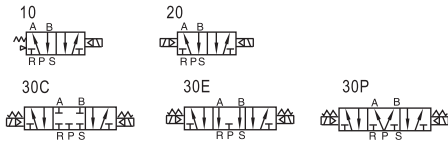


Solenoid valve(5/2 way,5/3 way)

4V100 Series



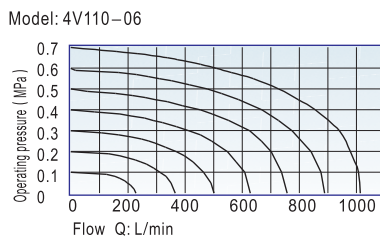
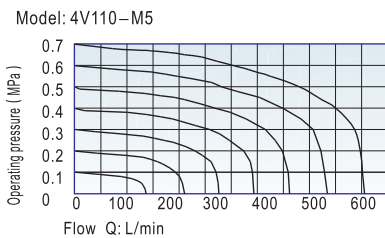
Symbol



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.

Flow chart



Specification

| Model | 4V110-M5 4V120-M5 | 4V130C-M5 4V130E-M5 4V130P-M5 | 4V110-06 4V120-06 | 4V130C-06 4V130E-06 4V130P-06 |
|--------------------|---|-------------------------------------|----------------------------------|-------------------------------------|
| Fluid | Air(to be filtered by 40 μm filter element) | | | |
| Acting | Internal pilot or external pilot | | | |
| Port size ① | In=Out=M5 | | In=Out=1/8" | |
| Orifice size | 5.5mm ² (Cv=0.31) | 5.0mm ² (Cv=0.28) | 12.0mm ² (Cv=0.67) | 9.0mm ² (Cv=0.50) |
| 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) | | | |
| Proof pressure | 1.5MPa(215psi) | | | |
| Temperature °C | -20~70 | | | |
| Material of body | Aluminum alloy | | | |
| Lubrication ② | Not required | | | |
| Max. frequency ③ | 5 cycle/sec | 3 cycle/sec | 5 cycle/sec | 3 cycle/sec |
| Weight | 4V110-M5:120g 4V120-M5:175g | 200g | 4V110-06:120g 4V120-06:175g | 200g |

① PT thread, NPT thread and G thread are available.

② Once lubricated air is used, continue with same medium to optimise valve life span. Lubricants like ISO VG32 or equivalent are recommended.

③ 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 | AC:2.5VA DC:2.5W |
| Protection | IP65(DIN40050) |
| Temperature classification | B Class |
| Electrical entry | Terminal, Grommet |
| Activating time | 0.05 sec and below |

Ordering code

4V 1 10 06 A □ □ -W

- Model**: 4V: Solenoid valve(5/2, 5/3 way)
- Code**: 1: 100 Series
- Valve type**:
 - 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
- Port size**:
 - M5: M5
 - 06: 1/8"
- Voltage**:
 - A: AC220V
 - B: DC24V
 - C: AC110V
 - E: AC24V
 - F: DC12V
- Pilot type**:
 - Blank: Internal pilot
 - Without M5 thread hole
 - W: External pilot
 - With M5 thread hole
- Thread type**:

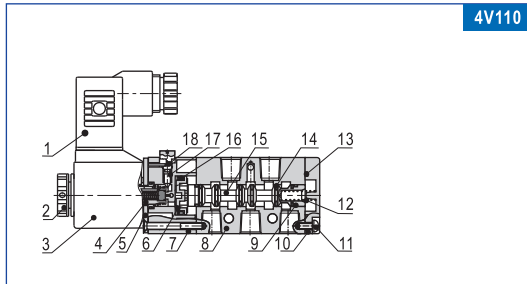
| Port size | Thread type |
|-----------|---------------|
| 1/8" | Blank: PT |
| | T: NPT |
| | G: G |
| M5 | Not this code |
- Electrical entry**:
 - Blank: Terminal
 - I: Grommet

Please refer to 37 for manifold specification and the order way.

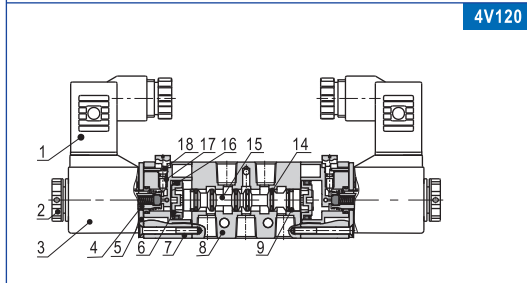
Solenoid valve(5/2 way,5/3 way)

