

PTL Mini series

Ordering code

PTL 6 M5 A □ □ -M

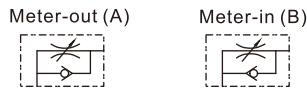
① ② ③ ④ ⑤ ⑥ ⑦

| ① Model | ② Port size | ③ Thread connection | ④ Control method | ⑤ Standard color | ⑥ Thread type | ⑦ Style |
|---------------------------------------|--------------------|------------------------|------------------------------------------------------------------------|--------------------------------------------------|---------------|--------------|
| PTL: Speed controller (Push lock) | 4: Φ4mm 6: Φ6mm | M5: M5X0.8 01: 1/8" | A: Meter-out Handle marking "A" Controlled flow Free flow | Standard color: Specification Blank: Gray | Blank: PT | M: Mini type |
| | | | B: Meter-in Handle marking "B" Free flow Controlled flow | D: Black Release button: Black Body: Black | | |

Specification

| | |
|------------------------------------|-----------------------------------------|
| Operating pressure range | 0~10kgf/cm²(0~1.0MPa) |
| Negative pressure | -750mmHg(10Torr) |
| Proof pressure | 1.5MPa |
| Ambient and fluid temperature (°C) | -20~70 |
| Applicable tubing | Soft nylon or polyurethane |
| Color | Grey/black |

Symbol



Selection, Installation and Operation

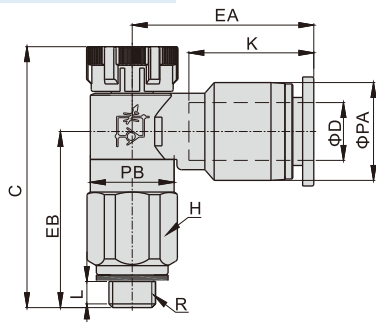
- The rotation torque of the push-lock speed controller cap should not be too large to avoid damage. It is recommended to use the torque below.

| Thread size | Recommended torque(N.m) |
|-------------|-------------------------|
| M5 | 0.05 |
| 1/8" | 0.08 |

- Push-lock speed controller installation instructions is the same as general one. Please refer to general type for specific content.

Dimensions

PTL Mini series



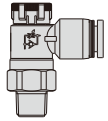
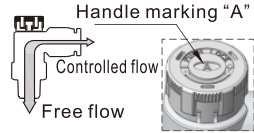
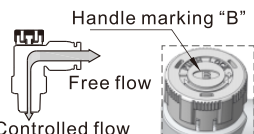
| Model/Item [Note1] | ΦD | R | ΦPA | ΦPB | L | C | | K | EA | EB | H | Weight (g) |
|--------------------|----|--------|------|-----|-----|------|------|------|------|----|----|------------|
| | | | | | | Pull | Push | | | | | |
| PTL4M5□-M | 4 | M5×0.8 | 8.5 | 9 | 3.5 | 29.5 | 28 | 12.5 | 16.5 | 19 | 9 | 5 |
| PTL401□-M | | 1/8" | 8.5 | 9 | 3.5 | 29.5 | 28 | 12.5 | 16.5 | 19 | 10 | 11 |
| PTL6M5□-M | 6 | M5×0.8 | 10.5 | 9 | 3.5 | 29.5 | 28 | 13.5 | 19.5 | 19 | 9 | 6.2 |
| PTL601□-M | | 1/8" | 10.5 | 9 | 3.5 | 29.5 | 28 | 13.5 | 19.5 | 19 | 10 | 12 |

[Note1] "□" stands for A or B. A indicates meter-out type while B indicates meter-in type. The two types are with the same overall dimension.

PTL series

Ordering code

PTL 6 01 A □ □
 ① ② ③ ④ ⑤ ⑥

| ① Model | ② Port size | ③ Thread connection | ④ Control method | ⑤ Standard color | ⑥ Thread type |
|------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------|
| PTL: Speed controller (Push lock)  | 6: Φ6mm | 01: 1/8" 02: 1/4" 03: 3/8" | A: Meter-out  | Standard color: Specification Blank: Gray Release button: Gray Body: Gray | Blank: PT |
| | 8: Φ8mm | 01: 1/8" 02: 1/4" 03: 3/8" 04: 1/2" | | | |
| | 10: Φ10mm | 02: 1/4" 03: 3/8" 04: 1/2" | B: Meter-in  | D: Black Release button: Black Body: Black | |
| | 12: Φ12mm | 03: 3/8" 04: 1/2" | | | |

