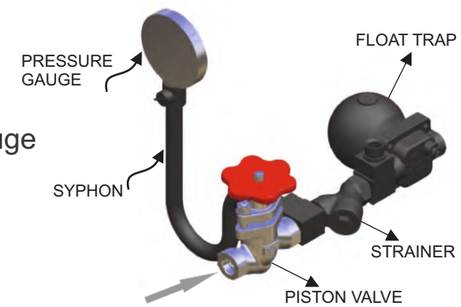
MULTI VALVE PRESSURE POWERED PUMP PACKAGED UNIT
MV 55

Installation

STEP1

Assemble the pressure gauge to the syphon and connect steam inlet to piston valve ensuring leakproof joint.

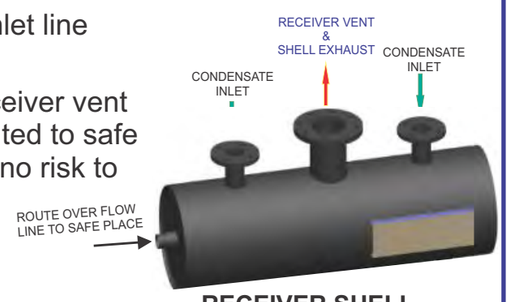


STEAM INLET LINE

STEP 2

Connect the condensate inlet line with the pump receiver.

Please ensure that the receiver vent and over ow lines are routed to safe location such that there is no risk to personnel



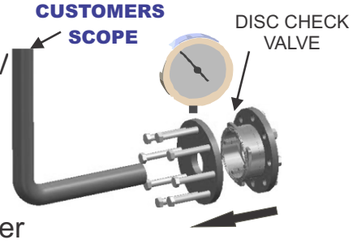
RECEIVER SHELL

STEP 3

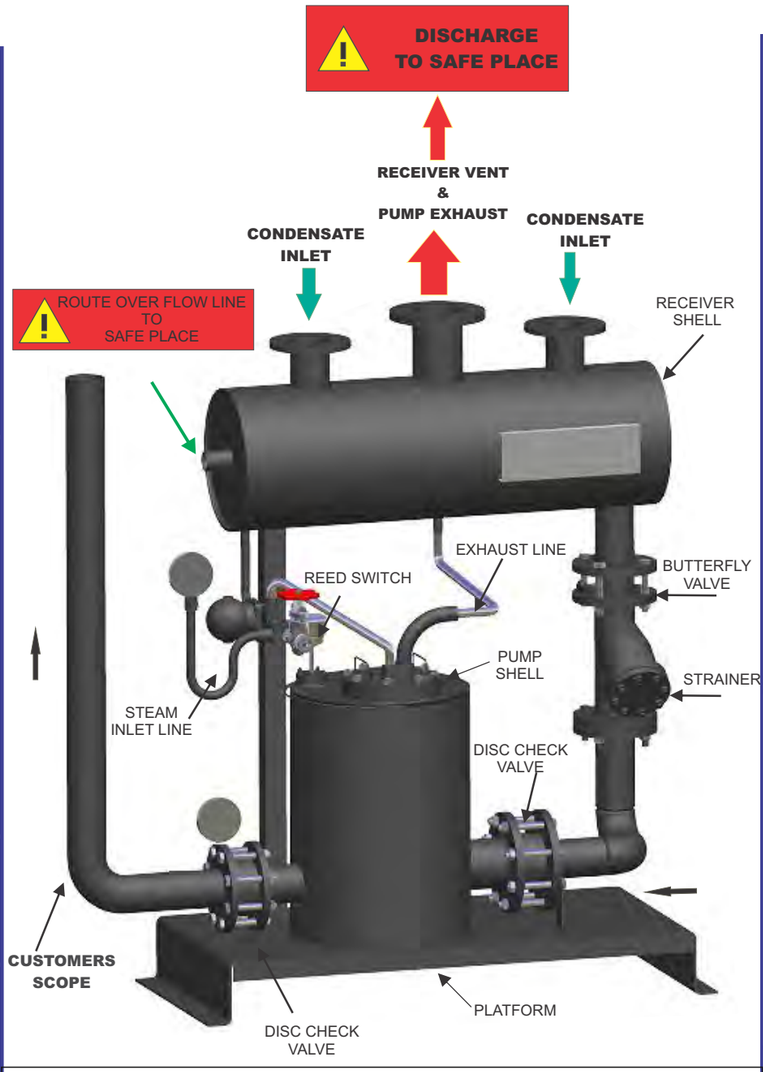
Connect CRM485R referring user manual (if supplied).

