## **Honeywell** Home



# V135 3-Way Mixing or Diverting **Valve**

#### **PRODUCT DATA**



#### APPLICATION

The V135 valve is designed for hydronic heating systems and can be applied as a mixing valve or a diverting valve. The V135 is normally used with the T100R series thermostatic control, which is equipped with a strap-on pipe sensor for attaching to the heating system pipe by means of a clamp. A plastic handle is also provided with the V135 for manual operation of the valve.

#### **SPECIFICATIONS**

#### Construction

Body of bronze, internal parts of high-quality engineering plastic, stainless steel stem and high-quality elastomer materials.

**Maximum Temperature Rating:** 248 °F (120 °C)

Maximum System Pressure: 232 psi.

Maximum Differential Pressure: 147 psi.

Stroke Length: 0.08 in. (2 mm)

Cv rating and valve size: See Table 1.

Table 1. Flov	v Capacities.
i (i )	Cu Esstau <sup>a</sup>

Size (in.)	Cv Factor <sup>a</sup>	
3/4	3.7	
1	5.8	
1-1/4	5.8	
1-1/2	11.7	

<sup>a</sup> Cv= U.S. GPM at 1psi differential pressure.

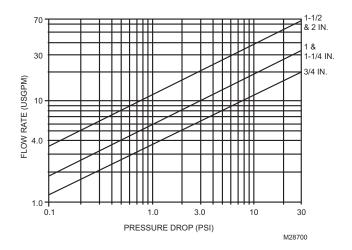


Fig. 1. V135A flow chart.

Dimensions: See Fig. 2 and Table 2.



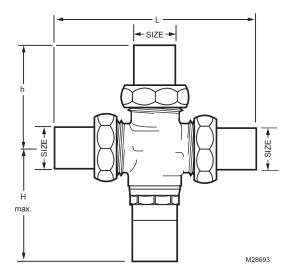


Fig. 2. V135A dimensions in in. (mm.).

Table 2. V135 Dimensions in in. (mm).

Item		L	H max.	h	
Number	Size (in.)	Sweat Union			
V135A1006	3/4	5-1/8 (128)	3-1/4 (83)	2-9/16 (64)	
V135A1014	1	5-13/16 (148)	3-1/4 (83)	2-15/16 (74)	
V135A1063	1-1/4	6-3/8 (162)	3-1/4 (83)	3-3/8 (86)	

#### **INSTALLATION**

### When Installing This Product...

- Read these instructions carefully. Failure to follow them could damage the product or cause hazardous conditions.
- 2. Before installation, make sure that the inside of the valve is clean and free of any packing materials, etc. The supply line should be flushed out to clear of any sediment, scale, or foreign material.
- 3. Installation as a mixing valve:

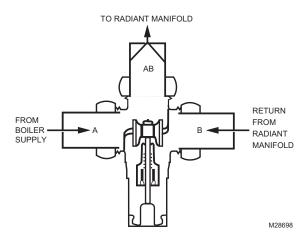


Fig. 3. Installation as a mixing valve.

#### 4. Installation as a diverting valve:

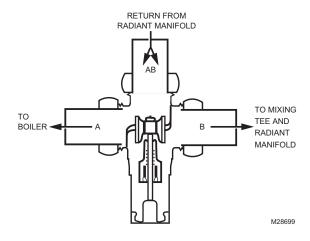


Fig. 4. Installation as a diverting valve.

## **SERVICE TIPS**

The 3-way valve has a double "stem seal" arrangement. The outer bushing with O-rings may be replaced under pressure and without draining the system.

An ordinary screwdriver is required to remove the bushing, as shown in Fig. 5.

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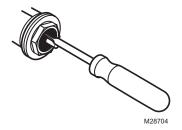


Fig. 5. Removing the bushing with a screwdriver.

After re-installation, the bushing should be adjusted flush with the metal cartridge rim.

## **APPLICATION DIAGRAMS**

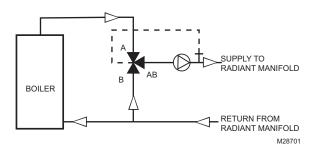


Fig. 6. Typical mixing valve application.

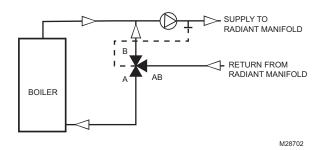


Fig. 7. Typical diverting valve application.

NOTE: These diagrams are intended to show general arrangement only. Consult local codes for complete piping requirements.

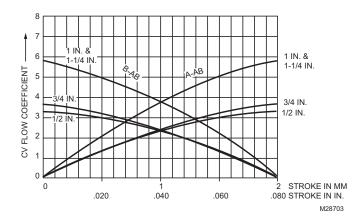


Fig. 8. Diagram for flows from A-AB and B-AB.

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