

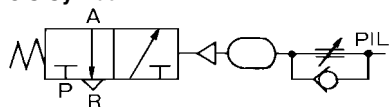
Transmitters: Time Delay Valve VR2110



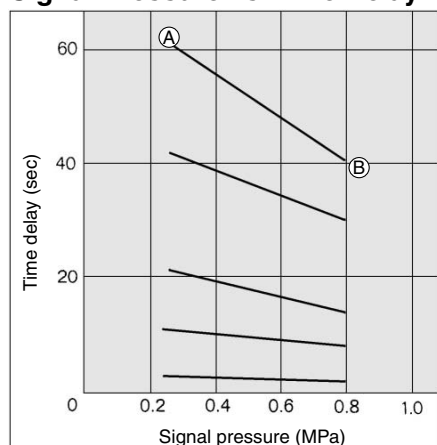
Combination of adjustable orifice and fixed flow allows transmission of a pneumatic signal after a fixed time period.



JIS Symbol

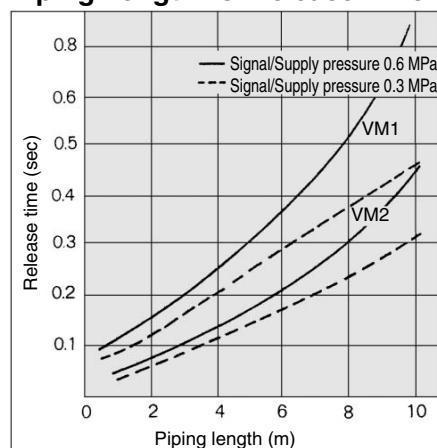


Signal Pressure vs. Time Delay



Example) ① 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 ② point (≈ 40 sec).

Piping Length vs. Release Time



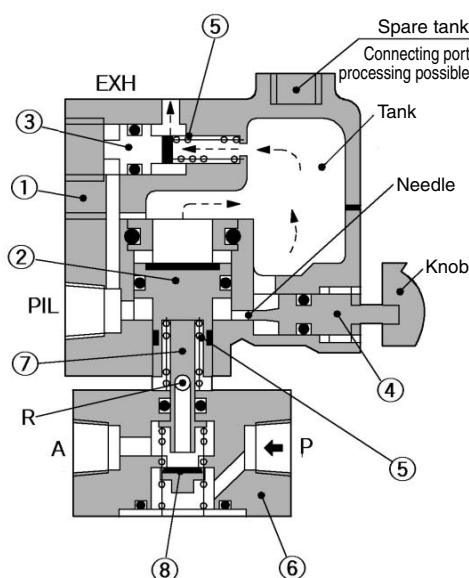
If the input signal (PIL) is turned OFF, the release time of the time delay valve changes depending upon the effective area of the valve and the length of piping. Please refer to the above graph for the standard values.

Model/Specifications

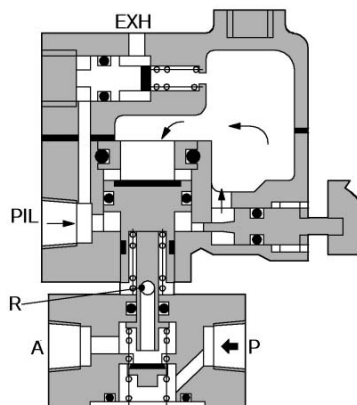
Model	VR2110-01
Supply pressure	0.1 to 1.0 MPa
Signal pressure	0.25 to 0.8 MPa
Time delay	0.5 to 60 s
Repeatability	$\pm 10\%$ F.S.
Operating and fluid temperature	-5 to 60°C (No freezing)
Effective area	2.5 mm^2
Port size	$\frac{1}{8}$
Weight	500 g

Construction

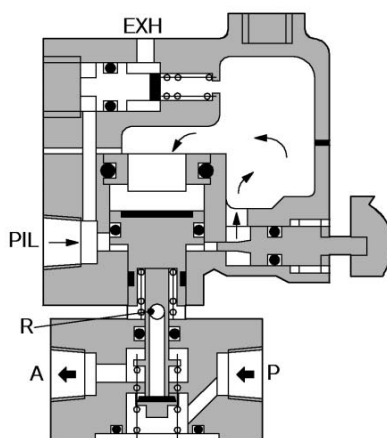
Non-actuated



Actuated before time set



Actuated after time set



Component Parts

No.	Description	Material	Note	No.	Description	Material	Note
①	Body	ADC	Metallic plated	⑤	Spring	Steel	
②	Piston	Brass, NBR	Rubber lined	⑥	Body	ZDC	Metallic plated
③	Piston	Brass, NBR	Rubber lined	⑦	Plunger	Stainless steel	
④	Needle	Brass		⑧	Valve	Brass, NBR	Rubber lined

