

INSTALLATION GUIDELINES

01

The inlet 40 NB flange of SOPT-LH be connected to outlet of the equipment being drained.

It is important to use Forbes Marshall 0.8 perforation strainer at the inlet of SOPT-LH (refer Figure 1).

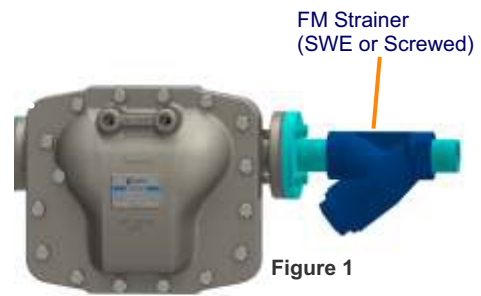


Figure 1

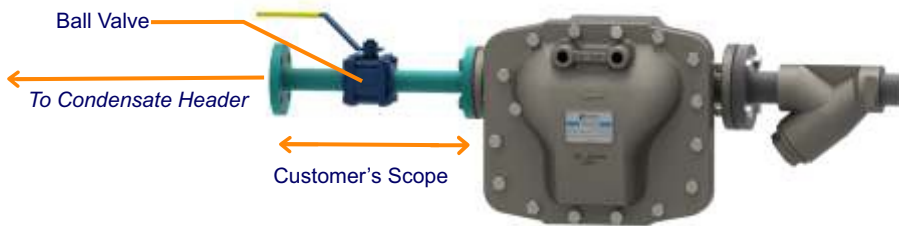


Figure 2

02

Connect outlet 25NB flange of SOPT-LH to condensate return header with isolation valve as shown (refer Figure 2).

03

Connect motive steam to port marked "IN" of SOPT-LH, use FM 100 Mesh Strainer. Ensure that this line is drained off the condensate at all times using Forbes Marshall Thermodynamic Steam Trap (refer Figure 3).

The motive line be taken from the upstream of process control valve and not the downstream.

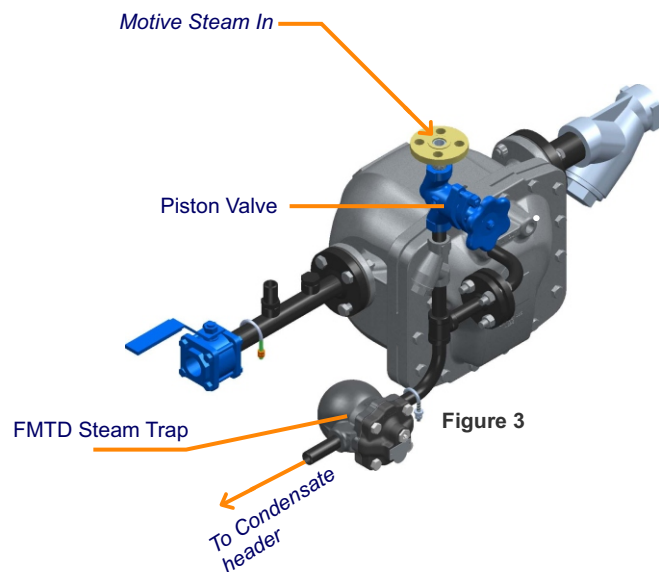


Figure 3

04

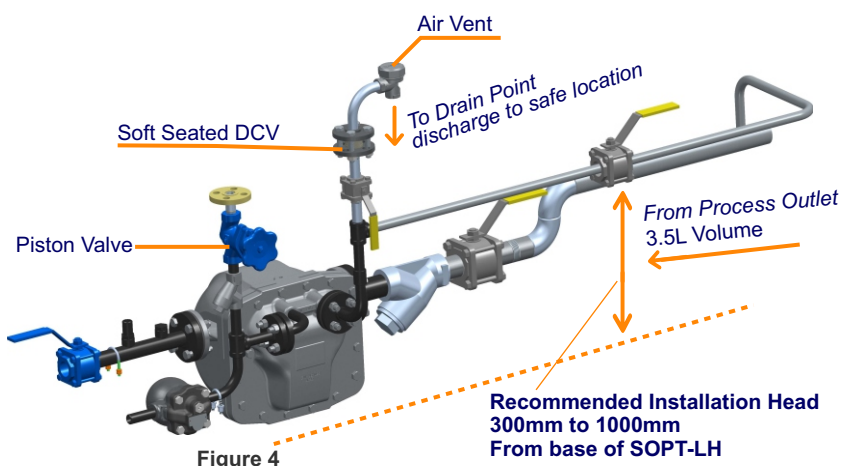


Figure 4

The screwed 15NB port marked "OUT" of SOPT-LH should be connected back as close as possible to the condensate outlet of the equipment. This balancing line must always be full bore and always connected to the top of the condensate pipe. **If supplied**, 15NB Air vent with Air vent isolation valve and soft seated 15NB FMDCV must be fitted on the balancing line at elevation higher than Steam inlet as shown in installation diagram

