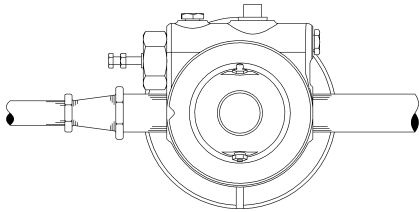


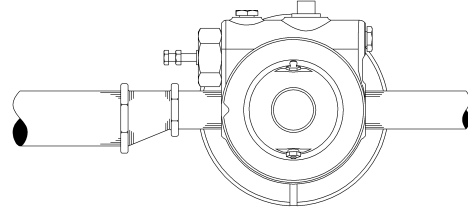
1



NO

Don't restrict the inlet line.

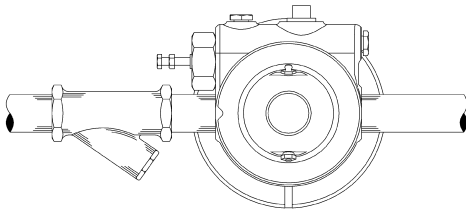
2



YES

Use inlet line same size or larger than pump inlet connection.

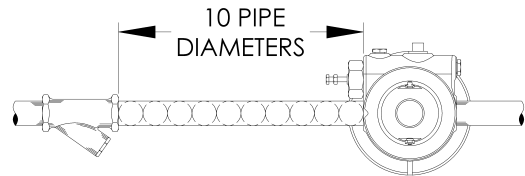
3



NO

Don't install restrictive fittings close to pump inlet.

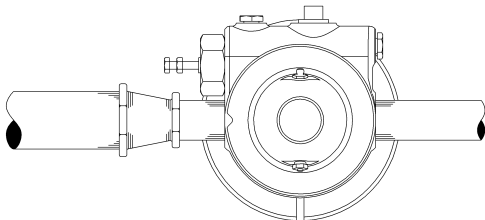
4



YES

When possible, install fittings at least 10 pipe diameters upstream of the pump inlet.

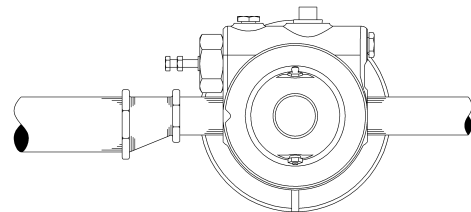
5



NO

Don't use concentric reducers in the pump suction.

