


























The accessories is necessary for intact air system. AirTAC has many types of accessories for your choice:

- 1. G thread Fitting; 2. G thread Silencer; 3. G thread Speed Controller; 4. Polyurethane re-coil Hosepart.
- 5. PT thread Fitting; 6. PT thread Silencer; 7. PT thread Speed Controller.

Threaded type (G Thread)	GPC Series  6	GPC-M Series  7	GPL-M Series  7	GPL Series  9
	GPCF Series  9	GPMF Series  9	GPLF Series  9	GPLL Series  10
	GPHW Series  10	GPH Series  10	GPHF Series  10	GPKD Series  10
	GPEB Series  11	GPYB Series  11	GPED Series  11	GPZB Series  11
Metal one-touch fittings (G Thread)	GBPC Series  13	GBPMF Series  13	GBPCF Series  13	GBPM Series  13
	GBB, GBD Series  14	GBU Series  14	GBZ Series  14	GBKC Series  15
	Tube-tube type	GPE Series  17	GPU Series  17	GPY Series  17
GPV Series  17		GPLM Series  17	GPYW Series  18	GPEG Series  18





Tube-tube type	GPZ Series  18	GPEW Series  18	GPG Series  18	GPP Series  18
	GPJ Series  19	GPZG Series  19	GPHK Series  19	GPHD Series  19
	GPKG Series  19			
Speed controllers (G Thread)	GPSS Series  21	GPSA Series  21	GPTL-M Series  24	GPTL Series  25
	GPHV Series  27			
Silencers (G Thread)	GBSL Series  29	GBSLM Series  29	GBESL Series  29	
	Polyurethane re-coil hosepart	US98A, UE95A Series  30	UCS Series  31	
Flame resistant tube	UN54D Series  32			





Threaded type (PT Thread)	PC, POC Series  33	PC-M Series  34	PL-M Series  34	PL Series  36
	PCF Series  36	PMF Series  36	PLF Series  36	PLL Series  37
	PHW Series  37	PH Series  37	PHF Series  37	PKD Series  37
	PEB Series  38	PYB Series  38	PED Series  38	PZB Series  38
Metal one-touch fittings (PT Thread)	BPC Series  40	BPOC Series  40	BPMF Series  40	BPCF Series  40
	BB, BD Series  41	BU Series  41	BZ Series  41	BKC Series  42
	BSL Series  44	BSLM Series  44	BESL Series  44	PAL, PALM Series  44
	PSL Series  46	PSS Series  46	PTL-M Series  48	PTL Series  49





Installation and Operation of tube and fitting

1. Installation and removal of tubing:

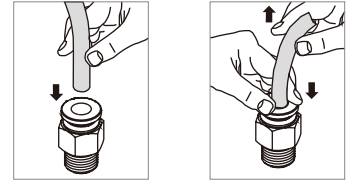
1.1. Installation of tubing

Grasp the tubing and slowly push it into the fitting until it comes to a stop. The tubing will be locked by the spring gasket.

1.2. Removal of tubing

Push the release button to open the spring gasket so that the tubing can be released.

Note: When remove the tubing, make sure the pressure in the tubing is Zero.

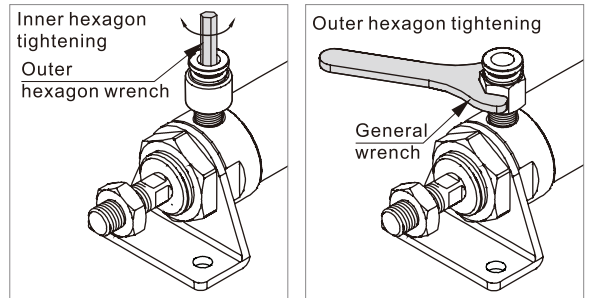


2. Connection thread tightening method

Use an inner or outer hexagon wrench to tighten the fitting as show in the picture below.

Note: Please refer to the tables below for the tightening torque.

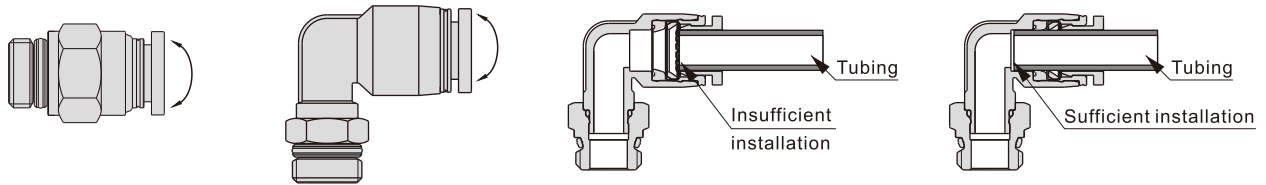
Recommended tightening torque(N.m)						
Thread type	M3	M5	1/8"	1/4"	3/8"	1/2"
Tightening torque	0.3~0.6	1~1.5	5~8	6~9	8~11	12~16



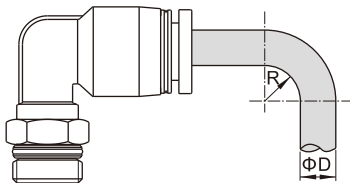
3. Caution

3.1. External force (bend, twist, and tension) may damage the fitting and cause air leakage.

3.2. Insufficient installation may cause air leakage or the tubing to release.



3.3. Pulling or twisting the tubing excessively may damage the fitting. For a mounting guide, see the table below.



Minimum bending radius of the tubing(mm)						
Tubing O.D.(ΦD)	3.2	4	6	8	10	12
Minimum bending radius(R)	15	20	30	50	80	150

4. Connection thread tightening method of the fitting with M5 type thread

First, tighten by hand, then use a wrench to tighten an additional 1/4 turn. Excessive tightening may damage the thread portion or deform the gasket and cause air leakage. Insufficient tightening may loosen the threads, or cause air leakage.

5. Tolerance of the Polyurethane tubing O.D.

Polyurethane tubing O.D.(mm)	3.2	4	6	8	10	12
Tolerance(mm)	±0.1	±0.1	±0.1	±0.1	±0.15	±0.15





Other precautions

1. Before piping is connected, it should be washed to remove chips and other debris from inside the pipe.
2. Ensure the tubing being cut perpendicularly and no damage or scratch on the surface of the tubing outside diameter.
3. Use pipe length with sufficient margin to avoid over-bending on the top of the fitting.
4. Pull the tubing back gently to make sure it has a positive seal before using.
5. Push the release button flange evenly and sufficiently to release the button. If the release button is not held down sufficiently, the tubing cannot be with drawn and the outer surface of the tubing may be scratched and cause air leakage.
6. When removing tubing, do not rotate around or 360 degree. This may result in scratch and removal of the tubing difficult.
7. When screwing together pipes and fittings, be certain that chips from the pipe threads and sealing material do not get inside the pipe. Also, when the pipe tape is used, leave approx. 1.5~2 thread ridges exposed at the end of the threads.



Notes

Safety instructions

1. When remove the tubing, make sure the pressure in the tubing is Zero.
2. Do not use the ordinary fittings and tubing in locations where spatter is generated. Spattering may result in a fire hazard.
3. Ensure that the pressure and ambient temperature are within the specified range.
4. Do not use in an atmosphere having corrosive gases, chemicals, sea water, water, water steam, or where there is direct contact with any of these.
5. Do not use in a place subject to heavy vibration and/or shock.



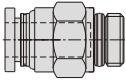
Warning

GPC series

Ordering code

GPC 6 01 □

① ② ③ ④

① Model	② Port size	③ Thread connection		④ Standard color	
GPC: Male connector (G thread) 	6: Φ6mm 8: Φ8mm 10: Φ10mm 12: Φ12mm	Thread connection	Adaptable port size	Standard color	Specification
		M5: M5X0.8	Φ6	Blank: Gray	Release button: Gray
		01: G1/8	Φ6, Φ8, Φ10, Φ12	D: Black	Release button: Black
		02: G1/4			
		03: G3/8			
		04: G1/2			

Specification

Operating pressure range	0~10kgf/cm ² (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	Gray/black

Table for interface port and tube O.D.

Product series	Thread type	Port size			
		Φ6	Φ8	Φ10	Φ12
GPC	M5	●			
	G1/8	●	●	●	●
	G1/4	●	●	●	●
	G3/8	●	●	●	●
	G1/2	●	●	●	●

Product feature

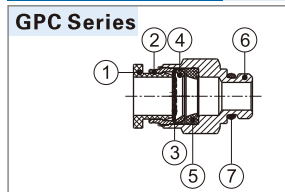
1. The compact appearance space saving.

2. Gray and black are optional for the release button.

3. The threaded portion is attached with a sealing gasket to prevent air leakage over the connection thread portion.



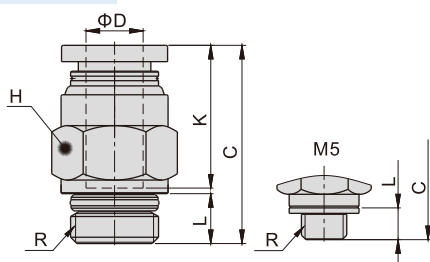
Inner structure



No.	Item	Material
1	Release button	POM
2	Guide	Aluminum alloy
3	Spring gasket	Stainless steel
4	Chuck	POM
5	O-ring	NBR
6	Body	Brass
7	O-ring	NBR

Dimensions

GPC Series



Model/Item	ΦD	R	L	C	K	H(Across flat)	Weight(g)	PCS/bag
GPC6M5	6	M5×0.8	3.5	22.5	16.5	12	8.5	10
GPC601		G1/8	5.5	22	16.35	12	7.1	10
GPC602		G1/4	6.5	21	16.35	14	11.5	10
GPC603		G3/8	7	20.5	16.35	19	23.2	10
GPC604	8	G1/2	8.5	20.5	16.35	22	37.9	10
GPC801		G1/8	5.5	26	18.5	14	10.7	10
GPC802		G1/4	6.5	25	18.5	14	10.5	10
GPC803		G3/8	7	22	18.5	19	21.5	10
GPC804	10	G1/2	8.5	23.5	18.5	22	36.2	10
GPC1001		G1/8	5.5	29.5	20.9	17	13.2	10
GPC1002		G1/4	6.5	29	20.9	17	15.8	10
GPC1003		G3/8	7	25	20.9	19	18.2	10
GPC1004	12	G1/2	8.5	23.5	20.9	22	30.7	10
GPC1201		G1/8	5.5	32	22.7	21	22.3	10
GPC1202		G1/4	6.5	33	22.7	21	25.4	10
GPC1203		G3/8	7	30.5	22.7	21	23.6	10
GPC1204		G1/2	8.5	27.5	22.7	22	31.7	10

Accessories—One-Touch Fittings

GPC, GPL mini series

Ordering code

GPC 6 01 □ - M

① ② ③ ④ ⑤

① Model	② Port size	③ Thread connection		④ Standard color		⑤ Style type
GPC: Male connector (G thread)	3.2: Φ 3.2mm 4: Φ 4mm 6: Φ 6mm	Thread connection	Adaptable port size	Standard color	Specification	M: Mini type
 GPL: Male elbow(G thread)		M3: M3X0.5	Φ 3.2, Φ 4	Blank: Gray	Release button: Gray	
		M5: M5X0.8	Φ 3.2, Φ 4, Φ 6	D: Black	Release button: Black	
		01: G1/8	Φ 4, Φ 6			
	02: G1/4	Φ 4				

Specification

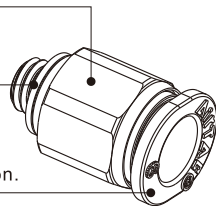
Operating pressure range	0~10kgf/cm ² (0~1.0MPa)
Negative pressure	-750mmHg(10Torr)
Proof pressure	1.5MPa
Ambient and fluid temperature (°C)	-20~70
Applicable tubing	Soft nylon or polyurethane
Color	Gray/black

Table for interface port and tube O.D.

