

**TORO**

Count on it.

# 252 Series Plastic Valves

V A L V E S

COMMERCIAL

252 Series valves' durability is a fit for commercial applications, while their plastic construction makes them an economical option. With several models to choose from, including contaminant-resistant valves, 252 Series provides flexibility.



## Toro 252 Series Plastic Valves

**1"–2" (25–50mm) Electric, 1½" and 2" (40–50mm) Pressure-regulating, 2" (50mm) Normally Open Hydraulic, and 1½" (40mm) Pin-type Hydraulic Valves**

### Features

- Globe/Angle configuration
- Stainless steel seat (1½" and 2" models) (40 and 50mm models)
- Fabric-reinforced rubber diaphragm (1½" and 2" models) (40 and 50mm models)
- Rubber diaphragm (1" model) (25mm model)
- Manual flow control: adjustable to zero flow (250 Series)
- Manual bleed screw
- Energy-efficient solenoid

- 24" (60cm) lead wires (1½" and 2" electric) (40 and 50mm) or 18" (45cm) lead wires (1" electric models) (25mm electric models) for easy-access installation
- Self-cleaning, stainless steel metering pin (electric models)
- Stainless steel diaphragm differential spring for smooth, positive closing
- Single-piece diaphragm for reliable, leak-free valve closing
- Built-in Schrader-type valve (pressure-regulating models)
- Removable, self-flushing, 120-mesh stainless steel screen (pressure-regulating models)
- Tough, glass-filled Zytel® cap provides stability under pressure
- Durable engineering plastic and stainless steel construction for exceptional stability
- Recycled water flow control knob available
- Two-year warranty



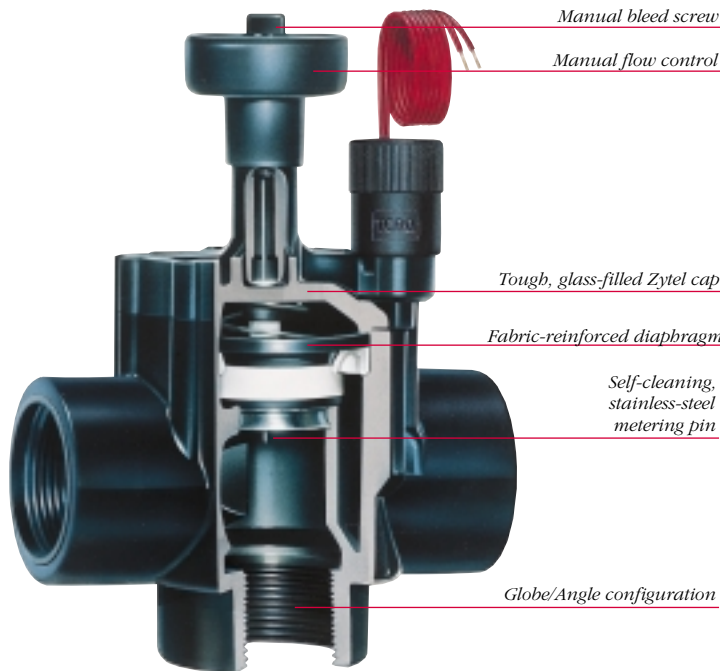
### Specifications

- Flow range:
  - 1"–5.0–40.0 GPM (25mm–19–151 LPM)
  - 1½"–25.0–120.0 GPM (40mm–95–454 LPM)
  - 2"–60.0–180.0 GPM (50mm–227–681 LPM)
- Operating pressure: 20–150 psi (1.4–10 Bar)
- Burst pressure safety rating: 750 psi (50 Bar)
- Body styles:
  - Globe/Angle valve—1", 1½" or 2" (25, 40 or 50mm) female-threaded inlet and outlet
  - BSP threads available
- Solenoid 1" (25mm) valve:
  - 24 V ac (50/60Hz)
  - Inrush: 0.30 amps, 7.20 VA
  - Holding: 0.20 amps, 4.80 VA
- Solenoid (1½" and 2" [40 and

- 50mm] valves): 24 V ac (50/60Hz)
- Inrush: 0.30 amps, 7.20 VA
- Holding: 0.20 amps, 4.80 VA
- Dimensions:
  - 1"–6¾" H x 4½" W (25–171 x 114mm)
  - 1½"–7¾" H x 6" W (40–197 x 152mm)
  - 2"–9½" H x 7" W (50–241 x 178mm)

### Optional Accessories:

- DC Latching solenoid assembly (E2002)
- 24VDC solenoid assembly (R576804)
- Recycled water lavender solenoid assembly and tag (RW60-Kit)
- 24 V ac potted solenoid assembly (89-9580)
  - 50-60 Hz, 24" leads
  - Inrush: 0.37 amps, 8.80 VA
  - Holding: 0.30 amps, 7.20 VA
- EZR-30 (5–30 psi pressure-regulation module)
- EZR-100 (5–100 psi pressure-regulation module)



