

# Single Acting Type Pneumatic Valve Positioner Model HTP

## OVERVIEW

Model HTP pneumatic valve positioner provides improvement of dynamic and static characteristics of control valve and satisfies many requirement referring to such process needs as split range action of actuator, changing from direct to reverse action and characteristics change.

## SPECIFICATIONS

### Model

HTP — (1) (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
(2) Positioner action	Direct (Output air pressure increases with input signal increase)	D
	Reverse (Output air pressure decreases with input signal increase)	R

### Output characteristics:

Linear, Equal percentage and Quick opening.

### Supply air pressure:

140 to 390 kPa {1.4 to 4.0 kgf/cm<sup>2</sup>}

### Air consumption:

7 Nl/min. or under (normal state, supply air pressure 140 kPa {1.4 kgf/cm<sup>2</sup>})

### Maximum capacity of air flow:

200 Nl/min. (supply air pressure 140 kPa {1.4 kgf/cm<sup>2</sup>})

### Pneumatic tubing connection:

Rc 1/4 internal thread

### Ambient temperature:

-25 to +60 °C

### Performance:

Accuracy ; ± 1% F.S.

Dead band ; 0.1% F.S.

Travel adjustable range ; 12 to 100mm,  
6 to 12 mm (optional)

### Stroke speed (max.):

10 mm/sec. (when with model PSA1 actuator.)

### Additional specifications:

With pressure gage and bypass (standard)

With pressure gage

Without pressure gage and bypass



### 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 (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.  
(Notes: Silver finish is not applicable for alkaline gases)

### Weight:

2.8 kg (standard model)

### Housing material:

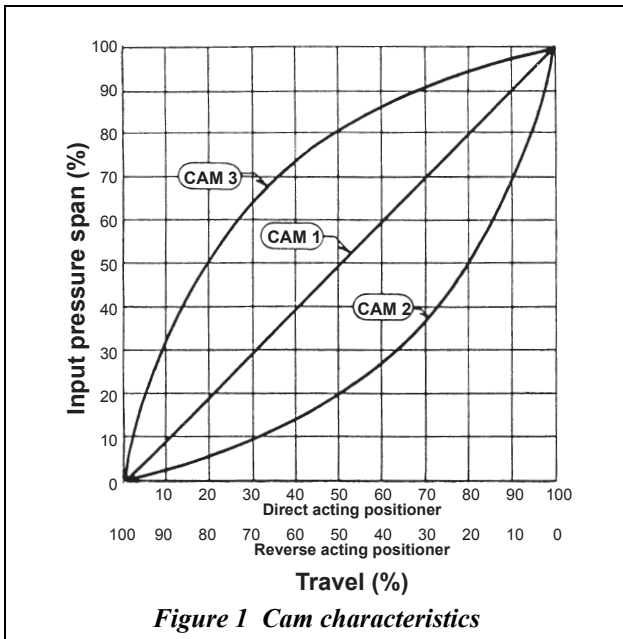
Aluminum alloy casting

### 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**

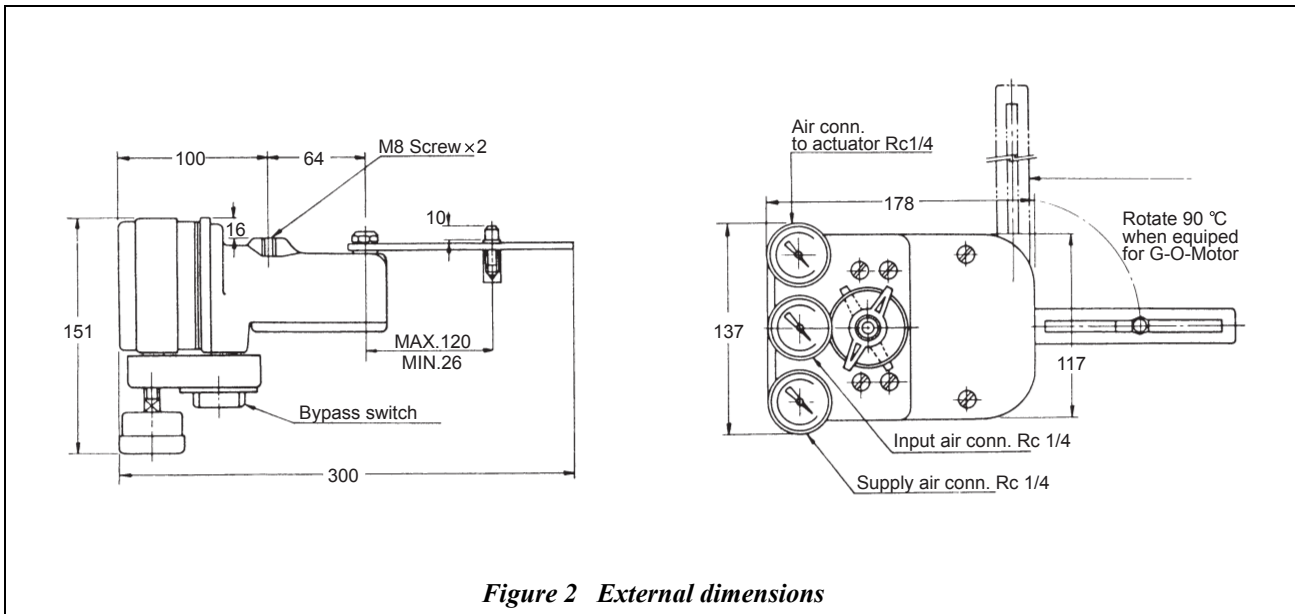
- Linear characteristic valve plug --> Quick opening characteristic
- Equal percentage characteristic valve plug --> Linear characteristic

**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.



Specifications are subject to change without notice.

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