

AE BYV338H Plastic Butterfly Valve Pneumatic and Electric Actuated



Design

AE BYV338H Plastic Butterfly Valve retrofitted with pneumatic or electric actuator for automatic process control application.

Pneumatic actuated is available in double acting (DA) or spring return (SR) version. Wide range of accessories including E/P positioner, limit switch box for position feedback, declutchable manual override gearbox and pilot solenoid valves complete the range to meet various application requirements.

Electric actuated is available in on/off or modulating control version and comes standard with manual override built in.

The actuator can be mounted onto the valve in normally open or normally closed position either directly or using customized mounting bracket. It is fully tested for alignment and proper functioning before delivery.

Specifications - Pneumatic Actuator

Function	Double Acting (DA) or Spring Return (SR)
Material	
Housing	Extruded aluminum alloy, hard anodized
End Cap	Pressure die cast aluminum alloy, epoxy coated
Pinion	Carbon steel, nickel plated
Piston	Cast aluminum / steel, hard anodized / Zinc galvanized
Cap Screw	Stainless steel
Spring	Spring steel, Dip Coated
Bearing and Guide	Engineering plastic
Travel Stop Cam	Alloy steel
Adjustment Screw	Stainless steel
Seal	NBR
Mounting Bracket	Aluminum, stainless steel, alloy steel
Operating Media	Dry or lubricated compressed air or non-corrosive gases
Supply Pressure	Min. 2 bar, Max. 8 bar
Operating Temperature	-20°C to +80°C (NBR) Lower or higher temperature version on request
Rotation	90°
Travel Adjustment	± 5°
Connection and Mounting	Namur, ISO5211 and DIN3337
Torque Output	3 Nm to 13024 Nm (DA) 4 Nm to 6584 Nm (SR)
Selection	Actuator is selected and matched in accordance to each process operating conditions and requirement to ensure proper functioning of the actuated valve

Specifications - Electric Actuator

Function	On/Off (Modulating type with 4 to 20 mA input on request)
Material	
Housing	Nylon (Aluminum on request)
Gear	S45C Carbon Steel and SCM21 Steel
Seal	NBR
Power Supply	24VDC, 110VAC, 220VAC
Position Feedback Limit Switches	2 x SPDT for Open/Close position
Rotation	90° (other rotation on request)
Stall protection	Internal overheating protection
Manual Operation	Mechanical by wrench or handwheel depending on size of actuator
Position Indicator	Standard mechanical position indicator
Enclosure	IP67
Electrical Conn.	1/2" PF
Operating Temperature	-10°C to +60°C
Ambient Humidity	30% ~ 95% RH
Mounting	ISO5211
Torque Output	9 Nm to 3000 Nm
Selection	Actuator is selected and matched in accordance to each process operating conditions and requirement to ensure proper functioning of the actuated valve
Options	
Space heater	
Position Feedback Potentiometer	
Frequent-working (100%ED) version	
Failsafe version	
Quick Opening Version	

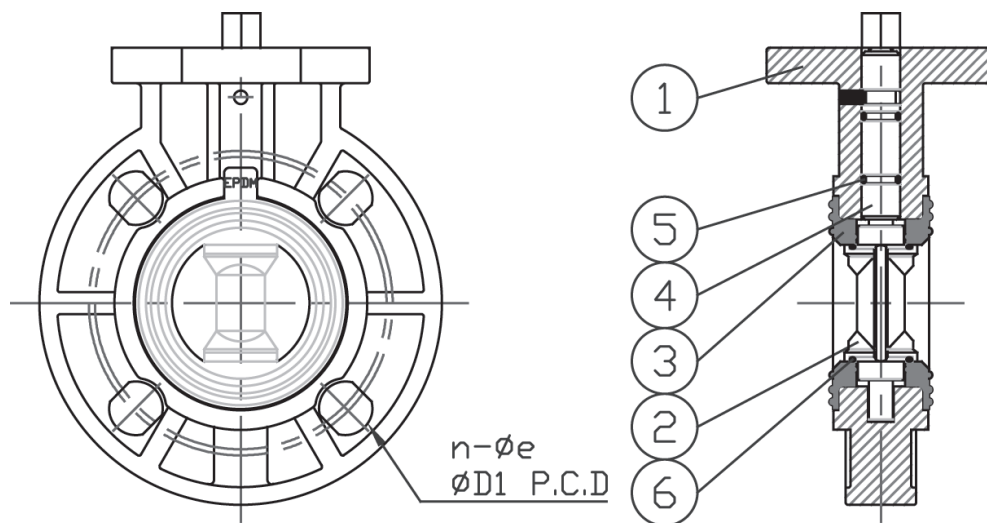
AE BYV338H Plastic Butterfly Valve

Pneumatic and Electric Actuated

Specifications - Valve

Construction	Wafer Design (Full Threaded Lug Version on request)
Size range	DN50 (2") to DN200 (8") (Bigger sizes on request)
Nominal Pressure	150 psi @ 23°C
Installation	Any direction, between ANSI150#, PN10, PN16, and JIS10K flanges

