

RFS CATALOG
Actuators
Solenoid Valves
2015 – 2016



FENGHUA XINGYU ELECTRON CO.,LTD.
Factory Add.: No.2 Hengfeng Road,Fangqiao Industry Zone,Ningbo,China
Office Add.:12B01,No.1 building ,Shangdong Business Center,No.1926
Canghai Road,Ningbo China
TEL:0086-574-87029557 87029559 87029561
Fax:0086-574-87029565
Mobile:0086-13858227613
E-MAIL: silvia@xyelectron.com nbrfs@nbrfs.com
www.xingyu-solenoid.com www.nbrfs.com



Company Profile



FENGHUA XINGYU ELECTRON CO LTD is one of the key enterprises in Chinese pneumatic and valve industry. We specialize in development, manufacturing, marketing and service of pneumatic actuators, angle seat valves, solenoid valves, solenoids and DIN connectors.

Xingyu was founded in year 1990 and covers an area of 37000 m². Now we have 400 employees .Our company equips large number of CNC machines, automated assembling lines as well as other advanced equipments.

Our company is ISO9001:2008 certificated and has more than 30 national products patents; Most products are CE certificated and some are UL approved. Xingyu is the first company getting the license on Explosion proof coil production in China.

With high quality, competitive price, strict production control system and good service, our products have been selling all over the world, like UK, Germany, Russia, South Africa, India, Turkey, USA, South America, Australia, Korea and so on.

“Not to be the biggest, but to be the strongest” is our Business Goal and ideal.
We will try to make great efforts for a better future.



Product Catalog

Pneumatic Actuator/ Valve



01-14
Pneumatic Actuator

15-20
Pneumatic ball valve

21-22
Pneumatic butterfly Valve

23-24
Positioner

25-26
Limit switch Box

27-29
Clutch Handwheel

Angle seat valve



31-35
Bevel Valve

36-38
Right Angle Valve

Pneumatic valves



39-42
100 Series

43-47
200 Series

48-52
300 Series

53-54
400 Series

55-56
3V1 Series

2/2 Valve



57-58
2W Series
(Diaphragm type)

59-60
2W Series
(Direct Action)

61-62
2L Series
Steam Valves

63-64
SB115 Series

65-66
PU Series

67-72
SB116 Series

73-74
BMC Series

Dust Collector Valves & Parts



75-82
Right Angle Pulse Jet Valve

83-87
In Line Pulse Jet Valve

88-90
Air Control Pulse Jet Valve

91
Explosion-proof Pulse
Jet Valve

92-93
Sequential Controller

94
RB Series Fitting

94
Venturi Tube

94
Diaphragm

Drain valves



95-98
CS Automatic
Drain valve

99
CS Strainer

100
PS Drain Valve

101
Float Type Drain Valve

Steam Valve



102-107
DL Series Steam Valve

108
0121 Steam Valve

109
RV08102 Steam Valve

Special Solenoid Valve



110-111
Low Pressure
Solenoid Valve

112-113
High Pressure
Solenoid Valve

113
Normal Open
Solenoid Valve

114-123
Special Solenoid Valve

124-127
Valve Manifold

127-128
Freon Valve

129-130
Micro Solenoid Valve

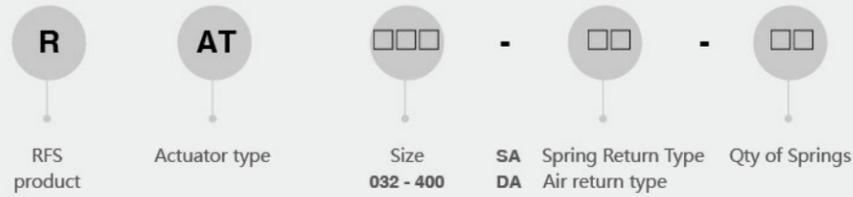
➤ Pneumatic Actuator

RAT

RAT Series Pneumatic Actuator was designed and developed based on the advanced technology and new material.



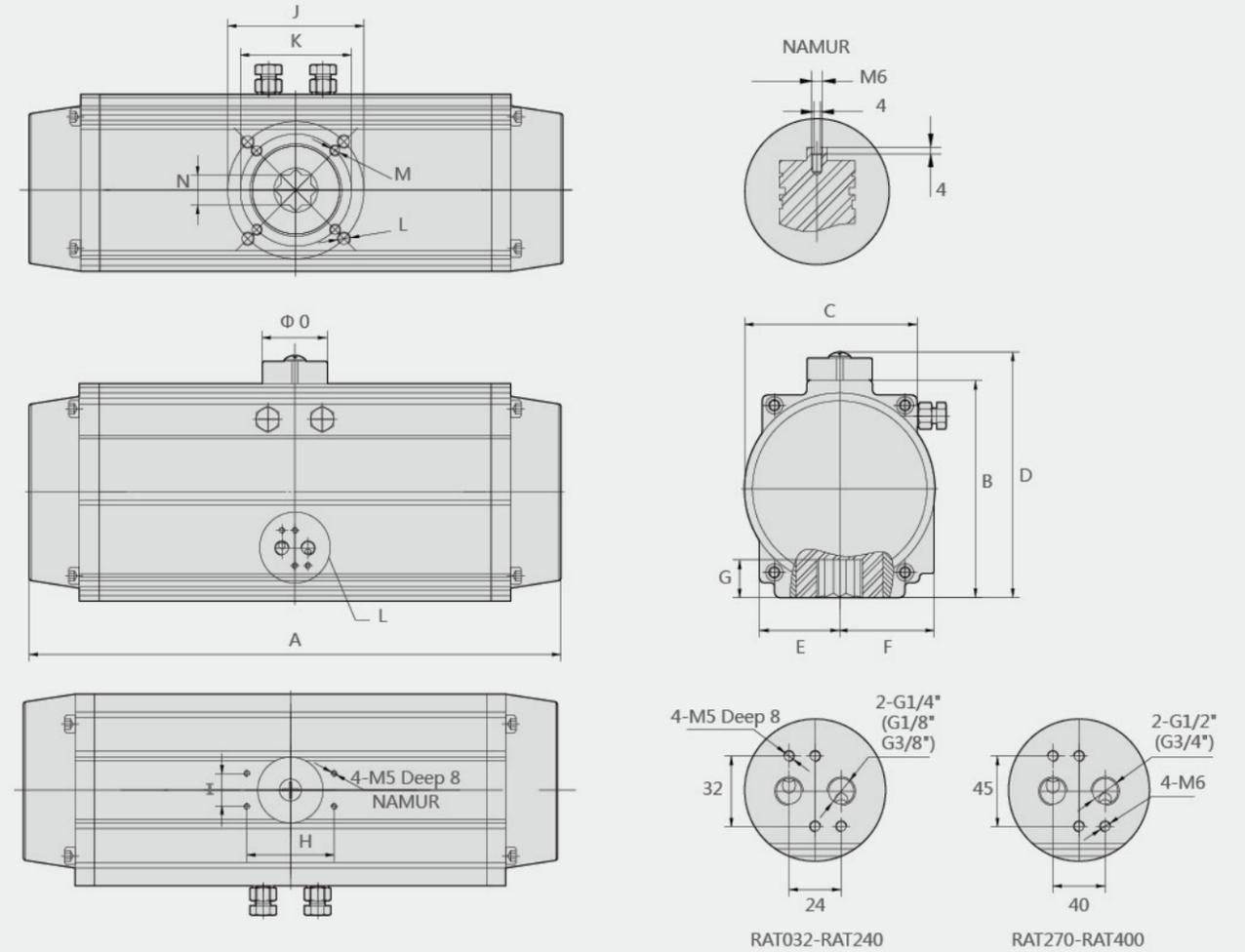
Order Code



Features

- Conform to the latest international standard: ISO5211, DIN3337, VD/VDE3845 and NAMUR.
- Excellent, compact and modernized design as well as complete specifications is good for your selection.
- All acting surfaces adopt high quality bearings, resulting in low friction, long cycle life and no noise.
- The two independent stroke adjusting devices can easily and precisely adjust at $\pm 5^\circ$ open or close.
- Double acting type and single acting type (spring return) are with the same external structure, which is easy to install the accessories.
- NAMUR standard multifunction position indicator indicates visually.
- Pre-compressed load spring is convenient for safe mounting and teardown procedures.
- Pistons and end caps are made from die-casting aluminum which has high intensity and light weight.
- Different seal materials are available for high or low temperature
- We can offer Multi-travel rotations (e.g. 120° 135° 180°) and three position actuators.
- Solenoid valves can be easily mounted without connecting plank.

The dimensions



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Airconnection
RAT032-DA	112	45	51	71	22.5	28.5	12	50	25		F03/φ36		M5x8	9	φ40	G1/8"
RAT032-SA	142	45	51	71	22.5	28.5	12	50	25		F03/φ36		M5x8	9	φ40	G1/8"
RAT040-DA	124	59.5	83	86	36.4	24	14	80	30	F05/φ50	F03/φ36	M6x9	M5x8	11	φ40	G1/4"
RAT040-SA	149	59.5	83	86	36.4	24	14	80	30	F05/φ50	F03/φ36	M6x9	M5x8	11	φ40	G1/4"
RAT052	163.5	72	65	98	26	42	14	80	30	F05/φ50	F03/φ36	M6x9	M5x8	11	φ40	G1/4"
RAT063	181	87.6	71	113	33	47	18	80	30	F07/φ70	F05/φ50	M8x10	M6x9	14	φ40	G1/4"
RAT075	207	99.4	80.2	125	38.7	52.5	20	80	30	F07/φ70	F05/φ50	M8x12	M6x9	14	φ40	G1/4"
RAT083	213	108.9	91.6	134.5	40	56.5	21	80	30	F07/φ70	F05/φ50	M8x12	M6x9	17	φ40	G1/4"
RAT092	258	117	98.3	143	44	59	21	80	30	F07/φ70	F05/φ50	M8x12	M6x10	17	φ40	G1/4"
RAT105	287	133	109.5	158.5	52	64	24.5	80	30	F10/φ102	F07/φ70	M10x15	M8x12	22	φ40	G1/4"
RAT125	342.5	154.4	127.2	180.5	59.7	74	29	80	30	F10/φ102	F07/φ70	M10x15	M8x12	22	φ50	G1/4"
RAT140	411	173.7	138	200	65	77	32	80	30	F12/φ125	F10/φ102	M12x20	M10x15	27	φ60	G1/4"
RAT160	488	198	158.3	224	73.8	86.7	34.5	80	30	F12/φ125	F10/φ102	M12x20	M10x15	27	φ60	G1/4"
RAT190	544	232.3	188.7	258	85.3	102.8	40	130	30	F14/φ140		M16x22		36	φ80	G1/4"
RAT210	580	257.6	210.5	284	96.5	113.2	41	130	30	F14/φ140		M16x24		36	φ80	G1/4"
RAT240	622	291	245	317	115	130	50	130	30	F16/φ165		M20x26		46	φ80	G3/8"
RAT270	766	330	273	356	126	147	50	130	30	F16/φ165		M20x26		46	φ80	G1/2"
RAT300	794	354	312	380	140	173	57	130	30	F16/φ165		M20x26		46	φ80	G1/2"
RAT350	880	410	362	436	164	195	60	130	30	F16/φ165		M20x26		46	φ80	G1/2"
RAT400	1067	466	450	493	145	145	60	130	30	F25/φ254		M20x26		55	φ80	G3/4"

Note: A120 and A180 means the acting length of 120° and 180° of rotary respectively.

Output torque of RAT spring return actuator

Output torque of Air supply													
Air pressure (bar)		3		4		5		6		7		Spring stroke	
Model	Spring qty	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°
		Start	End	Start	End	Start	End	Start	End	Start	End	Start	End
RAT032SA	2					4.76	0.92	6.26	2.42	7.26	3.42	2.74	6.58
RAT040-SA	2					7.59	1.18	9.93	3.52	11.5	5.09	4.13	10.54
RAT052SA	5	8.48	6.28	12.64	10.44							4	6.2
	6	7.68	4.98	11.84	9.14							4.8	7.5
	7	6.98	3.78	11.14	7.94							5.5	8.7
	8			10.34	6.74	14.5	10.9					6.3	9.9
	9			9.54	5.44	13.7	9.6					7.1	11.2
	10			8.74	4.24	12.9	8.4	17.06	12.56			7.9	12.4
	11					12.1	7.1	16.26	11.26	20.42	15.42	8.7	13.7
	12					11.3	5.9	15.46	10.06	19.62	14.22	9.5	14.9
RAT063SA	5	15	11.2	22.3	18.5	29.6	25.8					7	10.8
	6	13.5	9	20.8	16.3	28.1	23.7					8.5	12.95
	7	12	6.9	19.4	14.2	26.7	21.5					9.9	15.1
	8			18	12	25.3	19.3	32.6	26.6			11.3	17.3
	9			16.5	9.9	23.9	17.2	31.2	24.52			12.7	19.4
	10			15.3	7.7	22.6	15	29.9	22.3	37.2	29.6	14	21.6
	11			13.8	5.6	21.1	12.9	28.4	20.2	35.7	27.5	15.5	23.7
	12					19.7	10.7	27	18	34.3	25.3	16.9	25.9
RAT075SA	5	23.4	17.8	35.1	29.5							11.9	17.5
	6	-21.1	14.3	32.8	26							14.2	21
	7	-18.7	10.8	30.4	22.5							16.6	24.5
	8			28	19	39.8	30.8					19	28
	9			25.7	15.5	37.5	27.3					21.3	31.5
	10			23.3	12	35.1	23.8	46.8	35.5	58.6	47.3	23.7	35
	11					32.7	20.3	44.4	32	56.2	43.8	26.1	38.5
	12					30.4	16.8	42.1	28.5	53.9	40.3	28.4	42
RAT083SA	5	30.9	23.8	46.1	38.9							14.5	21.7
	6	28.1	19.5	43.3	34.6							17.39	26
	7	25.2	15.1	40.3	30.2							20.3	30.4
	8			37.4	25.9	52.6	41.1					23.2	34.7
	9			34.5	21.5	49.7	36.7					26.1	39.1
	10			31.6	17.2	46.8	32.4	62	47.6	77.1	62.7	29	43.4
	11					43.9	28.1	59.1	43.3	74.2	58.4	31.9	47.7
	12					41	23.7	56.2	38.8	71.3	54	34.78	52.08
RAT092SA	5	45.7	34.7	68.6	57.6							22.5	33.5
	6	41.2	28	64.1	50.9							27	40.2
	7	36.7	21.4	59.6	44.3							31.5	46.8
	8			55.1	37.6	77.7	60.2					36	53.5
	9			50.6	30.8	73.2	53.4					40.5	60.3
	10			47.1	26.1	69.7	48.7	92.4	71.4	115.2	94.2	44	65
	11					64.2	40	86.9	62.7	109.7	85.5	49.5	73.7
	12					59.7	33.5	82.4	56.2	105.2	79	54	80.2
RAT105SA	5	68.6	52	103.6	87							33.2	49.8
	6	61.9	42	96.9	77							39.9	59.8
	7	55.3	32.1	90.3	67.1							46.5	69.7
	8			83.7	57.1	116.6	90					53.1	79.7
	9			77	47.4	109.9	80.3					59.8	89.4
	10			70.4	37.2	103.3	70.1	137.3	104	171.2	138	66.4	99.6
	11					96.7	60.1	130.6	94	164.6	128	73	109.6
	12					90	50.2	123.9	64.1	157.9	118.1	79.7	119.5
RAT125SA	5	115.5	88	173.8	146.3							59.4	86.9
	6	103.6	70.6	161.9	128.9							71.3	104.3
	7	91.8	53.5	150.1	111.6							83.1	121.6
	8			138.2	94.2	196.5	152.5					95	139
	9			126.3	76.8	184.6	135.1					106.9	156.4
	10			114.4	59.4	172.7	117.7	231	176			118.8	173.8
	11					160.9	100.4	219.2	158.7	277.5	217	130.6	191.1
	12					149	83	207.3	141.3	265.6	199.6	142.5	208.5

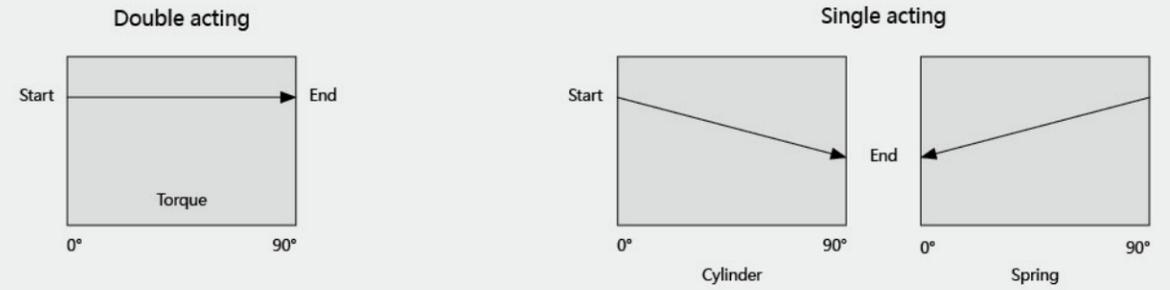
Output torque of RAT spring return actuator

Output torque of Air supply														
Air pressure (bar)		3		4		5		6		7		Spring stroke		
Model	Spring qty	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	
		Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	
RAT140SA	5	174.7	131.2	262.5	219							88.5	132	
	6	157	104.8	244.8	192.6							106.2	158.4	
	7	133.9	78.4	227.1	166.2							123.9	184.8	
	8			209.4	139.8	297.1	227.5					141.6	211.2	
	9			191.7	113.4	279.4	201.1					159.3	237.6	
	10			174	87	261.7	174.7	349.4	262.4	437.8	350.1	177	264	
	11					244	148.3	331.7	236	419.5	323.8	194.7	290.4	
	12					226.3	121.9	314	209.6	401.8	297.4	212.4	316.8	
	RAT160SA	5	264.6	197.1	398.3	330.8							136.5	204
		6	237.3	156.2	371	289.9							163.8	244.9
		7	210	115.4	343.7	249.1							191.1	285.7
		8	182.7	74.6	316.4	208.3	450.1	341.9					218.4	326.5
9				289.1	167.5	422.8	301.2					245.7	367.3	
10				261.8	126.7	395.5	260.4	529.2	394.1			273	408.1	
11						368.2	219.6	501.9	353.3	635.6	487	300.3	448.9	
12						340.9	178.8	474.6	312.5	608.3	446.2	327.6	489.7	
RAT190SA		5	429	320.4	644.5	535.9							217.4	326
		6	385.5	255.5	601	470.7							260.9	391.2
		7	342	190	557.5	405.5							304.4	456.4
		8			514	340.3	729.5	555.8					347.9	521.6
	9			470.6	275.1	686.1	490.6					391.3	586.8	
	10			427.1	209.9	642.6	425.4	858.1	640.9	1073.6	856.4	434.8	652	
	11					599.1	360.2	814.6	575.7	1030.1	791.2	478.3	717.2	
	12					555.6	295	771.1	510.5	986.6	726	521.8	782.4	
	RAT210SA	5	589.6	440.6	885.7	736.7							298.8	447.8
		6	529.8	351.1	825.9	647.2							358.6	537.3
		7	470.1	261.5	766.2	557.6							418.3	626.9
		8			706.4	468.1	1002.5	764.2					478.1	716.4
9				646.7	375.5	942.8	671.6					537.8	809	
10				586.9	289	883	585.1	1179.1	881.2	1475.2	1177.3	597.6	895.5	
11						823.2	495.5	1119.3	791.6	1415.4	1087.7	657.4	958.1	
12						763.5	406	1059.6	702.1	1355.7	998.2	717	1074.6	
RAT240SA		5	924	690.5	1488.1	1154.6							468.5	702
		6	829.9	550.1	1294	1014.2							562.6	842.4
		7	736.7	409.7	1200.8	873.8							655.8	982.8
		8			1107.1	733.4	1571.3	1197.6					749.5	1123.2
	9			1013.4	593	1477.6	1057.2					843.2	1263.6	
	10			919.7	452.6	1383.9	916.8	1848.1	1381	2312.2	1845.1	936.9	1404	
	11					1290.2	776.4	1754.4	1240.6	2218.5	1704.7	1030.6	1544.4	
	12					1196.5	636	1660.7	1100.2	2124.8	1564.3	1124.3	1684.8	
	RAT270SA	5	1299.7	971.2	1952.4	1623.9							658.5	987
		6	1168	773.8	1820.7	1426.5							790.2	1184.4
		7	1036.3	576.4	1689	1229.1							921.9	1381.8
		8			1557.3	1031.7	2210	1684.4					1053.6	1579.2
9				1425.6	834.3	2078.3	1487					1185.3	1776.6	
10				1293.9	636.9	1946.6	1289.6	2599.3	1942.3	3252	2595	1317	1974	
11						1814.9	1092.2	2467.6	1744.9	3120.3	2397.6	1448.7	2171.4	
12						1683.2	894.8	2335.9	1547.5	2988.6	2200.2	1580.4	2368.8	

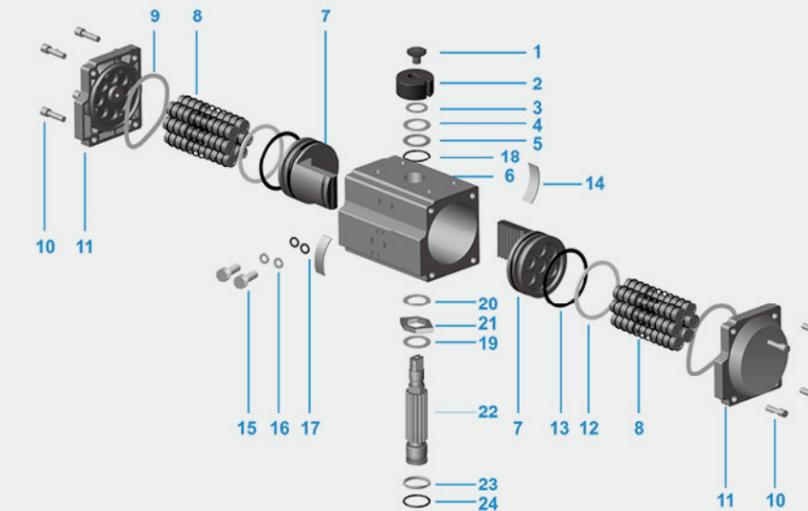
Output torque of RAT spring return actuator

		Output torque of Air supply										Spring stroke	
Air pressure (bar)		3		4		5		6		7			
Model	Spring qty	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°
		Start	End	Start	End	Start	End	Start	End	Start	End	Start	End
RAT300SA	5	1603	1183									800	1220
	6	1483	1066									920	1337
	7	1330	844	2132	1646							1073	1559
	8	1177	621	1979	1423	2780	2224					1226	1782
	9			1825	1201	2626	2002	3427	2803			1380	2004
	10			1652	977	2473	1778	3274	2579	4075	3380	1533	2228
	11					2320	1556	3121	2357	3922	3158	1686	2450
	12					2014	1077	2815	1878	3686	2679	1922	2929
RAT350SA	5	2399	1739									1199	1859
	6	2120	1453									1478	2145
	7	1874	1096	3074	2296							1724	2502
	8	1627	738	2827	1938	4027	3138					1971	2860
	9			2580	1581	3780	2781	4979	3980			2218	3217
	10			2335	1223	3535	2423	4734	3622	5934	4822	2463	3575
	11					3288	2066	4487	3265	5687	4465	2710	3932
	12					3120	1537	4319	2736	5519	3936	2878	4461
RAT400SA	5	3418	2479									1709	2648
	6	2922	1670									2205	3457
	7	2647	1239	4357	2949							2480	3888
	8	2372	806	4082	2516	5191	4225					2755	4321
	9			3806	2085	5515	3794	7224	5503			3031	4752
	10			3531	1652	5240	3361	6949	5070	8658	6779	3306	5185
	11					4963	2930	6672	4639	8381	6348	3583	5616
	12					4445	2190	6154	3899	8106	5608	4101	6356

Torque diagram of actuator



Parts and Material

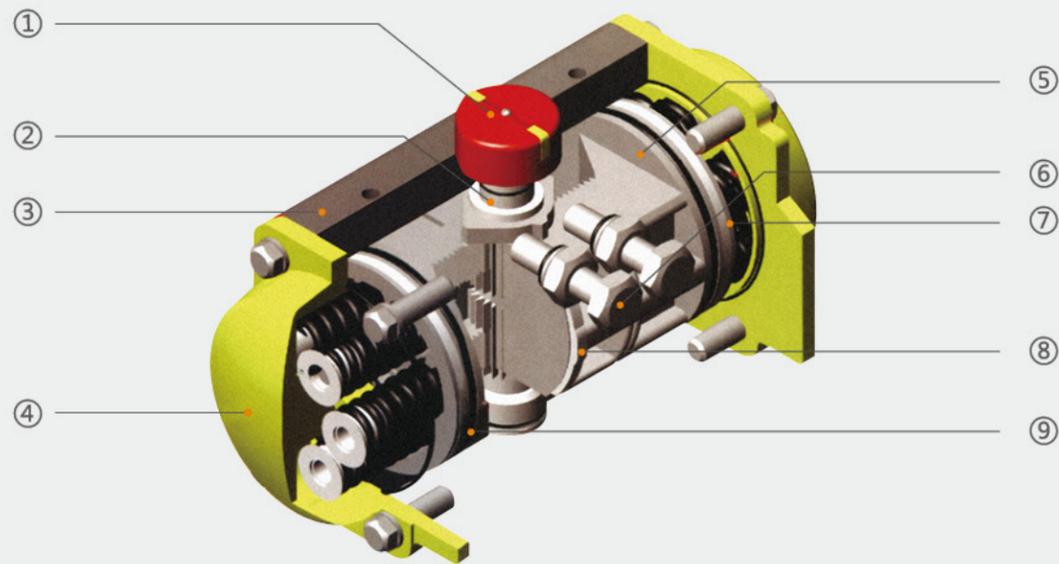


Output torque of RAT air force return actuator

Model	Air pressure (bar)						
	2	3	4	5	6	7	8
RAT 032DA	2.78	4.20	6.00	7.50	9.00	10.00	11.50
RAT 040DA	4.44	6.56	9.83	11.72	14.06	15.63	17.97
RAT 052DA	8.32	12.48	16.64	20.8	24.96	29.12	33.28
RAT 063DA	14.64	21.96	29.28	36.6	43.92	51.24	58.56
RAT 075DA	23.5	35.3	47	58.8	70.5	82.3	94
RAT 083DA	29.7	44.5	59.4	74.2	89.1	103.9	118.8
RAT 092DA	45.5	68.2	91.1	113.7	136.4	159.2	181.9
RAT 105DA	67.88	101.82	136.76	169.7	203.64	237.58	271.52
RAT 125DA	116.6	174.9	233.2	291.5	349.8	408.1	466.4
RAT 140DA	175.48	263.22	350.96	438.7	526.44	614.18	701.92
RAT 160DA	267.4	401.1	534.8	668.5	802.2	935.9	1069.6
RAT 190DA	430.96	646.44	861.9	1077.4	1292.9	1508.4	1723.8
RAT 210DA	592.2	888.4	1184.5	1480.6	1776.7	2072.8	2369
RAT 240DA	831.9	1220.8	1627.8	2030.7	2444.6	2848.6	3255.5
RAT 270DA	1305.4	1958.2	2610.9	3263.6	3916.3	4569	5221.8
RAT 300DA	1602	2403	3205	4006	4807	5608	6409
RAT 350DA	2399	3598	4798	5998	7197	8397	9596
RAT 400DA	3418	5127	6837	8546	10255	11964	13673

No	Description	Qty	Material	Anti-corrode treatment	Optional Material	Wearing parts
1	Indicator screw	1	PA66+SS			
2	Indicator	1	POM			
3	Spring clip	1	Circlip			
4	Washer	1	Stainless steel			
5	Outside washer	1	PTFE			
6	Body	1	Aluminum alloy	Hard anodized etc.		
7	Piston	2	Cast aluminum	Hard anodized	Stainless steel	
8	Spring assembly	*	60Si2Mn2 + PA66	Dip coating		
9	End cap O-ring	2	NBR/HNBR/FKM		Viton / Silicone	X
10	Cap screw	8	Stainless steel			
11	End cap	2	Cast aluminum	powder spraying etc		
12	Bearing (Piston)	2	PTFE			
13	O-ring(Piston)	2	NBR/HNBR/FKM		Viton / Silicone	X
14	Guide (Piston)	2	POM		PTFE	
15	Adjusting bolt	2	Stainless steel			
16	Adjusting screw nut	2	Stainless steel			
17	O-ring (adjusting nut)	2	NBR/HNBR/FKM		Viton / Silicone	
18	O-ring (pinion top)	1	NBR/HNBR/FKM		Viton / Silicone	X
19	Bearing (pinion top)	1	PTFE			X
20	Inside washer	1	PTFE			
21	Cam	1	Stainless iron			
22	Pinion	1	Alloy steel	Nickel plated	Stainless steel	
23	Bearing (pinion bottom)	1	PTFE			
24	O-ring (pinion bottom)	1	NBR/HNBR/FKM		Viton / Silicone	X

Parts Introduction



① Indicator

NAMUR standard indicator is convenient for mounting accessories such as Limit switch box, Positioner and so on

② Actuator Shaft

Nickel plated alloy steel and high-precision shaft conforms to NAMUR, ISO5211 and DIN3337 standard. The dimensions and stainless steel one can be customized.

③ Actuator Body

According to the different requirements, the extruded aluminum alloy ASTM6005 body can be treated with hard anodized, powder polyester painted (different colors like blue, orange, yellow and so on are available), PTFE or Nickel plated.

④ End Caps

Die-casting aluminum powder polyester can be painted in different colors, PTFE coated or Nickel plated.

⑤ Pistons

The twin rack pistons are made from Die-casting aluminum treated with hard anodized or made from Cast steel with galvanization. Symmetric mounting position, long cycle life and fast operation, reversing rotation by simply inverting the pistons.

⑥ Stroke adjustment

The two independent external stroke adjustment bolts can adjust $\pm 5^\circ$ at both open and close directions easily and precisely.

⑦ High performance springs

Preloaded coating springs are made from the high quality material for resistant to corrosion and long service life, which can be demounted safely and conveniently to satisfy different requirements of torque by changing quantity of springs.

⑧ Bearings and Guides

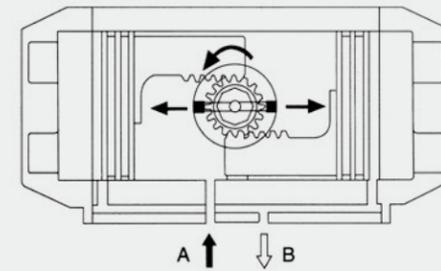
Made from low friction and long-life compound material which to avoid the direct contact between metals and also easy to be maintained.

⑨ O-rings

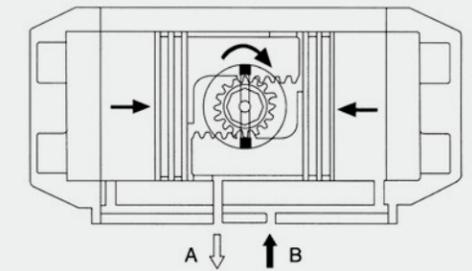
Normal: NBR
High temp. & low temp. : Viton or Silicone

Operating Principle

Double action

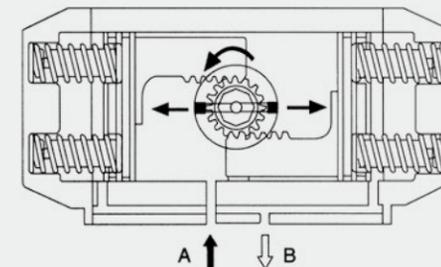


Input the air into Port A forces the pistons move outwards, the pinion turns counterclockwise and open the valve, then the air be exhausted from Port B.

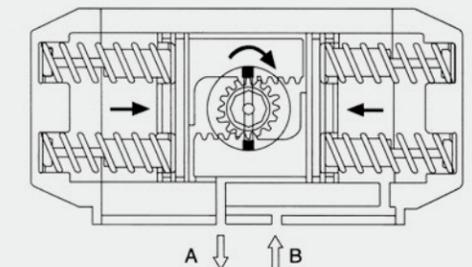


Input the air into Port B forces the pistons move inwards, the pinion turns clockwise and close the valve, then the air be exhausted from Port A.

Single action



Input the air into Port A forces the pistons move outwards, the pinion turns counterclockwise and open the valve, then the air be exhausted from Port B.



When loss air pressure or power, the stored energy in the springs forces the pistons inwards, causing the pinion turns clockwise while air be exhausted from Port A.

Note: 1. The standard rotation is clockwise for closing the valve and counterclockwise for opening. 2. If the direction of the piston is assembled reversely, then the standard rotation is counterclockwise for closing the valve and clockwise for opening.

The function and usage of the actuator and the parts

- Double action actuator: open and close the valve
- Single action actuator (spring return): when the air is cut off, it will close (normal close type)
- Double control solenoid valve: the valve open when one solenoid coil power on and close when another coil power on, it has memory function. (Ex-proof type is available)
- Single control solenoid valve: the valve open or close when power on, and close or open when power off. (Ex-proof type is available).
- Limit switch box: transmit the signal of open or close of the valve remotely. (Ex-proof type is available)
- Pneumatic positioner: control the medium flow rate of the valve according to air pressure (0.2~1bar) (Ex-proof type is available)
- Electric positioner: control the medium flow rate of the valve according to electric current (4-20mA) (Ex-proof type is available)
- Electric-pneumatic transducer: transduce current signal to air pressure signal for compatibility with positioner.
- FRL: includes filter, regulation and lubrication which can clean and lubricate the connection parts
- Manual equipments: manual operate on the valve in case of the cut off or stoppage of the air or power.

How to choose

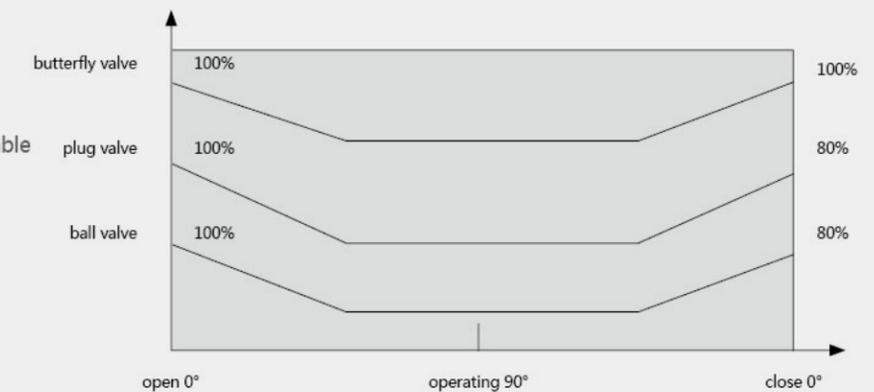
Firstly, confirm the torque that will need during the open or close of the valve. Normally the safety factor is 15~20%. If the medium is steam or non-lubricated liquid, then set it to 25%. The safety factor for non-lubricated slurry liquid is 40% and for non-lubricated granule powder is 80%. Then check output torque table form of double action or single action, you can get a right model. On the output torque table of single action actuator, the torque on the line of spring stroke is the torque of closing the valve.

Example

- A ball valve need torque= 280N.m
- Medium: water
- Safety factor (20%) = 280 (1+20%) =336N.m
- Air pressure= 4 bar
- According to the output torque table of double action actuator, the right model is RAT140DA, the output torque is 350.96N.m when the pressure is 4bar.

Sample of choosing single action actuators

During the selecting of the spring return actuators, we can choose a more reasonable and economical actuator if we know the different torque of valve on opening, operation and closing.



Example

A butterfly valve need torque=80N.m

The max torque needed by the butterfly valve $80(1+30\%) = 104\text{N.m}$

The torque after opened (operating) $104 \times 30\% = 32\text{N.m}$

Air supply=4bar

We can select RAT125 SA K10

- Air stroke $0^\circ = 114.4\text{N.m} > 104\text{N.m}$
- Air stroke $90^\circ = 59.4\text{N.m} > 32\text{N.m}$
- Spring stroke $90^\circ = 173.8\text{N.m} > 32\text{N.m}$
- Spring stroke $0^\circ = 118.8\text{N.m} > 104\text{N.m}$
- The above data shows the actuator's torque can satisfy the requirement of the butterfly valve.

Attention: During the restoration, the spring return actuator's torque will not be affected by inputting air from port B. On the contrary, it will help restoration of springs.

Air consumption

Air volume opening & closing					
Model	Air volume opening	Air volume closing	Model	Air volume opening	Air volume closing
RAT032	0.035 L	0.045 L	RAT140	1.7 L	2.4 L
RAT040	0.062L	0.082L	RAT160	2.6 L	3.7 L
RAT052	0.09 L	0.12 L	RAT190	4.2 L	5.9 L
RAT063	0.14 L	0.2 L	RAT210	5.7 L	8.2 L
RAT075	0.21 L	0.3 L	RAT240	9 L	12.8 L
RAT083	0.29 L	0.41 L	RAT270	12.6 L	17.9 L
RAT092	0.49 L	0.71 L	RAT300	21.4 L	30 L
RAT105	0.7 L	0.99 L	RAT350	31.2 L	43.7 L
RAT125	1.4L	1.6L	RAT400	47.9 L	67.1 L

Air consumption of double action actuator (L/min) = air volume (air volume opening + air volume closing) x (air supply (kpa) + 101.3) ÷ 101.3 x action cycle time (/min).

Air consumption of single action actuator (L/min) = air volume opening x (air supply (kpa) + 101.3) ÷ 101.3 x action cycle time (/min).

