HYGRADEWATER INFRASTRUCTURE

SINGER® a MUELLER brand

Solenoid Control Valve

The Singer 106SC / 206SC Single Solenoid Control Valve is used for remote on/off control via SCADA, IoT, or local controller.

TECHNICAL GUIDE: **AVH1.16**

Applications	Product Attributes	Approvals/Standards
Potable water	Positive, drip-tight shut-off	AS 5081:2008
Pressure control	Simple, on-off operation	Flanges to AS/NZS 4087 Fig. B5
Municipal	Globe or angle style body	Coating complies with AS/NZS 4158
Mining Applications		
Irrigation Applications		

WaterMark ***Licence Number:*** *WMK/SMK26726*

The Solenoid Control Valve responds to an electrical signal to provide two-position (On/Off) operation. The solenoid either admits inlet pressure into the main valve operating chamber or releases pressure from the operating chamber. A variety of voltage options are available and solenoids can be normally open or normally closed.

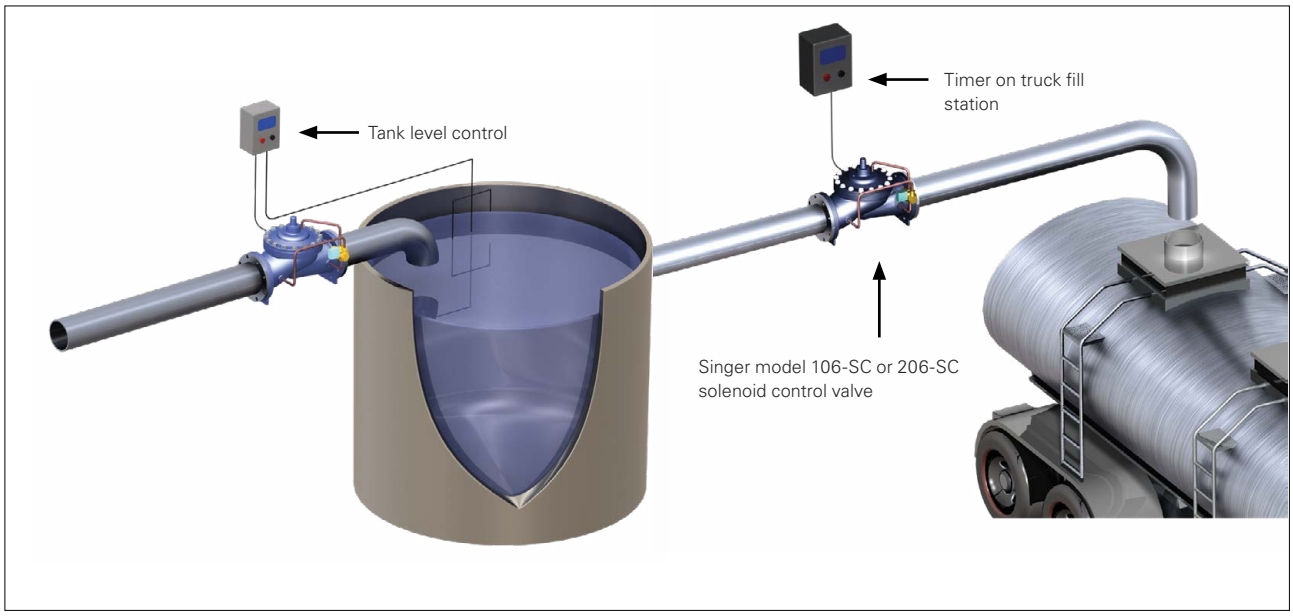

FIG. 1 Typical application

The solenoid control valve provides on-off position operation. The solenoid either admits inlet pressure into the main valve operating chamber or releases pressure from the operating chamber. The pilot system is usually piped to discharge at the valve outlet, but can be piped to discharge to drain (atmosphere). This valve is available either with the main valve closed when the solenoid is de-energised (NC - Normally Closed) or with the main valve open when the solenoid is de-energised (NO- Normally Open). (NC or NO refers to the main valve, not the solenoid.)

STANDARD MATERIALS

Standard materials for pilot system components are:

- ASTM B62 bronze or ASTM B-16 brass
- Stainless steel trim
- Standard solenoid coil is rated as NEMA 1, 2, 3, 3S, 4 and 4X, combination general purpose and watertight
- Other voltages, ratings and constructions are available, consult with Hygrade.

