

Double Acting Type Pneumatic Valve Positioner Model VPP 02/03

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 actuator in accordance with the pneumatic signal from a controller.

Standard Specifications

Type: Model VPP02

(Supply air pressure 2.0~3.5 kgf/cm²)

Model VPP03

(Supply air pressure 3.6~7.0 kgf/cm²)

Input: 0.2~1.0 kgf/cm² (standard)

0.2~0.6, 0.6~1.0 kgf/cm² are available.

Output characteristics:

Linear, Equal percentage and Quick opening.

Supply air pressure:

2.0~7.0 kgf/cm²

Air consumption: 20 Nℓ/min. (normal state, supply air pressure 5 kgf/cm²)

Maximum capacity of air flow: 250 Nℓ/min. (supply air pressure 5 kgf/cm²)

Pneumatic tubing connection: Rc 1/4 or 1/4 NPT internal thread

Ambient temperature: -30°C to +80°C

Performance

Accuracy: ±1% FS

Dead band: Within 0.2% FS

Travel adjustable range: 14~100 mm

Net weight: Approx. 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)

Corrosion-resistant and silver finish: (Semi-standard specification Y138. As specified when ordering.)

Corrosion resistant (Acryl baking) finish (Y138A); Resistance for corrosive gases.

Corrosion-proof (Epoxy baking) finish (Y138B); Resistance for corrosive liquids.

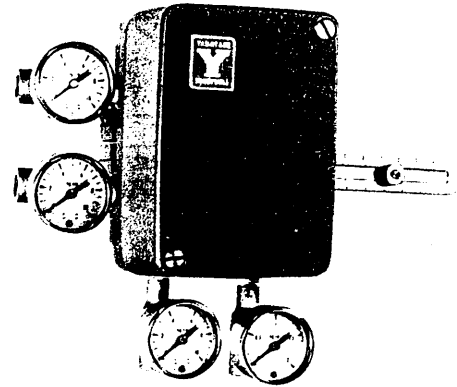
Silver-normal (Acryl baking) finish (Y137C);

Protection for temperature rise of device caused by direct sun light, radiation heat, etc.

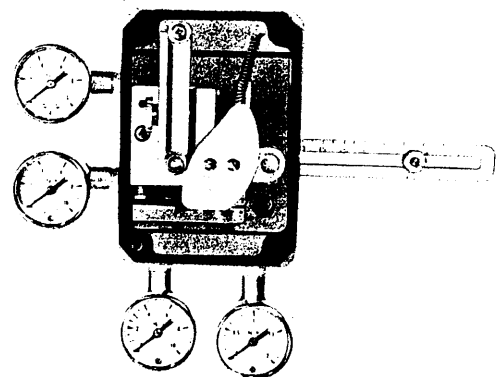
Silver-corrosion-resistant (Acryl baking) finish (Y138D);

Protection for above-mentioned temperature rise and resistance for corrosive gases.

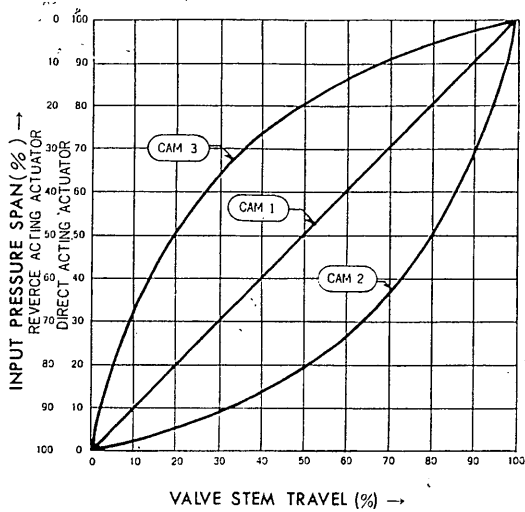
(Note: Silver finish is not applicable for alkaline gases)



Exterior view



Interior view



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 characteristics

- Cam 3 {
 - ▶ Linear characteristic valve plug
 - Equal percentage characteristic
 - ▶ Quick opening valve plug
 - Linear characteristics

(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 1. Cam Characteristics

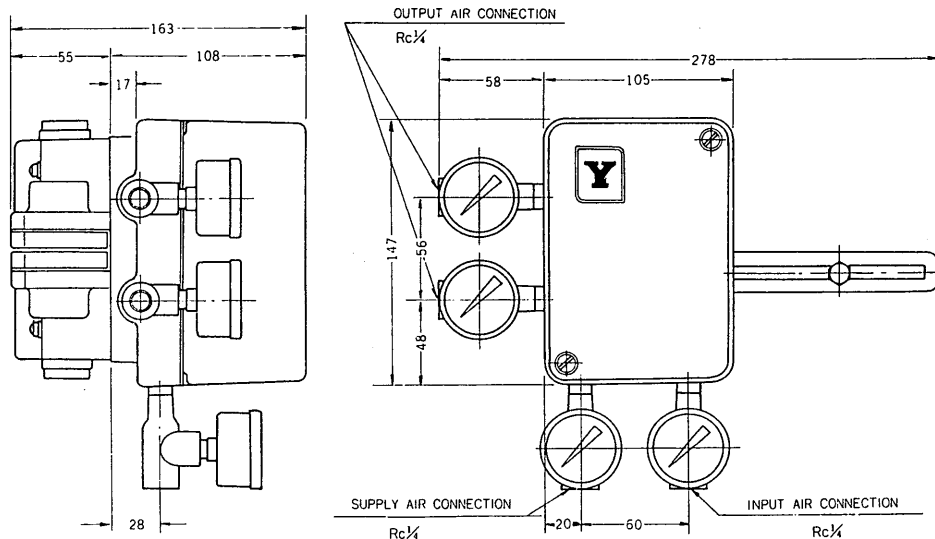


Figure 2. External Dimensions

Ordering Information

When ordering, please specify:

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

* Specifications are subject to change without notice.