Butterfly Valve (Bare Shaft) Material and Mounting Dimensions

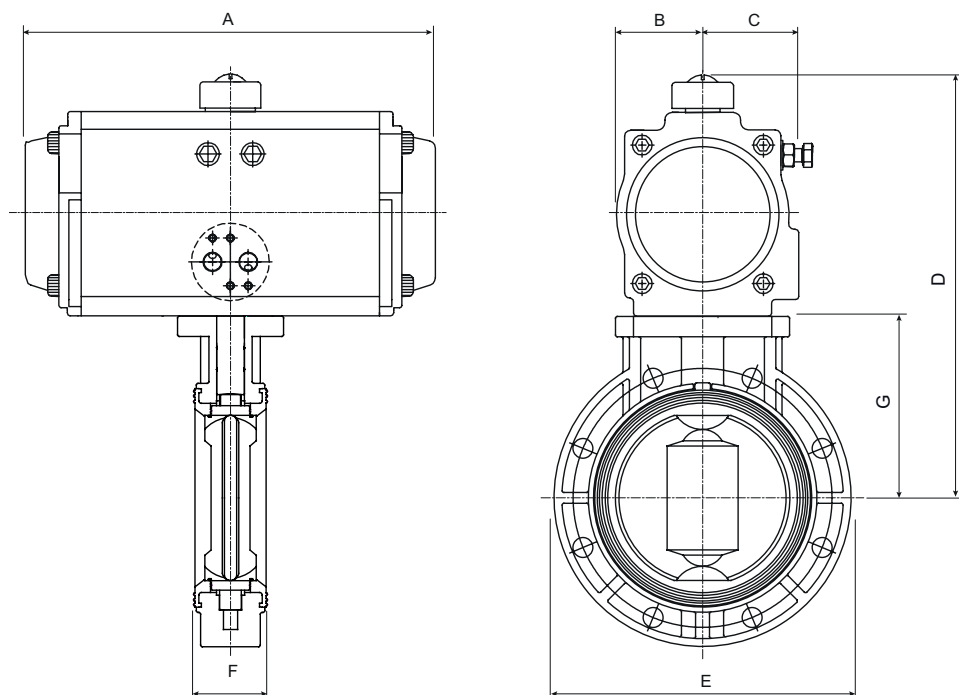


No	Part	Material	Qty
1	Body	UPVC (CPVC, PP, PVDF on request)	1
2	Disc	PP (CPVC, PVDF on request)	1
3	Seat	EPDM (FPM on request)	1
4	Stem	SS410 (SS316 on request)	1
5	Stem O-Ring	EPDM (FPM on request)	2
6	Disc O-ring	EPDM (FPM on request)	2

		50 (2")	65 (2 1/2")	80 (3")	100 (4")	125 (5")	150 (6")	200 (8")
JIS	D1	120	140	150	175	210	240	290
	n - øe	4 - 19	4 - 19	8 - 19	8 - 19	8 - 23	8 - 23	12 - 23
ANSI	D1	121	140	152	191	216	241	299
	n - øe	4 - 19	4 - 19	4 - 19	8 - 19	8 - 23	8 - 23	8 - 23
DIN	D1	125	145	160	180	210	240	295
	n - øe	4 - 18	4 - 18	8 - 18	8 - 18	8 - 18	8 - 22	8 - 22

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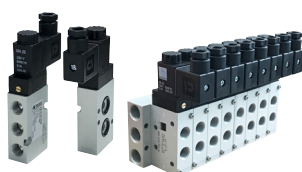
Pneumatic Actuated Version Common Selection and Dimension (mm)



Function	DN	Pressure Range ¹⁾ (bar)	Actuator @ pilot air of min. 5 bar	Dimensions							Weight (kg)
				A	B	C	D	E	F	G	
DA	50	0 to 10	AEJAT063DA	169	46	46	220	165.5	42.5	105	3.5
	65	0 to 10	AEJAT063DA	169	46	46	229	185	47	113.5	3.7
	80	0 to 10	AEJAT063DA	169	46	46	231	200	47	116	3.9
	100	0 to 10	AEJAT075DA	201	42	52	263	229	57	136.5	5.4
	125	0 to 10	AEJAT083DA	209	46	55	299	257	68	163.5	7.2
	150	0 to 10	AEJAT092DA	242	51	57.5	320	288	70	177	9.9
	200	0 to 10	AEJAT105DA	275	58	64	370	343	85	209.5	14.1
SR	50	0 to 10	AEJAT063SR	169	46	46	220	165.5	42.5	105	3.7
	65	0 to 10	AEJAT075SR	201	42	52	240	185	47	113.5	4.9
	80	0 to 10	AEJAT083SR	209	46	55	251	200	47	116	5.7
	100	0 to 10	AEJAT092SR	242	51	57.5	280	229	57	136.5	7.8
	125	0 to 10	AEJAT105SR	275	58	64	324	257	68	163.5	11.1
	150	0 to 10	AEJAT125SR	332	67.5	70	370	288	70	177	16.2
	200	0 to 10	AEJAT140SR	400	76	77	420	343	85	209.5	23.7