Product series	Thread type	Port size		
		Φ 3.2	Φ 4	Φ 6
GPC GPL	M3	●	●	
	M5	●	●	●
	G1/8		●	●
	G1/4		●	

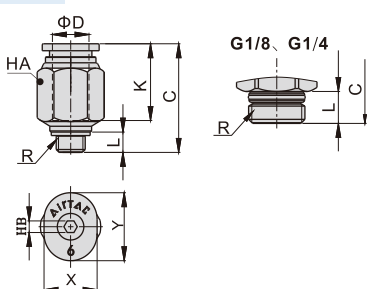
Product feature

- The compact appearance space saving.
- The threaded portion is attached with a sealing gasket to prevent air leakage over the connection thread portion.
- Gray and black are optional for the release button.

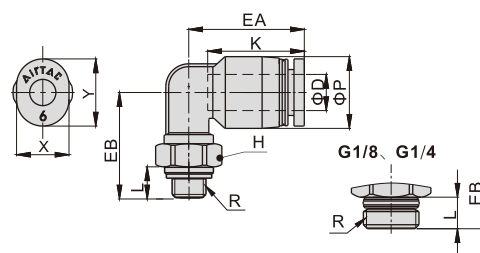


Dimensions

GPC Series



GPL Series



Model\Item	ΦD	R	L	C	K	X	Y	HA	HB	Weight(g)	PCS/bag
GPC3.2M3-M	3.2	M3×0.5	3	16	11.5	6.8	8.7	7	1.5	1.7	10
GPC3.2M5-M		M5×0.8	3.5	16	11.5	6.8	8.7	7	2	2.0	10
GPC4M3-M	4	M3×0.5	3	17.5	12.5	7.8	9.5	8	1.5	2.4	10
GPC4M5-M		M5×0.8	3.5	17	12.5	7.8	9.5	8	2	2.7	10
GPC401-M		G1/8	5.5	16	13.5	7.8	9.5	10	3	3.6	10
GPC402-M		G1/4	6.5	16.5	13.5	7.8	9.5	14	3	9.5	10
GPC6M5-M	6	M5X0.8	3.5	18.5	13.5	9.8	11.7	10	2	3.6	10
GPC601-M		G1/8	5.5	18.5	15.5	9.8	11.7	11	4	6.0	10

Model\Item	ΦD	R	ΦP	L	K	EA	EB	H	X	Y	Weight(g)	PCS/bag
GPL3.2M3-M	3.2	M3×0.5	7.5	3	12	14.5	14	7	6.8	8.7	2.4	10
GPL3.2M5-M		M5×0.8	3.5	12	14.5	7	6.8	8.7	2.7	10		
GPL4M3-M	4	M3×0.5	3	12.5	15	14	7	7.8	9.5	3.0	10	
GPL4M5-M		M5×0.8	3.5	12.5	15	14.5	7	7.8	9.5	3.3	10	
GPL401-M		G1/8	5.5	12.5	15	14	10	7.8	9.5	6.2	10	
GPL402-M		G1/4	6.5	12.5	16	15	14	7.8	9.5	14.1	10	
GPL6M5-M	6	M5X0.8	3.5	13.5	16.0	15.5	7	9.8	11.7	4.0	10	
GPL601-M		G1/8	5.5	13.5	16.0	14.5	10	9.8	11.7	6.8	10	

Accessories—One-Touch Fittings

One-touch fittings—threaded type

Ordering code

Same diameter type fittings

GPL 6 01 □

① ② ③ ④

① Model	② Port size	③ Thread connection	④ Standard color				
GPHW: Double universal male elbow (G thread) 	4: Φ4mm 6: Φ6mm 8: Φ8mm 10: Φ10mm 12: Φ12mm	Thread connection M5: M5X0.8 01: G1/8 02: G1/4 03: G3/8 04: G1/2	Adaptable port size Φ4, Φ6 Φ4, Φ6 Φ8, Φ10 Φ12				
GPL: Male elbow (G thread) 				Standard color Blank: Gray D: Black	Specification Release button: Gray GPCF GPMF		
GPHF: Universal female elbow (G thread) 						Adaptable model Release button: Gray Body: Gray Others	
GPEB: Male branch tee (G thread) 							Release button: Black GPCF GPMF
GPED: Male run tee (G thread) 							
GPYB: Branch "Y" (G thread) 							
GPZB: Threaded cross (G thread) 							
GPLL: Extended male elbow (G thread) 							
GPLF: Female elbow (G thread) 							
GPCF: Female connector (G thread) 							
GPMF: Bulkhead connector (G thread) 							
GPH: Universal male elbow (G thread) 							

Different diameter type fittings

GPKD 6-4 01 □

① ② ③ ④ ⑤

① Model	② Port size	③ Port size	④ Thread connection	⑤ Standard color
GPKD: Male reducer triple branch (G thread) 	6: Φ6mm 8: Φ8mm 10: Φ10mm	4: Φ4mm 6: Φ6mm 8: Φ8mm	01: G1/8 02: G1/4 03: G3/8	Standard color Blank: Gray D: Black
				Specification Release button: Gray/Body: Gray Release button: Black/Body: Black

Specification

Operating pressure range	0~10kgf/cm ² (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	Gray/black

Product feature

- Variable models can be widely used in every kind of pneumatic systems.
- High circulation performance: bear the same flow with the volume of the tubing inside diameter.
- Connect tubing easily and conveniently. The tubing connection portion is safe and durable.
- The thread is attached with a sealing gasket to prevent air leakage over the connection thread portion.
- The nickel plated body is anti-corrosion and anti-pollution, which allows a broader application.

Inner structure

GPL Series		No.	Item	Material
	1	Release button	POM	
	2	Guide	Aluminum alloy	
	3	Spring gasket	Stainless steel	
	4	Chuck	POM	
	5	O-ring	NBR	
	6	Body	PBT	
	7	O-ring	NBR	
	8	Stud	Brass	
	9	O-ring	NBR	

Table for interface port and tube O.D.

Product series	Thread type	Port size				
		Φ4	Φ6	Φ8	Φ10	Φ12
GPL	M5	●				
	G1/8		●	●	●	●
	G1/4		●	●	●	●
	G3/8		●	●	●	●
GPLL	G1/2		●	●	●	●
	M5	●	●			
	G1/8	●	●	●	●	
	G1/4	●	●	●	●	
GPLF	G3/8		●	●	●	●
	G1/2		●	●	●	●
	M5	●	●			
	G1/8	●	●	●	●	
GPCF	G1/4	●	●	●	●	
	G3/8		●	●	●	●
	G1/2		●	●	●	●
	M5	●	●			
GPMF	G1/8	●	●	●	●	
	G1/4	●	●	●	●	●
	G3/8		●	●	●	●
	G1/2		●	●	●	●
GPH	M5	●	●			
	G1/8	●	●	●	●	
	G1/4		●	●	●	●
	G3/8		●	●	●	●
GPHF	G1/2		●	●	●	●
	G1/8	●	●	●	●	
	G1/4	●	●	●	●	
	G3/8		●	●	●	●
GPHW	G1/4		●	●	●	●
	G3/8		●	●	●	●
	G1/2		●	●	●	●
	G1/8	●	●	●	●	
GPZB	G1/4		●	●	●	
	G3/8		●	●	●	●
	G1/2		●	●	●	●
	G1/8	●	●	●	●	




Product series	Thread type	Port size		
		Φ6-Φ4	Φ8-Φ6	Φ10-Φ8
GPKD	G1/8	●		
	G1/4		●	
	G3/8			●

Metal one-touch fittings

Ordering code

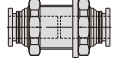
GBPC 6 01

① ② ③

① Model	② Port size	③ Thread connection
GBPC: Metal male connector (G thread) 	4: Φ 4mm 6: Φ 6mm 8: Φ 8mm 10: Φ 10mm 12: Φ 12mm	M5: M5X0.8 01: G1/8 02: G1/4 03: G3/8 04: G1/2
GBPCF: Metal female connector (G thread) 		
GBPMF: Metal bulkhead female connector (G thread) 		

GBPM 6

① ②

① Model	② Port size
GBPM: Metal bulkhead connector (G thread) 	4: Φ 4mm 6: Φ 6mm 8: Φ 8mm 10: Φ 10mm 12: Φ 12mm

Specification

Operating pressure range	0~9kgf/cm²(0~0.9MPa)
Negative pressure	-750mmHg(10Torr)
Proof pressure	1.5MPa
Ambient and fluid temperature (°C)	0~150
Applicable tubing	Soft nylon or polyurethane
Color	Gray/black

Note: The temperature resistance level of the tubing should be confirmed first when used in high temperature environments.

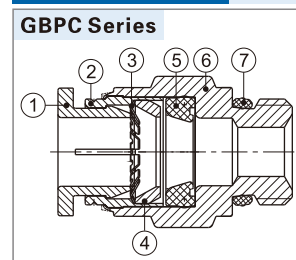
Product feature

1. High flow capacity; The flow rate of these fittings is equivalent to that of the adaptable tubes.
2. Inserting or removal tubing is simple and convenient, and the connecting portion is reliable and durable.
3. Thread is attached with a sealing gasket, to ensure no leakage of the threaded connection part.
4. The fitting metal body adopts a special nickel-plating process, which has good corrosion resistance.
5. Metal fittings can be used in high temperature environment.

Table for interface port and tube O.D.

Product series	Thread type	Port size				
		Φ 4	Φ 6	Φ 8	Φ 10	Φ 12
GBPC	M5	●	●	●	●	●
	G1/8	●	●	●	●	●
	G1/4	●	●	●	●	●
	G3/8		●	●	●	●
	G1/2				●	●
GBPCF	M5	●	●			
	G1/8	●	●	●		
	G1/4		●	●	●	
	G3/8				●	●
GBPMF	G1/2					●
	M5					
	G1/8	●	●	●		
	G1/4		●	●	●	
GBPM	G3/8				●	●
	G1/2					●
	G1/4				●	●

Inner structure



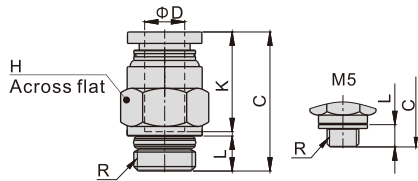
NO.	Name	Material
1	Metal connector	Brass
2	Locating ring	Aluminum alloy
3	Spring gasket	Stainless steel
4	Locating seat	Aluminum alloy
5	Special shape O-ring	Viton
6	Straight connector body	Brass
7	O-ring	NBR

Accessories—One-Touch Fittings

Metal one-touch fittings

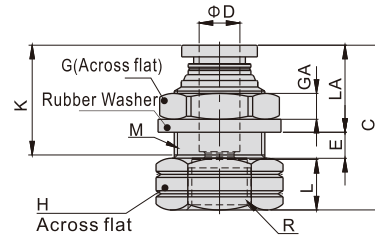
Dimensions

GBPC Series



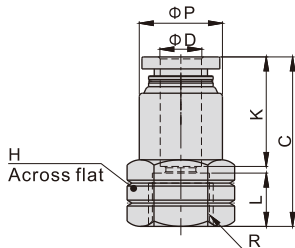
Model\Item	ΦD	R	L	C	K	H	Weight(g)	PCS/bag
GBPC4M5	4	M5X0.8	3.5	19.5	14	9	5.5	10
GBPC401		G1/8	5.5	16.5	13	10	7.9	10
GBPC402		G1/4	6.5	17	13	14	8.7	10
GBPC6M5	6	M5X0.8	3.5	22	16	12	10.1	10
GBPC601		G1/8	5.5	21.5	16	12	13.8	10
GBPC602		G1/4	6.5	20.5	16	14	15.1	10
GBPC603	8	G3/8	7	20	16	19	26	10
GBPC801		G1/8	5.5	25.5	18	14	13.3	10
GBPC802		G1/4	6.5	24.5	18	14	13.5	10
GBPC803	10	G3/8	7	21.5	18	19	25.9	10
GBPC1001		G1/8	5.5	28.5	20.5	17	17.2	10
GBPC1002		G1/4	6.5	28	20.5	17	19.8	10
GBPC1003	12	G3/8	7	24	20.5	19	32.3	10
GBPC1004		G1/2	8.5	22.5	19.5	22	31.9	10
GBPC1202		G1/4	6.5	32.5	22	21	29.4	10
GBPC1203	12	G3/8	7	30	22	21	29.3	10
GBPC1204		G1/2	8.5	27	22	22	37.2	10

