



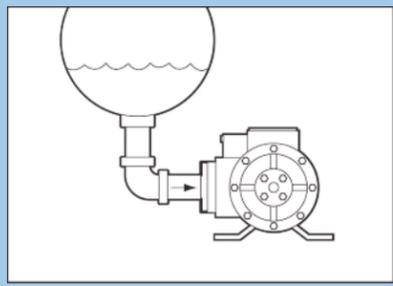
PUMP INSTALLATION

Quick Reference Guide For Trouble Free Operation

Make sure you are thoroughly trained before you attempt any pump installations. Improper conditions or procedures can cause accidents resulting in property damage and personal injury.

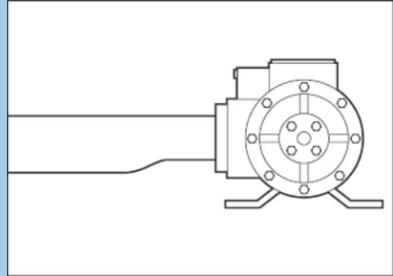
ALWAYS FOLLOW ORIGINAL EQUIPMENT MANUFACTURER'S GUIDELINES.

Inlet Piping



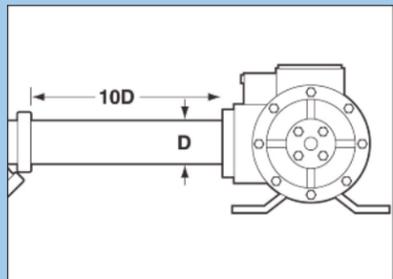
PUMP LOCATION

- Underneath and as close to the supply tank as possible.
- **Inlet to the pump is very important.**



INLET PIPE SIZE

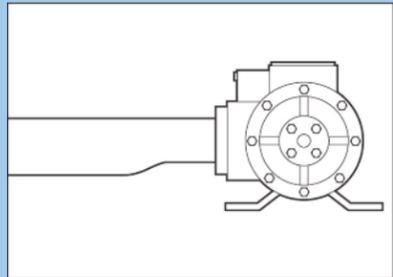
- Same as pump inlet connection or one pipe size larger.



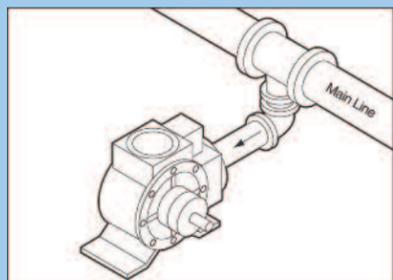
INLET PIPING

Use full port ball valves.

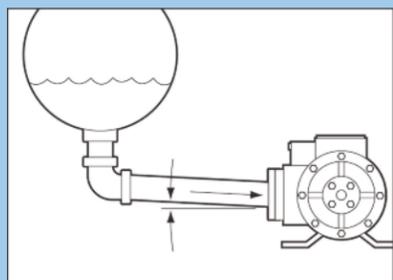
- Use strainer on inlet 10X pipe diameter from pump inlet
- Last valve, fitting, elbow should also be 10X the pipe diameter away from the inlet



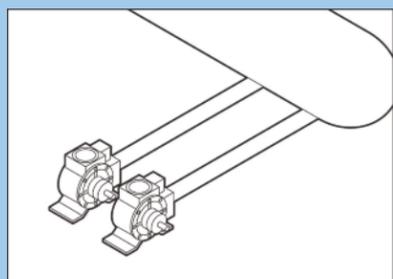
- If using a reducer at the pump inlet, use an eccentric reducer flat side up.



- When using a piping tee off a supply line, come off the bottom of the piping for liquid.



- Have inlet piping slope downward towards the pump inlet.



