

## ➤ Pneumatic butterfly valve

# RDV

Specialized manufacture, Specialized service, RFS valve devote to satisfy user' s expectation, improving service quality continuously.keeping improving.



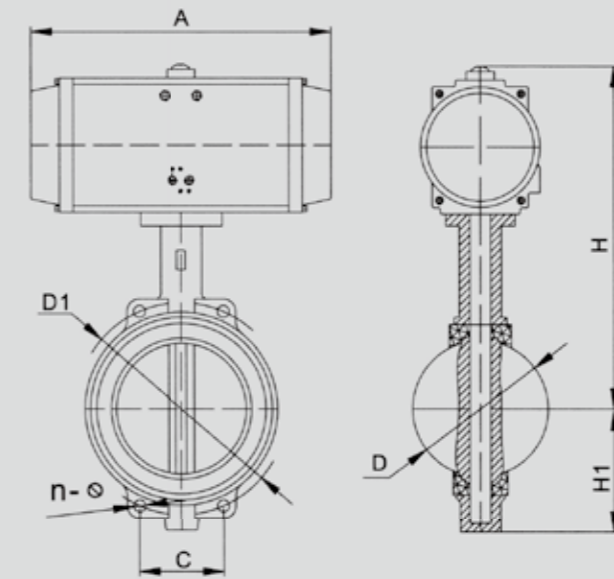
### Ordering Code

<b>R</b>	<b>DV</b>	<b>P</b>	□	□	-	□	-	□	-	□
RFS product	Butterfly valve	Type	Connection type	Body material	Disc material	Seal material		Orifice		
		P Pneumatic control L Lever control	4 Flange type 7 Wafer type	Z CI Q DI P Stainless steel 304 R Stainless steel 316 C Carbon steel T Aluminum bronze	B1 Plated DI B2 Aluminum bronze B3 Stainless steel 304 B4 Titanium steel B5 Stainless steel 316 B6 Carbon steel	H Stainless steel 1 Natural rubber 2 Hypalon seal 3 EPDM 5 Neoprene 6 NBR 7 Abrasion resistant rubber 8 Viton 9 Heat-resistant EPDM F4 PTFE		50-1000		

## Pneumatic wafer type soft seal butterfly valve

### Features

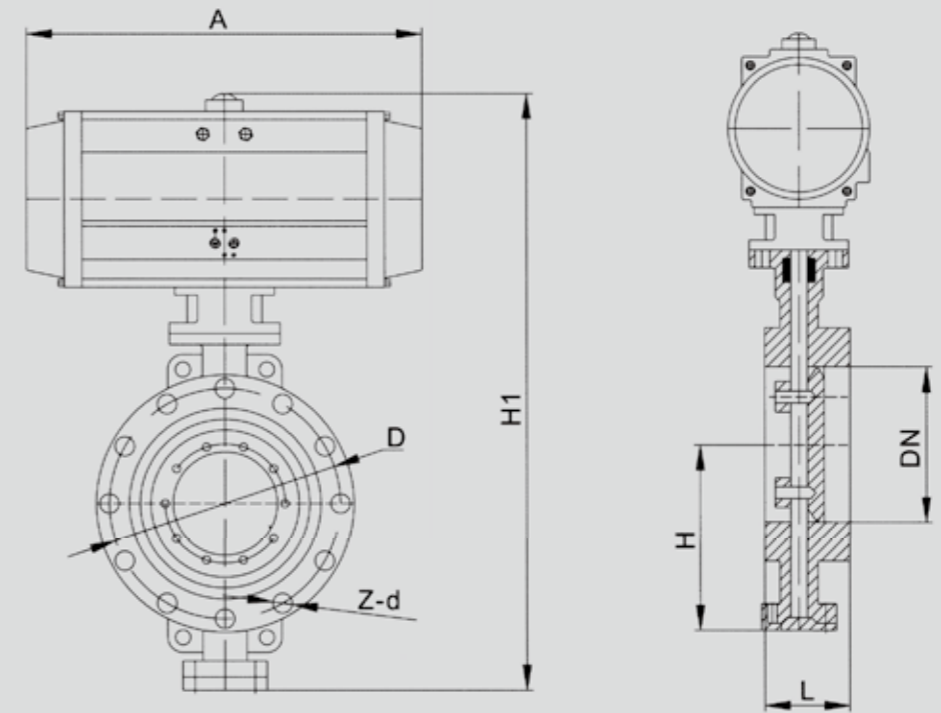
- Small and light, easy for installation and repair, and can be installation on any position.
- Simple structure, compact, prompt 90 degree turn round, open and close.
- Small operating torque
- Flow rate characteristic tend to straight, well regulate.
- Open and close test over 10,000 times, long life.
- Complete seal, no leakage during air testing.
- Choose different material as parts, fit for kinds of medium.