GBPMF Series



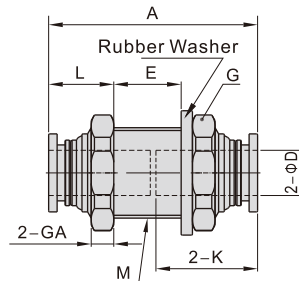
Model\Item	ΦD	R	M	L	C	K	LA	E	GA	G	H	Weight(g)	PCS/bag
GBPMF401	4	G1/8	M12X1	8	25	14	12	4	4	14	14	7.6	10
GBPMF601	6	G1/8	M14X1	8	25	16	12	5	4	17	17	10.4	10
GBPMF602		G1/4	M14X1	11	30	16	12	5	4	17	17	12.2	10
GBPMF801	8	G1/8	M16X1	8	27	18	13	5.5	4	19	19	13.9	10
GBPMF802		G1/4	M16X1	11	31.5	18	13	5.5	4	19	19	15.3	10
GBPMF1002	10	G1/4	M20X1	11	34.5	20.5	14	7.5	5	24	22	26.2	10
GBPMF1003		G3/8	M20X1	12	35.5	20.5	14	7.5	5	24	22	24.4	10
GBPMF1203	12	G3/8	M22X1	12	37	22	15	8	5	27	24	32.6	10
GBPMF1204		G1/2	M22X1	13.5	38.5	22	15	8	5	27	25	31.8	10

GBPCF Series



Model\Item	ΦD	R	ΦP	L	C	K	H	Weight(g)	PCS/bag
GBPCF4M5	4	M5X0.8	9	5	21	14	10	3.5	10
GBPCF401		G1/8	9.5	8	23	14	14	5.3	10
GBPCF6M5	6	M5X0.8	12	5	21	16	12	5.6	10
GBPCF601		G1/8	12.5	8	25	16	14	7.2	10
GBPCF602	8	G1/4	12.5	11	28	16	17	9.2	10
GBPCF801		G1/8	14	8	27	18	14	7.1	10
GBPCF802	10	G1/4	14.5	11	30	18	17	10.6	10
GBPCF1002		G1/4	17	11	32.5	20.5	17	13.5	10
GBPCF1003	12	G3/8	18	12	33.5	20.5	21	17.5	10
GBPCF1203		G3/8	21	12	35	22	21	22	10
GBPCF1204	12	G1/2	21	13.5	36.5	22	21	24.9	10

GBPM Series



Model\Item	ΦD	M	A	K	L	E	G(Across flat)	GA	Weight(g)	PCS/bag
GBPM4	4	M12X1	28.5	14	10	7	14	4	6.4	10
GBPM6	6	M14X1	33	16	10	11	17	4	16.4	10
GBPM8	8	M16X1	37	18	11	13	19	4	15.8	10
GBPM10	10	M20X1	41.5	20.5	12	16	24	5	28.9	10
GBPM12	12	M22X1	45	22	13	17.5	27	6	40.3	10

One-touch fittings—threaded type

Ordering code

GBB 01 01



① Model				② Thread connection I	③ Thread connection II
GBB: Male connector (G thread) 	GBD: Male & female connector (G thread) [Note1] 	GBU: Double female connector (G thread) 	GBZ: Hexagon head cap plug (G thread) [Note2] 	01: G1/8 02: G1/4 03: G3/8 04: G1/2	01: G1/8 02: G1/4 03: G3/8 04: G1/2

[Note1] For GBD series, Thread I is Female thread, Thread II is male thread; [Note2] For GBZ series, no thread II and thread I is male thread.

Specification

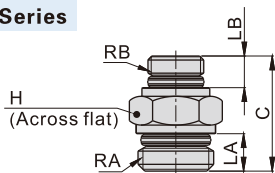
Operating pressure range	0~10kgf/cm²(0~1.0MPa)
Negative pressure	-750mmHg(10Torr)
Proof pressure	3.0MPa
Ambient and fluid temperature (°C)	0~150

Product feature

1. Variable models can be widely used in every kind of pneumatic systems.
2. High circulation performance bear the same flow with the volume of the tube innerdiameter.
3. The nickel plated body is anti-corrosion and anti-pollution, which allows a broader application.
4. Metal fittings can be used in high temperature environment.

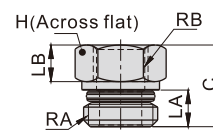
Dimensions

GBB Series



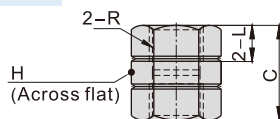
Model\Item	RA	RB	LA	LB	C	H	Weight(g)	PCS/bag
GBB0101	G1/8	G1/8	5.5	5.5	15.5	10	3.2	10
GBB0102	G1/4	G1/8	6.5	5.5	20	14	7.3	10
GBB0103	G3/8	G1/8	7	5.5	21.5	19	15.3	10
GBB0202	G1/4	G1/4	6.5	6.5	21	14	8.4	10
GBB0203	G3/8	G1/4	7	6.5	22.5	19	15.9	10
GBB0204	G1/2	G1/4	8.5	6.5	24.5	22	22.4	10
GBB0303	G3/8	G3/8	7	7	23.5	19	17.8	10
GBB0304	G1/2	G3/8	8.5	7	25	22	23	10
GBB0404	G1/2	G1/2	8.5	8.5	27	22	23.3	10

GBD Series



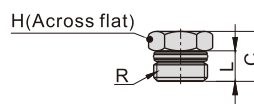
Model\Item	RA	RB	LA	LB	C	H	Weight(g)	PCS/bag
GBD0102	G1/4	G1/8	6.5	8	14.5	14	8.8	10
GBD0103	G3/8	G1/8	7	8	14	19	17.7	10
GBD0104	G1/2	G1/8	8.5	8	16	22	29.5	10
GBD0203	G3/8	G1/4	7	8.5	16	19	16.4	10
GBD0204	G1/2	G1/4	8.5	8.5	16	22	26.3	10
GBD0304	G1/2	G3/8	8.5	9.5	19	22	24.5	10

GBU Series



Model\Item	R	L	C	H	Weight(g)	PCS/bag
GBU0101	G1/8	6.5	17	14	8.4	10
GBU0202	G1/4	8.5	23	17	25.4	10
GBU0303	G3/8	9.5	25	21	40	10
GBU0404	G1/2	11	28	25	46.6	10

GBZ Series




Model\Item	R	L	C	H	Weight(g)	PCS/bag
GBZ01	G1/8	5.5	9	10	3.7	10
GBZ02	G1/4	6.5	12.5	14	9.2	10
GBZ03	G3/8	7	14	19	18	10
GBZ04	G1/2	8.5	16	22	29.4	10

One-touch fittings—threaded type

Ordering code

GBKC 06 04 - 01

① ② ③ ④

① Model	② Tubing outer diameter	③ Tubing inner diameter	④ Thread connection
GBKC: Straight locknut connector (G thread) 	04: Φ4mm 06: Φ6mm 08: Φ8mm 10: Φ10mm 12: Φ12mm	25: Φ2.5mm 04: Φ4mm 05: Φ5mm 06: Φ6mm 65: Φ6.5mm 75: Φ7.5mm 08: Φ8mm 09: Φ9mm	M3: M3X0.5 M5: M5X0.8 01: G1/8 02: G1/4 03: G3/8 04: G1/2

Note: When using the tubing Φ8×Φ5.5, the straight lock nut connector of GBKC0806 can be used.

Specification

Operating pressure range	0~10kgf/cm ² (0~1.0MPa)
Negative pressure	-750mmHg(10Torr)
Proof pressure	3.0MPa
Ambient and fluid temperature (°C)	0~150

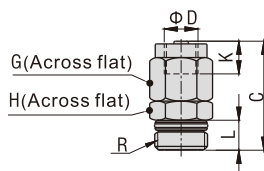
Note: The temperature resistance level of the tubing should be confirmed first when used in high temperature environments.

Product feature

1. Variable models can be widely used in every kind of pneumatic systems.
2. High circulation performance bear the same flow with the volume of the tube innerdiameter.
3. The nickel plated body is anti-corrosion and anti-pollution, which allows a broader application.
4. Metal fittings can be used in high temperature environments.

Dimensions

GBKC Series



Model/Item	ΦD		R	L	C	K	G	H	Weight (g)	PCS/bag	Model/Item	ΦD		R	L	C	K	G	H	Weight (g)	PCS/bag								
	O.D	I.D										O.D	I.D																
GBKC0425-M3	4	2.5	M3×0.5	3	17	5	8	8	4.4	10	GBKC1065-02	10	6.5	G1/4	6.5	28	7.5	15	15	23.7	10								
GBKC0425-M5			M5×0.8	3.5	17.5				8	4.8	10			GBKC1065-03	G3/8	7			29.5	19	29.7	10							
GBKC0425-01			G1/8	5.5	18.5				10	6.2	10			GBKC1065-04	G1/2	8.5			32	22	40.5	10							
GBKC0604-01	6	4	G1/8	5.5	20	5.5	10	9	10	GBKC1075-02	12			7.5	8	G1/4			6.5	28	7.5	17	15	22.5	10				
GBKC0604-02			G1/4	6.5	23.5			14	14.2	10						GBKC1075-03			G3/8	7			29.5	19	29.5	10			
GBKC0604-03			G3/8	7	25			19	23.1	10						GBKC1075-04			G1/2	8.5			32	22	40.1	10			
GBKC0805-01	8	5	G1/8	5.5	23.5	6.5	12	12	12.6	10		GBKC1208-02	12			8	G1/4	6.5	28	7.5			17	17	28.9	10			
GBKC0805-02			G1/4	6.5	25.5			14	15.6	10		GBKC1208-03					G3/8	7	29.5					19	32.7	10			
GBKC0805-03			G3/8	7	27			19	24.3	10		GBKC1208-04					G1/2	8.5	32					22	43.2	10			
GBKC0806-01			5.5 or 6	5.5	G1/8			5.5	23.5	6.5	12	12		12.9	10		GBKC1209-02	12	9 or 10		G1/4	6.5		28	7.5	17	17	29	10
GBKC0806-02					G1/4			6.5	25.5			14		15.6	10		GBKC1209-03				G3/8	7		29.5			19	32.5	10
GBKC0806-03					G3/8			7	27			19		24.2	10		GBKC1209-04				G1/2	8.5		32			22	42.9	10

Installation and application

1. Method of inserting or removal a tubing

1.1 Inserting a tubing

Place the locking cap over the tubing, and insert the tubing into the body, then tighten the locking cap. (As figure 1)

1.2 Removing a tubing

Loosen the locking cap first, then remove the tubing. (As figure 2)

2. Method of tightening the connector thread

Tighten the connector with a hex wrench, as shown right.

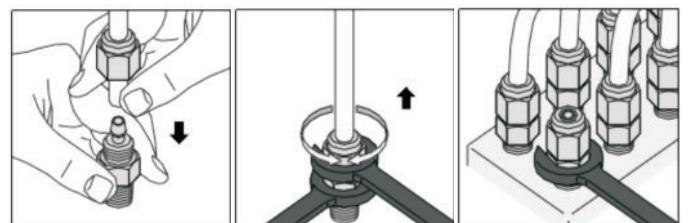


Figure 1

Figure 2

Figure 3

One-touch fittings—tube-tube type

Ordering code

Same diameter type fittings

GPE 6 □

① ② ③

① Model				② Port size	③ Standard color		
GPM: Bulkhead union 	GPE: Union tee 	GPP: Plug 	GPV: Union elbow 	4: Φ4mm 6: Φ6mm 8: Φ8mm 10: Φ10mm 12: Φ12mm	Standard color	Specification	Adaptable model
GPLM: Bulkhead male elbow 	GPY: Union "Y" 	GPZ: Cross 	GPU: Straight union 		Blank: Gray	Release button: Gray Body: Gray	GPM Others
					D: Black	Release button: Black Body: Black	GPM Others

Different diameter type fittings

GPEG 6-4 □

① ② ③ ④

① Model					② Port size I	③ Port size II	④ Standard color	
GPG: Different diameter straight 	GPZG: Different diameter cross 	GPEW: Different diameter tee 	GPYW: Different diameter union "Y" 	GPGJ: Plug-in reducer 	4: Φ4mm 6: Φ6mm 8: Φ8mm 10: Φ10mm 12: Φ12mm	4: Φ4mm 6: Φ6mm 8: Φ8mm 10: Φ10mm	Standard color	Specification
GPEG: Different diameter tee 	GPKG: Reducer triple branch union 	GPHK: Universal reducer triple branch union 	GPHD: Universal reducer four branch union 				Blank: Gray	Release button: Gray Body: Gray
							D: Black	Release button: Black Body: Black

Specification

Operating pressure range	0~10kgf/cm ² (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	Gray/black

Product feature

1. Variable models can be widely used in every kind of pneumatic systems.
2. High circulation performance: bear the same flow with the volume of the tubing inside diameter.
3. Connect tubing easily and conveniently. The tubing connection portion is safe and durable.
4. The threaded portion is covered with sealant and the M5 thread is attached with a sealing gasket to prevent air leakage over the connection thread portion.

