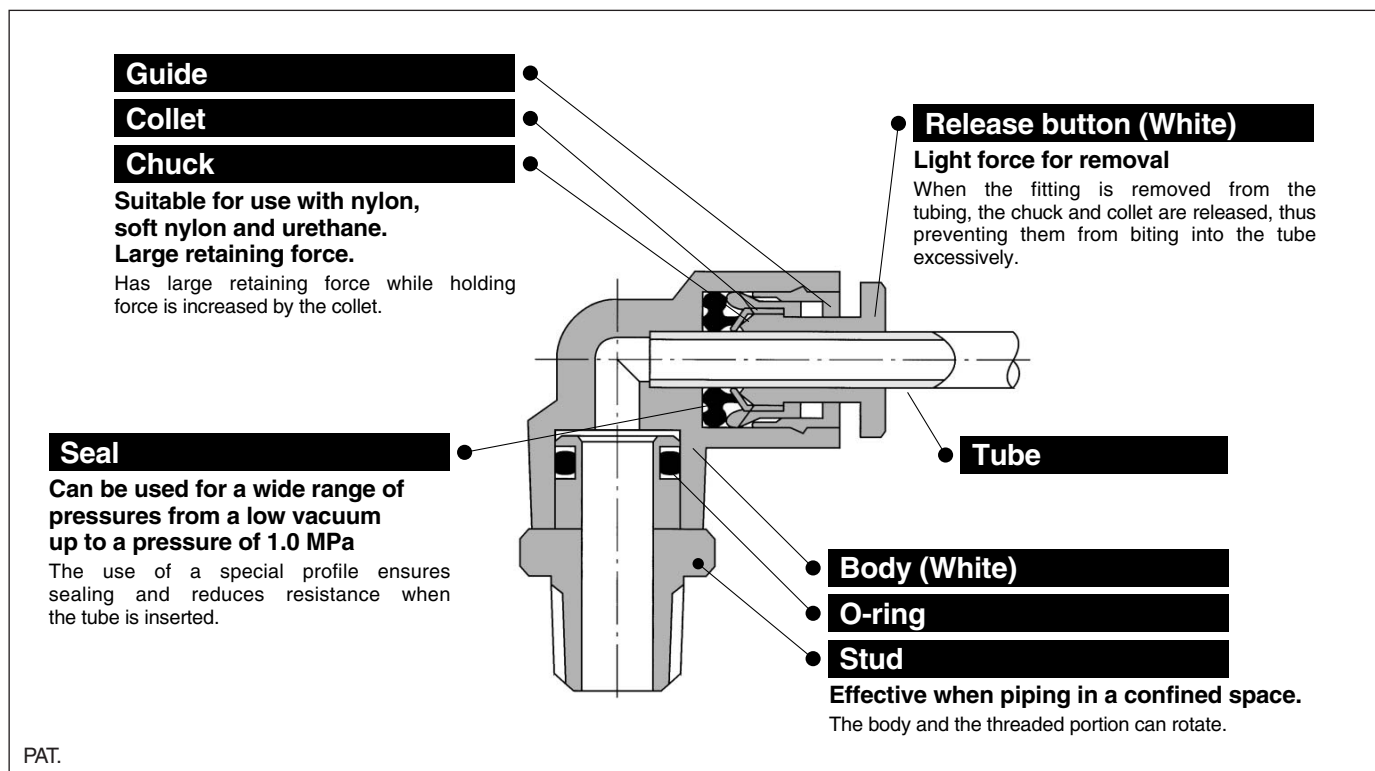


Stainless One-touch Fittings

Series KG



Stainless specifications applicable to corrosive environments

Stainless steel 303 adopted for metal elements

Suitable for use in CRT production lines where contact with copper must be avoided, food processing machines where water or salt water splashes and clean room where discoloration of copper material and corrosion must be avoided.