The weight of actuator

Model	Weight(kgs)	spring weight(kgs)	Model	Weight(kgs)	spring weight(kgs)
RAT032DA	0.65	0.016	RRAT140DA	14.88	0.24
RAT040DA	1	0.0252	RAT160DA	22.98	0.37
RAT052DA	1.52	0.104	RAT190DA	40.5	0.5
RAT063DA	2.28	0.198	RAT210DA	43.5	0.5
RAT075DA	3.12	0.02	RAT240DA	65.5	1.3
RAT083DA	3.48	0.434	RAT270DA	91	1.6
RAT092DA	5	0.06	RAT300DA	114.5	2.25
RAT105DA	6.52	0.08	RAT350DA	160.5	4
RAT125DA	10.12	0.15	RAT400DA	283	5.12

Operating conditions

Working medium

- Dry or lubricated air or inert gas, as long as the medium is compatible with the inside parts and lubricant of the actuator.
- The dew-point temperature of the operating media is -20°C . The dimension of the impurity particle cannot be larger than 30μ .
- If the positioner is needed, the dimension of impurity particle cannot be larger than 5μ .

Air pressure

- 3bar to 8bar

Working temperature

- Standard: $-5^{\circ}\text{C} \sim +80^{\circ}\text{C}$
- Low temperature type: $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$
- High temperature type: $-10^{\circ}\text{C} \sim +150^{\circ}\text{C}$

Lubrication

- Usually the standard types no need to use lubricant. In the low temperature or high temperature occasion, it will need special lubricant.

Three position actuator

Three position actuator provides an operation of 0° , 45° , 90° or the random travel of middle position. The middle position is achieved by the mechanical brake which is caused by the movement of the two auxiliary pistons. It is adjustable.

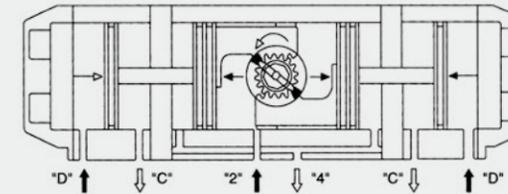


Chart 1: it is middle position, which is achieved when the air is supplied to port 2 and port D, meantime port 4 and port C are in a state of exhaust air. When the air is supplied to port D, it forces the auxiliary pistons move to the center, and make the inner pistons stopped at the setted position.

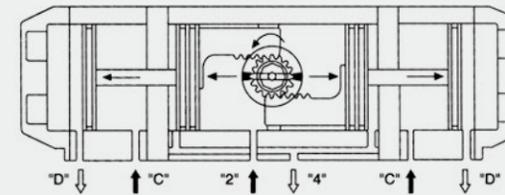


Chart 2: it is fully open position, which is achieved when the air is supplied to port 2 and port C (air to port C is optional), meantime port 4 and port D are in a state of exhaust air.

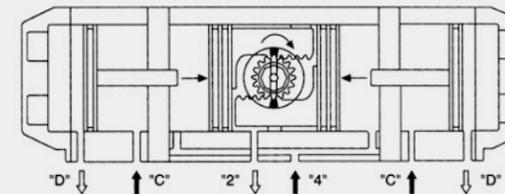


Chart 3: it is fully close position, which is achieved when the air is supplied to port 4 and port 2 is in a state of exhaust air. No need to operate port C and Port D.

How to order

- Pneumatic actuators: double acting or spring return type (normal close or normal open)
- Please note the working pressure of the valve, working medium, working temperature and the seals.
- Solenoid valve: please note whether you need double coil or single coil, voltage and Ex-proof or not.
- Signal feedback: mechanical or approachable switch, voltage, output current and ex-proof type.
- Positioner: pneumatic positioner, electric positioner, current signal, voltage, electrical converter, ex-proof type.
- FRL
- Manual device
- Special one can be customized

Quality Assurance

- Each actuator is tested and checked before delivery.
- Each actuator has a QC passed label.
- Each actuator is with the standard NUMAR connection and mounting size.
- Each actuator is packed by the carton.

Common problems and the solutions



Common problems	Checking Item	Solution
Pneumatic valve does not work	1. Check if the solenoid valve works normally? Is the solenoid coil failure? If the armature of the solenoid valve is jammed by impurity?	Replace the solenoid valve or coil and remove the impurity.
	2. Test the pneumatic actuator with air supply to check if the o-ring and cylinder are broken.	Replace the broken o-ring and cylinder.
	3. Is impurity blocking the valve?	Clean out the impurity, replace the broken parts.
	4. Is the handle of the manual device at the manual state?	Put the handle to the pneumatic state.
Acting slowly	1. Is the air supply pressure insufficient?	Increase the air pressure (0.4~0.7Mpa)
	2. Is the output torque of pneumatic actuator not enough?	Select a bigger model of the pneumatic actuator
	3. Is the valve stem or other parts assembled too tight?	Re-assemble and adjust the valve
	4. Is the air supply pipe blocked making the air flow too small?	Clean out the block and replace the filter stem.
The feedback has no signal	1. Check if the power is short circuit or open circuit	Examine and repair the circuit
	2. Is the cam of the feedback in the incorrect position?	Adjust the cam to the correct position
	3. Is the micro switch broken?	Replace the micro switch

➤ Pneumatic ball valve

RBV

Unique design and high platform structure.
ISO5211 connection, easy to be installed.



Order Code

R	BV	□	□	□	- □ - □	□
RFS product	Ball valve	Type	Connection	Structure	Tandem structure	Nominal diameter
		P pneumatic L Lever E Electric	1 Female thread connection 2 Male thread connection 4 flanged connection 8 Clamp type	1 Straight bore 2.Y 3-way Y type 4.L 3-way L type 5.T 3-way T type	1 1PCS type 2 2PCS type 3 3PCS type Blank Other	08 : 1/4" 10 : 3/8" 15 : 1/2" 20 : 3/4" 25 : 1" 32 : 1-1/4" 40:1-1/2" 50 : 2" 65 : 2-1/2" 80 : 3" 100 : 4" 125 : 5" 150 : 6"
						Valve body material
						Z CI Q DI P Stainless steel 304 R Stainless steel 316 C Carbon steel

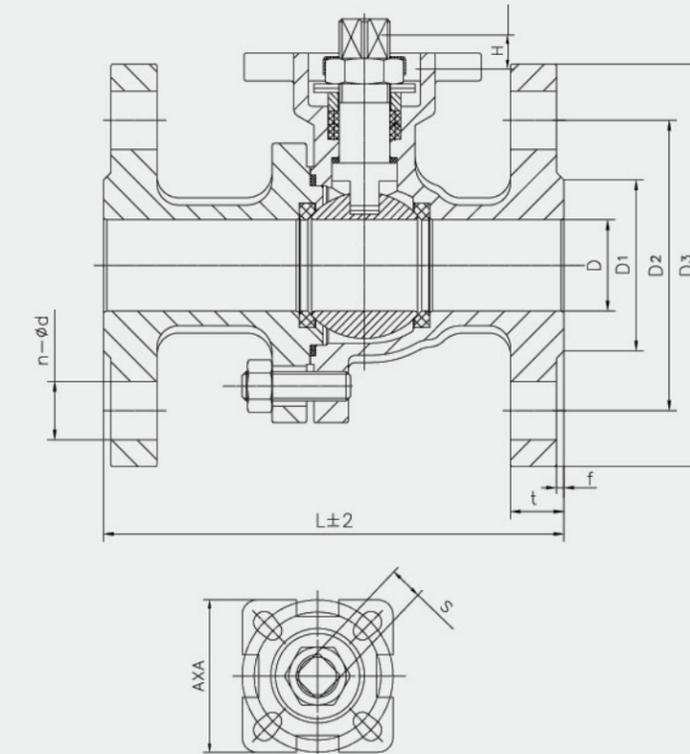
Features

- Unique design and beautiful appearance.
- High platform structure and ISO5211 connection, makes the installation of electric or pneumatic actuator to be more professional.
- Valve body is overlaid with reinforced bar, which can be permanently used in corrosion medium, and keep away from the cracking and failure during the installation.
- Grinding process of the valve stem reduces the torque of electric or pneumatic valve during the installation.
- The valve body of carbon steel is phosphate coated, which won't be discolored and rusty. It is durable and beautiful.

Pneumatic Din Flange Ball Valve

Features

- The nominal pressure : PN 1.6, 2.5MPa
 - Strength test pressure: PT2.4/8MPa.
 - Seal test pressure (low pressure) : 0.6MPa
 - Suitable medium:water.oil.gas.nitric acid.acetic acid
 - Suitable temperature: PTFE : -20 °C ~ +150 °C
PPL: -20 °C ~ +200 °C
(WCB, CF8, CF8M, Ti, Ni)
- GB:china national Standard



MODEL	INCH	DN	D	L	S	D1	D2	D3	t	f	n-φd	ISO5211	H	ACTUATOR
RBVP41-2-15-GB	1/2"	15	150	130	9	45	65	95	14	2	4-φ14	F03/F04	10.5	RAT052DA
RBVP41-2-20-GB	3/4"	20	20	140	9	55	75	105	14	2	4-φ14	F03/F04	10.7	RAT052DA
RBVP41-2-25-GB	1"	25	25	150	11	65	85	115	14	2	4-φ14	F04/F05	11	RAT063DA
RBVP41-2-32-GB	1-1/4"	32	32	165	11	78	100	135	16	2	4-φ18	F04/F05	11.5	RAT063DA
RBVP41-2-40-GB	1-1/2"	40	38	180	14	85	110	145	16	2	4-φ18	F05/F07	17	RAT075DA
RBVP41-2-50-GB	2"	50	50	200	14	100	125	160	16	3	4-φ18	F05/F07	17	RAT083DA
RBVP41-2-65-GB	2-1/2"	65	65	220	17	120	145	180	18	3	4-φ18	F07/F10	20	RAT092DA
RBVP41-2-80-GB	3"	80	76	250	17	135	160	195	20	3	8-φ18	F07/F10	20	RAT105DA
RBVP41-2-100-GB	4"	100	100	280	19	155	180	215	20	3	8-φ18	F07/F10	22.5	RAT125DA

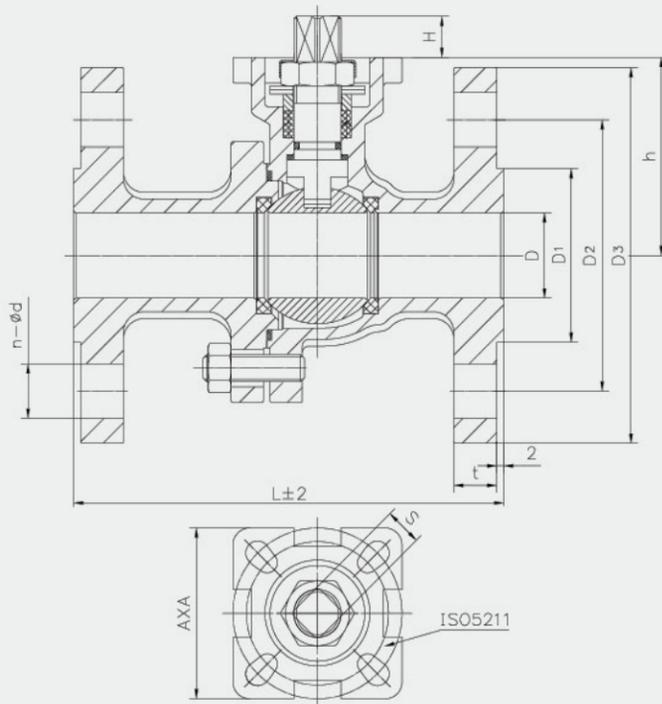
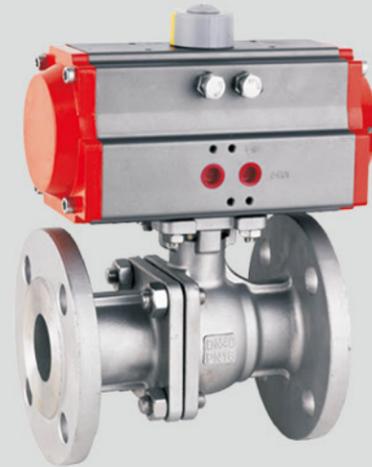
Pneumatic ANSI Flange Ball valve

Features

- The nominal pressure : 150 / 300
- Strength test pressure: PT 3.0/7.5MPa.
- Seal test pressure (low pressure): 0.6MPa
- Suitable medium: water, oil, gas, nitric acid, acetic acid
- Suitable temperature: PTFE : -20 °C ~ +150 °C
PPL: -20 °C ~ +200 °C

(WCB, CF8, CF8M, Ti, Ni)

Ansi: American Standard



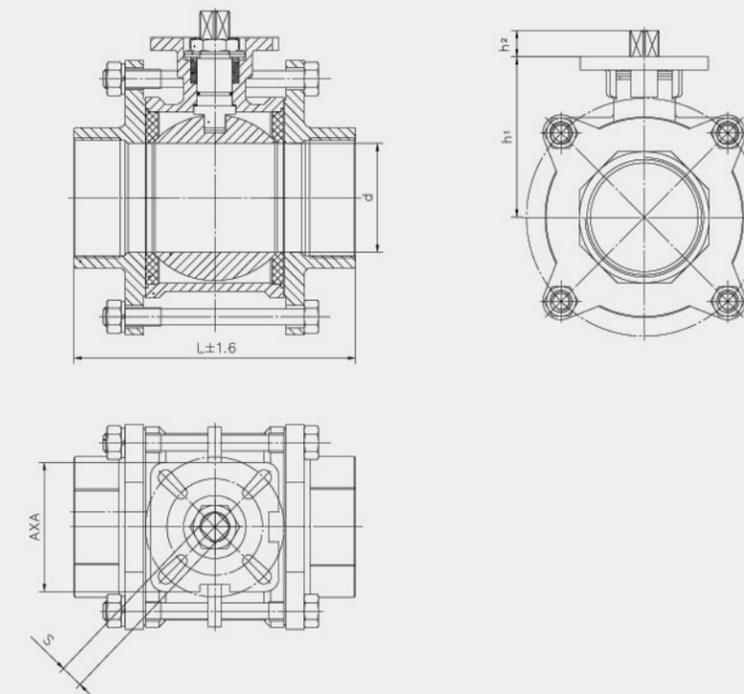
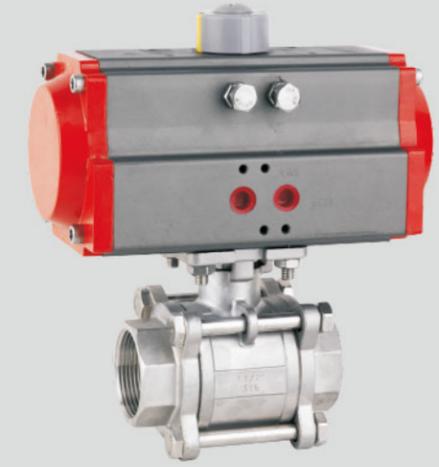
MODEL	INCH	DN	D	L	H	A	D1	D2	D3	ISO5211	t	n-φd	S	H	ACTUATOR
RBVP41-3-15-ANSI	1/2"	15	15	108	48	43	34.9	60.3	90	F03/F04	9.6	4-φ15.9	9	8.5	RAT052DA
RBVP41-3-20-ANSI	3/4"	20	20	117	53	43	42.9	69.9	100	F03/F04	11.2	4-φ15.9	9	9.5	RAT052DA
RBVP41-3-25-ANSI	1"	25	25	127	58	50	50.8	79.4	110	F04/F05	12.7	4-φ15.9	11	11	RAT063DA
RBVP41-3-32-ANSI	1-1/4"	32	32	140	62	50	63.5	88.9	115	F04/F05	14.3	4-φ15.9	11	12	RAT063DA
RBVP41-3-40-ANSI	1-1/2"	40	38	165	75	68	73	98.4	125	F05/F07	15.9	4-φ15.9	14	16.5	RAT075DA
RBVP41-3-50-ANSI	2"	50	50	178	85	68	92.1	120.7	150	F05/F07	17.5	4-φ19.1	14	16.5	RAT083DA
RBVP41-3-65-ANSI	2-1/2"	65	65	190	104	96	104.8	139.7	180	F07/F10	20.7	4-φ19.1	17	20	RAT092DA
RBVP41-3-80-ANSI	3"	80	78	203	114	96	127	152.4	190	F07/F10	22.3	4-φ19.1	17	20	RAT105DA
RBVP41-3-100-ANSI	4"	100	95	229	135	96	157.2	190.5	230	F07/F10	22.3	8-φ19.1	19	22.5	RAT125DA

Pneumatic Female Thread 3-part Ball Valve

Features

- Screw type: NPT, BSPT, BSP
ISO-228 Class A Thread
- Temperature range: PTFE : -20 °C ~ +150 °C
PPL: -20 °C ~ +200 °C
- Suitable medium: water, oil, air and some corrosive liquid
- Nominal pressure : 1000PSI (PN63) For 1/2" to 4"

- Blowout proof stem
 - Locking device
 - Material: CF8M (DIN 1.4408),
CF8 (DIN 1.4308),
WCB (DIN 1.0619)
- (WCB, CF8, CF8M/I, Ti, Ni)

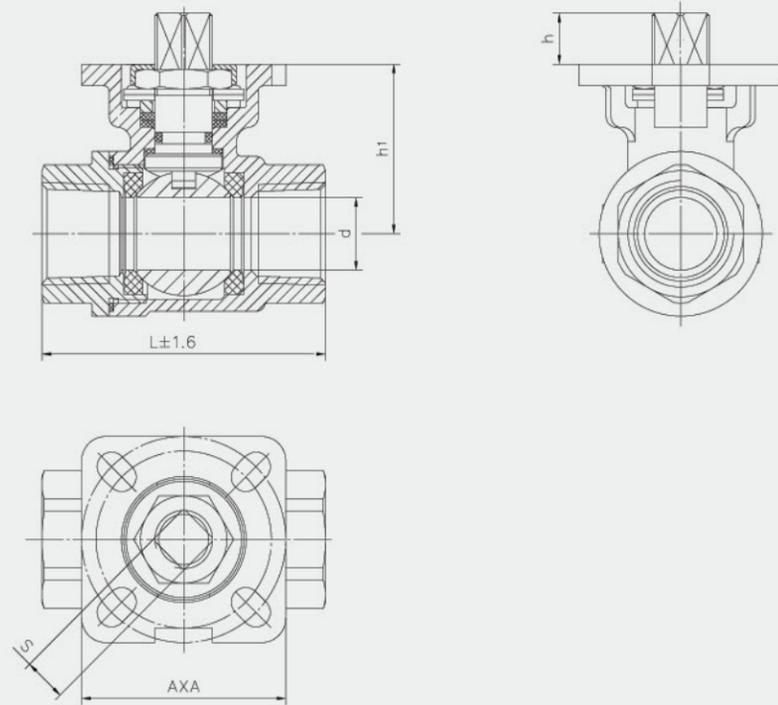


MODEL	INCH	DN	d	L	h1	h2	ISO5211	A	S	ACTUATOR
RBVP11-3-15	1/2"	15	15	75	39	10.5	F03/F04	42	9	RAT052DA
RBVP11-3-20	3/4"	20	20	80	44	10.5	F03/F04	42	9	RAT052DA
RBVP11-3-25	1"	25	25	90	52	11	F04/F05	50	11	RAT052DA
RBVP11-3-32	1-1/4"	32	32	110	56	11.5	F04/F05	50	11	RAT063DA
RBVP11-3-40	1-1/2"	40	38	120	65	17	F05/F07	70	14	RAT075DA
RBVP11-3-50	2"	50	49	140	75	17	F05/F07	70	14	RAT083DA
RBVP11-3-65	2-1/2"	65	64	177	105.5	19.5	F07/F10	95	17	RAT092DA
RBVP11-3-80	3"	80	80	209	118	19.5	F07/F10	95	17	RAT105DA
RBVP11-3-100	4"	100	100	267	141	20	F07/F10	96	19	RAT125DA

Pneumatic Female Thread 2-part Ball Valve

Features

- Screw type: NPT, BSPT, BSP
ISO-228 Class A Thread
- Temperature range: PTFE : -20 °C ~ +150 °C
PPL: -20 °C ~ +200 °C
- Suitable medium: water, oil, air and some corrosive liquid
- Nominal pressure : PN16,PN25,PN40,1000PSI (PN63) for 1/2" -4"
- Anti roll stem
- Locking device
- Material: CF8M (DIN I.4408),
CF8 (DIN I.4308),
WCB (DIN I.0619)
(WCB, CF8, CF8M/I, Ti, Ni)



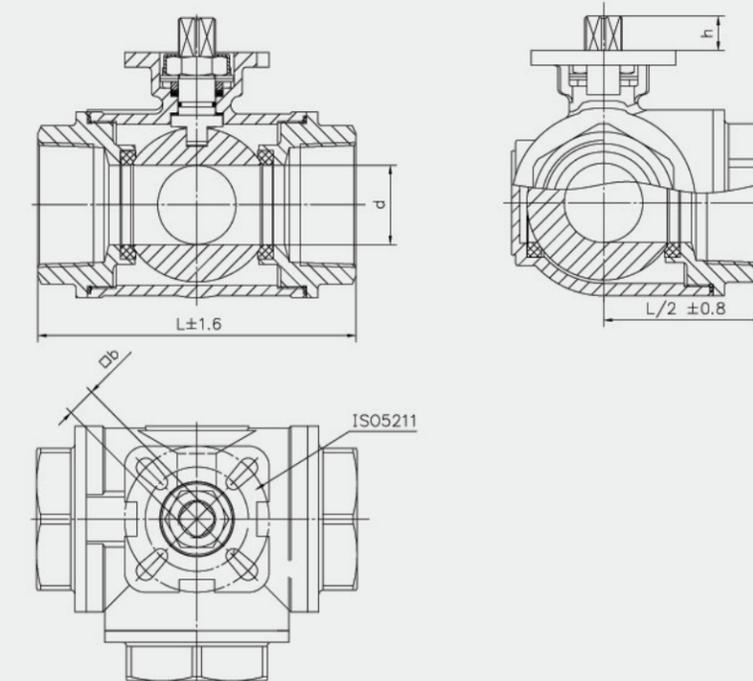
MODEL	INCH	DN	d	L	h	h1	E	d1	d2	R1	R2	A	S	ACTUATOR
RBVP11-2-15	1/2"	15	15	59	10.5	35	125	36.5	42.5	3	3	42	9	RAT052DA
RBVP11-2-20	3/4"	20	20	66	10.7	39	125	36.5	42.5	3	3	42	9	RAT052DA
RBVP11-2-25	1"	25	25	80	11	46	135	42.5	50.5	3	3.5	50	11	RAT052DA
RBVP11-2-32	1-1/4"	32	32	90	11.5	52	150	42.5	50.5	3	3.5	50	11	RAT063DA
RBVP11-2-40	1-1/2"	40	38	103	17	63	160	50	70	3.5	4.5	70	14	RAT075DA
RBVP11-2-50	2"	50	49	117	17	73.5	180	50	70	3.5	4.5	70	14	RAT083DA
RBVP11-2-65	2-1/2"	65	64	147	20	94.5	260	70	102	4.5	5.5	96	17	RAT092DA
RBVP11-2-80	3"	80	76	169	20	103.5	260	70	102	4.5	5.5	96	17	RAT105DA
RBVP11-2-100	4"	100	98	204	22.5	122	300	70	102	4.5	5.5	96	19	RAT125DA

Pneumatic 3-Way Ball Valve

Features

- Nominal pressure : PN 1.6,2.5,4.0,6.4MPa
- Strength test pressure: PT 2.4,3.8,6.0, 9.6MPa
- Sealed test pressure (low pressure): 0.6MPa
- Seal test pressure (pressure): 1.8,2.8,4.4, -7.1M pa
- Suitable medium: Suitable medium: water, oil, gas, nitric acid, acetic acid
- Suitable temperature: PTFE : -20 °C ~ +150 °C
PPL: -20 °C ~ +200 °C

(WCB, CF8, CF8M/I, Ti, Ni)



MODEL	INCH	DN	d	L	h	b	ISO5211	ACTUATOR
RBVP14-15	1/2"	15	12	72	8.5	9	F03/F04	RAT052DA
RBVP14-20	3/4"	20	15	82	9.5	9	F03/F04	RAT052DA
RBVP14-25	1"	25	18	90	11	11	F04/F05	RAT052DA
RBVP14-32	1-1/4"	32	25	128	12	11	F04/F05	RAT063DA
RBVP14-40	1-1/2"	40	32	137	16.5	14	F05/F07	RAT075DA
RBVP14-50	2"	50	38	154	16.5	14	F05/F07	RAT083DA
RBVP14-65	2-1/2"	65	48	185	20	17	F07/F10	RAT092DA
RBVP14-80	3"	80	55	212	20	17	F07/F10	RAT105DA
RBVP14-100	4"	100	74	254	22.5	19	F07/F10	RAT125DA

➤ Pneumatic butterfly valve

RDV

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



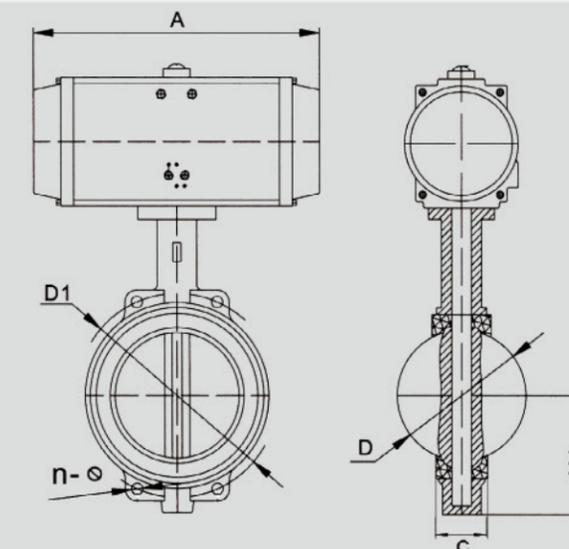
Ordering Code

R	DV	P			-		-		-	
RFS product	Butterfly valve	Type	Connection type	Body material	Disc material	Seal material	Orifice			
		P Pneumatic control L Lever control W Wheel type E Electric	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 installed in 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	H1	A	C	n-Φd	Actuator
RDVP7PB3-7-50	2	52.9	125	80	181	42	4-18	RAT063DA
RDVP7PB3-7-65	2.5	64.5	145	89	207	44.7	4-18	RAT075DA
RDVP7PB3-7-80	3	78.8	160	95	213	45.2	8-18	RAT083DA
RDVP7PB3-7-100	4	104	180	114	258	52.1	8-18	RAT092DA
RDVP7PB3-7-125	5	123.3	210	127	287	54.4	8-18	RAT105DA
RDVP7PB3-7-150	6	155.6	240	139	342.5	55.8	8-23	RAT125DA
RDVP7PB3-7-200	8	202.5	295	175	342.5	60.6	8-23/12-23	RAT125DA
RDVP7PB3-7-250	10	250.5	350	203	411	65.6	12-23/12-26	RAT140DA
RDVP7PB3-7-300	12	301.6	400	242	488	76.9	12-23/12-26	RAT160DA
RDVP7PB3-7-350	14	333.3	460	267	488	76.5	16-23/16-26	RAT160DA
RDVP7PB3-7-400	16	389.6	515	309	544	85.7	16-26/16-30	RAT190DA
RDVP7PB3-7-450	18	440.51	565	328	580	105.6	20-26/20-30	RAT210DA
RDVP7PB3-7-500	20	491.5	620	361	622	130.3	20-26/20-33	RAT240DA
RDVP7PB3-7-600	24	592.5	725	459	766	151.4	20-30/20-36	RAT270DA
RDVP7PB3-7-700	28	695	840	520	766	163	24-30/24-36	RAT270DA
RDVP7PB3-7-800	32	794.7	950	591	794	188	24-33/24-39	RAT300DA
RDVP7PB3-7-900	36	864.7	1050	656	880	203	28-33/28-39	RAT350DA
RDVP7PB3-7-1000	40	965	1160	721	1067	213	28-36/28-42	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	Stainless steel	Lubrication bronze	Natural rubber	1	-20~+85°C
	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	Carbon steel	PTFE	Abrasion resistant rubber	7	-10~+50°C
Carbon steel	C	Carbon steel	B6			Viton	8	-23~+150°C
						Heat-resistant EPDM rubber	9	-20~+150°C
								PTFE

➤ 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

R	EP-1000R	<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 mllBT5 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.



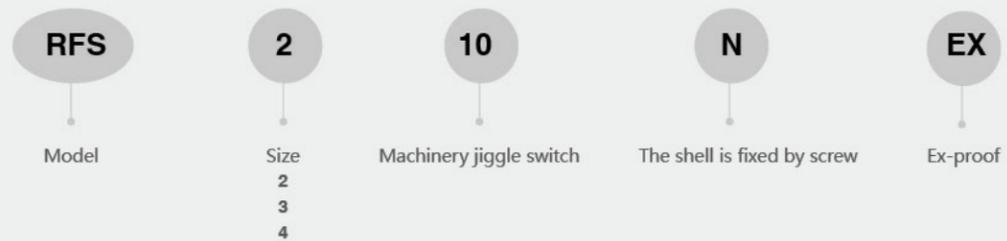
Parameter

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	ExiaII C T6 Ga, ExdIIB 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



Ordering Code



Limit switch box ,ex-proof limit switch box

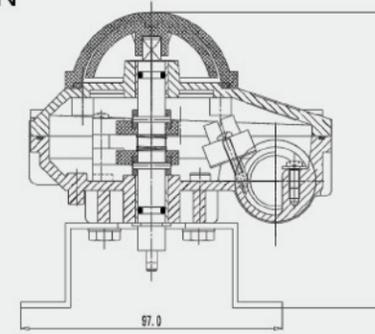
Features

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

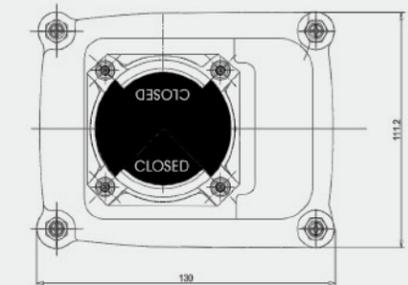
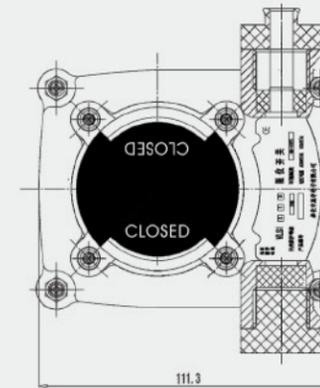
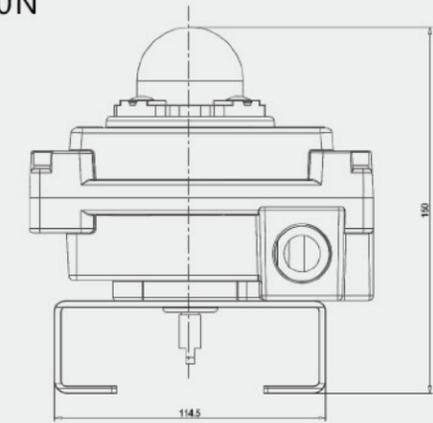
1. Visual position indicator and waterproof type.
2. Easy to set without tool based on spring loaded plined cam
3. There are many connection terminal and 8pcs of points, easy to connect and safety.
4. Standard dual cable connections.
5. No worry to loose bolts while cover opens.
6. Namur standard stainless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

Model	RFS-210N / RFS-310N	RFS-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	

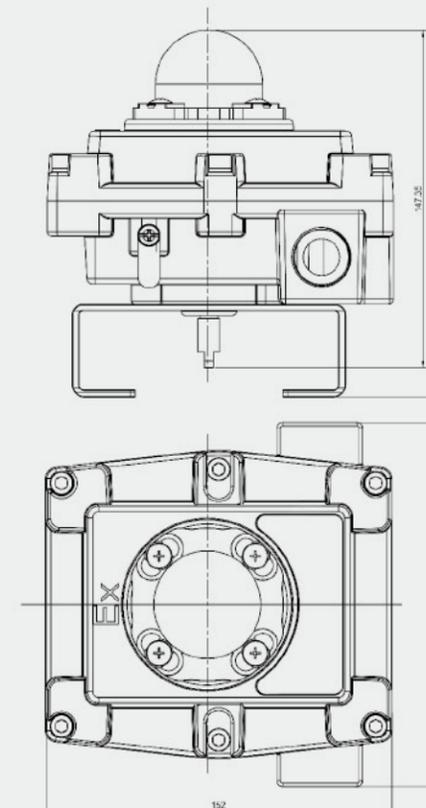
RFS-210N



RFS-310N



RFS-410N



Clutch Handwheel

Features

The pneumatic butterfly valve and ball valve with handle mechanism, as long as by the simple switching, then can achieve the handle operation of valve. Handle mechanism installed between pneumatic actuator and valve, quite convenience for operation.



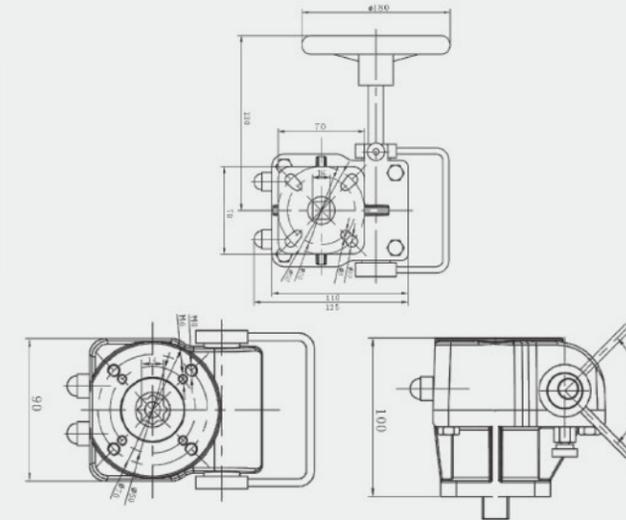
Structure character and using method

Transmission type	RSD1~8	Stem and wheel transmit
Stroke	90° ±5°	
Special design	The bearing of the stem are two pcs of eccentric body, using the connection stem for turning into integrative, at the same time, also can run 180 degree for combine and disconnection between stem and wheel, combine condition is by handle, disconnection condition is by pneumatic.	
Installation	The upper end	The standard size hole is connecting with pneumatic actuator. The square body is in the middle which hold out extracorporeal, connecting with the inner eight-square of pneumatic actuator directly.
	The lower end	The standard screw hole on the shell is connecting with the valve or bracket. The middle output shaft is a standard inner eight-square.
Usage	Handle	 Pulling the side round handle, then can turn spanner. When the spanner is at the appointed place, the round handle reset fastness eccentric bearing. Warning: It can not be operated by pneumatic when at the handle position, otherwise the parts will be damaged.
	Pneumatic	

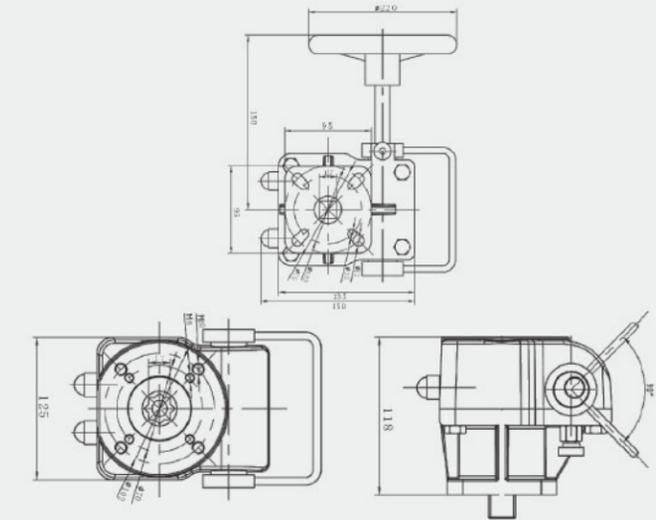
Model	Handwheel model	Shaft square	speed ratio	Diameter	input torque	out torque	Model	Handwheel Model
	DA			φ	NM	NM	SR	
RAT052DA	RSD-1	11*11	26 : 1	200	60	150	RAT052SA	RSD-1
RAT063DA	RSD-1	14×14	26 : 1	200	60	150	RAT063SA	RSD-1
RAT075DA	RSD-1	14×14	26 : 1	200	60	150	RAT075SA	RSD-1
RAT083DA	RSD-2	17*17	28 : 1	200	60	300	RAT083SA	RSD-2
RAT092DA	RSD-2	17*17	28 : 1	220	60	300	RAT092SA	RSD-2
RAT105DA	RSD-3	22*22	38 : 1	280	60	600	RAT105SA	RSD-3
RAT125DA	RSD-3	22*22	38 : 1	280	60	600	RAT125SA	RSD-3
RAT140DA	RSD-4	27*27	54 : 1	350	90	1000	RAT140SA	RSD-4
RAT160DA	RSD-4	27*27	54 : 1	350	90	1000	RAT160SA	RSD-4
RAT190DA	RSD-5	36*36	80 : 1	500	110	2000	RAT190SA	RSD-5
RAT210DA	RSD-5	36*36	80 : 1	500	140	2000	RAT210SA	RSD-5
RAT240DA	RSD-6	46*46	78 : 1	500	140	3500	RAT240SA	RSD-6
RAT270DA	RSD-6	46×46	78 : 1	500	200	3500	RAT270SA	RSD-6
RAT300DA	RSD-6	46×46	78 : 1	500	200	3500	RAT300SA	RSD-7
RAT350DA	RSD-6	46×46	78 : 1	500	200	3500	RAT350SA	RSD-7
RAT400DA	RSD-7	55*55	98 : 1	600	200	4500	RAT400SA	RSD-8

Dimensions

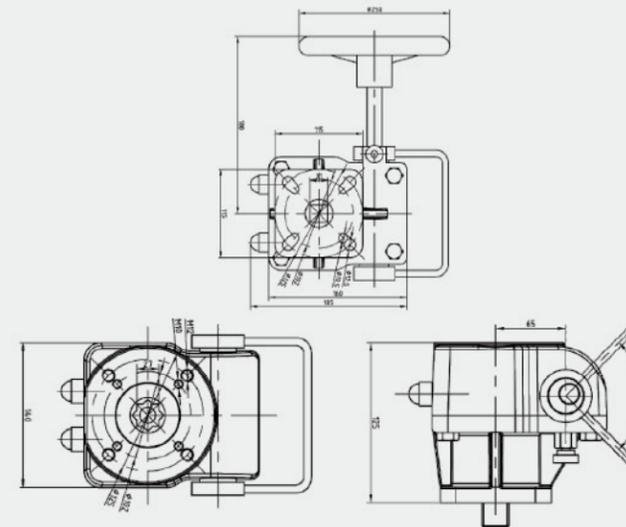
RSD-1



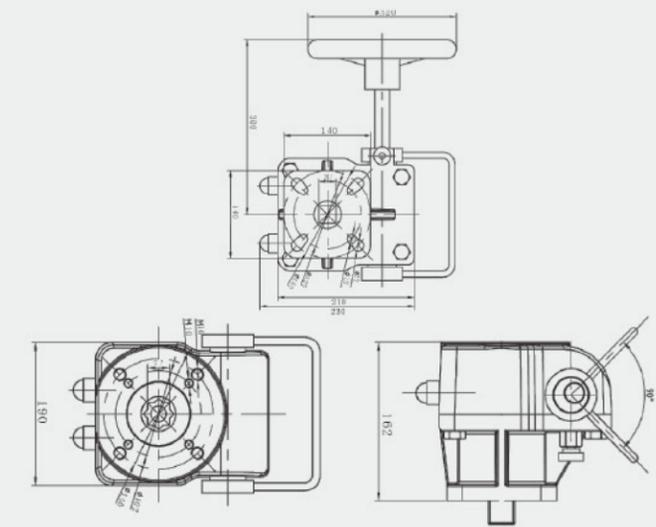
RSD-2



RSD-3

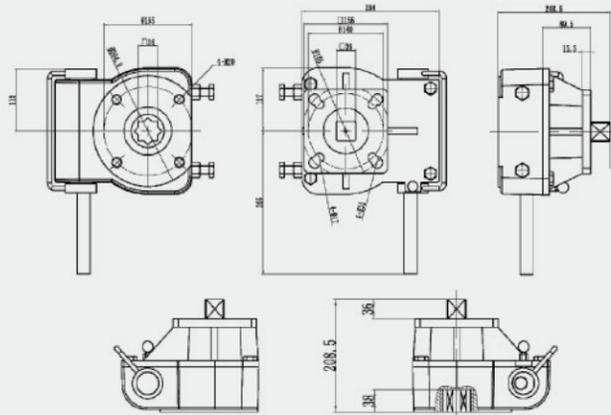


RSD-4

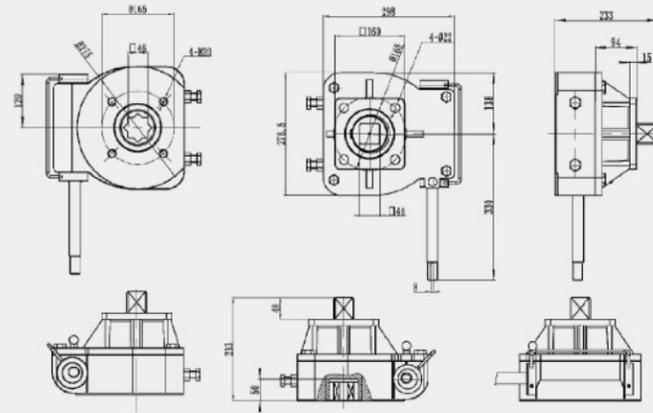


Dimensions

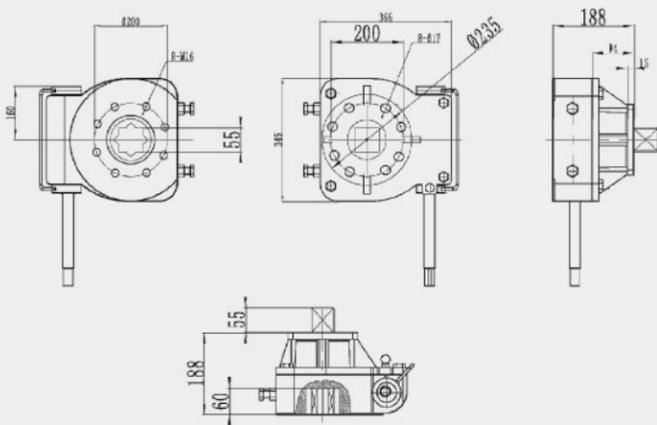
RSD-5



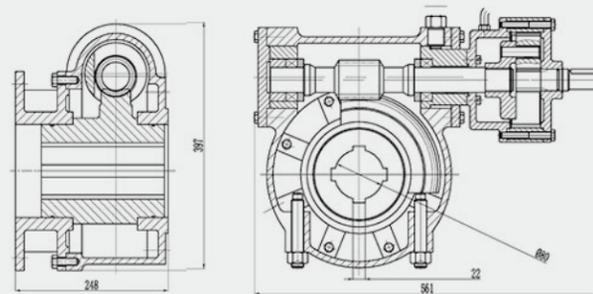
RSD-6



RSD-7



RSD-8



➤ Bevel Valve

RJQ22

There is automatic adjustable seal gland bush between overflow outlet and slide block.

