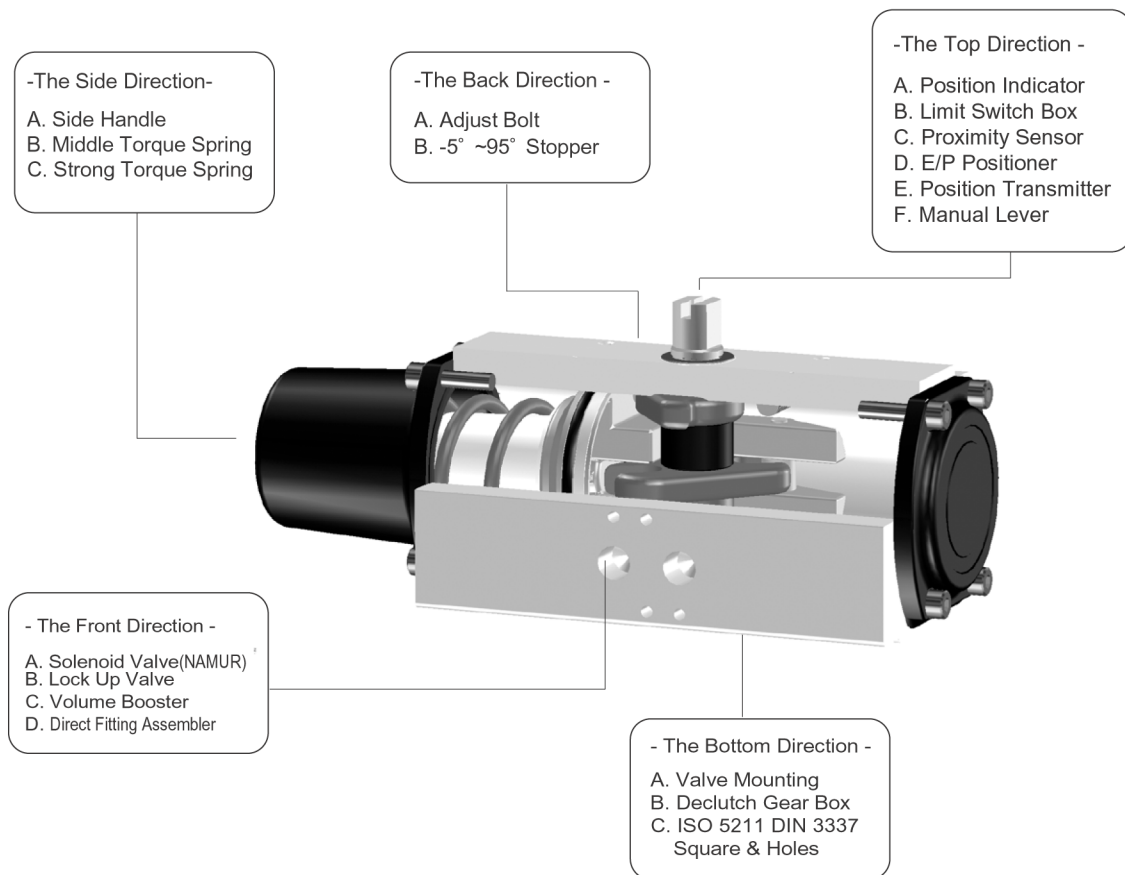


● Design and Construction

1. Automa actuator is designed for rotary type valve.
2. Automa actuator is scotch yoke type and is powerful with less defect.
3. Automa actuator is designed for ISO standard and it makes assembly with various accessories possible.
4. Automa actuator with good price and high quality is mass-produced through precision processing.
5. 3 steps inspection is performed in every actuator to minimize a defect.
6. More than 500,000pcs are produced yearly in automation facilities and quick delivery is one of our advantages.
7. Automa have a variety of size actuators including heavy-duty actuator to meet customers needs.
8. Automa is available to provide solutions to a wide of range of industries including petrochemical, power generation, atomic power plant, steel mill, shipyard, refining, wastewater disposal, automation facilities and building air conditioner.