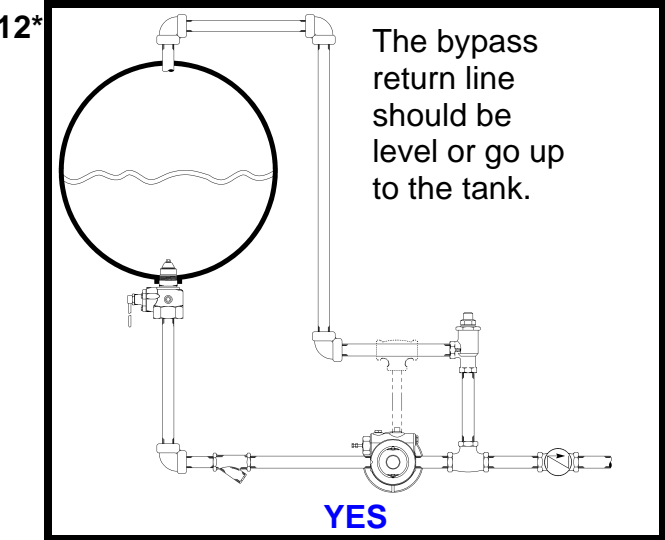
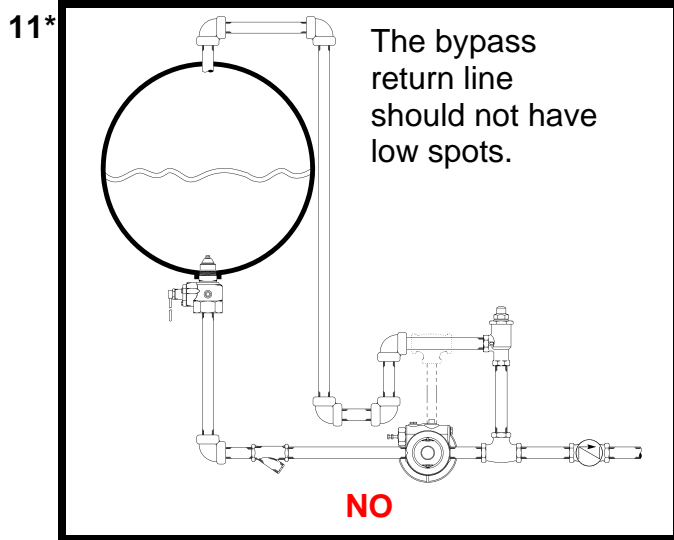
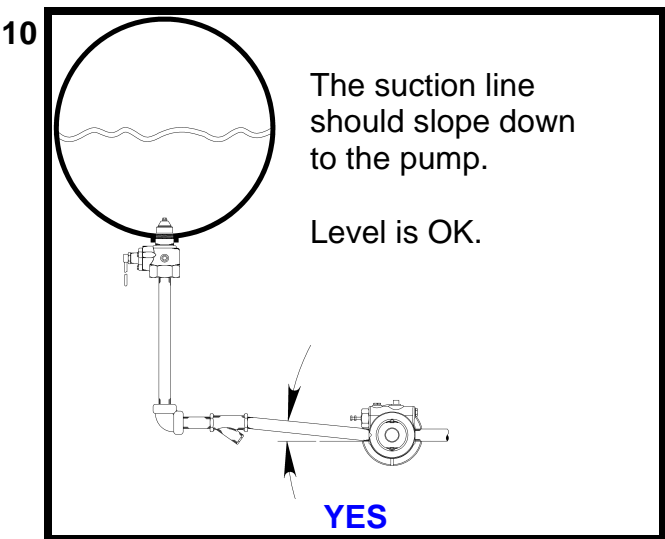
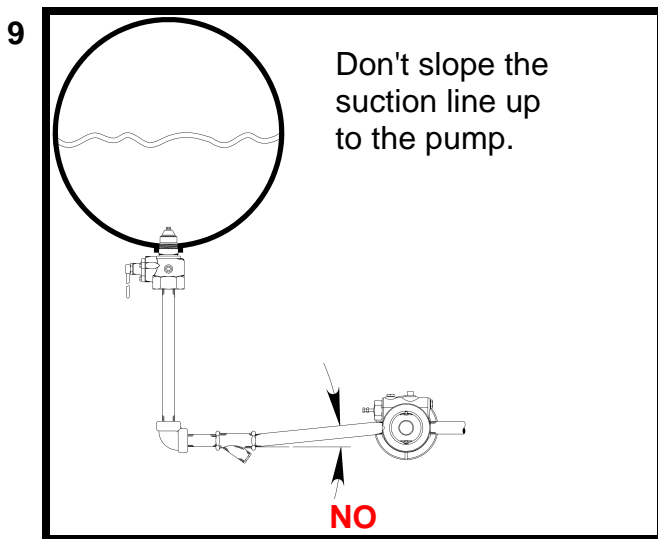
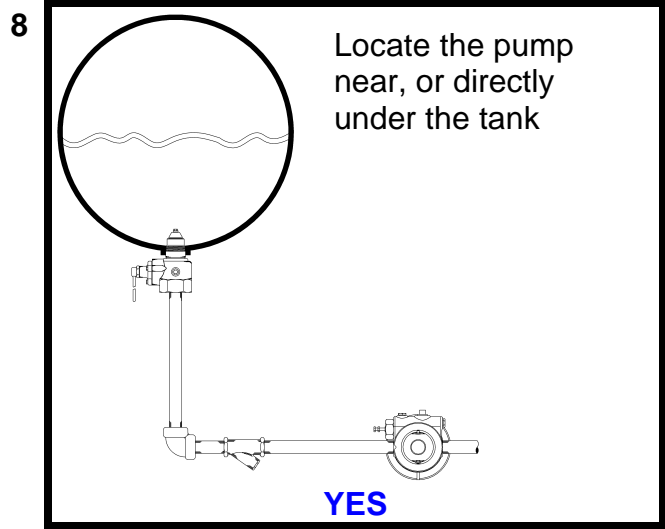
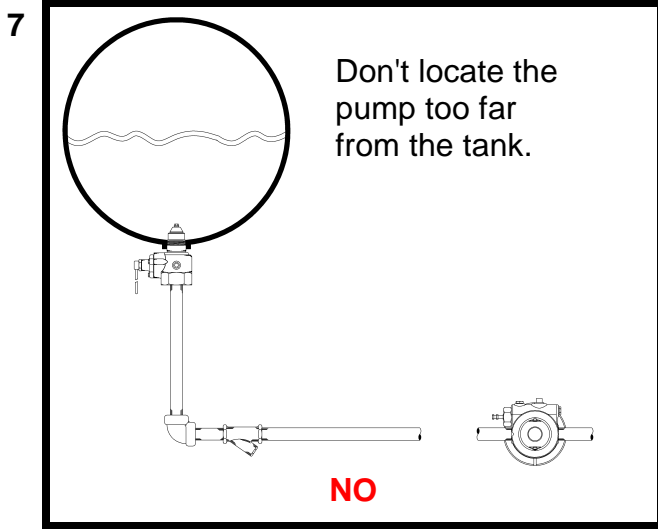
6



