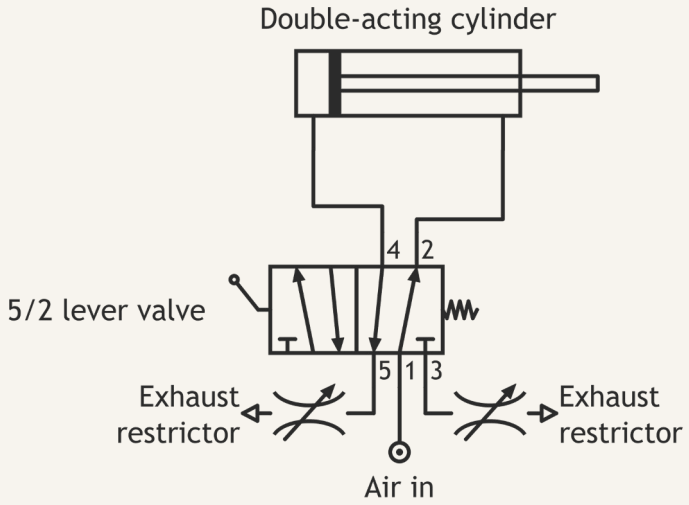
Daily Review



1. **State** the regulator setting while you build.
2. **State** the pressure we test at.
3. **State** what 3/2 means.
4. **State** what pushes a single-acting rod in.
5. **State** what pushes a double-acting rod in.

Review

Everything for the test, one more time.



S3 Engineering Science

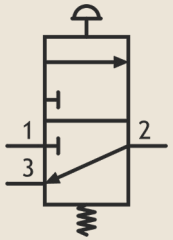
By the end of this lesson…



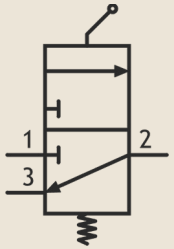
1. I can **name** every pneumatic **symbol** we have used
2. I can **use** P = F/A
3. I can **describe** what a circuit does

Name the Symbol: Round 1

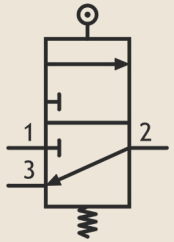
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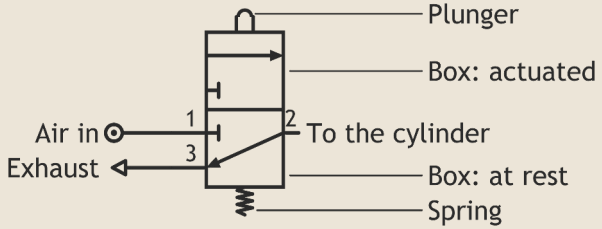
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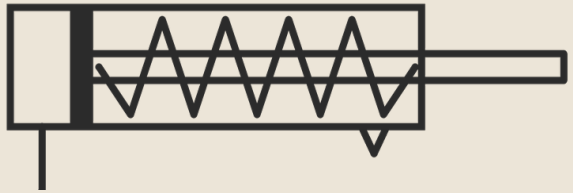
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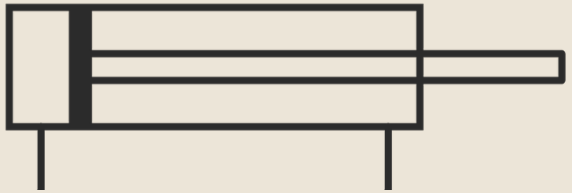
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5

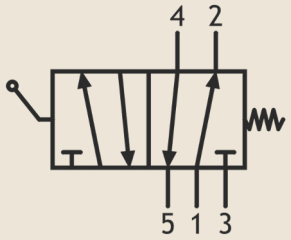


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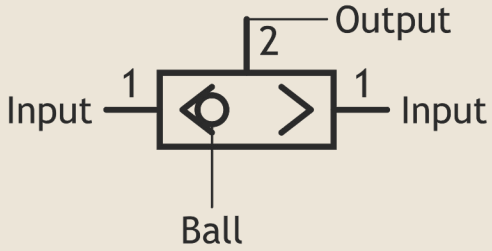


Name the Symbol: Round 2

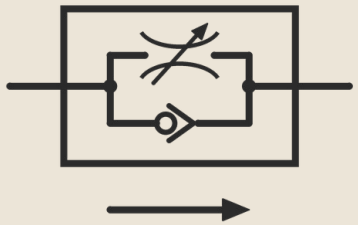
1



2



3



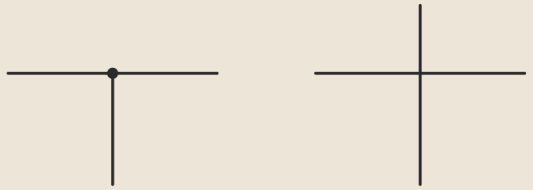
4



5



6



Dot: joined (a tee piece)

No dot: they cross

Show Me: Lessons 1 to 4

1. **State** what a flow control valve does.
2. **Name** the rod moving out.
3. **State** what moves a lever valve back.
4. **State** how many ports a double-acting cylinder has.

Second Start

1. **State** check 1 when fault-finding.
2. Tubes 4 and 2 swapped: **state** what the rod does.
3. **Name** the valve OR needs.
4. **State** which buttons work AND.
5. **State** the formula for pressure.

We Do: Will It Lift?

The air pressure is 0.2 N mm^{-2} and the piston area is 500 mm^2. Calculate the outstroking force.