Note

It's recommended that the inlet & exhaust lines be prepared separately and assembled on SOPT-LH ensuring that no dirt, weld spatter goes inside the ports commissioning. Install the SOPT-LH with **minimum installation head of 200 mm and recommended maximum installation head of 1000mm**, from the base of SOPT-LH (refer installation diagram). When using steam, the inlet piping should be atleast 20NB from the steam header towards the SOPT-LH only when the steam (motive) inlet pipework length is close to 600mm, the motive inlet piping can be reduced and fed into SOPT-LH motive inlet.

COMMISSIONING GUIDELINES

01

Remove the strainer cap and screen from steam and condensate inlet strainers.

02

Flush steam/condensate through the strainer for until clear steam and condensate is visible.

03

Close steam and condensate valves and reassemble the strainer cap and screen of both the strainers. Check the total back pressure and ensure that it does not exceed 5 bar g.

04

Open motive steam piston valve and see that steam inlet pressure does not exceed 14 bar g in the pressure gauge. It is recommended that Motive pressure be more than total back pressure by atleast 1.5 bar g.

05

Slowly open the motive steam inlet line to supply pressure to the SOPT LH. Slowly open the vent isolation valve. Ensure that the vent line is properly drained

06

Ensure that the balancing line isolation valve is open

07

Slowly open the isolation valves in the condensate inlet and discharge lines, allowing condensate to fill the body of SOPT LH. After approx 2-3 min. close the vent isolation valve. (If SOPT-LH is supplied without Airvent and DCV)

If airvent and DCV are supplied no need to close the vent isolation valve

PRECAUTIONS

Do not allow the motive steam pressure to fluctuate.

Do not install crooked discharge line.

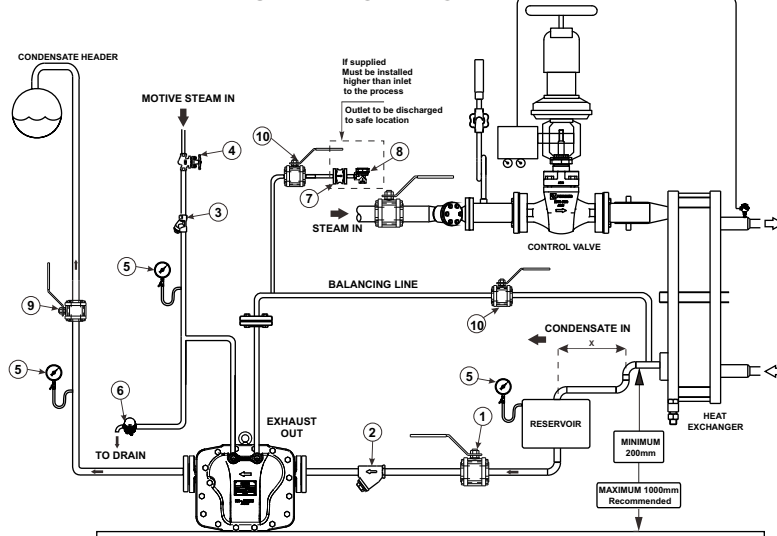
The discharge line should never be smaller than bore of the outlet check valve.

If the discharge line is more than 100 mtrs long then it should be properly sized to handle the quantity of condensate & flash steam.

Ensure there is no additional pressurised lines connected to discharge line which could cause increase in back pressure.

For more details, please contact Forbes Marshall.

INSTALLATION DIAGRAM



KEY

- 01 40NB Isolation Valve
- 02 40NB Forbes Marshall FMSTR31 Strainer 0.8 Mesh
- 03 15NB Forbes Marshall Screwed Strainer (FMSTR51) Dutch Weave type/ 100 mesh
- 04 15NB Forbes Marshall Piston Valve
- 05 Pressure Gauge with Syphon
- 06 15NB Float Trap
- 07 15NB Forbes Marshall Soft seated Disk Check Valve(if supplied)
- 08 15NB Forbes Marshall Air Vent
- 09 25NB Forbes Marshall Piston Valve
- 10 15NB vent isolation valve