

# PNEUMATIC REGULATING VALVE

JVL



Model: JL600-JH/C4/H/16/C/100/E1/W1/B5/B9

## Design Feature

- High control precision, wide adjustable range, large allowable pressure difference, good sealing performance
- Large flow capacity, multi-level pressure reduction, low noise, anti-cavitation, anti-pressure wear
- Built-in balance seal ring, open and close frequently, eliminate flash cavitation, enhance service life
- Integral packing box, compensation seal, dust prevention and shock absorption, stable flow

## Model Naming Method

JL	-600	-JH	-C4	-H	-16	-C	-100	-E1	-	-W3	-B5	-B9
Juliang brand	Pneumatic	Regulating valve	Flange	Metal hard sealing	PN	WCB	DN	Single acting	Anti explosion class	-20~250°C	Filter pressure reducing valve	Positioner

## Overview

Exquisite pneumatic diaphragm single seat regulating valve consists of a single seat valve body and a pneumatic actuator. Fine small single seat valve body compact structure, light weight, sensitive action, S-shaped fluid channel, small pressure drop loss, large valve capacity, accurate flow characteristics, and convenient disassembly and assembly. The press cage detachable structure design solves the problems of traditional screw-in valve seats, which is difficult to maintain on site and high maintenance cost. Suitable for strict leakage requirements, low pressure difference inlet and outlet the valve and a certain viscosity and containing a small amount of fiber medium occasions.

## Technical Parameter

DN	DN15~300mm
Nominal pressure	1.6~6.4Mpa(can design the high pressure condition)
Body material	WCB(C), SS304 (P), SS316 (R)
Sealing material	PTFE(F), Metal Hard sealing(H), Hard Alloy(Y)
Medium temp.	W2 : -20~150°C W3 : -20~250°C W4 : -29~425°C
Connection model	Flange, Female thread, Butt welding
Valve core mode	Single seat(P), Sleeve(M)
Control precision	0.3%~1%
Input signal	4~20mA, 0~10V, 1~5V
Flow characteristic	Equal percentage, equal linear, Quick open
Pneumatic actuator	ZHA series, ZHB series, Imported actuator series
Control mode	Single acting normally closed, single acting normally open
Travel(mm)	10, 16, 25, 40, 60, 100

## Technical specification

Design reference	GB
Design standard	GB/T4213
Structure Length	GB/T 12221
Flange connection	HG/T20592
Test, Inspection standard	JB/T 9092

• Notes: Other special sealing materials and special temperature can be selected according to customers' requirements.

## Characteristic

Item		Without positioner	With positioner
Basic tolerance %		±5.0	±1.0
Return tolerance %		≤3.0	≤1.0
Dead band %		≤3.0	≤0.4
Deviation for start point & end point %	Air to open	Start point	±2.5
		End point	±5.0
	Air to close	Start point	±5.0
		End point	±2.5
Rated travel deviation %		≤2.5	
Leakage rate I/h		0.01%x valve rated capacity	
Adjustable range R		10:1 30:1 50:1	

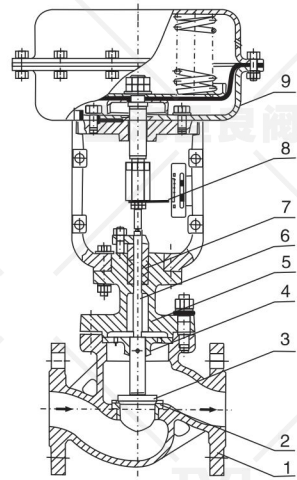


Fig 1 Standard type

1. Valve body
2. Valve seat
3. Valve core
4. Guide sleeve
5. Bonnet
6. Stem
7. Packing
8. Scale indication
9. Actuator

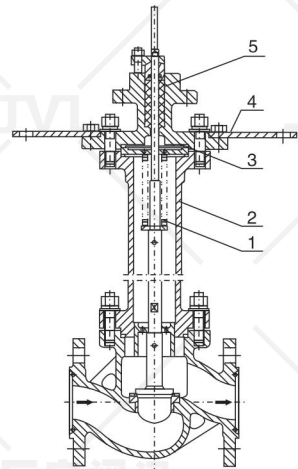


Fig 2 Low temperature type

- Reasonable valve core integrated external extraction structure, simple and convenient maintenance ( $\leq$ DN100)
1. Bellow
  2. Tube
  3. Bonnet
  4. Cooling box connecting plate
  5. Packing

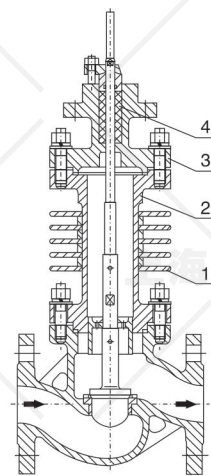


Fig 3 High temperature type

1. Cooling fin
2. Tube
3. Bonnet
4. Packing

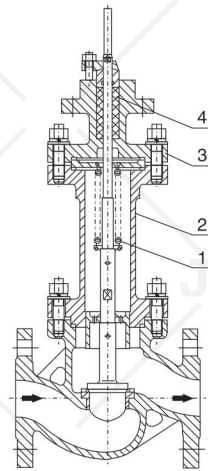


Fig 4 Bellows sealing type

- Reasonable valve core integrated external extraction structure, simple and convenient maintenance ( $\leq$ DN100)
1. Bellow
  2. Tube
  3. Bonnet
  4. Packing