SELECTION SUMMARY

1. Select the valve with sufficient capacity, using the allowable operating pressure drop across the valve.
2. If the outlet pressure is less than 35% of the inlet pressure, check for cavitation.
3. Ensure the maximum working pressure rating of the valve exceeds the maximum operating pressure.
4. Continuous, “C”, service up to 6 m/s is generally suitable.
5. Provide system maximum and minimum operating pressures, electrical voltage, etc for correct solenoid selection.
6. If control fluid is from a separate source, provide Hygrade with details.
   a. For valve positioning - process control, see technical guide AVH1.15 Dual Solenoid Control Valve.
   b. For two (2) stage opening or closing, consult with Hygrade.
   c. Most pilot functions may be combined with the model SC, consult Hygrade.

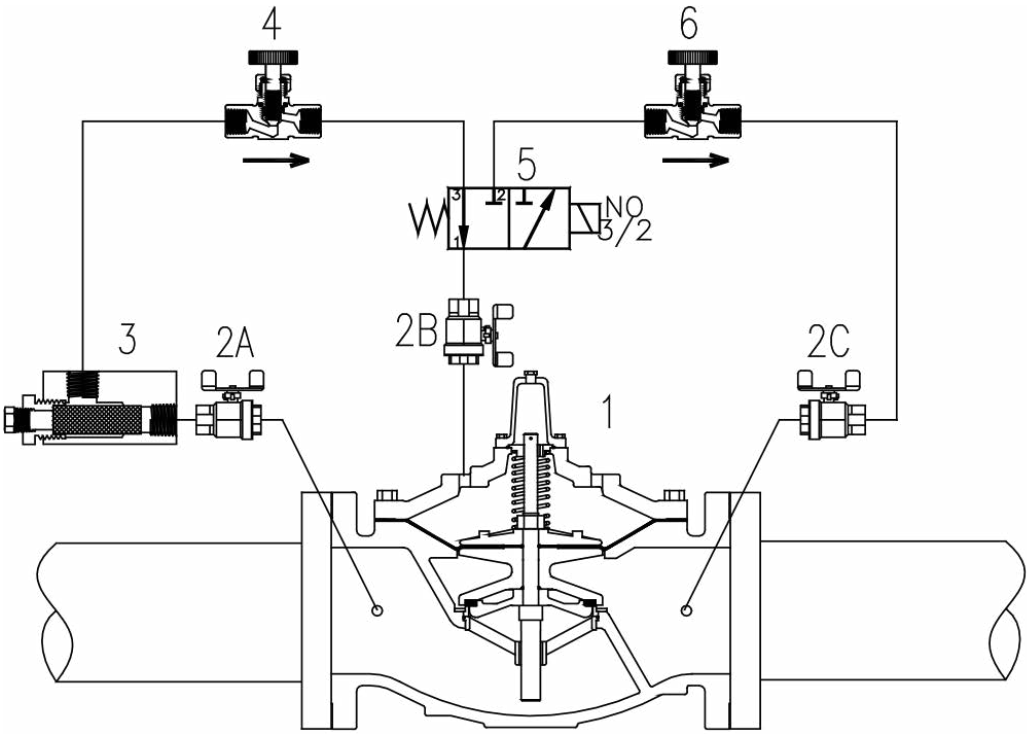

FIG. 2 Schematic A-0593C

SCHEMATIC DRAWING

1. Main Valve - 106-PG or 206-PG
2. Isolating Valves - 2A, 2B, 2C - *(optional on 80 mm and smaller).*
3. Strainer - 40 mesh stainless steel screen
4. Closing Speed Control - model 852-B *(optional on 80 mm and smaller).*
5. Solenoid Pilot Valve - 3 way - 240VAC / 50 HZ standard, other voltages [12/24 VDC etc] available.
6. Opening Speed Control - model 852-B *(optional on 80 mm and smaller).*

ORDERING INSTRUCTIONS

Refer to the order form and ordering instructions.

1. Single Chamber *(106)* or *(206)*
2. Solenoid Voltage
3. Energise or de-energise solenoid to close main valve.

Scan for more information

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