

Pneumatic Actuator Type AR

Features

- Full plastic body, No exposed metal parts
- Corrosion-free, Rust-free
- Compact & Light weight
- Fast One-Click connection (no bolts and nuts)

*Pneumatic Actuator Type AR is designed only for ASAHI AV Valve. It can be mounted on "Ball Valve Type 21/21 α ", "Compact Ball Valve Type 27" or "3-Way Ball Valve Type 23".



[Double Acting]



[One-Click Connection]



[Single Acting]

Basic specifications

	Actuator Rank (Cylinder Bore)			
	AR032	AR040	AR050	AR063
ACTUATOR TYPE	Double Acting (DA)	Double Acting (DA) Single Acting (AIR TO OPEN / AIR TO CLOSE)		
STRUCTURE	90° Rotary Actuator - Rack and Pinion			
HOUSING MATERIAL	PPG			
WORKING TEMP (°C)	-10* ~ 60			

* If the actuator is used in an environment below 5°C temperature, its operating fluid must be free from the water and moisture contained in it because of possible problems due to the freeze.

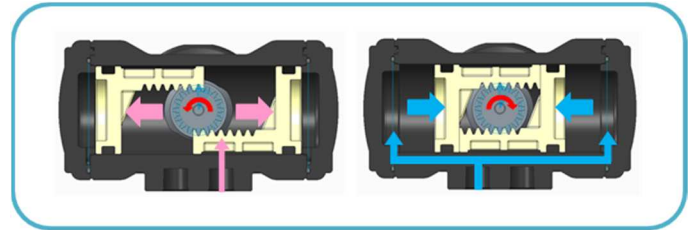
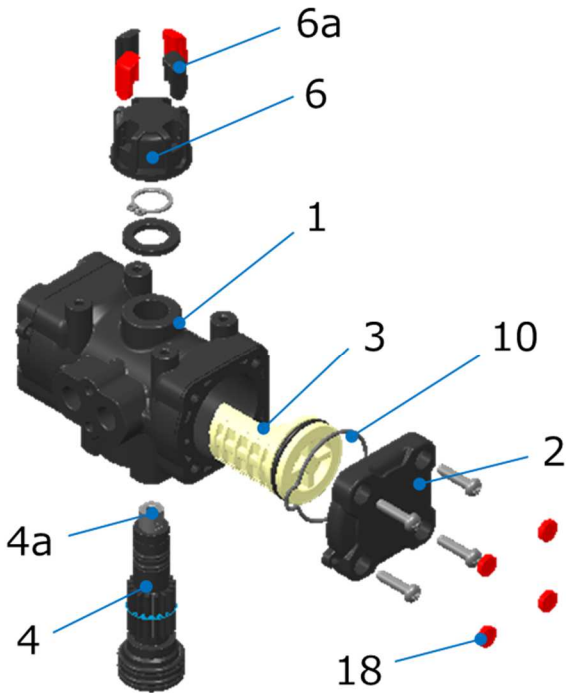
DOUBLE ACTING	ACTUATOR TYPE				UNIT
	AR032DA	AR040DA	AR050DA	AR063DA	
ANGLE ADJUSTMENT	No angle adjustment is available.				
OPERATING PRESSURE	0.4-0.7				MPa
AIR CONSUMPTION	0.3	0.6	1.3	2.4	NL/OPEN & CLOSE (0.4 MPa)
AIR SUPPLY BORE	Rc1/8		Rc1/4		

AIR TO OPEN AIR TO CLOSE	ACTUATOR TYPE				UNIT
	AR040NC AR040NO	AR050NC AR050NO	AR063NC AR063NO		
ANGLE ADJUSTMENT	No angle adjustment is available.				
OPERATING PRESSURE	0.4-0.7				MPa
AIR CONSUMPTION	0.2	0.4	0.8		NL/OPEN & CLOSE (0.4 MPa)
AIR SUPPLY BORE	Rc1/8	Rc1/4			

