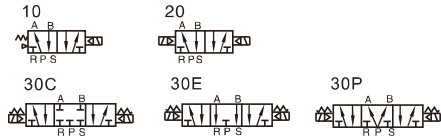


Solenoid valve(5/2 way, 5/3 way)

4V200 Series



Symbol



Product feature

1. Pilot-oriented mode: Internal pilot or external pilot.
2. Structure in sliding column mode: good tightness and sensitive reaction.
3. Three position solenoid valves have three kinds of central function for your choice.
4. Double control solenoid valves have memory function.
5. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
6. No need to add oil for lubrication.
7. It is available to form integrated valve group with the base to save installation space.
8. Affiliated manual devices are equipped to facilitate installation and debugging.
9. Several standard voltage grades are optional.

specification

| Model | 4V210-06 4V220-06 | 4V230C-06 4V230E-06 4V230P-06 | 4V210-08 4V220-08 | 4V230C-08 4V230E-08 4V230P-08 |
|------------------------|---|-------------------------------------|----------------------------------|-------------------------------------|
| Fluid | Air(to be filtered by 40 μm filter element) | | | |
| Acting | Internal pilot or external pilot | | | |
| Port size [Note1] | In=Out=Exhaust=1/8" | | In=Out=1/4" Exhaust=1/8" | |
| Orifice size | 14.0mm ² (Cv=0.78) | 12.0mm ² (Cv=0.67) | 16.0mm ² (Cv=0.89) | 12.0mm ² (Cv=0.67) |
| Valve type | 5 port 2 position | 5 port 3 position | 5 port 2 position | 5 port 3 position |
| Operating pressure | 0.15~0.8MPa(21~114psi) | | | |
| Operating pressure | 1.2MPa(175psi) | | | |
| Temperature | -20~70°C | | | |
| Material of body | Aluminum alloy | | | |
| Lubrication [Note2] | Not required | | | |
| Max. frequency [Note3] | 5 cycle/sec | 3 cycle/sec | 5 cycle/sec | 3 cycle/sec |
| Weight (g) | 4V210-06:220 4V220-06:320 | 360 | 4V210-08:220 4V220-08:320 | 360 |

[Note1] PT thread, G thread and NPT thread are available.

[Note2] Once lubricated air is used, continue with same medium to optimise valve life span. Lubricants like ISO VG32 or equivalent are recommended.

[Note3] The maximum actuation frequency is in the no-load state.

Coil specification

| Item | specification | | | | |
|----------------------------|---------------------|--------|-------|-------|-------|
| Standard voltage | AC220V | AC110V | AC24V | DC24V | DC12V |
| Scope of voltage | AC: ± 15% DC: ± 10% | | | | |
| Power consumption | 4.5VA | 4.5VA | 5.0VA | 3.0W | 3.0W |
| Protection | IP65(DIN40050) | | | | |
| Temperature classification | B Class | | | | |
| Electrical entry | Terminal, Grommet | | | | |
| Activating time | 0.05 sec and below | | | | |

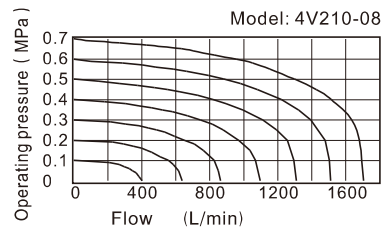
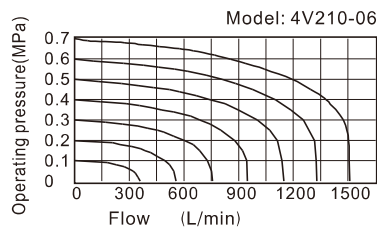
Ordering code

4V 2 10 08 A □ □
① ② ③ ④ ⑤ ⑥ ⑦

| ① Model | ② Code | ③ Valve type | ④ Port size | ⑤ Voltage | ⑥ Electrical entry | ⑦ Thread type |
|-----------------------------------|---------------|---|----------------------|--|-------------------------------|-----------------------------|
| 4V: Solenoid valve (5/2, 5/3 way) | 2: 200 Series | 10: Single solenoid 5/2 way 20: Double solenoid 5/2 way 30C: Double solenoid 5/3 way closed center 30E: Double solenoid 5/3 way exhaust center 30P: Double solenoid 5/3 way pressure center | 06: 1/8" 08: 1/4" | A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V | Blank: Terminal I: Grommet | Blank: PT G: G T: NPT |

Please refer to 76 for manifold specification and the order way.