Model	Orifice	D	D1	H	H1	A	C	n-d	Actuator
RDVP7PB3-7-50	2	52.9	120	274	80	173	42	4-23	RAT063DA
RDVP7PB3-7-65	2.5	64.5	136.2	300	89	190	44.7	4-26.5	RAT075DA
RDVP7PB3-7-80	3	78.8	160	315	95	196.5	45.2	8-18	RAT083DA
RDVP7PB3-7-100	4	104	185	345	114	241	52.1	4-24.5	RAT092DA
RDVP7PB3-7-125	5	123.3	215	371	127	263.5	54.4	4-23	RAT105DA
RDVP7PB3-7-150	6	155.6	238	407	139	319	55.8	4-25	RAT125DA
RDVP7PB3-7-200	8	202.5	295	441	175	319	60.8	4-25 4-23	RAT125DA
RDVP7PB3-7-250	10	250.5	357	490	203	390	65.6	4-29	RAT140DA
RDVP7PB3-7-300	12	301.6	407	560	242	449	76.9	4-29	RAT160DA
RDVP7PB3-7-350	14	333.3	467	591	267	449	76.5	4-30	RAT160DA
RDVP7PB3-7-400	16	389.6	515 525	656	309	515	86.5	4-26 4-30	RAT190DA
RDVP7PB3-7-450	18	440.51	565 585	703	328	560	105.6	4-26 4-30	RAT210DA
RDVP7PB3-7-500	20	491.5	620 650	786	361	654	131.8	4-26 4-33	RAT240DA
RDVP7PB3-7-600	24	592.5	725 770	908	459	725	152	20-30 20-33	RAT270DA
RDVP7PB3-7-700	28	695	840	970	520	725	163	24-30 20-36	RAT270DA
RDVP7PB3-7-800	32	794.7	950	1046	591	742	188	24-33 24-39	RAT300DA
RDVP7PB3-7-900	36	864.7	1050	1148	656	860	203	24-33	RAT350DA
RDVP7PB3-7-1000	40	965	1160	1310	721	918	213	24-36	RAT400DA