¹⁾ Actuator selection serve as a guide and is based on clean lubricating media at max. pressure. For other operating conditions, please consult us.

Accessories Available for Pneumatic Actuated Version



Pneumatic Solenoid Valves

- 3/2 way or 5/2 way
- NAMUR interface
- Standard ported
- Gang mounted
- Explosion proof version
- Full stainless steel version



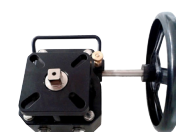
Limit Switch Box for position feedback

- NAMUR interface mounting
- 2 x SPDT mechanical switches
- Explosion proof version



Electro-Pneumatic Positioner

- Single or Double Acting
- NAMUR interface mounting
- Conventional version
- SMART version
- Explosion proof version
- Full stainless steel version

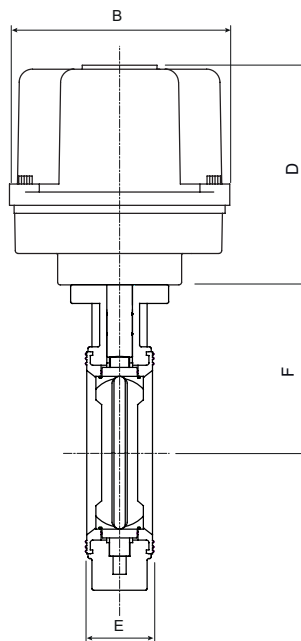
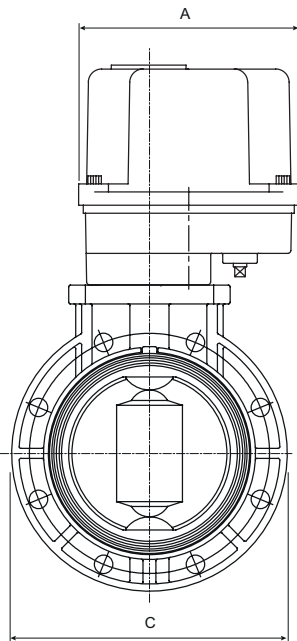


Declutchable Manual Override Gearbox

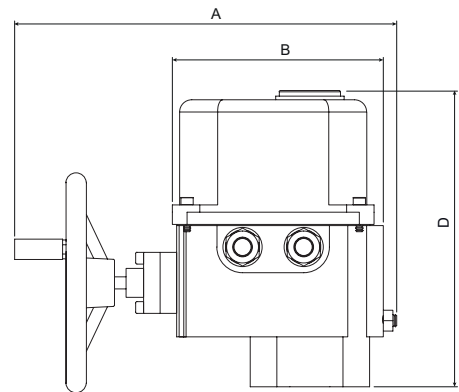
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Electric Actuated Version Common Selection and Dimension (mm)

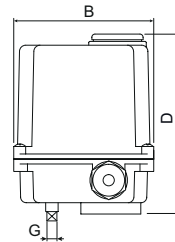
With UM-3 Electric Actuator



UM-4 with Handwheel Electric Actuator



With UM-1 and UM-2 Electric Actuator



Function	DN	Pressure Range ¹⁾ (bar)	Actuator	Dimensions							Weight (kg)
				A	B	C	D	E	F	G	
Bi-Stable	50	0 to 16	UM-1	118	118	165.5	145	42.5	105	8	3.5
	65	0 to 10	UM-1	118	118	185	145	47	113.5	8	3.7
	80	0 to 10	UM-2-5	118	118	200	145	47	116	8	4.0
	100	0 to 10	UM-2-7	118	118	229	145	57	136.5	8	4.6
	125	0 to 10	UM-3 ²⁾	165	165	257	172	68	163.5	8	8.7
	150	0 to 10	UM-3 ²⁾	165	165	288	172	70	177	8	10.0
	200	0 to 10	UM-4 ³⁾	330	173	343	244	85	209.5	-	17.7

¹⁾ Actuator selection serve as a guide and is based on clean lubricating media at max. pressure. For other operating conditions, please consult us.

²⁾ Version with handwheel operated manual override on request.

³⁾ Handwheel operated override manual standard.