Singer F-Type 5 Non Modulating Float Valve

SINGER®
a MUELLER brand

Technical Guide W4.80

The 106-F-Type 5 and 206-F-Type 5 non-modulating float valves are based on the 106-PG or 206-PG main valve. It is ideal for allowing normal forward flow to fill water reservoirs to a desired high level and where the pilot and valve of the reservoirs are easily accessible.

Applications	Product Attributes	Approvals/Standards
Pressure Control	Quick opening relief	AS 5081:2008
Remote and standalone applications	No electrical services required	Flanges to AS/NZS 4087 Fig. B5
Mining Applications	Easily adjustable pressure settings	Coating complies with AS/NZS 4158

WaterMark **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-F-Type 5 and 206-F-Type 5 non-modulating float valves are based on the 106-PG or 206-PG main valve. It is ideal for allowing normal forward flow to fill water reservoirs to a desired high level and where the pilot and valve of the reservoirs are easily accessible.

The valve functions as a two position valve, either open or closed. The valve remains closed when the reservoir level drops, until the float reaches the pre-determined adjustable minimum reservoir level. The F-Type 5 valve then opens to refill the reservoir and closes tightly when high water level is achieved.

KEY FEATURES

- No overflow, drip-tight close
- Adjustable draw down
- Easily adjustable level settings
- Low supply pressure options

TYPICAL APPLICATION

Non-modulating float valves are typically used in buildings with reservoir tanks or installations where the valve and pilot are readily accessible.

The on / off service ensures that the reservoir contents are cycled. It will also prevent over cycling of the supply pumps as the minimum quantity per cycle is adjustable.

STANDARD MATERIALS

Standard materials for pilot system components are:

- ASTM B-62 bronze or ASTM B-16 brass
- Copper float

Note: The stilling well and the connections between main valve and pilot completed by others.

SELECTION SUMMARY

1. Generally select line size to minimize losses during normal forward flow - see chart of maximum continuous flow below.
2. Use the performance curves and sizing bulletin to determine the pressure drop across the valve at normal flow rate.
3. Check the maximum operating pressure against the maximum working pressure rating of the flanges.
4. For pressures greater than 80 psi / 5.5 bar, consult factory
5. If the outlet pressure is less than 35% of the inlet pressure, check for cavitation.
6. If the inlet pressure is less than 10 psi / 0.70 bar higher than the reservoir head, consult with Singer Valve. Assisted opening may be required for full flow.

- To maintain a relatively steady tank level, refer to model 106-F-Type 4 / 206-F-Type 4
- For SCADA or electronic level control, refer to model 106-2SC-PCO / 206-2SC-PCO Dual Solenoid Control Valve

ORDERING INSTRUCTIONS

Refer to Hynds for the order form and ordering instructions.

Additionally, include the following information for this product:

1. Single chamber (106) or (206)
2. Pilot range

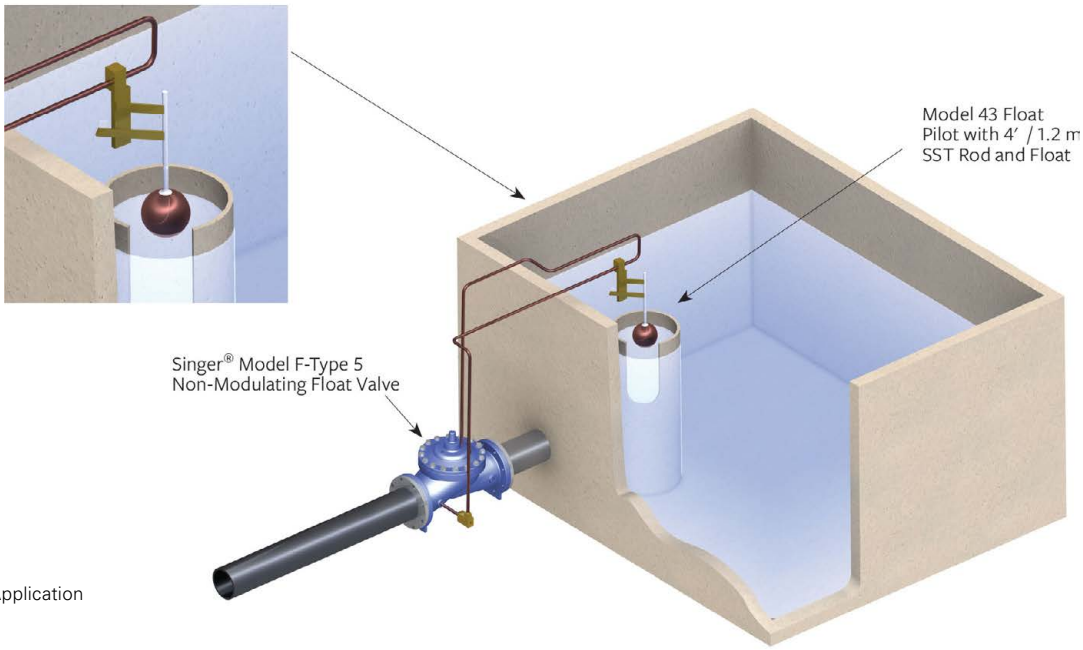

FIG. 1 Typical Application

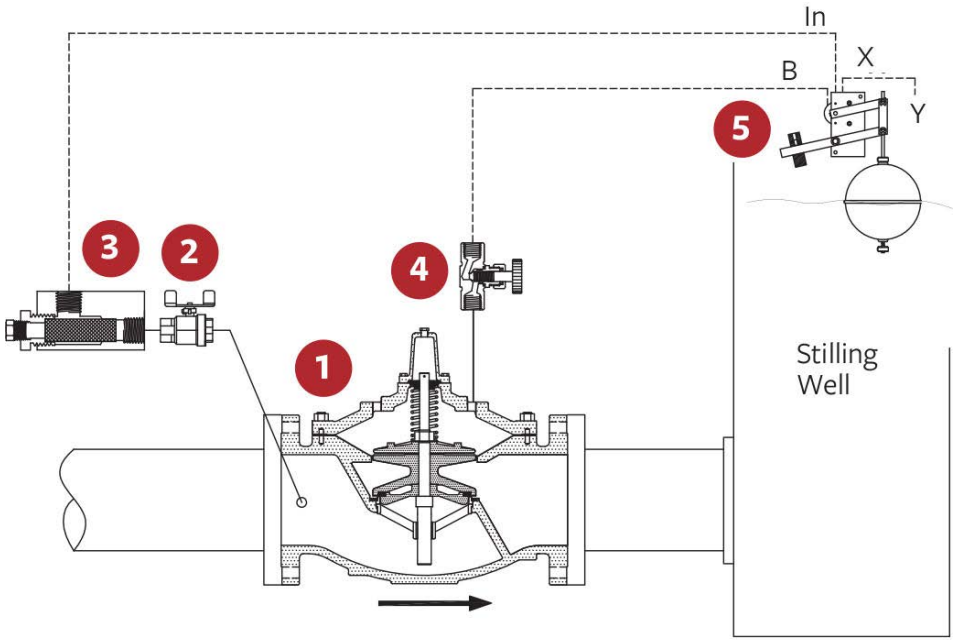

FIG. 2 Schematic A-0421C

Schematic Drawing

1. Main valve - 106-PG or 206-PG
2. Isolation valve
3. Strainer - 40 mesh stainless steel screen
4. Opening / closing speed control
5. Model 43 Float Pilot c/w SST float, 1.2 m SST rod

TABLE 1 **Singer F-TYPE 5 106 / 206-F-TYPE 5 Non Modulating Float Valve**
(See 106-PG and 206-PG main valve section for other valve data)

Size (mm)	**106-PR-R**			**206 PR-R**		
	Min (L/s) **Flat Diaphragm**	**Min** (L/s) **Rolling Diaphragm**	**Maximum Continuous** (L/s)	**Min** (L/s) **Flat Diaphragm**	**Min** (L/s) **Rolling Diaphragm**	**Maximum Continuous** (L/s)
15mm	0.1	-	0.8	-	-	-
19mm	0.1	-	1	-	-	-
25mm	0.1	-	3	-	-	-
32mm	0.1	-	6	-	-	-
40mm	0.1	-	8	-	-	-
50mm	0.3	-	13	-	-	-
65mm	0.3	-	19	-	-	-
80mm	0.3	-	29	0.3	-	19
100mm	0.6	-	50	0.3	-	37
150mm	1.3	0.1	114	0.6	-	65
200mm	2.5	0.1	196	1.3	-	145
250mm	-	0.2	309	2.5	-	260
300mm	-	0.2	442	-	0.2	404
350mm	-	0.2	536	-	-	-
400mm	-	0.2	694	-	0.2	1040
450mm	-	-	-	-	0.2	1040
500mm	-	0.6	1104	-	0.2	1040
600mm	-	0.6	1628	-	-	-
600 x 400mm	-	-	-	-	0.2	1040
600 x 500mm	-	-	-	-	0.2	1370
700mm	-	-	-	-	0.6	2120
750mm	-	-	-	-	0.6	2123
800mm	-	-	-	-	0.6	2126
900mm	-	1.3	3500	-	0.6	2132
1000mm	-	-	-	-	1.3	3500
1200mm	-	-	-	-	1.3	3500