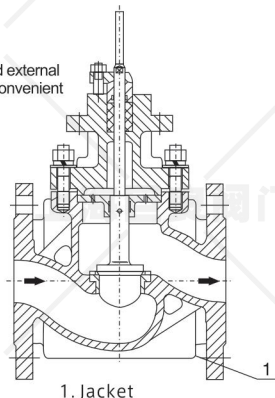
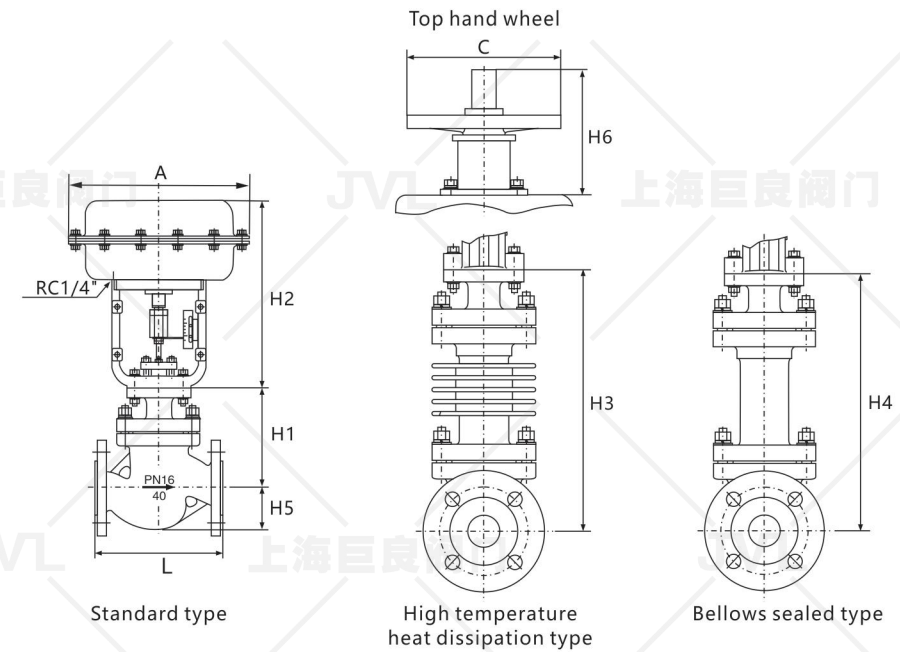


Fig 5 Jacket insulation type

1. Jacket



▼ PNEUMATIC OVERALL DIMENSIONS CHART- PN16 ( 16bar )

DN	L		A	H1		H2	H3		H4	H5		C	H6	WT (kg)	
	PN16/40	PN64		PN16/40	PN64		PN16/40	PN64		PN16/40	PN64			PN16/40	PN64
20	181	206	285	128	140	298	208	220	238	53	63	220	180	21	24
25	184	210	285	128	140	298	208	220	338	58	68	220	180	22	25
32	220	251	285	152	160	298	224	240	402	68	75	220	180	24	30
40	222	251	285	152	160	298	228	240	402	73	83	220	180	32	42
50	254	286	285	160	180	298	228	240	405	80	88	220	180	38	52
65	276	311	360	205	210	380	334	350	627	90	100	270	236	62	78
80	298	337	360	205	210	380	334	350	628	98	105	270	236	67	82
100	352	394	360	208	220	380	342	360	635	108	125	270	236	83	102
125	410	457	470	273	290	510	408	420	698	123	148	320	310	132	170
150	451	508	470	330	340	510	453	470	702	140	170	320	310	160	190
200	600	650	470	364	370	510	482	500	728	168	203	320	310	245	285

- 1. Other structure overall dimensions refer to the pneumatic diaphragm single seat regulating valve.
- 2. The weight in the table is the data of the matched PSL actuator.
- 3. Flange and flange end distance can be manufactured according to user specified standards, such as ANSI, JIS, DIN standards.

▼ Attachment selection

Solenoid valve	3/2, 5/2, single electric control and double electric control, please indicate when ordering
Filter pressure reducing valve	Stabilize and filter air source pressure
Limit switch	Remote feedback switch signal
Manual device	Open and close valve manually
Positioner	Input analog signal (4-20mA or 0-10V), adjust valve travel
Remark	The above accessories are not standard accessories, if you need them, please indicate when ordering, solenoid valve and limit switch are divided into explosion-proof type and non-explosion-proof type, please indicate the explosion-proof grade if you need.

▼ RATED FLOW COEFFICIENT KV, RATED TRAVEL, MATCHING ACTUATOR MODEL

DN (mm)	Seat DN (mm)	Rated flow value Kv		Rated travel (mm)	Actuator model
		Linear	Equal percent		
20	10	1.8	1.6	10	ZHA/B-22
20	12	2.8	2.5	10	ZHA/B-22
20	15	4.4	4.0	10	ZHA/B-22
20	20	6.9	6.3	10	ZHA/B-22
25	25	11	16	16	ZHA/B-22
32	32	17.6	10	25	ZHA/B-23
40	40	27.5	25	25	ZHA/B-23
50	50	44	40	25	ZHA/B-23
65	65	69	63	40	ZHA/B-34
80	80	110	100	40	ZHA/B-34
100	100	176	160	40	ZHA/B-34
125	125	275	250	60	ZHA/B-45
150	150	440	400	60	ZHA/B-45
200	200	690	630	60	ZHA/B-45