The bevel structure have big flow rate, no water hammer, no noise and credible seal performance.



Ordering Code

R	JQ	22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RFS product	Angle seat valve code	Two way two position	Actuator material S stainless steel Blank aluminium P Plastic	actuator size Φ40 Φ50 Φ63 Φ80 Φ100	Connection size 10 15 20 25 32 40 50 65 80 100	H welded type, W Waterhammer F flange	S single acting type D double acting type K normally open

Remark: Normally open: flow comes under piston seal, against arrow on body.

Design character

- Can see the position indication.
- Easy to install.
- Actuator adopt low abrasion piston structure, big capacity and low wastage.
- There is lubricative for inner parts, no need maintenance.
- The actuator material have stainless steel and aluminium.
- Long life for the piston pole, PTFE seal, avoid the reif come in.
- No water hammer effect, when the liquid flowed from valve underside, the water hammer will be absorbed.

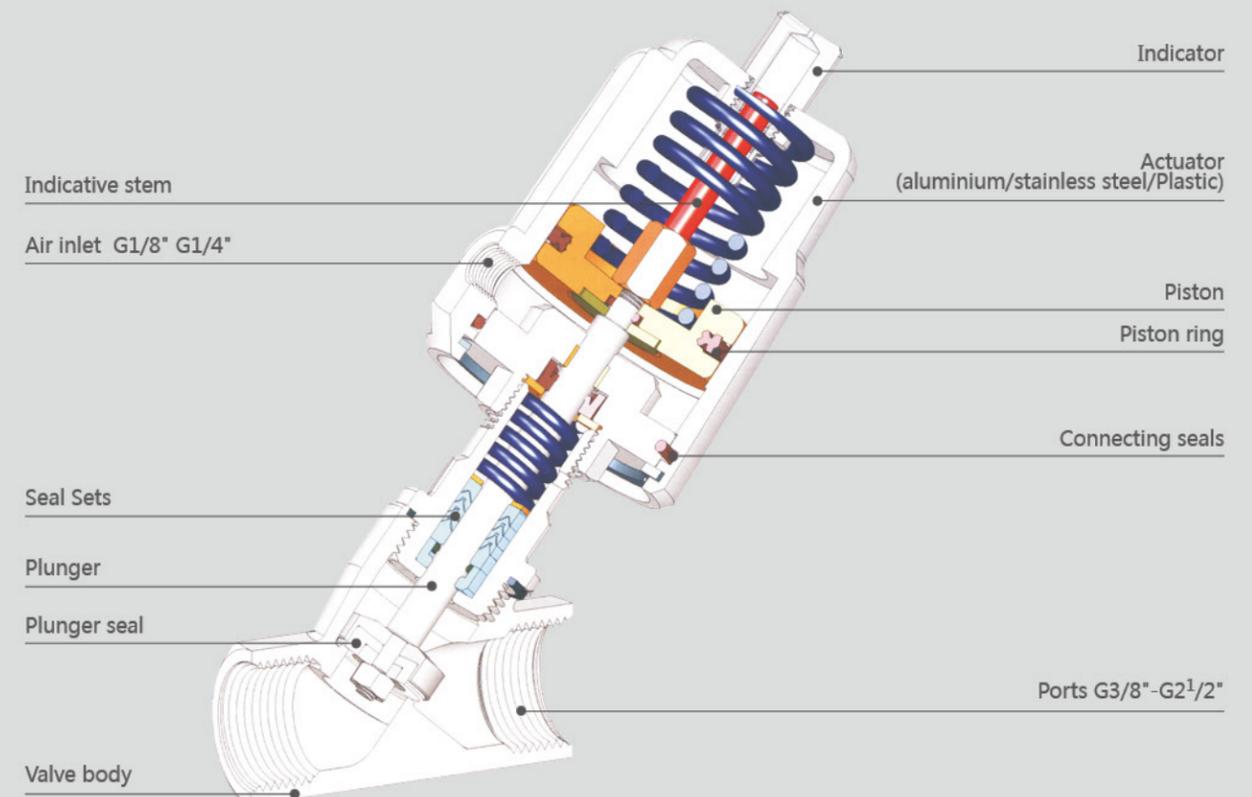
Angle seat valve



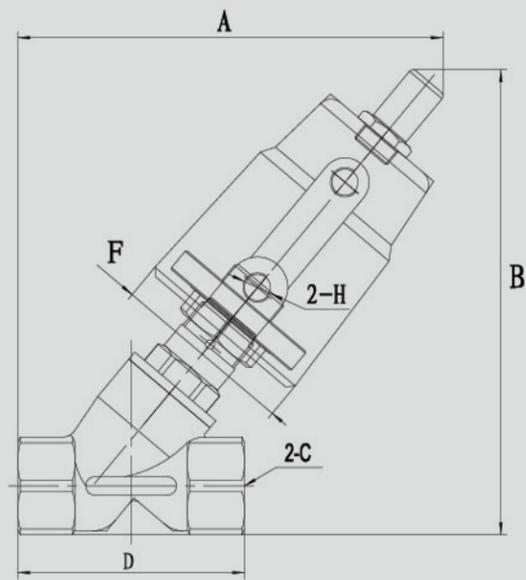
Specification

Orifice: DN15-DN65
 Thread: G1/8" -G2 1/2"
 Valve material: stainless steel 316
 Actuator material: Aluminium, stainless steel,plastic
 Valve core seal: PTFE
 Valve stem seal: PTFE / FKM
 Applicable medium: Water,liquid,neutral gas,oil
 water steam,weak acid or weak alkalis Solution.

Medium temperature: -10°C ~180°C
 Environment temperature: -10°C ~60°C
 Viscidity: max. 600 mm² / S
 Installation: any position
 Controlling medium: air or neutral gas
 Controlling pressure range: 0.3~1Mpa
 Liquid working pressure: 0~1.6Mpa

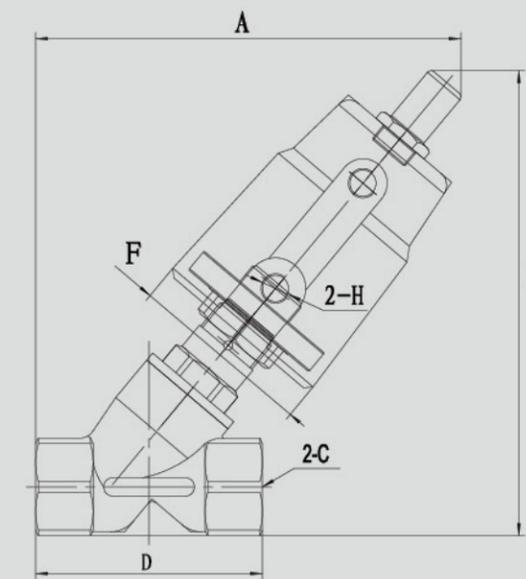


Angle seat valve



Model	Actuator size	A	B	C	D	E	F	H
RJQ22S40-10	40	127.5	136	G3/8"	69	27	50	G1/8"
RJQ22S40-15	40	127.5	136	G1/2"	69	27	50	G1/8"
RJQ22S50-10	50	140	150	G3/8"	69	27	60.5	G1/8"
RJQ22S50-15	50	140	150	G1/2"	69	27	60.5	G1/8"
RJQ22S50-20	50	143	155	G3/4"	75.5	32	60.5	G1/8"
RJQ22S50-25	50	163.5	176	G1	90	39	60.5	G1/8"
RJQ22S63-25	63	174.5	189.5	G1	90	39	77	G1/8"
RJQ22S63-32	63	190.5	207.5	G1-1/4"	117	50	77	G1/8"
RJQ22S63-40	63	190.5	207.5	G1-1/2"	117	55	77	G1/8"
RJQ22S63-50	63	219.5	232.5	G2"	145	70	77	G1/4"
RJQ22S80-50	80	233	253	G2"	145	70	98	G1/4"
RJQ22S80-65	80	273	290	G2-1/2"	170	85	116	G1/4"
RJQ22S100-65	100	270	290.5	G2-1/2"	170	85	116	G1/4"

Angle seat valve

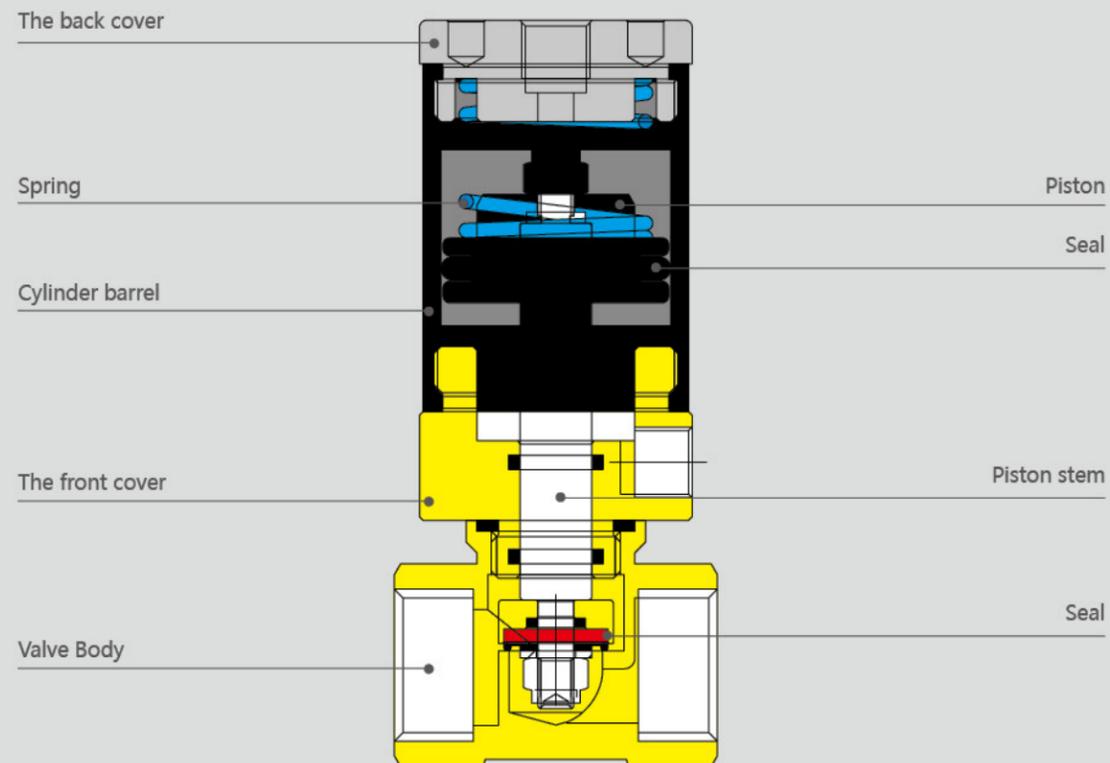


Model	Actuator size	A	B	C	D	E	F	H
RJQ2250-10	50	140	150	G3/8	69	27	60.5	G1/8
RJQ2250-15	50	140	150	G1/2	69	27	60.5	G1/8
RJQ2250-20	50	143	155	G3/4	75.5	32	60.5	G1/8
RJQ2250-25	50	163.5	176	G1	90	39	60.5	G1/8
RJQ2263-25	63	174.5	189.5	G1	90	39	77	G1/8
RJQ2263-32	63	190.5	207.5	G1-1/4	117	50	77	G1/8
RJQ2263-40	63	190.5	207.5	G1-1/2	117	55	77	G1/8
RJQ2263-50	63	219.5	232.5	G2	137	70	77	G1/4
RJQ2280-50	80	233	253	G2	137	70	98	G1/4
RJQ22100-65	100	270	290.5	G2-1/2	170	85	116	G1/4

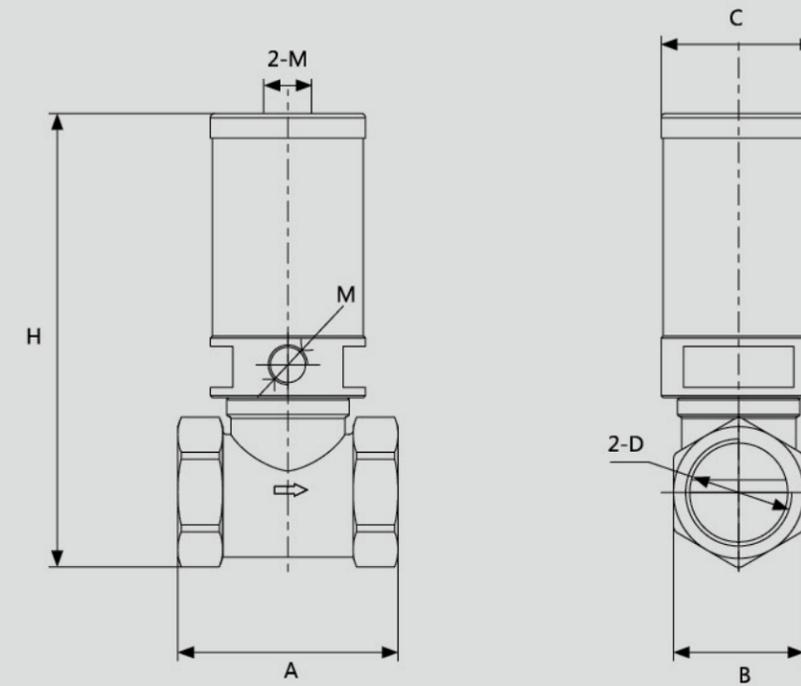
Pneumatic control valve

Features

Can work at low pressure, smartness for on and
There are many types of structure single acting and
double acting control,etc structure single acting type
and double acting type. Application: food, medicine,
industry, abstersion, landification, printing, etc.



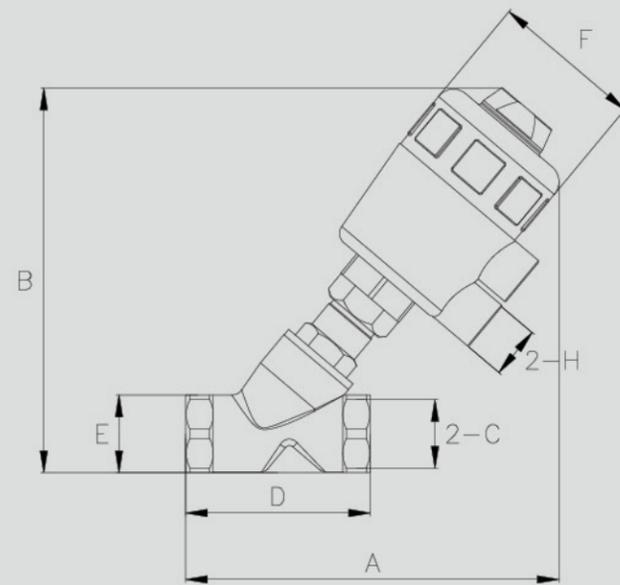
外形尺寸



Model	A	B	C	2-D	H	M
RQ22HD-15	45	25	37	G1/2"	89.5	G1/8"
RQ22HD-20	50	31	37	G3/4"	109	G1/8"
RQ22HD-25	64.5	38	37	G1"	118	G1/8"
RQ22HD-40	80	53	55	G1-1/2"	162	G1/8"
RQ22HD-50	99.5	65	78	G1/8"	179	G1/4"

Model	Orifice	Media	Working pressure	Control pressure	Temp range	Kv value (m ³ /k)
RQ22HD-15	13mm	Compress Air Water Oil	0-0.8MPa	0.4-0.8MPa	-5~80°C -20~150°C(High temp)	4
RQ22HD-20	16mm					5
RQ22HD-25	22mm					10
RQ22HD-40	35mm					25
RQ22HD-50	45mm					40

Angle seat valve



Model	Actuator size	A	B	C	D	E	F	H
RJQ22P50-10	50	148	158	G3/8	69	27	63	G1/4
RJQ22P50-15	50	148	158	G1/2	69	27	63	G1/4
RJQ22P50-20	50	151	162	G3/8	75	32	63	G1/4
RJQ22P50-25	50	173	184	G1	90	39	63	G1/4
RJQ22P63-25	63	198	210	G1	90	39	79	G1/4
RJQ22P63-32	63	215	229	G1-1/4	117	55	79	G1/4
RJQ22P63-40	63	215	229	G1-1/2	117	55	79	G1/4
RJQ22P63-50	63	238	251	G2	137	70	79	G1/4
RJQ22P80-50	80	255	263	G2	137	70	100	G1/4

Right angle valve

RQ22HD

Classical design, durable

Air control design, energy saving and environmental protection

Big flow rate, safety and Precision



Ordering Code

R	Q	22	HD	-	□	-	□	-	□
RFS product	Right angle valve code	Two way two position	Air control liquid valve		Connection size 15 1/2" 20 3/4" 25 1" 40 1 1/2" 50 2"		S single acting type D double acting type K normally open		Material H high temperature type Blank normal type

Remark: Normally open: Flow comes under the piston seal, against arrow on body.

➤ 4V100 Series

4V100

low power consumption, exhaust for the pilot and main valve,
small size, large flow, good appearance, flexible, can be
integrated installation, high wear resistance and long life.



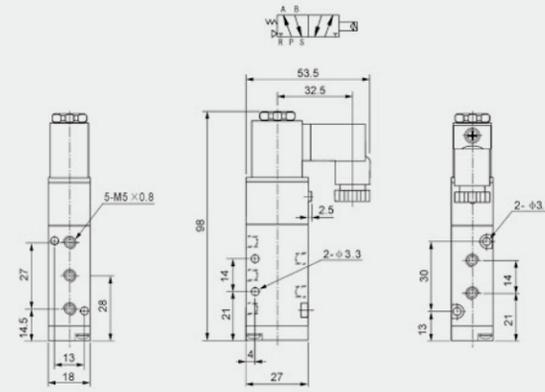
Ordering Code

4V	1	10	06	B	AC220V	W
Type 4V 5/2 or 5/3 way solenoid valve 4A 5/2 or 5/3 way pneumatic control valve 3V 3/2 way solenoid valve 3A 3/2 way pneumatic control valve	Series code 100 Series	Coil and position 10 single-coil double-position 20 double-coil double-position 30C double-coil three-position center close type 30E double-coil three-position center exhaust type 30P double-coil three-position center pressure type	Joint pipe bore M5 M5×0.8 06 1/8"	Connection type Blank Thread type B Namur	Standard voltage DC12V DC24V AC24V 50Hz/60Hz AC110V 50Hz/60Hz AC220V 50Hz/60Hz AC380V 50Hz/60Hz	Terminal Blank Black connector LD brown with LED connector LD1 white with LED connector W lead wire type

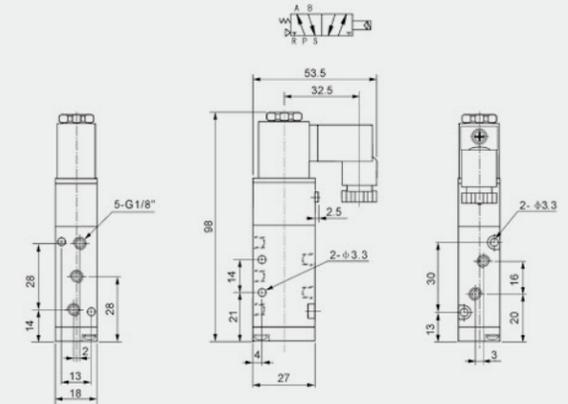
Specification

Model	4V110-M5	4V120-M5	4V130C-M5	4V130E-M5	4V130P-M5	4V110-06	4V120-06	4V130C-06	4V130E-06	4V130P-06
	4A110-M5	4A120-M5	4A130C-M5	4A130E-M5	4A130P-M5	4A110-06	4A120-06	4A130C-06	4A130E-06	4A130P-06
Type	5/2		5/3			5/2		5/3		
Flow rate	10mm ² (Cv=0.56)		7mm ² (Cv=0.40)			12mm ² (Cv=0.67)		9mm ² (Cv=0.5)		
Model	3V110-M5	3V120-M5	3A110-M5	3A120-M5	3V110-06	3V120-06	3A110-06	3A120-06		
Type	3/2				3/2					
Flow rate	10mm ² (Cv=0.56)				12mm ² (Cv=0.67)					
Connection ports	Inlet = Outlet = Exhaust = M5x0.8				Inlet = Outlet = Exhaust = G1/8"					
Media	Clean air									
Working type	Pilot									
Working pressure	0.15 ~ 0.8MPa									
Max. pressure	1.2MPa									
Ambient temp.	-5 ~ 50°C									
Voltage tolerance	±10%									
Power	AC:2.5VA DC:2.5W									
Insulation class Protection class	F class. IP65									
Terminal	Flying Lead Or Din43650C PIN									
Frequency	5 cycles/s									
Response time	0.05s									

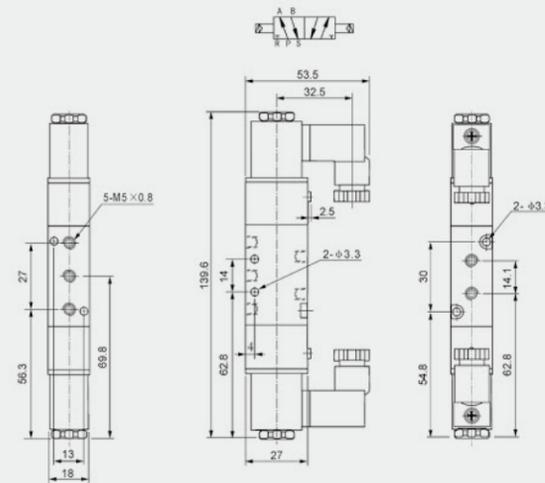
4V110-M5



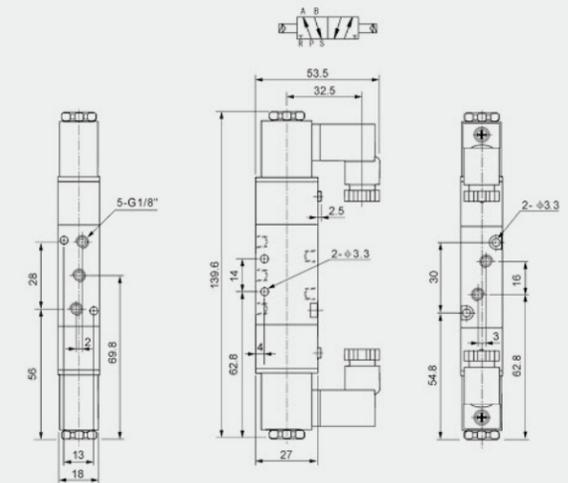
4V110-06



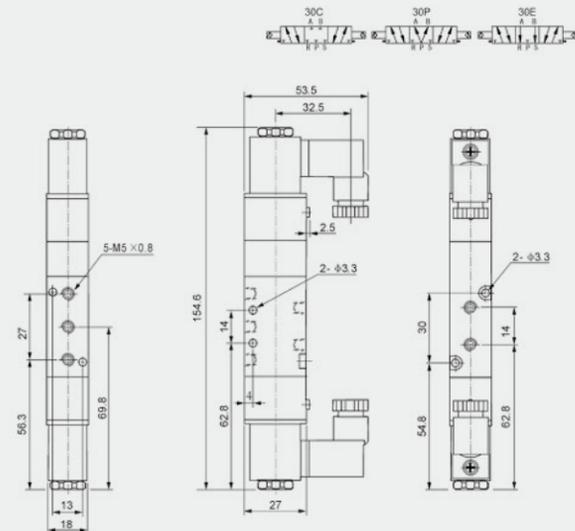
4V120-M5



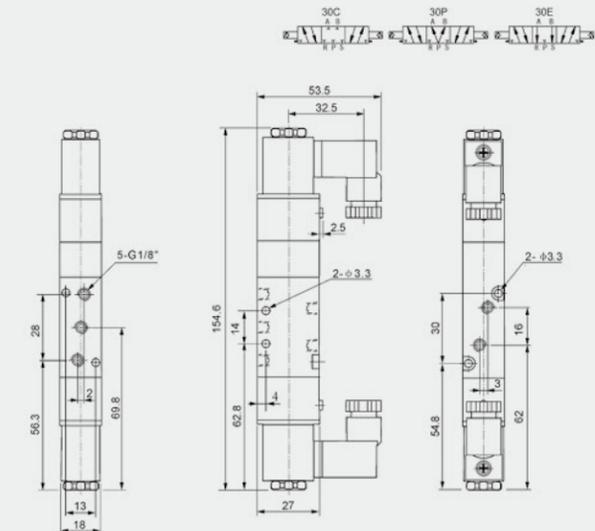
4V120-06



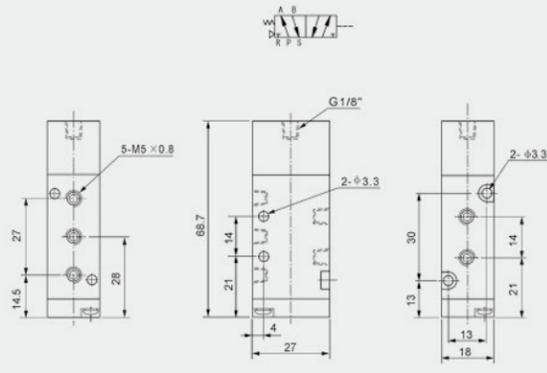
4V130-M5



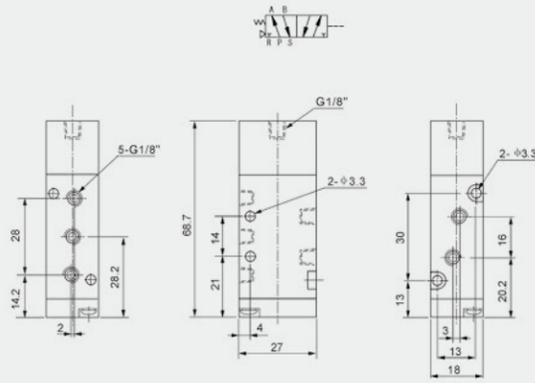
4V130-06



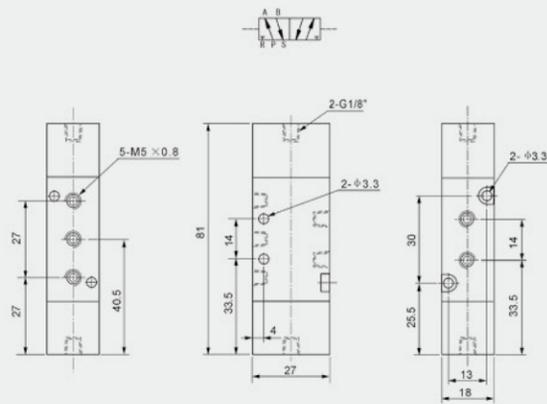
4A110-M5



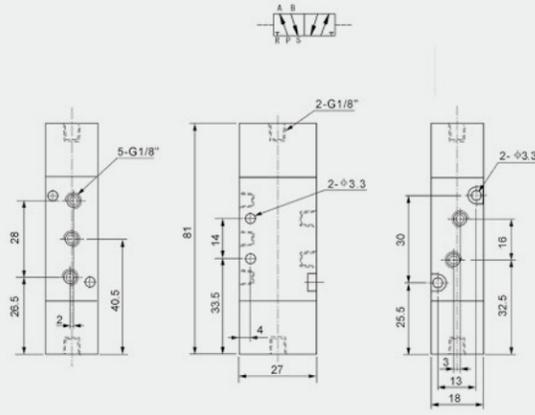
4A110-06



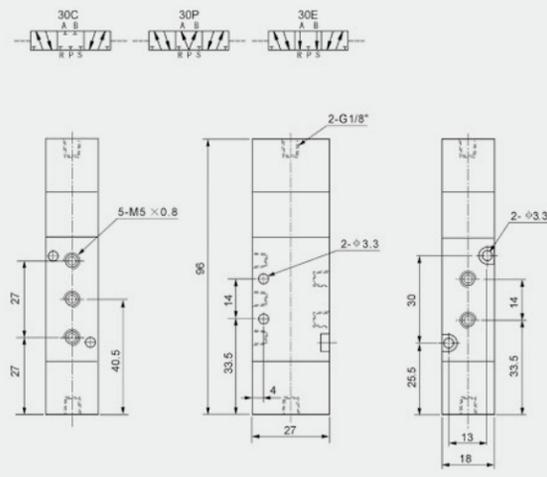
4A120-M5



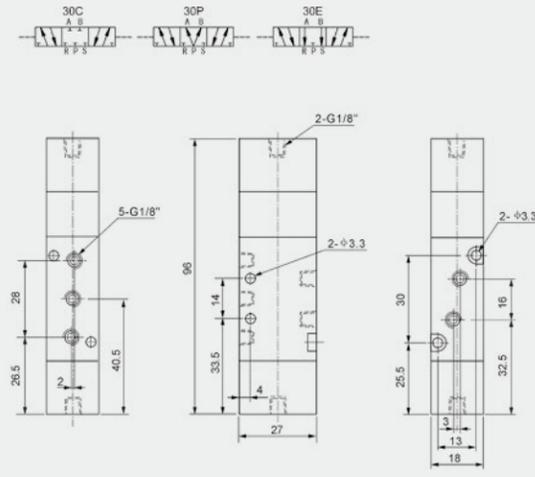
4A120-06



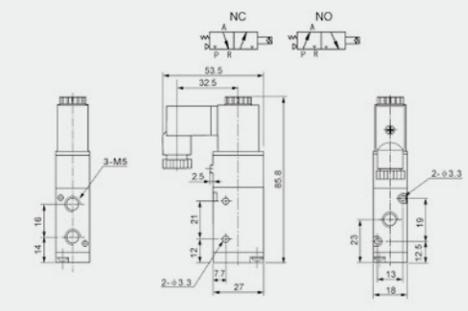
4A130-M5



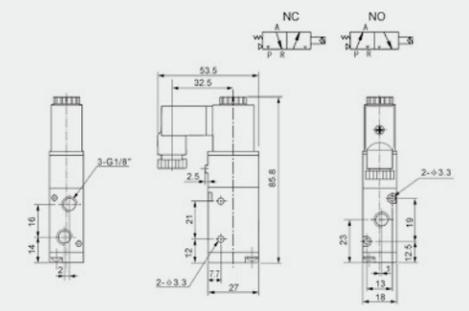
4A130-06



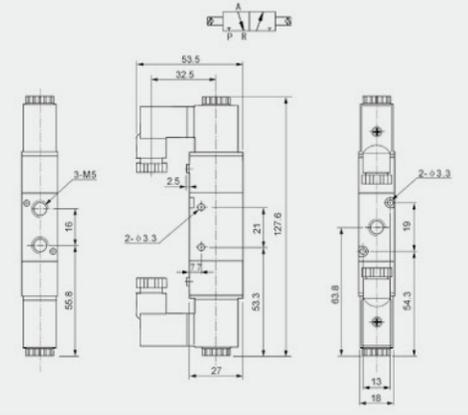
3V110-M5



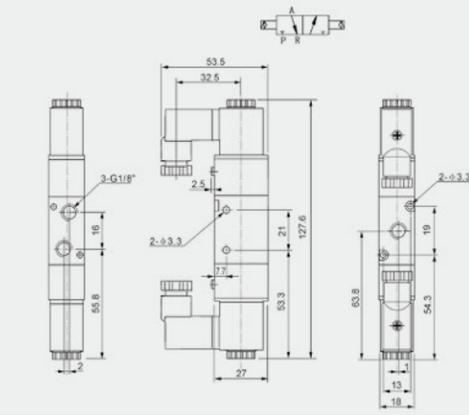
3V110-06



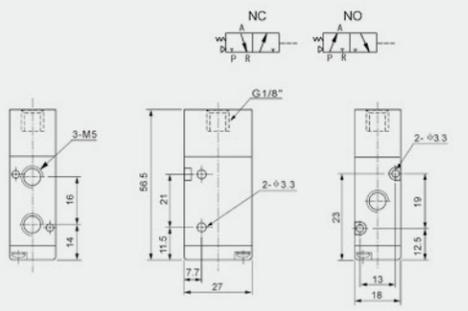
3V120-M5



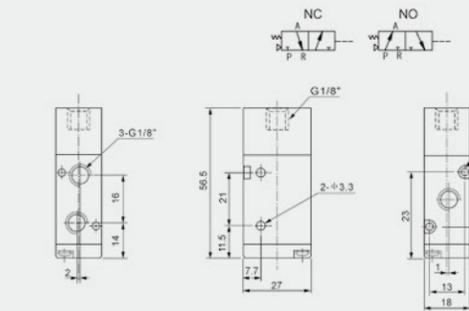
3V120-06



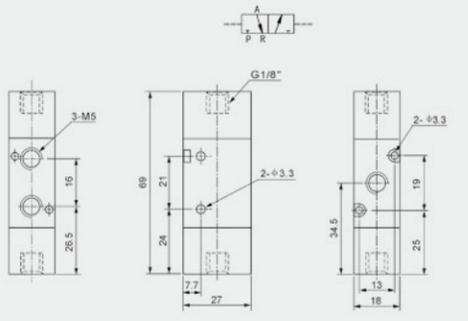
3A110-M5



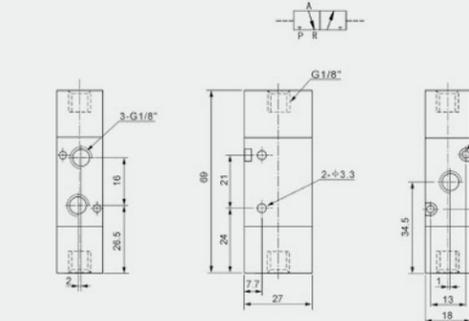
3A110-06



3A120-M5



3V120-06



➤ 4V200Series

4V200

low power consumption, exhaust for the pilot and main valve,
small size, large flow, good appearance, flexible, can be
integrated installation, high wear resistance and long life.



