

Quick Exhaust Valve Series AQ

Excellent exhaust characteristics

Large flow capacity

Compact and lightweight

A wide selection of models



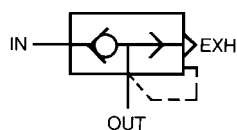
Model

Model	Port size	Effective area (mm ²)		Mass (g)
		IN → OUT	OUT → EXH	
AQ1500-M5	M5 x 0.8	2	2.8	25
AQ1510-01	1/8	4	5.8	45
AQ2000-01	1/8	25	25	110
AQ2000-02	1/4	35	40	105
AQ3000-02	1/4	40	42	215
AQ3000-03	3/8	60	70	205
AQ5000-04	1/2	105	115	690
AQ5000-06	3/4	135	180	650

Specifications

Fluid		Air
Proof pressure		1.5 MPa
Max. operating pressure	AQ15□0	0.7 MPa
	AQ2000 to 5000	1 MPa
Min. operating pressure	AQ15□0	0.1 MPa
	AQ2000 to 5000	0.05 MPa
Ambient and fluid temperature		−5 to 60°C (No freezing)

JIS Symbol



How to Order

AQ 2 0 0 0 - 02 -

Standard size

1	1/8
2	1/4
3	3/8
5	3/4

Type

Symbol	Type	Applicable model
0	Diaphragm	AQ2 to AQ5
5	Lip	AQ1 Only

Standard

0	M5 x 0.8
1	1/8

Note) "AQ15□0" only

Thread type

Nil	Metric thread (M5)
N	NPT
F	G

Option

H	High temperature (−5 to 80°C)
L	Low temperature (−30 to 60°C)

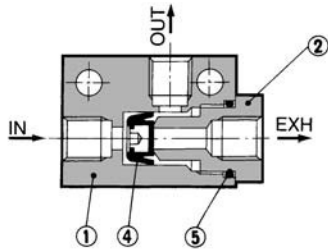
Note) AQ1500 and AQ1510 are not available.

Port size

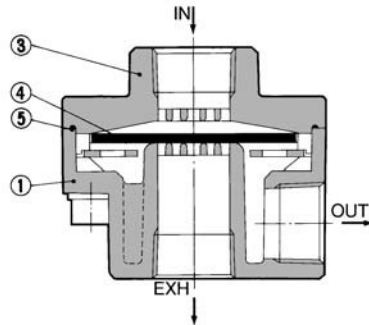
Port size	Applicable series
M5	M5 x 0.8 AQ1500
01	1/8 AQ1510/2000
02	1/4 AQ2000/3000
03	3/8 AQ3000
04	1/2 AQ5000
06	3/4 AQ5000

Construction

AQ1500/1510



AQ2000/3000/5000



⚠ Specific Product Precautions

Be sure to read before handling.
Refer to front matters 58 and 59 for
Safety Instructions and pages 412 to 414
for Flow Control Equipment Precautions.

Design/Selection

⚠ Caution

1. In the following cases, insufficient exhaust or vibration may cause noise.

- With residual pressure or back pressure on the IN side.
- When the differential pressure between the IN and OUT sides is smaller than the minimum operating pressure.
- When the effective area of the IN side piping of AQ, or the solenoid valve, is smaller than AQ.

Component Parts

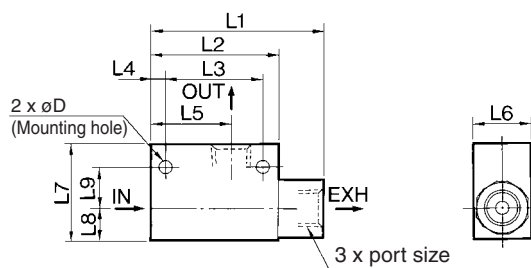
No.	Description	Material/Model		
		AQ1500	AQ1510	AQ2000, 3000, 5000
1	Body	Zinc die-casted	Zinc die-casted	Aluminum die-casted
2	Guide	Brass	Brass	—
3	Cover	—	—	Aluminum die-casted