**252 Electric Valve**

### Specifying Information

252 XX 0X

Activation Type	Size
06—1" (25mm) Electric	4—1" (25mm)
20—1½" (40mm) Pin-type Hydraulic	6—1½" (40mm)
21—Normally Open Hydraulic	8—2" (50mm)
25—1½" or 2" (40 or 50mm) Electric, Debris-resistant	
26—1½" or 2" (40 or 50mm) Electric	

**Example:** A 1½" (40mm) pin-type hydraulic 252 Series Valve, would be specified as: **252-20-06**

# Toro 252 Series Plastic Valves

## Contamination-resistant 1½" and 2" (25–50mm) Electric Valves

### Features

- Globe/Angle configuration
- Stainless steel seat
- Fabric-reinforced rubber diaphragm
- Removable, self-flushing, 120-mesh stainless steel screen
- Manual flow control: adjustable to zero flow
- Manual bleed screw

- Energy-efficient solenoid
- 24" (60cm) lead wires for easy-access installation
- Stainless steel diaphragm differential spring for smooth, positive closing
- Single-piece diaphragm for reliable, leak-free valve closing
- Tough, glass-filled Zytel® cap provides stability under pressure
- Durable engineering plastic and stainless steel construction for exceptional stability
- Recycled water flow control knob available



### Specifications

- Flow range:
  - 1½"—25.0–120.0 GPM (25mm—25–455 LPM)
  - 2"—60.0–180.0 GPM (50mm—230–700 LPM)
- Operating pressure: 20–150 psi (1,4–10 Bar)
- Burst pressure safety rating: 750 psi (50 Bar)

- Body styles:
  - Globe/Angle valve—1½" or 2" (40 or 50mm) female-threaded inlet and outlet
  - BSP threads available
- Solenoid: 24 V ac (50/60Hz)
  - Inrush: 0.30 amps, 7.20 VA
  - Holding: 0.20 amps, 4.80 VA
- Dimensions:
  - 1½"—7¾" H x 6" W (40mm—197 x 152mm)
  - 2"—9½" H x 7" W (50mm—241 x 178mm)

### 252 Series Friction Loss Data—U.S.

Size	Type	Configuration	GPM Flow														
			5	10	20	25	30	40	50	60	70	80	100	120	150	170	180
1½" (40mm)	Hydraulic	Globe Angle				1.0	1.0	2.0	3.0	4.0	5.5	6.5	10.5	13.5			
2" (50mm)	Hydraulic	Globe Angle								1.5	2.0	2.0	3.5	5.0	8.0	10.0	11.0
1" (25mm)	Electric	Globe Angle	3.0	4.0	5.0	6.0	7.0	9.5									
1½" (40mm)	Electric	Globe Angle				1.5	1.0	2.0	3.0	4.0	5.0	7.0	11.0	15.0			
2" (50mm)	Electric	Globe Angle								2.0	2.0	2.5	3.5	5.5	8.0	10.0	11.0

**Note:** For optimum performance when designing a system, be sure to calculate total friction loss to ensure sufficient downstream pressure. For optimum regulation performance, size regulating valves toward the higher flow ranges. Values shown in psi.

### 252 Series Friction Loss Data—Metric

Size	Type	Configuration	LPM Flow														
			25	50	75	100	125	150	175	200	250	300	400	500	600	700	
40mm (1½")	Hydraulic	Globe Angle				0,07	0,09	0,14	0,18	0,23	0,34	0,44	0,78	1,06			
50mm (2")	Hydraulic	Globe Angle									0,14	0,17	0,27	0,43	0,61	0,79	
25mm (1")	Electric	Globe Angle	0,2	0,30	0,34	0,42	0,53	0,65									
40mm (1½")	Electric	Globe Angle				0,10	0,11	0,14	0,18	0,23	0,32	0,47	0,84	1,20			
50mm (2")	Electric	Globe Angle									0,14	0,17	0,28	0,45	0,61	0,79	

**Note:** For optimum performance when designing a system, be sure to calculate total friction loss to ensure sufficient downstream pressure. For optimum regulation performance, size regulating valves toward the higher flow ranges. Values shown in bar. For kPa values, multiply tabular values by 100. For Kg/cm² values, multiply tabular values by 1,02.

## Specifying Information

252 25 X X

Body Threads	Size
0—NPT	6—1½" (40mm)
5—BSP	8—2" (50mm)

**Example:** A 1½" (40mm) Contamination-resistant 252 Series Valve with NPT threads, would be specified as: **252-20-06**



**The Toro Company** • Irrigation Division • An ISO 9000-Certified Company

• PO Box 489 • Riverside, CA • 92502 • (800) 664-4740 • [www.toro.com](http://www.toro.com)

© Copyright 2003 The Toro Company • All Rights Reserved • February 2003