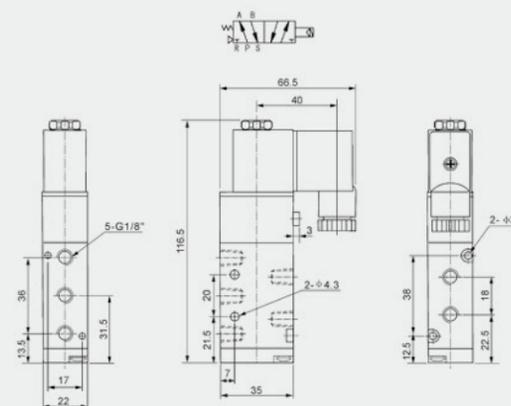
Ordering Code

4V	2	10	06	B	AC220V	W
Type 4V 5/2 or 5/3 way solenoid valve 4A 5/2 or 5/3 way pneumatic control valve 3V 3/2 way solenoid valve 3A 3/2 way pneumatic control valve	Series code 200 Series	Coil and position 10 single-coil double-position 20 double-coil double-position 30C double-coil three-position center close type 30E double-coil three-position center exhaust type 30P double-coil three-position center pressure type	Joint pipe bore 06 1/8" 08 1/4"	Connection type Blank Thread type B Namur	Standard voltage DC12V DC24V AC24V 50Hz/60Hz AC110V 50Hz/60Hz AC220V 50Hz/60Hz AC380V 50Hz/60Hz	Terminal Blank Black connector LD brown with LED connector LD1 white with LED connector W lead wire type

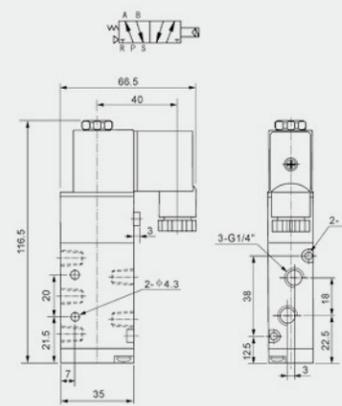
Specification

Model	4V210-06	4V220-06	4V230C-06	4V230E-06	4V230P-06	4V210-08	4V220-08	4V230C-08	4V230E-08	4V230P-08
Type	5/2		5/3			5/2		5/3		
Flow rate	14mm ² (Cv=0.78)		12mm ² (Cv=0.67)			16mm ² (Cv=0.89)		12mm ² (Cv=0.67)		
Model	3V210-06	3V220-06	3A210-06	3A220-06	3V210-08	3V220-08	3A210-08	3A220-08		
Type	3/2				3/2					
Flow rate	14mm ² (Cv=0.78)				16mm ² (Cv=0.89)					
Connection ports	Inlet = Outlet = Exhaust = G1/8"				Inlet = Outlet = G1/4" Exhaust = G1/8"					
Media	Clean air									
Working type	Pilot									
Working pressure	0.15 ~ 0.8MPa									
Max. pressure	1.2MPa									
Ambient temp.	-5 ~ 50°C									
Voltage tolerance	±10%									
Power	AC:4.5VA DC:3W									
Insulation class Protection class	F class. IP65									
Terminal	Flying Lead Or Din43650B PIN									
Frequency	5 cycles/s									
Response time	0.05s									

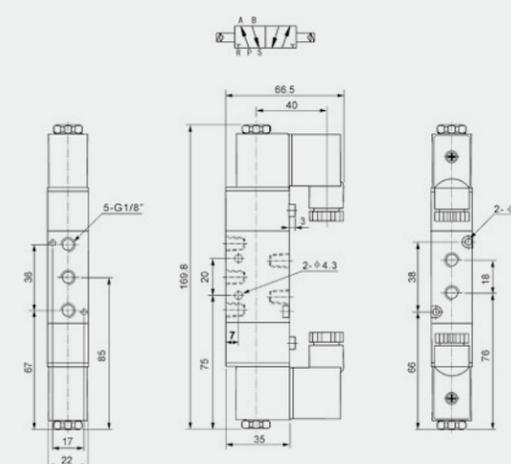
4V210-06



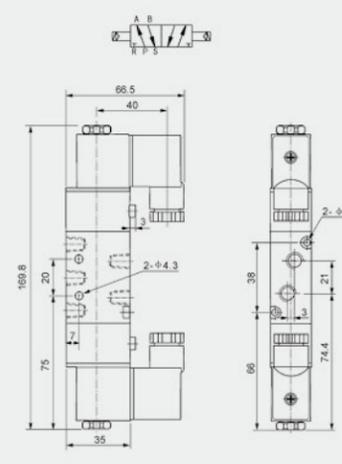
4V210-08



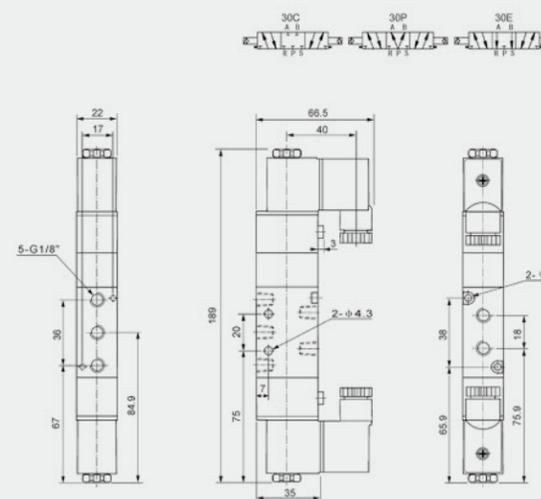
4V220-06



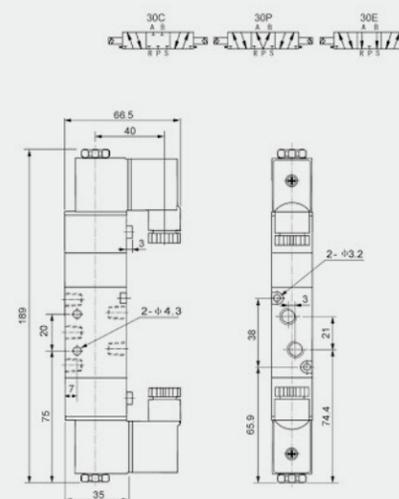
4V220-08



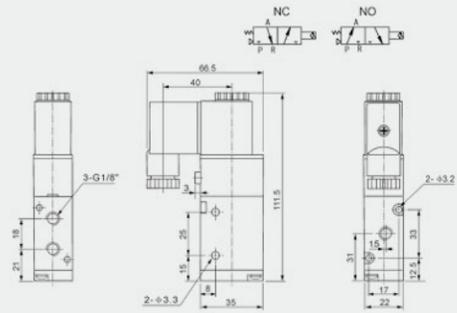
4V230-06



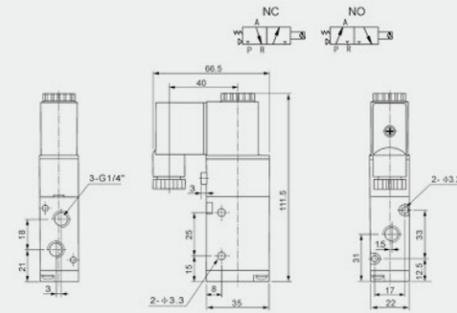
4V230-08



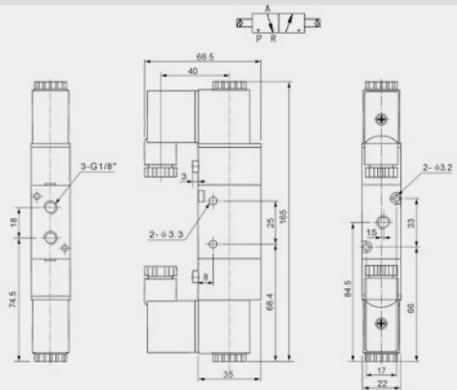
3V210-06



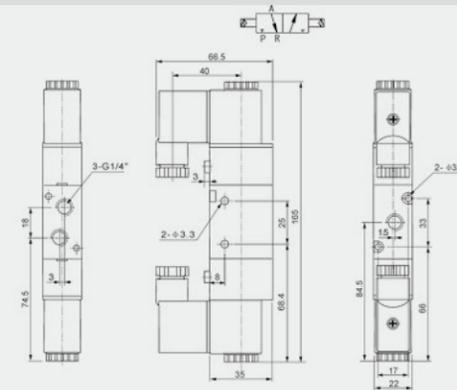
3V210-08



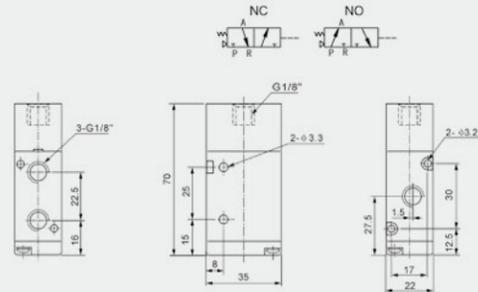
3V220-06



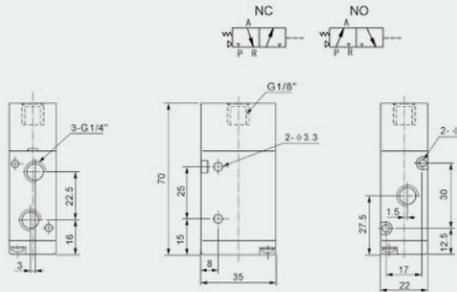
3V220-08



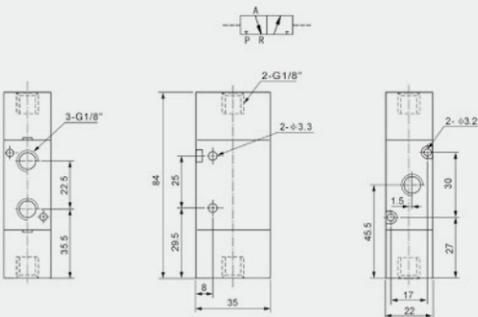
3A210-06



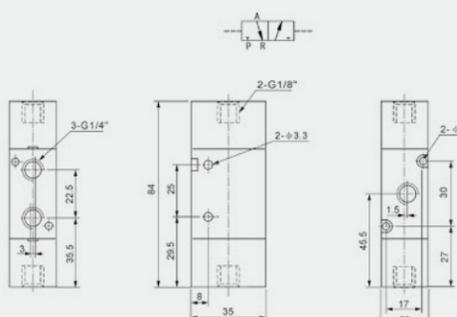
3A210-08



3A220-06



3A220-08



4V300Series

4V300

low power consumption, exhaust for the pilot and main valve, small size, large flow, good appearance, flexible, can be integrated installation, high wear resistance and long life.



Ordering Code

4V	3	10	06	B	AC220V	W
Type 4V 5/2 or 5/3 way solenoid valve 4A 5/2 or 5/3 way pneumatic control valve 3V 3/2 way solenoid valve 3A 3/2 way pneumatic control valve	Series code 300 Series	Coil and position 10 single-coil double-position 20 double-coil double-position 30C double-coil three-position center close type 30E double-coil three-position center exhaust type 30P double-coil three-position center pressure type	Joint pipe bore 08 1/4" 10 3/8"	Connection type Blank Thread type B Namur	Standard voltage DC12V DC24V AC24V 50Hz/60Hz AC110V 50Hz/60Hz AC220V 50Hz/60Hz AC380V 50Hz/60Hz	Terminal Blank Black connector LD brown with LED connector LD1 white with LED connector W lead wire type

Specification

Model	4V310-08	4V320-08	4V330C-08	4V330E-08	4V330P-08	4V310-10	4V320-10	4V330C-10	4V330E-10	4V330P-10	
	4A310-08	4A320-08	4A330C-08	4A330E-08	4A330P-08	4A310-10	4A320-10	4A330C-10	4A330E-10	4A330P-10	
Type	5/2			5/3			5/2			5/3	
Flow rate	25mm ² (Cv=1.40)			18mm ² (Cv=1.00)			30mm ² (Cv=1.68)			18mm ² (CV=1.0)	
Model	3V310-08	3V320-08	3A310-08	3A320-08	3V310-10	3V320-10	3A310-10	3A320-10			
Type	3/2					3/2					
Flow rate	25mm ² (Cv=1.40)					30mm ² (Cv=1.68)					
Connection ports	Inlet = Outlet = Exhaust = G1/4"					Inlet = Outlet = G3/8" Exhaust = G1/4"					
Media	Clean air										
Working type	Pilot										
Working pressure	0.15 ~ 0.8MPa										
Max. pressure	1.2MPa										
Ambient temp.	-5 ~ 50°C										
Voltage tolerance	±10%										
Power	AC:4.5VA DC:3W										
Insulation class Protection class	F class. IP65										
Terminal	Flying Lead Or Din43650B PIN										
Frequency	5 cycles/s										
Response time	0.05s										

➤ 4V400Series

4V400

low power consumption, exhaust for the pilot and main valve,
small size, large flow , good appearance, flexible, can be
integrated installation , high wear resistance and long life.



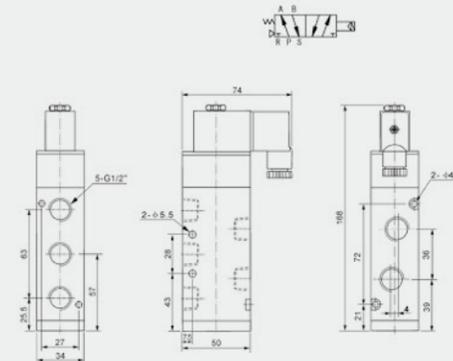
Ordering Code

4V	4	10	06	B	AC220V	W
Type	Series code	Coil and position	Joint pipe bore	Connection type	Standard voltage	Terminal
4V 5/2 or 5/3 way solenoid valve	400 Series	10 single-coil double-position 20 double-coil double-position	15 1/2"	Blank Thread type B Namur	DC12V DC24V AC24V 50Hz/60Hz AC110V 50Hz/60Hz AC220V 50Hz/60Hz AC380V 50Hz/60Hz	Blank Black connector LD brown with LED connector LD1 white with LED connector W lead wire type
4A 5/2 or 5/3 way pneumatic control valve	30C double-coil three-position center close type 30E double-coil three-position center exhaust type 30P double-coil three-position center pressure type					
3V 3/2 way solenoid valve						
3A 3/2 way pneumatic control valve						

Specification

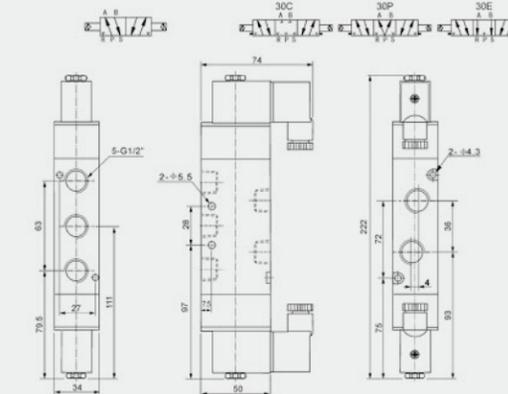
Model	4V410-15	4V420-15	4V430C-15	4V430E-15	4V430P-15
Type	5/2			5/2	
Flow rate	50mm ² (Cv=2.79)			30mm ² (Cv=1.68)	
Model	4A410-15	4A420-15	4A430C-15	4A430E-15	4A430P-15
Type	3/2				
Flow rate	50mm ² (Cv=2.79)				
Connection ports	Inlet = Outlet = Exhaust = G1/2"				
Media	Clean air				
Working type	Pilot				
Working pressure	0.15 ~ 0.8MPa				
Max. pressure	1.2MPa				
Ambient temp.	-5 ~ 50°C				
Voltage tolerance	±10%				
Power	AC:4.5VA DC:3W				
Insulation class Protection class	F class. IP65				
Terminal	Flying Lead Or Din43650B PIN				
Frequency	5 cycles/s				
Response time	0.05s				

4V410-15

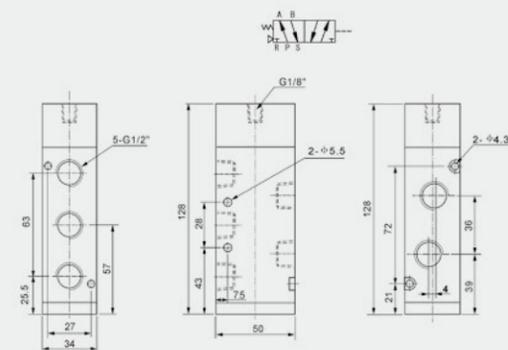


4V420-15

4V430-15

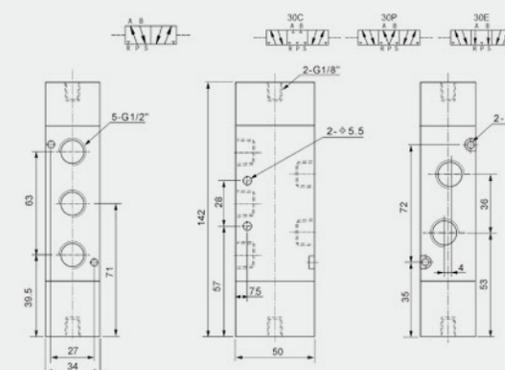


4A410-15

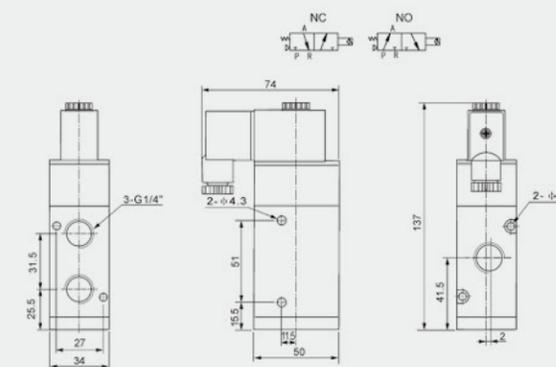


4A420-15

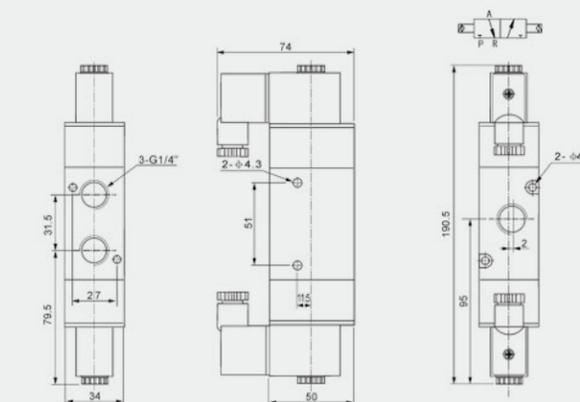
4A430-15



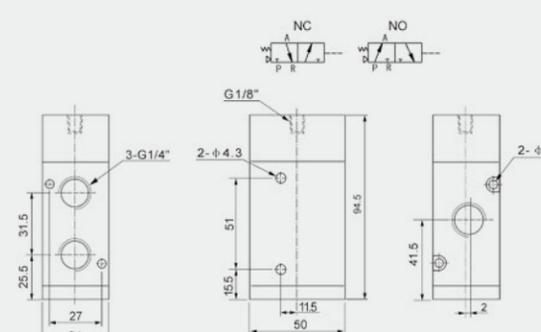
3A410-15



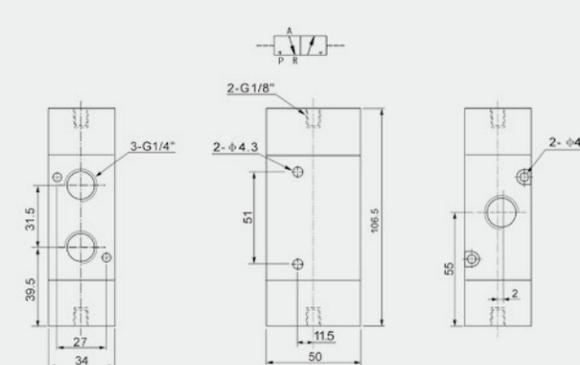
3V420-15



3A410-15



3A420-15



➤ 3V1Series

3V1

low power consumption, exhaust for the pilot and main valve, small size, large flow, good appearance, flexible, can be integrated installation, high wear resistance and long life.



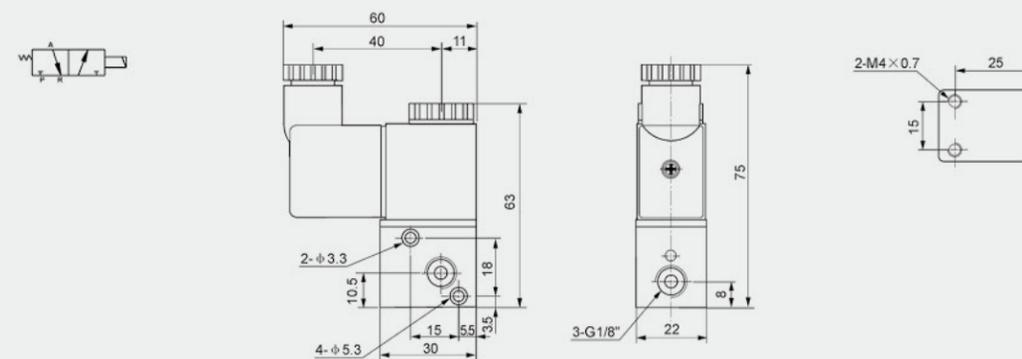
Ordering Code

3V	1	06	B	-	AC220V	-	W
Type 3V 3/2 solenoid valve	Series code 100 series	Connection ports M5 M5 06 1/8"	Connection type Blank Thread type B namur type		Standard voltage DC12V DC24V AC24V 50Hz/60Hz AC110V 50Hz/60Hz AC220V 50Hz/60Hz AC380V 50Hz/60Hz		Terminal Blank Black connector LD brown with LED connector LD1 white with LED connector W lead wire type

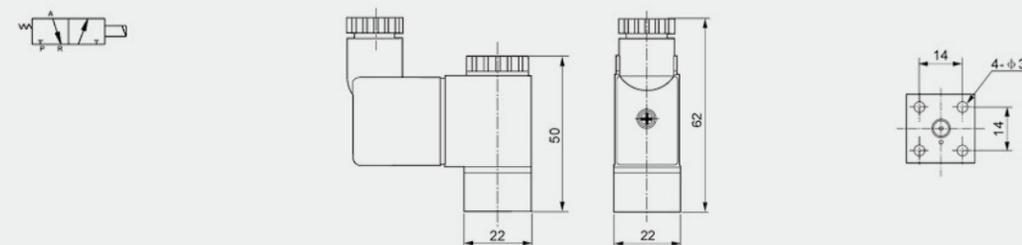
Specification

Model	3V1-M5	3V1-06
Medium	Clean air	
Working type	Direct action	
Model	M5	1/8"
Ambient temp.	-10~60°C	
Working Temp	-5~60°C	
Orifice	1.0mm	
Lubrication	No	
Pressure	0~0.8MPa	
Max. pressure	1.2MPa	
Power	AC 4.5VA DC 3W	
Protection class	IP65	
Cable Entry	Flying Lead Or Din43650C PIN	
Valve body material	Aluminum	
Frequency	10 cycles/s	
Insulation class	F class	
Voltage tolerance	±10%	
Response time	0.05s	

3V1-06



3V1-06B



➤ 2W(S) (large orifice) Two-Position Two-Way Solenoid Valve

R 2 W (S)(large orifice)

Various material for you chose,
Reasonable design , Reliable quality



Ordering Code

R	-	2W	-	160	-	15	-	K	-	<input type="checkbox"/>	-	<input type="checkbox"/>
RFS product		Valve body 2W Brass 2S stainless steel		Orifice 160 16mm 200 20mm 250 25mm 350 35mm 400 40mm 500 50mm		Connection port 10 (15) 3/8" 1/2" 20 3/4" 25 1" 35 1 1/4" 40 1 1/2" 50 2"		Initial state Blank normal close K normal open		Standard voltage DC12V DC24V AC24V AC36V AC110V AC220V		Seal code Blank NBR H VITON E EPDM

Parameters

Model	Media	Working type	Pattern	Orifice (mm)	Cv Value	Connection ports	Fluid viscosity	Working pressure (MPa)	Max. pressure (MPa)	Working temp (°C)	Rated voltage	Power	Valve body material	Seal material
R2W160-10	Air Water Oil	Direct action	Normally close	16	4.8	3/8"	< 20CST	0-0.7	1.0	-5-80	DC12-24V AC24V-380V ±10%	DC23.4W AC26VA DC40W AC50VA	Brass Stainless steel	NBR EPDM VITON
R2W160-15				16	4.8	1/2"								
R2W200-20				20	7.6	3/4"								
R2W250-25				25	12	1"								
R2W350-35				35	24	1 1/4"								
R2W400-40				40	29	1 1/2"								
R2W500-50	50	48	2"											

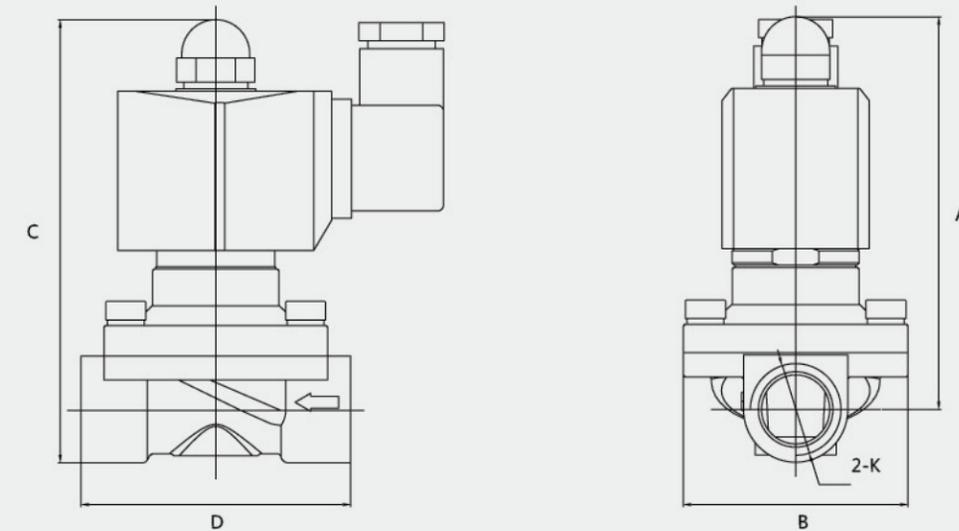
Overall Dimension

Speciality

- Direct acting, diaphragm structure, can be work at zero pressure, expanding the using area.
- Plate diaphragm structure, high reliability, long life.
- Valve body can be made from brass, stainless steel.
- plastic encapsulating coil , be able to use under numerous environment.



Overall Dimension



Model	A	B	C	D	K
R2W160-10	97	57	110	66	G3/8
R2W160-15	97	57	110	66	G1/2
R2W200-20	106	57	115	70	G3/4
R2W250-25	106	73	122	99	G1
R2W350-35	136	90.5	167	124	G1-1/4
R2W400-40	136	90.5	167	124	G1-1/2
R2W500-50	151	124	186	164	G2

➤ 2L series Two-position Two-way Solenoid valve

2L



Ordering Code

2L	-	170	-	15	-	
2L Steam Valve		Orifice		Connection port		Standard Voltage
		170 17mm		10 3/8"		AC110V
		200 20mm		15 1/2"		AC220V
		300 30mm		20 3/4"		AC380V
		500 50mm		25 1"		
				35 1 1/4"		
				40 1 1/2"		
				50 2"		

Parameters

Model	Media	Working type	Pattern	Orifice (mm)	Cv Value	Connection ports	Fluid viscosity	Working pressure (MPa)	Max. pressure (MPa)	Working temp (°C)	Rated voltage	Power	Valve body material	Seal material
2L170-10	Air Water Oil	Piston Type	Normally close	17	4.8	3/8"	< 20CST	0.1~1.5	2.5	-5-180	DC12-24V AC24V-380V ±10%	DC40W AC50VA	Brass	PTFE
2L170-15				17	4.8	1/2"								
2L170-20				17	4.8	3/4"								
2L200-25				22	12	1"								
2L300-35				30	20	1 1/4"								
2L300-40				30	20	1 1/2"								
2L500-50				50	48	2"								

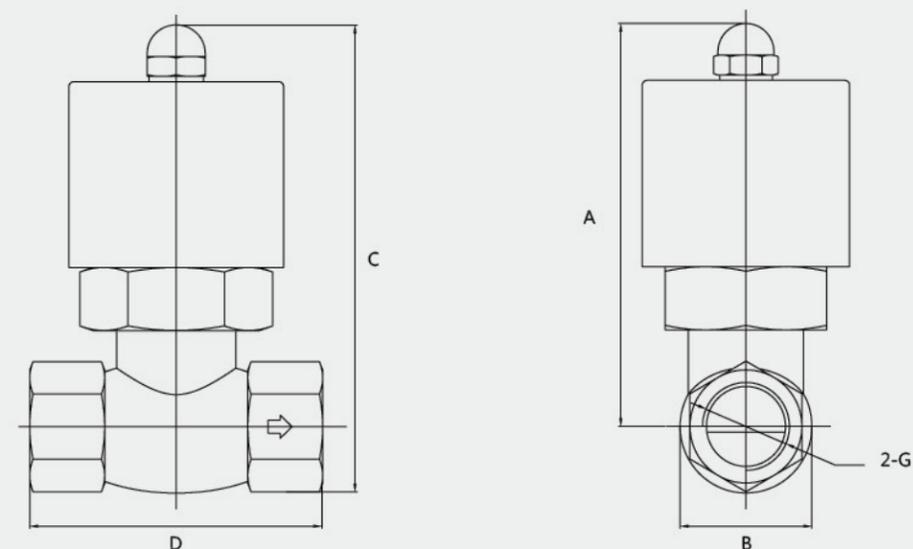
Overall Dimension

Speciality

- Using PTFE sealing, it is suitable for high temperature fluid flow.
- Top-centre structure, automatic sealing compensation extended the service life of valve
- Solenoid magnetic field design can make this valve reach higher pressure
- The balance of piston gap design enhance the reliable of valve in high temperature.



Overall Dimension



Model	A	B	C	D	G
2L170-10	125	42	146	82	3/8"
2L170-15	125	42	146	82	1/2"
2L170-20	125	42	146	82	3/4"
2L200-25	136	52	162	90.5	1"
2L300-35	148	74	185	111	1 1/4"
2L300-40	148	74	185	111	1 1/2"
2L500-50	176	94.5	223	163	2"

➤ R2W(S)Series Two-Position Two-Way Solenoid Valve

R2W(S)

The material of Valve is optional,
reasonable design, reliable quality



Ordering Code

R	-	2W	-	025	-	06	-	NO	-		-	
RFS product		Material 2W brass 2S stainless steel		Orifice 012 1.2mm 020 2.0mm 025 2.5mm 040 4.0mm		Connection port 06 1/8" 08 1/4" 10 3/8"		Initial State Blank Normal Close K Normal Open		Standard Voltage DC12V DC24V AC24V AC36V AC110V AC220V AC380V		Seal Code Blank NBR V VITON E EPDM

Parameters

Model	Media	Working type	Pattern	Orifice (mm)	Cv Value	Connection ports	Fluid viscosity	Working pressure (MPa)	Max. pressure (MPa)	Working temp (°C)	Rated voltage	Valve body material	Seal material
R2W025-06	Air Water Oil	Direct action	Normally close	2.5	0.23	1/8"	< 20CST	Air	1.0	-5~80	DC12-24V	Brass	NBR VITON EPDM
R2W025-08				2.5	0.23	1/4"		Water	1.0				
R2W040-10				4	0.60	3/8"		Gas	1.0				
R2W012-06				1.2	0.05	1/8"		Air	3.5				
R2W012-08				1.2	0.05	1/4"		Water	3.5				
R2W020-10				2	0.15	3/8"		Oil	3.5				

Overall Dimension

Speciality

2W series is direct acting type two-position two-way solenoid valve, which can work at Zero pressure with good shape and large flow. It is a common components used for industrial pipes.

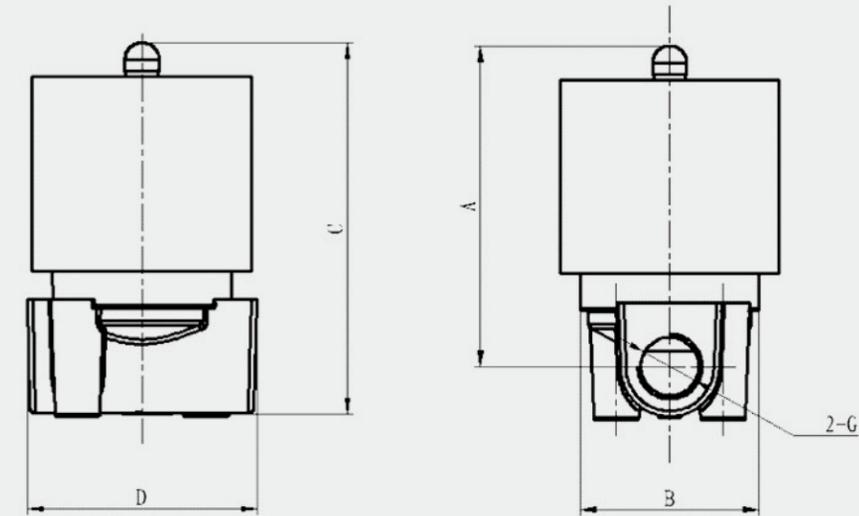
Connection port : G1/8" ~G3/8"

Working pressure : 0~0.7MPa

Operating Temperature : -5~80°C



Overall Dimension



Model	A	B	C	D	G
R2W025-06	66	30	75	40.5	G1/8"
R2W025-08	66	30	75	40.5	G1/4"
R2W040-10	67	32	76	55	G3/8"
R2W012-06	66	30.3	75	40.5	G1/8"
R2W012-08	66	30.3	75	40.5	G1/4"
R2W012-10	74	32.2	85.5	52.5	G3/8"

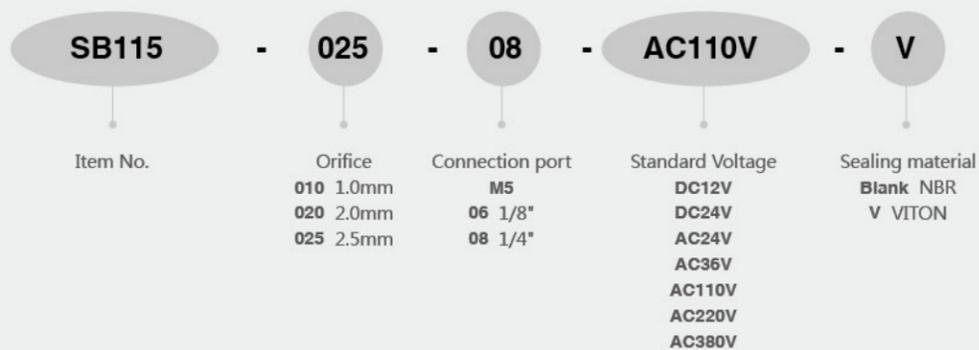
SB115 Series Two-position Two-way Solenoid valve

SB115

Small dimension, fast action and low noise.