Inner structure

GPM Series		
No.	Item	Material
1	Release button	POM
2	Guide	Aluminum alloy
3	Spring gasket	Stainless steel
4	Chuck	POM
5	O-ring	NBR
6	Body	Aluminum alloy
7	Rubber washer	NBR
8	Nut	Aluminum alloy

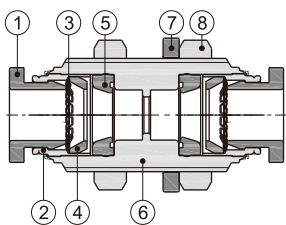


Table for interface port and tube O.D.

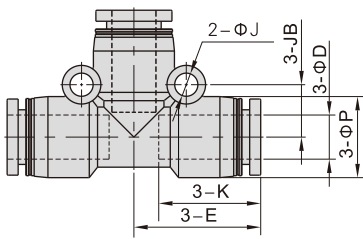
Product series	Port size I	Port size II				
		Φ4	Φ6	Φ8	Φ10	
GPG GPGJ	Φ4					
	Φ6	●				
	Φ8	●	●			
	Φ10		●	●		
	Φ12			●	●	
GPEG GPEW GPYW	Φ4					
	Φ6	●				
	Φ8		●			
	Φ10			●		
	Φ12			●	●	
GPZG	Φ4					
	Φ6	●				
	Φ8		●			
	Φ10			●		
GPKG GPHD	Φ4					
	Φ6	●				
	Φ8		●			
	Φ10			●		
GPHK GPHD	Φ4					
	Φ6					
	Φ8		●			
	Φ10			●		
Product series		Port size				
		Φ4	Φ6	Φ8	Φ10	Φ12
	GPE, GPY, GPV, GPU	●	●	●	●	●
	GPM, GPLM, GPP, GPZ	●	●	●	●	●

Accessories—One-Touch Fittings

One-touch fittings—tube-tube type

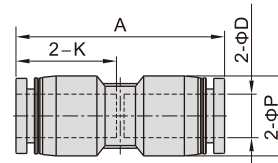
Dimensions

GPE Series



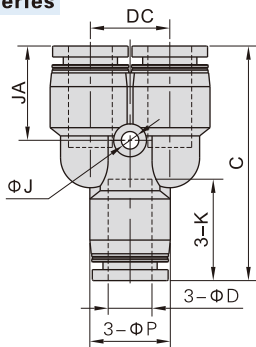
Model\Item	ΦD	ΦP	K	E	φJ	JB	Weight(g)	PCS/bag
GPE4	4	9	14	17	3.2	6.5	3.1	10
GPE6	6	12.5	16.5	20	3.2	8	6.1	10
GPE8	8	15	18.5	23	4.3	9.5	8.8	10
GPE10	10	18	21	26.5	4.3	11	13.8	10
GPE12	12	21	23	30	4.3	13	21	10

GPU Series



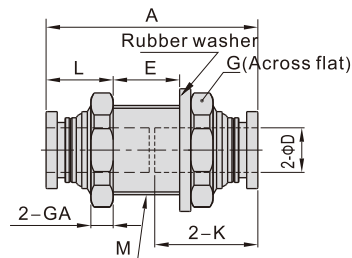
Model\Item	ΦD	ΦP	K	A	Weight(g)	PCS/bag
GPU4	4	9	14	29.5	1.7	10
GPU6	6	12.5	16.5	34	3.6	10
GPU8	8	15	18.5	38.5	5	10
GPU10	10	18	21	43	8.1	10
GPU12	12	21	23	47	12	10

GPY Series



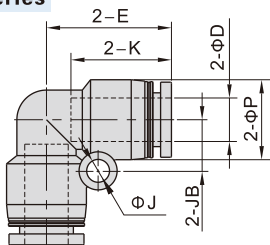
Model\Item	ΦD	ΦP	C	K	φJ	JA	DC	Weight(g)	PCS/bag
GPY4	4	9	31.5	14	3.2	13	10	3	10
GPY6	6	12.5	37	16.5	3.2	15.5	12	6	10
GPY8	8	15	42.5	18.5	3.2	17	14.5	8.6	10
GPY10	10	18	48.5	21	4.3	19.5	18	14	10
GPY12	12	21	54.5	23	4.3	21	20.5	21.2	10

GPM Series



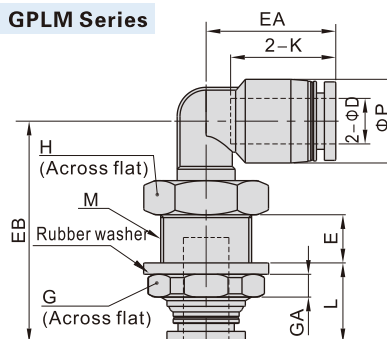
Model\Item	ΦD	M	A	K	L	E	GA	G	Weight(g)	PCS/bag
GPM4	4	M12X1	29	14	10	7	4	14	6.2	10
GPM6	6	M14X1	34	16.5	10.5	11	4	17	9.5	10
GPM8	8	M16X1	38	18.5	11.5	13	4	19	15.7	10
GPM10	10	M20X1	43	21	12.5	16	5	24	22.5	10
GPM12	12	M22X1	46.5	23	13.5	17.5	6	27	29.5	10

GPV Series



Model\Item	ΦD	ΦP	K	E	φJ	JB	Weight(g)	PCS/bag
GPV4	4	9	14	17	3.2	6.5	1.9	10
GPV6	6	12.5	16.5	20	3.2	8	4.2	10
GPV8	8	15	18.5	23	4.3	9.5	6	10
GPV10	10	18	21	26.5	4.3	11	9.3	10
GPV12	12	21	23	30	4.3	13	14.6	10

GPLM Series

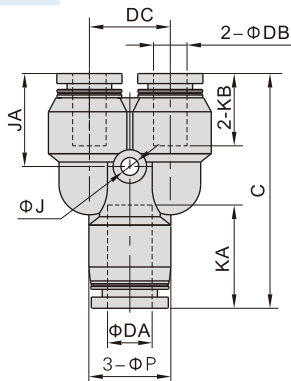


Model\Item	ΦD	ΦP	M	L	E	K	EA	EB	GA	G	H	Weight(g)	PCS/bag
GPLM4	4	9	M12X1	12	7.5	14	17	31	4	14	14	7.5	10
GPLM6	6	12.5	M14X1	12.5	8.5	17	20	35.5	4	17	17	12.1	10
GPLM8	8	15	M16X1	13.5	9	18.5	23	39	4	19	19	16.6	10
GPLM10	10	18	M20X1	14.5	11	21	25.5	44.5	5	24	22	26.2	10
GPLM12	12	21	M22X1	15.5	11	23	29.5	48	6	27	24	34	10

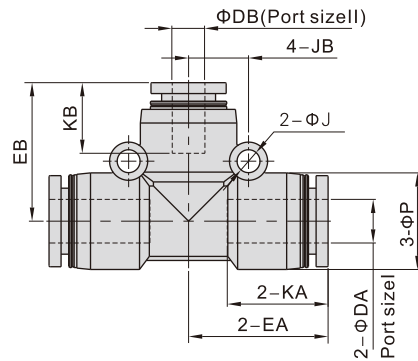
Accessories—One-Touch Fittings

One-touch fittings—tube-tube type

GPYW Series



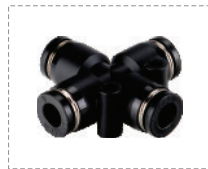
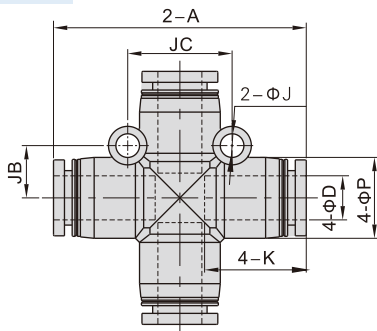
GPEG Series



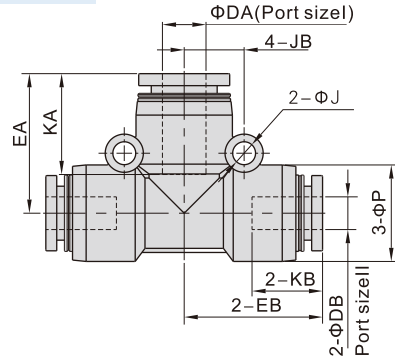
Model\Item	φDA	φDB	C	φP	KA	KB	φJ	JA	DC	Weight(g)	PCS/bag
GPYW6-4	6	4	36.5	12.5	16.5	14	3.2	15	12	5.8	10
GPYW8-6	8	6	42	15	18.5	16.5	3.2	16.5	14.5	9.1	10
GPYW10-8	10	8	48.5	18	21	18.5	4.3	19	18	14.1	10
GPYW12-8	12	8	54	21	23	18.5	4.3	20.5	20.5	22.3	10
GPYW12-10	12	10	54.5	21	23	21	4.3	21	20.5	21.7	10

Model\Item	φDA	φDB	φP	KA	KB	EA	EB	φJ	JB	Weight(g)	PCS/bag
GPEG6-4	6	4	12.5	16.5	14	20.0	19.5	3.2	8	7	10
GPEG8-6	8	6	15	18.5	16.5	22.5	22	4.3	9.5	22.8	10
GPEG10-8	10	8	18	21	18.5	25.5	25.5	4.3	11	15.1	10
GPEG12-8	12	8	21	23	18.5	29	28.5	4.3	13	2.2	10
GPEG12-10	12	10	21	23	21	29	29	4.3	13	21.5	10

GPZ Series



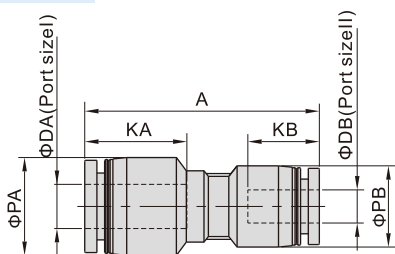
GPEW Series



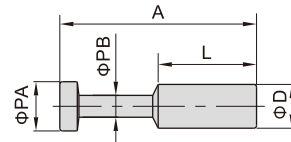
Model\Item	φD	A	φP	K	φJ	JB	JC	Weight(g)	PCS/bag
GPZ4	4	34	9	14	3.2	6.5	13	3.9	10
GPZ6	6	39.5	12.5	16.5	3.2	8	16	7.9	10
GPZ8	8	46	15	18.5	4.3	9.5	19	11.1	10
GPZ10	10	52.5	18	21	4.3	11	22	17.5	10
GPZ12	12	59.5	21	23	4.3	13	26	26.6	10

Model\Item	φDA	φDB	φP	KA	KB	EA	EB	φJ	JB	Weight(g)	PCS/bag
GPEW6-4	6	4	12.5	16.5	14	20	19.5	3.2	8	7	10
GPEW8-6	8	6	15	18.5	16.5	22.5	22	4.3	9.5	22.8	10
GPEW10-8	10	8	18	21	18.5	25.5	25.5	4.3	11	15.1	10
GPEW12-8	12	8	21	23	18.5	29	28.5	4.3	13	2.2	10
GPEW12-10	12	10	21	23	21	29	29	4.3	13	21.5	10

