

SERIES 80 NYLON CONTROL VALVES

NOW
AVAILABLE
IN 3-WAY
OR 2-WAY

QUICK REACTION AND DRIP-TIGHT CLOSURE
FOR PRECISE AND ACCURATE IRRIGATION



1 1/2" & 2" GLOBE/ANGLE
3-WAY PRESSURE REDUCING
CONTROL VALVES



1 1/2" & 2" GLOBE/ANGLE
3-WAY PRESSURE SUSTAINING
CONTROL VALVES



3/4" & 1" GLOBE
2-WAY ELECTRIC CONTROL
VALVES



1 1/2" & 2" GLOBE
2-WAY ELECTRIC CONTROL
VALVES



1 1/2" & 2" ANGLE
2-WAY ELECTRIC CONTROL
VALVES

PRODUCT ADVANTAGES

- Flow control stem allows manual control from full closure up to maximum capacity.
- Suitable for dirty water applications with clog-free labyrinth inlet for command water.
- Quick reaction to opening and closing and a drip-tight seal for accurate irrigation.
- Available in multiple body configurations and control functions.
- Very low friction loss allows valve use with a wider range of flows.
- Durable, corrosion resistant materials for long life.

3-WAY SERIES 80 NYLON CONTROL VALVES

FEATURES

- All control systems (pilot and solenoid) are assembled on the bonnet. No tubes are connected to the valve body.
- Tight sealing valve with fully supported diaphragm.
- Straight or angle with globe configuration activated by a fully supported diaphragm.
- Integrated check valve ensures valve remains closed until the controller designates opening.
- Vertical or horizontal installations.



APPLICATIONS

- Pressure regulation of irrigation systems - small blocks
- For remote control, master valve, automated or manual operations - accurate irrigation control
- Greenhouse and Nursery irrigation including hydroponic and mist systems

SPECIFICATIONS

- Recommended Flow Ranges:
1 1/2" valve - .25 to 110 GPM
2" valve - .25 to 176 GPM
- Valve Configurations:
1 1/2" and 2" valves - Globe or Angle
- Minimum Operating Pressure: 7 psi
- Maximum Operating Pressure: 150 psi
- Maximum Water Temperature: 140° F
- Optional Solenoid Voltage: 24VDC, 12VDC, 12VDC latching, 120VAC

MATERIALS

- Body, Bonnet, Diaphragm Seat: Glass Reinforced Polyamide (GRP)
- Nuts, Bolts, Washers: Stainless Steel 304
- Spring: Stainless Steel AISI 302

DIMENSIONS (3-WAY VALVES)

SIZE	LENGTH	WIDTH	HEIGHT	WEIGHT
1 1/2" GLOBE	6 9/16"	6 1/2"	6 3/8"	2 LBS
1 1/2" ANGLE	3 1/2"	6 1/2"	6 13/16"	1.8 LBS
2" GLOBE	6 9/16"	6 1/2"	6 5/8"	2 LBS
2" ANGLE	3 1/2"	6 1/2"	6 13/16"	1.8 LBS

Dimensions for Basic 3-Way Series 80 Control Valve

OPTIONAL VOLTAGES

VALVE SIZE	VOLTAGE
ALL SIZES	12VDC
	12VDCL
	24VDC
	120VAC

OPTIONAL VOLTAGES:
Call Netafim USA for Item and Model Numbers for Series 80 Nylon Control Valves with optional voltages.

OPTIONAL FUNCTIONS

VALVE SIZE	CODE	FUNCTION
ALL SIZES	ELTH	ELECTRIC
	PRTH	PRESSURE REDUCING
	PRELTH	PRESSURE REDUCING ELECTRIC
	PSTH	PRESSURE SUSTAINING
	PSELTH	PRESSURE SUSTAINING ELECTRIC

ORDERING INFORMATION

Use this chart to select the valve options and create the valve Model Number.