Ordering Code



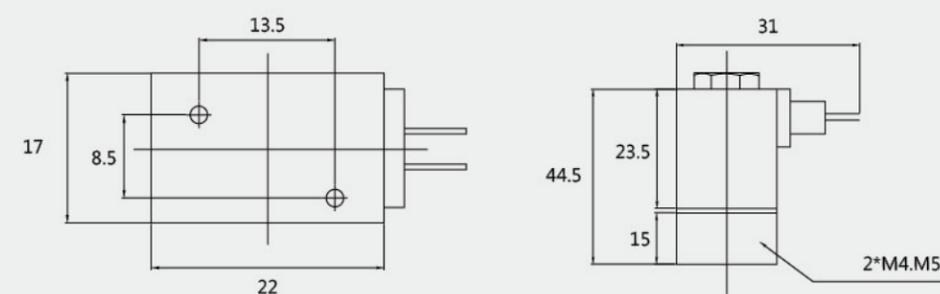
Specification

Model	SB115-010-M5	SB115-020-06	SB115-025-08
Media	Air / Water / Oil		
VOLTAGE	Direct action		
Pattern	Normally close		
Orifice	1.0mm	2.0mm	2.5mm
Cv Value	0.10	0.23	
Connection ports	M5	1/8"	1/4"
Fluid viscosity	< 20CST		
Working pressure	0~0.8MPa	0~1.6MPa	0~0.7MPa
Max. pressure	1.2MPa	2.4MPa	1.2MPa
Working temp	DC12-24V/AC24V-380V ±10%		
Protection class	IP65		
Power consumption	AC :6.5VA DC: 6W		
Insulation class	F class		
Valve body material	Aluminum / Brass / Stainless steel		
Seal material	NBR or VITON		
Response time	0.05S		

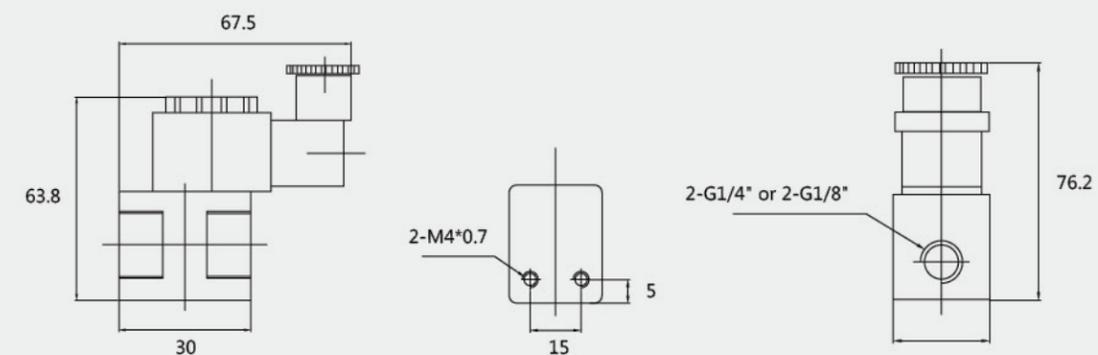
Overall Dimension



SB115-010



SB115-025



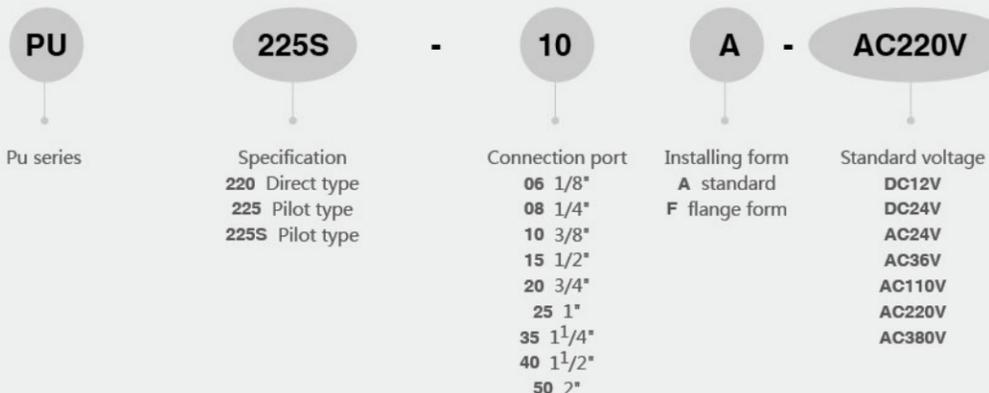
➤ PU series Two-Position Two-way Solenoid valve

PU

Compact and good appearance, small dimension
It can work at low pressure
Coil made from thermosetting plastic encapsulating



Ordering Code



Parameters

Model	Media	Working type	Pattern	Orifice (mm)	Cv Value	Connection ports	Medium viscosity	Working pressure	Max. pressure	Rated voltage	Power	Working temp
PU225-10A	Air Water Oil	Direct Action / Pilot Type	Normally close	13	4.5	3/8"	< 50CST	0.5 ~10bar	12bar	DC12- 24V AC24V- 380V ±10%	DC22W AC27VA	-5 ~ 80°C
PU225-15A				13	4.5	1/2"						
PU225-20A				25	12	3/4"						
PU225-25A				25	12	1"						
PU225-35A				38	22	1 1/4"						
PU225-40A				38	30	1 1/2"						
PU225-50A				50	48	2"						

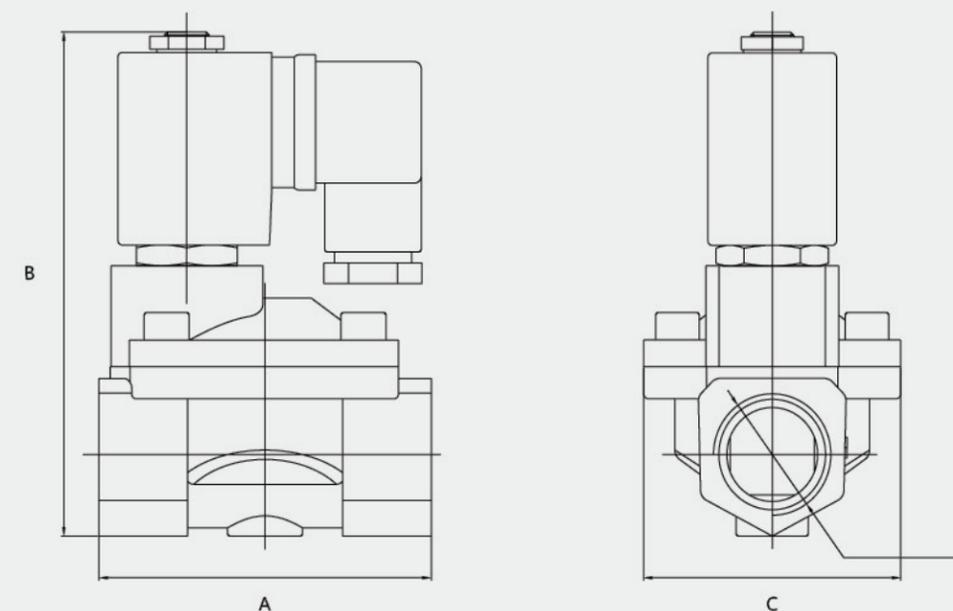
Overall Dimension

Speciality

- Compact and good appearance, small dimension
- Direct acting, diaphragm structure, it can work at low pressure
- Coil made from thermosetting plastic encapsulating, the protection class IP65, the temperature class can reach H Class.



Overall Dimension



Model	A	B	C	G
PU225-10A	66.5	106.5	48.0	G3/8"
PU225-15A	66.5	106.5	48.0	G1/2"
PU225-20A	96.0	126.0	70.0	G3/4"
PU225-25A	96.0	126.0	70.0	G1"
PU225-35A	131.0	145.5	96.0	G1 1/4"
PU225-40A	131.0	145.5	96.0	G1 1/2"
PU225-50A	160	160.0	112.0	G2"

SB116 Series Two-Position Two-way Solenoid valve

SB116

No-water hammer impact ,low noise, stable working, large flow, long service life.



Ordering Code



SB116-2A

Specification

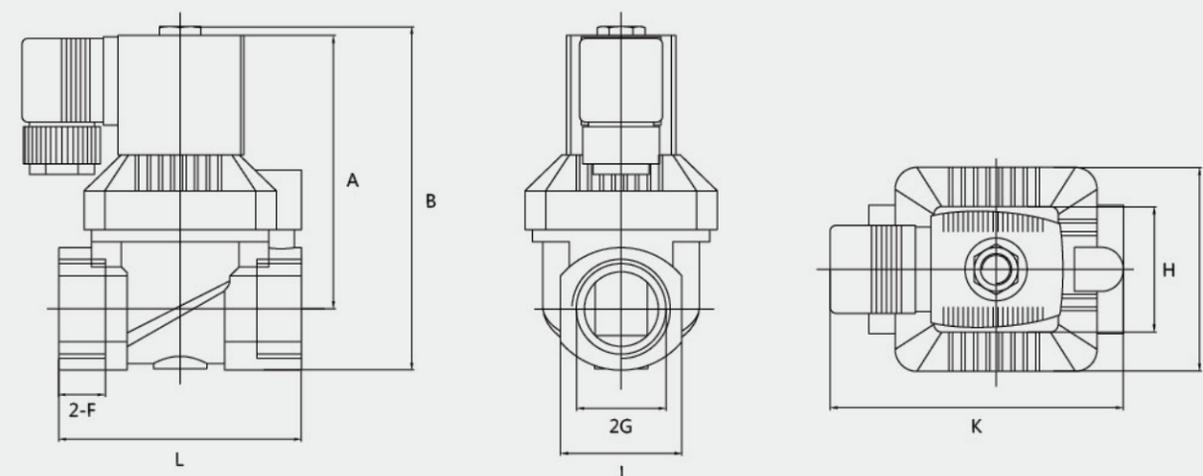
Model	Orifice	Connection ports	Working pressure	Ambient Temp.	Medium Temp.	Kv value (m3/h)	Power consumption		Response Frequency	Voltage
							AC(VA)	DC(W)		
SB116-2A1008	10mm	G1/4	0~1.0MPa	-10~+55°C	-10~+90°C	1.4	20	13	≥ 1Hz	DC12V DC24V AC24V AC36V AC110V AC220V AC380V ±10%
SB116-2A1010	10mm	G3/8				1.4	20	13	≥ 1Hz	
SB116-2A1015	10mm	G1/2				1.4	20	13	≥ 1Hz	
SB116-2A1415	14mm	G1/2				2.52	20	13	≥ 0.5Hz	
SB116-2A1420	14mm	G3/4				2.52	20	13	≥ 0.5Hz	
SB116-2A2020	20mm	G3/4				5.0	20	13	≥ 0.5Hz	
SB116-2A2025	20mm	G1				5.0	20	13	≥ 0.5Hz	

Speciality

- Working at Zero Pressure and used below 90°C
- It can be used in gas,water,oil,weak acid& Alkali.
- Low noise, No-water hammer impact ,low noise, stable working, large flow, long service life.
- Change to Ex-proof & suitable armature, it can used as Ex-proof valve. The coil made from thermosetting plastic encapsulating, the protection class IP65.Plug confirms with ISO standard.



Overall Dimension



Model	G	C	F	L	J	A	B	H	K
SB116-2A1008	G1/4"	38	13	50	26	71	85	36	76
SB116-2A1010	G3/8"	38	13	50	26	71	85	36	76
SB116-2A1015	G1/2"	38	13	50	26	71	85	36	76
SB116-2A1415	G1/2"	44	14	66	26	77	91	36	76
SB116-2A1420	G3/4"	44	16	60	31	80	96	36	76
SB116-2A2020	G3/4"	65	20	83	41	111	131	36	88
SB116-2A2025	G1"	65	20	83	41	111	131	36	88

SB116-2B

Specification

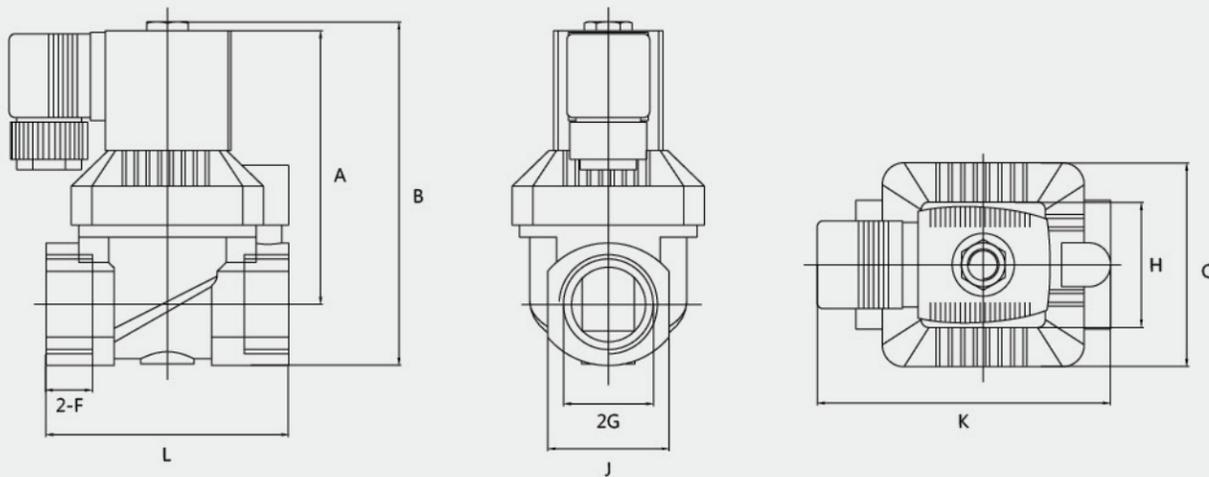
Model	Orifice	Connection ports	Working pressure	Ambient Temp.	Medium Temp.	Kv value (m3/h)	Power consumption		Response Frequency	Voltage
							AC(VA)	DC(W)		
SB116-2B1008	10mm	G1/4	0.02 ~1.0MPa	-10~+55°C	-10~+90°C	1.4	20	13	≥ 1Hz	DC12V DC24V AC24V AC36V AC110V AC220V AC380V ±10%
SB116-2B1010	10mm	G3/8				1.4	20	13	≥ 1Hz	
SB116-2B1015	10mm	G1/2				1.4	20	13	≥ 1Hz	
SB116-2B1415	14mm	G1/2				2.52	20	13	≥ 0.5Hz	
SB116-2B1420	14mm	G3/4				2.52	20	13	≥ 0.5Hz	
SB116-2B2020	20mm	G3/4				5	20	13	≥ 0.5Hz	
SB116-2B2025	20mm	G1				5	20	13	≥ 0.5Hz	
SB116-2B4035	40mm	G1 ¹ / ₄				18	20	13	≥ 0.33Hz	
SB116-2B4040	40mm	G1 ¹ / ₂				18	20	13	≥ 0.33Hz	
SB116-2B5050	50mm	G2				28	20	13	≥ 0.33Hz	

Speciality

- It can be used in gas,water,oil,weak acid& Alkali.
- Low noise, No-water hammer impact ,low noise, stable working, large flow, long service life.
- Coil model:BD-A-3
- Change to Ex-proof & suitable armature, it can used as Ex-proof valve. The coil made from thermosetting plastic encapsulating, the protection class IP65.Plug confirms with ISO standard.



Overall Dimension



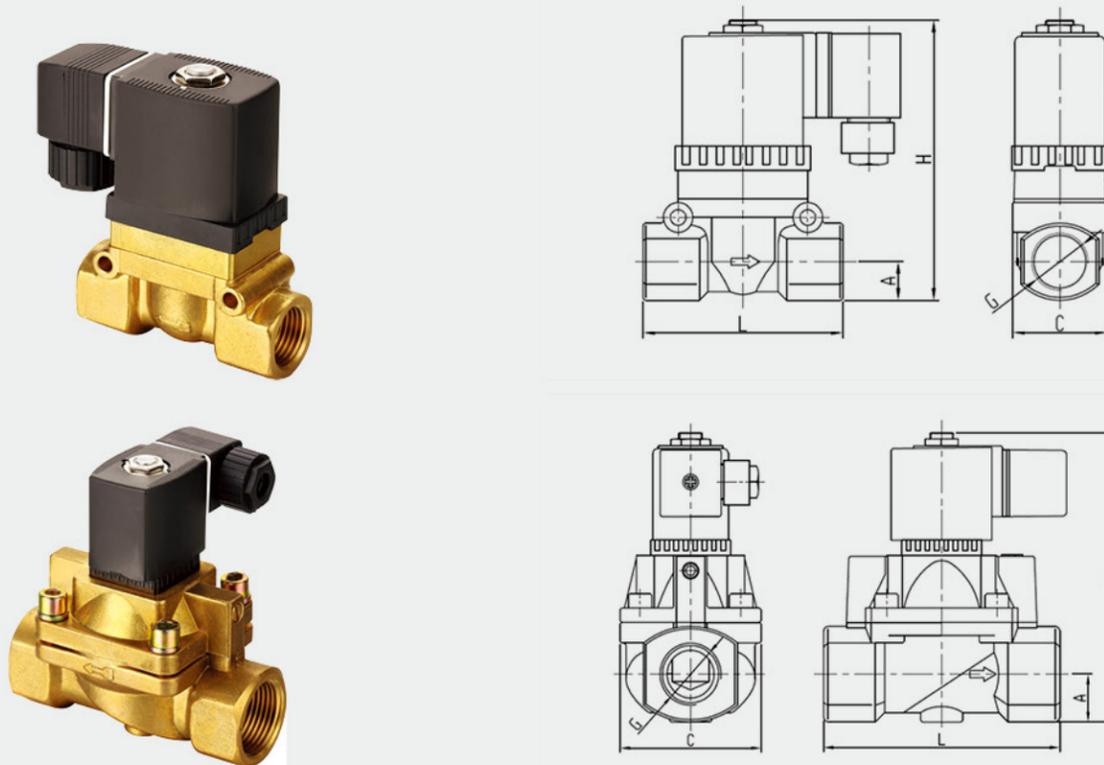
Model	G	C	2-F	L	J	A	B	H	K
SB116-2B1008	G1/4"	38	15	50	27	72.5	86	36	76
SB116-2B1010	G3/8"	38	15	50	27	72.5	86	36	76
SB116-2B1015	G1/2"	38	15	50	27	72.5	86	36	76
SB116-2B1415	G1/2"	44	16	67	27	78.5	92	36	76
SB116-2B1420	G3/4"	44	16	58	32	79	95	36	76
SB116-2B2020	G3/4"	66	18	83	40	100	120	36	76
SB116-2B2025	G1"	66	18	83	40	100	120	36	76
SB116-2B4035	G1 ¹ / ₄ "	92	25	135	57	109.5	138	36	76
SB116-2B4040	G1 ¹ / ₂ "	92	25	135	57	109.5	138	36	76
SB116-2B5050	G2"	109	28	160	68	122	156	36	76

SB116-4

Specification

Model	Orifice	Connection ports	Working pressure	Ambient Temp.	Medium Temp.	Kv value (m3/h)	Power consumption		Response Frequency	Voltage
							AC(VA)	DC(W)		
SB116-41308	13mm	G1/4"	0.1 ~1.6MPa	-20~+55°C	0~+180°C	3.6	20	13	≥ 1Hz	DC12V DC24V AC24V AC36V AC110V AC220V AC380V ±10%
SB116-41310	13mm	G3/8"				3.6	20	13	≥ 1Hz	
SB116-41315	13mm	G1/2"				3.6	20	13	≥ 1Hz	
SB116-42520	25mm	G3/4"				11	20	13	≥ 0.5Hz	
SB116-42525	25mm	G1"				11	20	13	≥ 0.5Hz	

Overall Dimension



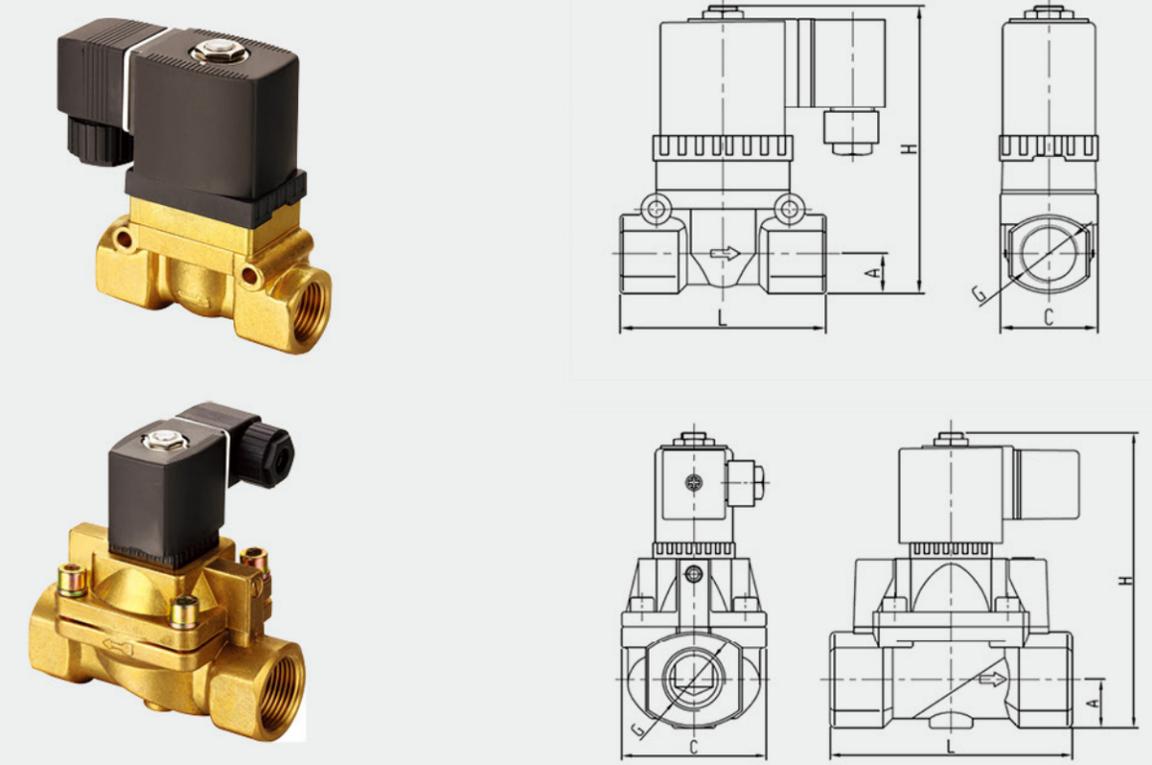
Model	G	K	L	B	A
SB116-41308	G1/4"	33.5	72	98	13
SB116-41310	G3/8"	33.5	72	98	13
SB116-41315	G1/2"	33.5	72	98	13
SB116-42520	G3/4"	60	100	120	20
SB116-42525	G1"	60	100	120	20

SB116-5

Specification

Model	Orifice	Connection ports	Working pressure	Ambient Temp.	Medium Temp.	Kv value (m3/h)	Power consumption		Response Frequency	Voltage
							AC(VA)	DC(W)		
SB116-51308	13mm	G1/4"	0.1 ~4.0MPa	-20~+55°C	0~+90°C	2.52	20	13	≥ 1Hz	DC12V DC24V AC24V AC36V AC110V AC220V AC380V ±10%
SB116-51310	13mm	G3/8"				2.52	20	13	≥ 1Hz	
SB116-51315	13mm	G1/2"				2.52	20	13	≥ 1Hz	
SB116-52520	25mm	G3/4"				5.0	20	13	≥ 0.5Hz	
SB116-52525	25mm	G1"				8.5	20	13	≥ 0.5Hz	

Overall Dimension



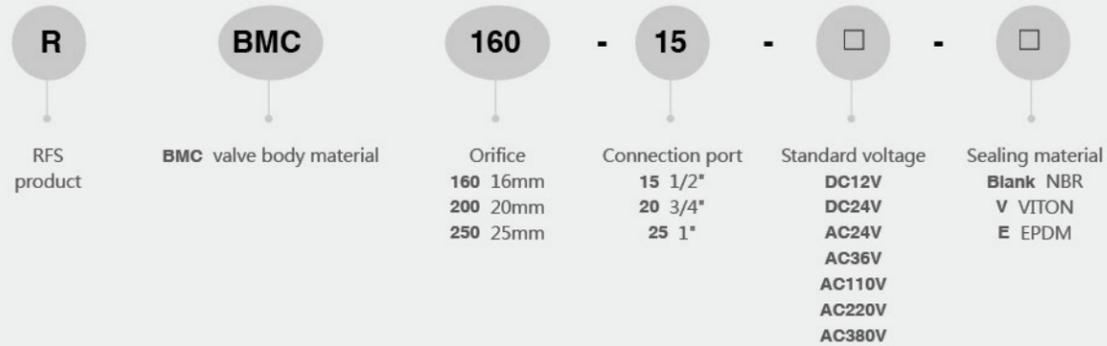
Model	G	K	L	B	A
SB116-51308	G1/4"	33.5	72	85	13
SB116-51310	G3/8"	33.5	72	85	13
SB116-51315	G1/2"	33.5	72	85	13
SB116-52520	G3/4"	60	100	120	20
SB116-52525	G1"	60	100	120	20

➤ RBMC diaphragm Solenoid valve

RBMC



Ordering Code



Specification

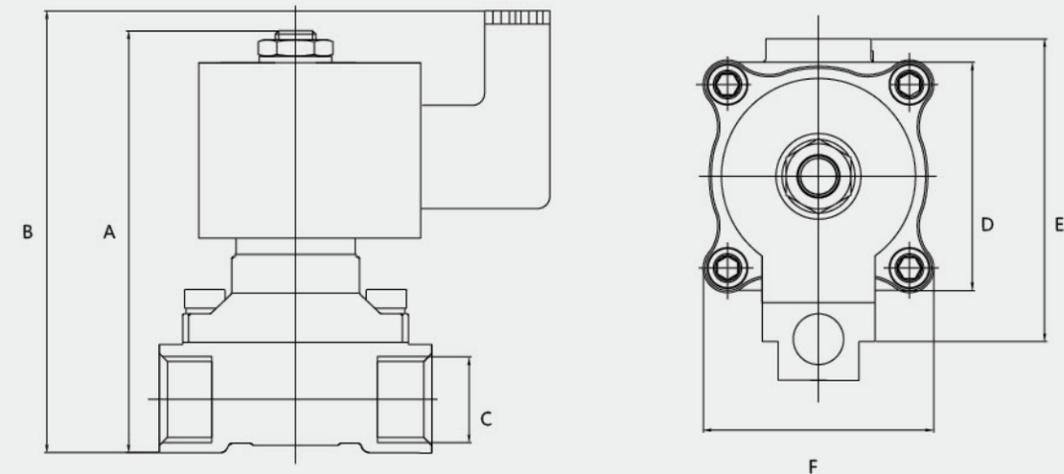
Model	RBMC-160-15	RBMC-200-20	RBMC-250-25
Media	Air / Water / Oil		
Working type	Direct action		
Pattern	Normally close		
Orifice	16mm	20mm	25mm
Connection ports	G1/2" G3/4" G1"		
Working pressure	0~0.7MPa		
Medium viscosity	< 20CST		
Working temp	-5~80°C		
Voltage	DC12-24V/AC24V-380V ±10%		
Power	AC28VA DC20W		
Max. pressure	1.2MPa		
Valve body material	BMC		
Seal material	NBR / EPDM or VITON		

Speciality

- Direct-acting, diaphragm structure, it can work at Zero Pressure.
- Plate type diaphragm structure, it is reliable of starting and off.
- Valve body material: BMC
- Choosing thermosetting plastic encapsulating coil which make the valve used in different kinds of environment



Overall Dimension



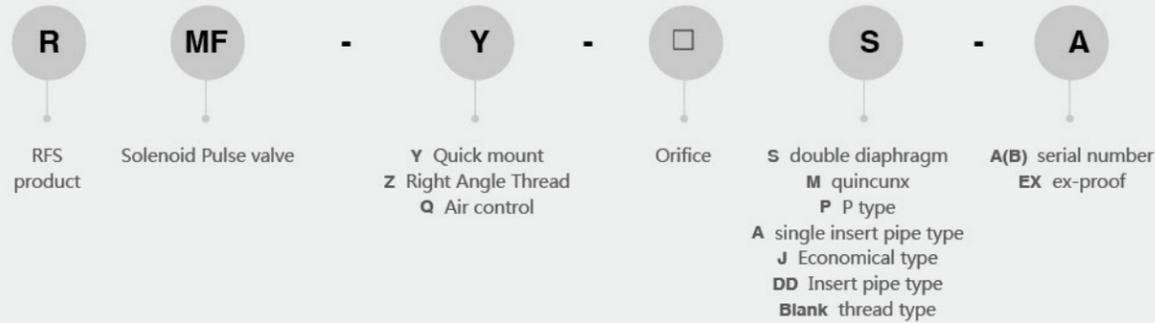
Model	RBMC-15	RBMC-20	RBMC-25
A	115mm	115mm	124mm
B	118mm	118mm	127mm
C	G1/2"	G3/4"	G1"
D	67mm	67mm	74mm
E	80mm	80mm	103mm
F	64mm	64mm	74.5mm

➤ Right Angle Pulse Jet Valve

- Introduction of advanced international technology and make some improvements
- Pulse Valve used for controlling the compressed air of dust remover filter system
- The key components adopt advanced material
- Pneumatic control type, solenoid control type and Ex-proof solenoid control type for optional
- Female thread connection port, it is easy for installing



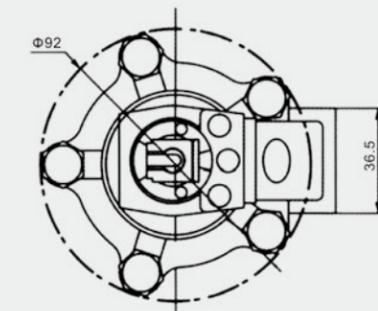
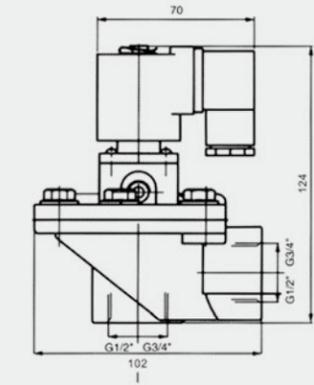
Ordering Code



Parameters

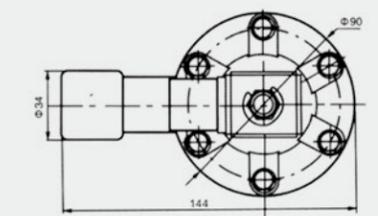
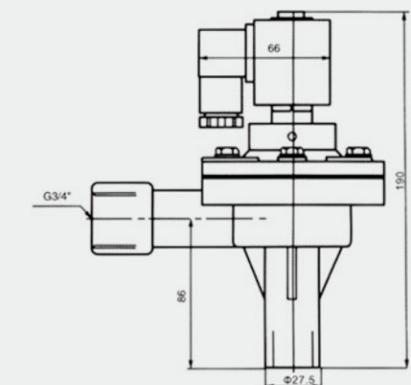
Model	Working pressure	Ambient Temp.	Relative Humidity	Media	Voltage	Power	Diaphragm Life	Orifice	Connection ports
RMF-Z-15M	0.3 ~ 0.8MPa	-5~55° C	< 85%	Clean Air	AC110V AC220V DC24V ±10%	DC20W AC25VA	Over one Million cycles	Φ15mm	G1/2"
RMF-Z-20M								Φ20mm	G3/4"
RMF-Z-20J								Φ20mm	G3/4"
RMF-Z-25J								Φ25mm	G1"
RMF-Z-20A								Φ20mm	G3/4"
RMF-Z-20P								Φ20mm	G3/4"
RMF-Z-25P								Φ25mm	G1"
RMF-Z-20								Φ20mm	G3/4"
RMF-Z-25								Φ25mm	G1
RMF-Z-35P								Φ35mm	G1 ¹ / ₂ "
RMF-Z-40S								Φ40mm	G1 ¹ / ₂ "
RMF-Z-45P								Φ45mm	G1 ¹ / ₂ "
RMF-Z-50S								Φ50mm	G2"
RMF-Z-50S-A								Φ50mm	G2"
RMF-Z-62S								Φ62mm	G2 ¹ / ₂ "
RMF-Z-62S-A								Φ62mm	G2 ¹ / ₂ "
RMF-Z-76S								Φ76mm	G3"
RMF-25DD								Φ25mm	Φ35
RMF-45DD								Φ40mm	Φ50

Right Angle Solenoid Pulse Valve



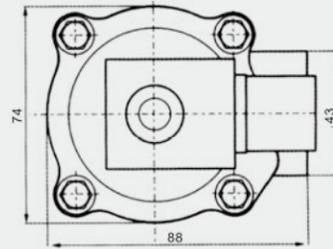
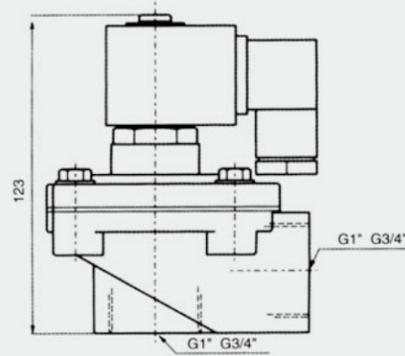
Model	RMF-Z-15M	RMF-Z-20M
Working-pressure	0.3 ~ 0.8MPa	
Ambient Temperature	-5 ~ 55°C	
Relative Humidity	< 85%	
Working Medium	Clean Air	
Voltage	AC110V / AC220V / DC24V	
Diaphragm Life	Over One Million Cycles	
Orifice	φ 15	φ 20
Connection Port	G1/8"	G3/4"

Right Angle Solenoid Pulse Valve



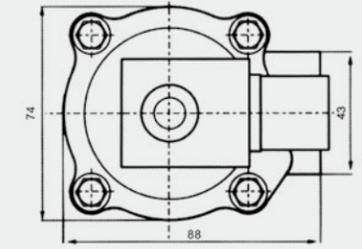
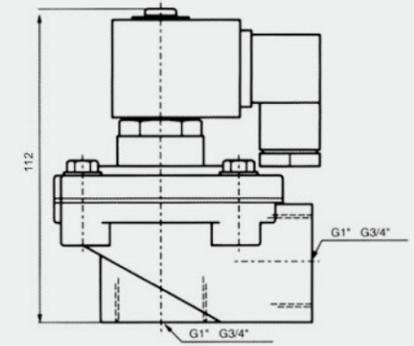
Model	RMF-Z-20A
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	φ 20
Connection Port	G3/4"

Right Angle Solenoid Pulse Valve



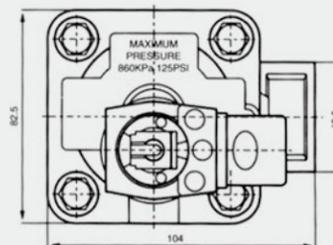
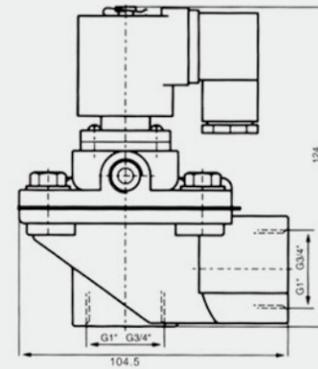
Model	RMF-Z-20J	RMF-Z-25J
Working-pressure	0.3 ~ 0.8MPa	
Ambient Temperature	-5 ~ 55°C	
Relative Humidity	< 85%	
Working Medium	Clean Air	
Voltage	AC110V / AC220V / DC24V	
Diaphragm Life	Over One Million Cycles	
Orifice	φ 20	φ 25
Connection Port	G3/4"	G1"

Right Angle Solenoid Pulse Valve



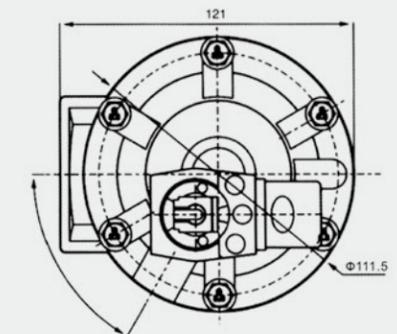
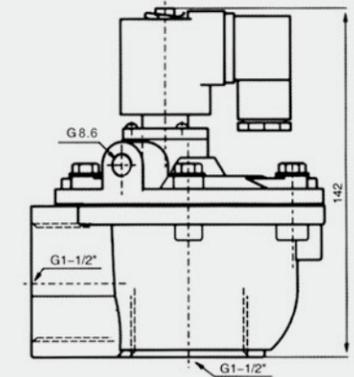
Model	RMF-Z-25	RMF-Z-20
Working-pressure	0.3 ~ 0.8MPa	
Ambient Temperature	-5 ~ 55°C	
Relative Humidity	< 85%	
Working Medium	Clean Air	
Voltage	AC110V / AC220V / DC24V	
Diaphragm Life	Over One Million Cycles	
Orifice	φ 25	φ 20
Connection Port	G1"	G3/4"

Right Angle Solenoid Pulse Valve



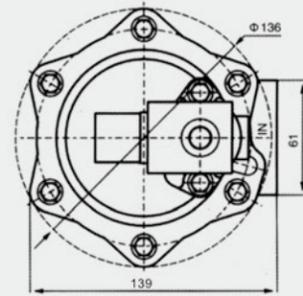
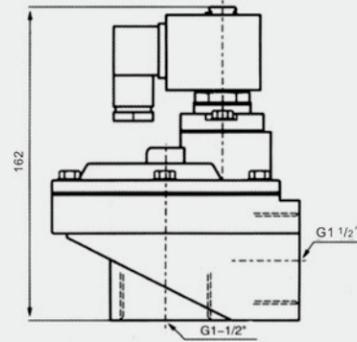
Model	RMF-Z-25P	RMF-Z-20P
Working-pressure	0.3 ~ 0.8MPa	
Ambient Temperature	-5 ~ 55°C	
Relative Humidity	< 85%	
Working Medium	Clean Air	
Voltage	AC110V / AC220V / DC24V	
Diaphragm Life	Over One Million Cycles	
Orifice	φ 25	φ 20
Connection Port	G1"	G3/4"

Right Angle Solenoid Pulse Valve



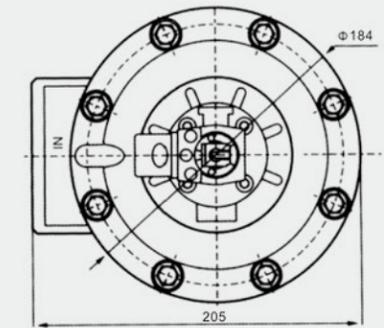
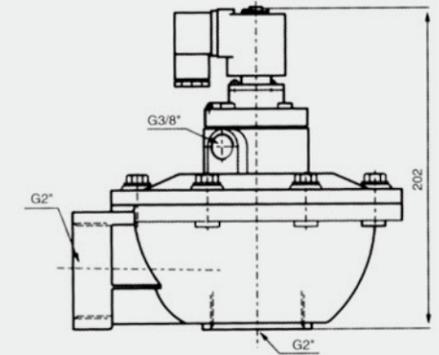
Model	RMF-Z-35P
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	φ 35
Connection Port	G1-1/2"

Right Angle Solenoid Pulse Valve



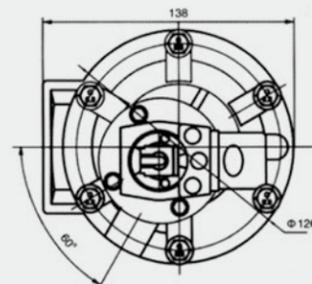
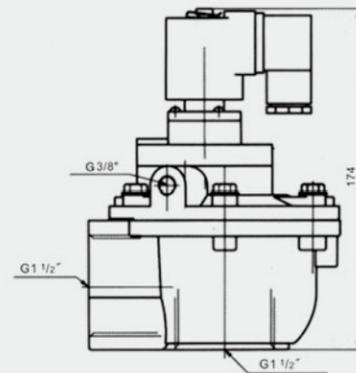
Model	RMF-Z-40S
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	φ 40
Connection Port	G1 1/2"

Right Angle Solenoid Pulse Valve



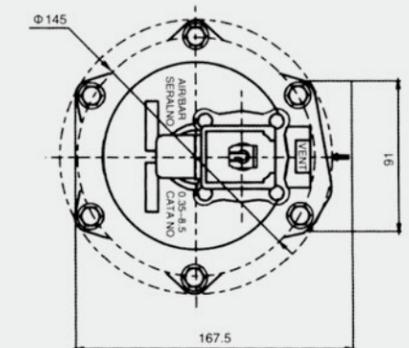
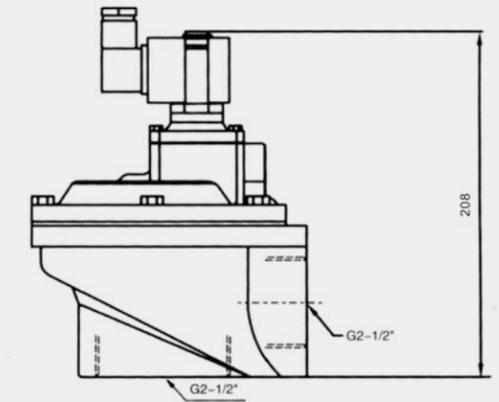
Model	RMF-Z-50S
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	φ 50
Connection Port	G2"