Replacement Parts

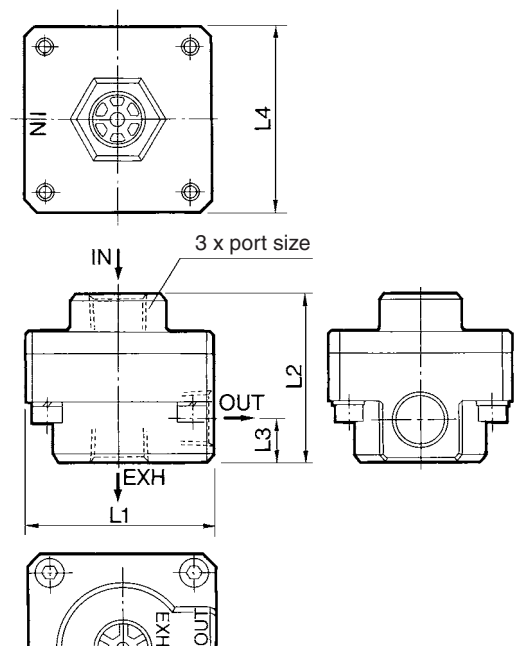
No.	Description	Material	Part no.				
			AQ1500	AQ1510	AQ2000	AQ3000	AQ5000
4	Valve	NBR	30083	30093	30073	30053	30063
5	O-ring	NBR	9 x 7 x 1	JISB2401P-7	CA40-1601	CA50-1602	30066

Dimensions

AQ1500/1510



AQ2000/3000/5000



Model	Port size	L1	L2	L3	L4	L5	L6	L7	L8	L9	D
AQ1500	M5 x 0.8	23	20	14	3	12.5	12	15	5.5	6.5	3.1
AQ1510	1/8	45	33	25	4	21	15	25	8	11	4.3

Model	Port size	L1	L2	L3	L4
AQ2000	1/8, 1/4	45	40	10	45
AQ3000	1/4, 3/8	56	50	12.5	56
AQ5000	1/2, 3/4	85	75	18	85

AS
ASP
ASN
AQ
ASV
AK
VCHC
ASS
ASR
ASQ
KE
TMH

Quick Exhaust Valve with One-touch Fittings Series **AQ240F/340F**

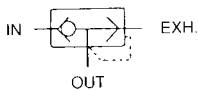


With exhaust port fitting

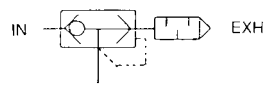


With silencer

JIS Symbol



With exhaust port fitting



With silencer

How to Order

AQ 2 4 0 F - 06 - 06

Quick exhaust valve

Body size

2	M5
3	1/8

In-line type

Exhaust port

00	With silencer
04	Applicable tubing O.D. ø4
06	Applicable tubing O.D. ø6
07	Applicable tubing O.D. ø1/4"

IN, OUT port applicable tubing O.D.

04	ø4
06	ø6
07	ø1/4"

With One-touch fittings

Note) Brass parts are all electroless nickel plated.

Specific Product Precautions

Be sure to read before handling.
Refer to front matters 58 and 59 for Safety Instructions and pages 412 to 414 for Flow Control Equipment Precautions.

Design/Selection

Caution

1. In the following cases, insufficient exhaust or vibration may cause noise.

- With residual pressure or back pressure on the IN side.
- When the differential pressure between the IN and OUT sides is smaller than the minimum operating pressure.
- When the effective area of the IN side piping of AQ, or the solenoid valve, is smaller than AQ.

Space-saving

Rectilinear IN-OUT tubing connections

- With One-touch fittings and silencer
- With silencer
- Lightweight (Resin body)

Specifications

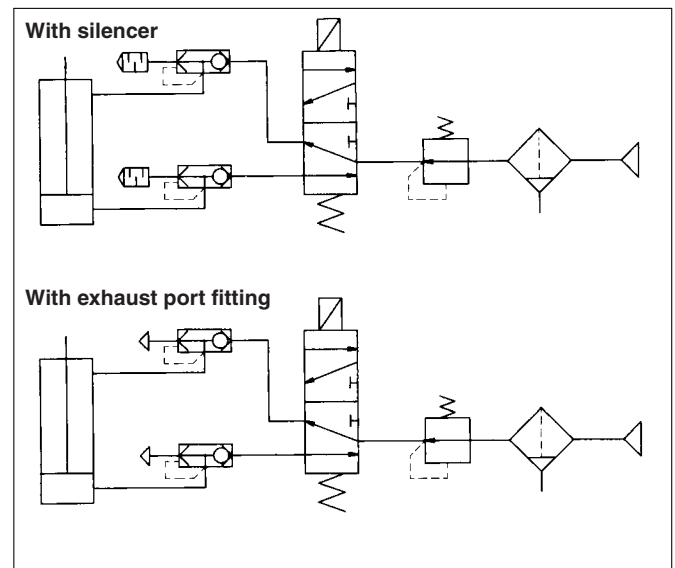
Fluid	Air
Proof pressure	1.5 MPa
Max. operating pressure	1 MPa
Min. operating pressure	0.1 MPa
Ambient and fluid temperature	-5 to 60°C (No freezing)
Applicable tubing material ⁽¹⁾	Nylon, Soft nylon, Polyurethane

Note 1) Use caution regarding the max. operating pressure when soft nylon or polyurethane tubing is used. (Refer to pages 371 and 372 for details.)