● Pneumatic Rotary Actuator Applications



Ball Valve, Butterfly Valve, Plug Valve, Damper Control

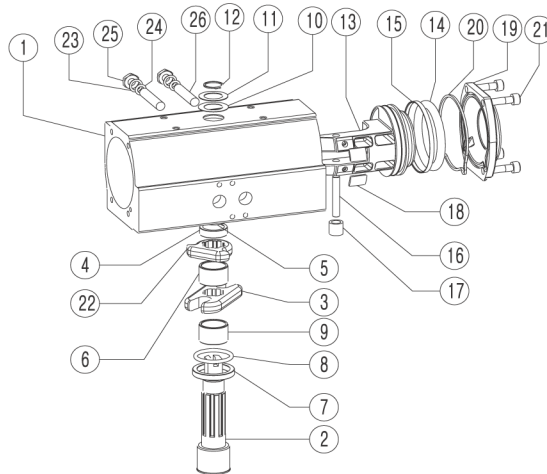


● Features

- Scotch - Yoke type
- No metal to metal touch
- I S O 5211, D I N 3337
- Anodized surface & double coated interior

● Specification

Item	AD32	AD40	AD50	AD65	AD80	AD100	AD125	AD140	AD160	AD200
Operating Type	R&P		Scotch - Yoke							
Operating Media	Compressed Dry Air									
Operating Pressure	4 ~ 7kg/cm ²									
Rotating Angle	90° ±5°									
Operating Temperature	-10℃ ~ 60℃									
Weight (kg)	0.25	0.7	1.6	2.7	4.3	7.5	11.6	18.9	26.3	47.2



● Part and Material

No.	Part Name	Materials	No.	Part Name	Materials
1	Body	Aluminum Alloy	14	Piston O-ring	NBR
2	Shaft	Steel Alloy (Nickel plated)	15	Piston Guide-ring	Engineering Plastic
3	Crank	Steel Alloy	16	Piston Pin	Steel Alloy
4	Bushing(Top)	Engineering Plastic	17	Piston Roller	Steel Alloy
5	Body O-Ring(Top)	NBR	18	Piston Pad	Engineering Plastic
6	Shaft Roller(Top)	Engineering Plastic	19	Cover	Aluminum Alloy
7	Bushing(Bottom)	Engineering Plastic	20	Cover O-ring	NBR
8	Body O-Ring(Bottom)	NBR	21	Cover Bolt	Steel Alloy
9	Shaft Roller(Bottom)	Engineering Plastic	22	Stopper	Steel Alloy
10	Body Washer(Bottom)	Engineering Plastic	23	Adjust Washer	Stainless Steel
11	Body Washer(Top)	Stainless Steel	24	Adjust O-ring	NBR
12	Body Snap-ring	Stainless Steel	25	Adjust Nut	Stainless Steel
13	Piston	Aluminum Alloy	26	Adjust Bolt	Steel Alloy

