

Pneumatic Valve Positioner For Small Actuators Model VPE 04/05

Introduction

The Pneumatic Valve Positioners (VPE) are designed specifically for small actuators for the CV 3000 Series valves, NEW 10 Series valves, and Small Flow valves to improve characteristics and response of control valves as well as to minimize the effect of changes in fluid pressures.

Features

- 1) The VPEs are compact and can be readily installed in small actuators.
- 2) All of the major components are housed in the casing and purged with bleeding air, thereby preventing corrosion caused by adverse atmosphere.
- 3) The VPEs provide an air booster mechanism. Although compact, the VPEs allow a rapid response speed which is comparable with that of a large positioner.
- 4) The VPEs can be effectively used when the controller signal span and the actuator spring span do not mutually conform, so that the valve position can be controlled in direct conformity with the controller signal.

Standard Specifications

Model: VPE04; Air supply pressure 1.4 to 1.9kgf/cm²
VPE05; Air supply pressure 2.0 to 4.0kgf/cm²

Input: 0.2 to 1.0kgf/cm²
0.2 to 0.6, 0.6 to 1.0kgf/cm² (optional)

Output: Linear

Air supply: 1.4 to 4.0kgf/cm²

Air consumption: 9Nℓ/min. (normal state, with air supply 3.5kgf/cm²)

Maximum air flow-through: 88Nℓ/min. (with air supply 3.5kgf/cm²)

Air connection: Rc1/4 internal thread

Ambient temperature: -20 to +70°C

Ambient humidity: 10 to 90%RH

Performance:

Accuracy; ±3%FS

Dead band; 0.3%FS or less

Stem travel range: 6 to 25mm

Operating speed: 12mm/s maximum



VPE04

Additional specification (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 against temperature rise of devices caused by direct sun light, radiation heat, etc.

Silver-corrosion-resistant (acryl baking) finish (Y138D);
Protection against the above-mentioned temperature rise and resistance to corrosive atmosphere
(Note: Silver finish is not applicable for alkaline gases.)

Dimensions: Refer to Figure 1, page 2.

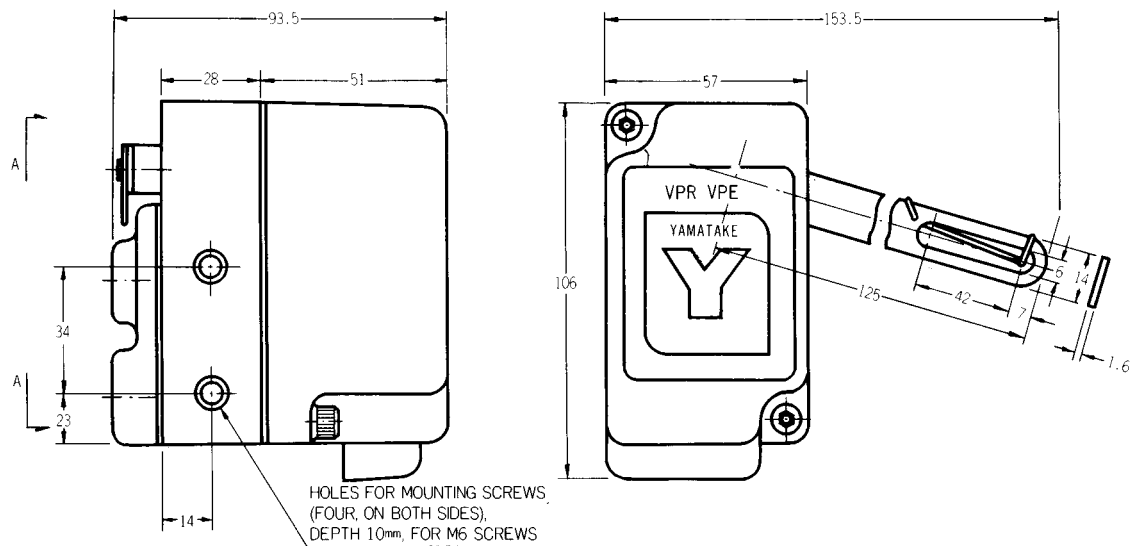
Weight: 1.1kg (including mounting bracket)

Housing material: Body; Aluminum alloy
Cover; Polyester resin reinforced with glass

Finish: Acryl baking finish

Note: For corrosion-resistant and silver finish, refer to additional specifications.

Color of finish: Dark beige (smooth tone finish)



A-A View

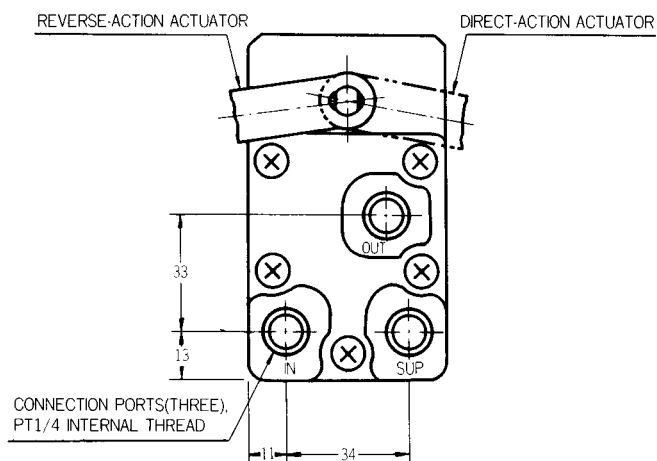


Fig.1 Dimension Drawing

Ordering Information

When ordering, please specify:

- 1) Model number: VPE
- 2) Input
- 3) Air supply
- 4) Actuator to be applied
- 5) Additional specifications

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