GPG Series



GPP Series



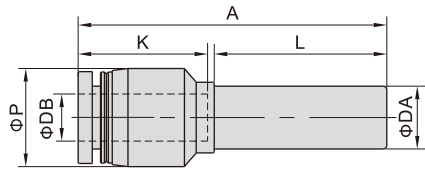
Model\Item	φDA	φDB	φPA	φPB	KA	KB	A	Weight(g)	PCS/bag
GPG6-4	6	4	12.5	9	16.5	14	33.5	2.7	10
GPG8-4	8	4	15	12.5	18.5	14	37.5	4.5	10
GPG8-6	8	6	15	12.5	18.5	16.5	38	4.5	10
GPG10-6	10	6	18	15	21	16.5	42	6.9	10
GPG10-8	10	8	18	15	21	18.5	42.5	6.7	10
GPG12-8	12	8	21	18	23	18.5	46.5	10.3	10
GPG12-10	12	10	21	18	23	21	47	10.2	10

Model\Item	φD	φPA	φPB	L	A	Weight(g)	PCS/bag
GPP4	4	5	3	15	27.5	0.7	10
GPP6	6	7	3	17	32	0.9	10
GPP8	8	9	4	18	36	1.6	10
GPP10	10	11	5	20	42	2.5	10
GPP12	12	13	6	23	44	4.3	10

Accessories—One-Touch Fittings

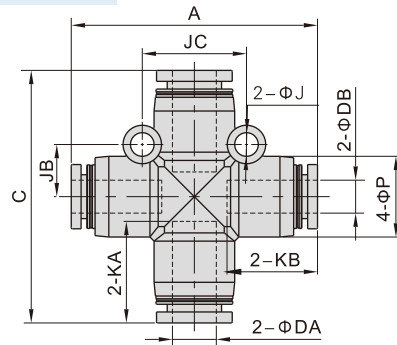
One-touch fittings—tube-tube type

GPGJ Series



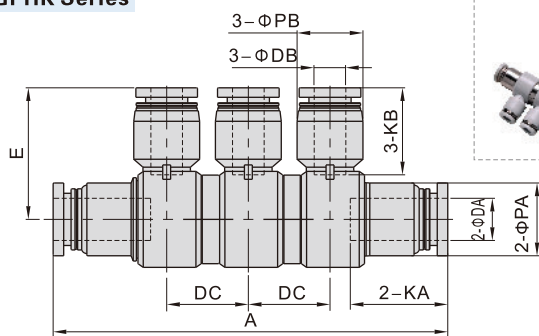
Model\Item	ΦDA	ΦDB	ΦP	K	L	A	Weight(g)	PCS/bag
GPGJ6-4	6	4	9	14	21	35	1.5	10
GPGJ8-4	8	4	12.5	14	22	39	2.6	10
GPGJ8-6	8	6	12.5	16.5	22	39.5	3.2	10
GPGJ10-6	10	6	15	16.5	25	44	4.1	10
GPGJ10-8	10	8	15	18.5	25	44.5	3.9	10
GPGJ12-8	12	8	18	18.5	26	48.5	6.2	10
GPGJ12-10	12	10	18	21	26	49	6	10

GPZG Series



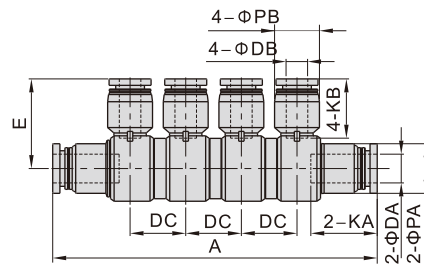
Model\Item	ΦDA	ΦDB	A	C	ΦP	KA	KB	ΦJ	JB	JC	Weight(g)	PCS/bag
GPZG6-4	6	4	39	39.5	12.5	16.5	14	3.2	8	16	8.2	10
GPZG8-6	8	6	45	46	15	18.5	16.5	4.3	9.5	19	12	10
GPZG10-8	10	8	52	52.5	18	21	18.5	4.3	11	22	18.1	10
GPZG12-10	12	10	59	59.5	21	23	21	4.3	13	26	29	10

GPHK Series



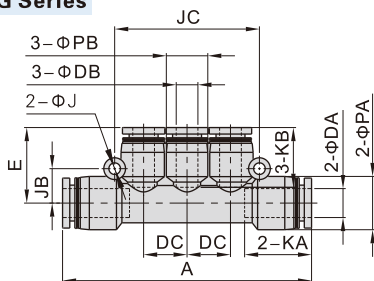
Model\Item	ΦDA	ΦDB	A	ΦPA	ΦPB	KA	KB	DC	E	Weight(g)	PCS/bag
GPHK8-6	8	6	75	14	12.5	18.5	16.5	15.5	25	28.4	2
GPHK10-8	10	8	85.5	17	15	21	18.5	16.5	29.5	45	2

GPHD Series



Model\Item	ΦDA	ΦDB	A	ΦPA	ΦPB	KA	KB	DC	E	Weight(g)	PCS/bag
GPHD8-6	8	6	90.5	14	12.5	18.5	16.5	15.5	25	18.7	2
GPHD10-8	10	8	102.5	17	15	21	18.5	16.5	29.5	52.7	2

GPKG Series



Model\Item	ΦDA	ΦDB	A	ΦPA	ΦPB	KA	KB	ΦJ	JB	JC	DC	E	Weight(g)	PCS/bag
GPKG6-4	6	4	58.5	12.5	9	16.5	14	3.2	8	34	10	17.5	8.6	5
GPKG8-6	8	6	69	15	12.5	18.5	16.5	3.2	9.5	40	12	21	13.5	5
GPKG10-8	10	8	80	18	15	21	18.5	4.3	11	48	14.5	24	20.7	5

GPSSA, GPSS series

Ordering code

GPSS 6 01 A □

① ② ③ ④ ⑤

① Model	② Port size	③ Thread connection		④ Control method	⑤ Standard color	
GPSS: Universal speed controller(G thread) 	4: Φ4mm 6: Φ6mm 8: Φ8mm 10: Φ10mm 12: Φ12mm	Thread	Adaptable port size	A: Meter-out Controlled flow Free flow Handle marking "A" 	Standard color	Specification
		M5: M5X0.8	Φ4		Blank: Gray	Release button: Gray Body: Gray
		01: G1/8 02: G1/4 03: G3/8 04: G1/2	Φ4, Φ6 Φ8, Φ10 Φ12	B: Meter-in Free flow Controlled flow Handle marking "B" 	D: Black	Release button: Black Body: Black

GPSSA 6 □

① ② ③

① Model	② Port size	③ Standard color	
GPSSA: Straight speed controller 	4: Φ4mm 6: Φ6mm 8: Φ8mm 10: Φ10mm 12: Φ12mm	Standard color	Specification
		Blank: Gray	Release button: Gray Body: Gray
		D: Black	Release button: Black Body: Black

Product feature

1. The silencer is small size, and light weight with small installation space.
2. Excellent flow characteristics, high sensitivity and easy to adjust.
3. The silencer brass body adopts a special nickel-plating process, which has good corrosion resistance and anti-pollution property.
4. Anti-drop structure is designed on the regulating rod.
5. The sealant being coated on threaded portion can ensure no leakage of the threaded connection part.
6. The inserting direction of universal speed controller can be adjusted in 360°.

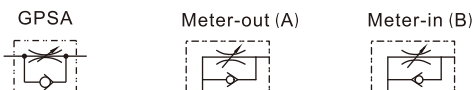
Specification

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	Gray/black

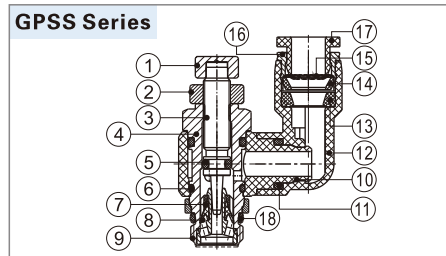
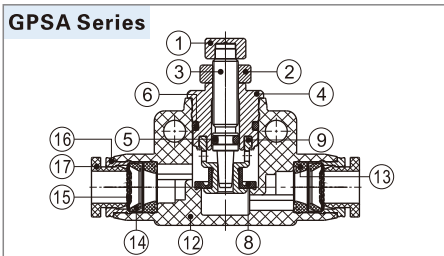
Table for interface port and tube O.D.

Product series	Thread type	Port size				
		Φ4	Φ6	Φ8	Φ10	Φ12
GPSSA	-	●	●	●	●	●
	M5	●				
GPSS	G1/8		●	●		
	G1/4		●	●	●	
	G3/8				●	●
	G1/2					●

Symbol



Inner structure

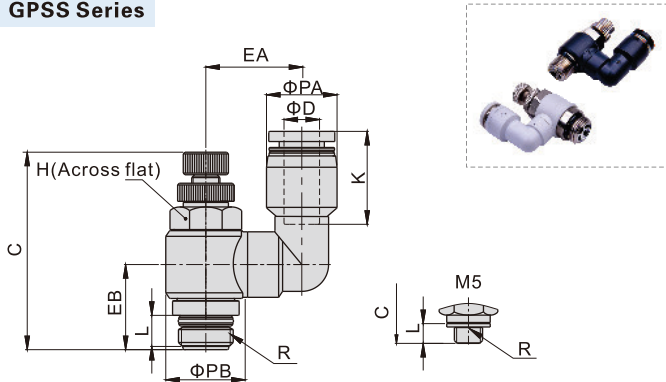


NO.	Name	Material	NO.	Name	Material	NO.	Name	Material
1	Adjusting cap	Aluminum alloy	7	Holder	PBT	13	O-ring	NBR
2	Locking cap	Aluminum alloy	8	O-ring	NBR	14	Locating seat	POM
3	Throttling column	Brass	9	Throttling sleeve	Aluminum alloy/Brass	15	Spring gasket	Stainless steel
4	Throttling body	Brass	10	Plastic body	PBT	16	Locating ring	Aluminum alloy
5	O-ring	NBR	11	O-ring	NBR	17	Plastic interface	POM
6	O-ring	NBR	12	Plastic body	PBT	18	O-ring	NBR

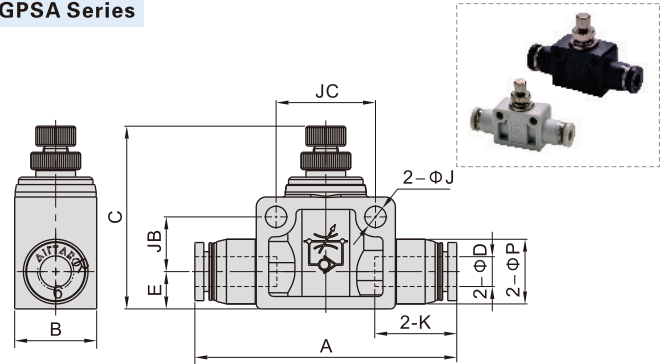
GPSSA, GPSS series

Dimensions

GPSS Series



GPSSA Series



Model/Item [Note1]	ΦD	R	ΦPA	ΦPB	L	C		K	EA	EB	H	Weight (g)	PCS/bag
						max	min						
GPSS4M5□	4	M5×0.8	9	10	3.5	30	27.5	14	12.5	9.5	8	8.1	2
GPSS601□	6	G1/8	12.5	14	5.5	41.5	35	17	17	15	11	19	2
GPSS602□		G1/4	12.5	18	6.5	47.5	41	17	19	17.5	14	34.7	2
GPSS801□	8	G1/8	15	14	5.5	41.5	35	18.5	17	15	11	20.2	2
GPSS802□		G1/4	15	18	6.5	47.5	41	18.5	19	17.5	14	39.8	2
GPSS1002□	10	G1/4	18	18	6.5	47.5	41	21	20.5	17.5	14	37.2	2
GPSS1003□		G3/8	18	22.5	7	52.5	45.5	21	24	20	19	66	2
GPSS1203□	12	G3/8	21	22.5	7	52.5	45.5	23	25.5	20	19	69.2	2
GPSS1204□		G1/2	21	28	8.5	58.5	51.5	23	28	25	24	105.8	2