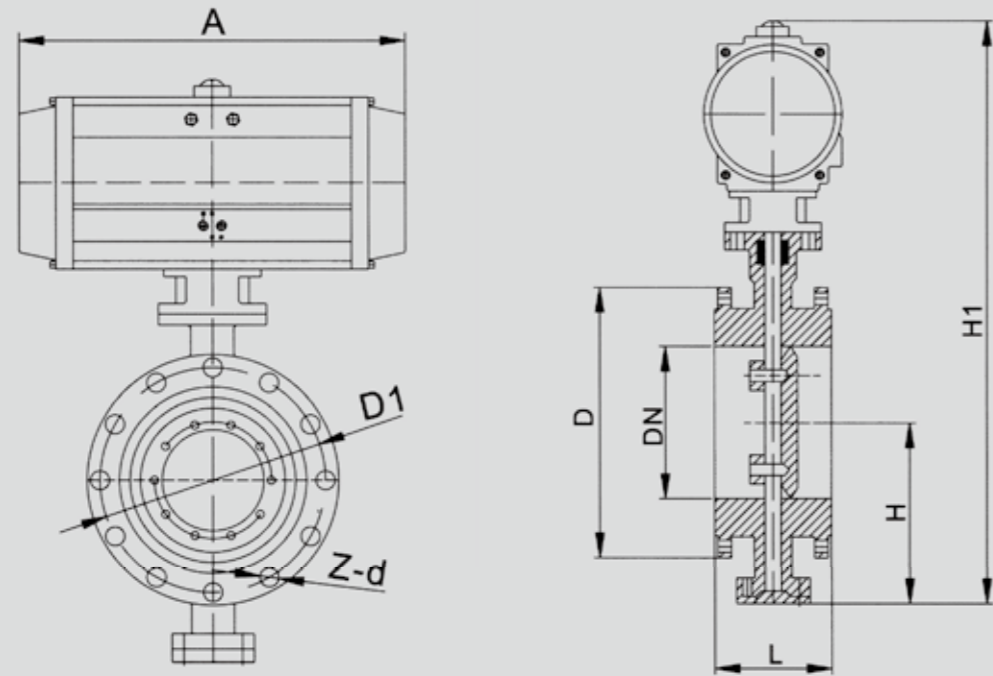
Valve body		Disc		Rotating shaft	Liner bushing	Seal material		
Material item	Code	Material item	Code	Material item	Material item	Material item	Code	Suitable temperature
CI	Z	Plated DI	B1			Natural rubber	1	-20~+85°C
DI	Q	Aluminum bronze	B2			Hypalon seal	2	-18~+135°C Short time -18~+149°C
Aluminum bronze	T	Stainless steel 304	B3	Stainless steel	Lubrication bronze	EPDM	3	-45~+135°C Short time -50~+150°C
						Neoprene	5	-7~+93°C Short time -7~107°C
Stainless steel 304	P	Titanium steel	B4	Carbon steel	PTFE	NBR	6	-12~+82°C Short time -12~+93°C
Stainless steel 316	R	Stainless steel 316	B5			Abrasion resistant rubber	7	-10~+50°C
						Viton	8	-23~+150°C
Carbon steel	C	Carbon steel	B6			Heat-resistant EPDM rubber	9	-20~+150°C
						PTFE	F4	-10~+150°C

## Pneumatic wafer type hard seal butterfly valve



Model	Orifice (Inch)	L		D	D1	H	H1	H2	A	Z - d	Actuator
		Short	Long								
RDVP7RB5-H-50	2	108	150	165	125	112		134	196.5	4-18	RAT083DA
RDVP7RB5-H-65	2 1/2	112	170	185	145	115		145	241	4-18	RAT092DA
RDVP7RB5-H-80	3	114	180	200	160	120		158	263.5	8-18	RAT105DA
RDVP7RB5-H-100	4	127	190	220	180	138	548	181	319	8-18	RAT125DA
RDVP7RB5-H-125	5	140	200	250	210	164	605	198	390	8-18	RAT140DA
RDVP7RB5-H-150	6	140	210	285	240	175	653	223	449	8-22	RAT160DA
RDVP7RB5-H-200	8	152	230	340	295	200	772	223	449	8-22	RAT160DA
RDVP7RB5-H-250	10	165	250	395	350	243	866	256	515	12-22	RAT190DA
RDVP7RB5-H-300	12	178	270	445	400	250	964	281	560	12-22	RAT210DA
RDVP7RB5-H-350	14	190	290	505	460	280	1068	281	560	16-22	RAT210DA
RDVP7RB5-H-400	16	216	310	565	515	305	1108	281	560	16-26	RAT210DA
RDVP7RB5-H-450	18	222	330	615	565	350	1177	306	654	20-26	RAT240DA
RDVP7RB5-H-500	20	291	350	670	620	380	1289	346	725	20-26	RAT270DA
RDVP7RB5-H-600	24	267	390	780	725	445	1439	374	745	20-30	RAT300DA
RDVP7RB5-H-700	28	292	430	892	840	480	1494	374	745	24-30	RAT300DA
RDVP7RB5-H-800	32	318	470	1015	950	530	1718	428	860	24-33	RAT350DA
RDVP7RB5-H-900	36	330	510	1115	1050	580	1818	428	860	28-33	RAT350DA
RDVP7RB5-H-1000	40	410	550	1230	1160	650	2041	506	918	28-36	RAT400DA
RDVP7RB5-H-1200	48	470	630	1455	1380	760	1176	506	918	32-39	RAT400DA

