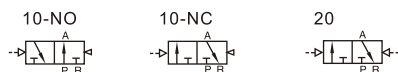


# Air valve( 3/2 way)

## 6TA Series



### Symbol



### Product feature

1. The body is extruded by aluminum alloy, and the inner hole is specially processed to increase the flow rate.
2. Can integrate manifold to form valve group to save space.

### Specification

| Model                 | 6TA0510                                                          | 6TA0520 | 6TA110                                                          | 6TA120 |
|-----------------------|------------------------------------------------------------------|---------|-----------------------------------------------------------------|--------|
| Port size [Note1]     | In=Out=Exh=M5                                                    |         | In=Out=Exh=M5(or=1/8")                                          |        |
| Orifice size(Cv)      | 5.0mm <sup>2</sup> (0.28)                                        |         | M5: 5.0mm <sup>2</sup> (0.28)<br>06: 10.0mm <sup>2</sup> (0.58) |        |
| Weight (g)            | 18.5                                                             | 28.5    | 46.5                                                            | 56.5   |
| Model                 | 6TA210                                                           | 6TA220  | 6TA310                                                          | 6TA320 |
| Port size [Note1]     | 06: In=Out=Exh=1/8"<br>08: In=Out=1/4" Exh=1/8"                  |         | In=Out=3/8" Exh=1/4"                                            |        |
| Orifice size(Cv)      | 06: 10.0mm <sup>2</sup> (0.58)<br>08: 18.0mm <sup>2</sup> (1.06) |         | 36.0mm <sup>2</sup> (2.00)                                      |        |
| Weight (g)            | 96                                                               | 121     | 200                                                             | 240    |
| Fluid                 | Air(to be filtered by 40 μm filter element)                      |         |                                                                 |        |
| Acting                | External air control                                             |         |                                                                 |        |
| Operating pressure    | 0.15~0.8MPa(21~114psi)                                           |         |                                                                 |        |
| Proof pressure        | 1.2MPa(175psi)                                                   |         |                                                                 |        |
| Temperature           | -20~70℃                                                          |         |                                                                 |        |
| Material of body      | Aluminum alloy                                                   |         |                                                                 |        |
| Lubrication [Note2]   | Not required                                                     |         |                                                                 |        |
| Max.frequency [Note3] | 5 cycle/sec                                                      |         |                                                                 |        |

[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.

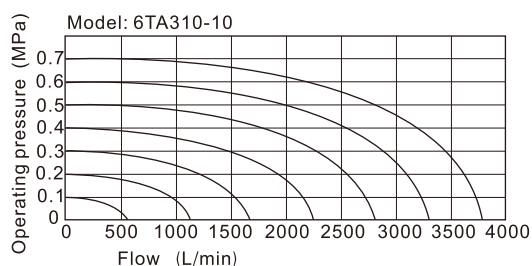
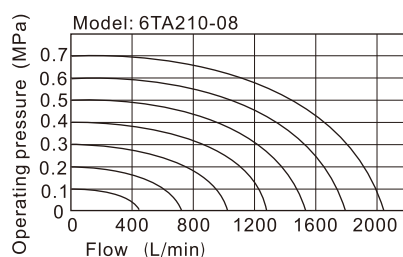
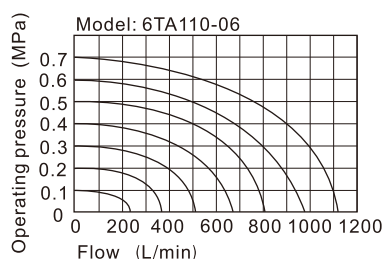
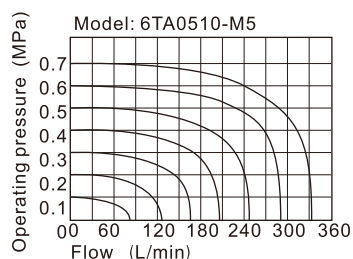
### Ordering code