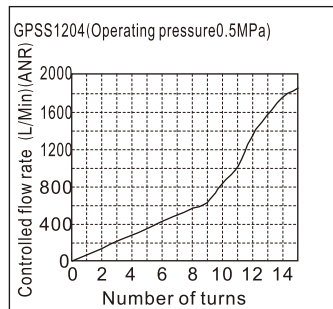
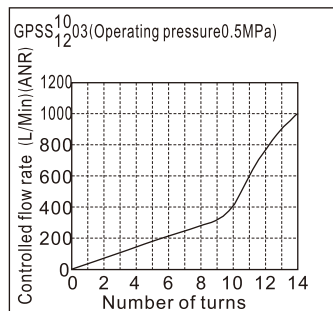
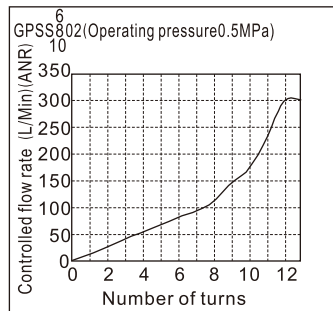
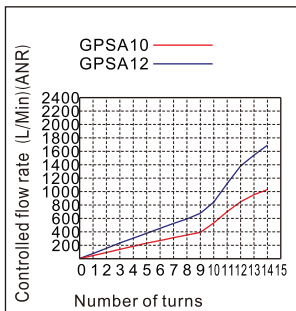
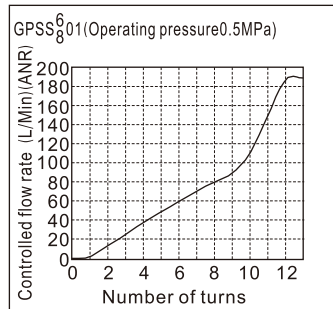
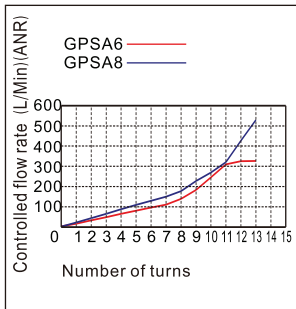
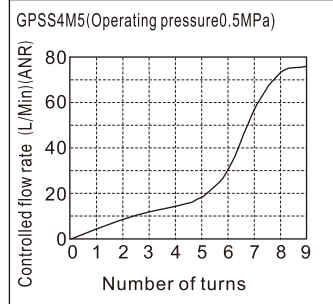
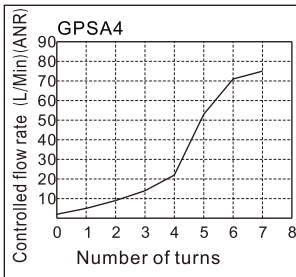
Model/Item	ΦD	A	B	C		ΦP	E	K	ΦJ	JB	JC	Weight (g)	PCS/bag
				max	min								
GPSSA4	4	41	11	29	26.5	9.5	7	14	3.2	6	14	7.85	2
GPSSA6	6	52.5	16.5	43.5	36.5	13	7.5	16.5	4.3	11	20	18.3	2
GPSSA8	8	59.5	16.5	47	40	15	8.5	18.5	4.3	11	22	23.5	2
GPSSA10	10	69	21	53.5	46.5	18	10.5	21	4.3	14.5	26	42.4	2
GPSSA12	12	78.5	26	58.5	51	21.5	12	23	4.3	17.5	32	67.5	2

[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.

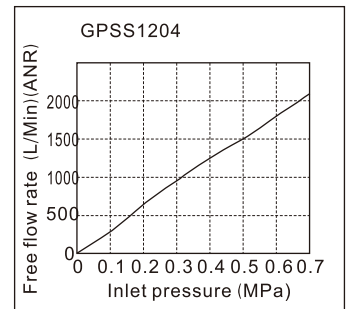
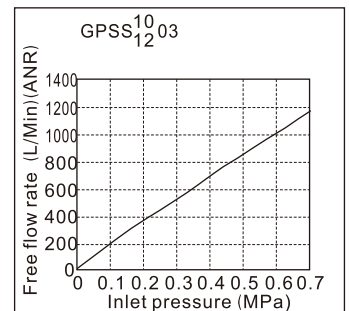
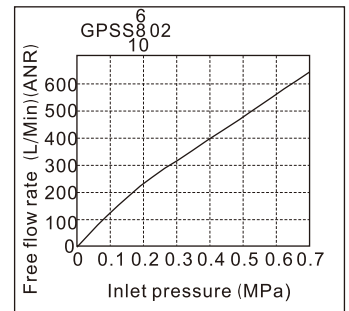
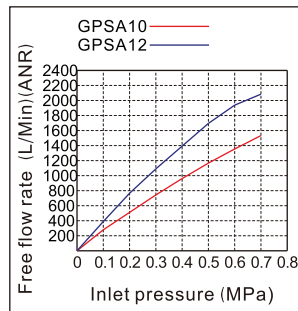
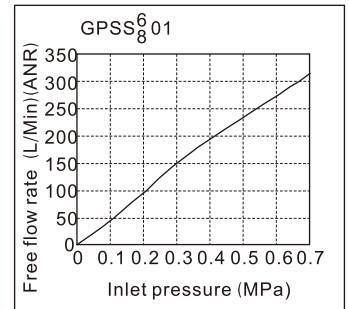
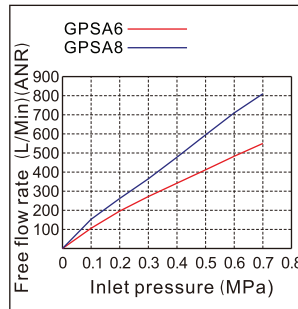
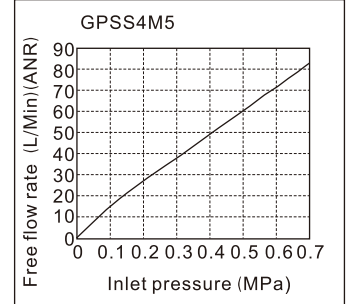
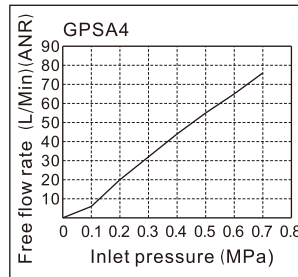
GPSSA, GPSS series

Flowrate characteristic

Controlled flow rate



Free flow rate



Selection, Installation and Operation

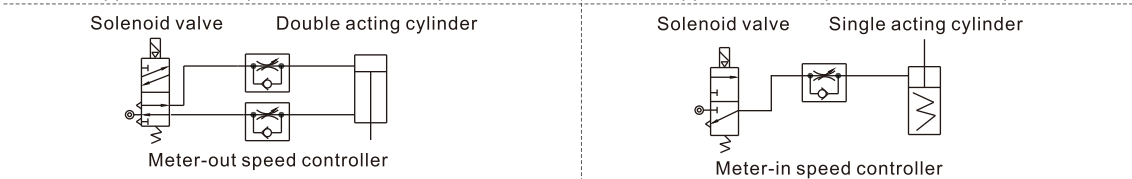
Selection

1. The speed controller has meter-out type and meter-in type:

	Working principle	Product identification
<p>Controlled flow Free flow</p>	A: Meter-out 1. The air flow is controlled from the threaded end to tubing connection end. 2. The air flow is free from the tubing connection end to the threaded end.	Handle marking "A"
<p>Free flow Controlled flow</p>	B: Meter-in 1. The air flow is free from the threaded end to tubing connection end. 2. The air flow is controlled from the tubing connection end to the threaded end.	Handle marking "B"

2. Select the different control method according to the actual requirement. The meter-out type is the first priority.

2.1. The application example of the meter-out speed controller | 2.2. The application example of the meter-in speed controller



Installation

1. Installation and removal of tubing:

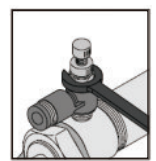
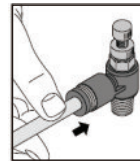
1.1. Installation of tubing

Grasp the tubing and slowly push it into the fitting until it comes to a stop. The tubing will be locked by the spring gasket.

1.2. Removal of tubing

Push the release button to open the spring gasket so that the tubing can be released.

Note: When remove the tubing, make sure the pressure in the tubing is Zero.



2. Mounting of the speed controller

Mount the speed controller into the inlet and outlet port of the cylinder with a wrench.

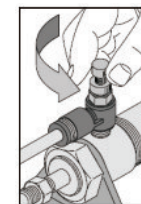
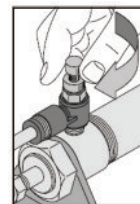
Note: Please refer to the fittings for the tightening torque and thread screw-in depth.

Operation

1. Adjustment of the cylinder speed

1.1. Make sure the speed controller is turned off before applying air pressure. The cylinder may fly out due to the high speed if the air is inlet when the speed controller is turned on.

1.2. Adjust the speed by opening the needle slowly from the fully closed state. When a needle valve is turned clockwise, the air flow through is reduced and the actuator speed decreases. When a needle valve is turned counter-clockwise, the air flow through is increased and the actuator speed increases.



2. Operation of the speed controller

2.1. Do not use tools such as pliers to rotate the handle. Do not apply excessive force or shock when the needle is at the place of top or bottom. It can cause damage or air leakage.

2.2. A certain amount of leakage is allowed in the closed state of the speed controller. It is not designed for the use as stop valve with zero air leakage.

GPTL Mini series

Ordering code

GPTL 6 M5 A □ -M

① ② ③ ④ ⑤ ⑥

① Model	② Port size	③ Thread connection	④ Control method	⑤ Standard color		⑥ Style
GPTL: Speed controller (Push lock) (G Thread) 	4: Φ4mm 6: Φ6mm	M5: M5X0.8 01: G1/8	A: Meter-out 	Standard color	Specification	M: Mini type
			B: Meter-in 	Blank: Gray	Release button: Gray Body: Gray	
				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	Gray/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 copper.

Symbol

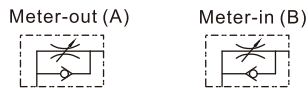


Table for interface port and tube O.D.

Product series	Thread type	Port size	
		Φ4	Φ6
GPTL	M5	●	●
	G1/8	●	●

Selection, Installation and Operation

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

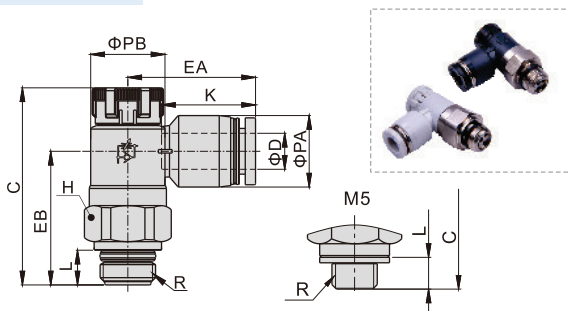
It is recommended to use the torque below.

Thread size	Recommended torque(N.m)
M5	0.05
G1/8	0.08

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

Dimensions

GPTL Mini series



Model/Item [Note1]	ΦD	R	ΦPA	ΦPB	L	C		K	EA	EB	H	Weight (g)	PCS/bag
						Pull	Push						
GPTL4M5□-M	4	M5×0.8	8.5	9	3.5	29.5	28	12.5	16.5	19	9	5	2
GPTL401□-M													
GPTL6M5□-M	6	M5×0.8	10.5	9	3.5	29.5	28	13.5	19.5	19	9	6.2	2
GPTL601□-M													

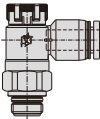
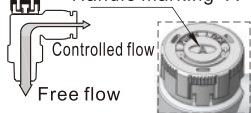

[Note1] "□" stands for A or B. A indicates meter-out type while B indicates meter-in type. The two types are with the same overall dimension.

GPTL series

Ordering code

GPTL 6 01 A □

① ② ③ ④ ⑤

① Model	② Port size	③ Thread connection	④ Control method	⑤ Standard color
GPTL: Speed controller (Push lock) (G Thread) 	6: Φ6mm	01: G1/8 02: G1/4 03: G3/8	A: Meter-out 	Standard color Blank: Gray Specification Release button: Gray Body: Gray
	8: Φ8mm	01: G1/8 02: G1/4 03: G3/8 04: G1/2	B: Meter-in 	D: Black Release button: Black Body: Black
	10: Φ10mm	02: G1/4 03: G3/8 04: G1/2		
	12: Φ12mm	03: G3/8 04: G1/2		

Specification

Operating pressure range	0~10kgf/cm ² (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	Gray/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 copper.

Symbol

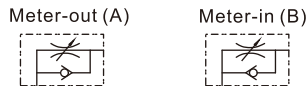


Table for interface port and tube O.D.