## Pneumatic flange type hard seal butterfly valve



Model	Orifice (Inch)	L	D	H	H1	A	Z - d	Actuator
RDVP4RB5-H-50	2	43	125	112		196.5	4-18	RAT083DA
RDVP4RB5-H-65	2 <sup>1</sup> / <sub>2</sub>	46	145	115		241	4-18	RAT092DA
RDVP4RB5-H-80	3	64	160	120		263.5	8-18	RAT105DA
RDVP4RB5-H-100	4	64	180	138	548	319	8-18	RAT125DA
RDVP4RB5-H-125	5	70	210	164	605	390	8-18	RAT140DA
RDVP4RB5-H-150	6	76	240	175	653	449	8-22	RAT160DA
RDVP4RB5-H-200	8	89	295	215	772	449	8-22	RAT160DA
RDVP4RB5-H-250	10	114	350	243	866	515	12-22	RAT190DA
RDVP4RB5-H-300	12	114	400	285	964	560	12-22	RAT210DA
RDVP4RB5-H-350	14	127	460	320	1068	560	16-22	RAT210DA
RDVP4RB5-H-400	16	140	515	350	1108	560	16-26	RAT210DA
RDVP4RB5-H-450	18	152	565	350	1176	654	20-26	RAT240DA
RDVP4RB5-H-500	20	152	620	380	1289	725	20-26	RAT270DA
RDVP4RB5-H-600	24	154	725	435	1439	745	20-30	RAT300DA
RDVP4RB5-H-700	28	165	840	480	1494	745	24-30	RAT300DA
RDVP4RB5-H-800	32	190	950	530	1718	860	24-33	RAT350DA
RDVP4RB5-H-900	36	203	1050	595	1818	860	28-33	RAT350DA
RDVP4RB5-H-1000	40	216	1160	650	2041	918	28-36	RAT400DA
RDVP4RB5-H-1200	48	254	1380	775	2276	918	32-39	RAT400DA

## Eccentric metal seated butterfly valve

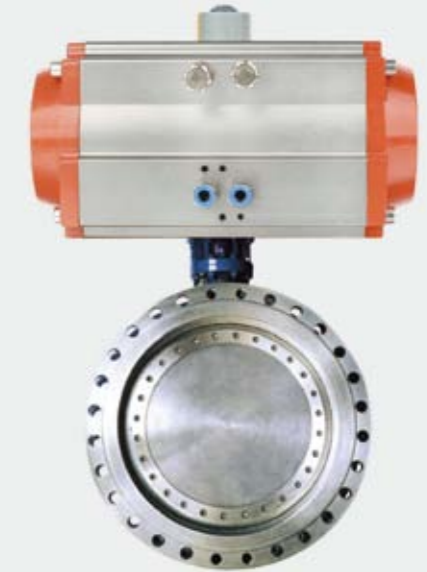
### Features

Because this butterfly valve adopt three-dimensional eccentric to design. Making the movement track on facing space reach to idealization, and there are no attrition and on intervene between hermetical components. Furthermore, the hermetical material has been selected reasonably, there by it ensure hermetic,10 antiseptis, wearable capability of valve.

The main characteristic as below

- Tiny moment for starting, flexible and convenient, save labor and energy.
- Three-dimensional eccentric configuration forces disc close tighter, and reach to reliable hermetic capability and without leakage.
- High temperature resistant, high pressure resistant, long service life etc.

### Eccentric metal seated butterfly valve



### Main technology parameter

Orifice	DN ( mm )	50 - 200				50 - 500
		0.6	1.0	1.6	2.5	
Nominal pressure	PN ( MPa )	0.6	1.0	1.6	2.5	4.0
PS ( MPa ) Test Pressure	Shell test	0.9	1.5	2.4	3.75	6.0
	Seal tesse	0.66	1.1	1.76	2.75	4.4
	Gas seal test	0.6	0.6	0.6	0.6	0.6
Leakage	<0.1xDNmm <sup>3</sup> /s ( accordance GB/T13927-92 standard )					
Appropriate temperature	Carbon steel: -29°C ~425°C / Stainless steel: -40°C ~600°C					
Appropriate medium	Air, water, steam, gas, oil, acid, alkali, salt and weak corrosion medium etc.					
Drive modality	Worm wheel drive / gas drive / electric drive					

### Material for main parts

Parts item	Material
Valve body	Cast iron, stainless steel, Cr.MO.Steel, alloy steel
Disc	Cast steel, alloy steel, stainless steel, Cr.MO.Steel
Seal	Stainless steel and Graphite
Stem	2Cr13,1Cr13 stainless steel, Cr.MO.Steel
Bearing	Stainless steel,304 nitrifier
Filler	Flexible graphite

## ➤ Pneumatic plastic ball valve, butterfly valve

# VP

Plastic ball valve and butterfly valve adopt special auxiliary formula material, ensure its acid resistance and alkali resistance for having higher machinery Strength. Applying many scopes water pipe line system widely.



