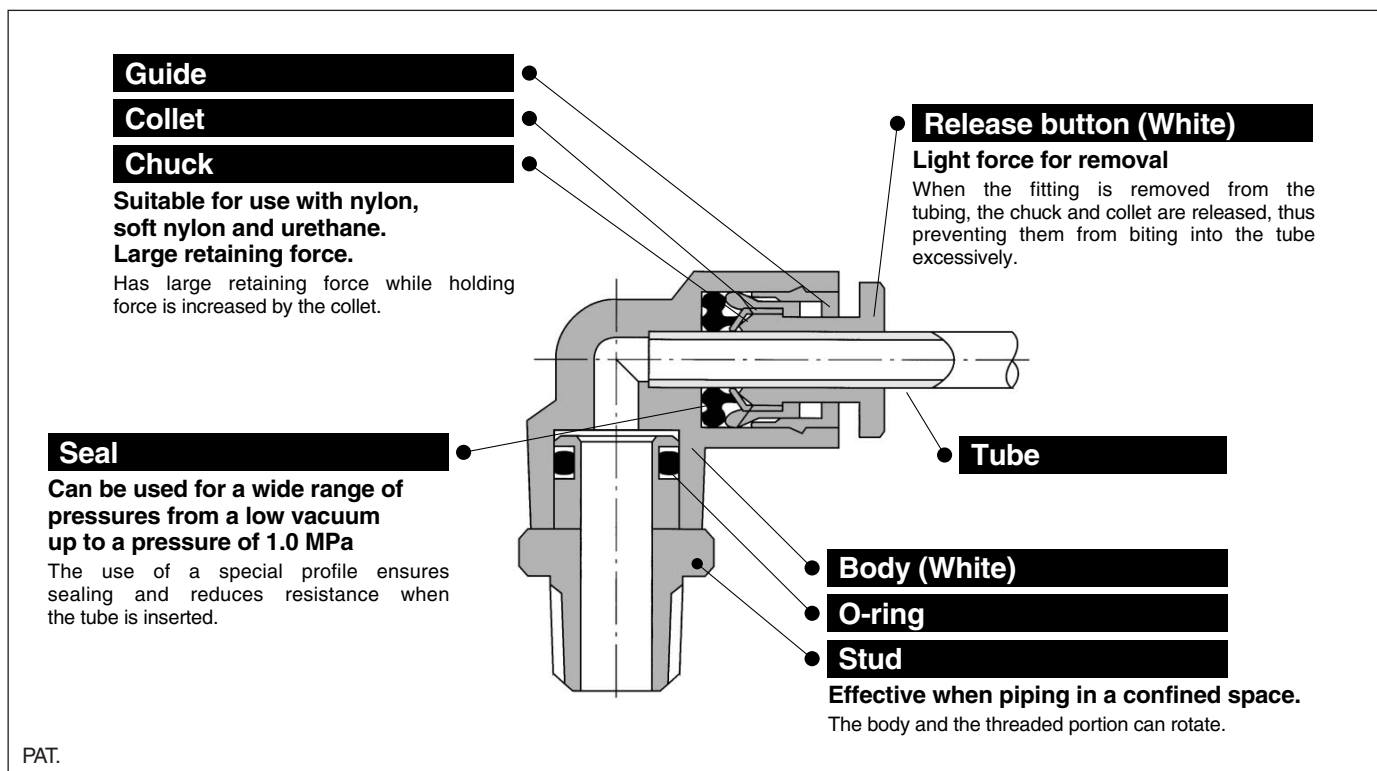


Stainless One-touch Fittings

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


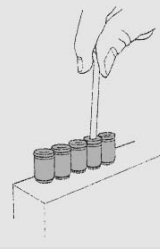

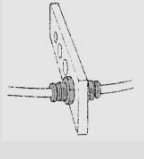
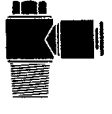
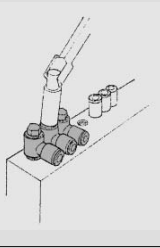