Specification

| | |
|------------------------------------|-----------------------------------------|
| Operating pressure range | 0~10kgf/cm²(0~1.0MPa) |
| Negative pressure | -750mmHg(10Torr) |
| Proof pressure | 1.5MPa |
| Ambient and fluid temperature (°C) | -20~70 |
| Applicable tubing | Soft nylon or polyurethane |
| Color | Grey/black |

Product feature

1. Compare with standard speed controller, smaller size, lighter weight, suitable for more occasions.
2. Effectively control the action speed and the pressure signal transmission from pneumatic device.
3. Simple push-lock, operation.
4. Adjust quickly, easily and accurately.
5. Excellent flow rate characteristic, high sensitivity and easy to adjust.
6. Options of Meter-out and meter-in, applicable for every type actuator.
7. Effectively prevent from corrosion and pollution by nickle plated copper.
8. The sealant being coated on threaded portion can ensure no leakage of the threaded connection part.

Symbol

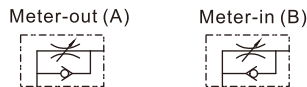


Table for interface port and tube O.D.

| Product series | Thread type | Port size | | | |
|----------------|-------------|-----------|----|-----|-----|
| | | Φ6 | Φ8 | Φ10 | Φ12 |
| PTL | 1/8" | ● | ● | | |
| | 1/4" | ● | ● | ● | |
| | 3/8" | ● | ● | ● | ● |
| | 1/2" | | ● | ● | ● |

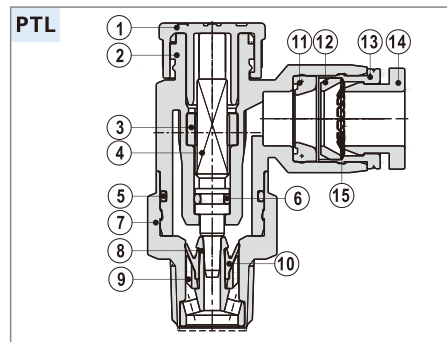
Selection, Installation and Operation

1. The rotation torque of the push-lock speed controller cap should not be too large to avoid damage. It is recommended to use the torque below.

| Thread size | Recommended torque(N.m) |
|-------------|-------------------------|
| 1/8" | 0.08 |
| 1/4" | 0.16 |
| 3/8" | 0.24 |
| 1/2" | 0.32 |

2. Push-lock speed controller installation instructions is the same as general one. Please refer to general type for specific content.

Inner structure

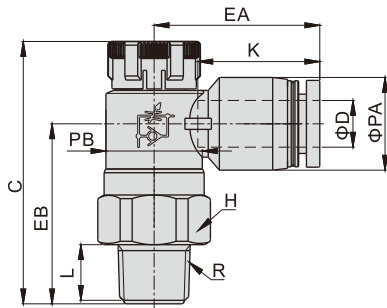


| NO. | Name | Material | NO. | Name | Material |
|-----|-------------------|----------------|-----|-------------------|-----------------|
| 1 | Adjusting cap | POM | 9 | Holder | PBT |
| 2 | Plastic body | PBT | 10 | O-ring | NBR |
| 3 | Locating ring | Aluminum alloy | 11 | O-ring | NBR |
| 4 | Throttling column | Aluminum alloy | 12 | Locating seat | POM |
| 5 | O-ring | NBR | 13 | Locating ring | Aluminum alloy |
| 6 | O-ring | NBR | 14 | Plastic interface | POM |
| 7 | Throttling body | Brass | 15 | Spring gasket | Stainless steel |
| 8 | Throttling sleeve | Aluminum alloy | | | |