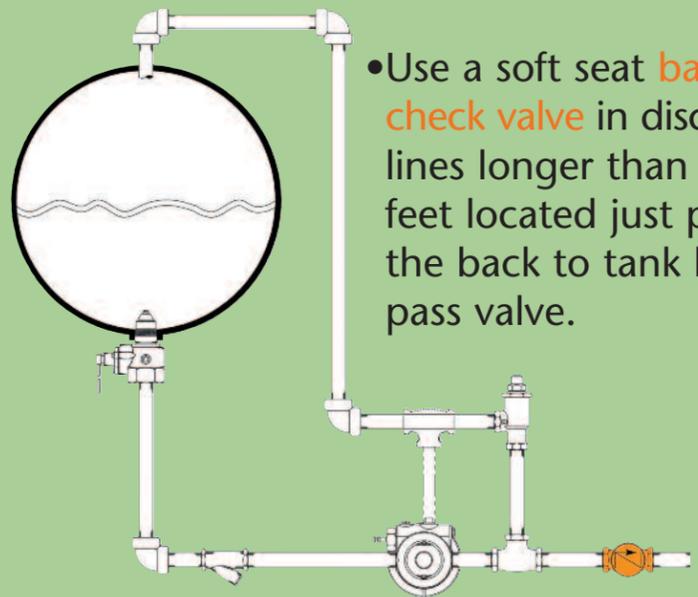
- Use separate liquid lines to supply each pump when using more than one pump at one time.

Above illustrations courtesy of Corken, Inc., A Unit of IDEX Corporation.

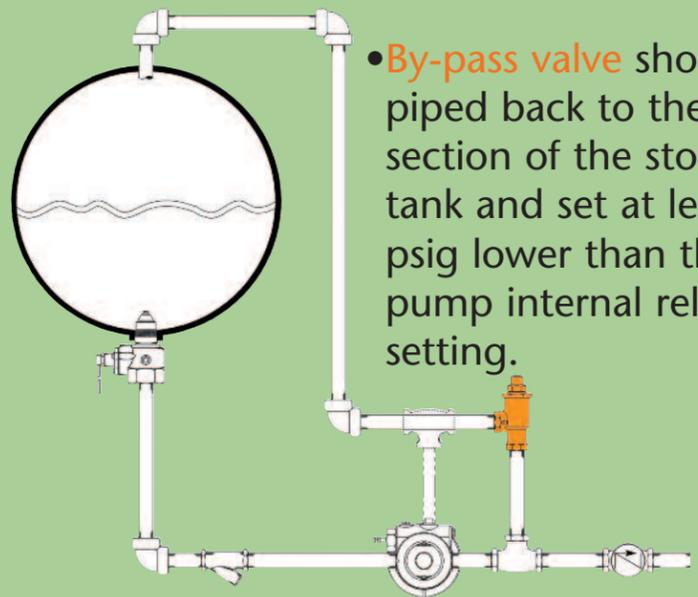
Discharge Piping

- **A differential by-pass valve must always be installed in a pumping system.**

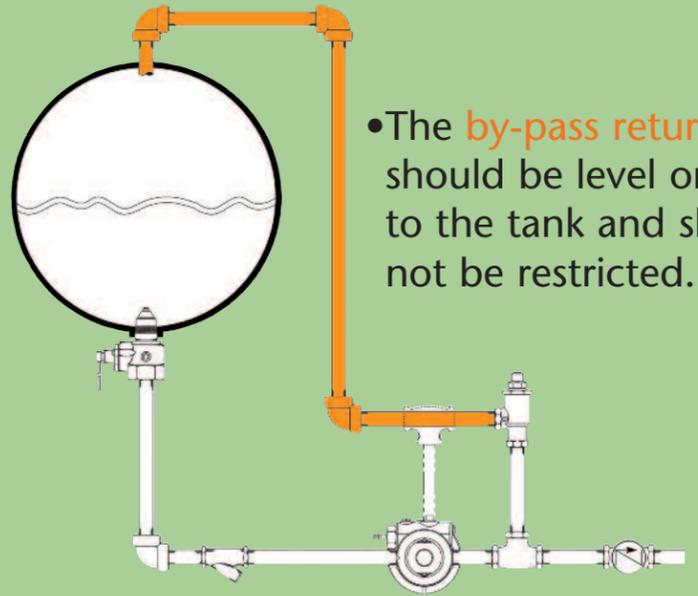
- Can use smaller piping on discharge side of the pump - watch total distance from pump to filling point.



- Use a soft seat **back check valve** in discharge lines longer than 50 feet located just past the back to tank by-pass valve.



- **By-pass valve** should be piped back to the vapor section of the storage tank and set at least 25 psig lower than the pump internal relief setting.



- The **by-pass return line** should be level or go up to the tank and should not be restricted.

Above illustrations courtesy of Blackmer.



GAS EQUIPMENT COMPANY, Inc.

SINCE 1937

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