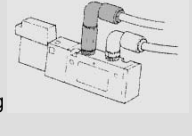


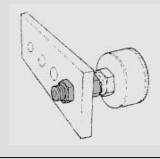










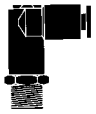


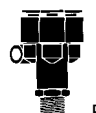

Specifications

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	 <p>Internal hex. allows thread connection by using an allen wrench for confined spaces.</p> 	Bulkhead union KGE P. 18  <p>Use to connect tubes through a panel.</p> 
Universal male elbow			
KGV	P. 12	 <p>Universal male elbow allows thread connection by using a socket wrench for confined spaces.</p> 	Extended male elbow KGW P. 14  <p>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.</p> 
Male connector			
KGH	P. 10	 <p>Use to pipe in the same direction from female thread. Most general style.</p>	Bulkhead connector KGE P. 18  <p>Use to connect male thread and tube through a panel.</p> 
Male elbow			
KGL	P. 11	 <p>Use to pipe at right angles to female thread. Most general style.</p>	Male branch tee KGT P. 14  <p>Use to branch line from female thread in both 90° directions.</p>
Female connector			
KGF	P. 11	 <p>Use to pipe from male thread such as pressure gauge.</p>	Union tee KGT P. 14  <p>Use to connect tubes in both 90° directions.</p>
Union elbow			
KGL	P. 13	 <p>Use to connect tubes at right angles.</p>	Different diameter tee KGT P. 15  <p>Use to connect tubes with size down in both 90° directions.</p>
Plug-in elbow			
KGL	P. 13	 <p>Use to change by 90° in a tube fetching direction from One-touch fittings.</p>	Male run tee KGY P. 15  <p>Use to branch line in the same direction from female thread and in 90° direction.</p>
Different diameter straight			
KGH	P. 11	 <p>Use to connect different sized tubes.</p>	Different dia. double union "Y" KGUD P. 17  <p>Use to four-branch line in the same direction.</p>
Male branch connector			
KGLU	P. 12	 <p>Use to branch line at right angles to female thread.</p>	Union "Y" KGU P. 17  <p>Use to branch line in the same direction.</p>
Delta union			
KGD	P. 16	 <p>Use to branch line in tripple 90° direction.</p>	Delta branch KGUD P. 16  <p>Use to four-branch line in the same direction from female thread.</p>
Branch union elbow			
KGLU	P. 13	 <p>Use to branch line at right angles.</p>	

- K
- M
- H
- D
- MS
- T
- VMG

Series KG

Model

Different dia. union "Y"



P. 17

Use to connect tubes in the same direction, reducing the size of tubes.

Plug-in reducer



P. 17

Use to change size of One-touch fittings.

Tube cap



P. 18

Use to plug unused tubing.

Branch

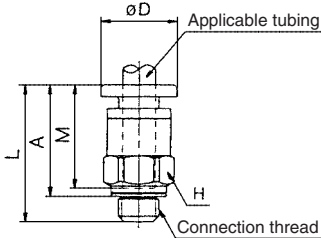


P. 16

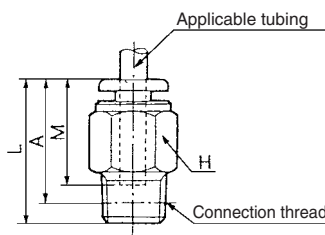
Use to branch line in the same direction from the female thread.

Male Connector: KGH

<M5>



<R>

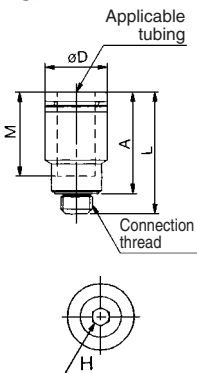


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	$\varnothing D$ ⁽¹⁾	L	A*	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
								Nylon	Urethane	
4	M5 x 0.8	KGH04-M5	8	8	17	14	13	4	4	2.4
	1/8	KGH04-01	10	—	22	18	16	5.6	4	9
	1/4	KGH04-02	14	—	19.5	13.5				16
6	M5 x 0.8	KGH06-M5	10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

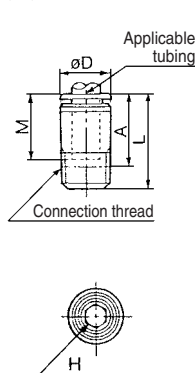
* Reference dimensions after R thread installation.
 Note 1) $\varnothing D$: Max. diameter
 Note 2) (): Values for nylon.

