Trainer Lab # 13 Controlling Actuator Speed w/ Flow Control Valve



Trainer Lab Instructions:

Steps:

1. Make sure you are wearing safety glasses.
2. Make sure that the orange shut off valve is shut off before you start hooking up any components.
3. Make sure that 2 of the 3 ports on the silver manifold are plugged.
4. Take a hose from the silver manifold, and run it to the “P” port on the Manually Operated Valve.
5. Take an 8” hose (approximate length) and run it from the “A” port on the Manually Operated Valve to one of the ports on the inline Tee.
6. Take an 8” hose (approximate length) and run it from another port of the same Tee to the ball side of the check valve, from the remaining port of the tee run a hose to the non-arrow side of the needle valve. ( See video and photo )
7. Now take an 8” hose (approximate length) and run it from the arrow side of the needle valve to another inline tee, take another 8” hose and run it from the check side of the check valve to one of the 2 remaining sides of the inline tee and finally take a 8” hose and run it from the remaining port on the tee to the non-rod side of the medium cylinder. ( See Video and Photo)
8. Make sure that the needle valve is opened all the way (counter-clockwise)
9. Push the Manually Operated Valve to the right or to the “A” side of the Manually Operated Valve.
10. Video yourself doing the following Steps: and submit.
11. Turn on the orange shut off valve and set the “FR” unit to 60 PSI.
12. Shift the Manually Operated Valve to the left side or to the “A” port.
13. Shut the needle valve completely closed clockwise.
14. Shift the Manually Operated Valve to the “B” port, notice the cylinder will not extend , now slowly open the needle valve, notice how the cylinder will extend slowly, the more you open it the faster the cylinder will extend.
15. Now shift the Manually Operated Valve to the “A” port and see that the cylinder retracts and normal speed.
16. Repeat steps 11-13 a couple of times.
17. Turn off the orange shut off valve, cycle the Manually operated valve back and forth a couple of times so that there is no stored air in the system. Un-hook the hoses and put everything away.

Close up Needle Valve and check valve.