6TA 2 10 08 NC □

① ② ③ ④ ⑤ ⑥

|               |                          |               |                                               |                        |                                         |          |               |
|---------------|--------------------------|---------------|-----------------------------------------------|------------------------|-----------------------------------------|----------|---------------|
| ① Model       | 6TV: Air valve (3/2 way) |               |                                               |                        |                                         |          |               |
| ② Code        | 05: 0500 Series          | 1: 100 Series |                                               |                        | 2: 200 Series                           |          | 3: 300 Series |
| ③ Valve type  | 10: Single air control   |               |                                               | 20: Double air control |                                         |          |               |
| ④ Port size   | M5: M5                   | M5: M5        | 06: 1/8"                                      | 06: 1/8"               | 08: 1/4"                                | 10: 3/8" |               |
| ⑤ Acting type | NC: Normally closed      |               | NO: Normally opened                           |                        | [Note: Double air control no this code] |          |               |
| ⑥ Thread type | -                        |               | Blank: PT Thread/ G: G Thread / T: NPT Thread |                        |                                         |          |               |

### Flow chart

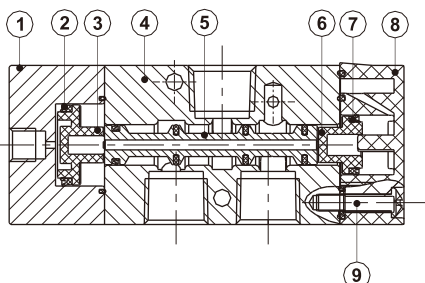


# Air valve( 3/2 way)

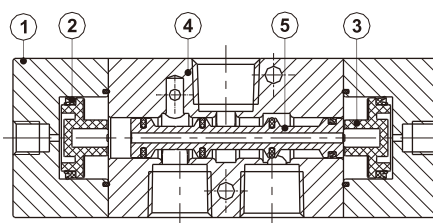
## 6TA Series

### Inner structure

6TA110



6TA120NC



| No. | Item         |
|-----|--------------|
| 1   | Pilot valve  |
| 2   | Gasket       |
| 3   | Big piston   |
| 4   | Body         |
| 5   | Spool        |
| 6   | Small piston |
| 7   | Gasket       |
| 8   | Bottom cover |
| 9   | Bolt         |

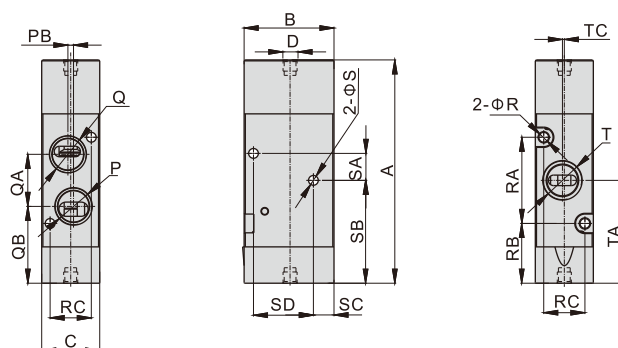
### Dimensions

6TA0510

6TA110

6TA210

6TA310



| Model\Item | A    | B    | C    | D      | P      | PB  | Q      | QA  | QB   | R   | RA | RB   | RC   | S    | SA  | SB   | SC | SD   | T      | TA   | TC  |
|------------|------|------|------|--------|--------|-----|--------|-----|------|-----|----|------|------|------|-----|------|----|------|--------|------|-----|
| 6TA0510M5  | 41.5 | 21   | 10.6 | M5X0.8 | M5X0.8 | 1   | M5X0.8 | 9.5 | 13.5 | 2.1 | 14 | 11.3 | 7.5  | -    | -   | -    | -  | -    | M5X0.8 | 18.3 | 0.5 |
| 6TA110M5   | 59.5 | 24   | 15.5 | M5X0.8 | M5X0.8 | -   | M5X0.8 | 14  | 20.5 | 2.6 | 23 | 16   | 11   | Φ2.6 | 7.2 | 34.5 | 4  | 17.5 | M5X0.8 | 27.5 | -   |
| 6TA11006   | 59.5 | 24   | 15.5 | M5X0.8 | 1/8"   | 1.5 | 1/8"   | 14  | 20.5 | 2.6 | 23 | 16   | 11   | Φ2.6 | 7.2 | 34.5 | 4  | 17.5 | 1/8"   | 27.5 | 0.5 |
| 6TA21006   | 77.5 | 32.5 | 18.5 | 1/8"   | 1/8"   | -   | 1/8"   | 18  | 25.5 | 3.2 | 33 | 18   | 13.5 | Φ3.2 | 12  | 46.5 | 7  | 21   | 1/8"   | 34.5 | -   |
| 6TA21008   | 77.5 | 32.5 | 18.5 | 1/8"   | 1/4"   | -   | 1/8"   | 18  | 25.5 | 3.2 | 33 | 18   | 13.5 | Φ3.2 | 12  | 46.5 | 7  | 21   | 1/4"   | 34.5 | 1   |
| 6TA31010   | 95   | 46   | 23.5 | 1/8"   | 3/8"   | -   | 1/4"   | 28  | 29.5 | 3.2 | 43 | 22   | 18.4 | Φ4.3 | 15  | 58.5 | 8  | 31   | 3/8"   | 43.5 | -   |

