

# JOHNSON SCREENS® PVC INLINE MIXER

## Reduces Pressure Drop by 50 Percent

Johnson Screens improved inline mixer utilizes a unique internal design, which uses ordinary line pressure to create high levels of turbulence, enhancing the mixing of fluid additives with the product stream. With no moving parts, the inline mixer is virtually maintenance free and installs quickly and easily with no special tools or additional components. These inline mixers are used in a wide variety of processes, such as chemical blending, pH control, water treatment and chlorine mixing.

This new model of inline mixer has some distinct advantages compared to earlier models:

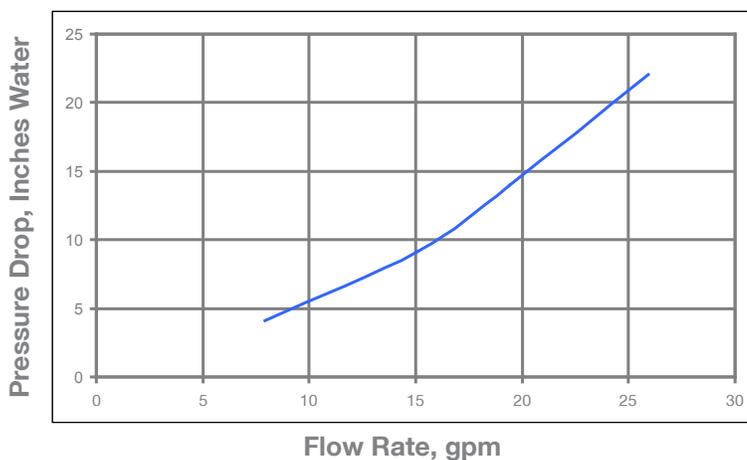
- Handles higher flow rates
- Improved mixing performance
- Reduced energy consumption
- Larger wrench flats
- Reduced backpressure during operation



Standard features of the inline mixer include:

- PVC construction, with stainless steel bands, aids in chemical compatibility
- Clear PVC sight tube allows easy viewing of the mixing process
- Standard 1 in. male NPT threads on the inlet and outlet ports
- Standard ½ in. female NPT threads on the injection port

Pressure Drop of Improved Inline Mixers



*The triple turbine (patent pending) in the new inline mixer model induces the turbulence needed for increased mixing performance with a decreased differential pressure. This triple turbine changes the directional flow of the fluids, allowing mixture prior to exiting the mixing chamber.*

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## Planning and Installation Instructions

These instructions are intended to be used as guidelines solely for the installation of the Johnson Screens PVC inline mixer. They are not to be used with any other product or any other manufacturer's product. The mixer should only be installed by someone with knowledge or experience of the state and local plumbing codes and installation of similar devices. The installer should follow all state and local codes when using this device. **The mixer should be inspected every 6 months.** Call Johnson Screens at (800) 935-5727 with any questions concerning the use or installation.



Prior to installation, check to verify that all limitations and guidelines of the mixer are met:

1. The limits of schedule 80 PVC pipe, or any attachments to the mixer, must not be exceeded.
2. The mixer needs to be installed on a cold water supply line.
3. The mixer should only be used in conjunction with approved chemicals.
4. Appropriate water hammer and/or surge suppressors should be installed and working before the mixer is installed.
5. The mixer should be installed at or near a floor drain so that any drips or spills will be captured by the drain.
6. The mixer should be located away from high traffic, child play or other areas where damage can occur.
7. Pipe joint compounds and Teflon® paste products may react with PVC, resulting in stress cracks. For best results, use Teflon® tape or Loctite® 55 pipe sealing cord, or equivalent.\*
8. Do not use pipe wrenches on the clear pipe section.

Installation process and procedure:

1. In an acceptable installation location, connect the inlet port of the mixer (B) to the water supply source using the 1 in. male pipe threads on the mixer. Caution: **DO NOT OVERTIGHTEN. PVC PIPE THREADS SHOULD BE TIGHTENED FINGER TIGHT AND THEN 1 TO 2 MAXIMUM ADDITIONAL TURNS.** Do not place wrenches on pipe and opposite end connection. Wrenches must be placed on grey end connection to which pipe is being attached.
2. Attach an outlet pipe to the outlet port (C) of the mixer using the 1 in. male pipe threads on the mixer. Follow over tightening and wrench placement cautions above.
3. Attach adequate mounting supports to the mixer and connecting piping.
4. Install an appropriate check valve to the 1/2 in. chemical injection port (A).
5. Install the chemical injection pump to the check valve.
6. Pressurize and test the mixer and chemical injector.
7. Check and correct any leaks.

**Johnson**screens®

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