Product series	Thread type	Port size			
		Φ6	Φ8	Φ10	Φ12
GPTL	G1/8	●	●		
	G1/4	●	●	●	
	G3/8	●	●	●	●
	G1/2		●	●	●

Selection, Installation and Operation

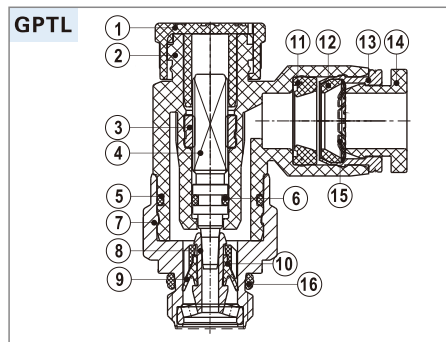
1. The rotation torque of the push-lock speed controller cap should not be too large to avoid damage.

It is recommended to use the torque below.

Thread size	Recommended torque(N.m)
G1/8	0.08
G1/4	0.16
G3/8	0.24
G1/2	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

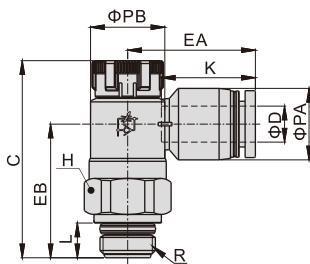


NO.	Name	Material	NO.	Name	Material
1	Adjusting cap	POM	9	Holder	PBT
2	Plastic body	PBT	10	O-ring	NBR
3	Locating ring	Aluminum alloy	11	O-ring	NBR
4	Throttling column	Aluminum alloy	12	Locating seat	POM
5	O-ring	NBR	13	Locating ring	Aluminum alloy
6	O-ring	NBR	14	Plastic interface	POM
7	Throttling body	Brass	15	Spring gasket	Stainless steel
8	Throttling sleeve	Aluminum alloy	16	O-ring	NBR

GPTL series

Dimensions

GPTL Series

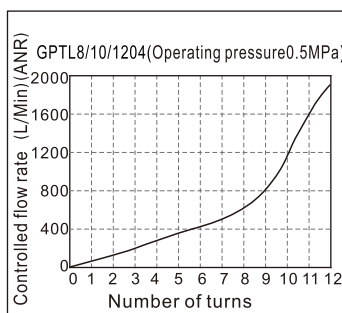
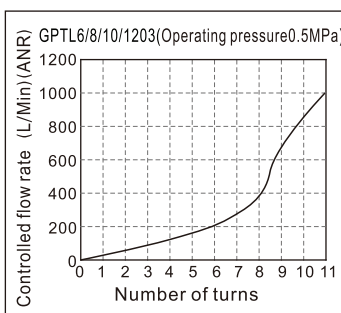
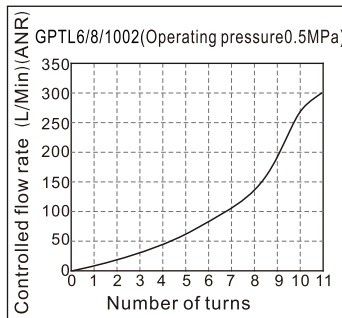
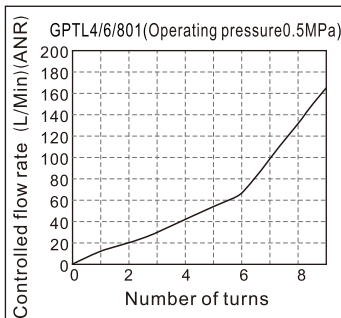
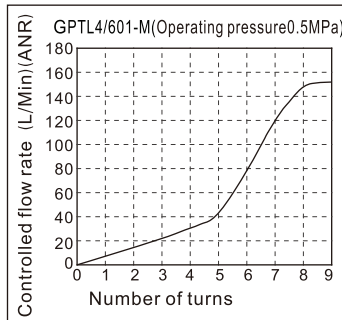
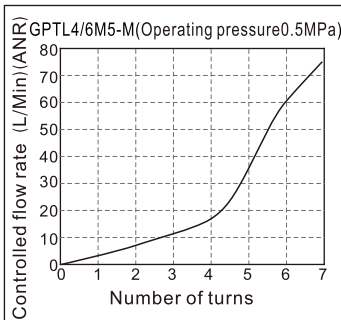


Model\Item [Note1]	ΦD	R	ΦPA	ΦPB	L	C		K	EA	EB	H	Weight (g)	PCS/bag
						Pull	Push						
GPTL601□	6	G1/8	12.5	13	5.5	36	34.5	16.5	22.5	23.5	14	12.5	2
GPTL602□		G1/4	12.5	16.5	6.5	40.5	39	16.5	24	28	17	19.5	2
GPTL603□		G3/8	12.5	19	7	44	42.5	16.5	25.5	31	19	28.5	2
GPTL801□	8	G1/8	15	13	5.5	36	34.5	18.5	24.5	22.5	14	13	2
GPTL802□		G1/4	15	16.5	6.5	40.5	39	18.5	26	27	17	20.5	2
GPTL803□		G3/8	15	19	7	44	42.5	18.5	27	30	19	29	2
GPTL804□		G1/2	15	24	8.5	52.5	51	18.5	29.5	37.5	24	49	2
GPTL1002□	10	G1/4	18	16.5	6.5	40.5	39	21	31	26	17	22	2
GPTL1003□		G3/8	18	19	7	44	42.5	21	29	29	19	30.5	2
GPTL1004□		G1/2	18	24	8.5	52.5	51	21	31.5	36.5	24	50.5	2
GPTL1203□	12	G3/8	21	19	7	44	42.5	23	34.5	28	19	32.5	2
GPTL1204□		G1/2	21	24	8.5	52.5	51	23	34	28	24	53	2

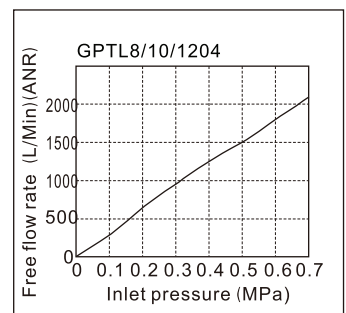
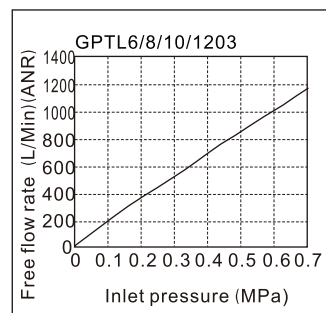
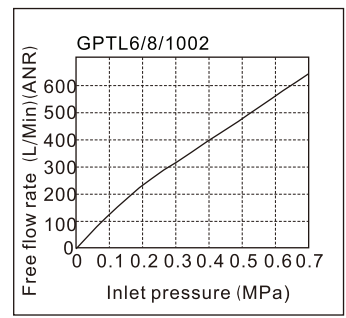
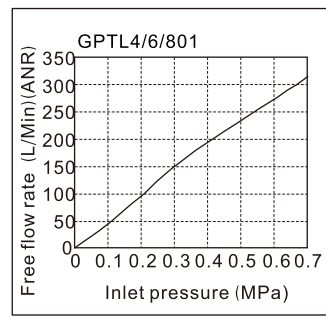
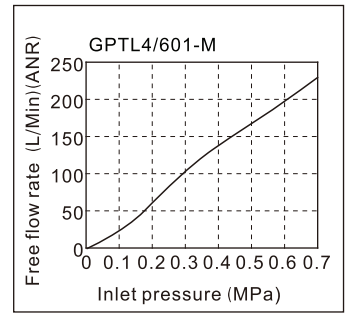
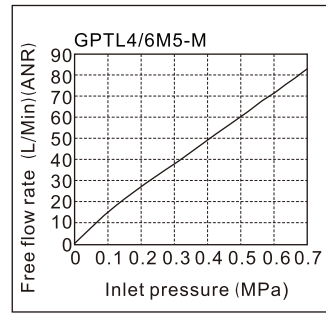
[Note1] "□" stands for A or B. A indicates meter-out type while B indicates meter-in type. The two types are with the same overall dimension.

Flowrate characteristic

Controlled flow rate



Free flow rate



GPHV series



Specification

Model	GPHV6	GPHV8	GPHV10	GPHV12
Operating pressure range	0~10kgf/cm ² (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	Gray/black			

Symbol



Product feature

1. GPHV series product doesn't contain brass, so can be used for forbidding brass condition.
2. When the three-way valve is closed, the outlet pressure is released, which facilitates in commissioning and maintenance.
3. The finger valve has excellent flow characteristic and high sensitive anti-direction characteristic.

Ordering code

GPHV 6 A □



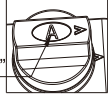
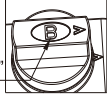
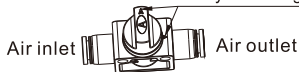
① Fitting type	② Port size	③ Valve specification	④ Standard color
GPHV: Finger valve	6: Φ6mm	A: Three-way B: Two-way Knob identifier "A"  Knob identifier "B" 	Blank: Gray(Release button: Gray Body: Gray) D: Black(Release button: Black Body: Black)
	8: Φ8mm		
	10: Φ10mm		
	12: Φ12mm		

Diagram of finger valve in the open and closed states

Closed state

Valve is closed, when the angle between the arrow on knob and the arrow on valve body is 90 degree

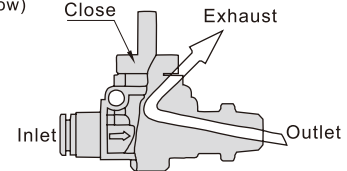


Opened state

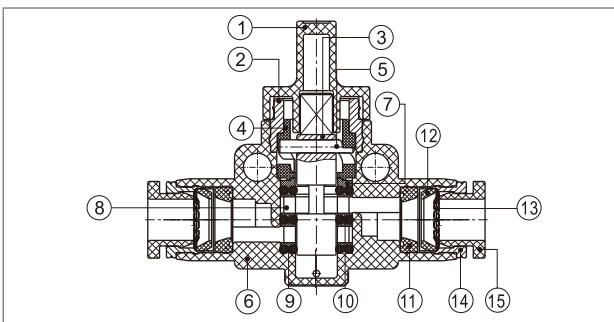
Valve is open, when the direction of the arrow on commutation knob is consistent with that on valve body.



When the three-way valve is closed, the outlet pressure is released, which facilitates in commissioning and maintenance. (as figure below)

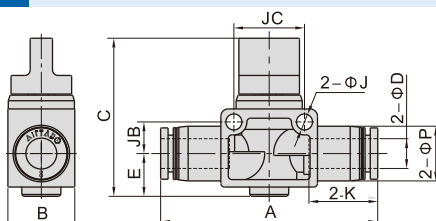


Inner structure



NO.	Name	Material	NO.	Name	Material
1	Knob	POM	9	Special shape O-ring	NBR
2	Fixing ring	Aluminum alloy	10	Spacer ring	Aluminum alloy
3	Spool	Aluminum alloy	11	Special shape O-ring	NBR
4	Cam groove block	POM	12	Locating seat	POM
5	Pin	Stainless steel	13	Spring gasket	Stainless steel
6	Plastic body	PBT	14	Locating ring	Aluminum alloy
7	Locating block	Aluminum alloy	15	Plastic interface	POM
8	Spacer	POM			

Dimensions

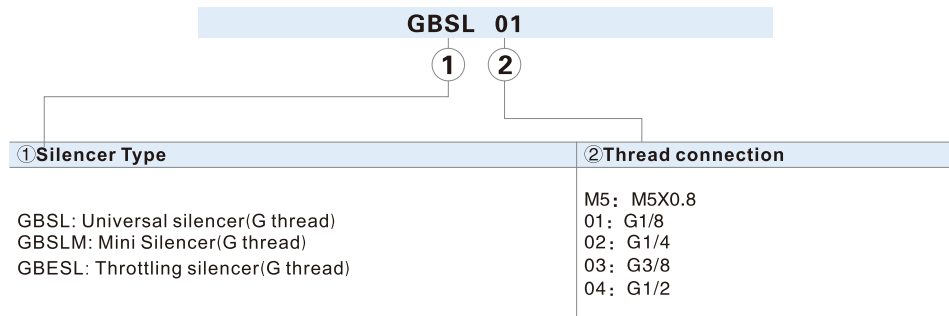


Model\Item	ΦD	A	B	C	ΦP	K	E	ΦJ	JB	JC	Weight(g)	PCS/bag
GPHV6□	6	51.5	17	40.5	12.5	16.5	10	4.3	8	18	14.3	2
GPHV8□	8	58.5	18	42.5	15	18.5	11.5	4.3	8.5	19	17.5	2
GPHV10□	10	66	21	42	18	21	11	4.3	11	24	25.1	2
GPHV12□	12	71	22	46	21	23	13	4.3	11	24	31.4	2

Note: "□" indicates "A" or "B", "A" indicates three-way, and "B" indicates two-way. The two kinds of valve have same dimensions.