### Ordering Code

VP

Pneumatic plastic valve

□□

Valve type  
64 ball valve  
83 butterfly valve

□

Material  
0 PVC  
1 CPVC  
3 PVDF  
4 PP  
5 ABS

□□

Orifice

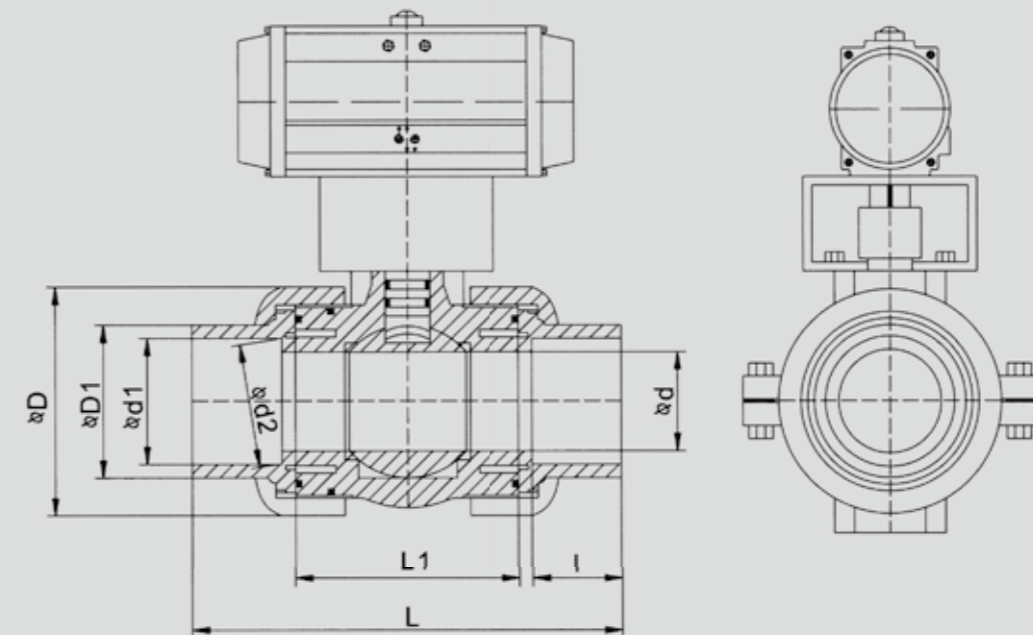
## Pneumatic plastic ball valve

### Features

- Working pressure : 150 psi
- Easy to disassemble by handle for cushion elasticity
- Can be assemble quickly without any special tool
- Actuator can be installed with inserted nut



Model	Size	Standard	Material	Seat	Seat	Port
VP-640	1/2"~4"	ANSI,JIS,DIN,BS	PVC	PTFE	EPDM,FPM	Socket,Threaded,Flanged
VP-641	1/2"~4"	ANSI,JIS,DIN,BS	CPVC	PTFE	EPDM,FPM	Socket,Threaded,Flanged
VP-643	1/2"~4"	ANSI,JIS,DIN,BS	PVDF	PTFE	EPDM,FPM	Socket,Threaded,Flanged
VP-644	1/2"~4"	ANSI,JIS,DIN,BS	PP	PTFE	EPDM,FPM	Socket,Threaded,Flanged
VP-645	1/2"~4"	ANSI,JIS,DIN,BS	ABS	PTFE	EPDM,FPM	Socket,Threaded,Flanged