Flow chart



Solenoid valve(5/2 way, 5/3 way)

4V200 Series

Inner structure

4V210

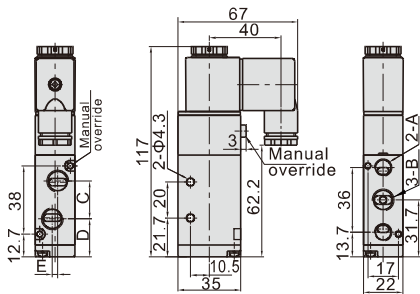
4V220

4V230C

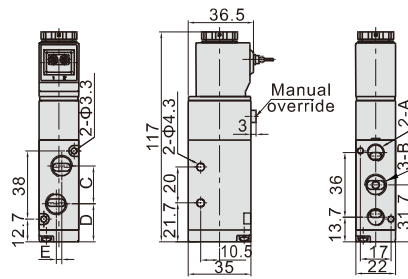
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|-----|-----------|-----|----------|-----|-------------|-----|-----------|-----|--------------|-----|--------------|-----|---------------------|-----|---------------|-----|-----------------|-----|---------------|----|---------------|
| 1 | Connector | 3 | Coil | 5 | Fixed plate | 7 | Pilot kit | 9 | Wear ring | 11 | Fixed screw | 13 | Bottom cover gasket | 15 | Spool | 17 | Override spring | 19 | Spring holder | 21 | Side cover |
| 2 | Coil net | 4 | Armature | 6 | Piston | 8 | Body | 10 | Bottom cover | 12 | Spool spring | 14 | Spool O-ring | 16 | Piston O-ring | 18 | Manual override | 20 | Return spring | 22 | Spring holder |

Dimensions

4V210(Terminal)

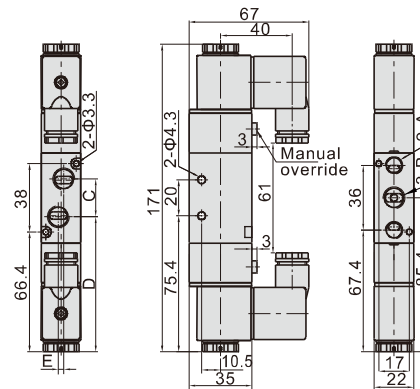


4V210(Grommet)

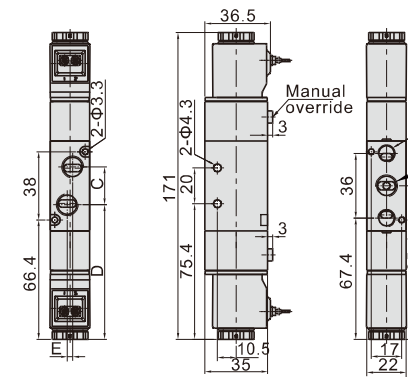


| Model\Item | A | B | C | D | E |
|------------|------|------|----|------|---|
| 4V210-06 | 1/8" | 1/8" | 18 | 22.7 | 0 |
| 4V210-08 | 1/8" | 1/4" | 21 | 21.2 | 3 |

4V220(Terminal)

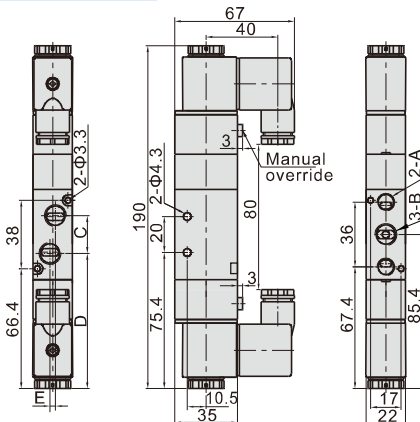


4V220(Grommet)

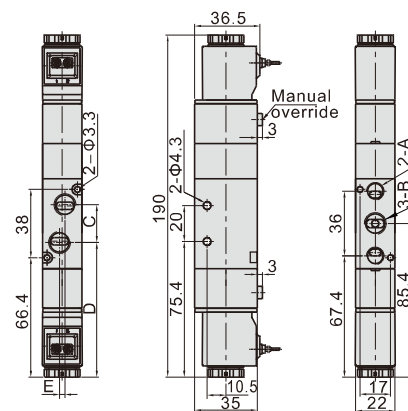


| Model\Item | A | B | C | D | E |
|------------|------|------|----|------|---|
| 4V220-06 | 1/8" | 1/8" | 18 | 76.4 | 0 |
| 4V220-08 | 1/8" | 1/4" | 21 | 74.9 | 3 |

4V230(Terminal)



4V230(Grommet)



| Model\Item | A | B | C | D | E |
|------------|------|------|----|------|---|
| 4V230-06 | 1/8" | 1/8" | 18 | 76.4 | 0 |
| 4V230-08 | 1/8" | 1/4" | 21 | 74.9 | 3 |