YES

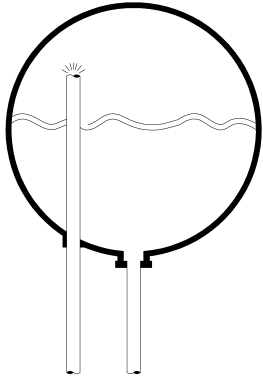
Use eccentric reducers in the pump suction. Install the reducer with the flat side up.

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13

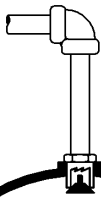


A bottom vapor opening with a stand pipe to the vapor section may be used instead of a top vapor opening.

OK

VAPOR / LIQUID

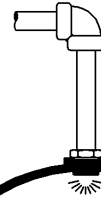
14



Avoid using a back-check valve in the bypass return line.

NO

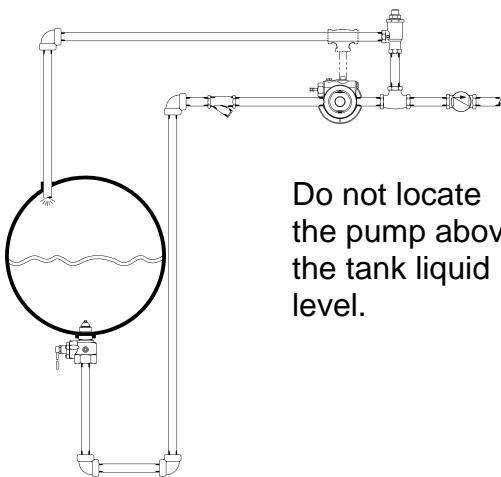
15



Use an excess flow valve in the bypass return line.

YES

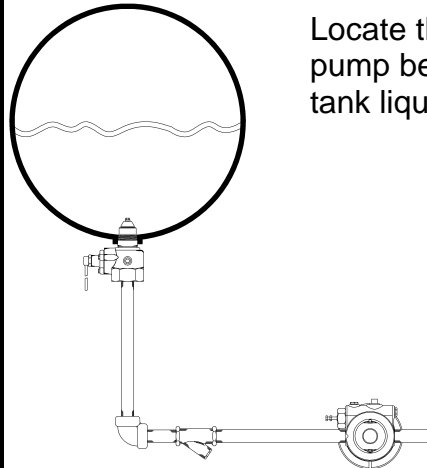
16



Do not locate the pump above the tank liquid level.

NO

17

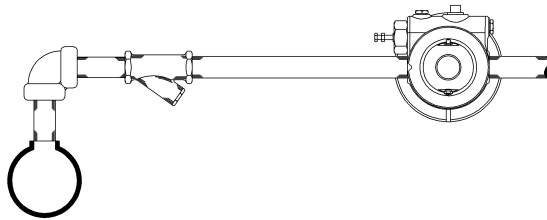


Locate the pump below the tank liquid level.

YES

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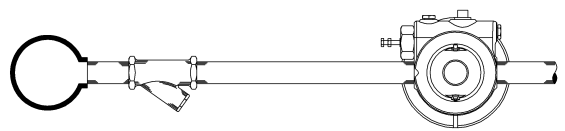
18



NO

Never pipe the pump suction from the top of the supply line.

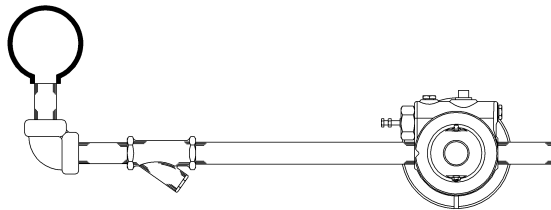
19



NO

Do not pipe the pump suction from the side of the supply line.