Right Angle Solenoid Pulse Valve



Model	RMF-Z-45P
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	φ 45
Connection Port	G1 1/2"

Right Angle Solenoid Pulse Valve



Model	RMF-Z-50S-A	RMF-Z-62S-A
Working-pressure	0.3 ~ 0.8MPa	
Ambient Temperature	-5 ~ 55°C	
Relative Humidity	< 85%	
Working Medium	Clean Air	
Voltage	AC110V / AC220V / DC24V	
Diaphragm Life	Over One Million Cycles	
Orifice	φ 50	φ 62
Connection Port	G2"	G2-1/2"

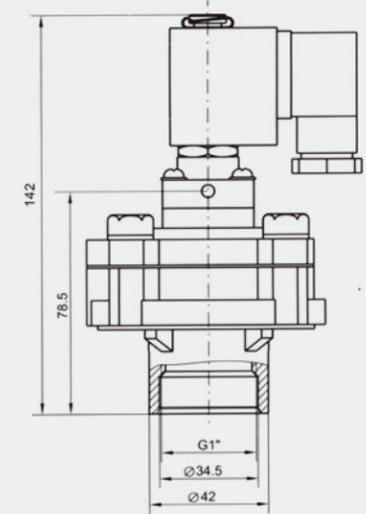
➤ Quick Mount Pulse Solenoid Valve



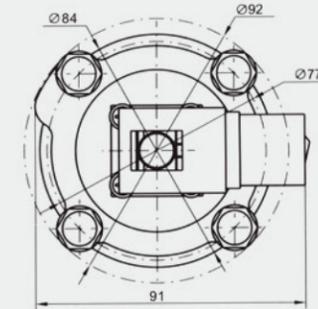
Parameters

Model	Working pressure	Ambient Temp.	Relative Humidity	Media	Voltage	Power	Diaphragm Life	Orifice	Connection ports
RMF-Y-25	0.3 ~ 0.8MPa	-5~55° C	< 85%	Clean Air	AC110V AC220V DC24V ±10%	DC12W/AC15VA	Over one Million cycles	Φ25mm	G1"
RMF-Y-40						Φ45mm		G1 1/2"	
RMF-Y-50S						Φ50mm		Φ62.5mm	
RMF-Y-62S						Φ62mm		Φ76mm	
RMF-Y-76S						Φ76mm		Φ86mm	
RMF-Y-76S-A1						Φ75mm		Φ88mm	
RMF-Y-86S						Φ76mm		Φ90mm	

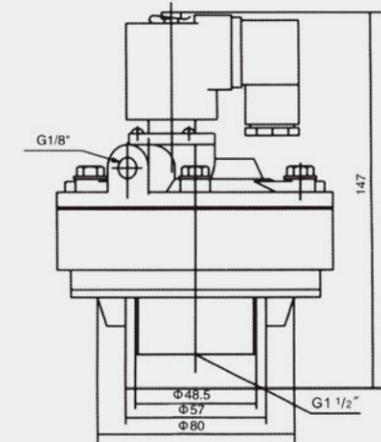
Solenoid Pulse Valve



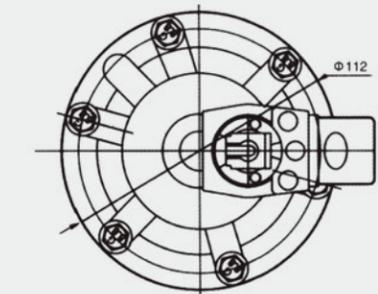
Model	RMF-Y-25
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	φ 25
Connection Port	φ 42



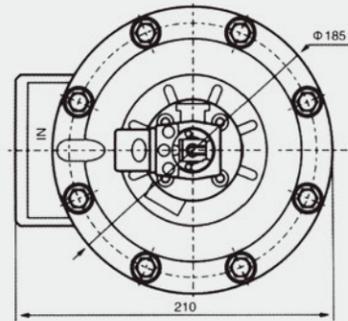
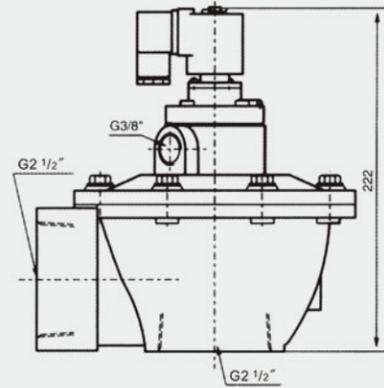
Solenoid Pulse Valve



Model	RMF-Y-40
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	φ 45
Connection Port	φ 50

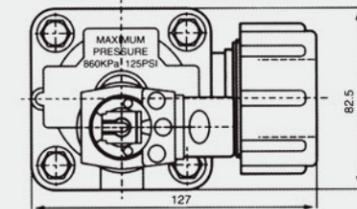
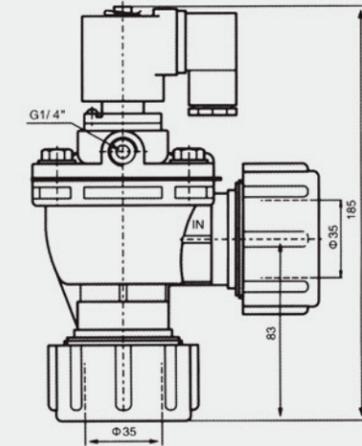


Right Angle Solenoid Pulse Valve



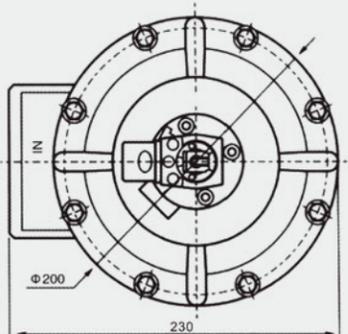
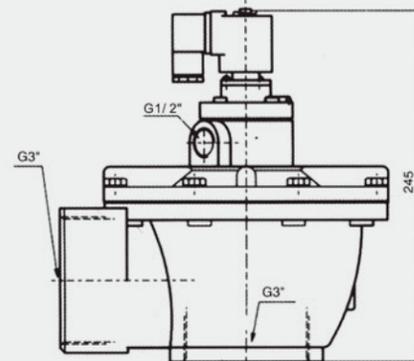
Model	RMF-Z-62S
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	φ 62
Connection Port	G2-1/2"

Right Angle (DD Type) Solenoid Pulse Valve



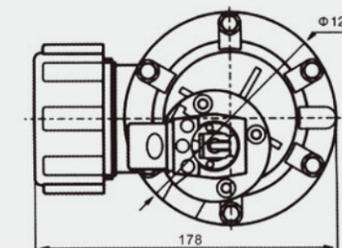
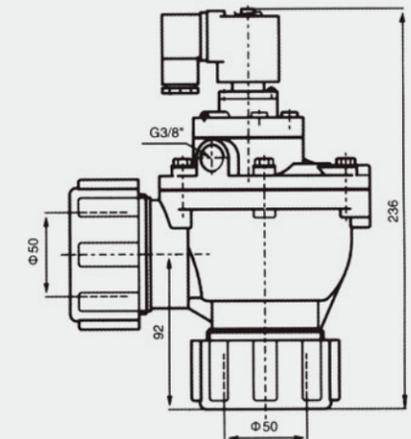
Model	RMF-25DD
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	φ 25
Connection Port	φ 35

Right Angle Solenoid Pulse Valve



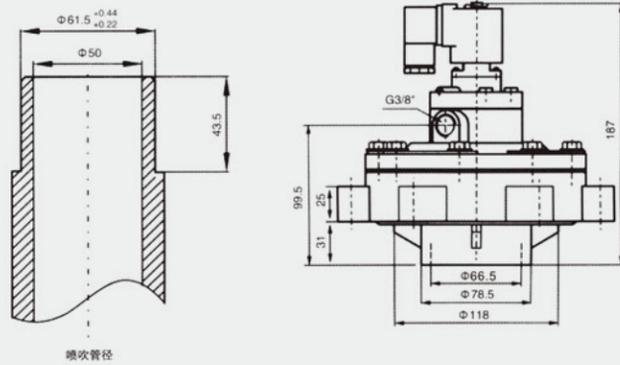
Model	RMF-Z-76S
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	φ 76
Connection Port	G3"

Right Angle (DD Type) Solenoid Pulse Valve

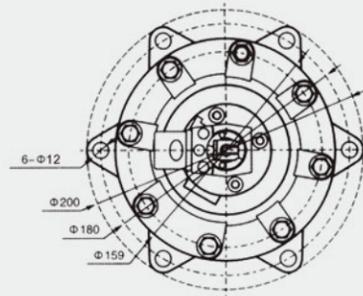


Model	RMF-45DD
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	φ 40
Connection Port	φ 50

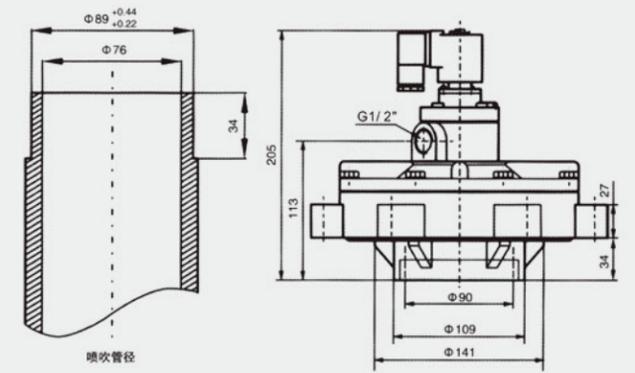
Solenoid Pulse Valve



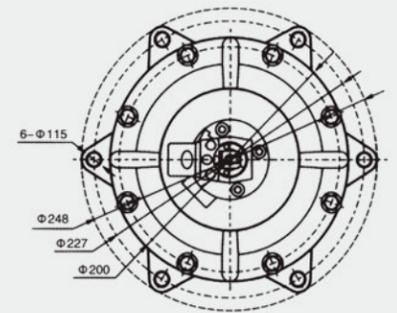
Model	RMF-Y-50S
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	φ 50
Connection Port	φ 65



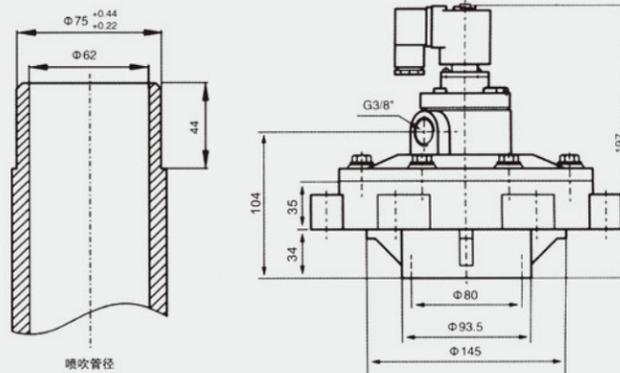
Solenoid Pulse Valve



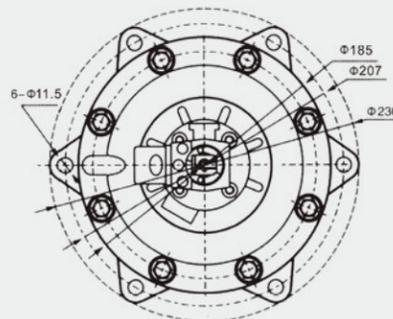
Model	RMF-Y-76S
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	φ 76
Connection Port	φ 90



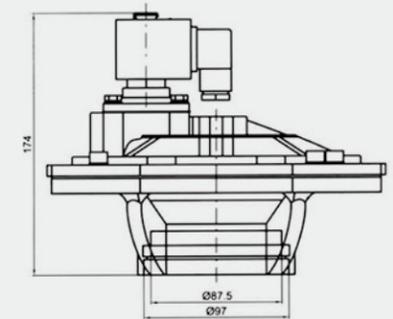
Solenoid Pulse Valve



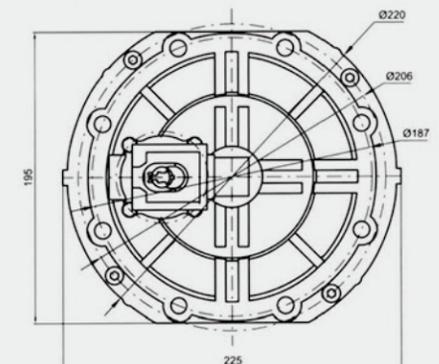
Model	RMF-Y-62S
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	φ 62
Connection Port	φ 80



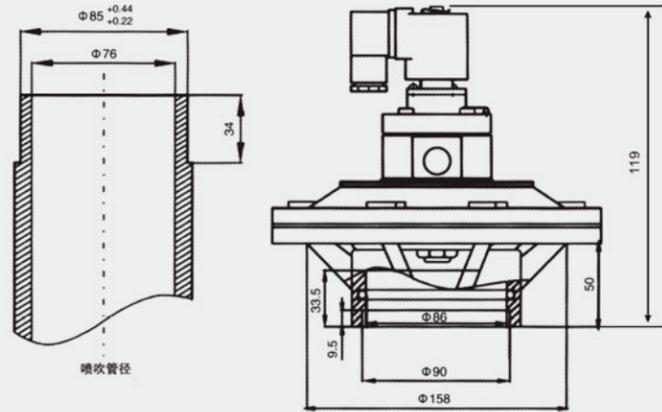
Solenoid Pulse Valve



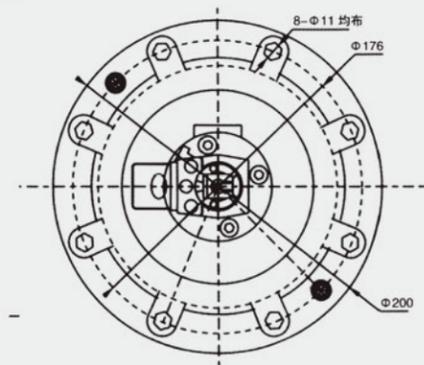
Model	RMF-Y-76S-A1
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	φ 76
Connection Port	φ 89



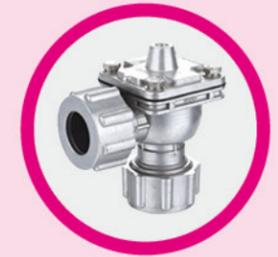
Solenoid Pulse Valve



Model	RMF-Y-86S
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	$\phi 76$
Connection Port	$\phi 90$



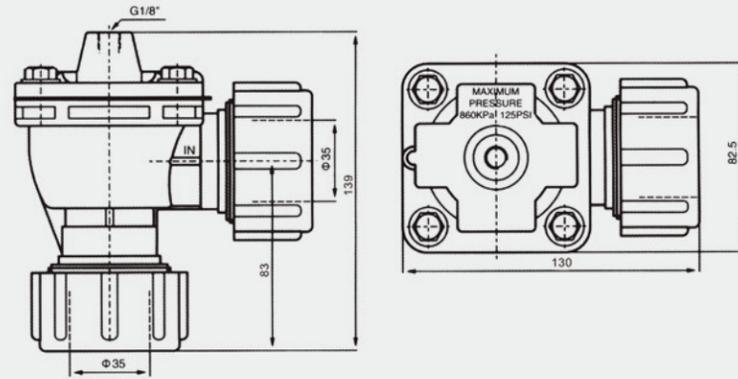
➤ Air Control Pulse Jet Valve



Parameters

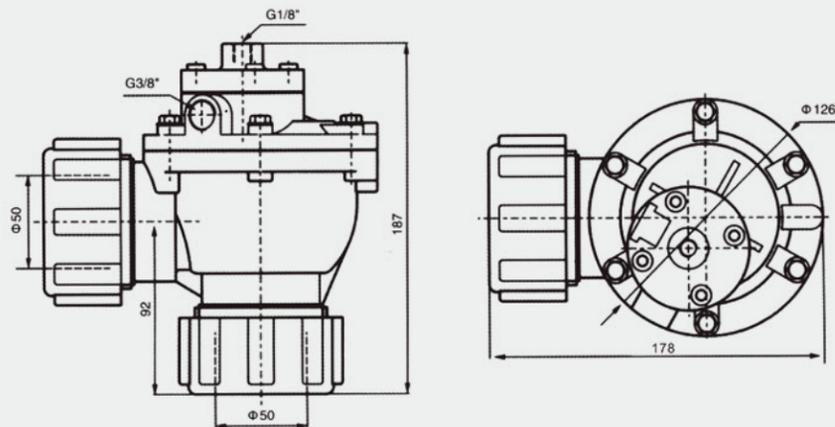
Model	Working pressure	Ambient Temp	Relative Humidity	Media	Diaphragm Life	Orifice	Connection ports
RMF-Q-25DD	0.3 ~ 0.8MPa	-5 ~ 55° C	< 85%	Clean Air	Over one Million cycles	$\Phi 25$	$\Phi 35$
RMF-Q-45DD						$\Phi 45$	$\Phi 50$
RMF-Q-20P						$\Phi 20$	G3/4"
RMF-Q-25P						$\Phi 25$	G1"
RMF-ZQ-45P						$\Phi 45$	G1-1/2"
RMF-ZQ-50S						$\Phi 50$	G2"
RMF-ZQ-62S						$\Phi 62$	G2-1/2"
RMF-ZQ-76S						$\Phi 76$	G3"
RMF-YQ-50S						$\Phi 50$	$\Phi 62.5$
RMF-YQ-62S						$\Phi 62$	$\Phi 76$
RMF-YQ-76S	$\Phi 76$	$\Phi 90$					

Right Angle (DD type) Air Control Pulse Valve



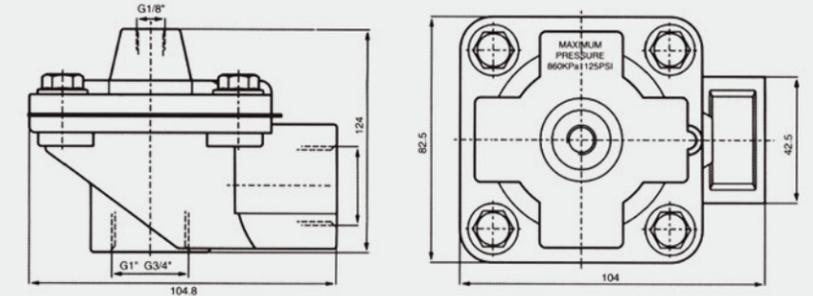
Model	RMF-Q-25DD
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	$\phi 25$
Connection Port	$\phi 35$

Right Angle (DD type) Air Control Pulse Valve



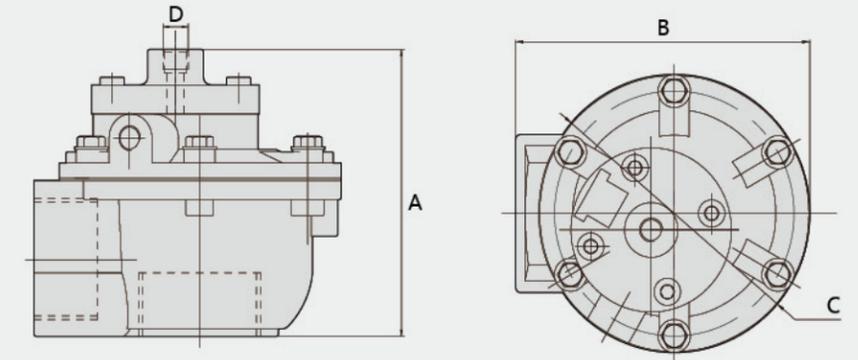
Model	RMF-Q-45DD
Working-pressure	0.3 ~ 0.8MPa
Ambient Temperature	-5 ~ 55°C
Relative Humidity	< 85%
Working Medium	Clean Air
Voltage	AC110V / AC220V / DC24V
Diaphragm Life	Over One Million Cycles
Orifice	$\phi 45$
Connection Port	$\phi 50$

Right Angle Air Control Pulse Valve



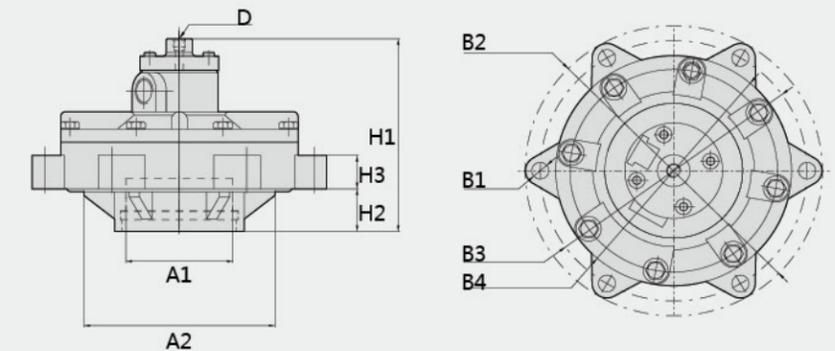
Model	RMF-Q-25P	RMF-Q-20P
Working-pressure	0.3 ~ 0.8MPa	
Ambient Temperature	-5 ~ 55°C	
Relative Humidity	< 85%	
Working Medium	Clean Air	
Voltage	AC110V / AC220V / DC24V	
Diaphragm Life	Over One Million Cycles	
Orifice	$\phi 25$	$\phi 20$
Connection Port	G1"	G3/4"

Right Angle Air Control Pulse Valve



Model	A	B	C	D
RMF-ZQ-45P	125	138	$\phi 126$	G1/8"
RMF-ZQ-50s	153	205	$\phi 184$	G1/8"
RMF-ZQ-62s	173	210	$\phi 185$	G1/8"
RMF-ZQ-76s	195	230	$\phi 200$	G1/8"

In Line Gas control Pulse valve



Model	A1	A2	B1	B2	B3	B4	H1	H2	H3	D
RMF-YQ-50S	$\phi 62.5$	$\phi 118$	6- $\phi 12$	$\phi 200$	$\phi 180$	$\phi 159$	138	30.5	34.5	G1/8"
RMF-YQ-62S	$\phi 76$	$\phi 143.5$	6- $\phi 11.5$	$\phi 230$	$\phi 207$	$\phi 185$	148	34	35	
RMF-YQ-76S	$\phi 90$	$\phi 141$	6- $\phi 12$	$\phi 248$	$\phi 277$	$\phi 200$	156	34.5	27	

➤ Explosion-proof Pulse Jet Valve

- Ex class: ExmI/II T4
- Using our own Explosion-proof coil, All the solenoid pulse valves can be changed into Ex-proof style
- Voltage & wire length can be made as your request
- When you order Ex-proof solenoid valve, Add "Ex" after model



Parameters

Model	Working pressure	Ambient Temp.	Relative Humidity	Media	Voltage	Power	Orifice	Connection ports
RMF-25DD-EX	0.3 ~ 0.8MPa	-5~55° C	< 85%	Clean Air	AC110V AC220V DC24V DC12V ±10%	DC15W	Φ25mm	Φ31mm
RMF-45DD-EX						AC13VA	Φ40mm	Φ50mm
RMF-Z-25J-EX						DC11W	Φ25mm	G1"
RMF-Z-20J-EX						AC13VA	Φ20mm	G3/4"
RMF-Z-20M-EX						DC15W	Φ20mm	G3/4"
RMF-Z-15M-EX						AC13VA	Φ15mm	G1/2"
RMF-Z-20A-EX						DC11W/AC13VA	Φ20mm	G3/4"
RMF-Z-20P-EX						DC15W	Φ20mm	G3/4"
RMF-Z-25P-EX						AC13VA	Φ25mm	G1"
RMF-Z-35P-EX						DC13W/AC23VA	Φ40mm	G1 1/2"
RMF-Z-40S-EX						DC15W/AC13VA	Φ45mm	G1 1/2"
RMF-Z-45P-EX							Φ50mm	G2"
RMF-Z-50S-EX							Φ62mm	G2 1/2"
RMF-Z-62S-EX						DC13W/AC23VA	Φ76mm	G3"
RMF-Z-76S-EX							Φ45mm	G1 1/2"
RMF-Y-40S-EX						DC15W AC13VA	Φ50mm	Φ62.5mm
RMF-Y-50S-EX							Φ62mm	Φ76mm
RMF-Y-62S-EX							Φ76mm	Φ90mm
RMF-Y-76S-EX								



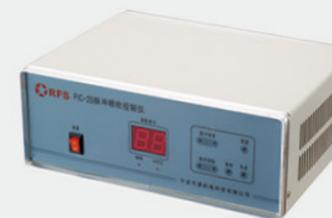
➤ Pulse signal controller & parts

Sequential controller is main control part of bag filter system. It controls the on/off of pulse solenoid valves sequentially, so circularly the air runs in the bag and shakes off the dust which adsorbs on bag surface, make the bag keep clean and sufficient air permeability.



Pulse signal controller

PIC-20X Pulse signal controller



The PIC-20X controller is made from PC coated aluminum alloy. It has microprocessor, can adjust the width as per different clean request. Its output signal directly controls the solenoid valves. The controller is stable and easy to use. Can be installed in the control room or on the dust collector machinery directly.

Input voltage	AC220V±10%50Hz/60Hz
Output voltage	DC24V AC110V AC220V
Output current	1A
Interval Range	1~99S
Adjustable Length Range	0.03~0.3S 0.09~0.9S
Output lines	4~20 Lines
Volume	280×220×110mm

PIC-64 Pulse signal controller



The controller is controlled by microprocessor. It can adjust the pulse interval and width as the requirement of the dust remover.

Model	PIC-64		
Input voltage	AC220V±10%50Hz/60Hz	AC110V±10%50Hz/60Hz	
Output voltage	DC24V	AC110V	AC220V
Output current	1A		
Power consumption	≤ 15VA		
Interval time range	1~250S		
On time range	30~2500ms		
Output lines no	1-64 Lines		
Working environment	Temp : -40°C ~ 50°C	humidity : ≤ 85%	no strong corrosive fluid and no conductive dust no strenuous vibration and shock
Install method	separately or within the control box		
Weight	1.4kg (different according to different lines)		
Dimension	200×170×75mm		164×154×84mm

RMY-8 Pulse signal controller



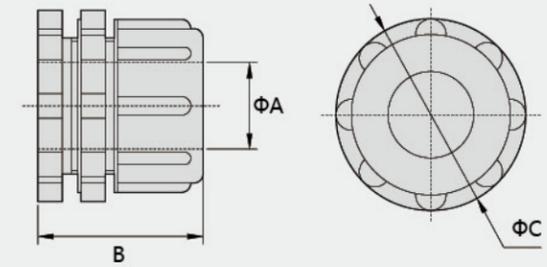
Will not damage the small volume, light weight, transport and use process.
 Automatic switching power supply for AC110V-AC220V.
 Input AC110V-AC220V, output AC110V-AC220V, DC24V.
 With lifting valve function and without lifting valve function.
 Double short circuit protection, safe use.
 The number of outputs of 1-8 options.
 With soft switch (close the program preset cycles, after the completion of the system).
 Waterproof and dustproof.
 Blow lamp is easy to view state way spray.
 With no signal sleep function.

RMY-64 Pulse signal controller



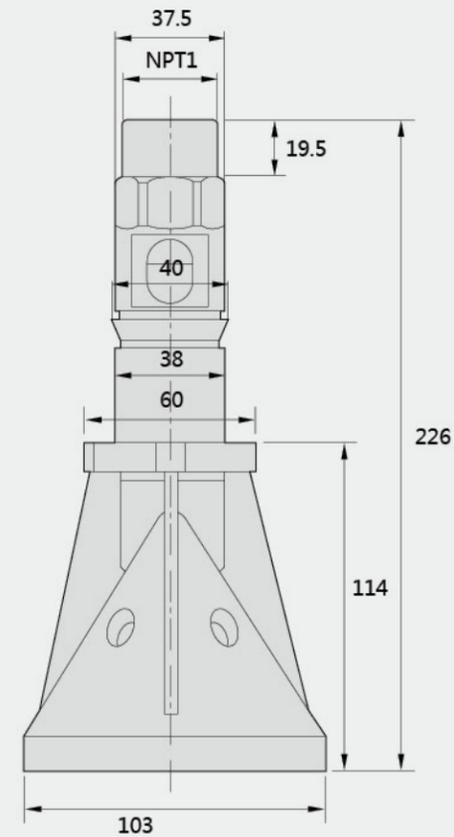
Model	RMY-64
Input voltage	AC110V AC220V ±10% 50Hz
Output voltage	DC24V AC110V AC220V
Output current	1A
Interval time range	1 ~ 120S
On time range	30 ~ 406ms
Output lines no	2 ~ 64Lines
Working environment	Temperature:-40°C ~-80°C Humidity: ≤ 85%No enormous shake& shock
Install method	Install on dust catcher or contol box
Weight	1.1kg (different according to different lines)
Dimension	200×170×75mm

RB CONNECTION



Overall dimension				
Model	symbol	A	B	C
RB-25		35	67.5	77.5
RB-40		50	92.5	92

Plastic Venturi Tube



Diaphragm

Diaphragm is the one of the most important components in pulse valve, our diaphragm is made from import material.
 It has good antifatigue, ageing resistance etc. We offer better quality than others in this field. We also offer special diaphragms as per customer's request.



➤ CS Automatic Drain valve

CS

Fully automatic, maintenance-free Timer control drain valve



Ordering Code

CS	-	720		-			-	
RFS product		Series code			Material code			Port size
		720			B Blank brass			01 1/8"
		3800			S Stainless steel			02 1/4"
		728A			W Without Timer			03 3/8"
		711			WS Stainless steel without timer			04 1/2"
		740						

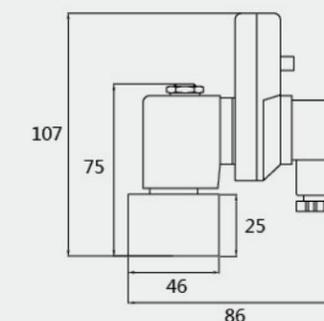
Speciality

- Conforming to CE standard
- Fully automatic, maintenance-free
- Suitable for automatic discharge of condense water in many occasions and automatic irrigation system
- Different voltage and port size are available for selection
- Interval and working time can be adjustable
- Without manual testing switch
- ABS flame-proof house, can reach IP65 class after right installed
- Applicable to a wide range of temperature
- Direct-acting, big orifice, to avoid blockade
- With filter ball valve, Port size and manual switch Can do any changes, easy to install and maintain

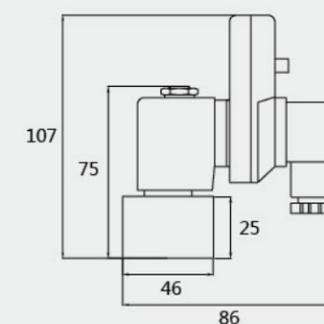
Parameters

Model	CS-720				CS-3800			CS-711	
Valve Style	2/2 Direct action								
Connection ports	1/8"	1/4"	3/8"	1/2" Female		1/8"			1/4"
Working pressure	16bar		40bar	80bar		16bar			
On/off time	On 0.5~10s			On 1s ~ 99h59min59s			On 2s		
	Off 0.5~45min			Off 1s ~ 99h59min59s			Off 0.5~120min		
Working temp.	-20°C ~60°C								
Highest Media Temperature	160°C								
Valve Body	Brass / Stainless steel								
Orifice	1.9mm	2.5mm	4.5mm		2mm				
Protection class Insulation class	F/H class IP65 (with plug)								
Voltage	24~240V			DC/AC	50/60z±10%				
Power	AC22VA/DC20W						AC 8VA,DC 8W		
Mounting	Any place								

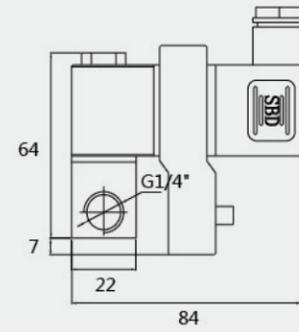
CS-720



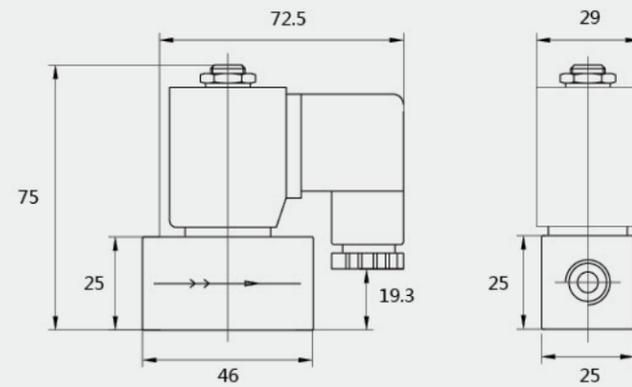
CS-3800



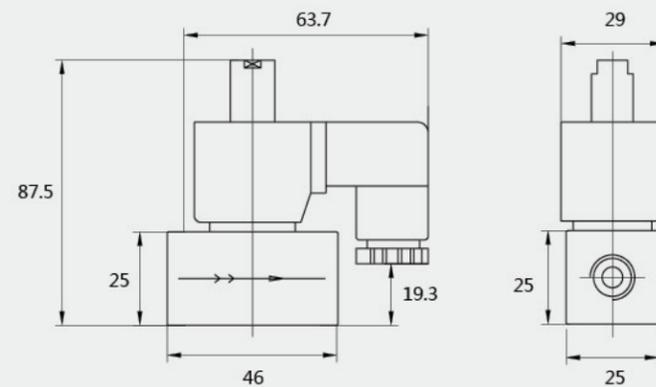
CS-711



CS-720W



CS-720W-CK



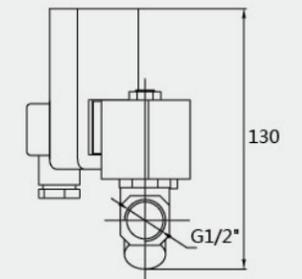
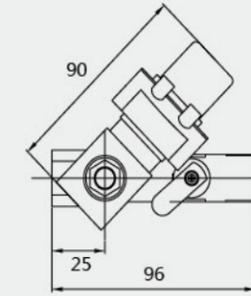
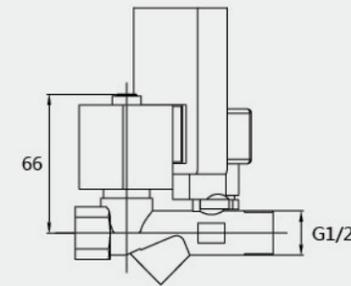
CS-728A



Combine filter ball valve and Timer control drain valve together

Parameters

Orifice	3.5mm
Pattern	Normally close
Rated voltage	AC/DC24~240V ±10%
Power	AC22VA/DC20W
Working pressure	0~16Bar
Working temp.	0°C ~ 80°C
Valve body material	Brass
Seal material	NBR / VITON



CS-740

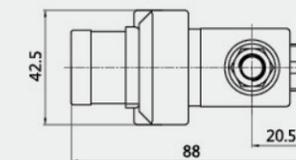
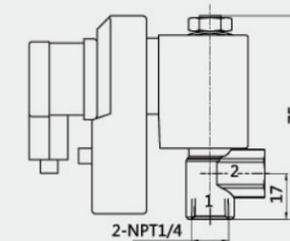


The structure of the product is easy and delicate.

