TORO Count on it.

600 Series Valves

Micro-Irrigation

Application:

600 series hydraulic valves are configured with an in-line filter, three-position selector and a three-way pilot for downstream pressure reducing or pressure sustaining/relief.

Features:

Multi-purpose pilot valve

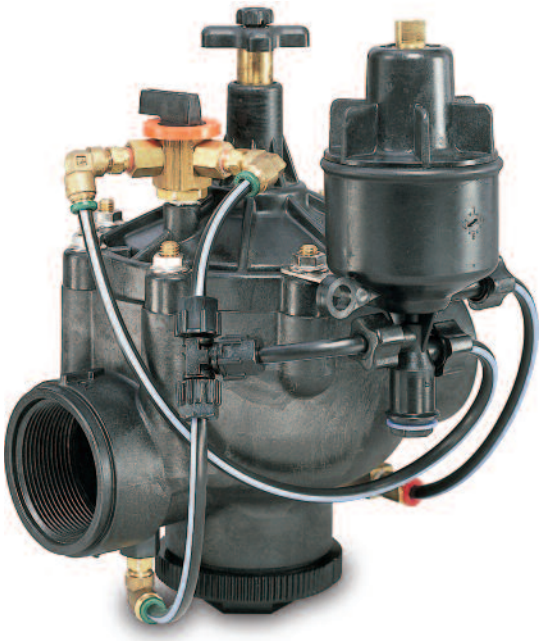
- Three-way pressure-sensing pilot controls hydraulically operated valves
- The pilot vents to atmosphere for pressure regulation, giving the advantage of fully opening the main valve when conditions call for minimum pressure loss
- The pilot is versatile – by changing the porting, the same pilot valve can be used to convert a hydraulic valve into a pressure reducing or pressure sustaining/relief control valve
- Downstream pressure regulating range from 5 psi to 113 psi

Three-position selector

- This valve allows for selection of hydraulic control modes: open, closed or automatic
- Allows for manual override for opening or closing the main control valve

Flow control stem

- Flow control allows for precise flow adjustment



600 Series Valves

Additional Features:

- Self-cleaning In-line filter for filtration of the command system water
- Non-continuous metering system – since only a small exchange of control water is used to operate the main valve, the system is less susceptible to failure due to plugging
- Available in 2" and 3" (51 and 76mm)
- Working pressure is 10 to 150 psi (.7 to 10.3 bar)
- Flow range from 80 gpm to 300 gpm (5.0 to 18.9 l/s)
- Manual external bleed
- Glass reinforced nylon body and bonnet give superior high temperature strength

Understanding 600 Series Valves Part Numbers

Example: 601 – 3 – T – 01 – B

Valve Category

Basic Hydraulic	–600
Pressure Reducing	–601
Pressure Sustaining/Relief	–602
Pressure Reducing and Sustaining/Relief Valve	–603

Valve Size

Two-inch Valve	–2
Three-inch Valve	–3

Options

Three Position Selector Valve	–T

Electric Control

No Solenoid	–00
Solenoid 24 VAC	–01
24 VDC Latching	–02
9 – 12 VDC Latching	–03

Pilot Springs

5–20psi Blue	–B
9–35psi Green	–G
21–113psi Silver	–S

Pressure Loss in PSI

		Flow Rate (GPM)																			
Style	Size	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	175	200	225	250	275	300
Globe	2"								2.1	2.7	3.3	4.0	4.8	5.6	6.5	7.5						
Angle									1.2	1.6	2.0	2.4	2.8	3.3	3.9	4.4						
Globe	3"															2.5	3.0	4.1	5.3	6.7	8.3	10.1
Angle																1.9	2.4	3.3	4.3	5.5	6.9	8.5

Pressure Loss in Bar

		Flow Rate																			
Liters/second		0,5	1,0	1,5	2,0	3,0	4,0	5,0	6,0	7,0	8,0	9,0	10,0	11,0	12,0	13,0	14,0	15,0	16,0	17,0	18,0	19,0
M^3/Hour		1,8	3,6	5,4	7,2	10,8	14,4	18,0	21,6	25,2	28,8	32,4	36,0	39,6	43,2	46,8	50,4	54,0	57,6	61,2	64,8	68,4
Style	Size																					
Globe	50mm							0,14	0,21	0,28	0,37	0,47										
Angle								0,08	0,12	0,17	0,22	0,28										
Globe	75mm												0,18	0,21	0,25	0,30	0,35	0,41	0,48	0,54	0,62	0,70
Angle													0,14	0,16	0,20	0,24	0,29	0,34	0,39	0,45	0,52	0,59

NOTES: (1) When designing a system, the industry standard for flow rate velocity through pipes and fittings is 5 Fps (2m/s).
(2) Pressure loss data is derived from valves independently tested by C.I.T., Fresno, CA.
(3) Hydraulic actuated valves vented to atmosphere will show lower pressure loss figures at low flows.
(4) Pressure regulating valves must operate in the recommended flow ranges – For the best pressure regulation the valves should be sized at the upper end of the flow range.

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