

**3 MPa / 7 MPa**

# Coolant Valve for High-Pressure

Suitable for high-speed grinding and drilling with a long drill

This coolant valve is suitable for lubrication, blowing cutting chips, and cooling by high-pressure (3 MPa/7 MPa) coolant.

● Life service: **3** million cycles  
(Under SMC lifespan test conditions)

● Power consumption: **0.35** W  
(24 VDC)  
(With light/surge voltage suppressor: 0.58 W)

● Water hammer: Reduced by **20%**  
(2 port) (Compared with the existing model VNH series)

● Standardized the 3-port reverse pressure spec.  
(Refer to the application example 1 and 2.)

● Flow-rate characteristics (2 port)

Pressure spec.	$Av \times 10^{-6} [m^2]$
7 MPa	42 (1.8) to 155 (6.5)

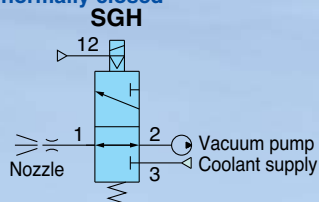
( ) : Cv factor



## Application example

[Example 1]

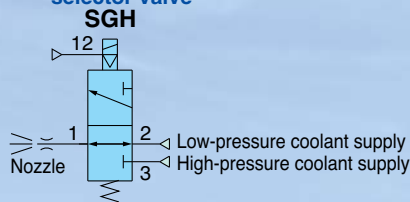
3-port reverse pressure spec. normally closed



Dripping can be prevented.

[Example 2]

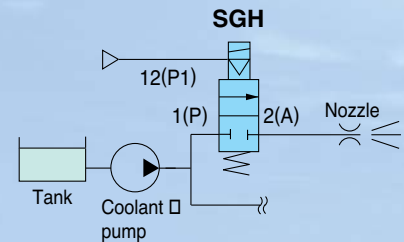
3-port reverse pressure spec. selector valve



Different pressures can be supplied.

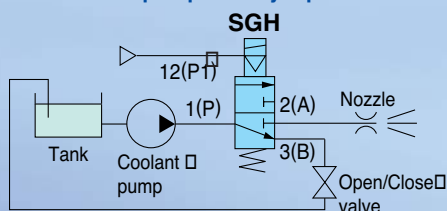
[Example 3]

Nozzle turned ON/OFF by 2-port valve



[Example 4]

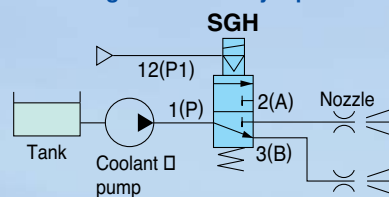
Reduction of pump load by 3-port valve



Use to continuously return the coolant from □ port B to a tank in order to reduce pump load.

[Example 5]

Switching the nozzles by 3-port valve



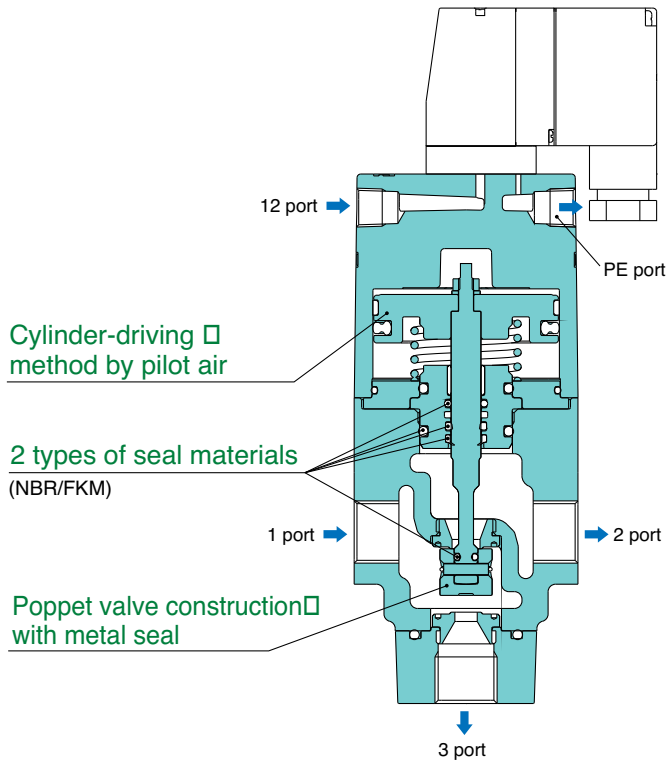
Use to supply the coolant with 2 locations by □ switching the valve. Can be used as a 2-port □ valve by plugging in the port 3(B).