Hexagon Socket Head Male Connector: KGS

<M5>



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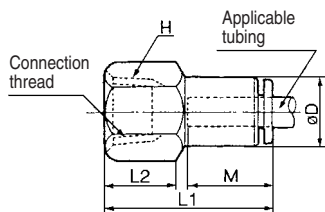


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	$\varnothing D$ ^{Note)}	L	A*	M	Effective area (mm ²)		Weight (g)		
								Nylon	Urethane			
4	M5 x 0.8	KGS04-M5	2.5	9.5	19	15.5	13	4	4	2.6		
	1/8	KGS04-01	3	9.8	23	19	16	4.1	3.6	8		
6	M5 x 0.8	KGS06-M5	2.5	11.5	20	16.5	14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

* Reference dimensions after R thread installation.
 Note) $\varnothing D$: Max. diameter



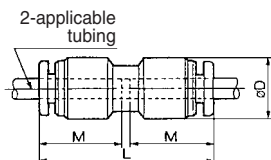
Female Connector: KGF



Applicable tubing O.D. (mm)	Connection thread Rc	Model	H (width across flats)	Note) ϕD	L1	L2	M	Effective area (mm ²)		Weight (g)
								Nylon	Urethane	
4	1/8	KGF04-01	14	10	27	11	16	5.6	4	15
	1/4	KGF04-02	17		31	14				23
6	1/8	KGF06-01	14	12	27.5	11	17	13.1	10.4	15
	1/4	KGF06-02	17		31	13				22
	3/8	KGF06-03	19		33.5	15				25
8	1/8	KGF08-01	14	14	29	11	18.5	26.1	18.0	17
	1/4	KGF08-02	17		32.5	13				24
	3/8	KGF08-03	19		33.5	14				24
10	1/4	KGF10-02	17	17	34.5	14	21	41.5	29.5	27
	3/8	KGF10-03	19		36.5	15				30
12	1/4	KGF12-02	19	19	35	14	22	58.3	46.1	36
	3/8	KGF12-03			37					31
	1/2	KGF12-04	24		41	18				52

Note) ϕD : Max. diameter

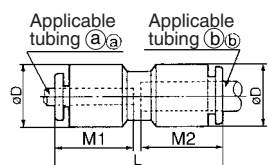
Straight Union: KGH



Applicable tubing O.D. (mm)	Model	Note) ϕD	L	M	Effective area (mm ²)		Weight (g)
					Nylon	Urethane	
4	KGH04-00	10.4	32.5	16	5.6	4	3
6	KGH06-00	12.8	34.5	17	13.1	10.4	4
8	KGH08-00	15.2	38.5	18.5	26.1	18.0	6
10	KGH10-00	18.5	42.5	21	41.5	29.5	11
12	KGH12-00	20.9	44.5	22	58.3	46.1	14

Note) ϕD : Max. diameter

Different Diameter Straight: KGH

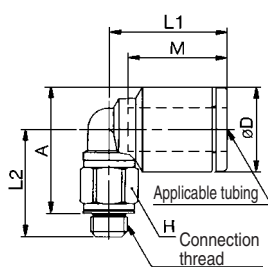


Applicable tubing O.D. (mm)		Model	Note) ϕD	L	M1	M2	Effective area (mm ²)		Weight (g)
(a)	(b)						Nylon	Urethane	
4	6	KGH04-06	12.8	34.5	16	17	5.6	4	5
6	8	KGH06-08	15.2	38.5	17	18.5	13.1	10.4	6
8	10	KGH08-10	18.5	42	18.5	21	26.1	18.0	11
10	12	KGH10-12	20.9	44.5	21	22	41.5	29.5	14

