1002F-23	AS1002F-01		AS-33B	AS-34B
AS1002F-04	AS1002F-03	AS-32B		AS-35B
AS1002F-06	—		AS-34B	AS-36B
—	AS1002F-07			AS-37B
AS2002F-04	AS2002F-03		AS-35B	AS-38B
AS2002F-06	—	AS-32B	AS-34B	
—	AS2002F-07		AS-36B	
AS2052F-06	—			
—	AS2052F-07	AS-41B	AS-42B	AS-44B
AS2052F-08	AS2052F-09			AS-45B
AS3002F-06	—			
—	AS3002F-07			
AS3002F-08	AS3002F-09	AS-42B	AS-44B	AS-45B
AS3002F-10	—			AS-46B
—	AS3002F-11			
AS3002F-12	—			
AS4002F-10	—			
—	AS4002F-11	AS-43B	AS-45B	AS-47B
AS4002F-12	—			AS-48B
—	AS4002F-13			

Details of threaded stud kit for manifold

Part no.	Threaded stud		Accessories			
	Length (mm)	pcs.	Hexagon nut	pcs.	Flat washer	pcs.
AS-31B	38	2	M3	4	M3	4
AS-32B	62	2				
AS-33B	72	2				
AS-34B	90	2				
AS-35B	104	2				
AS-36B	114	2				
AS-37B	135	2				
AS-38B	140	2				
AS-41B	78	2	M4	4	M4	4
AS-42B	111	2				
AS-43B	119	2				
AS-44B	147	2				
AS-45B	179	2				
AS-46B	191	2				
AS-47B	236	2				
AS-48B	277	2				

* Precautions when options are ordered

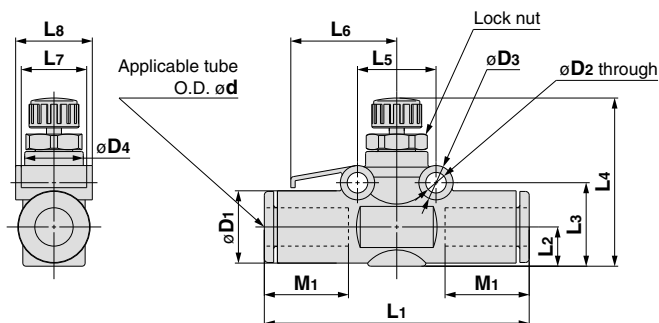
Threaded studs for manifold are not included when L-bracket and DIN rail mounting bracket are ordered. Please order them according to the number of stations.

Ex.) AS2002F-04 When connecting 4 pcs. and mounting L-brackets on both sides

• Speed controller	AS2002F-04	4 pcs.
• L-bracket	AS-20L	2 pcs.
• Threaded stud kit for manifold	AS-32B	1 pc.

Series AS

Dimensions



Metric Size

Unit: mm

Model	Applicable tube O.D. ød	D1	D2	D3	D4	L1	L2	L3	L4 (Note)		L5	L6	L7	L8	M1	Weight (g)
									MAX.	MIN.						
AS1002F-02	2	6	3.2	5	6	25.4	3.4	7.9	20.9	18.4	11	9.8	5	6.7	8.8	3
AS1002F-23	3.2	8.4	3.3	5.5	9.1	36	4.4	11.1	23.8	21	11	15.4	8.8	9.8	12.7	5
AS1002F-04	4	9.3				37	5.1	11.8	24.5	21.7				10.1	12.3	13.5
AS1002F-06	6	11.6				39.5	6.1	12.8	25.5	22.7				12.3		
AS2002F-04	4	9.3	3.3	5.5	10	40.7	5.2	12.3	28.9	25.4	12.6	17	10.5	11.5	12.7	8.5
AS2002F-06	6	11.6				42.5	6.3	13.4	30	26.5				12.3	13.5	9.5
AS2052F-06	6	12.8	4.3	7.8	14	53.2	6.7	16.3	33.2	28.2	17	22.8	12	15.7	17	19
AS2052F-08	8	15.2				57.2	8	17.6	34.5	29.5				16.1	18	22
AS3002F-06	6	13.2				59	7.4	19.3	38.6	33.6	22	25	12	20.5	17	36
AS3002F-08	8	15.2	4.3	8	19.3	65	8.2	20.1	39.4	34.4					18	38
AS3002F-10	10	18.5				70.8	9.8	21.7	41	36					21	42
AS3002F-12	12	20.9				76	10.9	22.8	42.1	37.1					22.1	44
AS4002F-10	10	18.5	4.3	8	25	76.9	10.3	22.7	51.6	44.1	28	33	14	26.2	21	76
AS4002F-12	12	21.7				81.3	11.3	23.7	52.6	45.1					22	82

Note) Reference dimensions

Inch Size

Unit: mm

Model	Applicable tube O.D. ød	D1	D2	D3	D4	L1	L2	L3	L4 (Note)		L5	L6	L7	L8	M1	Weight (g)
									MAX.	MIN.						
AS1002F-01	1/8"	8.4	3.3	5.5	9.1	36	4.5	11.2	23.8	21	11	15.4	8.8	9.8	12.7	5
AS1002F-03	5/32"	9.3				37	5.2	11.9	24.5	21.7				10.1	12.8	13.7
AS1002F-07	1/4"	12				39.5	6.1	12.8	25.5	22.7				12.8		
AS2002F-03	5/32"	9.3	3.3	5.5	10	40.7	5.2	12.3	28.9	25.4	12.6	17	10.5	11.5	12.7	8.5
AS2002F-07	1/4"	12				42.6	6.5	13.6	30.2	26.7				12.8	13.7	9.5
AS2052F-07	1/4"	13.2	4.3	7.8	14	53.4	6.9	16.5	33.4	28.4	17	22.8	12	15.7	17	19
AS2052F-09	5/16"	15.2				57.2	8	17.6	34.5	29.5				16.1	18	22
AS3002F-07	1/4"	13.2				59	7.4	19.3	38.6	33.6	22	25	12	20.5	17	35
AS3002F-09	5/16"	15.2	4.3	8	19.3	65	8.2	20.1	39.4	34.4					18	38
AS3002F-11	3/8"	18.5				69.8	9.8	21.7	41	36					21	52
AS4002F-11	3/8"	18.5				76.9	10.3	22.7	51.6	44.1	28	33	14	26.2	21	86
AS4002F-13	1/2"	21.7				81.3	11.3	23.7	52.6	45.1					22	95

Note) Reference dimensions

It is possible to tighten the lock nut (hexagon) manually.

If the nut needs to be fixed more firmly, retighten it with a tool. When using a tool, the nut needs to be tightened to the recommended tightening torque shown in the table.

As a guide, it should be tightened by 15 to 30° with a tool after tightening it manually.

Be careful not to damage the lock nut by applying too much torque.

Series	Proper tightening torque (ft.lb)
AS1002F-02	0.05
AS1002F	0.15
AS2002F	0.22
AS2052F	0.74
AS3002F	1.5
AS4002F	3