FEATURES:

- Heavy-duty, large diameter shaft to eliminate flexing and breakage.
- Dual shaft seals eliminate leakage.
- PTFE bearing on shaft eliminates friction and wear; stem design is “blow-out” proof.
- PTFE seats energized with O-rings eliminate wear and improve cycle life.
- Trunnion design eliminates lateral ball stress and allow downstream piping to be disconnected under full line pressure.
- Fully concentric and mirror polished ball assures smooth, leakproof operation.
- Multi-direction flow means valve cannot be piped in backwards.
- Smooth flow path eliminates pressure loss.
- True-union ends for ease of piping installation and removal.
- Mounting lugs on body for piping support or easy attachment of True Blue Actuators.

DESIGN:

Known as “The Engineered Ball Valve”, Series MBV provides more safety and design features than any other thermoplastic ball valve. With its mirror-polished ball, perfectly machined sealing surfaces, Trunnion centering design, PTFE thrust bearing and O-ring loaded floating PTFE seats, the True Blue manual ball valve offers smooth turning even in difficult applications. The floating seats automatically compensate for seat wear, and after long-term cycling, the carriers can easily be returned to their original position simply by tightening the union nuts. The top and bottom “Trunnion” design permits flow and pressure in either direction, and eliminates the stresses inherent to a ball secured only at the top. Sizes 1/2" through 11/2" have a full port; size 2" has a tapered port; the ultra smooth flow path virtually eliminates turbulence and pressure loss and permits flow rates that far exceed pipe manufacturers specifications.

Mounting lugs are integrally molded on the sides of each valve. These provide convenient piping support, and allow you to add an actuator in the field with no bulky adapter kits or change-overs. Even after many years, a True Blue Actuator can be added without removing the valve from the piping system.

MATERIALS OF CONSTRUCTION:

Series MBV is molded of Type 1 Grade 1 Geon® PVC, Corzan® CPVC, Natural Polypropylene, and Kynar® PVDF. Standard O-ring seals are FKM or EPDM. Seats and shaft bearings are PTFE. Standard connections are threaded (NPT or BSP) or socket (Schedule 80 or Metric). For optional materials and connections, please consult factory.

MBV PVC and CPVC body types certified to NSF/ANSI 61 and NSF/ANSI 372
**PRODUCT DATA**

**APPROXIMATE FLOW RATES at 1.0 PSI (0.07 Bar) Pressure Drop**

<table>
<thead>
<tr>
<th>Valve Sizes</th>
<th>1/2</th>
<th>3/4</th>
<th>1</th>
<th>1 1/4</th>
<th>11/2</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cv Factor</td>
<td>10</td>
<td>20</td>
<td>40</td>
<td>80</td>
<td>100</td>
<td>120</td>
</tr>
</tbody>
</table>

**TORQUE SPECIFICATIONS**

| Torque in-lbs. | 25  | 35  | 45  | 70  | 70  | 70  |

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**SEAL MATERIAL**

- V FKM
- EP (EPDM)

**VENTED BALL** ← Add suffix -Z for sodium hypochlorite.

**BODY MATERIAL**

- PV Polyvinyl Chloride (PVC)
- CP Chlorinated Polyvinyl Chloride (CPVC)
- PP Virgin Polypropylene
- PF Kynar® (PVDF)

**CONNECTIONS**

- S Socket Ends
- T Threaded Ends
- F Flanges
- SC Sanitary
- BSP BSP Threads

**ORDERING INFORMATION**

Order by part number and specify exact chemicals, temperatures and pressures. To arrive at the proper part number, please consult diagram below.

The letters and numbers used in this part number are for example only!

**PLAST-O-MATIC**

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