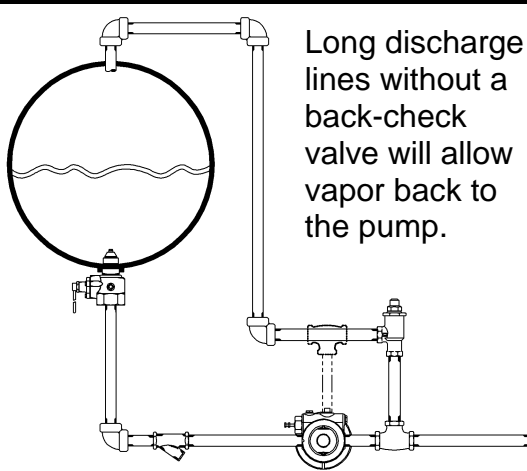
20



YES

Always pipe the pump suction from the bottom of the supply line.

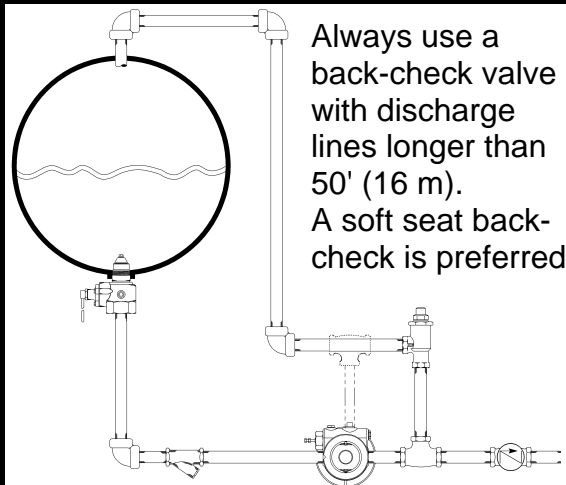
21*



NO

Long discharge lines without a back-check valve will allow vapor back to the pump.

22*



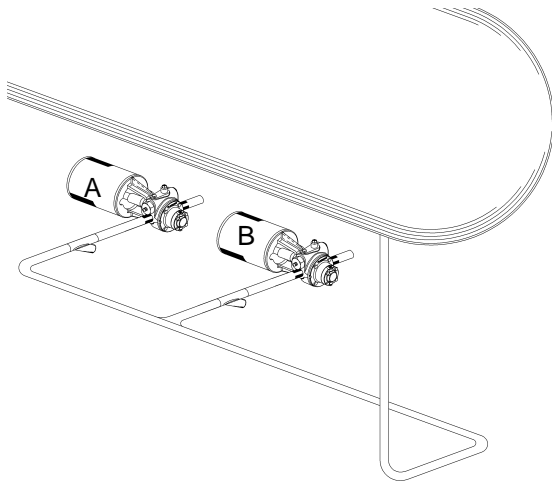
YES

Always use a back-check valve with discharge lines longer than 50' (16 m). A soft seat back-check is preferred.

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23

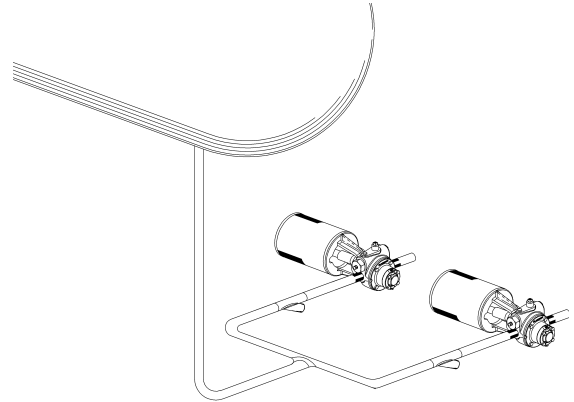
Pump A will starve Pump B.



NO

24

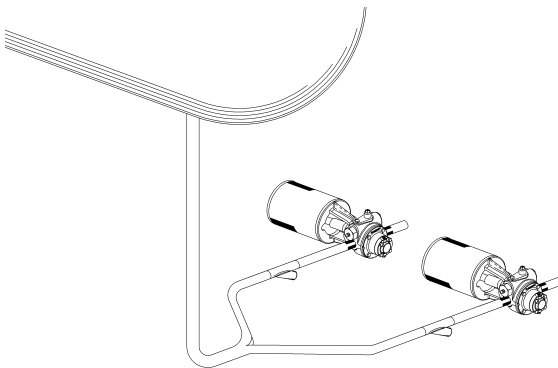
Operating 2 pumps in parallel with a tee is OK. The common portion of the suction line must be sized to handle the total system capacity.