PTL series

Dimensions

PTL Series

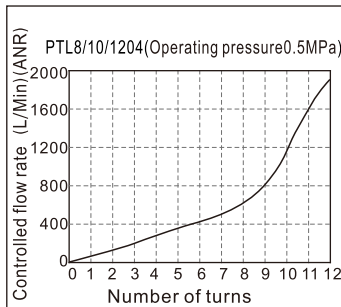
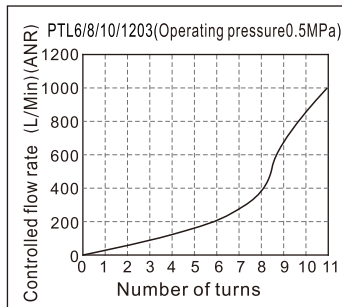
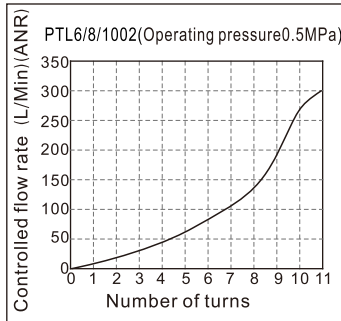
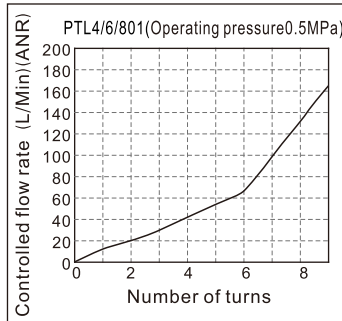
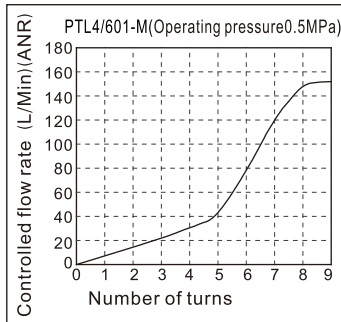
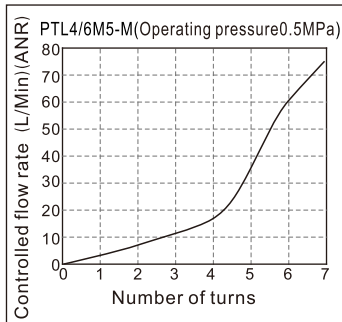


| Model\Item [Note1] | ΦD | R | ΦPA | ΦPB | L | C | | K | EA | EB | H | Weight (g) |
|-----------------------|------|------|------|------|------|------|------|------|------|------|----|---------------|
| | | | | | | Pull | Push | | | | | |
| PTL601□ | 6 | 1/8" | 12.5 | 13 | 8.5 | 36 | 34.5 | 16.5 | 22.5 | 23.5 | 14 | 12.5 |
| PTL602□ | | 1/4" | 12.5 | 16.5 | 11 | 40.5 | 39 | 16.5 | 24 | 28 | 17 | 19.5 |
| PTL603□ | | 3/8" | 12.5 | 19 | 12 | 44 | 42.5 | 16.5 | 25.5 | 31 | 19 | 28.5 |
| PTL801□ | 8 | 1/8" | 15 | 13 | 8.5 | 36 | 34.5 | 18.5 | 24.5 | 22.5 | 14 | 13 |
| PTL802□ | | 1/4" | 15 | 16.5 | 11 | 40.5 | 39 | 18.5 | 26 | 27 | 17 | 20.5 |
| PTL803□ | | 3/8" | 15 | 19 | 12 | 44 | 42.5 | 18.5 | 27 | 30 | 19 | 29 |
| PTL804□ | 1/2" | 15 | 24 | 15 | 52.5 | 51 | 18.5 | 29.5 | 37.5 | 24 | 49 | |
| PTL1002□ | 10 | 1/4" | 18 | 16.5 | 11 | 40.5 | 39 | 21 | 31 | 26 | 17 | 22 |
| PTL1003□ | | 3/8" | 18 | 19 | 12 | 44 | 42.5 | 21 | 29 | 29 | 19 | 30.5 |
| PTL1004□ | | 1/2" | 18 | 24 | 15 | 52.5 | 51 | 21 | 31.5 | 36.5 | 24 | 50.5 |
| PTL1203□ | 12 | 3/8" | 21 | 19 | 12 | 44 | 42.5 | 23 | 34.5 | 28 | 19 | 32.5 |
| PTL1204□ | | 1/2" | 21 | 24 | 15 | 52.5 | 51 | 23 | 34 | 36 | 24 | 53 |

[Note1] "□" stands for A or B. A indicates meter-out type while B indicates meter-in type. The two types are with the same overall dimension.

Flowrate characteristic

Controlled flow rate



Free flow rate