* DA: Double Acting / NC: Air to Open / NO: Air to Close

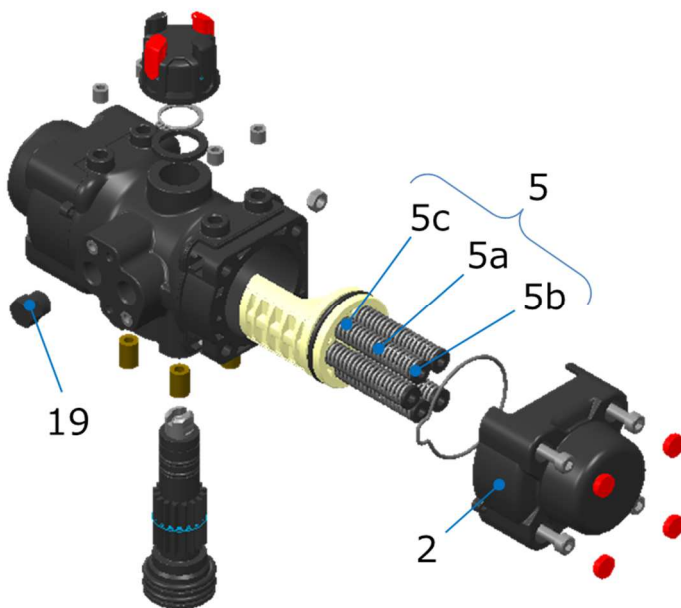
Structures

[DOUBLE ACTING; DA]



No.	Description
1	Cylinder Body
2	Cylinder Cover
3	Piston
4	Shaft
4a	Shaft Insert
6	Indicator Base
6a	Indicator
10	O-ring for Cylinder Cover
18	Cap

[SINGLE ACTING; AIR TO OPEN / AIR TO CLOSE]



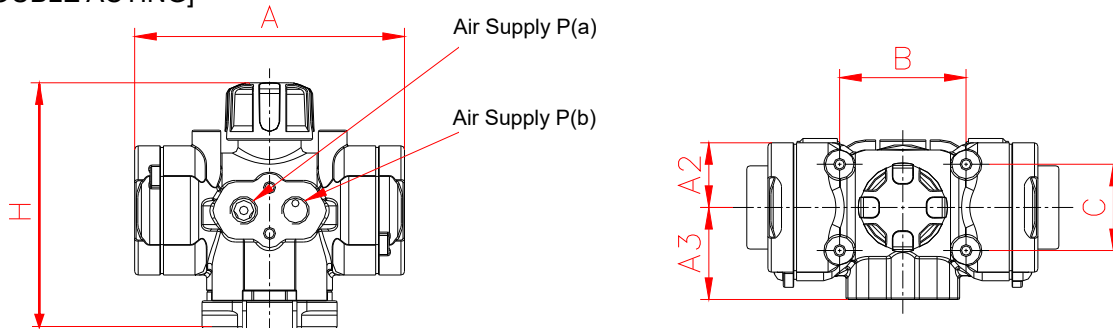
No.	Description
5	Spring Unit
5a	Spring
5b	Stopper
5c	Stopper
19	Plug



Never attempt to disassemble an actuator for your safety.

Product dimension & Weight

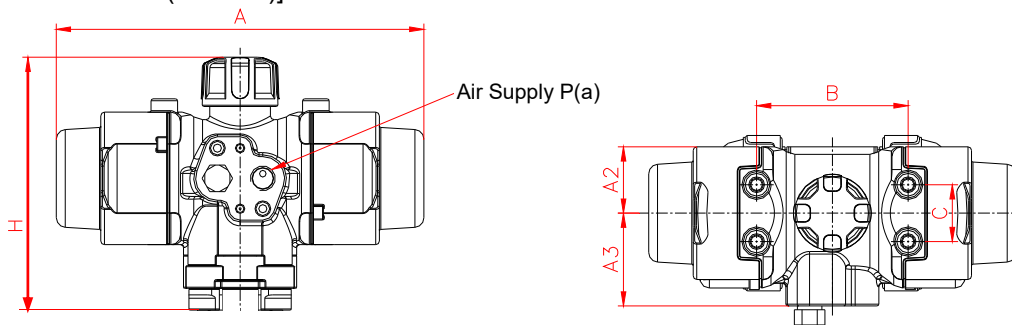
[DOUBLE ACTING]



Size	A	A2	A3	B	C	H	Air Supply P(a), P(b)	Net Weight (g)
AR032DA	94	22,5	32	44	30	79,5	Rc 1/8	200
AR040DA	116	28	38	44	30	91	Rc 1/8	300
AR050DA	147	35	49	80	30	113,5	Rc 1/4	700

*The shape and appearance of assembly differ slightly with nominal size compared to this drawing.