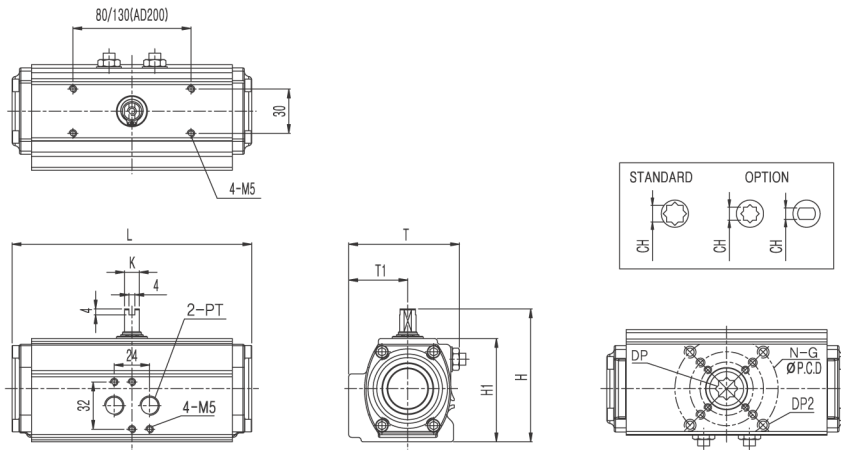
AD SERIES

ROTARY ACTUATOR / DOUBLE ACTING

● Torque Table

unit : N-m

Model	Angle	4bar	5bar	6bar	Model	Angle	4bar	5bar	6bar
AD32	0°	7.0	9.0	11.0	AD125	0°	551	678	794
	45°	24.0	30.0	36.0		45°	360	443	531
	90°	85.0	107.0	127.0		90°	491	613	732
AD40	0°	8	10	11	AD140	0°	754	923	1097
	45°	8	10	11		45°	455	582	668
	90°	8	10	11		90°	720	880	970
AD50	0°	28	37	41	AD160	0°	1062	1312	1600
	45°	21	26	30		45°	758	949	1133
	90°	38	40	52		90°	1320	1635	2027
AD65	0°	78	95	116	AD200	0°	2600	3200	4820
	45°	49	63	73		45°	1500	1950	2400
	90°	71	93	107		90°	2300	2900	3450
AD80	0°	143	183	210	AD200D	0°	4680	5760	6876
	45°	92	121	144		45°	2700	3510	4320
	90°	133	156	209		90°	4140	5220	6210
AD100	0°	247	292	368					
	45°	165	196	250					
	90°	237	301	363					



● Dimension

(mm)

MODEL	ISO	ØP.C.D	N-G	DP2(TAP)	K	L	T	T1	H	H1	2-PT	CH	CH(OPT)	DP
AD32	F03	36	4-M5	9	8	70	45	25	55	45	1/8"	9×9	-	10
AD40	F03/F05	36/50	4-M5/M6	8/12	9	108	60	35	74	54	1/8"	9×9	-	12
AD50	F03/F05/F07	36/50/70	4-M5/M6/M8	10/12/13	10	162	75	40	90	70	1/4"	11×11	14×14	14
													9.7×Ø15	14
AD65	F05/F07	50/70	4-M6/M8	14/13	13	202	89	46	107	87	1/4"	14×14	11.7×Ø17	17
												-	9.7×Ø15	14
AD80	F07	70	4-M8	12	17	262	101	50	126	106	1/4"	17×17	14.7×Ø19	19
AD100	F07/F10	70/102	4-M8/M10	17/21	22	311	129	62	148	128	1/4"	22×22	17.7×Ø22	26
AD125	F07/F10	70/102	4-M8/M10	17/21	22	390	151	72	174	154	1/4"	22×22	-	26
AD140	F10/F12	102/125	4-M10/M12	22/27	24	431	164	77	192	172	1/4"	27×27	22×22	30
AD160	F14	140	4-M16	27	32	506	189	89	216	196	1/4"	36×36	27×27	30
	F10/F12(OPT)	102/125	4-M10/M12	-										
AD200	F16/F14(OPT)	165/(140)	4-M20/(4-M16)	32	36	605	231	115	284	254	1/4"	46×46	36×36	60

Ball Valve, Butterfly Valve, Plug Valve, Damper Control

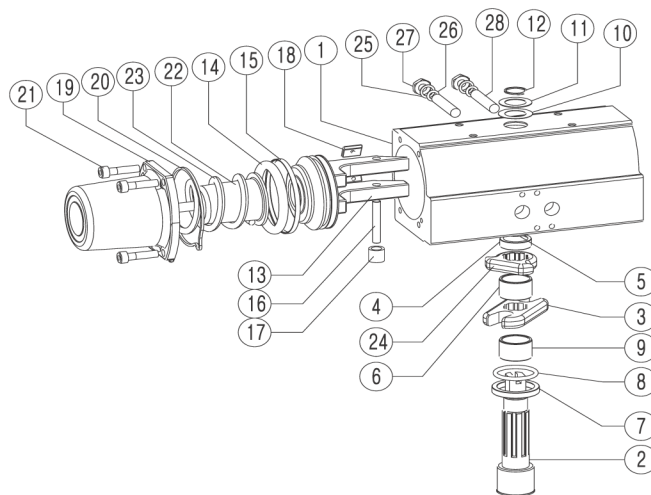


● Features

- Scotch - Yoke type
- No metal to metal touch
- I S O 5211, D I N 3337
- Anodized surface & double coated interior

● Specification

Item	AS40	AS50	AS65	AS80	AS100	AS125	AS140	AS160	AS200
Operating Type	R&P	Scotch - Yoke							
Operating Media	Compressed Dry Air								
Operating Pressure	4.5 ~ 7kg/cm ²								
Rotating Angle	90° ±5°								
Operating Temperature	-10°C~ 60°C								
Weight (kg)	0.7	1.7	3.4	5.7	10.6	17.9	25.2	36.8	76.9



