MV55PPPPUHP

Installation

01

Connect steam inlet to piston valve ensuring leakproof joint.

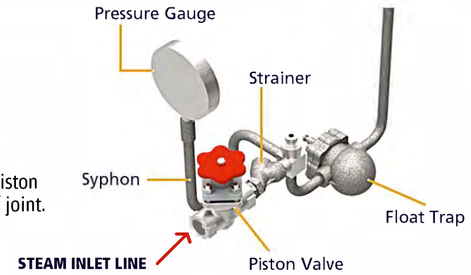


Figure 1

02

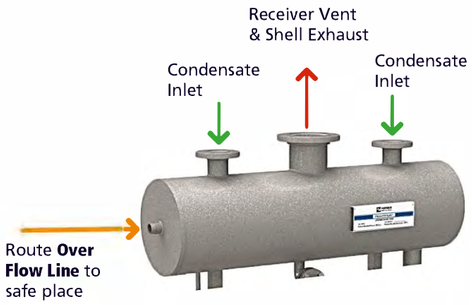


Figure 2

Connect condensate inlet line with pump receiver.

Please ensure that receiver vent and overflow lines are routed to safe location such that there is no risk to personnel.

03

Connect CRM referring user manual (if supplied).

04

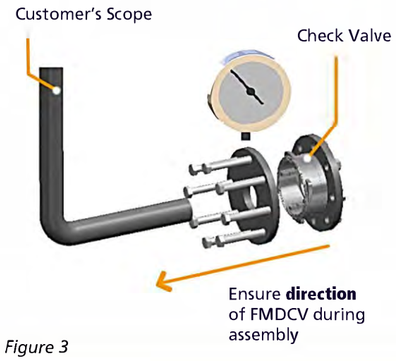


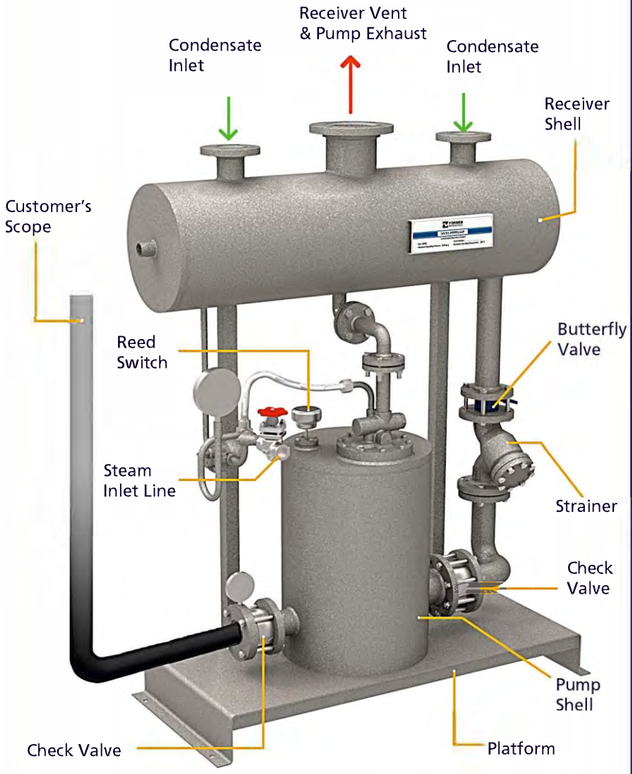
Figure 3

Unscrew the flange of outlet check valve and keep the check valve safe preventing any damage.

Assemble and weld the discharge line with the check valve outlet flange.

Please ensure that no dirt, weld spatter is left while welding.

Provide ½" BSPT tapping on pump discharge line to cross check the back pressure in the discharge line.



NOTE

If the condensate flow to the pump is **low**, the pump will not operate till it is full. The strokes will be intermittent.

For foundation details refer user manual

Multi Valve

High Back Pressure Powered Pump Package Unit

Commissioning

01

Remove strainer cap and the screen from steam and condensate inlet strainers. Flush steam/condensate through the strainer for 3-5 minutes until clear steam/condensate is visible. Reassemble the strainer cap and screen of both the strainers.

Open motive steam inlet piston valve and see that steam inlet pressure does not exceed 13.8 bar g in pressure gauge.

