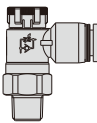
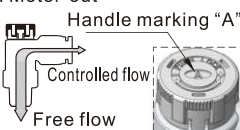



## PTL Mini series

### Ordering code

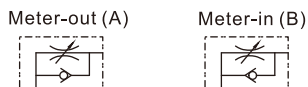
PTL 6 M5 A □ □ - M S  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Model	② Port size	③ Thread connection	④ Control method	⑤ Standard color	⑥ Thread type	⑦ Style	⑧ Material
PTL: Speed controller (Push lock) 	4 : Φ4mm 6 : Φ6mm	M5 : M5X0.8 01 : 1/8"	<b>A: Meter-out</b>  Handle marking "A" Controlled flow Free flow	Standard color Specification Blank: Gray Release button: Gray Body: Gray	Blank: PT	M: Mini type	S: SUS304
			<b>B: Meter-in</b>  Handle marking "B" Free flow Controlled flow	D: Black Release button: Black Body: Black			

### Specification

<b>Operating pressure range</b>	<b>0~10kgf/cm<sup>2</sup>(0~1.0MPa)</b>
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

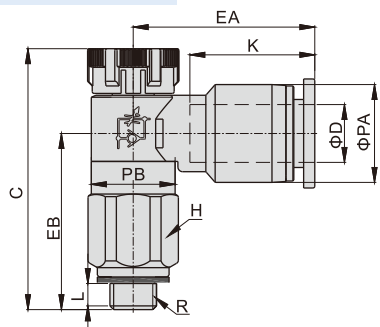
- The rotation torque of the push-lock speed controller cap should not be too large to avoid damage. It is recommended to use the torque below.

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□-MS	4	M5×0.8	8.5	9	3.5	29.5	28	12.5	16.5	19	9	5
PTL401□-MS		1/8"	8.5	9	3.5	29.5	28	12.5	16.5	19	10	11
PTL6M5□-MS	6	M5×0.8	10.5	9	3.5	29.5	28	13.5	19.5	19	9	6.2
PTL601□-MS		1/8"	10.5	9	3.5	29.5	28	13.5	19.5	19	10	12

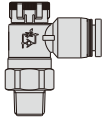
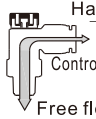



[Note1] "□" stands for A or B. A indicates meter-out type while B indicates meter-in type. The two types are with the same overall dimension.

## PTL series

### Ordering code

PTL 6 01 A □ □ - S

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 Material	
PTL: Speed controller (Push lock) 	6 : Φ6mm	01 : 1/8" 02 : 1/4" 03 : 3/8"	<b>A: Meter-out</b>  Handle marking "A" Controlled flow Free flow 	Standard color	Blank: PT	S: SUS304	
	8 : Φ8mm	01 : 1/8"    02 : 1/4" 03 : 3/8"    04 : 1/2"		Blank: Gray			Release button: Gray Body: Gray
	10 : Φ10mm	02 : 1/4" 03 : 3/8" 04 : 1/2"	<b>B: Meter-in</b>  Handle marking "B" Free flow Controlled flow 	D: Black			Release button: Black Body: Black
	12 : Φ12mm	03 : 3/8" 04 : 1/2"					

### Specification

<b>Operating pressure range</b>	<b>0~10kgf/cm<sup>2</sup>(0~1.0MPa)</b>
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 nickel plated brass.
8. The sealant being coated on threaded portion can ensure no leakage of the threaded connection part.