● Part and Material

No.	Part Name	Materials	No.	Part Name	Materials
1	Body	Aluminum Alloy	15	Piston Guide-ring	Engineering Plastic
2	Shaft	Steel Alloy (Nickel plated)	16	Piston Pin	Steel Alloy
3	Crank	Steel Alloy	17	Piston Roller	Steel Alloy
4	Bushing(Top)	Engineering Plastic	18	Piston Pad	Engineering Plastic
5	Body O-Ring(Top)	NBR	19	Cover	Aluminum Alloy
6	Shaft Roller(Top)	Engineering Plastic	20	Cover O-ring	NBR
7	Bushing(Bottom)	Engineering Plastic	21	Cover Bolt	Steel Alloy
8	Body O-Ring(Bottom)	NBR	22	Spring Cap	Engineering Plastic
9	Shaft Roller(Bottom)	Engineering Plastic	23	Spring	Steel Alloy
10	Body Washer(Bottom)	Engineering Plastic	24	Stopper	Steel Alloy
11	Body Washer(Top)	Stainless Steel	25	Adjust Washer	Stainless Steel
12	Body Snap-ring	Stainless Steel	26	Adjust O-ring	NBR
13	Piston	Aluminum Alloy	27	Adjust Nut	Stainless Steel
14	Piston O-ring	NBR	28	Adjust Bolt	Steel Alloy

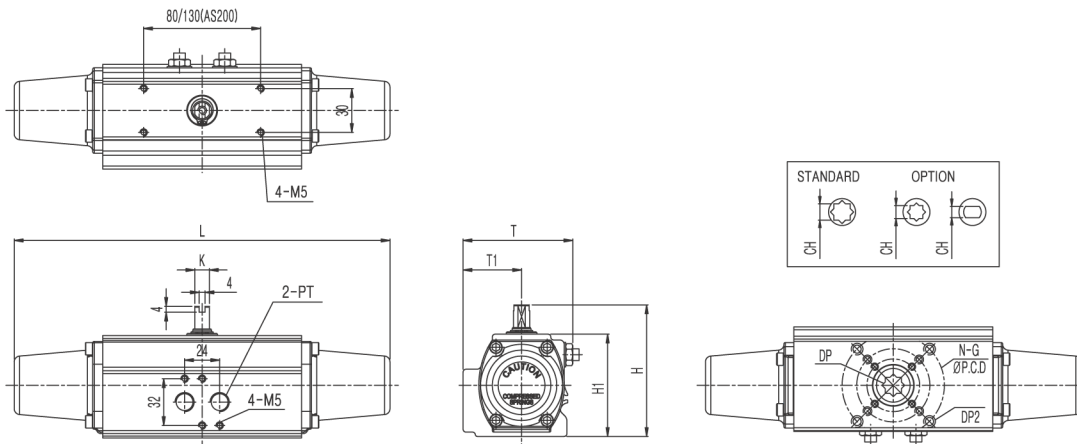
AS SERIES

ROTARY ACTUATOR / SINGLE ACTING

● Torque Table

unit : N-m

Model	Angle	Spring Torque Middle		Spring Torque Strong		Model	Angle	Spring Torque Middle		Spring Torque Strong	
		Spring to	Air to 4.5	Spring to	Air to 6			Spring to	Air to 4.5	Spring to	Air to 6
AS40	0°	4	6	5	8	AS125	0°	230	380	300	510
	45°	3	3	4	4		45°	190	190	260	260
	90°	6	4	8	5		90°	380	230	510	300
AS50	0°	14	26	17	34	AS140	0°	300	550	410	730
	45°	12	12	15	15		45°	290	290	340	340
	90°	26	14	34	17		90°	550	300	730	410
AS65	0°	35	54	48	70	AS160	0°	550	750	770	1150
	45°	23	28	37	32		45°	420	420	560	560
	90°	54	35	70	48		90°	750	550	1150	770
AS80	0°	60	100	80	130	AS200	0°	1050	1620	1420	2170
	45°	50	50	70	70		45°	940	940	1260	1260
	90°	100	60	130	80		90°	1620	1050	2170	1420
AS100	0°	100	190	130	240	AS200D	0°	1890	2916	2556	3906
	45°	80	80	110	110		45°	1692	1692	2268	2268
	90°	190	100	240	130		90°	2916	1890	3906	2556