STEP 4

*Unscrew the ange of the outlet FMDCV and keep the FMDCV safe preventing any damage.
*Assemble and weld the discharge line with the FMDCV outlet ange.
*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



ENSURE DIRECTION OF FMDCV DURING ASSEMBLY



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

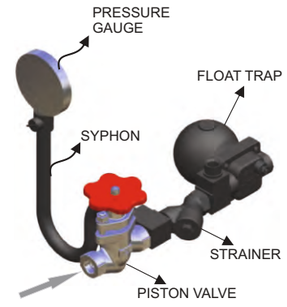
For foundation details refer user manual

Commissioning

STEP A

1. Remove strainer cap and the screen from steam and condensate inlet strainers. Flush steam /condensate through the strainer for 5-10 minutes until clear steam and condensate is visible. Reassemble the strainer cap and screen of both the strainers.

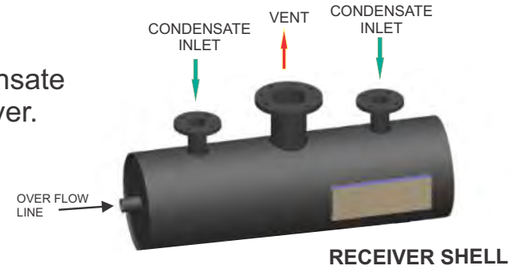
2 Open the piston valve and see that steam inlet pressure do not exceed more than 7 bar g in the pressure gauge.



STEAM INLET LINE

STEP B

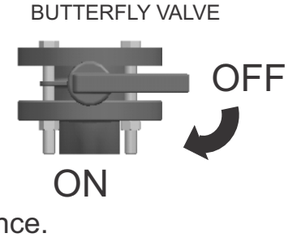
Allow the condensate ow to the receiver.



RECEIVER SHELL

STEP C

Check that the isolation valve on the pump is in open condition and observe the pump performance.



PRECAUTIONS

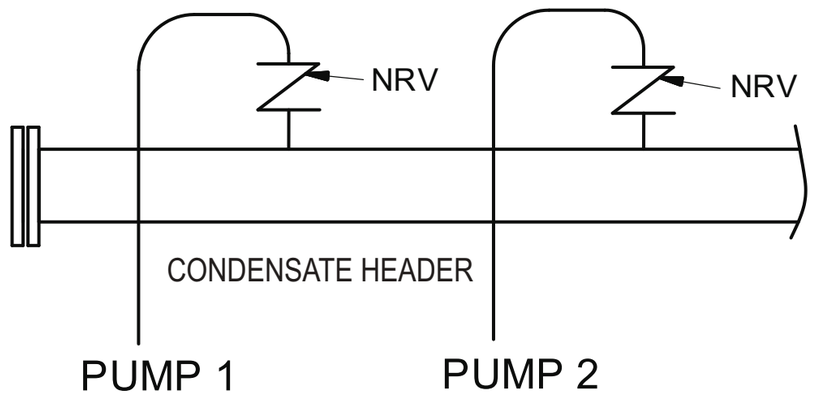
1. Do not allow the motive(Steam/Air) pressure to fluctuate.
2. Do not install crooked discharge line.
3. The discharge line should never be smaller than bore of the outlet check valve.
4. If the condensate discharge line is more than 100 mtrs long then it should be properly sized to handle the quantity of condensate.For more details please contact Forbes Marshall .
5. Do not close the exhaust and vent pipe under any circumstances
6. If the pump is supplied with Flash Vessel allow the condensate to flow by gravity from flash vessel trap outlet to condensate inlet of pump receiver.

CAPACITY CHART

Motive Inlet Pressure	Back Pressure	Capacity Motive Fluid - Steam	Capacity Motive Fluid - Air
barg	barg	kg/hr	kg/hr
7.00	1.00	10548	**
7.00	2.00	7960	**
7.00	3.00	6119	**
7.00	4.00	5048	**
6.00	1.00	8358	10556
6.00	2.00	6870	7896
6.00	3.00	5480	5587
6.00	4.00	3583	4118
5.00	1.00	7997	10690
5.00	2.00	6006	7410
5.00	3.00	4983	5099
4.00	0.50	8429	11136
4.00	1.00	7437	9586
4.00	2.00	4649	6806
3.00	0.50	7379	10723
3.00	1.00	6039	9498

Condensate temperature 80 deg C
when using Air as a motive inlet use 15NB line, with steam as a motive use 50NB line

7. If you have to connect more than one pump to common condensate return header please refer below figure.



* NRV :SIZE EQUAL TO PUMP OUTLETSIZE

8. 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