Model

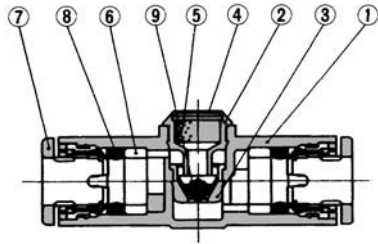
Model	Applicable tubing O.D.			Effective area (mm ²)	
	4	6	1/4"	IN→OUT	OUT→EXH.
AQ240F-04-□	●			1.7	2.5
AQ240F-06-□		●		2.4	2.7
AQ340F-06-□		●		4	4
AQ240F-07-□			●	2.4	2.7
AQ340F-07-□			●	4	4

Circuit



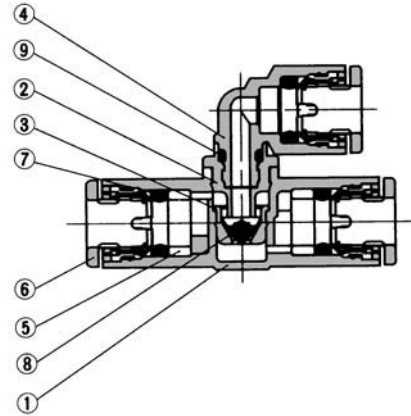
Construction

With silencer



No.	Description	Material	Note
1	Body A	PBT	
2	Seat ring	Brass	Electroless nickel plated
3	Valve seat	Brass	Electroless nickel plated
4	Silencer cover	Stainless steel 304	
5	Silencer	PVA sponge	
6	Spacer	POM	
7	Cassette	—	
8	Seal	NBR	
9	Valve	HNBR	

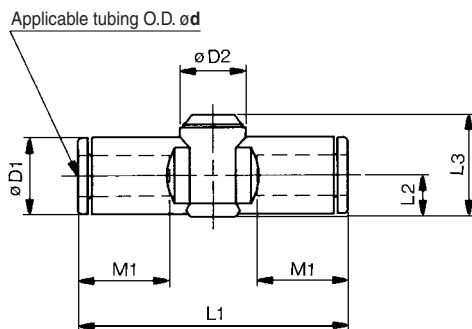
With exhaust port fitting



No.	Description	Material	Note
1	Body A	PBT	
2	Seat ring	Brass	Electroless nickel plated
3	Valve seat	Brass	Electroless nickel plated
4	Elbow union body	POM	
5	Spacer	POM	
6	Cassette	—	
7	Seal	NBR	
8	Valve	HNBR	
9	O-ring	NBR	

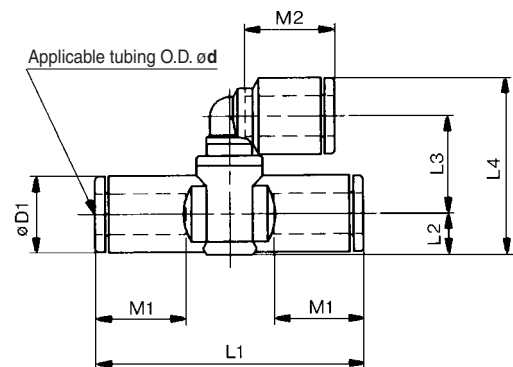
Dimensions

With silencer



Model	Tubing O.D. ød	D1	D2	L1	L2	L3	M1	Weight (g)
AQ240F-04-00	4	9.3	10.0	39.2	5.2	14.3	12.9	5
AQ240F-06-00	6	11.6	10.0	40.7	6.2	15.4	13.7	6
AQ340F-06-00	6	11.6	11.8	44.8	6.3	19.5	13.7	11
AQ240F-07-00	1/4"	12	10.0	40.7	6.2	15.4	13.7	6
AQ340F-07-00	1/4"	13.2	11.8	52.2	7.1	20.3	16.8	11

With exhaust port fitting



Model	Tubing O.D. ød	D1	L1	L2	L3	L4	M1	M2	Weight (g)
AQ240F-04-04	4	9.3	39.2	5.2	13.7	23.5	12.9	12.9	6
AQ240F-06-06	6	11.6	40.7	6.2	14.7	26.7	13.7	13.7	8
AQ340F-06-06	6	11.6	44.8	6.3	19.6	31.7	13.7	13.7	13
AQ240F-07-07	1/4"	12	40.7	6.2	15.1	27.3	13.7	13.7	8
AQ340F-07-07	1/4"	13.2	52.2	7.1	20.0	33.1	16.8	13.7	13

AS

ASP

ASN

AQ

ASV

AK

VCHC

ASS

ASR
ASQ

KE

TMH