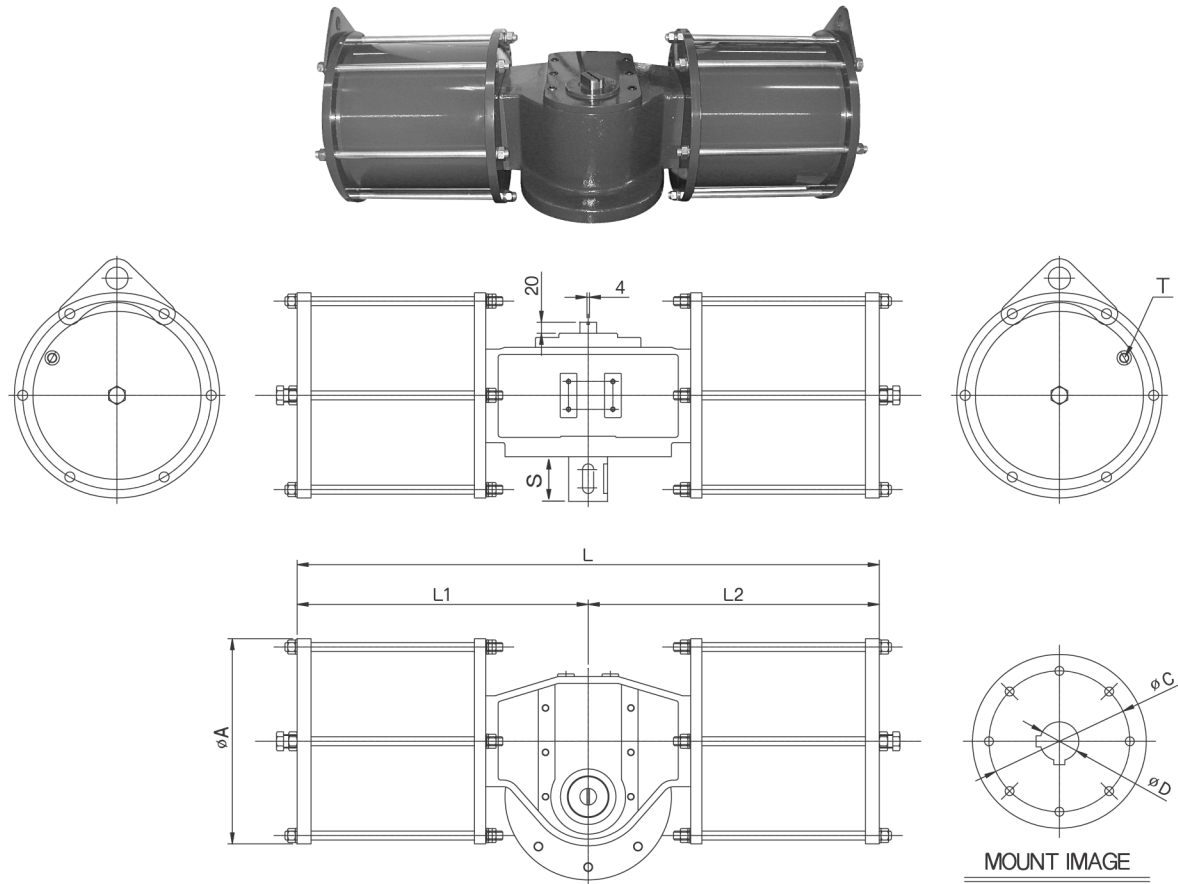
● Dimension

(mm)

MODEL	ISO	ØP.C.D	N-G	DP2(TAP)	K	L	T	T1	H	H1	2-PT	CH	CH(OPT)	DP
AS40	F03/F05	36/50	4-M5/M6	8/12	9	108	60	35	74	54	1/8"	9×9	-	12
AS50	F03/F05/F07	36/50/70	4-M5/M6/M8	10/12/13	10	257	75	40	90	70	1/4"	11×11	14×14	14
													9.7×Ø15	14
AS65	F05/F07	50/70	4-M6/M8	14/13	13	314	89	46	107	87	1/4"	14×14	11.7×Ø17	17
												-	9.7×Ø15	14
AS80	F07	70	4-M8	12	17	430	101	50	126	106	1/4"	17×17	14.7×Ø19	19
AS100	F07/F10	70/102	4-M8/M10	17/21	22	500	129	62	148	128	1/4"	22×22	17.7×Ø22	26
AS125	F07/F10	70/102	4-M8/M10	17/21	22	606	151	72	174	154	1/4"	22×22	-	26
AS140	F10/F12	102/125	4-M10/M12	22/27	24	682	164	77	192	172	1/4"	27×27	22×22	30
AS160	F14	140	4-M16	27	32	781	189	89	216	196	1/4"	36×36	27×27	30
	F10/F12(OPT)	102/125	4-M10/M12	-										
AS200	F16/F14(OPT)	165/(140)	4-M20/(M16)	32	36	982	231	115	284	254	1/4"	46×46	36×36	60