$P = 0.2\ \text{N mm}^{-2}$

$A = 500\ \text{mm}^2$

$F = ?$

$P = F/A$

$0.2 = F/500$

$F = 0.2 \times 500$

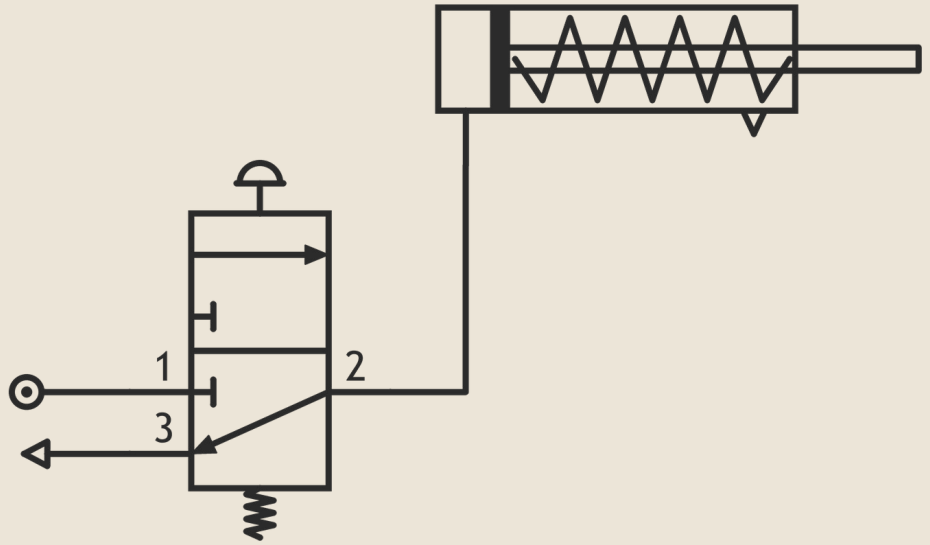
$F = 100\ \text{N}$

Show Me: OR or AND?

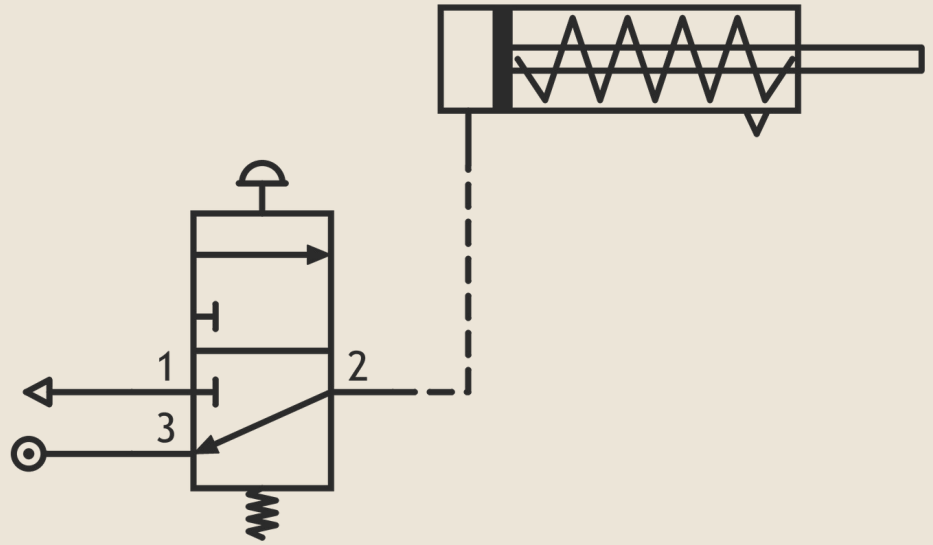


1. Two valves side by side, into a shuttle valve.
2. Out of one valve, into the next.
3. A press needs both hands on buttons.
4. A door opens from inside or outside.

Spot the Mistakes



Right



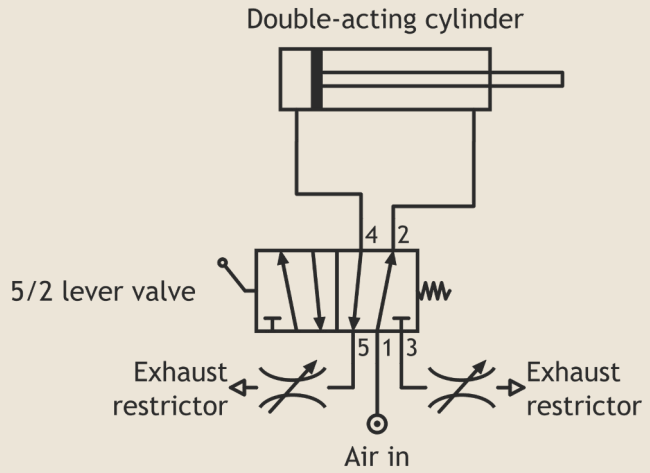
Two mistakes: what?

Review Questions

Booklet page 21

Answer Questions 1 to 5 on your own.

Finished? Try the Challenge.



Answers: Review Questions



Question	Answer
1	
2	
3	
4	
5	
Challenge	

Look back — by the end of this lesson…



1. I can **name** every pneumatic **symbol** we have used
2. I can **use** P = F/A
3. I can **describe** what a circuit does

Credits

Symbols: Sources: symbols drawn by R Stewart to BS ISO 1219, as the Matrix CP2080 kit worksheets.

R Stewart - October 2026