

SMC Lock-Up Valve

Series IL200

When accident takes place on air operated process control line due to air source or air supply piping line, lock-up valve retains pressure at the tool end until restored to normal condition.



Specifications

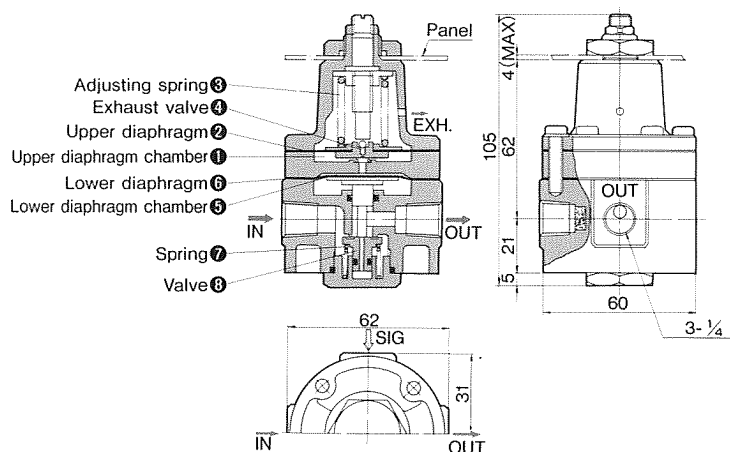
Proof pressure	Max. 9.9kgf/cm ²
Signal pressure	1.4 ~ 7kgf/cm ²
Line pressure	Max. 7kgf/cm ²
Effective orifice (Cv)	17mm ² (0.9)
Ambient and fluid temperature	-5 ~ 60°C
Connections	1/4
Hysteresis	Within 0.1 kgf/cm ²

Model

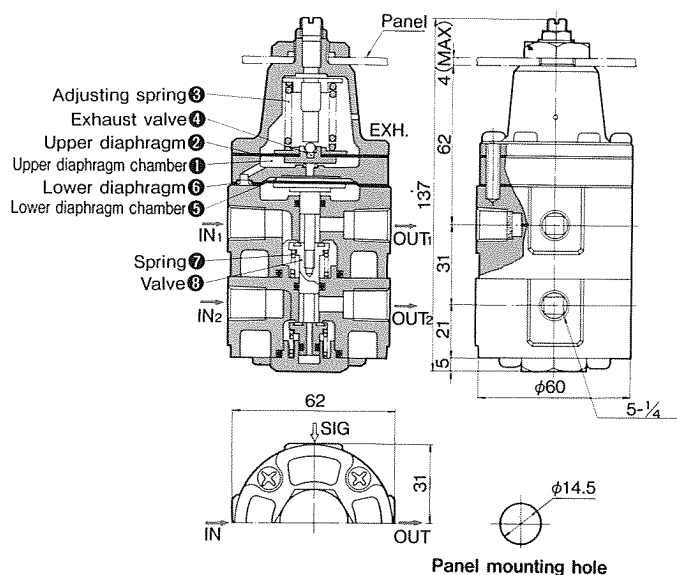
Model	Weight	Note
IL201-02	430gf	Single acting
IL211-02	640gf	Double acting

Construction/Dimensions (mm)

Single Acting/IL201



Double Acting/IL211



Operation

Safe signal pressure enters the upper diaphragm chamber ① and compresses the adjusting spring ③ and moves the upper diaphragm ② upward. It also closes the exhaust valve ④. Signal pressure also enters the lower diaphragm chamber ⑤ and exerts a downward force on the valve ⑧. This opens the flow path from 'IN' and 'OUT' ports for flow in either direction.

When malfunction in the control signal circuit occurs pressure holding the lower diaphragm downwards is lost through the exhaust valve ④. Valve ⑧ closes with spring return and the circuit is sealed. For double acting lock-up valve above operation is extended by an extra valve movement allow two separate circuits to be protected.

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Precautions

- Blow out air lines and fittings before installation.
- Use dry and oil-free air. Recommend use of SMC AM Mist Separator.