

## OPERATION

The Honeywell Braukmann D05T is a balanced, direct acting pressure regulating valve. The D05T provides constant downstream pressure regardless of varying inlet pressures and downstream flow demands.

The spring force holds the valve in the open position until downstream pressure, sensed by a port, is sufficient to press on the underside of the diaphragm and close the valve. As downstream pressure drops due to demand, the force on the diaphragm is reduced and the valve opens. Adjustment is made by manually turning the adjustment screw clockwise to increase the spring force and require a higher downstream pressure to close the valve. Similarly, reducing the spring force lowers the outlet set pressure.

Once the outlet pressure is set, the D05T automatically regulates to maintain the downstream pressure. See Fig. 5 for the internal construction of the D05T.

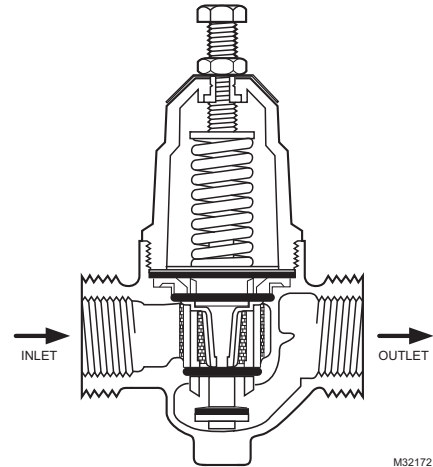


Fig. 5. Internal construction of D05T.

## TROUBLESHOOTING

Table 3 provides a troubleshooting guide for the D05T Pressure Regulating Valves.

Table 3. Troubleshooting the D05T Pressure Regulating Valves.

Problem	Solution
Whistling noise.	<ul style="list-style-type: none"> <li>Slightly increase or decrease the outlet pressure until the noise disappears.</li> </ul>
Will not hold pressure.	<ul style="list-style-type: none"> <li>Clean the filter cartridge.</li> </ul>
Chatters.	<ul style="list-style-type: none"> <li>Replace the screen and O-rings.</li> <li>Replace the cartridge (see replacing the cartridge section).</li> </ul>
Freezes up.	<ul style="list-style-type: none"> <li>Replace bonnet or cartridge, if damaged.</li> <li>To avoid future freeze-up:                             <ul style="list-style-type: none"> <li>— Temporarily (slightly) open a downstream faucet if the DS05 is going to be exposed to temperatures below 32°F (0°C). The slight water flow will eliminate freeze-up.</li> <li>— Move the DS05 to a location with an ambient temperature above 32°F (0°C) if it is currently exposed to prolonged temperatures below 32°F (0°C).</li> </ul> </li> </ul>
Pressure gauge measures a lower pressure under flow conditions than was originally set during static conditions.	<ul style="list-style-type: none"> <li>DS05 is functioning properly. No action is necessary. The pressure decrease is characteristic of all directacting pressure regulating valves and is referred to as falloff (See Table 2).</li> </ul>

### D05T Parts and Accessories

**Order Number Description**

*Replacement Parts*

203223	Bonnet Assembly for 3/4 in. Valves.
203224	Bonnet Assembly for 1 in. Valves.
272841	Gasket for 3/4 in. D05T/DS05 (quantity 24).
272842	Gasket for 1 in. D05T/DS05 (quantity 24).
K05A1009	Replacement Cartridge, Screen and O-ring for 3/4 in. Valves.
K05A1017	Replacement Cartridge, Screen and O-ring for 1 in. Valves.
K05B1007	Replacement Screen and O-ring for 3/4 in. Valves.

K05B1015

Replacement Screen and O-ring for 1 in. Valves.

*Union Kits*

K06U1077	Union Kit—3/4 in., includes nut, female NPT threaded tailpiece and gasket.
K06U1085	Union Kit—1 in., includes nut, female NPT threaded tailpiece and gasket.
K06U1101	Union Kit—3/4 in., includes nut, sweat tailpiece and gasket.
K06U1119	Union Kit—1 in., includes nut, sweat tailpiece and gasket.