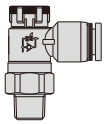
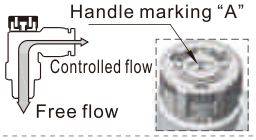
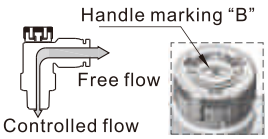
PTL Mini series

Ordering code

PTL 6 M5 A □ □ –M

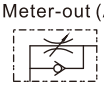
(1) (2) (3) (4) (5) (6) (7)

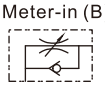
①Model	②Port size	③Thread connection	④Control method	⑤Standard color		⑥Thread type	⑦ Style
PTL: Speed controller (Push lock) 	4：Φ4mm 6：Φ6mm	M5：M5X0.8 01：1/8"	A: Meter-out 	Standard color	Specification	Blank: PT	M: Mini type
				Blank: Gray	Release button: Gray Body:Gray		
			B: Meter-in 	D: Black	Release 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 (℃)	-20~70
Applicable tubing	Soft nylon or polyurethane
Color	Grey/black

Symbol

Meter-out (A) 

Meter-in (B) 

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)
M5	0.05
1/8"	0.08

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

Product feature

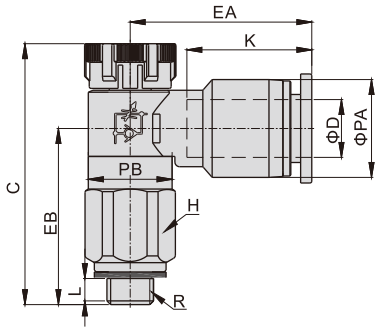
1. Compare with standard speed controller, smaller size, lighter weight, suitable for more occasions.
2. Effectively control the action speed and the pressure signal transmission from pneumatic device.
3. Simple push-lock, operation.
4. Adjust quickly, easily and accurately.
5. Excellent flow rate characteristic, 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 pollusion by nickle plated copper.
8. The sealant being coated on threaded portion can ensure no leakage of the threaded connection part.

Table for interface port and tube O.D.

Product series	Thread type	Port size	
		Φ4	Φ6
PTL	M5	●	●
	1/8"	●	●

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

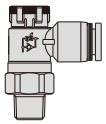
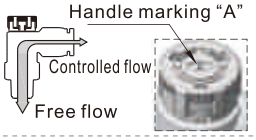
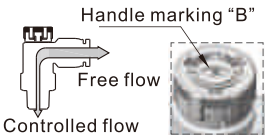
[Note1] “□” stands for A or B. A indicates meter-out type while B indicates meter-in type. The two types are with the same overall dimension.

PTL series

Ordering code

PTL 6 01 A □ □

①	②	③	④	⑤	⑥

①Model	②Port size	③Thread connection	④Control method	⑤Standard color		⑥Thread type
PTL: Speed controller (Push lock) 	6：Φ6mm	01：1/8" 02：1/4" 03：3/8"	A: Meter-out 	Standard color	Specification	Blank: PT
	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: 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 (℃)	-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.
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7. Effectively prevent from corrosion and pollusion by nickle plated copper.
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

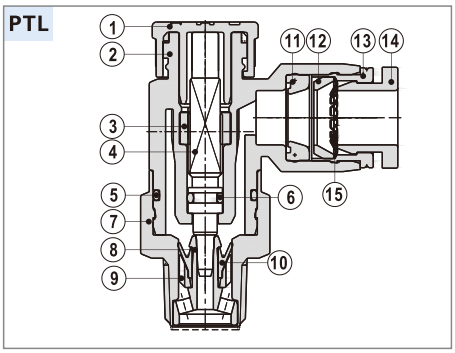
1. The rotation torque of the push-lock speed controller cap should not be too large to avoid damage.
   It is recommended to use the torque below.

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

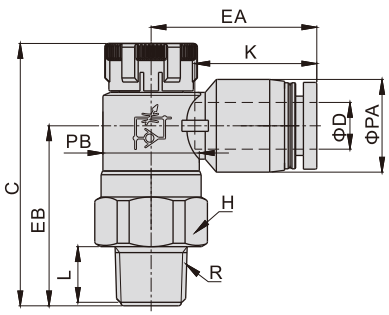
PTL



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			

Dimensions

PTL Series

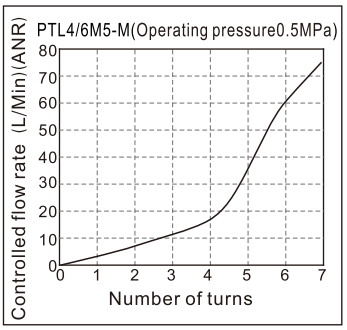


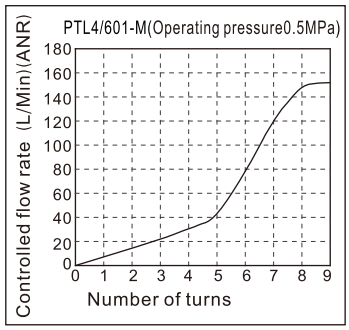
Model\Item [Note1]	ΦD	R	ΦPA	ΦPB	L	C		K	EA	EB	H	Weight (g)
						Pull	Push					
PTL601□	6	1/8"	12.5	13	8.5	36	34.5	16.5	22.5	23.5	14	12.5
PTL602□		1/4"	12.5	16.5	11	40.5	39	16.5	24	28	17	19.5
PTL603□		3/8"	12.5	19	12	44	42.5	16.5	25.5	31	19	28.5
PTL801□	8	1/8"	15	13	8.5	36	34.5	18.5	24.5	22.5	14	13
PTL802□		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

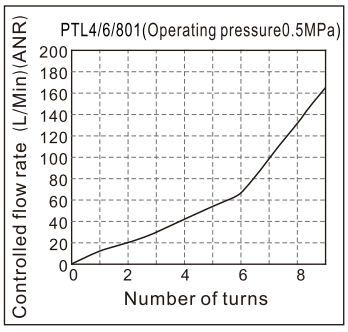
[Note1] "□" stands for A or B. A indicates meter-out type while B indicates meter-in type. The two types are with the same overall dimension.

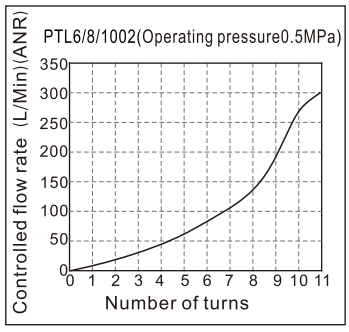
Flowrate characteristic

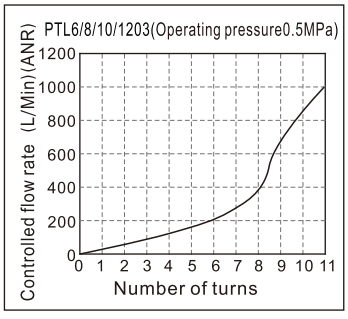
Controlled flow rate

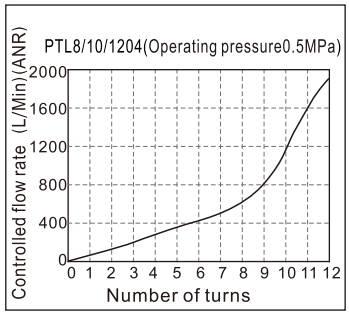












Free flow rate