**FEATURES**

- High quality spray nozzle with ceramic orifice for extended life.
- Built-in check valve to prevent dripping when not in use.
- 304 stainless steel screen.
- Free pass area is 40% larger than conventional nozzles.
- Provides uniform fine droplet for misting and atomizing at high efficiency.

**SELECTION**

There are three (3) different sizes to choose from. Select a nozzle from the Nozzle Performance Chart to match the flow and pressure requirements of the system.

**INSTALLATION**

The misting/atomizing nozzle is designed for stationary mounting in any position. Position nozzle for desired impact and coverage towards the target. All three (3) nozzle sizes have a standard 1/4”NPT(M) threaded end for easy installation. Use tape or pipe sealant on the adjoining threaded NPT(F) fitting and tighten the nozzle onto the fitting.

**OPERATION**

This misting/atomizing nozzle is defined as an impeller type nozzle. It is designed to atomize water flow into tiny droplets by forcing water through a small orifice. To prevent dripping when spraying stops, this misting/atomizing nozzle has a built-in check valve. It is also considered a cleanable nozzle where a screen holder and screen can be removed to clean out foreign debris.

**MAINTENANCE**

A loss in system pressure is often the result of a dirty, worn or improperly sized nozzle. Remove spray nozzle from equipment. Pull screen holder from main body and inspect o-ring, screen holder, screen, poppet and spring for foreign material or damage. Clean out or replace with new spray nozzle.
PARTS LIST

<table>
<thead>
<tr>
<th>ITEM</th>
<th>P/N</th>
<th>MATL</th>
<th>DESCRIPTION</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>—</td>
<td>PA</td>
<td>Body w/ceramic orifice</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>—</td>
<td>PLM</td>
<td>Closer</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>—</td>
<td>S</td>
<td>Spring</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>—</td>
<td>NBR</td>
<td>Poppet</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>—</td>
<td>S</td>
<td>Screen</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>—</td>
<td>POP</td>
<td>Holder, Screen w/O-Ring</td>
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</tr>
</tbody>
</table>

MATERIAL CODES (Not Part of Part Number):
NBR = Medium Nitrile (Buna-N)  PA = Polyamide,
PLM = Unspecified poly  POP = Polypropylene  S = 304 SS

EXPLODED VIEW

DIMENSIONALS

1/4 NPT MALE THREAD

NOZZLE PERFORMANCE CHART

<table>
<thead>
<tr>
<th>Model</th>
<th>Color</th>
<th>Free Pass Dia. (mm)</th>
<th>507 psi 50 bar</th>
<th>725 psi 70 bar</th>
<th>1015 psi 70 bar</th>
<th>1450 psi 100 bar</th>
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</thead>
<tbody>
<tr>
<td>31943</td>
<td>Red</td>
<td>0.2</td>
<td>0.02</td>
<td>0.02</td>
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<tr>
<td>31944</td>
<td>Green</td>
<td>0.3</td>
<td>0.04</td>
<td>0.05</td>
<td>0.06</td>
<td>0.07</td>
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<tr>
<td>31945</td>
<td>Purple</td>
<td>0.4</td>
<td>0.07</td>
<td>0.08</td>
<td>0.10</td>
<td>0.12</td>
</tr>
</tbody>
</table>

TROUBLESHOOTING

No flow from nozzle
- Nozzle plugged
- Low flow to pump
- Internal filter clogged

Leaking
- Worn o-ring

IMPORTANT SAFETY INSTRUCTIONS

Relieve all line pressure in the inlet line to the pump and discharge line from the pump before performing any maintenance on the pump.

⚠️ CAUTIONS AND WARNINGS

All High Pressure Systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices could result in personal injury or damage to pump or property. Cat Pumps does not assume any liability or responsibility for the operation of a customer's high pressure system.

Read all CAUTIONS and WARNINGS before commencing service or operation of any high pressure system. The CAUTIONS and WARNINGS are included in each service manual and with each Accessory Data sheet. CAUTIONS and WARNINGS can also be viewed online at www.catpumps.com/cautions-warnings or can be requested directly from Cat Pumps.

WARRANTY

View the Limited Warranty on-line at www.catpumps.com/warranty.