



ZMQY Pneumatic Diaphragm Small Flow Regulating Valve

Design Features

- European style finely made, precise control, good sealing performance, advanced design, excellent quality
- Exquisite technology, superior structure, stable flow, quick response, replace import
- Small pressure drop loss, stable output force, large flow coefficient, equal channel smooth cross-section
- Wide regulation range, high flow characteristic precision, top guide structure, easy handwheel operation

Overview

The ZMQY pneumatic diaphragm small flow regulating valve consists of a pneumatic diaphragm multi spring actuator and a small flow valve. Suitable for regulating small flow rates, it has the characteristics of compact structure, small volume, light weight, and convenient installation and maintenance.

Model description

-Z	-MQ	-Y	-	-1	-Y	-1/2"	-15	-16	-K	-D
Control valve category	Structure form	Trim type	Bonnet type	Connection mode	Sealing material	Nominal diameter	Valve core size	Nominal pressure	Flow characteristic	Action mode

Technical parameters & performance --Valve body

Type	Straight through forge valve
Nominal diameter	G1/2",G3/4"
Nominal pressure	PN16,40,64bar
Material	Stainless steel (1Cr18Ni9Ti, 1Cr18Ni12Mo2Ti), etc.
Top bonnet	Regular type: -40~230℃ Heat sink type: 230~450℃
Bonnet type	Bolt tightened type
Packing	V-shaped PTFE, PTFE impregnated asbestos, graphite

Technical parameters & performance -- Valve trim

Valve core type	Single seat plunger type
Flow characteristic	Linear
Material	Stainless steel (1Cr18Ni9Ti, 1Cr18Ni12Mo2Ti, 316L), Stainless steel surfacing STL, Titanium corrosion-resistant alloy, etc.

Technical parameters & performance -- Actuator

Type	ZHA/BMulti spring diaphragm actuator
Model	ZHA/B-11
Effective area (cm2)	200
Stroke (mm)	10
Spring range (KPa)	20~100 (Standard) , 40~200 , 80~240 , 20~60 , 60~100
Diaphragm material	Nitrile rubber with nylon cloth, ethylene propylene rubber with nylon cloth
Air supply pressure	140~400KPa
Air source interface	RC1/4"
Ambient temperature	-30~70℃

Valve action mode: Air to close (B) - Air failure valve position open (FO); Air to open (K) - Air failure valve position closed (FC)

Accessories: Positioner, air filter regulator, position holding valve, stroke switch, valve position transmitter, handwheel mechanism, etc.

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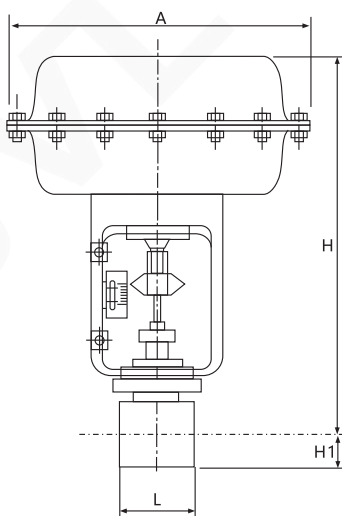
Technical parameters & performance -- Performance

Item	Index value
Basic error % (With positioner)	±1.0
Return difference % (With positioner)	≤1.0
Leakage rate l/h	0.01% * Valve rated capacity
Regulating range R	30:1

Rated flow coefficient Kv, rated stroke, allowable differential pressure

Nominal diameter DN (mm)	G1/2", G3/4								
Valve seat diameter (mm)	2	2.5	3	4	5	6	7	8	9
Rated stroke L (mm)	10								
Rated flow coefficient Kv	0.04	0.06	0.08	0.12	0.2	0.32	0.5	0.8	1
Allowable differential pressure (bar)	64							52	46

●Note: The basis for determining the allowable differential pressure: 1) Standard spring; Valve closed P2=0; 2) The flow direction is bottom in top out.



Outline dimensions

Nominal diameter DN (mm)	G1/2", G3/4	
Valve seat diameter (mm)	2~9	
L (mm)	80	
H (mm)	Regular type	280
	Heat sink type	400
H1 (mm)	19	
A (mm)	230	
Weight (kg)	18	