GBSL, GBSLM, GBESL series

Ordering code



Product feature

1. This silencers have excellent noise silencing performance.
2. The installation of the silencer is simple and convenient, and the connecting portion is reliable and durable.
3. It is easy to adjust the exhaust flow of the throttling type silencer.

Configuration table of tubing thread

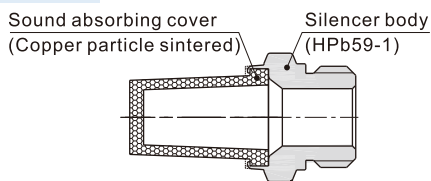
Product series	Thread connection				
	M5	01	02	03	04
GBSL	●	●	●	●	●
GBSLM	●	●	●	●	●
GBESL		●	●	●	●

Specification

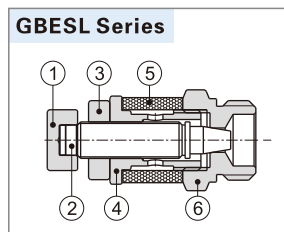
Model	GBSLM5	GBSL01	GBSL02	GBSL03	GBSL04	GBSLMM5	GBSLM01	GBSLM02	GBSLM03	GBSLM04
Thread connection	M5×0.8	G1/8	G1/4	G3/8	G1/2	M5×0.8	G1/8	G1/4	G3/8	G1/2
Silencing effect(dB)(0.5MPa)	15	20	20	20	12	15	20	20	20	20
Model	GBESL01	GBESL02	GBESL03	GBESL04						
Thread connection	G1/8	G1/4	G3/8	G1/2						
Silencing effect(dB)(0.5MPa)	20	20	20	20						
Operating pressure	0~10kgf/cm ² (0~1.0MPa)									
Negative pressure	-750mmHg(10Torr)									
Proof pressure	1.5MPa									
Temperature range	-20~70℃									

Inner structure

GBSL Series



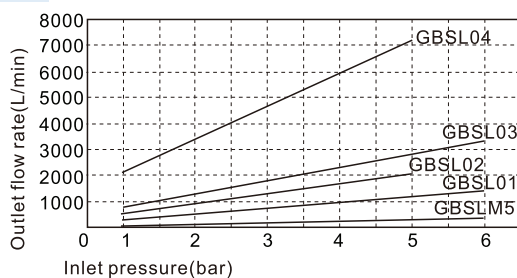
GBESL Series



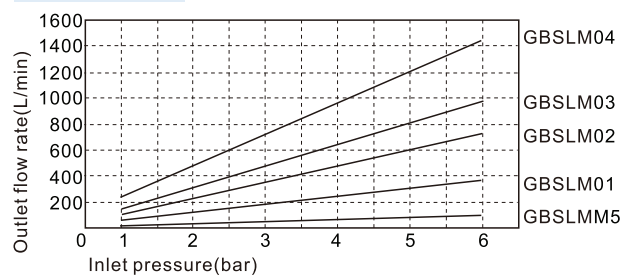
NO.	Name	Material
1	Adjusting cap	Aluminum alloy
2	Throttling column	Aluminum alloy
3	Locking cap	Aluminum alloy
4	Locking ring	Aluminum alloy
5	Silencer ring	Copper particle sintered
6	Silencer body	Brass

Flowrate characteristic

GBSL Series



GBSLM Series

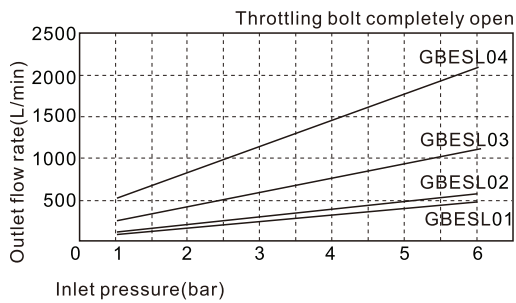


Accessories—Silencers

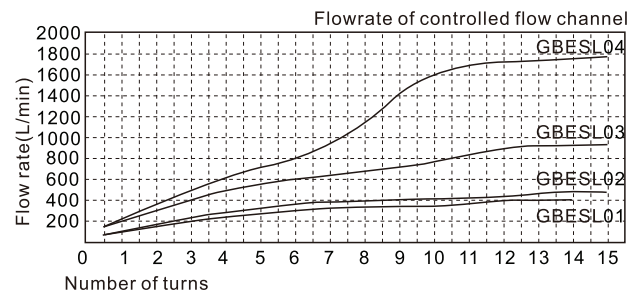
GBSL, GBSLM, GBESL series

Flowrate characteristic

GBESL Series (Inlet pressure and outlet flow rate)

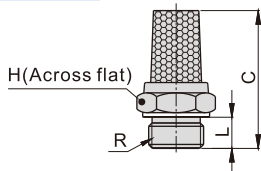


GBESL Series



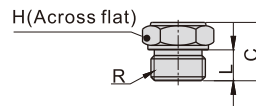
Dimensions

GBSL Series



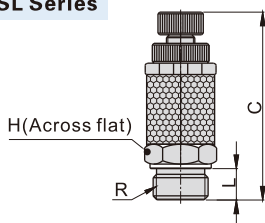
Model/Item	R	L	C	H	Weight(g)	PCS/bag
GBSLM5	M5×0.8	3.5	19.5	8	2.9	10
GBSL01	G1/8	5.5	24	12	6.8	10
GBSL02	G1/4	6.5	29.5	15	11.3	10
GBSL03	G3/8	7	37.5	19	21.1	10
GBSL04	G1/2	8.5	45	22	33.6	10

GBSLM Series



Model/Item	R	L	C	H	Weight(g)	PCS/bag
GBSLMM5	M5×0.8	3.5	9.5	8	2.3	10
GBSLM01	G1/8	5.5	11	11	4.4	10
GBSLM02	G1/4	6.5	13	15	8.1	10
GBSLM03	G3/8	7	14.5	19	14.9	10
GBSLM04	G1/2	8.5	17.5	22	24.5	10

GBESL Series



Model/Item	R	L	C		H	Weight(g)	PCS/bag
			max	min			
GBESL01	G1/8	5.5	40.5	33	12	10.1	10
GBESL02	G1/4	6.5	42	34.5	14	17.9	10
GBESL03	G3/8	7	48	40.5	17	30.3	10
GBESL04	G1/2	8.5	58.5	51	24	68.6	10

Polyurethane re-coil hosepart

US98A, UE95A Series



Product feature

1. Plastic polyurethane material conforms to the ROHS environment protection requirement.
2. High elasticity: small bend radius enables PU tube to pass through the tight space.
3. Anti-knot: better anti-knot effect than other plastic tube.
4. Excellent flexibility: it can bear repeated expansion.
5. Anti-abrasion: long working life and suitable for the environment in which it is easy to be worn.
6. Low permeability of gas: relieve the problems of leakage and pollution.
7. Good anti-solubility: no solvent leaks, therefore it will not pollute the environment.
8. Low compression: maintain excellent physical character.
9. Wide resistance: it has certain resistance to chemicals, water, fuel, oil and bacterium.

Specification(Standard pressure type)

Type [Note1]	Tube OD (mm)	Tube ID (mm)	Wall Thickness (mm)	Package Length(m)	Working Pressure at 23°C(MPa)[Note2]	Burst pressure at 23°C(MPa)	Bend radius (mm)	Weight per 100M(kg)	Temperature (°C)
US98A032020□□	3.2	2.0	0.60	100/200	1.0	3.0	8	0.60	-20~70
US98A040025□□	4.0	2.5	0.75	100/200	1.0	3.0	10	0.94	
US98A060040□□	6.0	4.0	1.00	100/200	1.0	3.0	15	1.93	
US98A080050□□	8.0	5.0	1.50	100	1.0	3.0	20	3.66	
US98A100065□□	10.0	6.5	1.75	100	1.0	3.0	25	5.44	
US98A120080□□	12.0	8.0	2.00	100	1.0	3.0	35	7.56	
US98A160110□□	16.0	11.0	2.50	100	1.0	3.0	80	10.03	
UE95A032020□□	3.2	2.0	0.60	20/100/200	1.0	2.5	8	0.60	-40~70
UE95A040025□□	4.0	2.5	0.75	20/100/200	1.0	2.5	8	0.94	
UE95A060040□□	6.0	4.0	1.00	20/100/200	1.0	2.5	12	1.91	
UE95A080050□□	8.0	5.0	1.50	20/100	1.0	2.5	17	3.58	
UE95A100065□□	10.0	6.5	1.75	20/100	1.0	2.5	20	5.32	
UE95A120080□□	12.0	8.0	2.00	20/100	1.0	2.5	30	7.27	

[Note1] The first square of "□□" in the type column is for ordering code "unit" and the second is for "color".

[Note2] Working pressure:3 to 1 safety factor.

Specification(Lower pressure type)

Type [Note1]	Tube OD (mm)	Tube ID (mm)	Wall Thickness (mm)	Package Length(m)	Working Pressure at 23°C(MPa)[Note2]	Burst pressure at 23°C(MPa)	Bend radius (mm)	Weight per 100M(kg)	Temperature (°C)
US98A080055□□	8.0	5.5	1.25	100	0.8	2.0	20	3.25	-20~70
US98A080060□□	8.0	6.0	1.00	100	0.4	1.5	25	2.70	
US98A100080□□	10.0	8.0	1.00	100	0.4	1.5	40	3.47	
US98A120100□□	12.0	10.0	1.00	100	0.4	1.5	60	4.24	
US98A160120□□	16.0	12.0	2.00	100	0.4	2.0	80	8.32	
UE95A080055□□	8.0	5.5	1.25	20/100	0.8	1.5	17	3.18	-40~70

[Note1] The first square of "□□" in the type column is for ordering code "unit" and the second is for "color".

[Note2] Working pressure:3 to 1 safety factor.

Ordering code

US98A 060 040 100M BU

① ② ③ ④ ⑤

① Model	② Tube OD	③ Tube ID	④ Material length	⑤ Standard color [Note1]
US98A: Ester Base, Shore A98±2	032: Φ3.2mm 040: Φ4.0mm 060: Φ6.0mm	020: Φ2.0mm 025: Φ2.5mm 040: Φ4.0mm	065: Φ6.5mm 080: Φ8.0mm 0100: Φ10.0mm 0110: Φ11.0mm 0120: Φ12.0mm	100M: 100 m/coil 200M: 200 m/coil
	080: Φ8.0mm 100: Φ10.0mm 120: Φ12.0mm 160: Φ16.0mm	050: Φ5.0mm 055: Φ5.5mm 060: Φ6.0mm		100M: 100 m/coil
UE95A: Ether Base, Shore A95±2	032: Φ3.2mm 040: Φ4.0mm 060: Φ6.0mm	020: Φ2.0mm 025: Φ2.5mm 040: Φ4.0mm	055: Φ5.5mm 065: Φ6.5mm 080: Φ8.0mm	20M: 20 m/coil 100M: 100 m/coil 200M: 200 m/coil
	080: Φ8.0mm 100: Φ10.0mm 120: Φ12.0mm	050: Φ5.0mm		20M: 20 m/coil 100M: 100 m/coil

BU: Blue
BK: Black
GE: Orange
C: Clear
WH: White
CB: Clear Blue
R: Red
Y: Yellow
GA: Gray
GN: Green
BR: Brown
CR: Clear Red
CG: Clear Green
CY: Clear Yellow
CE: Clear Orange

[Note1] Φ8xΦ6, Φ10xΦ8, Φ12xΦ10 type have nine standard colors: Blue\ Black\ Orange\ Clear\ White\ Clear Blue\ Red\ Yellow\ Gray.