

# Transmitters: Time Delay Valve

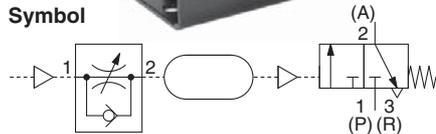
## Series VR2110



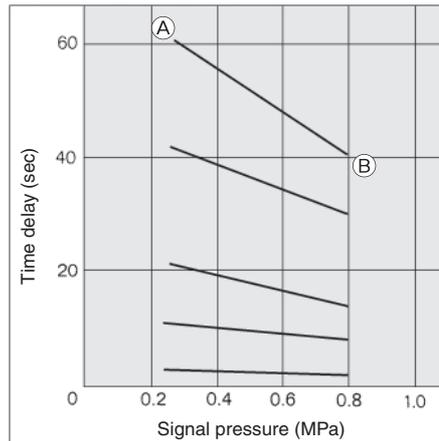
Combination of adjustable orifice and fixed flow allows transmission of a pneumatic signal after a fixed time period.



Symbol

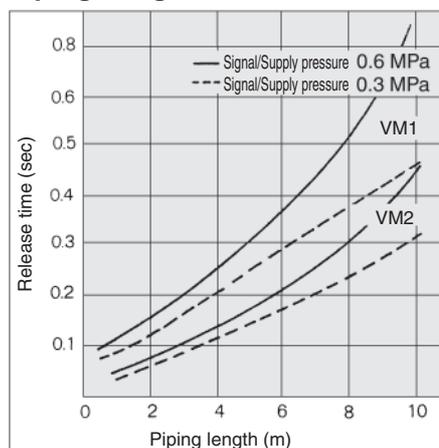


Input Signal (PIL) vs. Time Delay



Example) Ⓐ is the point, which is set by the input signal pressure 0.25 MPa, with a delay time of 60 sec. With the same status, if the input signal pressure is increased to 0.8 MPa, the delay time varies to the Ⓑ point (≈ 40 sec).

Piping Length vs. Release Time



If the input signal (PIL) is turned OFF, the release time of the time delay valve changes depending upon the effective area of the valve and the length of piping. Please refer to the above graph for the standard values.

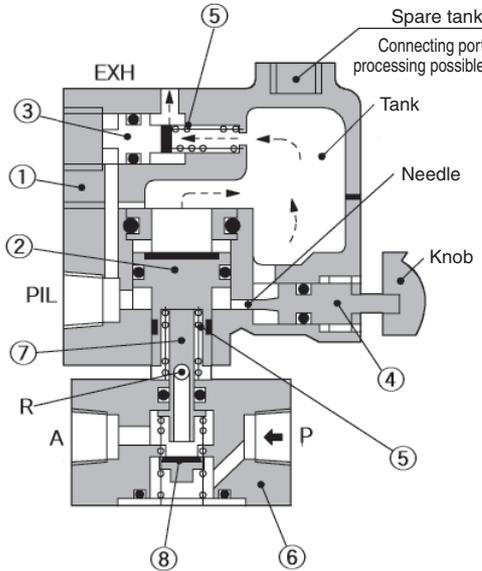
### Model/Specifications

Model		VR2110-01
Supply pressure		0 to 1.0 MPa
Signal pressure		0.25 to 0.8 MPa
Time delay		0.5 to 60 s
Repeatability*		±10 % F.S. (Representative valve)
Operating and fluid temperature		-5 to 60 °C (No freezing)
Flow-rate characteristics	C[dm <sup>3</sup> /(s·bar)]	0.5 (P→A), 0.4 (A→R)
	b	0.2 (P→A), 0.15 (A→R)
Port size		1/8
Weight		500 g

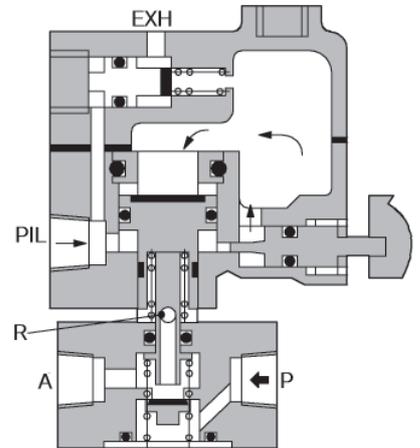
\*) The dispersion is shown excluding the first actuation when actuated 4 times continuously.

