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Application Guide

SPENCE ENGINEERING COMPANY, INC. 150 GOLDENHAM ROAD, WALDEN, NY 12586-2035

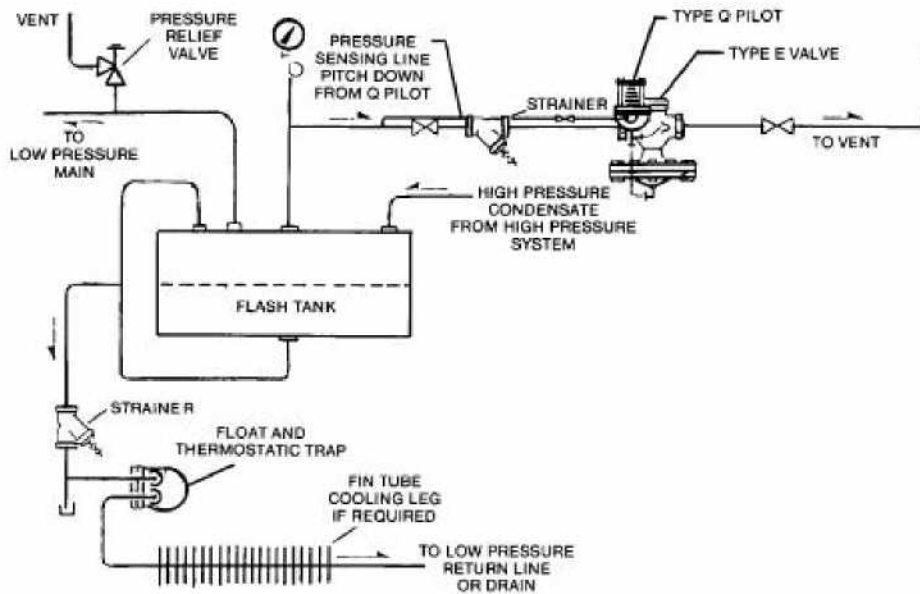
TYPE EQ BACK PRESSURE REGULATOR

APPLICATION:

To maintain pressure in a flash tank so that steam can be used in low pressure main.

OPERATION:

When steam pressure in the flash tank increases above the Q pilot setting, the E valve will open and vent the excess to maintain correct pressure.



ADVANTAGES:

- Accurate control.
- Saves money by using flash steam.

EQ BACK PRESS.
FLASH TANK

APPLICATION GUIDE
OTHER PRODUCTS



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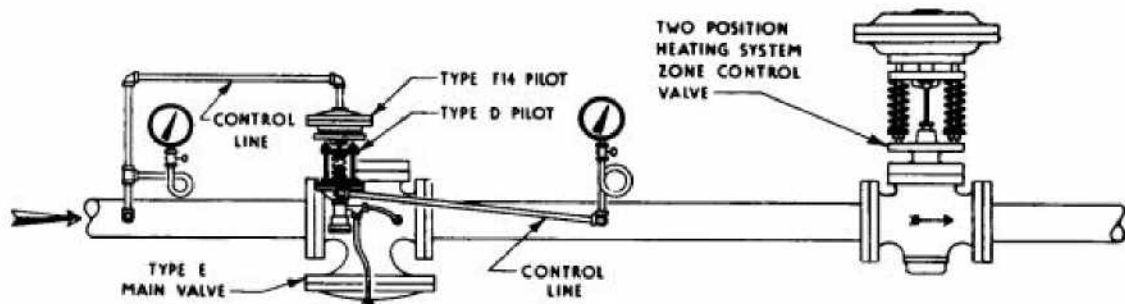
TYPE EF14D PRESSURE REDUCING VALVE with BACK PRESSURE CONTROL

APPLICATION:

To retard flow of steam to a rate that can be handled by the boiler.

OPERATION:

Frequently, large automatic on-off control valves, or inexperienced equipment operators, impose load pick-ups on a steam system that the boilers cannot follow. An F14 pilot added to the pressure regulator feeding such loads can be set to throttle, when the boiler pressure sags, as it does on such a quick load surge. Then, when the boiler has increased its steam rate, the F pilot will re-open and permit full load to be handled.



ADVANTAGES:

- Only slight additional cost overpressure regulator alone.
- Operates on small differential - does not allow large drop in boiler pressure.
- Prevents "upsetting" boiler controls.
- All standard equipment.