OK

25

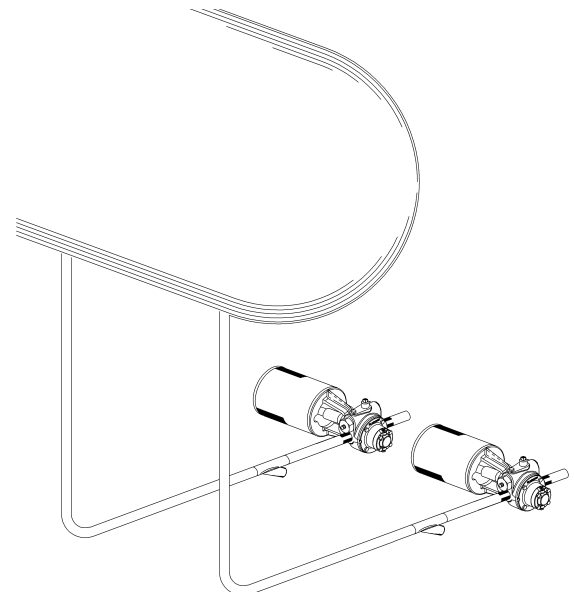
Operating 2 pumps in parallel with a wye is better. The common portion of the suction line must be sized to handle the total system capacity.



GOOD

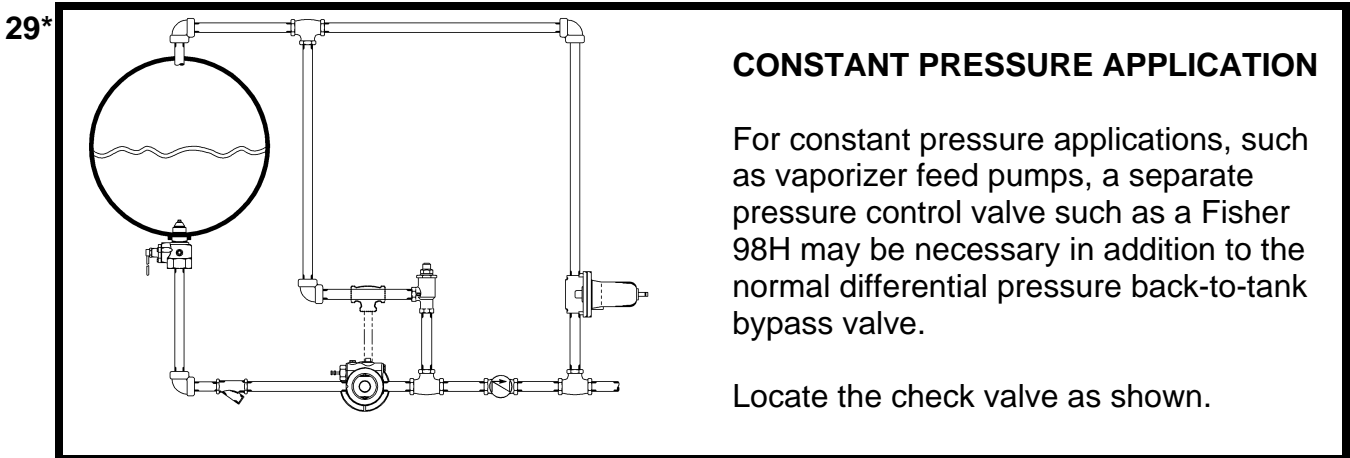
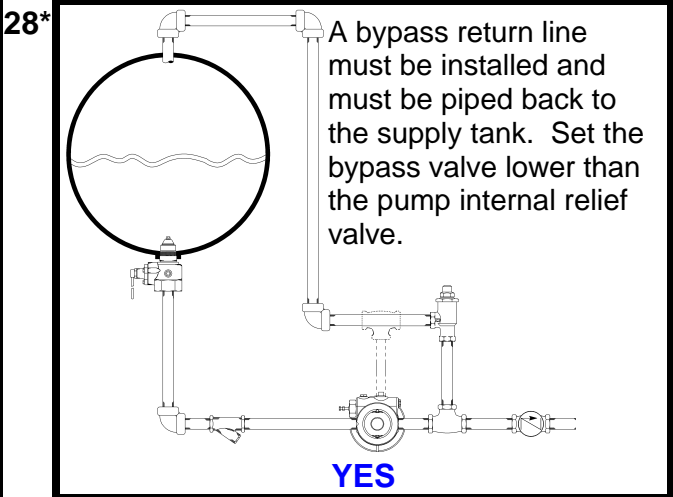
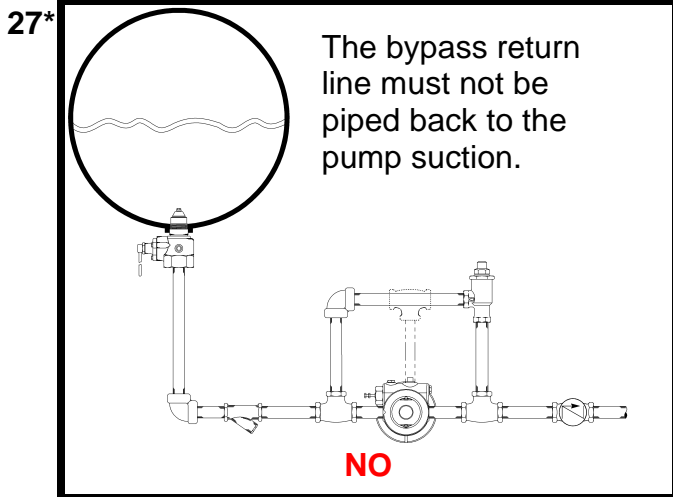
26

