

# 252 Valves



1", 1½", 2"

Electric, Hydraulic

Globe, Angle

Commercial

**Application:** This durable valve is designed to handle the needs of every commercial application, whether electric or hydraulic. The debris-resistant design is tested and proven to perform under the harshest conditions.

## Features

- Fabric-reinforced rubber diaphragm provides long-term tear and stretch tolerance
- Debris-resistant models that can operate in the harshest of climates with dirty water
- Globe and globe/angle built into one valve
- 1", 1½" and 2" (25mm, 40mm and 50mm) female inlet/outlet NPT
- Manual flow control
- External manual bleed
- 24" (60cm) lead wires (1½" and 2" electric [40mm and 50mm] electric models) or 18" lead wires (1" [25mm] electric model)
- Self-cleaning, stainless steel metering pin (electric)
- Removable, self-flushing, 120-mesh stainless steel screen
- Tough, glass-filled Zytel® cap
- Single-piece diaphragm
- Recycled water flow-control knob available for a greater range of uses
- Two-year warranty

## Specifications

### Recommended flow range (by size):

- 1" (25mm): 5.0–20 GPM (19–91 LPM)
- 1½" (40mm): 25–70 GPM (95–318 LPM)
- 2" (50mm): 60–90 GPM (227–409 LPM)

### Operating pressure:

20–150 psi (1,4–10 Bar)

### Solenoid (24 V ac, 50/60 Hz):

Inrush: 0.30 amps, 7.20 VA  
Holding: 0.20 amps, 4.80 VA

### Dimensions (by size):

- 1" (25mm): 6¾" H x 4½" W (171 x 114mm)
- 1½" (40mm): 7¾" H x 6" W (197 x 152mm)
- 2" (50mm): 9½" H x 7" W (241 x 178mm)

### Burst pressure safety rating:

750 psi (50 Bar)

### (Debris-resistant model)

### Recommended flow range (by size):

- 1½" (40mm): 25–90 GPM (95–409 LPM)
- 2" (50mm): 60–90 GPM (230–409 LPM)

### Operating pressure:

20–150 psi (1,4–10 Bar)

### Solenoid (24 V ac, 50/60 Hz):

Inrush: 0.30 amps, 7.20 VA  
Holding: 0.20 amps, 4.80 VA

### Dimensions (by size):

- 1½" (25mm) 7¾" H x 6" W (197 x 152mm)
- 2" (50mm): 9½" H x 7" W (241 x 178mm)

### Burst pressure safety rating:

750 psi (50 Bar)

### Body configurations:

| Type              | Size |     |    |
|-------------------|------|-----|----|
|                   | 1"   | 1½" | 2" |
| FxF NPT           | ✓    | ✓   | ✓  |
| Flow Control with | ✓    | ✓   | ✓  |

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         |          |    |    | 1.0 | 1.0 | 1.5 | 1.5 | 2.0 | 2.0 | 3.0 | 4.0  | 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         |          |    |    |     |     |     |     |     |     |     |      |      |     |      |      |  |  |

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. Flow rates are recommended not to exceed 5 psi (0.3 bar) loss.

U.S. values shown in psi. Metric values shown in bar.

For kPa values, multiply tabular values by 100. For Kg/cm² values, multiply tabular values by 1.02.

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         |          |    |    |      |      |      |      |      |      |      |      |      |     |     |  |  |  |
| 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         |          |    |    |      |      |      |      |      |      |      |      |      |     |     |  |  |  |

## 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) electric 252 Series Valve, would be specified as: 252-26-06