4V100 Series

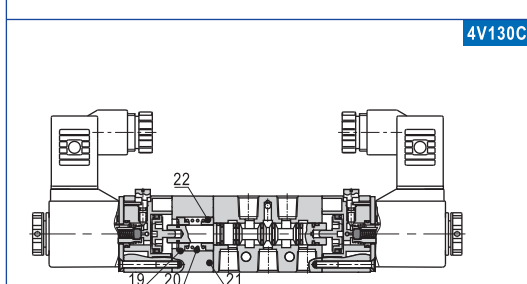
Inner structure



4V110



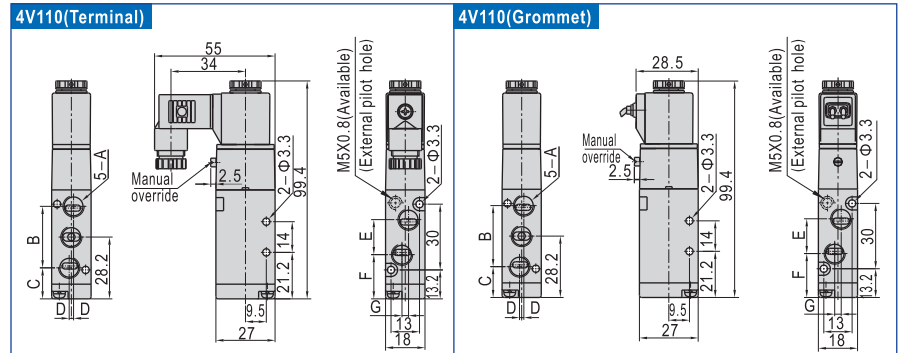
4V120



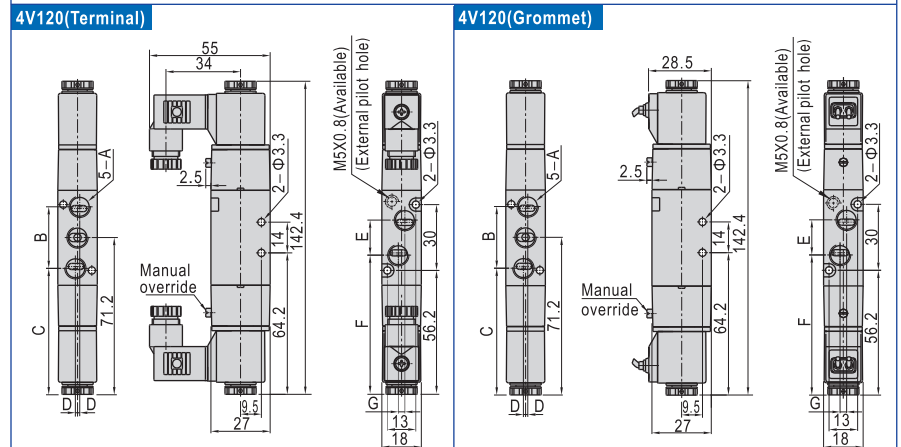
4V130C

| No. | Item | No. | Item | No. | Item |
|-----|-------------|-----|---------------------|-----|-----------------|
| 1 | Connector | 9 | Wear ring | 17 | Override spring |
| 2 | Coil net | 10 | Bottom cover | 18 | Manual override |
| 3 | Coil | 11 | Fixed screw | 19 | Spring holder |
| 4 | Armature | 12 | Spool spring | 20 | Return spring |
| 5 | Fixed plate | 13 | Bottom cover gasket | 21 | Side cover |
| 6 | Piston | 14 | Spool O-ring | 22 | Spring holder |
| 7 | Pilot kit | 15 | Spool | | |
| 8 | Body | 16 | Piston O-ring | | |

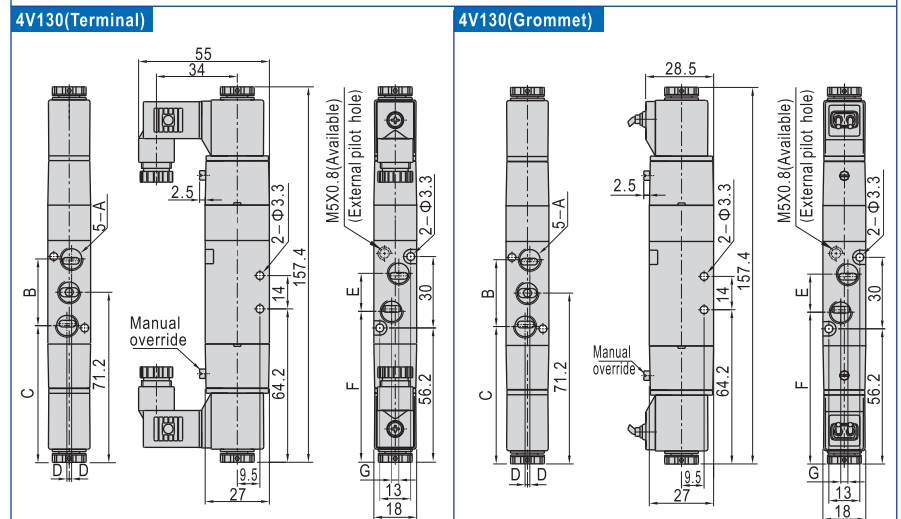
Dimensions



| Model\Item | A | B | C | D | E | F | G |
|------------|--------|----|------|---|----|------|---|
| 4V110-M5 | M5x0.8 | 27 | 14.7 | 0 | 14 | 21.2 | 0 |
| 4V110-06 | 1/8" | 28 | 14.2 | 1 | 16 | 20.2 | 3 |



| Model\Item | A | B | C | D | E | F | G |
|------------|--------|----|------|---|----|------|---|
| 4V120-M5 | M5x0.8 | 27 | 57.7 | 0 | 14 | 64.3 | 0 |
| 4V120-06 | 1/8" | 28 | 57.2 | 1 | 16 | 63.2 | 3 |



| Model\Item | A | B | C | D | E | F | G |
|------------|--------|----|------|---|----|------|---|
| 4V130-M5 | M5x0.8 | 27 | 57.7 | 0 | 14 | 64.3 | 0 |
| 4V130-06 | 1/8" | 28 | 57.2 | 1 | 16 | 63.2 | 3 |



4V100

