

Pilot no-return valve



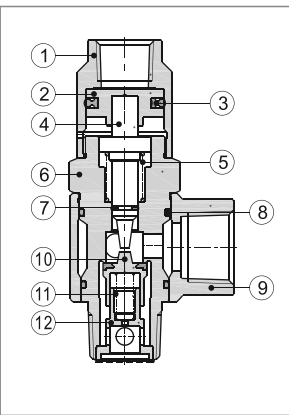
PCV series



Symbol



Inner structure



| No. | Item | Material |
|-----|--------------------|-------------------------|
| 1 | Pilot body | Aluminum alloy or Brass |
| 2 | Piston | Brass |
| 3 | Gasket | NBR |
| 4 | Spool | Brass |
| 5 | Spring | SUS304 |
| 6 | Body | Brass |
| 7 | Spool O-ring | NBR |
| 8 | O-ring | NBR |
| 9 | Conversion fitting | Aluminum alloy or Brass |
| 10 | Pluger | Brass+NBR |
| 11 | Spring | SUS304 |
| 12 | Pedestal | Brass |

Specification

| Model | PCV06 | PCV08 | PCV10 | PCV15 | PCV06F | PCV08F | PCV10F | PCV15F | |
|--------------------------|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------|
| Fluid | Air (to be filtered by 40 μm filter element) | | | | | | | | |
| Operating pressure range | 0.15~1.0MPa | | | | | | | | |
| Proof pressure | 1.5MPa | | | | | | | | |
| Temperature | -20~70(°C) | | | | | | | | |
| Operating frequency | 6(Cycle/minute) | 40(Cycle/minute) | 60(Cycle/minute) | 40(Cycle/minute) | 60(Cycle/minute) | 40(Cycle/minute) | 60(Cycle/minute) | 40(Cycle/minute) | |
| Port size [Note1] | 1/8" | 1/4" | 3/8" | 1/2" | 1/8" | 1/4" | 3/8" | 1/2" | |
| Pilot port size | M5X0.8 | 1/8" | 1/4" | 1/4" | Φ6 | Φ6 | Φ8 | Φ8 | |
| Weight (g) | PT thread | 53.2 | 94.8 | 142.8 | 189.6 | 53 | 90 | 142.2 | 188.1 |
| | G thread | 54.6 | 94.8 | 145 | 189 | 54.2 | 90.6 | 143.4 | 187.6 |

[Note1] PT thread, G thread are available.

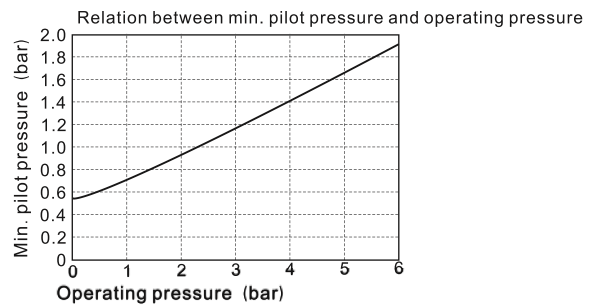
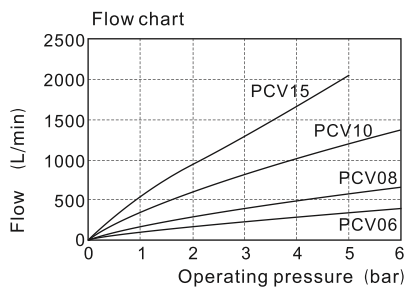
Product feature

1. Can be used for safety loop of pressure holding.
2. Can make cylinder momentary stop, accurate orientation.
3. Can be used special loop.
4. Fitting joint type is used for pilot port, which saved space and improve efficiency of installation.