***Refer** Figure 1*

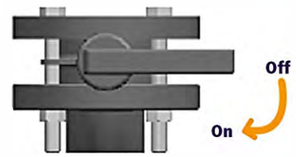
02

Allow the condensate to flow to the pump receiver.

***Refer** Figure 2*

03

Check that the butterfly valve on pump inlet line is in open condition and observe the pump performance.



BUTTERFLY VALVE

PRECAUTIONS

01 To avoid fluttering of inlet check valve during cold startup of the pump, open the pump condensate isolation valve by 50%. Once the cold startup is over open the isolation valve fully.

02 Do not allow the motive pressure to fluctuate. To avoid steam starvation- the motive inlet piping should be at least 50NB (2") from the steam header to the pump. It can be reduced to 25NB (1") for a length no more than 5 meters, when measured from pump.

03 Do not install crooked discharge line.

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

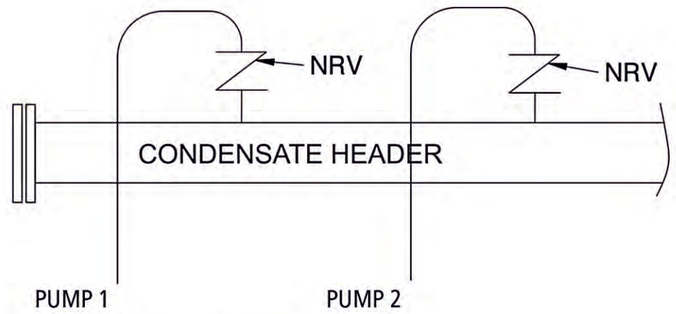
05 If the condensate discharge line is more than 100 mtrs long then it should be properly sized to handle the quantity of condensate. *For more details contact Forbes Marshall.*

06 Do not close the exhaust and vent pipe under any circumstance and ensure they are piped to a safe location.

07 If the pump is supplied with Flash Vessel allow the condensate to flow by gravity from Flash Vessel trap outlet to condensate inlet of the pump receiver.

08 If you have to connect more than one pump to a common condensate header, *please refer figure on the side*

09 Ensure there is no additional pressurised lines or any discharge from centrifugal pump is connected to the discharge line which could cause increase in back pressure



NRV: SIZE EQUAL TO PUMP OUTLET SIZE

CAPACITY CHART

Motive Pr. (bar g)	Back Pr. (bar g)	Capacity (kg/hr)
3	0.5	6953
3	1	5707
3	2	4228
4	0.5	8292
4	1	7305
4	2	5470
4	3	3512
4	2	5470
4	3	3512
5	0.5	8116
5	1	8180
5	2	6331
5	3	4424
5	4	2998
5	4	2998
6	0.5	9419
6	1	9126
6	2	7281
6	3	5379
6	4	4563
6	5	2536
7	0.5	9878
7	1	10057
7	2	7667
7	3	6300
7	4	5076
7	5	3812
7	6	2961
8	0.5	9946
8	1	9997
8	2	8572
8	3	6945
8	4	5996
8	5	5017
8	6	4368
8	7	2563
9	0.5	10382
9	1	9881
9	2	8481
9	3	6949
9	4	5477
9	5	5086
9	6	4296
9	7	3357
9	8	2523
10	0.5	11209
10	1	9649
10	2	8762

Motive Pr. (bar g)	Back Pr. (bar g)	Capacity (kg/hr)
10	3	7982
10	4	6009
10	5	5792
10	6	4549
10	7	4167
10	8	3614
10	8.5	3101
11	0.5	11417
11	1	10800
11	2	9726
11	3	7914
11	4	6595
11	5	6169
11	6	5347
11	7	4695
11	8	4056
11	8.5	3716
12	0.5	11828
12	1	11228
12	2	9935
12	3	8524
12	4	6336
12	5	5930
12	6	5483
12	7	4978
12	8	4334
12	8.5	4211
13	0.5	11613
13	1	10791
13	2	10088
13	3	8795
13	4	7021
13	5	6161
13	6	5643
13	7	5087
13	8	4612
13	8.5	4218
13.8	0.5	11442
13.8	1	11354
13.8	2	10128
13.8	3	9158
13.8	4	7815
13.8	5	7114
13.8	6	6524
13.8	7	6027
13.8	8	5045
13.8	8.5	4518