

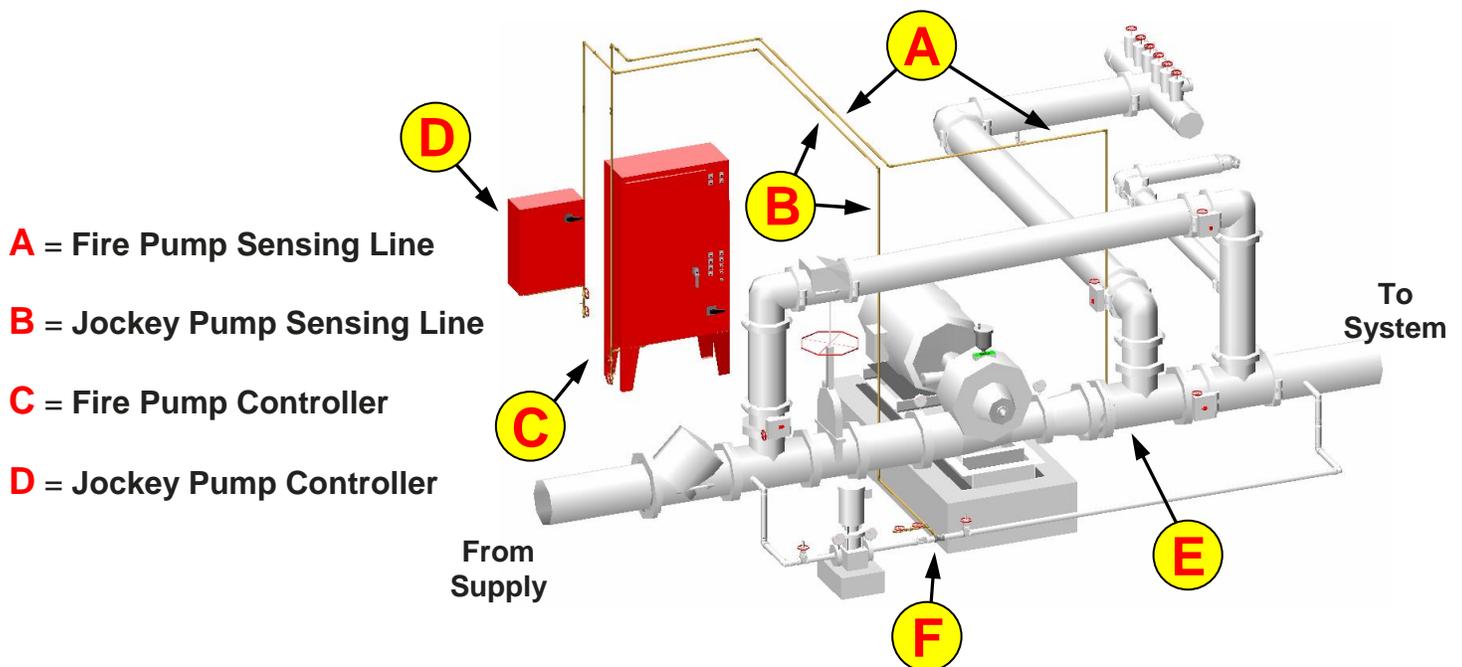


QUICK RESPONSE

*Saving life and property through effective licensing, plan review,
and inspection of fire protection systems.*

January 2009

FIRE PUMPS – SENSING LINES



Most commonly the pump controller is connected to the fire protection system by means of piping known as a **sensing or pilot line**. Each pump, including the jockey pump, shall have its own individual controller and each controller shall have its own individual **sensing line**. The **sensing line** is connected to the fire protection system between its respective pump discharge check valve and the discharge control valve (E and F).

The size of the **sensing lines** shall be a minimum of 1/2-inch and must be of non-corrosive metallic pipe or tube (brass, copper, stainless steel). Galvanized pipe is not corrosion resistant enough to be suitable for **sensing line** use. Plastic pipe is corrosion resistant, however, due to it being easily damaged, it too is not suitable for **sensing line** use.

To absorb pressure surges and protect the controller pressure switch from damage, two check valves shall be installed in each **sensing line**. These check valves shall be at least five feet apart. To aid in dampening, a small 3/32" hole shall be drilled into the clapper of each check valve. Where the water is clean, ground-face unions with noncorrosive diaphragms drilled with a nominal 3/32" orifice shall be permitted in place of the check valves.

Lastly, control valves are not allowed to be installed in the **sensing line**.

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