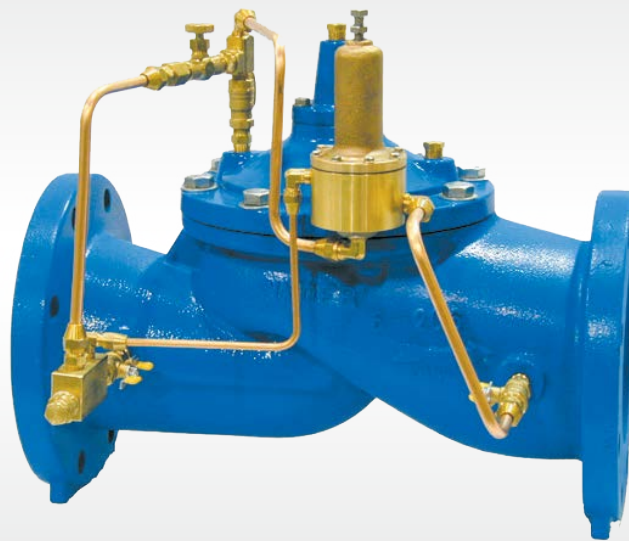


# Singer RPS Pressure Sustaining Valve

The Singer RPS pressure sustaining control valve maintains minimum upstream pressures.



TECHNICAL GUIDE: **AVH1.27**

## Applications

Pressure Control

Potable water

Municipal

Mining Applications

Irrigation Applications

## Product Attributes

Easily adjustable pressure setting

Closes if inlet pressure drops below set-point

Ensures minimum upstream pressure for critical use

## Approvals/Standards

AS 5081:2008

Flanges to AS/NZS4087 Fig. B5

Coating complies with AS/NZS 4158

## Quality

ISO 9001:2015 Quality Management Systems



**Licence Number:**  
WMK/SMK26726

The 106-RPS, or 206-RPS valve prevents high demand in the residential area from dropping the pressure available to the critical user. The valve modulates to assure minimum upstream pressure and if need be, closes tight.

### STANDARD MATERIALS

- Standard materials for pilot system components are:
- ASTM B62 bronze or ASTM B16 brass
- AISI 303/316 stainless-steel trim
- Buna-N / EPDM diaphragm and seals