Applicable Tubing

Tubing material	Nylon, Soft nylon, Polyurethane
Tubing O.D.	ø4, ø6, ø8, ø10, ø12, ø16

Specifications

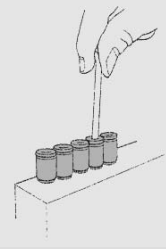
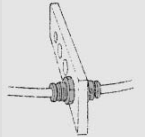
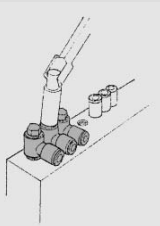
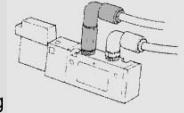
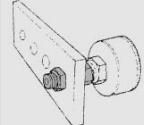
Fluid	Air/Water ⁽¹⁾	
Maximum operating pressure	1.0 MPa	
Operating vacuum pressure	-100 kPa	
Proof pressure	3.0 MPa	
Ambient and fluid temperature	-5 to 60°C (Water: 0 to 40°C) (No freezing)	
Thread	Mounting section	JIS B 0203 (Taper thread for piping)
	Nut section	JIS B 0211 Class 2 (Metric fine thread)
Seal (Thread portion)	With seal or none ⁽²⁾	

Note 1) Applicable for general industrial water. Please consult with SMC if using for other kinds of fluid. Also, the surge pressure must be under the maximum operating pressure.

Note 2) Suffix "S" to the part number, if w/ seal is desired.

Principal Parts Material

Body	Stainless steel 303, PBT
Stud	Stainless steel 303
Chuck	Stainless steel 304
Guide	Stainless steel 304, Stainless steel 303, POM
Collet, Release button	POM
Seal, O-ring	NBR

Model		
Hex. socket head male connector KGS P. 10 	 Internal hex. allows thread connection by using an allen wrench for confined spaces.	Bulkhead union KGE P. 18  Use to connect tubes through a panel. 
Universal male elbow KGV P. 12 	 Universal male elbow allows thread connection by using a socket wrench for confined spaces.	Extended male elbow KGW P. 14  Basically, it is used together with male elbow. Different point is that it is used for fittings to avoid from interfering with each other by making the piping two-level. 
Male connector KGH P. 10 	Use to pipe in the same direction from female thread. Most general style.	Bulkhead connector KGE P. 18  Use to connect male thread and tube through a panel. 
Female connector KGF P. 11 	Use to pipe from male thread such as pressure gauge.	Male branch tee KGT P. 14  Use to branch line from female thread in both 90° directions.
Straight union KGH P. 11 	Use to connect tubes in the same direction.	Union tee KGT P. 14  Use to connect tubes in both 90° directions.
Different diameter straight KGH P. 11 	Use to connect different sized tubes.	Different diameter tee KGT P. 15  Use to connect tubes with size down in both 90° directions.
Male branch connector KGLU P. 12 	Use to branch line at right angles to female thread.	Male run tee KGY P. 15  Use to branch line in the same direction from female thread and in 90° direction.
Branch union elbow KGLU P. 13 	Use to branch line at right angles.	Different dia. double union "Y" KGUD P. 17  Use to four-branch line in the same direction.
	Male elbow KGL P. 11  Use to pipe at right angles to female thread. Most general style.	Union elbow KGL P. 13  Use to connect tubes at right angles.
	Plug-in elbow KGL P. 13  Use to change by 90° in a tube fetching direction from One-touch fittings.	Delta union KGD P. 16  Use to branch line in 90° direction from female thread.
	Delta branch KGUD P. 16  Use to four-branch line in the same direction from female thread.	Union "Y" KGU P. 17  Use to branch line in the same direction.

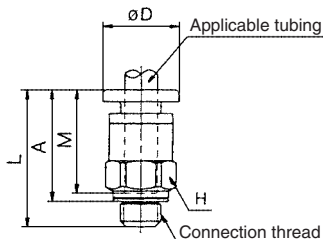
K□
 M□
 H□
 D□
 MS
 T□
 VMG

Series KG

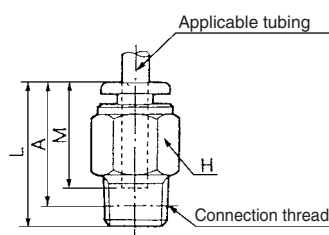
Model			
Different dia. union "Y"			
KGU	P. 17		Use to connect tubes in the same direction, reducing the size of tubes.
Plug-in reducer			
KGR	P. 17		Use to change size of One-touch fittings.
Tube cap			
KGC	P. 18		Use to plug unused tubing.
Branch			
KGU	P. 16		Use to branch line in the same direction from the female thread.