S□A

V□A

S□A

V□A

VM

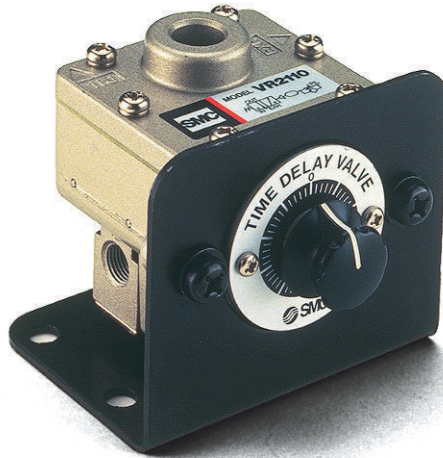
VR

VH

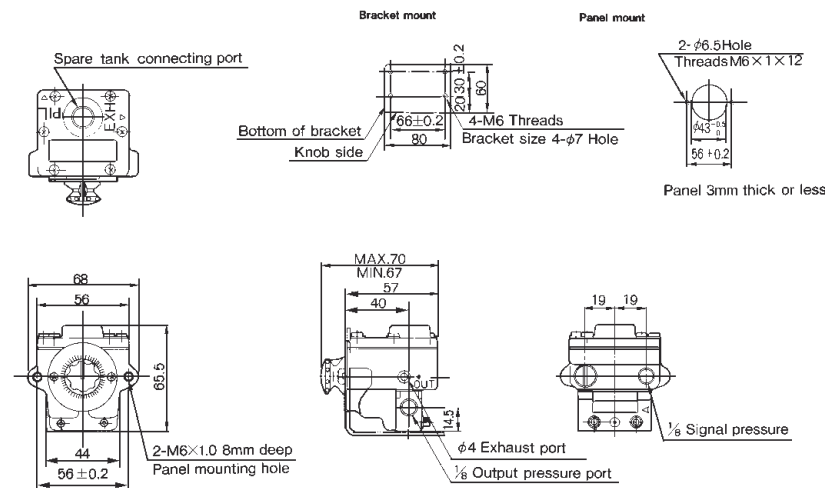
VHS

TIME DELAY VALVE SERIES (N)VR2110

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



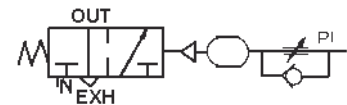
DIMENSIONS
TIME DELAY VALVE



TECHNICAL SPECIFICATIONS

Supply Pressure	0 ~ 1MPa / 0 ~ 145 PSI
Signal Pressure	0.25 ~ 0.8MPa / 32 ~ 116PSI
Time Delay	0.5 ~ 60 Sec
Effective Orifice (Cv Factor)	2.5mm ² (0.14)
Port Size	1/8 PT / NPT

SYMBOLS



How To Order

TIME DELAY VALVE

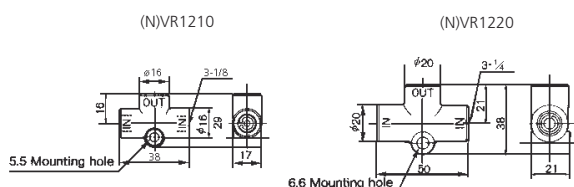
NVR2110-N01 (1/8 NPT)
VR2110-01 (1/8 PT)

SHUTTLE VALVE SERIES (N)VR1210, (N)VR1220

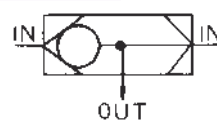
3 Ported Check Valve with one output and 2 pneumatic signal input ports



DIMENSIONS SHUTTLE VALVE



SYMBOLS



TECHNICAL SPECIFICATIONS

Series	(N)VR1210-01	(N)VR1220-02
Max Operating Pressure	1MPa / 145 PSI	
Min Operating Pressure	0.05MPa / 8 PSI	
Effective Orifice (Cv Factor)	7mm ² (0.38)	15mm ² (0.81)
Port Size	1/8 PT / NPT	1/4 PT / NPT

How To Order

SHUTTLE VALVE

NVR1210-N01 (1/8 NPT)
NVR1220-N02 (1/4 NPT)
VR1210-01 (1/8 PT)
VR1220-02 (1/4 PT)

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