Nom	SIZE	15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm
		(1/2")	(3/4")	(1")	(1-1/4")	(1-1/2")	(2")	(2-1/2")	(3")	(4")
JIS	d1	22.30	26.30	32.33	38.43	48.46	60.56	76.60	89.6	114.7
	d2	21.70	25.70	31.67	37.57	47.54	59.44	75.87	88.83	113.98
		22.22	25.4	28.6	31.8	34.9	38.1	44.45	63	69.0
ANSI	d1	21.54	26.87	33.65	42.42	48.56	60.63	73.38	89.31	114.76
	d2	21.23	26.57	32.27	42.04	48.11	60.17	72.85	88.7	114.07
		22.22	25.40	28.58	31.75	34.93	38.10	44.45	47.63	57.15
DIN	d1	20.3	25.3	32.3	40.3	50.3	63.0	75.3	90.3	110.4
	d2	20.1	25.1	32.1	40.1	50.1	63.1	75.1	90.1	110.1
		16	19	22	26	31	38	44	51	61
BS	d1	21.5	26.9	33.7	42.4	48.4	60.5	-	-	-
	d2	21.3	26.7	33.5	42.2	42.8	60.3	-	-	-
		16.5	19.5	22.5	27	30	36	-	-	-
THD,/IN	NPT	14	14	11.5	11.5	11.5	11.5	8	8	8
	PT	14	14	11	11	11	11	11	11	11
D		45	55	66	82	98	120	140	160	225
D1		31	37	44	54	65	79	92	108	146
d		13	18	23	30	38	48	61	69	99
L		112	132	144	165	171	200	273	303	326
L1		60	73	78	87	92	112	136	158	176
执行器		RAT032DA	RAT052DA	RAT052DA	RAT063DA	RAT075DA	RAT083DA	RAT092DA	RAT105DA	RAT140DA

## Pneumatic plastic butterfly valve

### Features

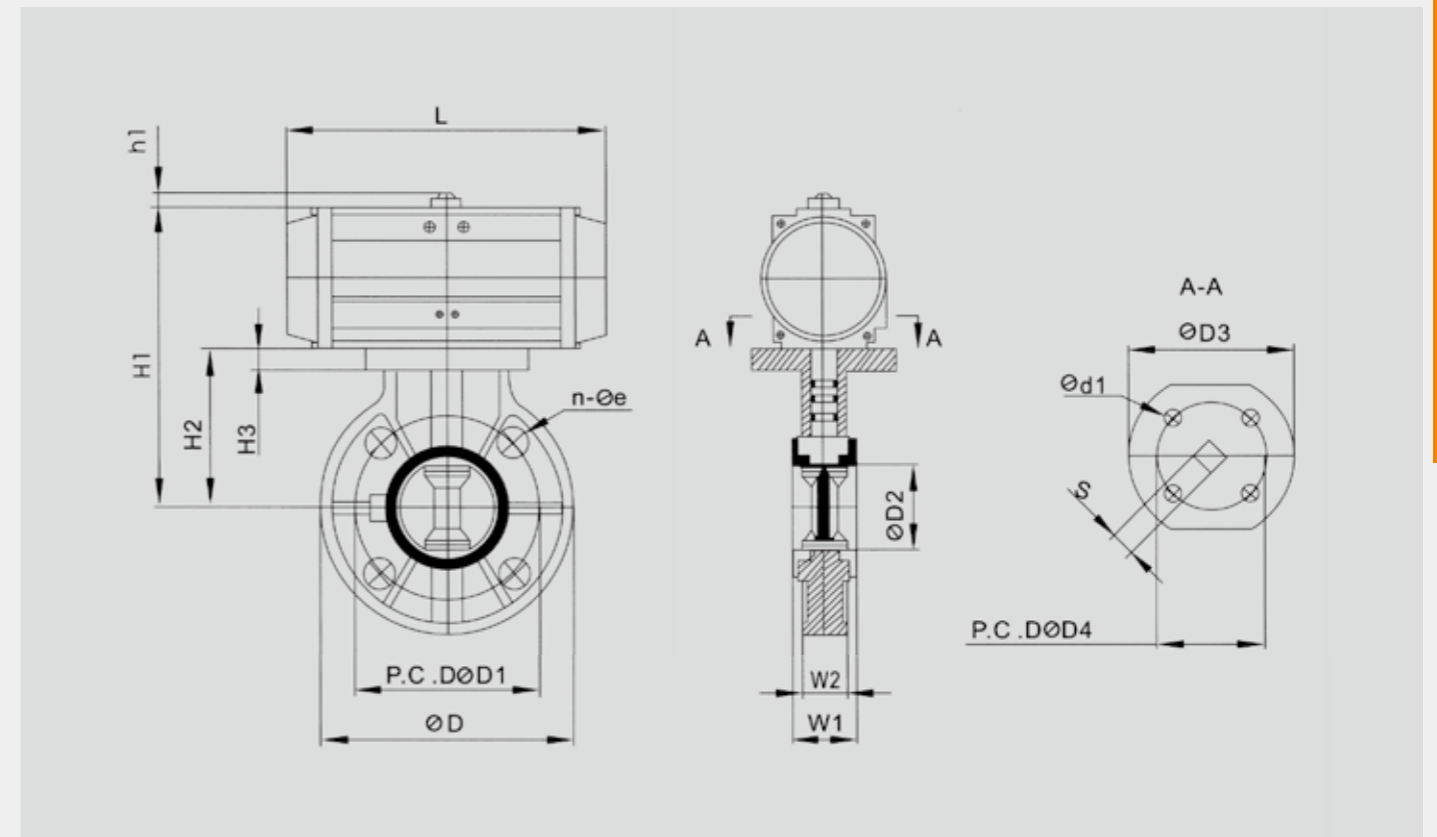
Valve disc can be controlled by positioner.

