

MULTI POSITION CYLINDER

Normally we can get only two fixed positions [end positions] using a conventional cylinder. However It is possible to attain 3 to 4 positions using combinations of two cylinders of same or different lengths . The Cylinders are connected back to back using appropriate size of flange mountings. Piston rod of one of the cylinder is trunion mounted. This provides an economical solutions without going for elaborate electronic control

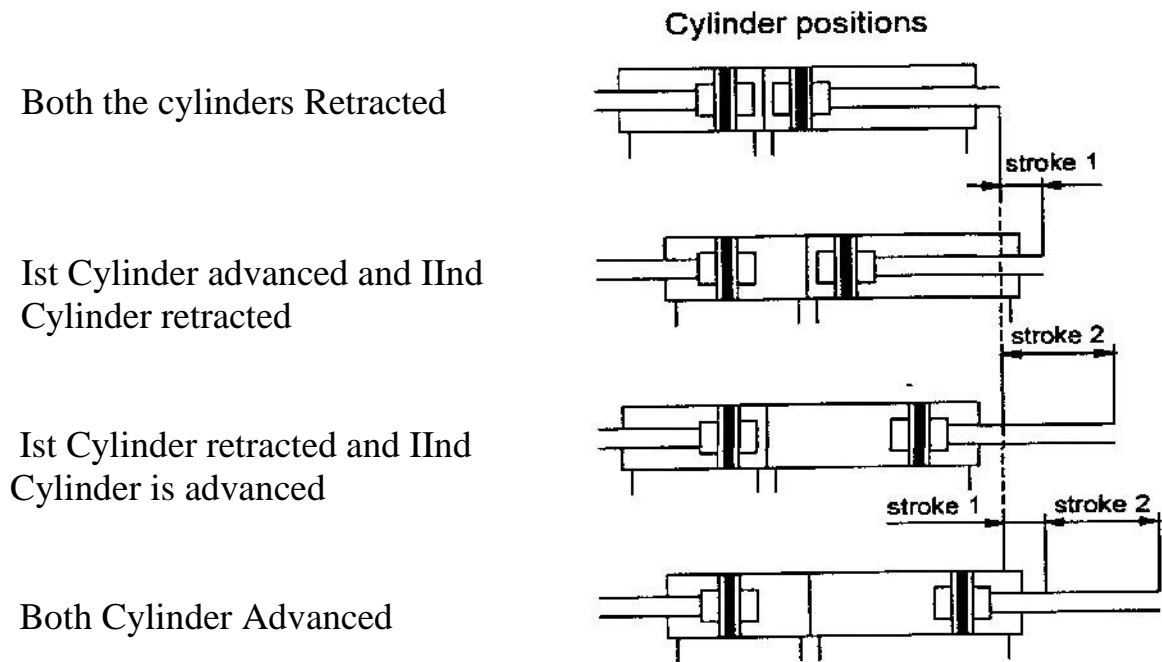


Figure 5.15 Multi position Cylinder Arrangement

Four positions can be obtained using combinations of two cylinders

<u>Position</u>	<u>Displacement</u>	<u>Cylinder status</u>
1	0	Both Cylinders retracted
2	L1 [Stroke length]	Ist Cylinder advanced & II Cylinder retracted
3	L2 [Stroke length]	I st Cylinder retracted & II Cylinder advanced
4	L1+L2	Both the Cylinders advanced

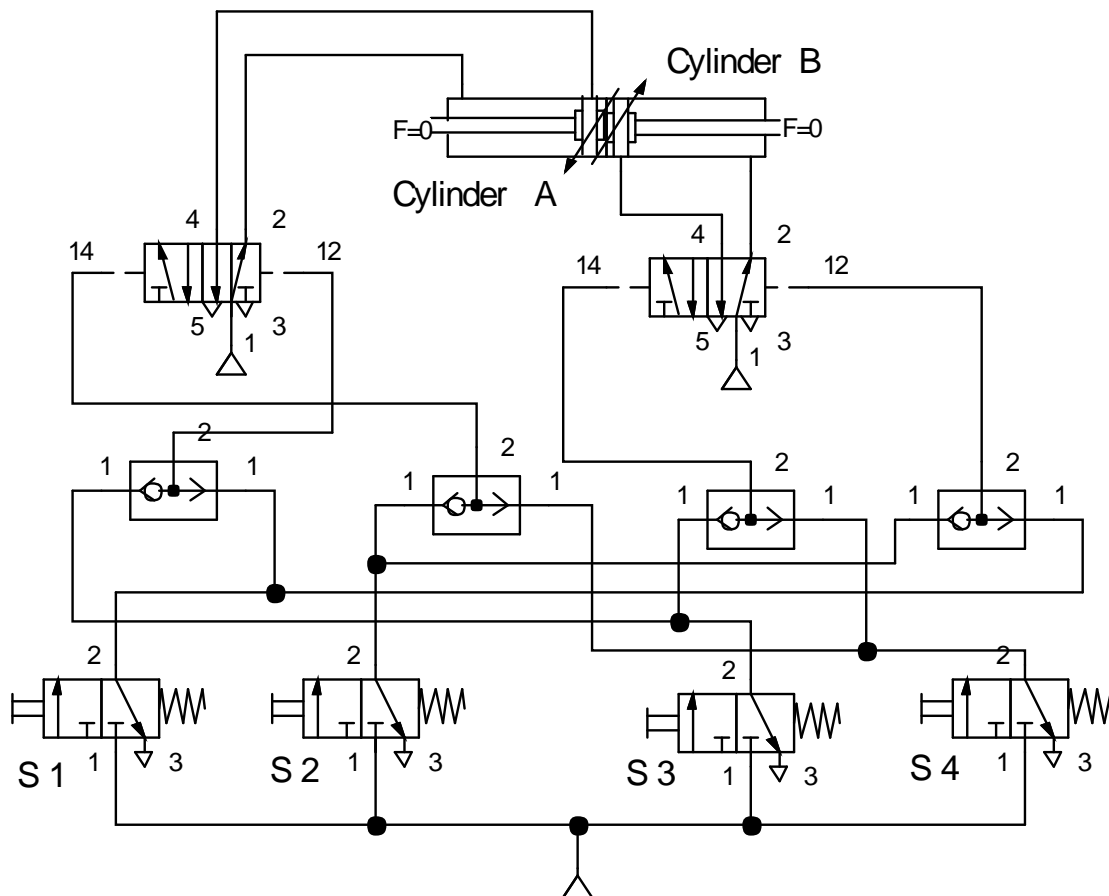


Figure 5.16 Pneumatic Control Diagram