

HYDRONIC ZONE VALVES

Two Types of Valves, 2-Wire or 3-Wire, for Zoning Hydronic Systems Up to 50 PSI

FEATURES

- Quiet operation.
- Valve stem made of stainless steel.
- Automatic recycling manual operator shows valve position at all times.
- Built-in auxiliary contacts to control burner or circulator relay.
- Motor can be removed from valve assembly without draining system.

SPECIFICATIONS

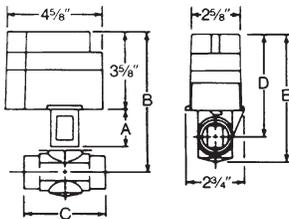
Electric rating of auxiliary switch. 2.0A at 24VAC
 Four zone valves operate with one 40 VA transformer

CONTRACTOR TIP: FOR HEAT / COOL APPLICATIONS, SEE 752-1 CONTROL ON PAGE 106.

DO NOT CHANGE VALVE ASSEMBLY WITHOUT DRAINING BOILER OR WHILE BOILER WATER IS HOT. FAILURE TO RELIEVE WATER PRESSURE OR WAIT UNTIL WATER COOLS COULD RESULT IN SCALDING INJURIES

PARTS AND ACCESSORIES See end of this section for additional parts and accessories

- F19-0097 — Motor assembly for 3-wire zone valves
- F19-0104 — Motor assembly for 2-wire zone valves
- F84-0433 — Valve assembly for 3/4" (both series)
- F84-0434 — Valve assembly for 1" (both series)
- F84-0435 — Valve assembly for 1 1/4" (both series)
- F92-0227 — Water seal kits for 3/4" (both series)
- F92-0228 — Water seal kits for 1" (both series)
- F92-0229 — Water seal kits for 1 1/4" (both series)



| VALVE SIZE | DIMENSIONS (inches) | | | | |
|------------|---------------------|-------|---------|---------|-------|
| | A | B | C | D | E |
| 3/4" | 1 3/4 | 6 1/2 | 2 7/8 | 4 11/16 | 5 5/8 |
| 1" | 1 15/16 | 6 3/4 | 3 1/8 | 4 13/16 | 5 7/8 |
| 1 1/4" | 2 1/8 | 7 1/8 | 3 11/16 | 5 | 6 1/4 |



TECHNICAL HELP

Zone Valve Troubleshooting See pages 204–205

3-WIRE, 24V VALVES WITH SCREW TERMINAL WIRING PANEL AND AUXILIARY SWITCH (SEE TABLE AT BOTTOM FOR COMPATIBLE THERMOSTATS)

| Model Number | Tubing Size (I.D.) | 24 VAC Thermostat Circuit Rating | Time Cycle | Maximum Differential Across Valve | Maximum Water Temp. | Maximum System Pressure | Flow Capacity Cv | Friction Loss Equivalents Ft. of Tubing |
|--------------|--------------------|----------------------------------|---------------------------------------|-----------------------------------|---------------------|-------------------------|------------------|---|
| 1311-102 | 3/4" | 0.4A ① | Open: 45 seconds Close: 45 seconds | 15 PSI | 240°F (116°C) | 50 PSI | 23.5 ③ | 2 1/2 |
| 1311-103 | 1" | 0.4A ① | Open: 45 seconds Close: 45 seconds | 15 PSI | 240°F (116°C) | 50 PSI | 37.0 ③ | 3.5 |
| 1311-104 | 1 1/4" | 0.4A ① | Open: 45 seconds Close: 45 seconds | 15 PSI | 240°F (116°C) | 50 PSI | 42.2 ③ | 6.5 |

2-WIRE, 24V VALVES WITH SCREW TERMINAL WIRING PANEL AND AUXILIARY SWITCH

| Model Number | Tubing Size (I.D.) | 24 VAC Thermostat Circuit Rating | Time Cycle | Maximum Differential Across Valve | Maximum Water Temp. | Maximum System Pressure | Flow Capacity Cv | Friction Loss Equivalents Ft. of Tubing |
|--------------|--------------------|----------------------------------|---------------------------------------|-----------------------------------|---------------------|-------------------------|------------------|---|
| 1361-102 | 3/4" | 0.2A ② | Open: 45 seconds Close: 60 seconds | 15 PSI | 240°F (116°C) | 50 PSI | 23.5 ③ | 2 1/2 |
| 1361-103 | 1" | 0.2A ② | Open: 45 seconds Close: 60 seconds | 15 PSI | 240°F (116°C) | 50 PSI | 37.0 ③ | 3.5 |
| 1361-104 | 1 1/4" | 0.2A ② | Open: 45 seconds Close: 60 seconds | 15 PSI | 240°F (116°C) | 50 PSI | 42.2 ③ | 6.5 |

① Valve current is 0.4A only during opening or closing. For proper anticipation, select thermostat designed for use with a 3-wire zone valve.
 ② Valve current is 0.52A when opening but 0.2A when fully open: therefore set anticipator for 0.2A. ③ GPM @ 1 PSI drop.

1311 COMPATIBLE THERMOSTATS TABLE

| Model Number | Mechanical/Digital | Display | Upgrade Model Choices/Upgrade Size | Mechanical/Digital | Display |
|--------------|--------------------|---------------------------|------------------------------------|--------------------|-------------------------------------|
| 1F56N-444 | Mechanical | Analog | 1F95-0671 | Digital | Blue Universal 6" Display |
| 1F80-0471 | Digital | Blue Single 4" Display | 1F95-0680 | Digital | Blue Commercial 6" Display |
| 1F83-0422 | Digital | Blue Universal 4" Display | 1F95-1280 | Digital | Big Blue Commercial 12" Touchscreen |
| 1F83-0471 | Digital | Blue Universal 4" Display | 1F95-1291 | Digital | Big Blue Humidity 12" Touchscreen |
| 1F85-0422 | Digital | Blue Universal 4" Display | 1F95EZ-0671 | Digital | Blue Easy Reader 6" Display |
| 1F86-0471 | Digital | Blue Single 4" Display | 1F97-1277 | Digital | Big Blue Single 12" Touchscreen |

HYDRONIC / APPLIANCE