[SINGLE ACTING (NC/ NO)]



Size	A	A2	A3	B	C	H	Air Supply P(a)	Net Weight (g)
AR040	154	28	38	44	30	101	Rc 1/8	600
AR050	194	35	49	80	30	125,5	Rc 1/4	1000
AR063	254	42,5	57	80	30	147,5	Rc 1/4	1900

*The shape and appearance of assembly differ slightly with nominal size compared to this drawing.

Actuator Ranking for ASAHI AV Valves

Valve DN Size (mm)	Ball Valve Types 21 & 21α Compact Ball Valve Type 27			3-Way Ball Valve Type 23		
	DOUBLE ACTING	AIR TO OPEN	AIR TO CLOSE	DOUBLE ACTING	AIR TO OPEN	AIR TO CLOSE
13/15	AR032DA10	AR040NC20	AR040NO20	AR040DA20	AR040NC20 ^{*2}	
20	AR032DA11				AR050NC30 ^{*2}	
25		AR040DA20	AR050NC30	AR050NO30	AR050DA30	AR063NC40 ^{*2}
32	AR050DA30	AR063NC40	AR063NO40			
40	AR050DA30	AR063NC40	AR063NO40			
50	AR050DA30	AR063NC40	AR063NO40	AR050DA30	AR063NC40 ^{*2}	

* 1) DA: Double Acting / NC: Air to Open / NO: Air to Close

* 2) Type 23 uses the same actuator for Air to Open & Air to Shut operations (with ball mounting position changed 180°).

Functions and Options

[TAG-HOLE (Standard)]

Handy tag-hole attachment.



[ACCESSORIES]

Many of accessories can be easily mounted afterwards. (except POSITIONER & STROKE LIMITER).

Limit Switch Box



Open-Close Counter



Speed Controller



Bypass Valve



Solenoid Valve & Filter Regulator



Positioner



Full Opening Adjustment



Nut Caps available in 4 Colours



*1: Solenoid Valve is equipped with a built-in speed controller and bypass valve.

A conversion adapter need to be used to apply NAMUR connection for AR032 and AR040.

*2: When the positioner is installed, the actuator will be mounted on the valve with bracket, bolts and nuts for reinforcement.

OPTION LIST	MANUFACTURER	BASIC SPECIFICATIONS
SOLENOID VALVE NAMUR	KONAN	<ul style="list-style-type: none"> • WATER PROOF, EXPLOSION PROOF • POWER SOURCE AC100V, AC110V, AC200V, AC220V, DC24V
FILTER REGULATOR	KONAN	
SPEED CONTROLLER	SMC	<ul style="list-style-type: none"> • Since a solenoid valve has a built-in exhaust valve, when a solenoid valve is mounted, no speed controller is necessary.
BYPASS VALVE (SPEED CONTROLLER)	KONAN	
LIMIT SWITCH BOX	PRISMA	<ul style="list-style-type: none"> • WATER PROOF
POSITIONER	YTC	<ul style="list-style-type: none"> • E/P: INPUT SIGNAL CURRENT DC 4-20 mA • P/P: INPUT SIGNAL AIR PRESSURE 0.02 - 0.1 MPa
STROKE LIMITER (OPENING DEGREE ADJUSTING BOLT)	ASAHI YUKIZAI	
PNEUMATIC COUNTER	ASAHI YUKIZAI	
DISMOUNT LEVER	ASAHI YUKIZAI	

Installation, Operation and Maintenance Manual

For details of Installation, Operation and Maintenance, please contact our nearest distribution agent or sales office. Technical documents, IOM and drawings as a completed valve can be downloaded from our website.