

# Single Acting Type Pneumatic Valve Positioner For Higher Supply Air Pressure Model VPP08

## OVERVIEW

Model VPP08 valve positioner is designed to operate piston cylinder that require higher supply air pressure than diaphragm actuator. The positioner is a force-balance servo-mechanism to position valve opening correctly and rapidly by bleeding or feeding air of a pneumatic-operated single acting actuator in accordance with a pneumatic signal from a controller.

## FEATURES

- 1) Compact, rigid construction makes it easy for adjustment and maintenance.
- 2) Changes in characteristics can easily be made by changing cams.
- 3) Anti-corrosive materials are used for components, thus is suitable for service in bad operating atmosphere.

## SPECIFICATIONS

### Model

VPP08 — (1)

		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:

350 to 690 kPa {3.6 to 7.0 kgf/cm<sup>2</sup>}

### Air consumption:

20 Nl/min. (normal state, supply air pressure 490 kPa {5.0 kgf/cm<sup>2</sup>})

### Maximum capacity of air flow:

250 Nl/min. (supply air pressure 490 kPa {5.0 kgf/cm<sup>2</sup>})

### 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:

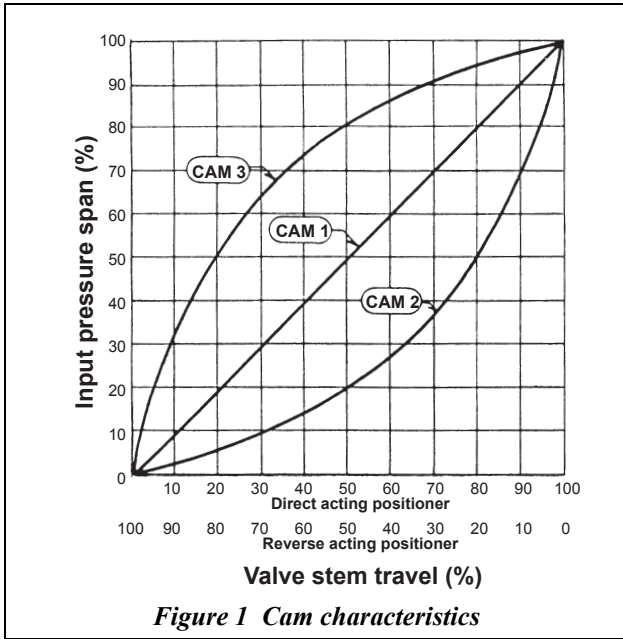
Aluminum alloy casting

#### 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)



**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**

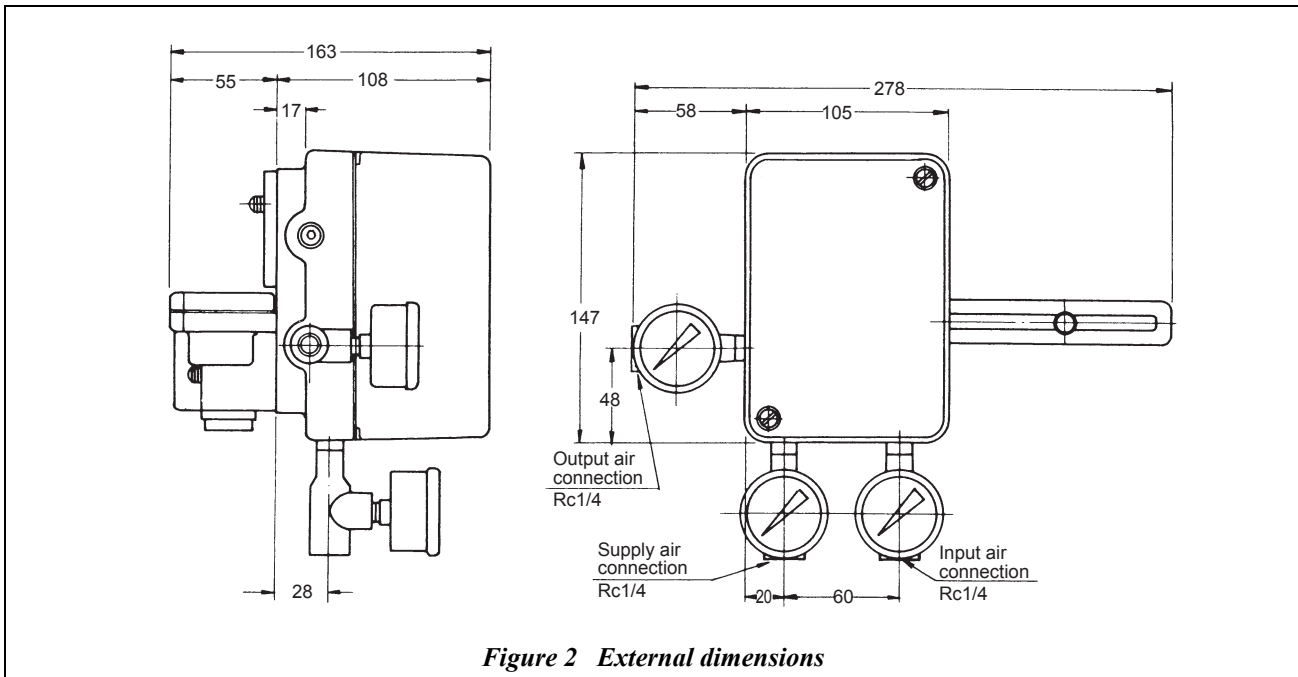
- Linear characteristic valve plug --> Quick opening characteristic
- Equal percentage characteristic valve plug --> Linear characteristic

**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.



**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                |

Specifications are subject to change without notice.



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