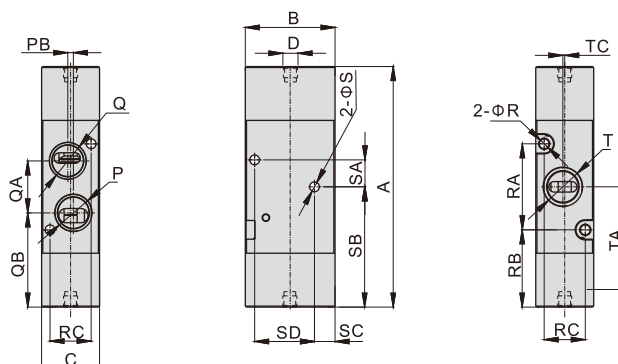
[Note]: 6TA0510 type no through hole "S" on the side.

6TA0520

6TA120

6TA220

6TA320



| Model\Item | A    | B    | C    | D      | P      | PB  | Q      | QA  | QB   | R   | RA | RB   | RC   | S    | SA  | SB   | SC | SD   | T      | TA   | TC  |
|------------|------|------|------|--------|--------|-----|--------|-----|------|-----|----|------|------|------|-----|------|----|------|--------|------|-----|
| 6TA0520M5  | 47   | 21   | 10.6 | M5X0.8 | M5X0.8 | 1   | M5X0.8 | 9.5 | 18.7 | 2.1 | 14 | 16.5 | 7.5  | -    | -   | -    | -  | -    | M5X0.8 | 23.5 | 0.5 |
| 6TA120M5   | 64.5 | 24   | 15.5 | M5X0.8 | M5X0.8 | -   | M5X0.8 | 14  | 25.2 | 2.6 | 23 | 20.7 | 11   | Φ2.6 | 7.2 | 39.5 | 4  | 17.5 | M5X0.8 | 32.2 | -   |
| 6TA12006   | 64.5 | 24   | 15.5 | M5X0.8 | 1/8"   | 1.5 | 1/8"   | 14  | 25.2 | 2.6 | 23 | 20.7 | 11   | Φ2.6 | 7.2 | 39.5 | 4  | 17.5 | 1/8"   | 32.2 | 0.5 |
| 6TA22006   | 85.5 | 32.5 | 18.5 | 1/8"   | 1/8"   | -   | 1/8"   | 18  | 33.9 | 3.2 | 33 | 26.3 | 13.5 | Φ3.2 | 12  | 54.8 | 7  | 21   | 1/8"   | 42.8 | -   |
| 6TA22008   | 85.5 | 32.5 | 18.5 | 1/8"   | 1/4"   | -   | 1/8"   | 18  | 33.9 | 3.2 | 33 | 26.3 | 13.5 | Φ3.2 | 12  | 54.8 | 7  | 21   | 1/4"   | 42.8 | 1   |
| 6TA32010   | 103  | 46   | 23.5 | 1/8"   | 3/8"   | -   | 1/4"   | 28  | 37.5 | 3.2 | 43 | 30   | 18.4 | Φ4.3 | 15  | 66.5 | 8  | 31   | 3/8"   | 51.5 | -   |

[Note]: 6TA0520 type no through hole "S" on the side.