EF14D BACK PRESSURE

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TYPE EQ BACK PRESSURE VALVE with FLOW CONTROL ORIFICE

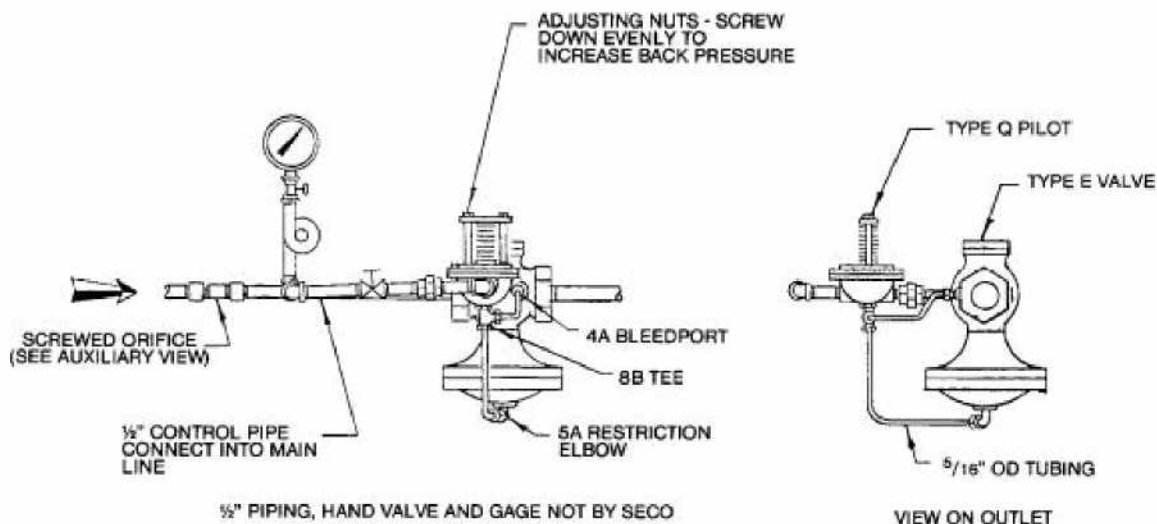
APPLICATION:

To provide a valve that will limit flow and provide steam at a constant pressure.

OPERATION:

An orifice is sized for a known flow at a given pressure drop and is fitted in the upstream piping of the Back Pressure Valve. The Q pilot is set for the pressure required at the outlet of the orifice. If the pressure at the outlet of the orifice drops, the valve will start to close to maintain the pressure and flow.

EQ BACK PRESS.
W/FLOW CONTROL



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OTHER PRODUCTS

ADVANTAGES:

- Standard Spence Valves.
- Easily adjustable.



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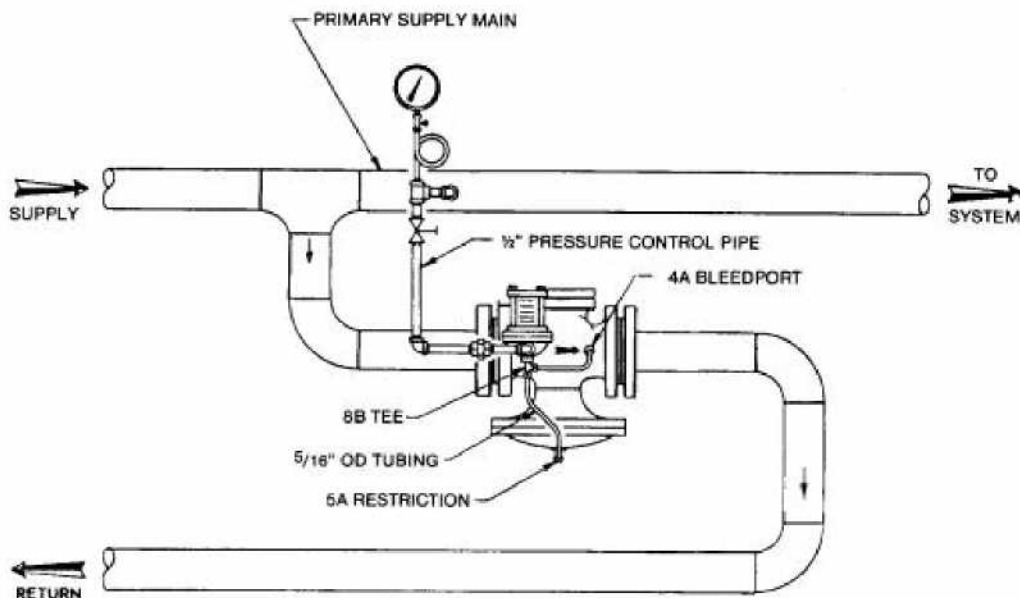
TYPE C34Q BACK PRESSURE PUMP BYPASS CONTROL

APPLICATION:

To maintain pump discharge pressure and insure constant circulation of water through pump.

OPERATION:

The Q pilot is set to open when pump discharge pressure raises, due to decreased need for water in system. The C34 will discharge excess water to return line.



ADVANTAGES:

- Self operated.
- Balanced construction.
- High capacity.

C34Q BACK PRESS

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