- Pneumatic actuator standard meets with ISO5211,DIN3337,VDI/VDE 3845
- NAMUR, easy to assemble solenoid valve,limit switch and other accessories.
- Pneumatic actuator supply max. air pressure is 0.8Mpa and min. air pressure is 0.5Mpa.

Standard	The max working pressure
2" - 10"	10bar
12"	7bar
14" 16"	6bar
18"	5bar
20"~24"	3.5bar



Model	Orifice	Standard	Material	Seat	O-ring	Disc	Port
VP-830	2"~24"	ANSI,JIS,DIN	PVC	EPDM,FPM	EPDM,FPM	PP	Flange
VP-831	2"~24"	ANSI,JIS,DIN	CPVC	EPDM,FPM	EPDM,FPM	CPVC	Flange
VP-833	2"~24"	ANSI,JIS,DIN	PVDF	EPDM,FPM	EPDM,FPM	PVDF	Flange
VP-834	2"~24"	ANSI,JIS,DIN	PP	EPDM,FPM	EPDM,FPM	PP	Flange



Nom	Size	50mm	32mm	80mm	100mm	125mm	150mm	200mm	250mm	300mm	350mm	400mm	450mm	500mm	600mm
		(2")	(2-1/2")	(3")	(4")	(5")	(6")	(8")	(10")	(12")	(14")	(16")	(18")	(20")	(24")
JIS	D1	120	140	150	175	210	240	290	355	400	445	510	565	620	730
	n-Øe	4-19	4-19	8-19	8-19	8-23	8-23	12-23	12-25	16-25	16-25	16-27	20-27	20-27	24-35
ANSI	D1	120.39	139.44	152.40	190.50	216	241.55	298.5	362	432	476	540	578	635	749
	n-Øe	4-19	4-19	4-19	8-19	8-22	8-22	8-22	12-25	12-25	12-29	16-29	16-32	20-32	20-30
DIN	D1	125	145	160	180	210	240	295	350	400	460	515	565	620	725
	n-Øe	4-18	4-18	4-18	8-18	8-18	8-18	8-23	8-23	12-23	12-23	16-23	16-27	20-27	24-30
D		165	185	200	229	257	285	343	411	490	533	597	635	699	813
D2		56.5	69.5	79.5	102.5	130	152	203	255	309.5	365	406	452	502	603
D3		105	120	123	135	164	169	201	205	237	236	300	335	335	335
H2		103	113	115	135.5	165	177	210	342	302	300	350	370	400	465
H3		13	13	13	13	15	19	21	22	26	25	32	35	40	46
W1		43	46	46	56	69	705	85	109	133	127	168	189.5	189	209
W2		29	31	31	40	50	54	69	88	103.5	113	153	163	171	191
T-DIN259 85P		1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/2"	1/2"
Double action	Ød1	6.5	6.5	8.5	8.5	8.5	10.5	10.5	10.5	12.5					
	ØD4	50	50	70	70	70	102	102	102	105					
	h1	20	20	20	20	20	20	30	30	30					
	H1	188	188	217	237.5	280	304	367	399	498					
	L	158.5	158.5	210.5	210.5	247.5	268.5	345	345	437.5					
Single action	S	14	14	17	17	17	22	27	27	27					
	Ød1	6.5	6.5	8.5	8.5	10.5	10.5	12.5	12.5						
	ØD4	50	50	70	70	102	102	125	125						
	h1	20	20	20	20	20	30	30	30						
	H1	205	205	230	250.5	292	334	406	438						
L		210.5	210.5	247.5	247.5	268.5	345	437.5	437.5						
	S	17	17	17	17	22	27	27	27						