Separate suction lines are best.

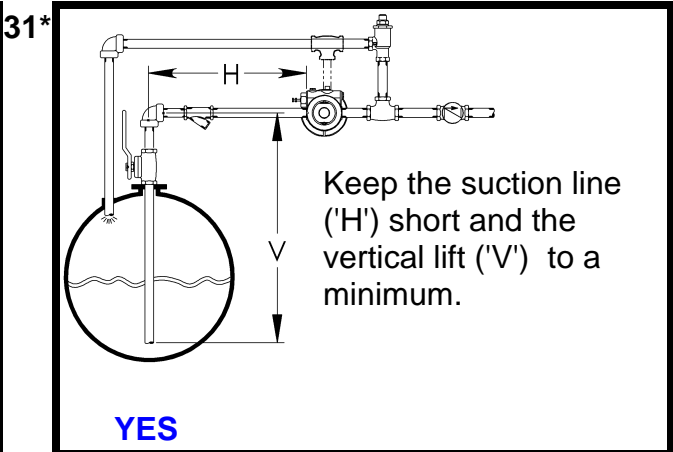
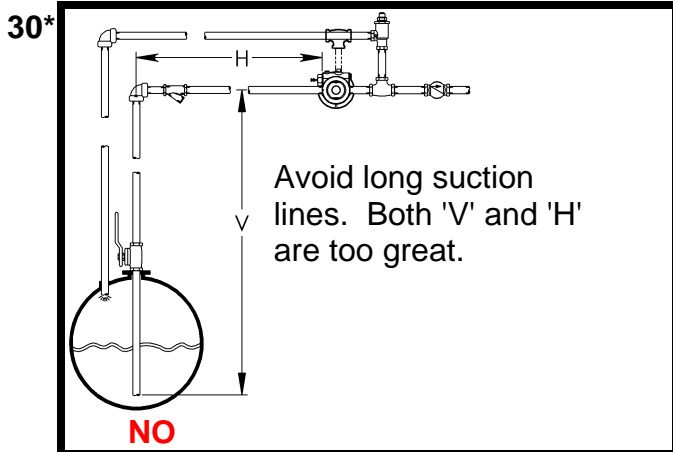


BEST

LIQUEFIED GAS PUMP INSTALLATION GUIDE



PUMPING FROM UNDERGROUND TANKS (Consult Factory for additional information.)



* Drawings 11, 12, 16, 21, 22, 27, 28, 29, 30 & 31. Blackmer 1" LG pumps feature an internal relief valve that may also be piped back to the supply tank eliminating the need for an external valve. Blackmer LGL 1.25" pumps and larger must use an external back-to-tank relief valve.

Note: The drawings in this document show only the items referred to in the text. All installations must conform to local codes and will require the addition of unions, shut-off valves, hydrostatic relief valves, etc.