61	FUNCTION CODE	DIAMETER	MATERIAL & END CONNECTION	CONFIGURATION	SPRING COLOR
	ELTH Electric 3-Way Throttling PRTH Pressure Reducing PRELTH Pressure Reducing Electric PSTH Pressure Sustaining PSELTH Pressure Sustaining Electric	NYLON: 1.5", 2"	GH3 Nylon Threaded	AN - Angle Leave blank for Globe	(ONLY IF REQUIRED) Y Yellow (7-30 psi) G Green (14-65 psi) R Red (30-90 psi)

2-WAY SERIES 80 NYLON CONTROL VALVES



FEATURES

- Suitable for high pressure applications with quick reaction to opening and closing.
- Exceptionally low inrush and holding current allows the longest wire run from valve to controller.
- Tight sealing valve with fully supported diaphragm.
- Stable solenoid to voltage fluctuations with low sensitivity to dirt - no diode solenoid.
- Integrated check valve (on 1 1/2" and 2" sizes) ensures valve remains closed until the controller designates opening.
- Optimal for vertical installations.

SERIES 80 VALVE WITH BATTERY OPERATED CONTROLLER

Low cost automatic valve operation without additional wiring costs. Aqua Pro Single Zone Valve Controller mounts on each valve and is individually programmed. Controller's 9 VDC battery is the only power required to turn the valve on and off. Ideal for seasonal or annual crops requiring system portability.



APPLICATIONS

- For mild corrosive and mild acidity levels in the water
- For remote control, master valve, automated or manual operations
- Greenhouse and Nursery irrigation including hydroponic and mist systems

SPECIFICATIONS

- Recommended Flow Ranges:
3/4" valve - .01 to 26 GPM *
1" valve - .01 to 44 GPM *
1 1/2" valve - .25 to 110 GPM
2" valve - .25 to 176 GPM
- Valve Configurations:
3/4" and 1" valves - Globe
1 1/2" and 2" valves - Globe or Angle
- Standard 2-Way Electric Normally Closed Valve
- Minimum Operating Pressure: 7 psi
- Maximum Operating Pressure: 150 psi
- Maximum Water Temperature: 140° F
- Standard Solenoid Voltage: 24VAC ± 10% voltage
- Solenoid Inrush Current: .22A
- Solenoid Holding Current: .095A
- Optional Solenoid Voltage: 24VDC, 12VDC, 12VDC latching, 120VAC

DIMENSIONS (2-WAY VALVES)

SIZE	LENGTH	WIDTH	HEIGHT	WEIGHT
3/4" GLOBE	3 15/16"	3"	4 3/8"	.62 LBS
1" GLOBE	4 1/8"	3"	4 1/2"	.64 LBS
1 1/2" GLOBE	6 9/16"	6 1/2"	6 3/8"	2 LBS
1 1/2" ANGLE	3 1/2"	6 1/2"	6 13/16"	1.8 LBS
2" GLOBE	6 9/16"	6 1/2"	6 5/8"	2 LBS
2" ANGLE	3 1/2"	6 1/2"	6 13/16"	1.8 LBS

ORDERING INFORMATION STANDARD 24VAC VALVES

VALVE SIZE	ITEM NUMBER	MODEL NUMBER
3/4" GLOBE	71640-007355	61ET.75GH2
1" GLOBE	71640-007406	61ET1GH2
1 1/2" GLOBE	71640-007425	61ET1.5GH2
1 1/2" ANGLE	71640-007426	61ET1.5GH2-AN
2" GLOBE	71640-007660	61ET2GH2
2" ANGLE	71640-007665	61ET2GH2-AN

OPTIONAL VOLTAGES

VALVE SIZE	VOLTAGE
ALL SIZES	12VDC
	12VDCL
	24VDC
	120VAC

OPTIONAL VOLTAGES:

Call Netafim USA for Item and Model Numbers for Series 80 Nylon Control Valves with optional voltages.

MATERIALS

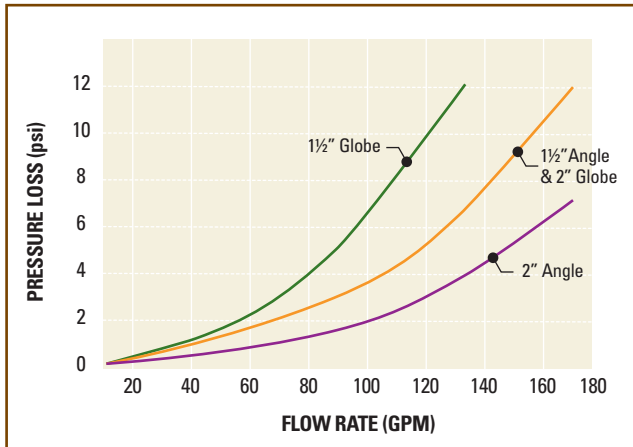
- Body, Bonnet, Diaphragm Seat: Glass Reinforced Polyamide (GRP)
- Nuts, Bolts, Washers: Stainless Steel 304
- Spring: Stainless Steel AISI 302

