



New SY - SMC's Flagship Valve Series

- **FLEXIBLE!** Side, top and bottom porting locations, consolidation of options from multiple legacy valve series and increase of flow rates
- Long life - 70 million to 200 million cycles depending on seal materials used
- Low operating costs
- Extensive list of overall features to maximize design flexibility
- Important safety features such as highly visible pressure relief valve indicators, double check spacers (for holding actuators in place while performing maintenance) and supply stop spacers

Lower Power Consumption

0.1w **0.35w**

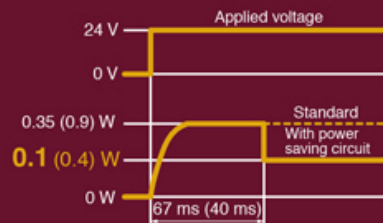
With power saving circuit

Standard

Power consumption is reduced by power saving circuit.

Power consumption is decreased by approx. 1/3 by reducing the wattage required to hold the valve in an energized state. (Effective energizing time is over 67 ms at 24 VDC.) Refer to the Electrical power waveform as shown on the right.

[Electrical power waveform with power saving circuit]



The value in () indicates high pressure types.

Mixed Valve Size and Bottom Porting Available

SY5000
Valve



SY3000
Valve



Bottom
Porting

Manifold

1

Manifold material available
in resin or bar stock



2

Side, top,
and bottom porting



3

Extensive SI unit
and SI protocols



Resin & Bar Stock Manifolds

Both types utilize "Plug-in" bases, which simplifies wiring and reduces installation time



Metal Base

Wiring type	D-sub connector	Flat ribbon cable	Serial wiring
			S5 type (EX510)
Enclosure (Based on IEC60529)		IP40	IP20

Connector Connecting Base

Wiring type	D-sub connector	Flat ribbon cable	Terminal BOX	Lead wire	Multi-connector	Serial wiring			
						S6□ type (EX800)	SA2 type (EX500) S4□ type (EX126)	S1□ type (EX250)	S3□ type (EX120)
Enclosure (Based on IEC60529)	IP40				IP67	IP67 EX500 gateway unit, input unit: IP65	IP67 (Partially IP40)	IP20	

• First Characteristics: Degrees of protection against solid foreign objects

0	Non-protected
1	Protected against solid foreign objects of 50mm ø and greater
2	Protected against solid foreign objects of 12mm ø and greater
3	Protected against solid foreign objects of 2.5mm ø and greater
4	Protected against solid foreign objects of 1.0mm ø and greater
5	Dust-protected
6	Dust-tight

• Second Characteristics: Degrees of protection against water

0	Non-protected	—
1	Protected against vertically falling water drops	Drip proof type 1
2	Protected against vertically falling water drops when enclosure tilted up to 15°	Drip proof type 2
3	Protected against rainfall when enclosure tilted up to 60°	Rain proof type
4	Protected against splashing water	Splash proof type
5	Protected against water jets	Low jet proof type
6	Protected against powerful water jets	Strong jet proof type
7	Protected against the effects of temporary immersion in water	Immersible type
8	Protected against the effects of continuous immersion in water	Submersible type

For more information: www.smcusa.com/sy

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Valves

- ⦿ Quick response and high pressure options available (options B & K)
- ⦿ Built in or retro-fit back pressure check valve options
- ⦿ IP67 protection available, dust and water jet tight
- ⦿ Slim profile (10mm for SY3000 and 15mm for SY5000)
- ⦿ Greatly improved sonic conductance vs previous model (3.6C vs 2.8C)



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