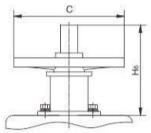
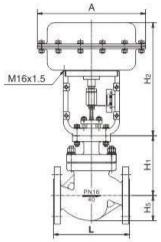
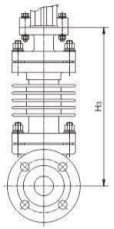


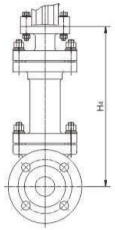

Top hand wheel




Standard type




High temperature heat dissipation




Bellows seal type

## Product overview

ZJHP type pneumatic diaphragm single seat regulating valve adopts top guide structure.The guide area of the valve core guide part is large and has strong vibration resistance.The valve seat closing performance complies with GB/T4213-92 standard. The regulating valve is equipped with a multi-spring diaphragm actuator, which has a small structure and large output force.

## Standard technical parameters

Valve body type: straight-through single-seat cast ball valve
Valve size: DN20~300
Rated pressure: PN16, PN40, PN63, PN100
Connection form: flange (standard type), thread, welding (must be specified by the user)
Flange standard: steel flange according to GB9113-200, JB/T-94
Sealing surface type: PN16 is convex surface PN40, 63, 100 are concave and convex surface

Material：ZG230~450
ZG1Cr18Ni9Ti
ZG1Cr18NI12Mo2Ti

Structural type: Standard type (-20℃~+200℃)
Low temperature type (-60℃~-196℃)
Heat dissipation type (-40℃~+450℃)
Bellows sealed type

Gland type: platen type
Padding: V-type polytetrafluoroethylene packing, flexible graphite packing
Gasket: Type, tooth type and flat type
Material, F4/modified F4, stainless steel + graphite

**Valve components**
Valve core:
single-seat plunger valve core
Metal seal
Equal percentage characteristics (%C)
Linear characteristics (LC)
Soft seal (material: reinforced polytetrafluoroethylene)
Equal percentage characteristics (%C)
Linear characteristics (LC)

**Actuator**
Type: Multi-spring diaphragm actuator
$ZH^{A}_{B}$-22, $ZH^{A}_{B}$-23, $ZH^{A}_{B}$-45, $ZH^{A}_{B}$-56
Valve action: Direct action, Reverse action
Diaphragm material: Nitrile rubber sandwich reinforced polyester fabric
Spring range. 20-100KPa,40-200KPa,80-240KPa

Air supply pressure: 0.14~0.4MPa
Signal interface: internal thread M16×1.5
Ambient temperature: -30℃~+70℃

**Valve action (valve core positive installation)**

Air-to-close type FO (with positive acting actuator)
When the air source fails, the actuator spring opens the valve
Air-to-open type FC (with negative acting actuator)
When the air source fails, the actuator spring closes the valve

**Accessories (configured upon request)**
Positioner, air filter pressure reducing valve, hand wheel mechanism. Limit switch
Switch, solenoid valve, valve position transmitter, relay.
Position retaining valve, others

**Performance**
Rated Kv value: refer to Table 1
Flow characteristics: linear, equal percentage
Adjustable range: 50:1
Valve seat leakage rate (for rated Kv value %)
Metal seal: less than 0.01% (ANSI B16.104-1976 IV grade)
and less than 0.001% (optional))
Soft seal: less than 0.00001%
and less than (ANSI B16.104-1976 VI grade)
Return difference: less than 1% of the full stroke (with positioner)
less than 3%~5% of the full stroke (without positioner)
Basic error:
less than ±1% of the full stroke (with positioner)
less than ±5% of the full stroke (without positioner)

Dimensions: Refer to Table 2
Paint color: The pneumatic actuator and valve surface of the regulating valve should be painted, and stainless steel and steel valves do not need to be painted.The arrows and text on the valve body are painted red. User-specified colors are also acceptable.

Advantages of quick change: the valve seat can be used on both sides to increase service life, can be quickly installed and disassembled without special tools, and is cost-effective.



