

Singer RPS Pressure Sustaining Valve

Technical Guide W4.69

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



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/NZS 4087 Fig. B5
Coating complies with AS/NZS 4158



Licence Number:
WMK/SMK26726

We are the supply partner of choice for New Zealand's civil construction industry, specialising in water and infrastructure based solutions.

HYNDSwater

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

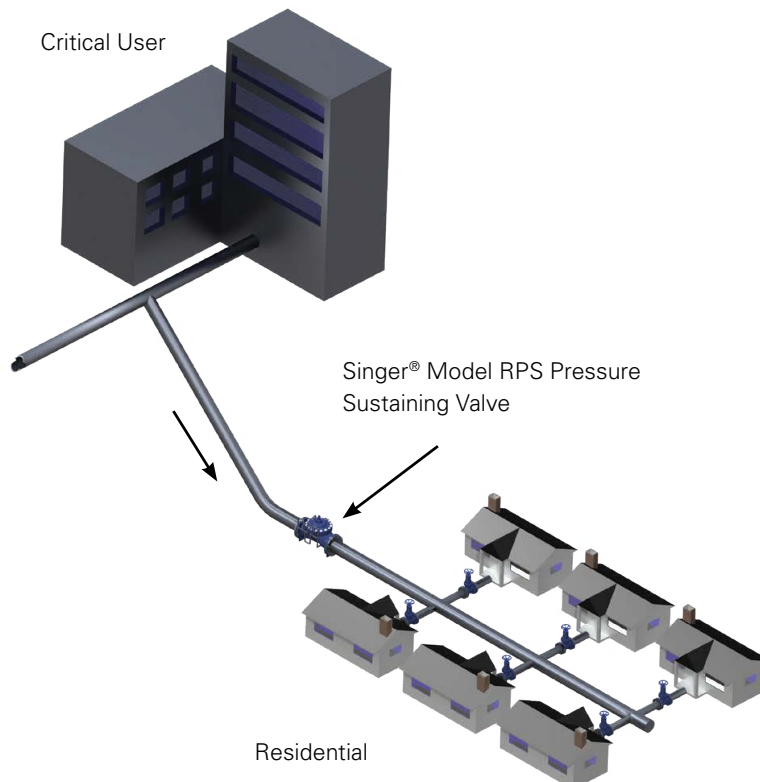
1. Select the valve with sufficient capacity using the minimum available pressure drop across the valve.
2. Usually operating in the continuous "C" service range up to 6 m/s.
3. If the outlet pressure is less than 35% of the inlet pressure and operating for extended periods, check for cavitation.

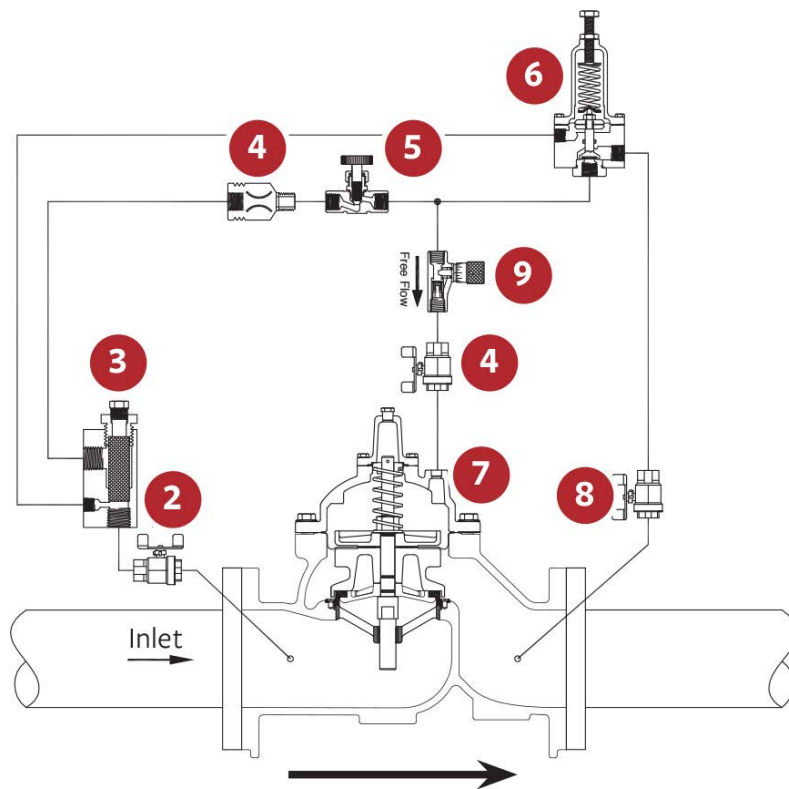
4. For sustaining applications with high pressure drops, model 106-RPS-AC: Pressure Sustaining with anti-cavitation cages may be required. Consult with us for more information.
5. Ensure that the maximum working pressure rating for the valve and for the flanges exceeds the maximum operating pressure.

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 A-0423F

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
VC50RPS106S	50mm	0.3	-	13
Indent	65mm	0.3	-	19
VC80RPS106S	80mm	0.3	-	29
VC100RPS106S	100mm	0.6	-	50
VC150RPS106S	150mm	-	1	114
VC200RPS106S	200mm	-	1	196
VC250RPS106S	250mm	-	3	309
VC300RPS106S	300mm	-	3	442
VC350RPS106S	350mm	-	3	536
VC400RPS106S	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)
VC80RPS206S	80mm	0.3	-	19
VC100RPS206S	100mm	0.3	-	37
VC150RPS206S	150mm	0.6	-	65
VC200RPS206S	200mm	1.3	-	145
VC250RPS206S	250mm	2.5	-	260
VC300RPS206S	300mm	-	0.2	404
VC400RPS206S	400mm	-	0.2	1040
VC450RPS206S	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

Branches Nationwide Support Office & Technical Services 0800 93 7473

Disclaimer: While every effort has been made to ensure that the information in this document is correct and accurate, users of Hynds product or information within this document must make their own assessment of suitability for their particular application. Product dimensions are nominal only, and should be verified if critical to a particular installation. No warranty is either expressed, implied, or statutory made by Hynds unless expressly stated in any sale and purchase agreement entered into between Hynds and the user.