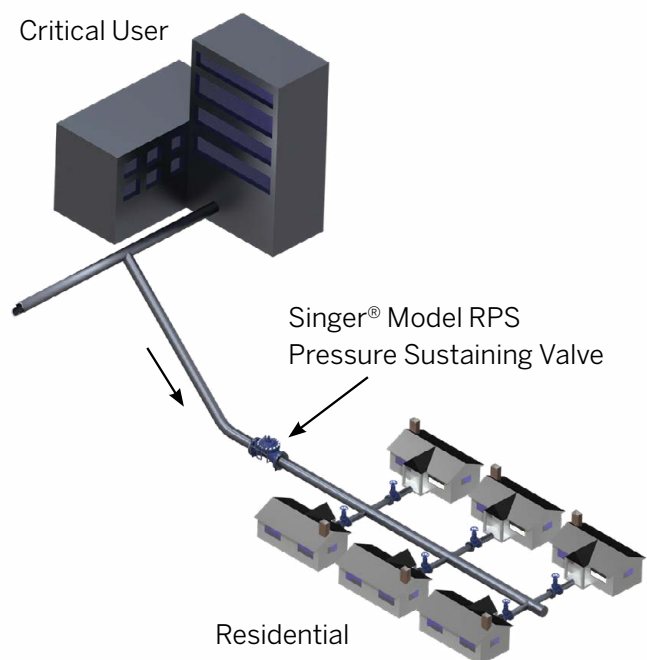
### SELECTION SUMMARY

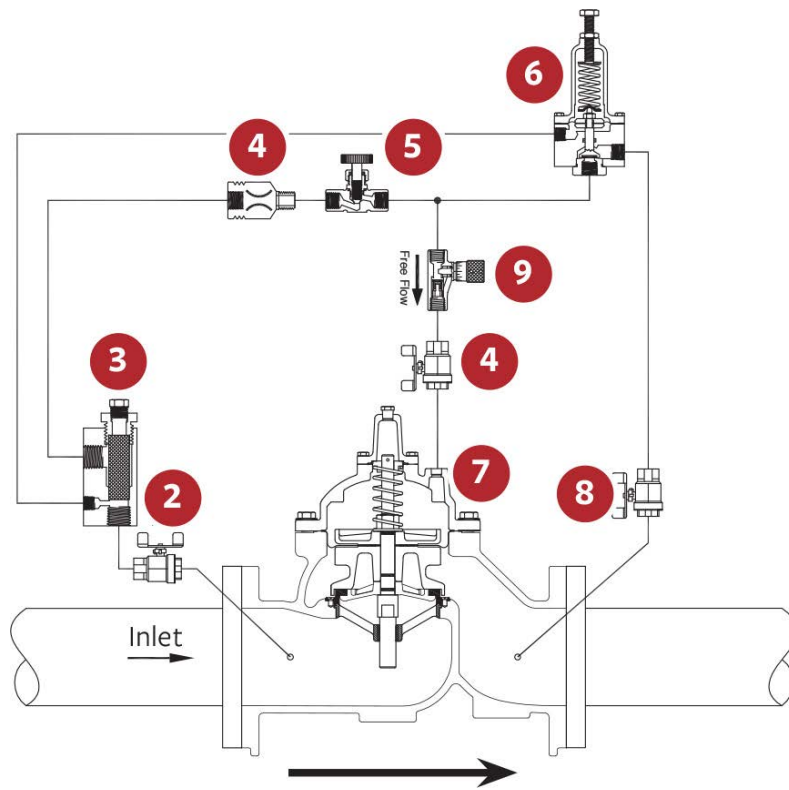
1. Select the valve with sufficient capacity using the minimum available pressure drop across the valve.
2. Usually operating in the continuous "C" service range up to 6 m/s.
3. If the outlet pressure is less than 35% of the inlet pressure and operating for extended periods, check for cavitation.
4. For sustaining applications with high pressure drops, model 106-RPS-AC: Pressure Sustaining with anti-cavitation cages may be required. Consult with us for more information.
5. Ensure that the maximum working pressure rating for the valve and for the flanges exceeds the maximum operating pressure.

### ORDERING INSTRUCTIONS

Refer to the order form and ordering instructions. Additionally, include the following information for this product:

1. Single chamber (106), or (206)
2. Outlet pressure
3. Inlet pressure pilot range





### SCHEMATIC DRAWING

1. Main Valve - 106-PG, or 206-PG
2. Isolation Valve - Standard 100 mm and larger
3. Strainer - Standard 100mm and larger
4. Fixed Restriction- 3.2mm
5. Model 852-B Closing speed control
6. Model 81-RP Pilot. Specify for:
  - 0.35 to 3.5 bar
  - 0.70 to 5.5 bar
  - 1.38 to 13.8 bar
  - 6.9 to 20.7 bar
7. Isolation Valve - Standard 100mm and larger
8. Isolation Valve - Standard All Sizes
9. Opening speed control, Optional

**TABLE 1** Model RPS 106 Pressure Sustaining Valves

Code	Size (mm)	106-RPS		
		Min (L/s) Flat Diaphragm	Min (L/s) Rolling Diaphragm	Maximum Continuous (L/s)
Indent	15mm	0.1	-	0.8
Indent	19mm	0.1	-	1
Indent	25mm	0.1	-	3
Indent	32mm	0.1	-	6
Indent	40mm	0.1	-	8
CV050PRSV106-RPS-ESS	50mm	0.3	-	13
Indent	65mm	0.3	-	19
CV080PRSV106-RPS-ESS	80mm	0.3	-	29
CV100PRSV106-RPS-ESS	100mm	0.6	-	50
CV150PRSV106-RPS-ESS	150mm	-	1	114
CV200PRSV106-RPS-ESS	200mm	-	1	196
CV250PRSV106-RPS-ESS	250mm	-	3	309
CV300PRSV106-RPS-ESS	300mm	-	3	442
CV350PRSV106-RPS-ESS	350mm	-	3	536
CV400PRSV106-RPS-ESS	400mm	-	3	694
Indent	500mm	-	10	1104
Indent	600mm	-	10	1628
Indent	900mm	-	20	3500

**TABLE 2** Model RPS 206 Pressure Sustaining Valves

Code	Size (mm)	206-RPS		
		Min (L/s) Flat Diaphragm	Min (L/s) Rolling Diaphragm	Maximum Continuous (L/s)
CV080PRSV206-RPS-ESS	80mm	0.3	-	19
CV100PRSV206-RPS-ESS	100mm	0.3	-	37
CV150PRSV206-RPS-ESS	150mm	0.6	-	65
CV200PRSV206-RPS-ESS	200mm	1.3	-	145
CV250PRSV206-RPS-ESS	250mm	2.5	-	260
CV300PRSV206-RPS-ESS	300mm	-	0.2	404
CV400PRSV206-RPS-ESS	400mm	-	0.2	1040
CV450PRSV206-RPS-ESS	450mm	-	0.2	1040
Indent	500mm	-	0.2	1040
Indent	600 x 400mm	-	0.2	1041
Indent	600 x 500mm	-	0.2	1370
Indent	700mm	-	0.6	2120
Indent	750mm	-	0.6	2123
Indent	800mm	-	0.6	2126
Indent	900mm	-	0.6	2132
Indent	1000mm	-	1.3	3500
Indent	1200mm	-	1.3	3500



Scan for more  
information

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February 2025