## Table 1 Kv value action time

| Nominal diameter (mm) | Valve seat diameter (mm) | Rated flow coefficient KV | | Actuator model | Diaphragm effective area ($cm^2$) | Rated stroke (mm) |
|---|---|---|---|---|---|---|
| | | Linear | Equal ratio | | | |
| 20 | 5 | 0.2 | | $ZH^{A}_{B}$-22I | 350 | 10 |
| | 7 | 0.5 | | | | |
| | 8 | 0.8 | | | | |
| | 10 | 1.8 | 1.6 | $ZH^{A}_{B}$-22 | 350 | 16 |
| | 12 | 2.8 | 2.5 | | | |
| | 15 | 4.4 | 4 | | | |
| | 20 | 6.9 | 6.3 | | | |
| 25 | 25 | 11 | 10 | | | |
| 32 | 32 | 17 | 16 | $ZH^{A}_{B}$-23 | 350 | 25 |
| 40 | 40 | 27 | 25 | | | |
| 50 | 50 | 44 | 40 | | | |
| 65 | 65 | 69 | 63 | $ZH^{A}_{B}$-34 | 560 | 40 |
| 80 | 80 | 110 | 100 | | | |
| 100 | 100 | 176 | 160 | | | |
| 125 | 125 | 275 | 250 | $ZH^{A}_{B}$-45 | 900 | 60 |
| 150 | 150 | 440 | 400 | | | |
| 200 | 200 | 690 | 630 | | | |
| 250 | 250 | 1000 | 900 | $ZH^{A}_{B}$-56 | 1400 | 100 |
| 300 | 300 | 1600 | 1440 | | | |

## Table 2 Dimensions and weight

Unit:mm

| Nominal diameter (mm) | L | | A | H1 | | H2 | H3 | | H4 | | H5 | | C | H6 | weight(kg) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PN 16/40 | PN 63/100 | | PN 16/40 | PN 63/100 | | PN 16/40 | PN 63/100 | PN 16/40 | PN 63/100 | PN 16/40 | PN 63/100 | | | PN 16/40 | PN 63/100 |
| 20 | 150 | 230 | 285 | 126 | 138 | 271 | 286 | 298 | 286 | 298 | 43 | 49 | 220 | 180 | 21 | 24 |
| 25 | 160 | 230 | 285 | 126 | 138 | 271 | 286 | 298 | 286 | 298 | 48 | 54 | 220 | 180 | 22 | 25 |
| 32 | 180 | 260 | 285 | 134 | 142 | 297 | 302 | 310 | 302 | 310 | 57 | 61 | 220 | 180 | 24 | 30 |
| 40 | 200 | 260 | 285 | 157 | 165 | 297 | 325 | 333 | 325 | 333 | 66 | 70 | 220 | 180 | 32 | 42 |
| 50 | 230 | 300 | 285 | 167 | 187 | 297 | 335 | 345 | 335 | 345 | 80 | 84 | 220 | 180 | 38 | 52 |
| 65 | 290 | 340 | 360 | 199 | 204 | 375 | 437 | 442 | 437 | 442 | 92 | 97 | 265 | 240 | 62 | 78 |
| 80 | 310 | 380 | 360 | 214 | 219 | 375 | 452 | 457 | 452 | 457 | 100 | 105 | 265 | 240 | 67 | 82 |
| 100 | 350 | 430 | 360 | 229 | 240 | 375 | 467 | 478 | 467 | 478 | 120 | 125 | 265 | 240 | 83 | 102 |
| 125 | 400 | 500 | 470 | 263 | 280 | 455 | 524 | 541 | 524 | 671 | 134 | 138 | 315 | 304 | 132 | 170 |
| 150 | 480 | 550 | 470 | 293 | 300 | 455 | 554 | 561 | 554 | 691 | 156 | 163 | 315 | 304 | 160 | 190 |
| 200 | 600 | 650 | 470 | 358 | 364 | 455 | 619 | 625 | 619 | 755 | 199 | 206 | 315 | 304 | 245 | 285 |
| 250 | 730 | 775 | 580 | 440 | 450 | 655 | 700 | 710 | 824 | 835 | 252 | 260 | 440 | 410 | 375 | 390 |
| 300 | 850 | 900 | 580 | 550 | 565 | 655 | 795 | 805 | 915 | 930 | 325 | 335 | 440 | 410 | 475 | 495 |

Note: 1. The weight in the table is the standard data without accessories, and the side-mounted hand wheel can also be installed.
2. The valve body flange end face distance can be manufactured according to the user's specified standard, such as:ANSI,JIS,DIN.