Male Connector: KGH

<M5>



<R>



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	ØD ⁽¹⁾	L	A*	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
								Nylon	Urethane	
4	M5 x 0.8	KGH04-M5	8	8	17	14	13	4	4	2.4
	1/8	KGH04-01	10	—	22	18	16	5.6	4	9
	1/4	KGH04-02	14	—	19.5	13.5	16	5.6	4	16
6	M5 x 0.8	KGH06-M5	10	10	18.5	15	14	4	4	3.4
	1/8	KGH06-01	12	—	22.5	18.5	17	13.1	10.4	16
	1/4	KGH06-02	14	—	23	17	17	13.1	10.4	14
	3/8	KGH06-03	17	—	22	15.5	17	13.1	10.4	27
8	1/8	KGH08-01	14	—	28	24	18.5	26.1	18.0	21
	1/4	KGH08-02	14	—	26.5	20.5	18.5	26.1	18.0	19
	3/8	KGH08-03	17	—	22	15.5	18.5	26.1	18.0	26
10	1/8	KGH10-01	17	—	30	26	21	41.5	29.5	19
	1/4	KGH10-02	17	—	33.5	27.5	21	41.5	29.5	30
	3/8	KGH10-03	17	—	29	22.5	21	41.5	29.5	30
	1/2	KGH10-04	22	—	27	19	21	41.5	29.5	53
12	1/4	KGH12-02	19	—	34.5	28.5	22	58.3	46.1	42
	3/8	KGH12-03	19	—	23.5	22	22	58.3	46.1	34
	1/2	KGH12-04	22	—	30	22	22	58.3	46.1	51
16	3/8	KGH16-03	24	—	39.5	32	24	81	(81)	61
	1/2	KGH16-04	24	—	35.5	26.5	24	113	(96)	47



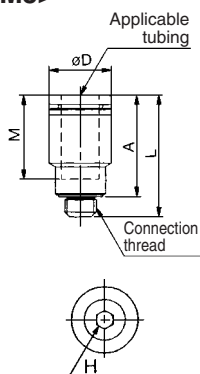
* Reference dimensions after R thread installation.

Note 1) ØD: Max. diameter

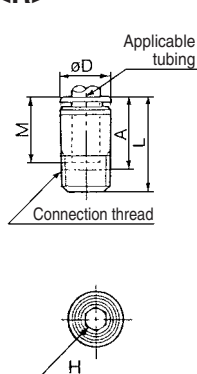
Note 2) (): Values for nylon.

Hexagon Socket Head Male Connector: KGS

<M5>



<R>



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	ØD ^{Note)}	L	A*	M	Effective area (mm ²)		Weight (g)
								Nylon	Urethane	
4	M5 x 0.8	KGS04-M5	2.5	9.5	19	15.5	13	4	4	2.6
	1/8	KGS04-01	3	9.8	23	19	16	4.1	3.6	8
6	M5 x 0.8	KGS06-M5	2.5	11.5	20	16.5	14	4	4	3.2
	1/8	KGS06-01	4	11.8	24	20	17	10.0	9.9	9
	1/4	KGS06-02	4	13.8	24	18	17	10.7	10.0	15
8	1/8	KGS08-01	5	14	28	24	18.5	17.2	16.2	12
	1/4	KGS08-02	6	14	25.5	19.5	18.5	23.3	16.2	11
	3/8	KGS08-03	6	17	27.5	21	18.5	23.3	16.2	24
10	1/8	KGS10-01	5	17	30	26	21	17.2	10.0	18
	1/4	KGS10-02	8	17	27.5	21.5	21	39.0	26.6	12
	3/8	KGS10-03	8	17	27.5	21	21	39.0	26.6	19
	1/2	KGS10-04	8	22	28	20	21	39.0	26.6	35
12	1/4	KGS12-02	8	19	33.5	27.5	22	46.0	44.5	23
	3/8	KGS12-03	10	19	29	22.5	22	60.0	44.5	18
	1/2	KGS12-04	10	22	28	20	22	60.0	44.5	30



* Reference dimensions after R thread installation.

Note) ØD: Max. diameter