Be used together with the timer, which can auto shift to ON or Off the valve

Parameters

Orifice	2.2mm
Pattern	Normally close
Rated voltage	AC/DC24~240V ±10%
Power	AC22VA/DC20W
Working pressure	0~17.5bar
Working temp.	0°C ~ 80°C
Valve body material	Brass
Seal material	NBR / VITON



➤ Float Type Drain Valve

RD50016-15G

Automatic Discharge, without human management and other functions

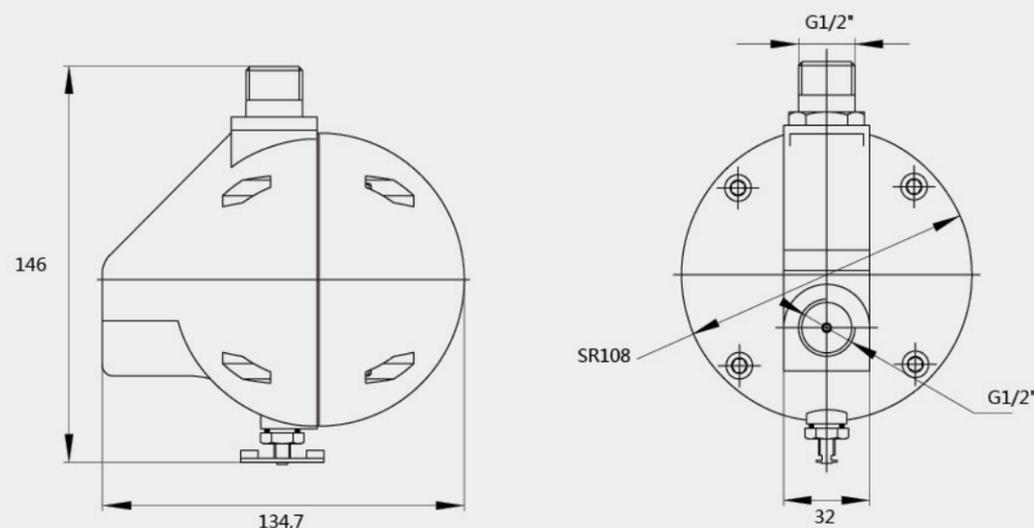
Parameters

Connection ports	G1/2"
Seal material	NBR
Media	Water
Working pressure	0~16bar
Working temp.	-10°C ~ 80°C
Working type	Leverage and Buoyancy type
Max. pressure	20bar
Valve body material	Aluminum



Feature

- 1、Automatic Discharge, without human management and other functions
- 2、When the water reaches a certain volume, Under the leverage and buoyancy Principle, discharge the water automatically
- 3、Overall ball type design, save the installation space
- 4、Directly Install on the inlet pipe , no need to install bolts



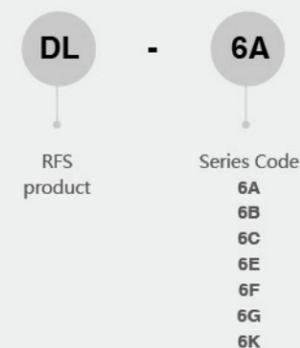
➤ DL Series Steam Valve

DL

- Installed on the Ironing equipments independent
- Fully made of heat resistant H class material
- Steam flow rate can be adjustable, Easy to operate
- Electrical parts good water-proof
- Insert pipe, Female-male thread, Adjustable and angle adjustable type for choose



Ordering Code



Parameters

Model	DL-6A	DL-6B	DL-6C	DL-6E	DL-6F	DL-6G	DL-6K
Media	Water / Steam / Clean Air						
Working type	2/2 Direct action						
Pattern	Normally close						
Orifice	2.5mm	2.5mm	2.7mm	2.5mm	2.5mm	2.5mm	2.5mm
Connection ports	Φ6Insert pipe, Male G1/8"	Male G1/4"	G1/4"	G1/4"	G1/4"	G1/4"	G1/4"
Working pressure	0~0.8MPa	0~0.8MPa	0~0.8MPa	0~2.5MPa	0~2.5MPa	0~1.0MPa	0~0.8MPa
Max. pressure	1.6MPa	1.6MPa	2.5MPa	3MPa	3MPa	3MPa	2.5MPa
Working temp.	0.1°C ~180°C						
Rated voltage	DC/AC24~240V ±10%						
Power	DC12W/AC15VA			DC20W/AC28VA		DC16W/AC19VA	DC12W/AC15VA
Protection class	IP65						
Insulation class	H class						
Valve body material	Brass						
Seal material	PTFE/FKM						

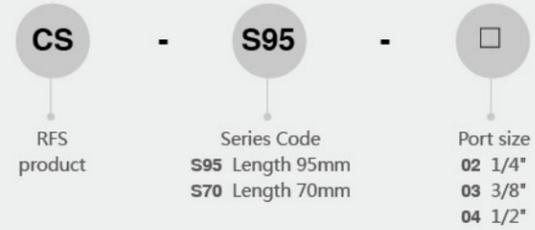
CS Strainer

S70/S95

Used alone or Together with CS-720 Series valve

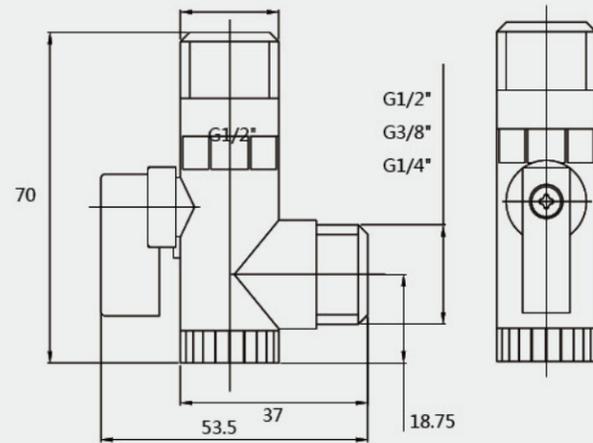


Ordering Code

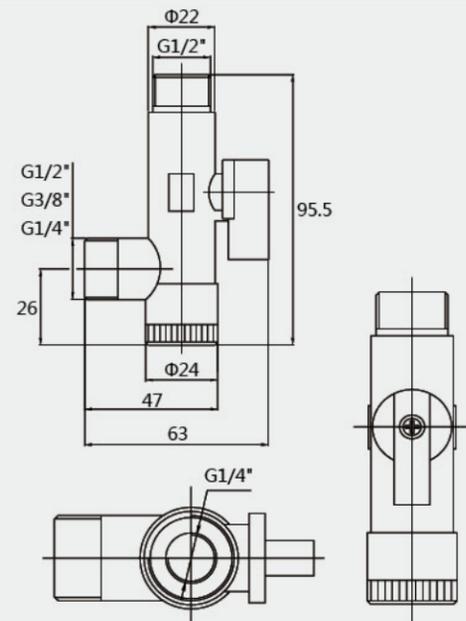


Overall Dimension

CS-S70 Strainer



CS-S95 Strainer



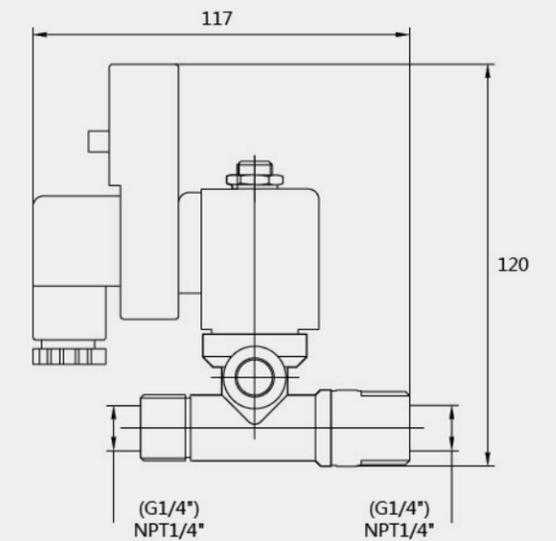
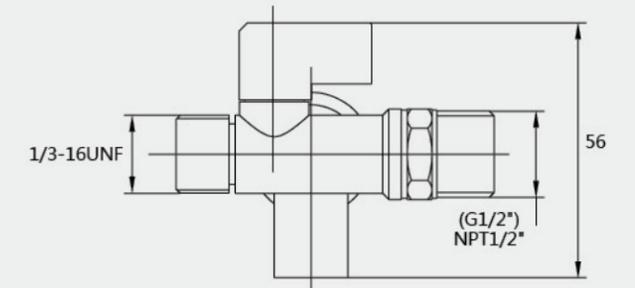
PS Drain Valve

PS

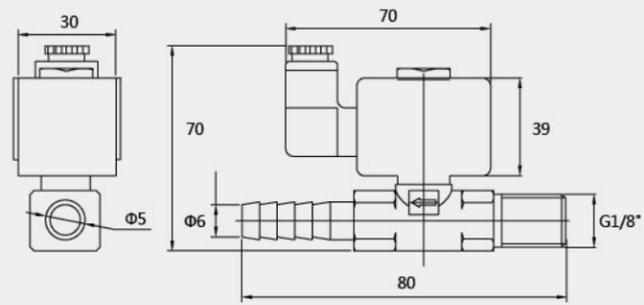
Combine filter ball valve and Timer control drain valve Together, Economic and benefits

Parameters

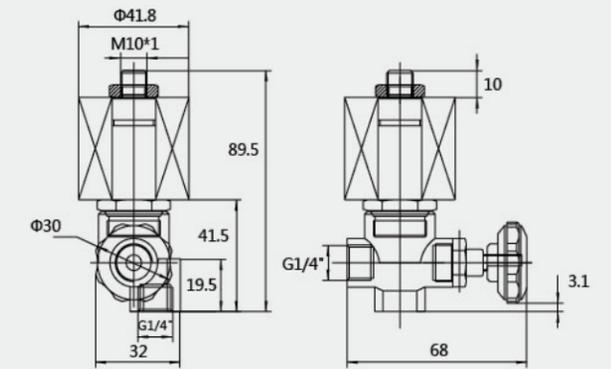
Orifice	4mm
Pattern	Normally close
Rated voltage	AC/DC24~240V ±10%
Power	AC22VA/DC20W
Working pressure	0~16Bar
Working temp.	-5~ 80°C
Valve body material	Brass
Seal material	NBR / VITON



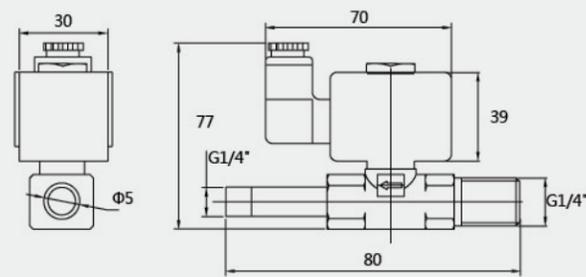
DL-6A



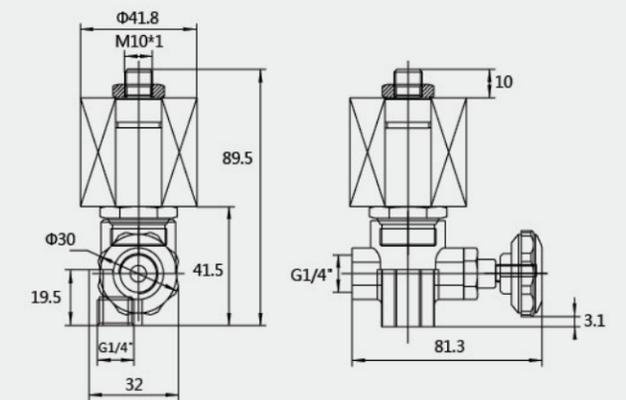
DL-6E



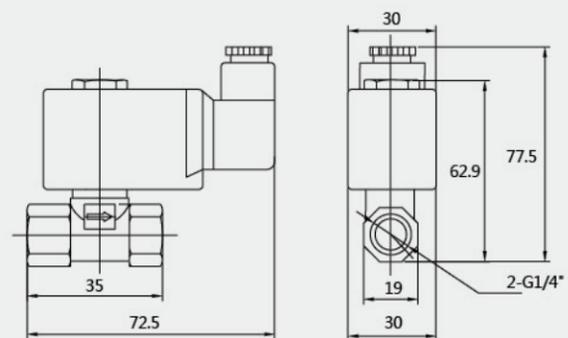
DL-6B



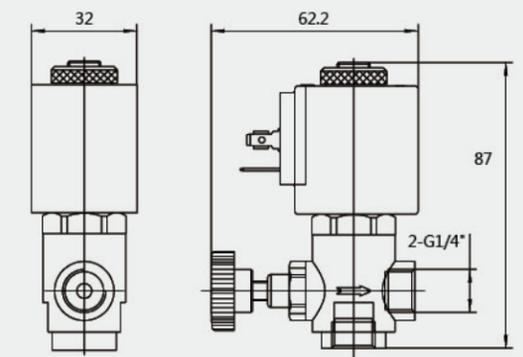
DL-6F



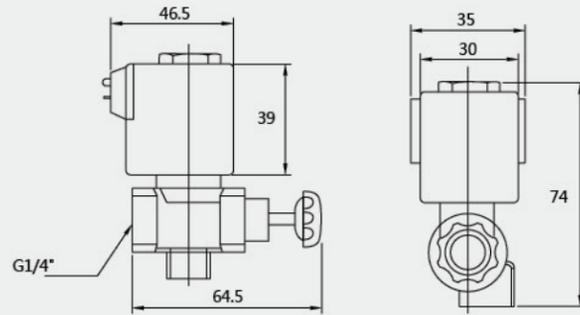
DL-6C



DL-6G



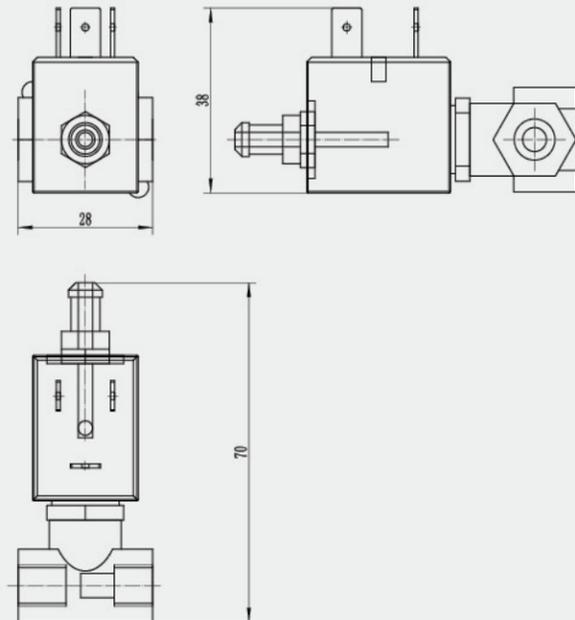
DL-6K



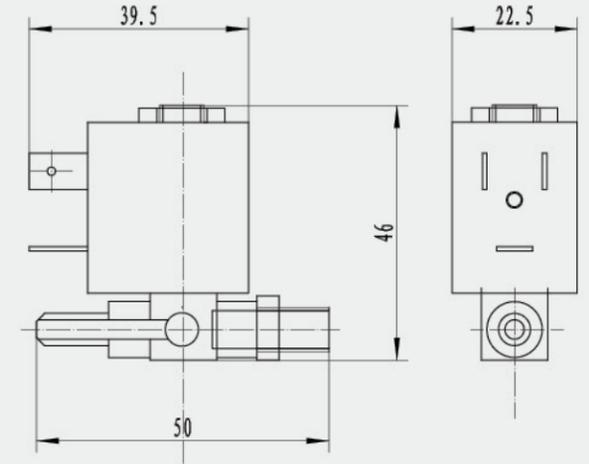
Parameters

Model	DL-6M	DL-3T	DL-3Q	DL-6P	DL-6I	DL-6D	DL-6N
Media	Water / Steam / Clean Air						
Working type	2/2 Direct action						
Pattern	Normally close						
Orifice	1mm	2.7mm	2.7mm	1.8mm	1.8mm	2mm	3mm
Working pressure	0.2-8 BAR	0.2-4.5 BAR	0.2-3.5 BAR	0.2-10 BAR	0.2-10 BAR	0-8 BAR	0-8 BAR
Voltage	220V AC						
Connector Port	G1/8"						G1/4"

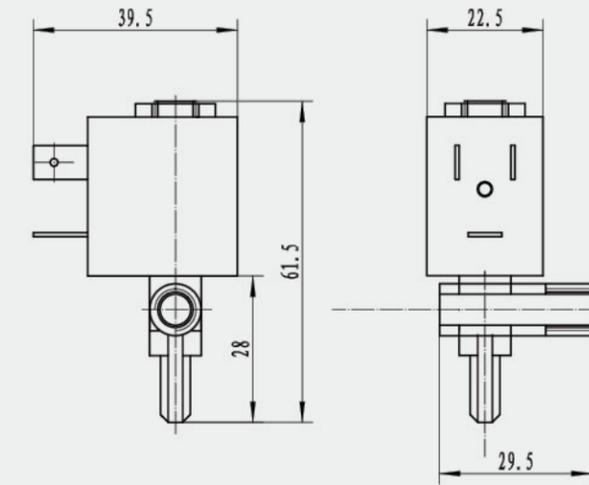
DL-6M



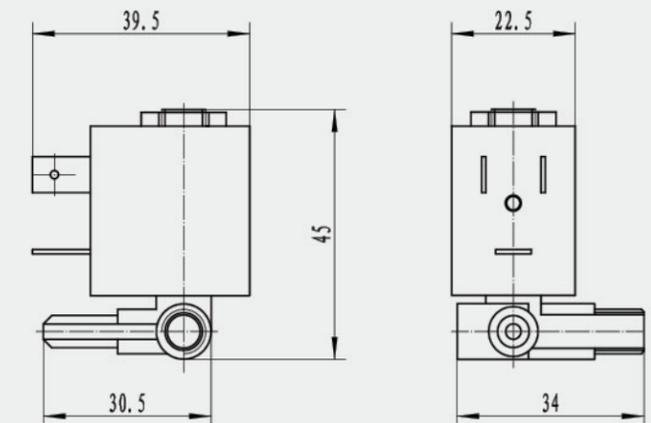
DL-3T



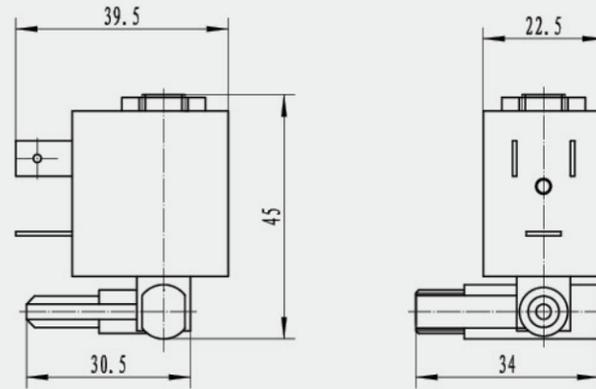
DL-3Q



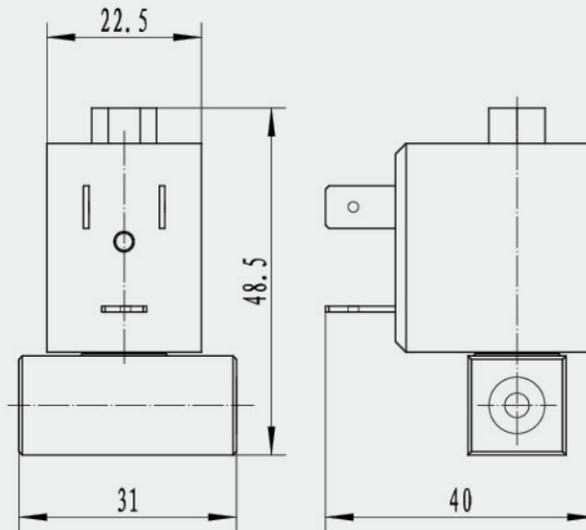
DL-6P



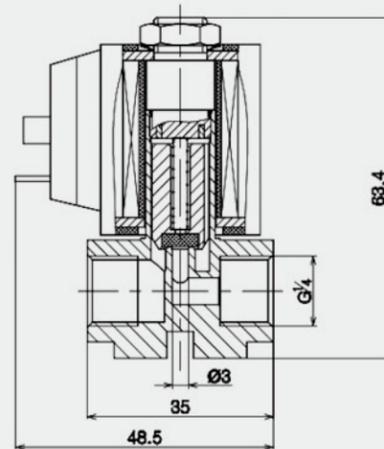
DL-6I



DL-6D



DL-6N



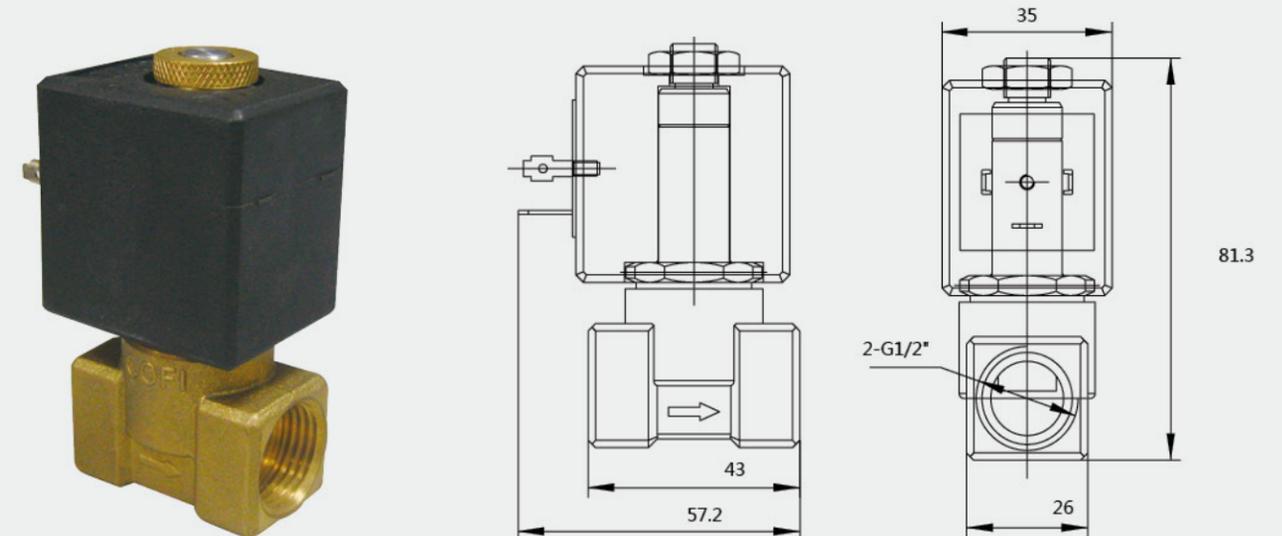
➤ 0121 Steam Valve

- International advanced technology
- Compact, easy to install
- For steam pipe

Parameters

Medium	Steam
Pattern	Normally close
Orifice	4.5mm
Connection ports	G1/2"
Working pressure	0~0.6MPa
Max. pressure	2.5MPa
Working temp.	-20~180°C
Rated voltage	AC220V ±10%
Power	32VA
Protection class	IP65
Insulation class	H class
Valve body material	Brass
Seal material	VITON

Overall Dimension



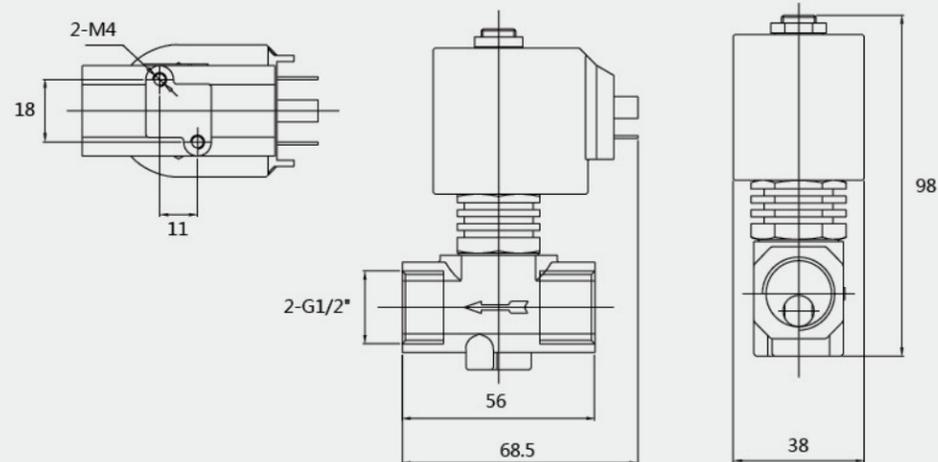
➤ RV08102 Steam Valve

- Coil with heat sink, Resistant high temperature
- Piston type, big flow rate
- For steam pipe

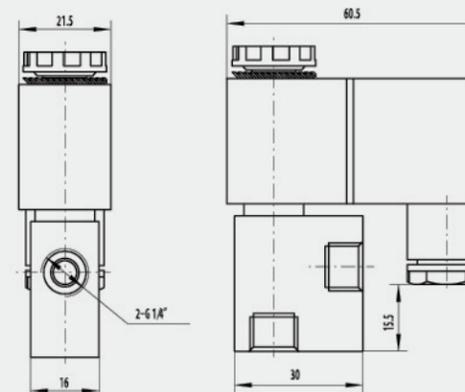
Parameters

Medium	Steam
Pattern	Normally close
Orifice	8mm
Connection ports	G1/2"
Working pressure	0~1.0MPa
Max. pressure	2.5MPa
Working temp.	0~180°C
Rated voltage	AC220V ±10%
Power	19VA
Protection class	IP65
Insulation class	H class
Valve body material	Brass
Seal material	PTFE/ Viton

Overall Dimension



51001 Low pressure valves



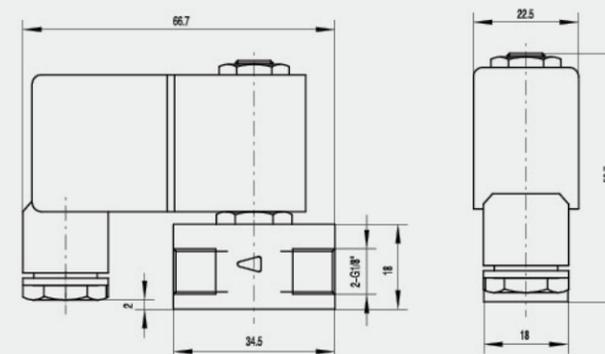
Features

Compact design with right angle inlet and outlet ports
Low pressure for gas burner application
Small power consumption

Technic data

Model	51001
Media	Clean Air / Gas
Working type	Direct action 3/2 2/2
Pattern	Normally close
Orifice	1mm/5mm
Connection ports	G1/8" G1/4"
Working pressure	0-0.8MPa/0-150mbar
Max. pressure	1.2MPa
Working temp.	-10°C ~ 80°C
Rated voltage	AC24V-220V ±10%
Power	6VA
Protection class	IP65
Insulation class	F class
Valve body material	Aluminum
Seal material	NBR / FKM

52001/52001-1 pressure valves



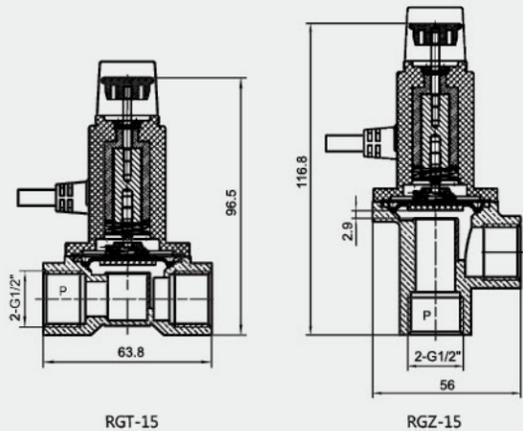
Features

Compact design with in line inlet and outlet ports
Low pressure for gas burner application
Small power consumption

Technic data

Model	52001	52001-1
Media	Clean Air / Gas	
Working type	Direct action 2/2	
Pattern	Normally close	
Orifice	3.1mm	4.0mm
Connection ports	G1/8"	
Working pressure	0 ~ 150mbar	
Max. pressure	1.0MPa	
Working temp.	-10°C ~ 80°C	
Rated voltage	AC24V-220V ±10%	
Power	6VA	
Protection class	IP65	
Insulation class	F class	
Valve body material	Aluminum	
Seal material	NBR / FKM	

RG-15 Gas Valve



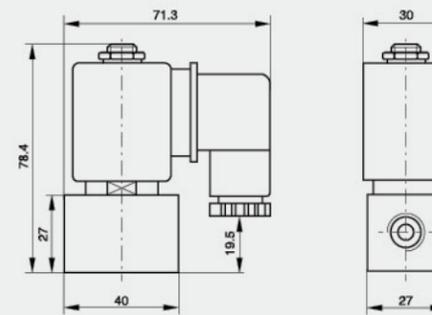
Features

1. Safety valve used in gas pipe line.
2. Normally open type, shut off immediately when gas detector give signal.
3. Diaphragm type with big office.
4. Bistable type with low power consumption.

Technic data

Model	RGT-15	RGZ-15
Media	Gas / Compressed air	
Working type	Diaphragm type	
Pattern	Direct action 2/2	
Orifice	16mm	
Connection ports	G1/2"	
Working pressure	250mbar	
Max. pressure	8bar	
Working temp.	-20°C ~ 180°C	
Rated voltage	DC6V-24V ±10%	
Power	5W	
Protection class	IP65	
Insulation class	F class	
Valve body material	Brass	
Seal material	NBR / FKM	

HP250/350 High pressure valve



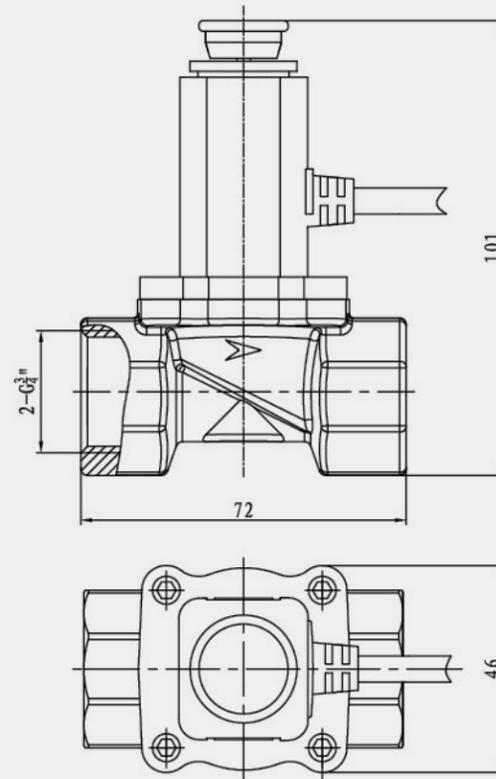
Features

For special very high pressure applications
SUS316 material with good Acid and alkali resistant

Technic data

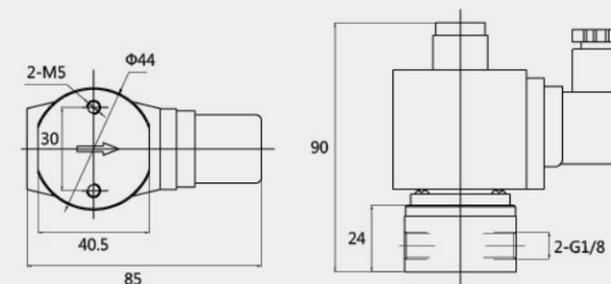
Model	HP250	HP350
Media	Clean Air / Water	
Working type	Direct action 2/2	
Pattern	Normally close	
Orifice	1mm	
Connection ports	G1/8"-G1/2"	
Working pressure	0-25MPa	0-35MPa
Max. pressure	45MPa	
Working temp.	-10°C ~ 120°C	
Rated voltage	AC/DC24V-220V ±10%	
Power	AC22VA/DC14W	
Protection class	IP65	
Insulation class	F class	
Valve body material	SUS316	
Seal material	PTFE	

RG-20



Model	RG-20
Media	Compressed air/ Gas
Working type	Diaphragm type
Orifice	16mm
Connection ports	G3/4"
Working pressure	250mbar
Max. pressure	8bar
Working temp.	-5° ~ 80°
Rated voltage	AC220V±10%
Power	6.4W
Protection class	IP65
Valve body material	Aluminum
Seal material	NBR

KS-40 High pressure NO valve



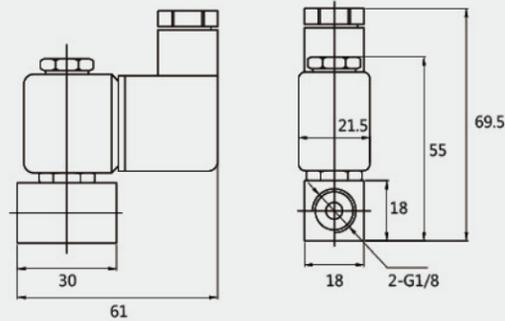
Features

Normally open valve for high pressure application
0-4MPa

Technic data

Model	KS-40
Media	Clean Air / Water
Working type	Direct action 2/2
Pattern	Normally open
Orifice	1.5mm
Connection ports	G1/8"
Working pressure	0 ~ 4.0MPa
Max. pressure	6.0MPa
Working temp.	-20°C ~ 120°C
Rated voltage	RAC220/RAC380 ±10%
Power	10W
Protection class	IP65
Insulation class	F class
Valve body material	Brass
Seal material	VITON

RSS210-70 High pressure NC valve



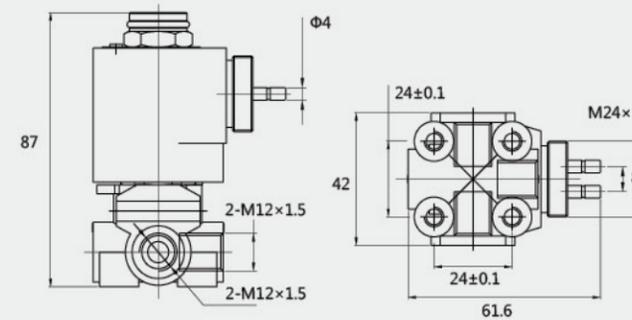
Features

Compact valve for high pressure application, good Acid and alkali resistant, low power consumption

Technic data

Model	RSS210-70
Media	Compressed air/ Water
Working type	Direct action 2/2
Pattern	Normally close
Orifice	1.0mm
Connection ports	G1/8"
Working pressure	0 ~ 6.0MPa
Max. pressure	10MPa
Working temp.	-20°C ~ 120°C
Rated voltage	DC12V-24V/AC24V-220V ±10%
Power	AC6VA/DC6W
Protection class	IP65
Insulation class	F class
Valve body material	Stainless steel SUS316
Seal material	VITON

WP03103 Valve for truck application



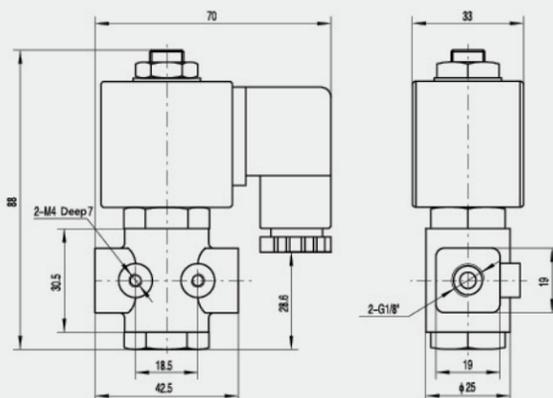
Features

Valve for automobile application.
Nice dust-proof design with O-ring on cap.

Technic data

Model	MP-3L
Media	Compressed air
Working type	Direct action 3/2
Pattern	Normally close
Orifice	Φ3mm
Connection ports	M12×1.5
Working pressure	4.5 ~ 10bar
Working temp.	-10°C ~ 55°C
Rated voltage	DC24V ±10%
Power	12W
Protection class	IP65
Insulation class	F class
Valve body material	Zinc alloy
Seal material	VITON

440000672 Normally open valve



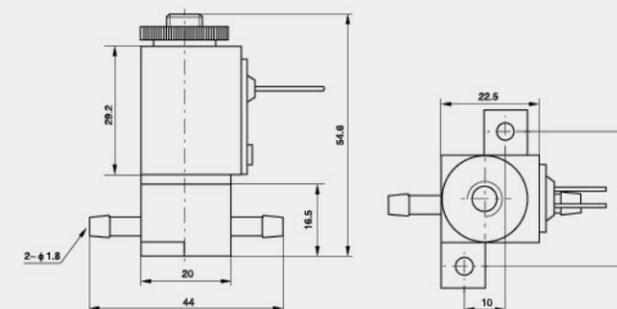
Features

Normally open with bottom valve seat, perfect and stable function

Technic data

Model	440000672
Media	Clean Air
Working type	Direct action 2/2
Pattern	Normally open
Orifice	2mm
Connection ports	G1/8"-G1/4"
Working pressure	0 ~ 1.0MPa
Max. pressure	2MPa
Working temp.	-10°C ~ 80°C
Rated voltage	AC/DC24V-220V ±10%
Power	AC18VA/DC19W
Protection class	IP65
Insulation class	H class
Valve body material	Brass
Seal material	VITON

F17 Valve for gasoline



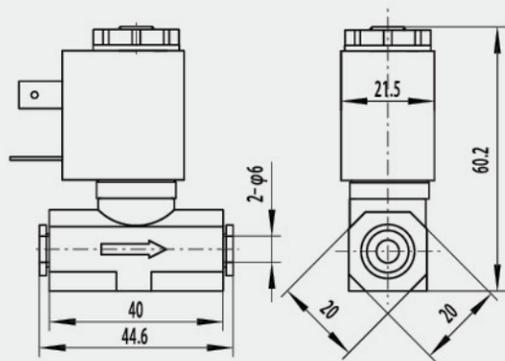
Features

Body made from POM, seal made from solvent resistant material, valve is good for solvent like gasoline and so on.
Compact design with bable connection ports, easy for assembly.

Technic data

Model	F17
Media	Petrol/Solvent
Working type	Direct action 2/2
Pattern	Normally close
Orifice	1.8mm/3mm
Connection ports	Φ4mm bable/Φ6mm bable
Working pressure	0 ~ 0.35MPa
Max. pressure	0.8MPa
Working temp.	-40°C ~ 80°C
Rated voltage	AC/DC24V-220V ±10%
Power	4.5W
Protection class	IP65
Insulation class	F class
Valve body material	POM
Seal material	FKM

POU Valve for beverage machines



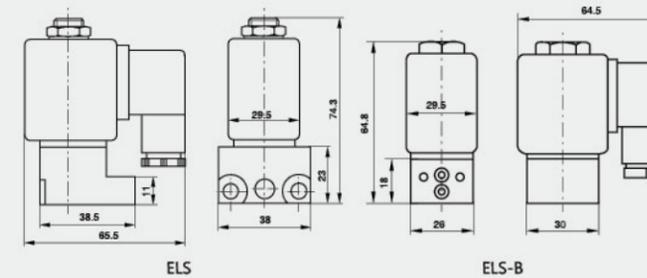
Features

1. Special on/off control valve for beverage machine
2. High quality food grade material, comply with ROHS indicate
3. Push fitting type connection, easy for assembly

Technic data

Model	POU
Media	Clean Air / Water / Beverage
Working type	Direct action 2/2
Pattern	Normally close
Orifice	2.5mm
Connection ports	6mm bable
Working pressure	0 ~ 0.6MPa
Max. pressure	1.2MPa
Working temp.	-10°C ~ 130°C
Rated voltage	AC24V-220V ±10%
Power	7VA
Protection class	IP65
Insulation class	F class
Valve body material	SUS316
Seal material	Silicon

ELS/ELS-B Pilot valve



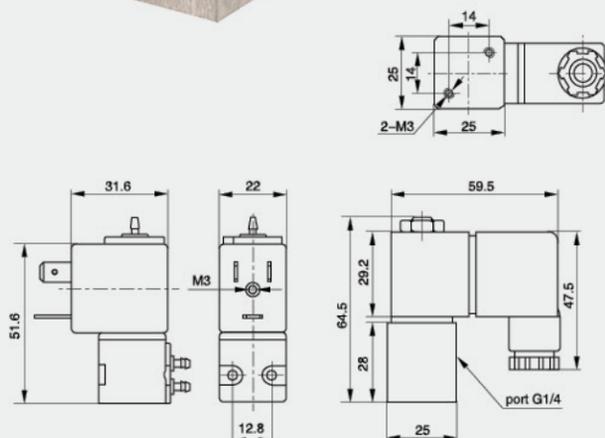
Features

- Nice design with small flow resistance.
Moving core made from high quality material without residual magnetism.