### Symbol

Meter-out (A)



Meter-in (B)



### 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"		•	•	•

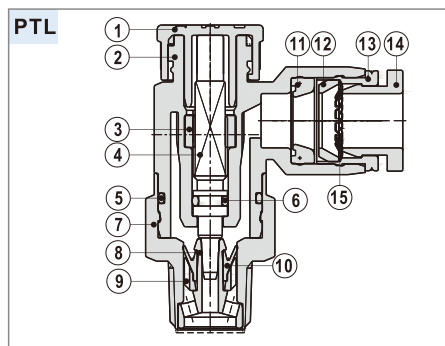
### Selection, Installation and Operation

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

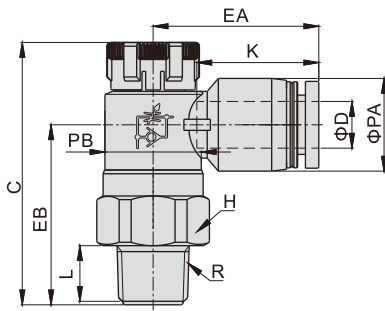


NO.	Name	Material	NO.	Name	Material
1	Adjusting cap	POM	9	Holder	PBT
2	Plastic body	PBT	10	O-ring	NBR
3	Locating ring	Aluminum alloy	11	O-ring	NBR
4	Throttling column	Aluminum alloy	12	Locating seat	POM
5	O-ring	NBR	13	Locating ring	Aluminum alloy
6	O-ring	NBR	14	Plastic interface	POM
7	Throttling body	SUS304	15	Spring gasket	Stainless steel
8	Throttling sleeve	Aluminum alloy			

## PTL series

### Dimensions

#### PTL Series

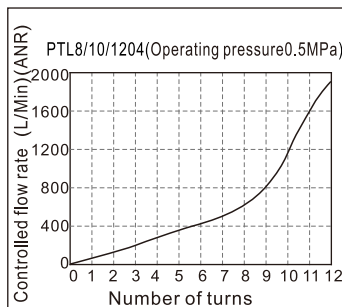
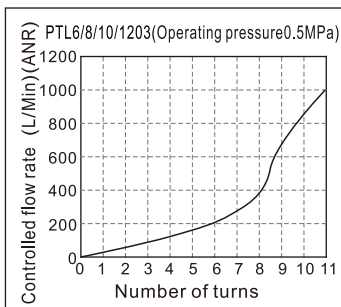
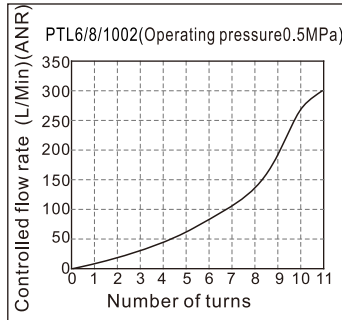
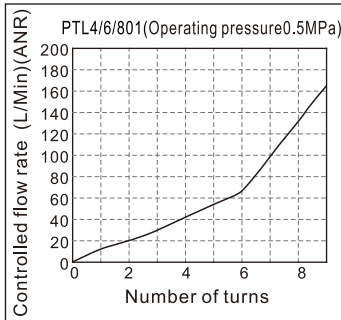
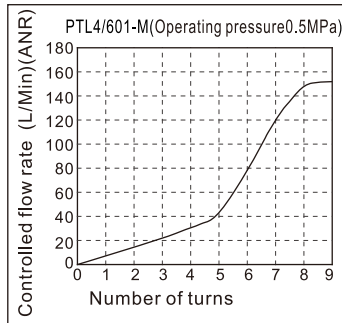
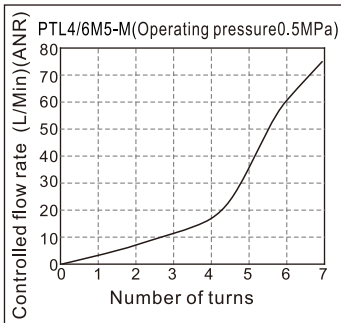


Model/Item [Note1]	ΦD	R	ΦPA	ΦPB	L	C		K	EA	EB	H	Weight (g)
						Pull	Push					
PTL601□-S	6	1/8"	12.5	13	8.5	36	34.5	16.5	22.5	23.5	14	12.5
PTL602□-S		1/4"	12.5	16.5	11	40.5	39	16.5	24	28	17	19.5
PTL603□-S		3/8"	12.5	19	12	44	42.5	16.5	25.5	31	19	28.5
PTL801□-S	8	1/8"	15	13	8.5	36	34.5	18.5	24.5	22.5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

