

Push-pull valve(5/2way)

4L Series



Ordering code

4L 2 10 08 T



| ① Model | ② Code | ③ Valve type | ④ Port size | ⑤ Thread type |
|---------------------------------------|---------------|----------------|----------------------|---------------|
| 4L: 5 port 2 position push-pull valve | 1: 100 Series | 10: 2 position | 06: 1/8" | T: NPT |
| | 2: 200 Series | | 06: 1/8" 08: 1/4" | |
| | 3: 300 Series | | 08: 1/4" 10: 3/8" | |

Specification

| Model | 4L110-06 | 4L210-06 | 4L210-08 | 4L310-08 | 4L310-10 |
|----------------------|--|--|----------|---|----------|
| Fluid | Air (to be filtered by 40 μm filter element) | | | | |
| Operating | Manual control direct acting type | | | | |
| Port size[Note1] | 1/8" | | 1/4" | | 3/8" |
| Orifice size [Note3] | 10.2mm ² (Cv=0.6) | 4L210-08:17.0mm ² (Cv=1.0) | | 4L310-10:28.0mm ² (Cv=1.65) | |
| Valve type | 5/2 Way | | | | |
| Lubrication [Note2] | Not required | | | | |
| Pressure range | 0~145psi(0~1.0MPa) | | | | |
| Proof pressure | 215psi(1.5MPa) | | | | |
| Temperature | -20~70°C | | | | |
| Material body | Aluminum alloy | | | | |

[Note1] NPT thread is available.

[Note2] Once lubricated air is used, continue with same medium to optimise valve life span.

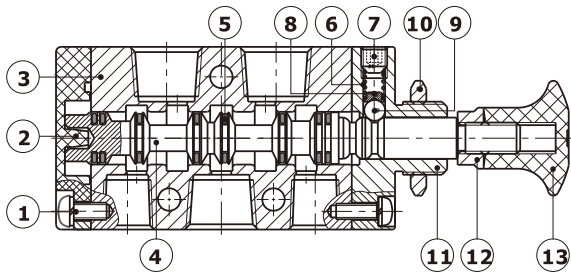
It is suggested to use ISO VG32 lubricant or the oil with the same grade.

[Note3] Equivalent orifice S and Cv are all calculated from the flow rate data.

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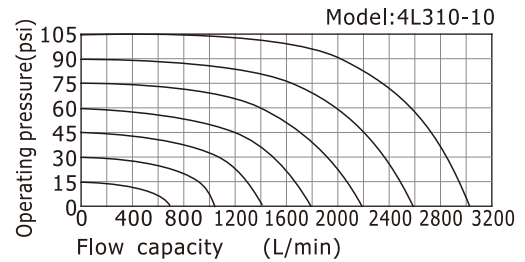
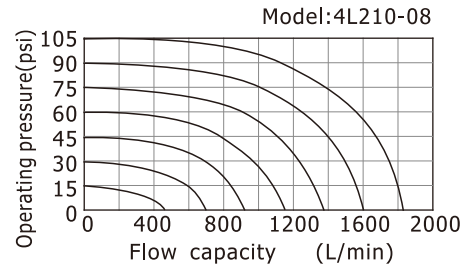
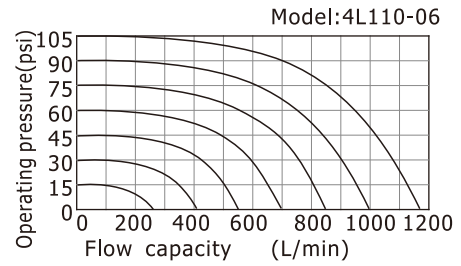
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Inner structure



| No. | Item | No. | Item | No. | Item |
|-----|------------------|-----|-------------|-----|------------|
| 1 | Round head screw | 6 | Spring | 11 | Top cover |
| 2 | Bottom cover | 7 | Stop screw | 12 | Safety nut |
| 3 | Body | 8 | Spring base | 13 | Hand grip |
| 4 | Spool | 9 | Steel ball | | |
| 5 | O-ring | 10 | Hexagon nut | | |

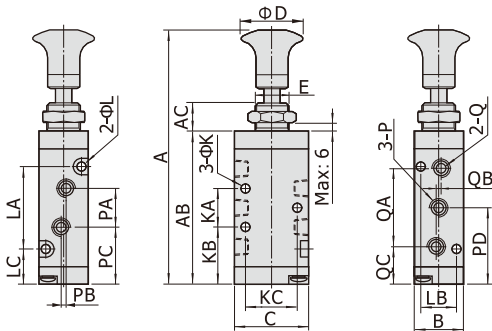
Flow chart



The data in flow rate chart are obtained from AirTAC lab.

Dimensions

[Unit: mm]



| Item\Model | 4L11006 | 4L21006 | 4L21008 | 4L31008 | 4L31010 |
|------------|----------|---------|---------|---------|---------|
| A | 98 | 106 | 106 | 121.5 | 121.5 |
| AB | 58.8 | 65.8 | 65.8 | 81 | 81 |
| AC | 10 | 10 | 10 | 10 | 10 |
| B | 18 | 22 | 22 | 27 | 27 |
| C | 27 | 35 | 35 | 40 | 40 |
| D | 25 | 25 | 25 | 25 | 25 |
| E | M12×0.75 | M14×1.0 | M14×1.0 | M16×1.0 | M16×1.0 |
| K | 3.3 | 4.3 | 4.3 | 4.3 | 4.3 |
| KA | 14 | 20 | 20 | 24 | 24 |
| KB | 22 | 22.5 | 22.5 | 28.5 | 28.5 |
| KC | 19 | 23.5 | 23.5 | 27.5 | 27.5 |
| L | 3.3 | 3.3 | 3.3 | 4.3 | 4.3 |
| LA | 30 | 38 | 38 | 50 | 50 |
| LB | 13 | 17 | 17 | 20 | 20 |
| LC | 14 | 13.5 | 13.5 | 15.5 | 15.5 |
| P | 1/8" | 1/8" | 1/4" | 1/4" | 1/4" |
| PA | 16 | 18 | 21 | 22 | 24 |
| PB | 3 | 0 | 3 | 0 | 4 |
| PC | 21 | 23.5 | 22 | 29.5 | 28.5 |
| PD | 29 | 32.5 | 32.5 | 40.5 | 40.5 |
| Q | 1/8" | 1/8" | 1/8" | 1/4" | 3/8" |
| QA | 28 | 36 | 36 | 45 | 45 |
| QB | 2 | 0 | 0 | 0 | 0 |
| QC | 15 | 14.5 | 14.5 | 18 | 18 |