### Construction

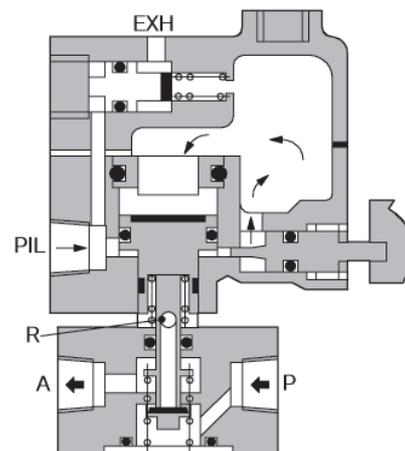
#### Non-actuated



#### Actuated before time set



#### Actuated after time set



### Component Parts

No.	Description	Material	Note	No.	Description	Material	Note
1	Valve body	ADC	Platinum silver	5	Return spring	Steel	
2	Differential piston	Brass, NBR	Rubber lined	6	Valve body	ZDC	Platinum silver
3	Exhaust piston	Brass, NBR	Rubber lined	7	Plunger	POM	
4	Needle	Brass		8	Valve	NBR	

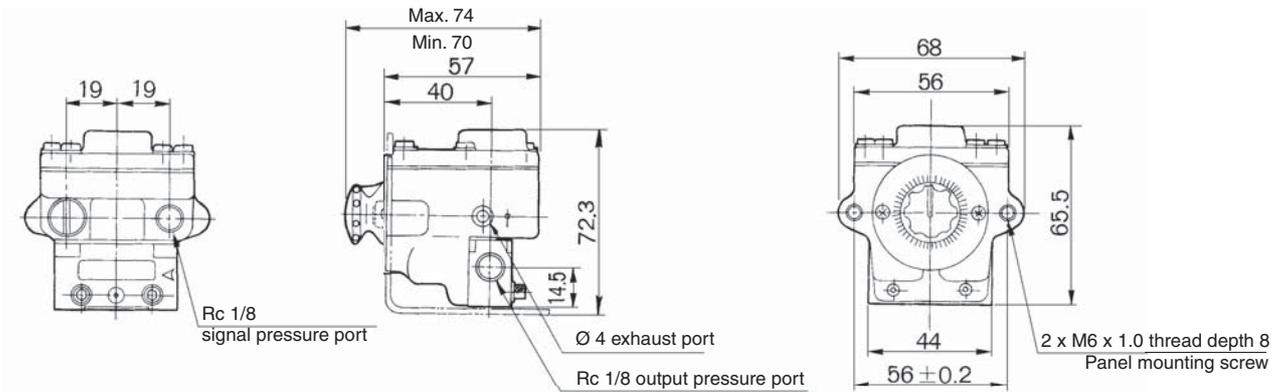
## How to Order

### VR2110 - 01

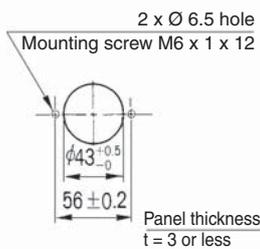
Port size

<b>01</b>	Rc 1/8
<b>N01</b>	NPT 1/8
<b>F01</b>	G 1/8

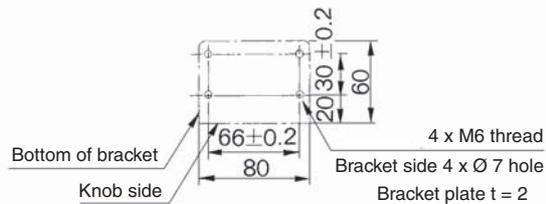
## Dimensions



### Panel mounted



### Bracket mounted



Rc 1/4 Spare tank connecting port processing possible

