

Double Acting Type Pneumatic Valve Positioner

Model VPP02/03

OVERVIEW

Model VPP02/03 double acting type pneumatic valve positioner mounted on the valve is a force-balance servo mechanism designed to position the control valve correctly and rapidly by bleeding or feeding air to the diaphragm, double acting actuation in accordance with the pneumatic signal from a controller.

SPECIFICATIONS

Model

VPP02 : Supply air pressure 200 to 340 kPa {2.0 to 3.5 kgf/cm ² }		— (1)
VPP03 : Supply air pressure 350 to 690 kPa {3.6 to 7.0 kgf/cm ² }		
		Code
(1) Input signal	Full range 20 to 100 kPa (Standard)	1
	Half range 20 to 60 kPa (Low range)	2
	Half range 60 to 100 kPa (High range)	3

Output characteristics:

Linear, Equal percentage and Quick opening.

Supply air pressure:

200 to 690 kPa {2.0 to 7.0 kgf/cm²}

Air consumption:

20 Nl/min. (normal state, supply air pressure 490 kPa {5.0 kgf/cm²})

Maximum capacity of air flow:

250 Nl/min. (supply air pressure 490 kPa {5.0 kgf/cm²})

Pneumatic tubing connection:

Rc 1/4

Ambient temperature:

-30 to +80 °C

Performance:

Accuracy ; ± 1% F.S.

Dead band ; 0.5% F.S.

Travel adjustable range:

14 to 100 mm



Additional specifications (by special order):

Corrosion-resistant and silver finish (Semi-standard specification Y138):

- Corrosion-resistant (Acryl baking) finish (Y138A) ; Resistance for corrosive gases.
- Corrosion-proof (Epoxy baking) finish (Y138B) ; Resistance for corrosive liquids.
- Silver-normal (Acryl baking) finish (Y138C) ; Protection for temperature rise of device caused by direct sun light, radiation heat, etc.
- Silver-corrosion-resistant (Acryl baking) finish (Y138D) ; Protection for above-mentioned temperature rise and resistance for corrosive gases.

Note) Silver finish is not applicable for alkaline gases.

Weight:

3.5 kg

Housing material:

Aluminum alloy casting

Finish:

Acryl baking finish (For corrosion-resistant and silver finish, refer to the optional specification.)

Color of finish:

Dark beige (Munsell 10YR 4.7/0.5)

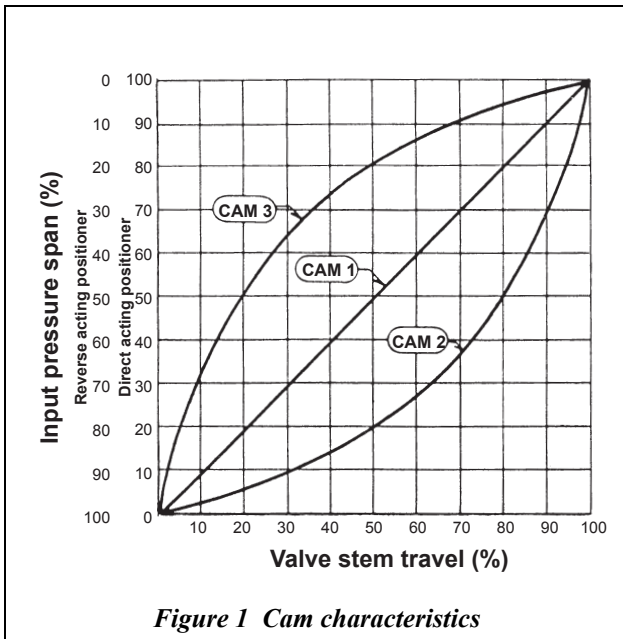


Figure 1 Cam characteristics

Cam characteristics:

Linear (cam 1, standard) and two other kinds. By selecting the other two cams, valve characteristics can be approximated as follows:

(1) For reverse acting valve

Cam 2

- Linear characteristic valve plug --> Quick opening characteristic
- Equal percentage characteristic valve plug --> Linear characteristic

Cam 3

- Linear characteristic valve plug --> Equal percentage characteristic
- Quick opening valve plug --> Linear characteristic

(2) For direct acting valve

The effect of cams 2 and 3 applied to direct action valves is reversed as compared with the case of reverse action valves.

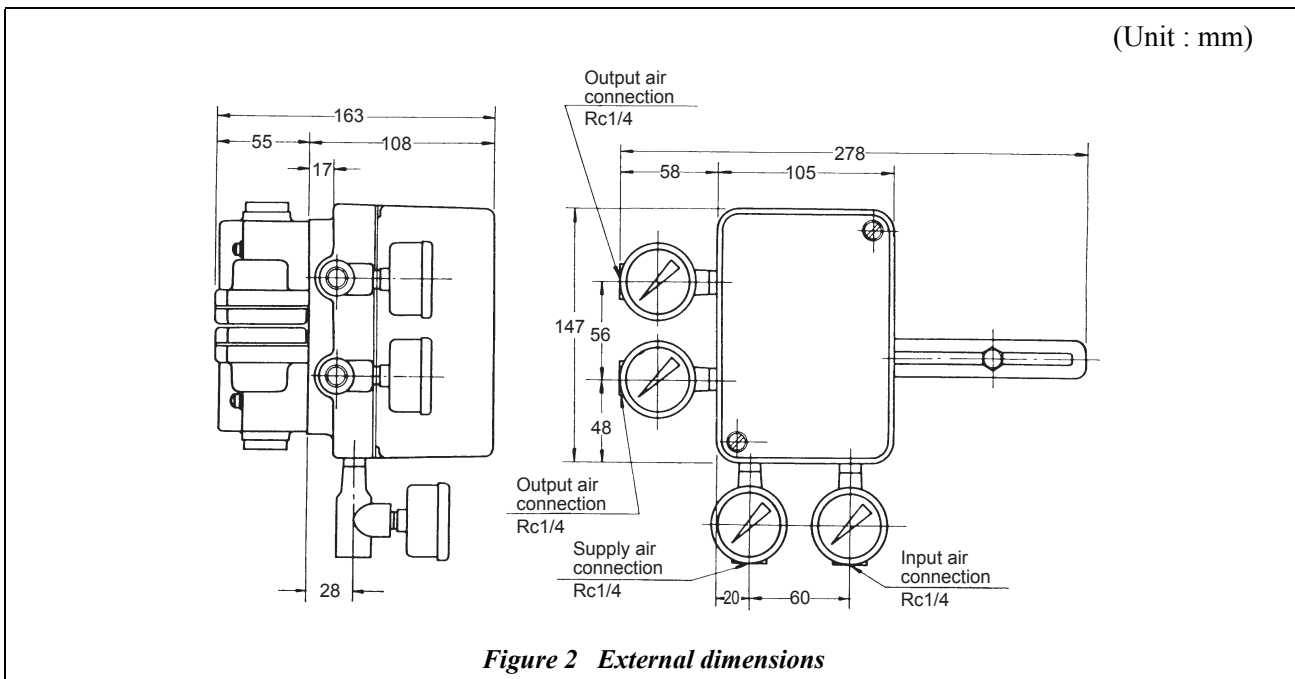


Figure 2 External dimensions

Ordering information

When ordering, please specify;

- | | |
|------------------------|--------------------------|
| 1) Model number | 4) Actuator model No. |
| 2) Input range | 5) Output characteristic |
| 3) Supply air pressure | 6) Option |

Note

Please, read 'Terms and Conditions' from following URL before the order and use.

<http://www.azbil.com/products/bi/order.html>

Specifications are subject to change without notice.

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