HEAVY DUTY - DOUBLE ACTING

ROTARY ACTUATOR / PISTON



● Dimension

unit : mm

Model	ØA	L	L1	L2	ØD	S	N-M	KEY	T	P.C.D-ØC
AD250D	313	890	445	445	Ø55	65	4-M20	16×10	PT 3/8"	165
AD300D	370	1090	545	545	Ø70	85	8-M16	20×12	PT 3/8"	254
AD350D	410	1420	710	710	Ø80	85	8-M20	28×16	PT 1/2"	298
AD400D	470	1570	785	785	Ø80	85	8-M20	28×16	PT 1/2"	298

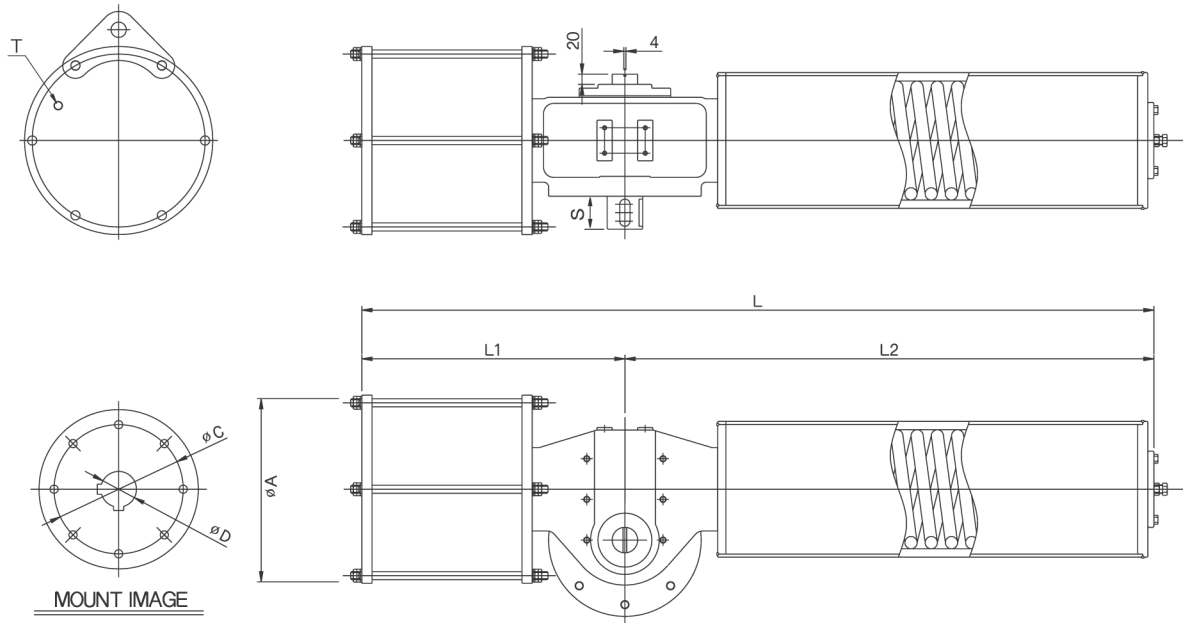
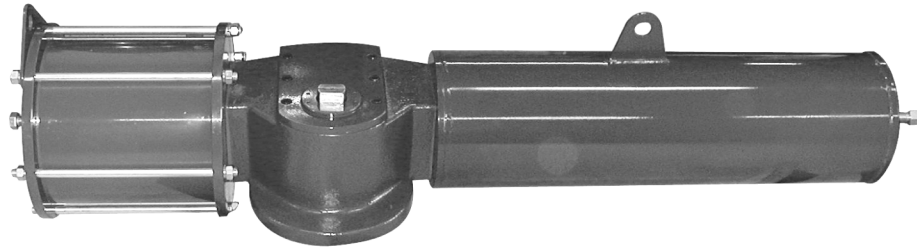
● Torque Table

unit : N-m

Model	Angle	Supply Air		
		4Bar	5Bar	6Bar
AD250D	0°	4,200	5,200	6,300
	45°	3,100	3,800	4,600
	90°	4,200	5,200	6,300
AD300D	0°	7,600	9,500	11,000
	45°	6,500	8,000	9,700
	90°	7,600	9,500	11,000
AD350D	0°	18,093	22,617	27,140
	45°	12,063	15,078	18,094
	90°	18,093	22,617	27,140
AD400D	0°	25,600	32,000	38,400
	45°	17,081	20,100	25,100
	90°	25,600	32,000	38,400