## ➤ Positioner

# REP

The positioner is used for operation of pneumatic rotary valve actuators by means of electrical controller or control systems with a similar output signal of DC4 to 20mA or split ranges.



### Ordering Code

<b>R</b>	<b>EP-1000R</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RFS product	Item number EP-1000R ( Rotary type ) EP-1000L ( Linear type )	Action type S single acting D double acting	Ex-proof rate m Exd mIBT5 n non ex-proof	Feedback pole 1 M6×40L 2 M6×63L 3 M8×40L 4 M8×63L 5 NAMUR	Throttle pole 1 Φ1 2 Φ2 3 NONE	Connection type 1 1PT 2 2NPT	Environment temperature S -20°C ~60°C H -20°C ~120°C L -40°C ~70°C	Select accessories 1 +PTM(Intrnal) 2 +PTM(External) 3 +L/S(Intrnal) 4 +L/S(External) 5 +PTM+L/S(Intrnal)

## REP-1000R/L positioner

### Features

The positioner is used for operation of pneumatic rotary valve actuators by means of electrical controller or control systems with a similar output signal of DC4 to 20mA or split ranges.

- There is no resonance at 5~200Hz
- The change of RA/DA acting is convenient. It' s able to apply to single or double acting actuator.
- It' s possible to prevent the hunting with orifice to the small size actuator.
- It' s economical due to less air consumption.
- It' s able to control the 1/2 split range with simple operation without replacement of parts.



### Parameter

Item / Type	Single action	Double action
Input Signal	4-20mA DC	
Impedance	250±15 Ohm	
Supply Pressure	1.4-7kgf/cm2(20-100psi)	
Stroke	0 ~ 90°C	
Air Connection	PT(NPT)1/4"	
Gauge Connection	PT(NPT)1/8"	
Conduit	PF1/2"(G1/2")	
Explosion Proof	ExdmIB T5	
	ExdmIC T5	
	ExialIB T6	
Protection	IP66	
Ambient Temp	Operating -20°C ~ 70°C	
	Explosion -20°C ~ 60°C	
Linearity	±1%F.S.	±2%F.S.
Hysteresis	±1%F.S.	
Sensitivity	±0.2%F.S.	±0.5%F.S.
Repeatability	±0.5%F.S.	
Air Consumption	3LPM(Sup=1.4kgf/cm2, 20psi)	
Flow Capacity	80LPM(Sup=1.4kgf/cm2, 20psi)	
Material	Aluminum Diecasting	
Weight	2.8kg(6.2lb)	

## ➤ Limit switch Box

# VLS1

RAT series pneumatic actuator developed, exploited and designed based on synthesizing exertion internal and overseas high tech, new material, new technics and innovative conception.



### Ordering Code

VLS1

Model

2

Size  
2  
3  
4

10

Machinery jiggle switch

N

The shell is fixed by screw

EX

Ex-proof

## Limit switch box ,ex-proof limit switch box

### Features

Limit switch box is designed based on advanced technology which are solid beautiful, high-level quality and with the following characteristic:

1. Visual position indicator and waterproof type.
2. Easy to set without tool based on spring loaded plined cam
3. There are many connection terminal and 8pcs of points, easy to connect and safety.
4. Standard dual cable connections.
5. No worry to loose bolts while cover opens.
6. Namur standard stainless steel shaft and bracket.



Model	VLS1-210N / VLS1-310N / VLS1-410N	VLS1-210N-EX / VLS1-310N-EX / VLS1-410N-EX
Explosion Proof	IP 65	ExdII BT4
Ambient Temp	-25°C ~ 85°C	
Cable Entry	G1/2" G3/4"	
Terminal Stripe	8	
Position Indicator	0 ~ 90°C	
Switches	Mechanical Type	
Potentiometer	1 KΩ	
Current	4~20mA	