Ordering code

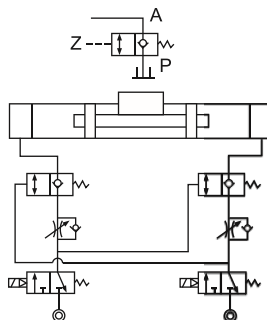
| PCV 06 | | | | |
|----------------------------|--|----------------------|-----------------|------------|
| ① Model | ② Port size | ③ Pilot port type | ④ Thread type | |
| PCV: Pilot no-return valve | 06: 1/8" 08: 1/4" 10: 3/8" 15: 1/2" | Pilot port type | Pilot port size | |
| | | Blank: Female thread | M5X0.8 | 1/8" |
| | | | 1/8" | 1/4" |
| | | | 1/4" | 3/8", 1/2" |
| | | F: Fitting | Φ6 | 1/8", 1/4" |
| | | | Φ8 | 3/8", 1/2" |
| | | Blank: PT | G: G | |

Flow chart, Relation between min. pilot pressure and operating pressure



Typical application

Accurate orientation



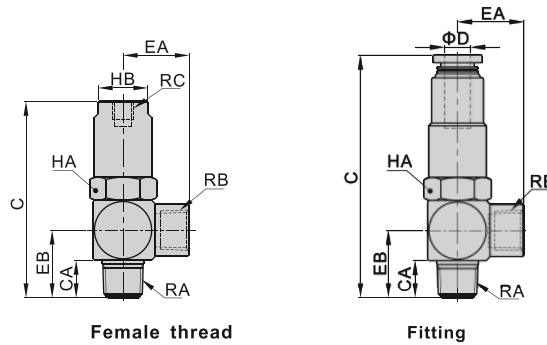
Pilot no-return valve



PCV series

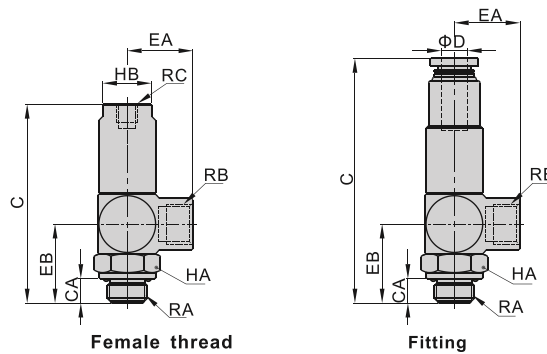
Dimensions

PT Thread



| Model\Item | C | CA | D | EA | EB | HA | HB | RA | RB | RC |
|------------|------|-----|---|------|------|----|----|------|------|--------|
| PCV06 | 48.5 | 7.5 | - | 16 | 16.5 | 14 | 12 | 1/8" | 1/8" | M5X0.8 |
| PCV08 | 59 | 10 | - | 20.3 | 21 | 17 | 14 | 1/4" | 1/4" | 1/8" |
| PCV10 | 74.5 | 11 | - | 25 | 26 | 22 | 17 | 3/8" | 3/8" | 1/4" |
| PCV15 | 79.5 | 14 | - | 28 | 29.5 | 24 | 19 | 1/2" | 1/2" | 1/4" |
| PCV06F | 58.5 | 7.5 | 6 | 16 | 16.5 | 14 | - | 1/8" | 1/8" | - |
| PCV08F | 67 | 10 | 6 | 20.3 | 21 | 17 | - | 1/4" | 1/4" | - |
| PCV10F | 82 | 11 | 8 | 25 | 26 | 22 | - | 3/8" | 3/8" | - |
| PCV15F | 87 | 14 | 8 | 28 | 29.5 | 24 | - | 1/2" | 1/2" | - |

G Thread



| Model\Item | C | CA | D | EA | EB | HA | HB | RA | RB | RC |
|------------|------|-----|---|------|------|----|----|------|------|--------|
| PCV06G | 48.5 | 5.5 | - | 16 | 19 | 14 | 12 | G1/8 | G1/8 | M5X0.8 |
| PCV08G | 59 | 6.5 | - | 20.3 | 24 | 17 | 14 | G1/4 | G1/4 | G1/8 |
| PCV10G | 74.5 | 7.5 | - | 25 | 30.5 | 22 | 17 | G3/8 | G3/8 | G1/4 |
| PCV15G | 79.5 | 9 | - | 28 | 34.5 | 24 | 19 | G1/2 | G1/2 | G1/4 |
| PCV06FG | 58.5 | 5.5 | 6 | 16 | 19 | 14 | - | G1/8 | G1/8 | - |
| PCV08FG | 67 | 6.5 | 6 | 20.3 | 24 | 17 | - | G1/4 | G1/4 | - |
| PCV10FG | 82 | 7.5 | 8 | 25 | 30.5 | 22 | - | G3/8 | G3/8 | - |
| PCV15FG | 87 | 9 | 8 | 28 | 34.5 | 24 | - | G1/2 | G1/2 | - |