* Minimum flow tested by Center for Irrigation Technology, Fresno, California, November 2010

TECHNICAL INFORMATION

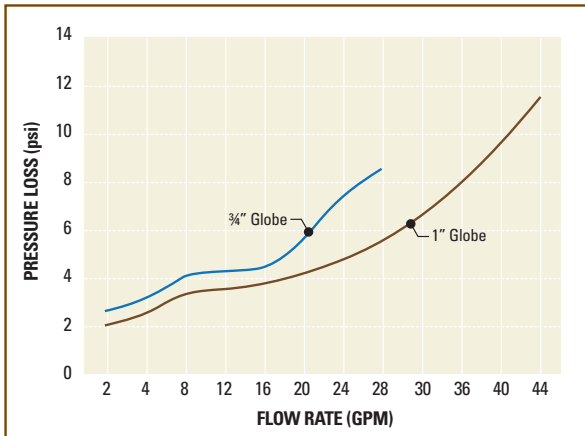
3-WAY SERIES 80 NYLON CONTROL VALVES

1½" & 2" FLOW RATE VS. PRESSURE LOSS *



2-WAY SERIES 80 NYLON CONTROL VALVES

¾" & 1" FLOW RATE VS. PRESSURE LOSS *



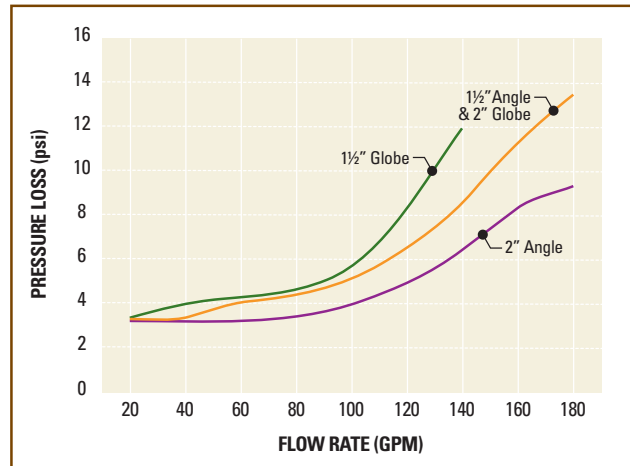
FLOW RATE AND PRESSURE LOSS

FLOW (GPM)	PRESSURE LOSS (psi)	
	¾" GLOBE	1" GLOBE
2	2.5	2.0
4	3.0	2.5
8	4.0	3.4
12	4.1	3.5
16	4.4	3.9
20	5.5	4.1
24	7.5	4.7
28	8.5	5.4
32	-	6.5
36	-	8.0
40	-	9.5
44	-	11.5

FLOW RATE AND PRESSURE LOSS

FLOW (GPM)	PRESSURE LOSS (psi)			
	1 ½" GLOBE	1 ½" ANGLE	2" GLOBE	2" ANGLE
20	0.3	0.2	0.2	0.1
40	1.3	0.7	0.7	0.4
90	5.0	3.0	3.0	1.75
130	12.0	6.5	6.5	4.0
170	-	12.0	12.0	7.0

1½" & 2" FLOW RATE VS. PRESSURE LOSS *



FLOW RATE AND PRESSURE LOSS

FLOW (GPM)	PRESSURE LOSS (psi)			
	1 ½" GLOBE	1 ½" ANGLE	2" GLOBE	2" ANGLE
20	3.3	3.3	3.3	3.3
40	4.0	3.3	3.3	3.3
60	4.3	4.0	4.0	3.3
80	4.5	4.3	4.3	3.6
100	5.5	5.0	5.0	4.1
120	8.5	6.5	6.5	5.0
140	12	8.5	8.5	6.5
160	-	-	11.5	8.5
180	-	-	13.5	9.5



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* Tested by Center for Irrigation Technology, Fresno, California, November 2010