HEAVY DUTY - SINGLE ACTING

ROTARY ACTUATOR / PISTON



● Dimension

unit : mm

Model	ØA	L	L1	L2	ØD	S	N-M	KEY	T	P.C.D-ØC
AS250	313	1445	445	1000	Ø55	65	4-M20	16×10	PT 3/8"	165
AS300	370	1630	545	1085	Ø70	85	8-M16	20×12	PT 3/8"	254
AS350	410	1840	720	1120	Ø80	85	8-M20	28×16	PT1/2"	298

● Torque Table

unit : N-m

Model	Angle	Supply Air			
		4Bar	5Bar	6Bar	Spring
AS250	0°	1,620	2,023	2,827	2,000
	45°	1,106	1,509	2,313	2,514
	90°	578	981	1,785	3,042
AS300	0°	2,873	3,591	5,028	3,591
	45°	1,976	2,694	4,131	4,488
	90°	1,030	1,751	3,188	5,413
AS350	0°	4,290	4,910	6,470	4,990
	45°	3,395	4,030	5,480	5,870
	90°	2,413	3,154	4,395	6,780

● Air Consumption

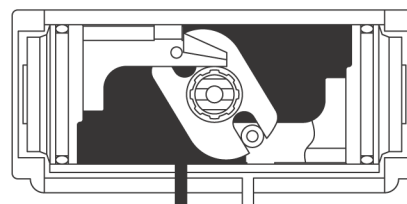
The air consumption of actuator is calculated by below.
 The air consumption is based on 1 action of used valve and do calculate the consumption per an hour.

■ Spring Return Actuator (AS Series)
 $V = A \times N$

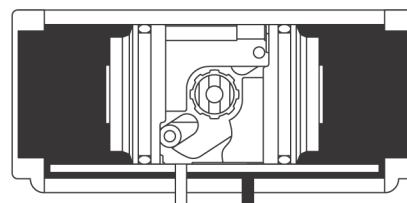
■ Double Acting Actuator (AD Series)
 $V = (A + B) \times N$

V = Air Consumption (Liter)
 A = Volume A
 B = Volume B
 N = Number of Operating

Actuator Model		Actuator Volume(Liter)	
		A	B
AD32		0.06	0.07
AD40	AS40	0.11	0.13
AD50	AS50	0.24	0.25
AD65	AS65	0.48	0.54
AD80	AS80	0.86	0.97
AD100	AS100	1.28	1.47
AD125	AS125	1.45	1.74
AD140	AS140	3.60	4.76
AD160	AS160	4.83	5.62
AD200	AS200	6.50	6.50
AD200D	AS200D	13.0	13.0
AD250D	AS250	59.27	57.47
AD300D	AS300	107.0	103.5
AD350D	AS350	182.1	177.4
AD400D	AS400	276.4	268.9



Volume "A"

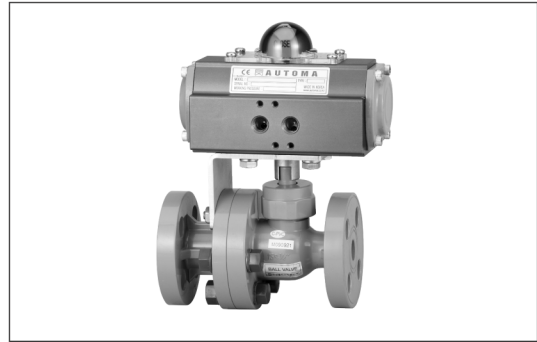


Volume "B"

SAMPLES



Flanged Ball Valve (Double)



Plastic Ball Valve(Double)



Butterfly Valve (Double)



Butterfly Valve (Single)



3-Piece Screwed Ball Valve (Double)



Plastic Butterfly Valve(Double)



1-Piece Screwed Ball Valve



3-Way Flanged Ball Valve