NPP-E07-5

**Series SGH**

Coming soon!



2 port

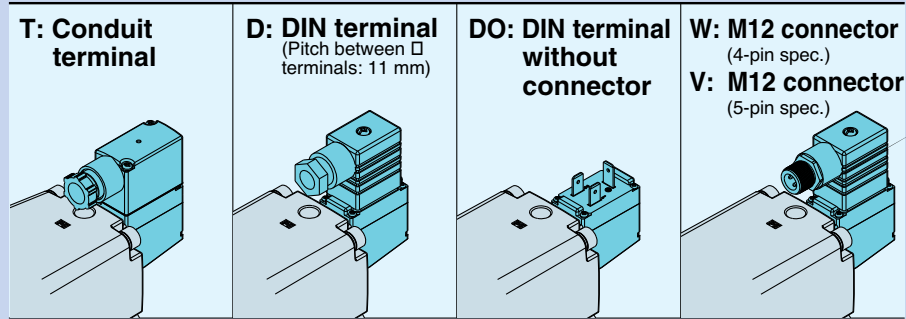


3 port

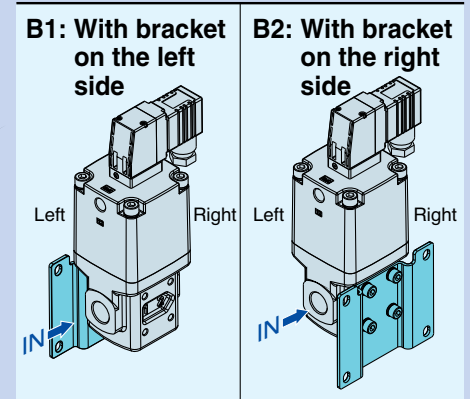
[Variations]

Port	Pressure specification	Model	Port size	Orifice size $\phi$ [mm]		Flow-rate characteristics $A_v \times 10^{-6}$ [m <sup>2</sup> ] ( ) : Cv factor		Rated voltage
				1→2□	1→3□	1→2□	1→3□	
2 port	7 MPa	SGH(A)12□□-70□10	3/8□	$\phi 7.5$ □	—□	42(1.8)□	—□	100 VAC 50/60Hz□ 200 VAC 50/60Hz□ 110 VAC[115 VAC] 50/60Hz□ 220 VAC[230 VAC] 50/60Hz□ 24 VDC□ 12 VDC
		SGH(A)22□□-70□15	1/2□	$\phi 9.4$ □	—□	65(2.7)□	—□	
		SGH(A)32□□-70□20	3/4□	$\phi 12.4$ □	—□	112(4.7)□	—□	
		SGH(A)42□□-70□25	1□	$\phi 15.4$ □	—□	155(6.5)□	—□	
3 port	3 MPa	SGH(A)13□□-30□10	3/8□	$\phi 11$ □	$\phi 9.4$ □	50(2.1)□	56(2.3)□	
		SGH(A)23□□-30□15	1/2□		$\phi 10.5$ □	55(2.3)□	73(3.0)□	
		SGH(A)33□□-30□20	3/4□	$\phi 15$ □	$\phi 12$ □	90(3.8)□	92(3.8)□	
		SGH(A)43□□-30□25	1□	$\phi 17$ □	$\phi 15.2$ □	135(5.6)□	140(5.8)□	
	7 MPa	SGH(A)13□□-70□10	3/8□	$\phi 7.5$ □	$\phi 6$ □	26(1.1)□	23(1.0)□	
		SGH(A)23□□-70□15	1/2□	$\phi 10.1$ □	$\phi 7.6$ □	45(1.9)□	49(2.0)□	
		SGH(A)33□□-70□20	3/4□	$\phi 12.8$ □	$\phi 10$ □	78(3.3)□	65(2.7)□	
		SGH(A)43□□-70□25	1	$\phi 15.3$ □	$\phi 11.5$ □	102(4.3)□	84(3.5)□	

[Electrical entry]



[Bracket]



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