Technic data

Model	ELS/ELS-B
Media	Clean Air
Working type	Direct action 2/2
Pattern	Normally close
Orifice	Φ 1.3mm
Working pressure	0-0.8MPa
Working temp.	-10°C ~ 40°C
Rated voltage	AC/DC24V-220V ±10%
Power	AC9VA-15VA/DC7W-12W
Protection class	IP65
Insulation class	F class
Valve body material	Aluminum
Seal material	VITON

SB156/157 valve for printing machine



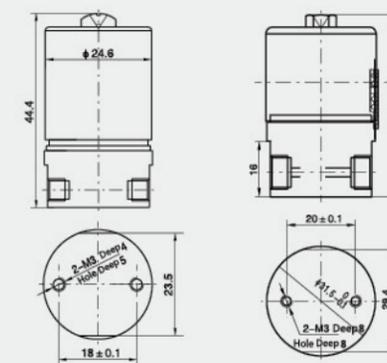
Features

- Made from solvent resistant material, valve is good for solvent like ink and so on.
Compact design with bable connection ports, easy for assembly.
3way and 2way are optional.

Technic data

Model	SB156	SB157
Media	Ink / Solvent	
Working type	Direct action 2/2 3/2	
Pattern	2/2:Normally close 3/2:NC / NO / Divert	
Orifice	2mm	3mm
Connection ports	M5, G1/8"	2.5mm bable
Working pressure	0 ~ 6Bar	
Max. pressure	16bar	
Working temp.	-10°C ~ 100°C	
Rated voltage	DC24V ±10%	
Power	7W	
Protection class	IP65	
Insulation class	F class	
Valve body material	Stainless steel SUS316	POM
Seal material	EPDM	

SB114 Valve for dental machine



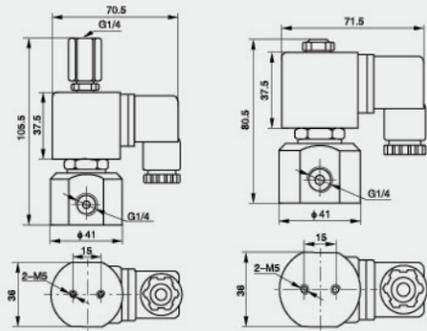
Features

1. Used for dental machine, control the on/off the clean water or air.
2. Compact construction.
3. Metal house which is rusty resistant.

Technic data

Model	SB114
Media	Clean Air / Water
Working type	Direct action
Pattern	Normally close
Orifice	1.2mm
Connection ports	M5 or bable
Working pressure	0 ~ 0.8MPa
Max. pressure	1.6MPa
Working temp.	-10°C ~ 80°C
Rated voltage	AC/DC24V-220V ±10%
Power	AC3.5VA/DC2.5W
Protection class	IP65
Insulation class	F class
Seal material	NBR

RMF23-SS/RMF22-SS Multi-use stainless steel valves



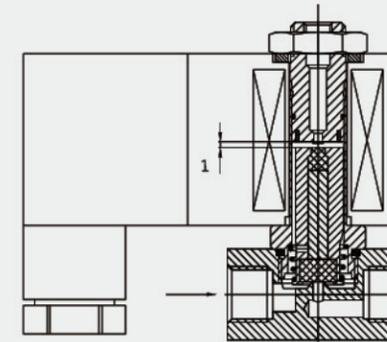
Features

1. Widely used in different applications.
2. Different seals, different inlets, different pressure ranges are optional.
3. Include 3way and 2way types.

Technic data

Model	RMF23-SS	RMF22-SS
Media	Clean Air/ Water/ Oil /Solvent/Weak acid/Weak alkali	
Working type	Direct action 3/2	Direct action 2/2
Pattern	Normally close/Normally open/divert	
Orifice (mm)	2	2 3 3.5 4 5
Working pressure (MPa)	NC 0.7	NO 0.7
	Divert 1.6	5.5 2.5 1.6 1.4 0.8
Connection ports	G1/8" G1/4" G3/8"	
Media temp.	0°C ~ 80°C / -40°C ~ 180°C	
Rated voltage	DC12~220V/AC24~380V/50/60Hz ± 10%	
Power	AC18VA/DC19W	
Valve body material	Stainless steel SUS316	
Seal material	NBR, EPDM/, VITON	

SB360 2/2 SB360 3/2 Solenoid valves



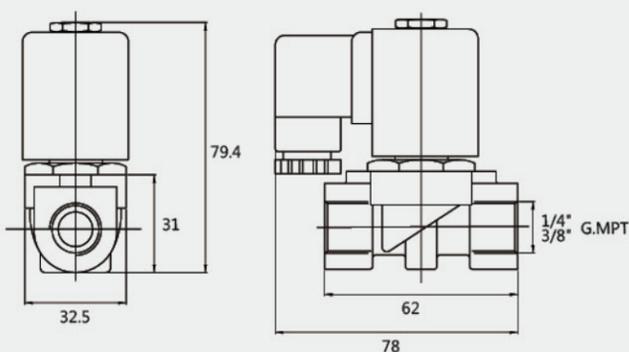
Features

Direct action valve, 3way or 2way for choice.

Technic data

Model	SB360 2/2	SB360 3/2
Media	Compressed air	
Working type	Direct action 2/2 3/2	
Pattern	Normally close / Normally open	
Orifice	2mm	1.8mm
Connection ports	G1/8"	G1/4"
Working pressure (MPa)	0~0.6	NC 0.3
		NO 0.7
		Divert 0.4
Working temp.	-40°C ~ 120°C	
Rated voltage	DC12V-DC24V ±10%	
Power	10W	
Protection class	IP65	
Insulation class	F class	
Valve body material	Brass	
Seal material	VITON	

SB167 Diaphragm valves



Features

1. Direct action type
2. Thermosetting coil, UL approved
3. Diaphragm type with big orifice
4. Suitable for different fluid based on different seals

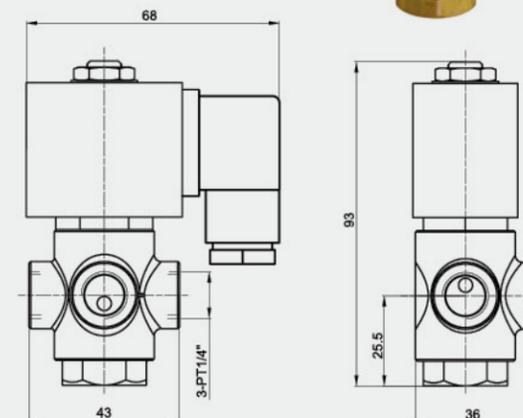
Technic data

Model	SB167
Media	Compressed air
Working type	Direct action 2/2
Pattern	Normally close
Orifice	10mm
Connection ports	G1/4" G1/2"
Working pressure	0.1 ~ 1.6MPa
Max. pressure	2.5MPa
Working temp.	-20°C ~ 80°C
Rated voltage	AC/DC24V-220V ±10%
Power	AC12VA/DC15W
Protection class	IP65
Insulation class	F class
Valve body material	Brass
Seal material	NBR

VT312 Multi-use valve

Features

Multi-use three way valve with all three ports on valve body, easy for assembly



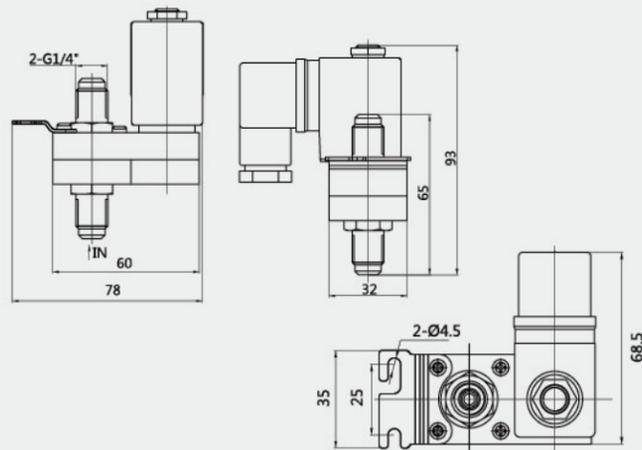
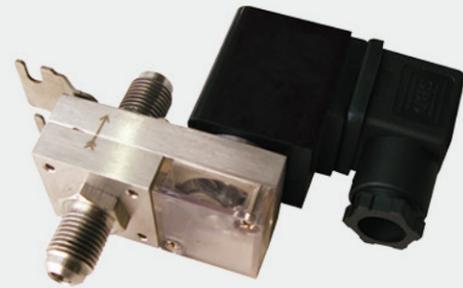
Technic data

Model	VT312
Media	Clean Air / Water / Oil
Working type	Direct action 3/2
Pattern	Normally close/Normally open/divert
Orifice	2.0mm
Connection ports	G1/4"
Working pressure	0 ~ 1.0Mpa
Valve body material	Brass
Seal material	VITON
Rated voltage	AC/DC24V-220V ±10%
Power	AC28VA/DC20W
Protection class	IP65

Function

Inlet	1 Inlet (HX23)			2 Inlet (CB23)			3 Inlet (CK23)		
Condition	2	1	3	3	1	2	3	1	2
No power	→			↔			→		
Energized	←			←			↔		

SB197 Stainless Steel Lever Valve



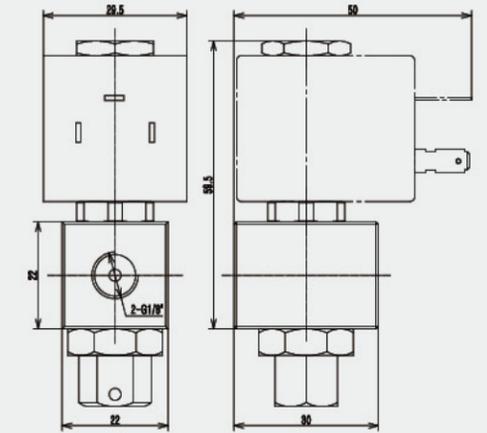
Features

Valve's On and Off is designed according to lever principle, High reliability, Wide range of working medium. The material of part which contact to working medium are VITON and SUS316, which can be widely used for Medical services, Food industry and so on.

Technic data

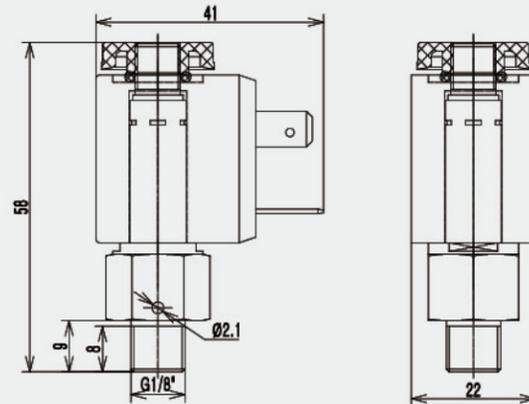
Model	SB197
Working pattern	2/2 Normal close
Working pressure	0~4bar
Orifice	4mm
Port Size	G1/2"
Body material	Stainless steel
Seal	VITON
Rated voltage	AC24V-220V ±10%
Power	AC22VA

BG06D020X25 valve for diesel charging machine



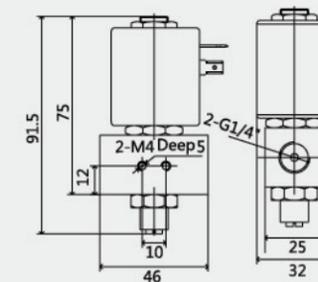
Model	BG06D020X25
Media	Diesel/ Water/Gas
Working type	Direct action 2/2
Pattern	Normally close
Orifice	2mm
Working pressure	0-8bar
Pull the minimum voltage	DC24/5W
Valve body material	Brass
Seal material	FKM

22120



Model	22120
Media	Water/ Air
Working type	Direct action 2/2
Pattern	Normally close
Orifice	1.9mm
Working pressure	0-12bar
Pull the minimum voltage	DC18V
Valve body material	Brass
Seal material	HNBR

SB369 Valve for diesel charging machine



SB369

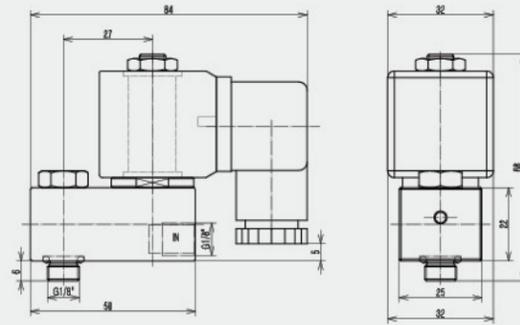
Features

1. Double flow pathways
2. Flow rate adjustable
3. Can be for other media when other seals used

Technic data

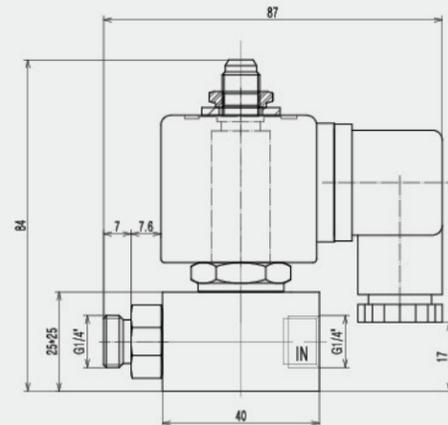
Model	SB369
Media	Diesel / Clean Air / Water
Working type	Direct action 2/2
Pattern	Normally close
Orifice	3mm
Connection ports	G1/4" / M5 / G1/8"
Working pressure	-2 ~ 6.5bar
Max. pressure	1.6MPa
Working temp.	-10°C ~ 80°C
Rated voltage	DC12V/DC24V ±10%
Power	12W
Protection class	IP65
Insulation class	H class
Valve body material	Brass
Seal material	NBR / FKM

RV02103-08Q



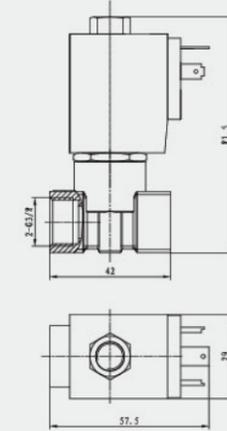
Model	RV02103-08Q
Type	3/2way,direct type
Connection port	G1/8 or G1/4
Working pressure	3 ~ 10bar
Working temp.	-5°C ~ 80°C
Max medium temp.	150°C
body	brass
orifice	2mm
Protection class	F级 IP65
Voltage	DC24V/19W
Mounting	Any place

RV02103-08T



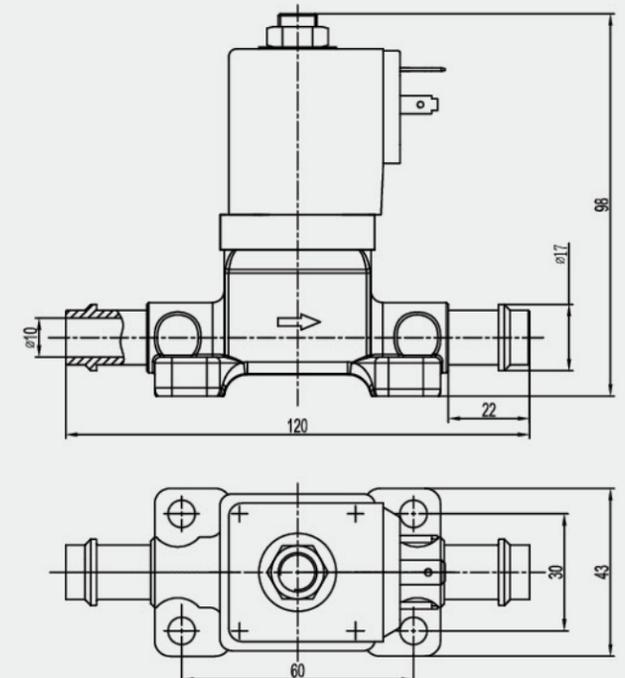
Model	RV02103-08T
Type	3/2way,direct type
Connection port	G1/4
Working pressure	3 ~ 10bar
Working temp.	-5°C ~ 80°C
Max medium temp.	150°C
body	brass
orifice	2mm
Protection class	F级 IP65
Voltage	DC24V/19W
Mounting	Any place

BTFS



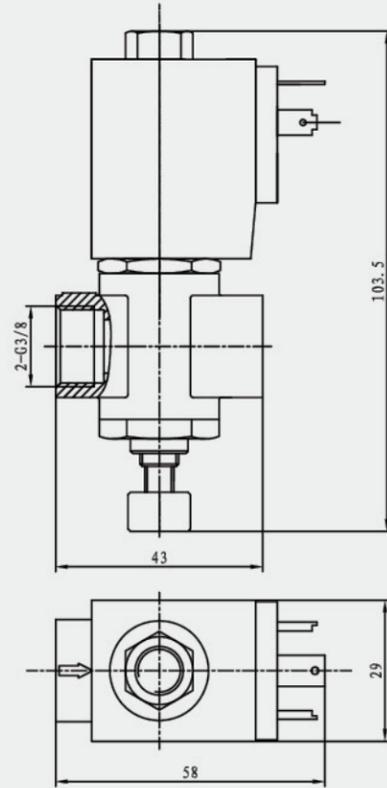
Model	BTFS
Media	Compressed air/ Water / Oil
Working type	Direct action 2/2
Pattern	Normally close
Orifice	5mm
Connection ports	G3/8"
Working pressure	0-10bar
Rated voltage	DC28V
Power	20W
Working temp	-5° ~80°
Valve body material	Stainless steel

KR13102



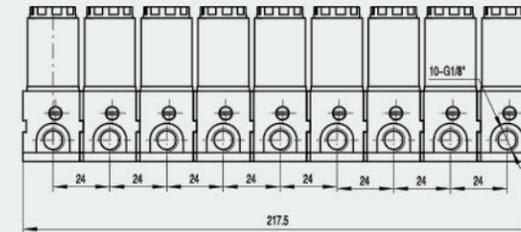
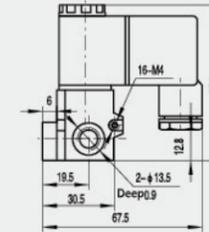
Model	KR13102
Media	Compressed air/ Gas
Working type	Pision type
Orifice	14mm
Connection ports	Pipe type Φ17
Working pressure	0-10bar
Working temp	-5° ~80°
Rated voltage	DC24V±10%
Power	20W
Protection class	IP65
Valve body material	Brass
Seal material	NBR

KTFS



Model	KTFS
Media	Water
Working type	Direct action 2/2
Pattern	Normally close
Orifice	5mm
Connection ports	G3/8"
Working pressure	0-6bar
Rated voltage	DC28V
Power	20W
Working temp.	-5° ~ 80°
Valve body material	Stainless steel

R2 Pilot valve



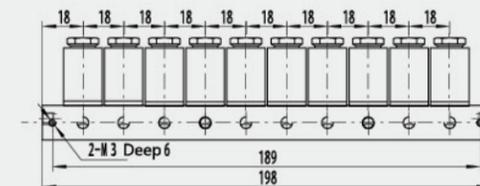
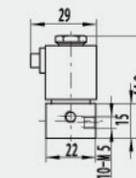
Features

1. Can be used as single valve or assembled together as manifold.
2. 2way or 3way for choice.
3. L means qty. of the valves in one manifold, this qty. is depend on customers' application.

Technic data

Model	R2-8L
Media	Compressed air
Working type	Direct action 3/2
Pattern	Normally close
Orifice	1.2mm
Connection ports	G1/8"
Working pressure	0 ~ 0.8MPa
Max. pressure	1.6MPa
Working temp.	-10°C ~ 80°C
Rated voltage	AC/DC24V-220V ±10%
Power	AC6VA / DC4.8W
Protection class	IP65
Insulation class	F class
Valve body material	Zinc alloy
Seal material	NBR / FKM

RFZ-10A Knitting machine



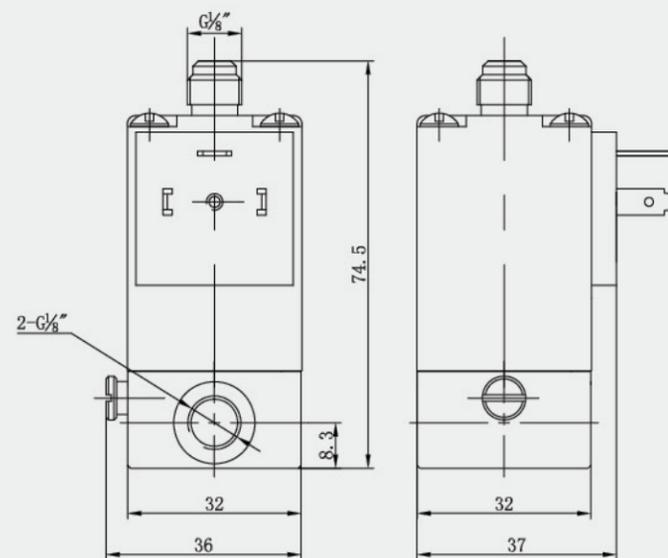
Features

- Used for pneumatic control system of knitting machine.
Qty. of valve in one manifold can be changed according to application.

Technic data

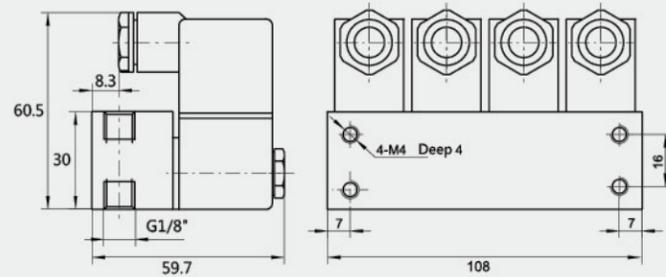
Model	RFZ-10A
Media	Clean Air
Working type	Direct action 2/2 3/2
Pattern	Normally close
Orifice	0.7mm
Connection ports	M5
Working pressure	0 ~ 0.8MPa
Max. pressure	1.6MPa
Working temp.	-10°C ~ 80°C
Rated voltage	DC12V/DC24V ±10%
Power	2.8W×10
Protection class	IP65
Insulation class	F class
Valve body material	Aluminum (Anodized in black)
Seal material	NBR

RV02103-06B/06BK



Model	RV02103-06BK RV02103-06B
Media	Compressed air/ Gas
Working type	Direct action ,3/2way
Pattern	Normally open / Normally close
Orifice	2mm
Connection ports	G1/8"
Working pressure	0-10bar
Rated voltage	DC24V
Power	14W

RSB115 valve



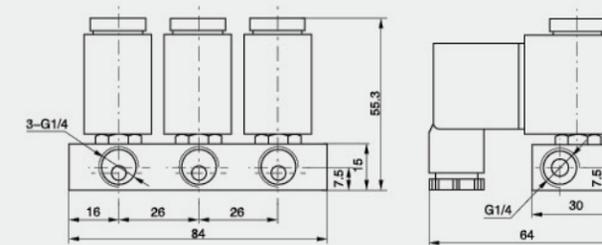
Features

Valve for water, air or oil

Technic data

Model	RSB115
Media	Clean Air / Water
Working type	Direct action 2/2
Pattern	Normally close
Orifice	2.5mm
Connection ports	G1/8\"-G1/4"
Working pressure	0~0.8MPa
Max. pressure	2.5MPa
Working temp.	-10°C ~ 80°C
Rated voltage	AC/DC24V-220V ±10%
Power	AC6VA/DC6W
Protection class	IP65
Insulation class	F class
Valve body material	Brass
Seal material	NBR

SB162



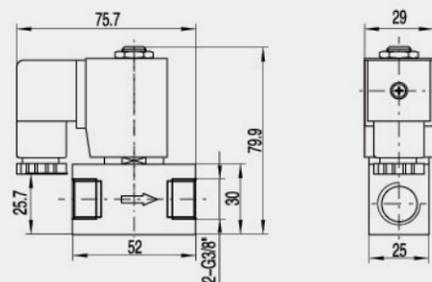
Features

Compact design, multi-use for water, air or oil.

Technic data

Model	SB162
Media	Compressed air/ Water / Oil
Working type	Direct action 2/2
Pattern	Normally close
Orifice	Φ2.5mm
Connection ports	G1/4"
Working pressure	0-0.8MPa
Working temp.	-10°C ~ 40°C
Rated voltage	AC/DC24V-220V ±10%
Total Power	AC6VA/DC6W
Protection class	IP65
Insulation class	F class
Valve body material	Brass
Seal material	NBR, FKM

SB163



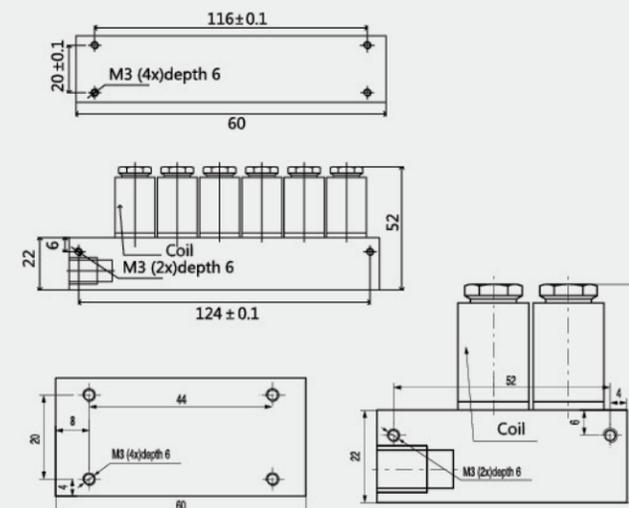
Features

Low pressure valve for gas burner or waste water treatment system.

Technic data

Model	SB163	SB163-4-A
Media	Clean Air	
Working type	Direct action 2/2	
Pattern	Normally close / Normally open	
Orifice	12mm/10mm/8mm	5mm
Connection ports	G1/2"	G1/4"
Working pressure	0-350mbar	0~2bar
Max. pressure	1.0MPa	
Working temp.	-10°C ~ 80°C	
Rated voltage	AC/DC24V-220V ±10%	
Power	AC22VA/DC14W	
Protection class	IP65	
Insulation class	F class	
Valve body material	Aluminum	
Seal material	NBR, FKM	

SBKV-2L/SBKV-6L



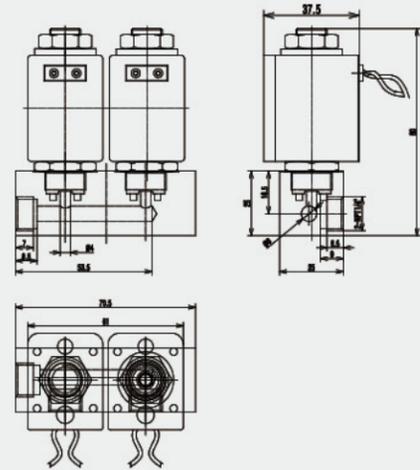
Features

Low pressure air valve, usually 2pcs manifold and 6pcs manifold for choice.

Technic data

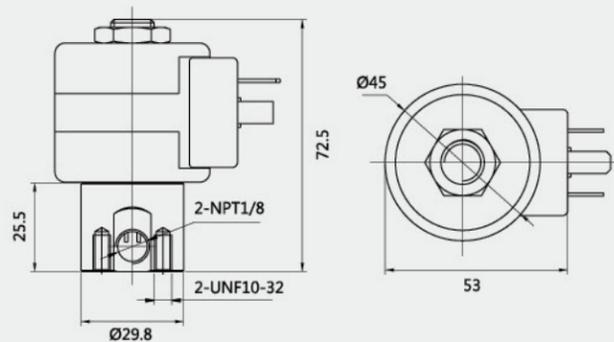
Model	SBKV-2L/SBKV-6L
Media	Clean Air
Working type	Direct action 2/2
Pattern	Normally close
Orifice	2.6mm
Connection ports	G1/8"
Working pressure	0-500mbar
Max. pressure	1.6MPa
Working temp.	-10°C ~ 80°C
Rated voltage	AC/DC24V-220V ±10%
Power	3.5W×2/3.5W×6
Protection class	IP65
Insulation class	F class
Valve body material	Aluminum
Seal material	NBR / Silicon

BN08D040X08



Model	BN08D040X08
Media	Steam ,air
Working type	Direct action 2/2
Pattern	Normally close
Orifice	4mm
Working pressure	0-3.5bar
Pull the minimum voltage	AC127V
Valve body material	Brass
Seal material	FKM

RV02352M-06B Latch freon valve



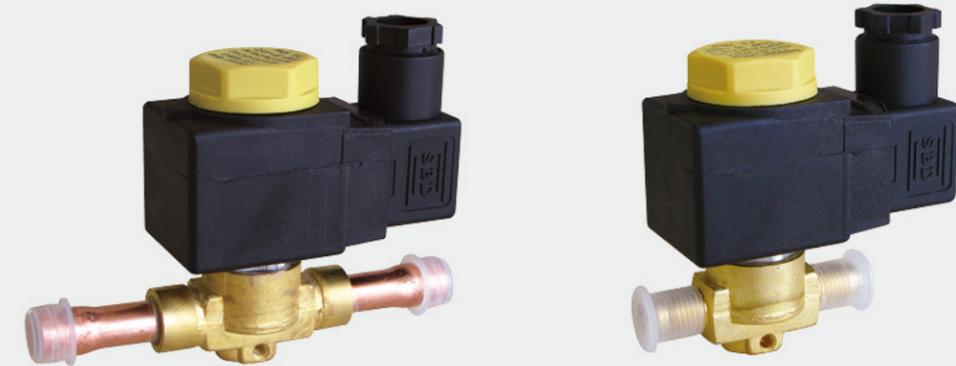
Features

Used in collection machine of freon

Technic data

Model	RV02353M-06B
Media	Freon
Working type	2/2 Bistable
Pattern	Normally close
Orifice	2.4mm
Connection ports	NPT 1/8
Working pressure	0~35bar
Rated voltage	DC6V~24V Pulse
Power	10.7W Pulse
Protection class	IP65
Insulation class	H class
Valve body material	Brass
Seal material	HNBR

SB125 Freon Solenoid Valve



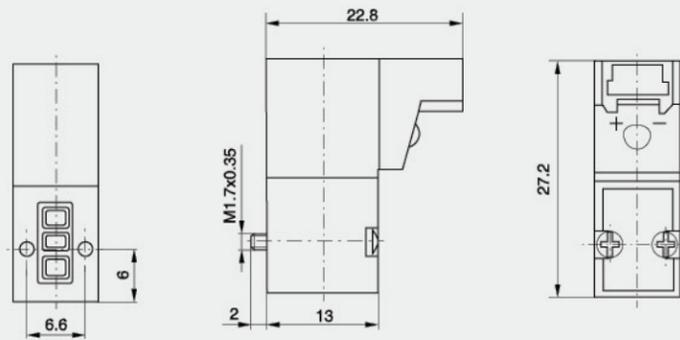
Features

Commonly used for control of freon in industrial refrigeration
Screw type and welding type optional
Good water-prof,heat-proof characteristic
Various connection and voltages made to order of clients

Technic data

Model	Port Size	Orifice	Working pressure	Max. Working pressure	Rated voltage	Power
SB125-1020/2	1/4" Thread Port	2.5mm	21bar	30bar	DC24V AC24V~380V ±10%	8W
SB125-1020/3	3/8" Thread Port	3.0mm				
SB125-1028/3	3/8" Welded Port	3.0mm				
SB125-1064/3	3/8" Thread Port	7.0mm				
SB125-1064/4	1/2" Thread Port	7.0mm				
SB125-1070/4	1/2" Thread Port	12.5mm				
SB125-1070/5	5/8" Thread Port	12.5mm				
SB125-1090/5	5/8" Thread Port	16.5mm				
SB125-1070/6	3/4" Thread Port	17.0mm				
SB125-1028/2	1/4" Welded Port	2.2mm				
SB125-1068/2	3/8" Welded Port	7.0mm				
SB125-1068/4	1/2" Welded Port	7.0mm				
SB125-1078/4	1/2" Welded Port	12.5mm				
SB125-1078/5	5/8" Thread Port	12.5mm				
SB125-1078/6	3/4" Welded Port	17.0mm				
SB125-1078/7	7/8" Welded Port	16.5mm				
SB125-1078/9	1-1/8" Welded Port	25.5mm				
SB125-1079/7	7/8" Welded Port	12.5mm				
SB125-1099/9	1-1/8" Welded Port	16.5mm				
SB125-1079/11	1-3/8" Welded Port	25.5mm				
SB125-1079/13	1-5/8" Welded Port	27.0mm				

XY-10A Micro valves



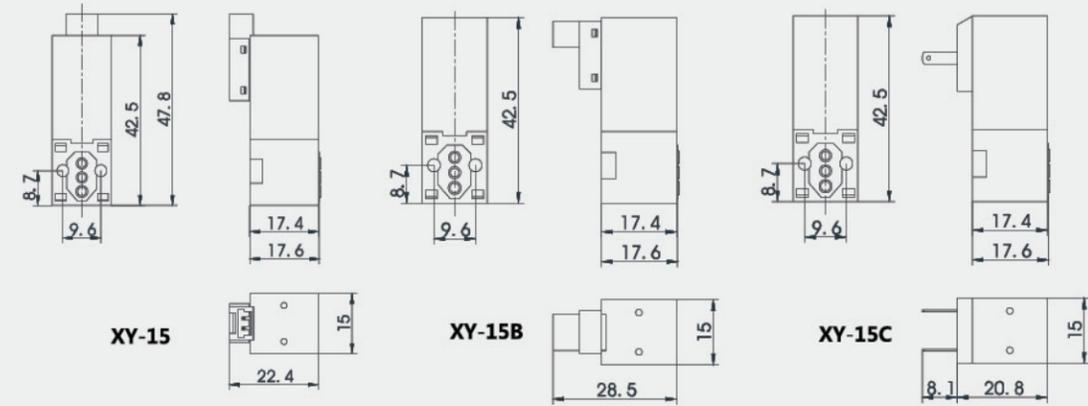
Features

1. Single or manifold for different applications, one inlet with some outlets based on manifold
2. Mostly used as pilot valves for the pilot type valves or control the mini cylinders
3. Very low power, is suitable for PC control system
4. Compact design, light and easy for assembly
5. No lubrication requested, long life design
6. Led indicator and protection circuit with coil

Technic data

Model	XY-10A
Medium	Compressed air
Working type and Pattern	Direct action 3/2 ,Normal close
Orifice	0.7mm
Connection ports	M3-M5 manifold
Working pressure	0-0.7Mpa
Rated voltage	DC24V ±10%
Power	1W
Protection class	IP65
Working temp.	-10°C ~ 80°C
Material of body	POM,PPS
Seal Material	NBR
Response time	Within 10ms
Working life	50 million cycle

XY-15 Micro valves



Features

1. Single or manifold for different applications, one inlet with some outlets based on manifold
2. Mostly used as pilot valves for the pilot type valves or control the mini cylinders
3. Very low power, is suitable for PC control system
4. Compact design, light and easy for assembly
5. No lubrication requested, long life design
6. Led indicator and protection circuit with coil

Technic data

Model	XY-15 / XY-15B / XY-15C
Media	Compressed air
Working type	Direct action 3/2
Pattern	Normally close (Direct action)
Orifice	1.4mm
Connection ports	M3 ~ M5 Manifold
Working pressure	0 ~ 0.7MPa
Working temp.	-5°C ~ 55°C
Rated voltage	DC24V
Power	2.3W
Protection class	IP65
Insulation class	F class
Valve body material	PA66
Seal material	NBR



Warning

1. Our products are for industry use, pls. ask experienced person to use it.
2. Pls. use it according to the datas.
3. About safety management, pls. refer to relative industry standards and regulations.
4. Before you ensure the safety, pls. don't operate with the products:
 - a. Before you inspect and repair, pls. ensure it is safe.
 - b. Pls. pay attention even the product stops working, because some parts maybe electricity charged already, and maybe some parts are not fully cooled down.
 - c. Before you inspect and repair, pls. stop the supply of fluid, turn off the power, exhaust the fluid.
 - d. Before you restart the product, pls. ensure the system is safe and in case, there is failure of the product, there is precautions to avoid whole system out of control.

Notes for ordering

1. We will carry one year repair-free guarantee from the day goods be delivered.

2. The following problems not included above repair-free guarantee :

- a. Use the products in the condition which is not according to data.
- b. The problem cause is not product itself.
- c. Not use the product according to user manual.
- d. Modify the products by user himself.
- e. Unexpected technical problem unmentioned when ordering.
- f. Problem caused by unforeseen natural disasters.

3. Confirmation of applicability :

The user Have the obligation to confirm the product is suitable for the application before using it.



Solenoid Valve 's Installation Remarks and Notes in use

1. Installation notice

- A. Check the model and parameter which print on the label, they must conform to actual technical requirements.
- B. Check solenoid coil, electromagnet and connetcor to make sure no damages.
- C. Clean the pipeline. The working medium of solenoid valve should be clean.
You should install filtering devices on the pipeline if the medium contains particle of impurities.
- D. Connect the valve port with pipeline according to the direction arrowhead indicates (same to the direction of medium flows), and make sure the connection seals good.
- E. The best installation method is perpendicular to pipeline and keep solenoid coil upward. The maximal inclination angle shoule be $\leq 30^\circ$, otherwise the normal operation cannot be promised.
- F. When the solenoid valve is installed outdoors, the protective cover is necessary to make sure the performance and longer service life.

2. Attentions

- A. Don't cover the solenoid coil when it is electrified that to avoid burnout because of overheating.
- B. Don't touch the solenoid coil during its working since the temperature is high because of heating itself.
- C. Don't hit and knock the solenoid coil, plug, electromagnet and connetor to avoid damage.
- D. The actual voltage cannot over regulated voltage.
- E. The working pressure, temperature and viscosity of media cannot over regulated range.
- F. Solenoid valve's inner part and filtering devices should keep clean.
- G. Normal type solenoid valve cannot be used in any explosive occasion.
- H. When the solenoid valve is not used, put it in a room that has temperature range 0°C to 40°C , relative humidity $\leq 80\%$ and has no corrosive gases.

3. Guarantee

- A. We will carry one year repair-free guarantee from the day goods be delivered.
- B. The following situation are not included in repair-free guarantee:
 - 1) The valve is not working normally or even damaged because the medium contains particle of impurities and the filtering devices is not installed.
 - 2) The service voltage is not conform to rated voltage that results in solenoid coil burn out or short circuit.
 - 3) The valve is not working normally or even damaged because of human destruction or incorrect use.
 - 4) The valve is not working normally or even damaged because the storage is in the open or inappropriate