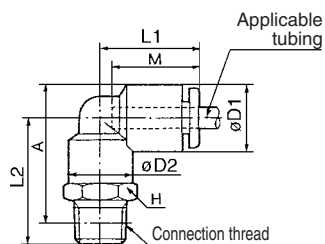
Note) ϕD : Max. diameter

Male Elbow: KGL

<M5>



<R>



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	⁽¹⁾ $\phi D1$	$\phi D2$	L1	L2	A*	M	Effective area ⁽²⁾ mm ²		Weight (g)									
										Nylon	Urethane										
4	M5 x 0.8 1/8	KGL04-M5 KGL04-01	7	9.5	—	16	13.5	15	13	3.5	3.5	2.7									
												10	10.4	10	18	23	16	4.2	4.2	10	
												14	—	—	26	25	—	—	—	19	
6	M5 x 0.8 1/8	KGL06-M5 KGL06-01	7	11.5	—	16	14.5	17	14	3.5	3.5	3.1									
												10	—	—	23	25.5	—	—	—	12	
												14	12.8	10	20	27	27.5	17	11.4	9.0	10
												17	—	—	29	29	—	—	—	—	33
8	1/8	KGL08-01	12	15.2	12	23	24.5	28	18.5	21.6	14.9	13									
												14	—	—	28.5	30	—	—	—	21	
												17	—	—	30.5	31.5	—	—	—	35	
10	1/8	KGL10-01	17	18.5	17	26.5	27	32	21	21.6	14.9	25									
												14	—	—	30	33	—	—	—	26	
												17	—	—	32	34.5	—	—	—	36	
												22	—	—	36	37	—	—	—	63	
12	1/4	KGL12-02	17	20.9	17	28.5	31	35.5	22	50.2	39.7	28									
												3/8	—	—	33	37	—	—	—	38	
												1/2	—	—	37	39.5	—	—	—	65	
16	3/8	KGL16-03	22	26.5	20.9	34	38	44.5	24	71	(71)	101									
												1/2	—	—	41	46	—	—	—	105	

* Reference dimensions after R thread installation.
 Note 1) $\phi D1$: Max. diameter
 Note 2) (): Values for nylon.

K

M

H

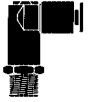
D

MS

T

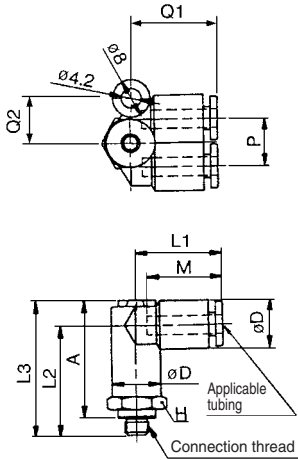
VMG

Series KG



Male Branch Connector: KGLU

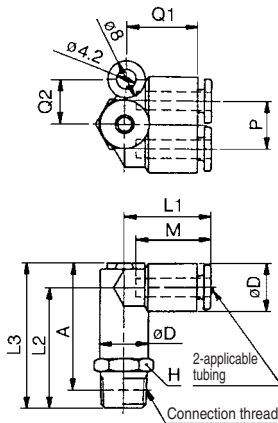
<M5>



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) ϕD	L1	L2	L3	A*	M	P	Q1	Q2	Effective area (mm ²)		Weight (g)
													Nylon	Urethane	
4	M5 x 0.8	KGLU04-M5	11	10.4	18.5	24	29.5	25.5	16	10.4	18.5	10	4.3	4.1	10
	1/8	KGLU04-01	14			26.5	32	27.5					6.0	4.1	12
	1/4	KGLU04-02	14			30.5	36	30					21		
6	M5 x 0.8	KGLU06-M5	13	12.8	21	26.5	33	29.5	17	12.8	20.5	12	4.3	4.3	13
	1/8	KGLU06-01	14			29.5	36	32					15		
	1/4	KGLU06-02	17			33	39.5	33.5					13.9	11.0	22
	3/8	KGLU06-03	17			35	41.5	35							35
8	1/8	KGLU08-01	17	15.2	24	34	41.5	38	18.5	15.2	24.5	14	26.3	18.2	27
	1/4	KGLU08-02	17			37	44.5	38.5					35		
	3/8	KGLU08-03	17			38	45.5	39					35		
10	1/4	KGLU10-02	19	18.5	27	40	49.5	43.5	21	18.5	28	16	40.8	29.0	41
	3/8	KGLU10-03	22			41	50.5	44					42		
	1/2	KGLU10-04	22			44.5	54	45.5					64		
12	1/4	KGLU12-02	22	20.9	29	42.5	53	47	22	20.9	30	18	57.2	45.2	57
	3/8	KGLU12-03	22			43.5	54	47.5					58		
	1/2	KGLU12-04	22			46.5	57	49					65		

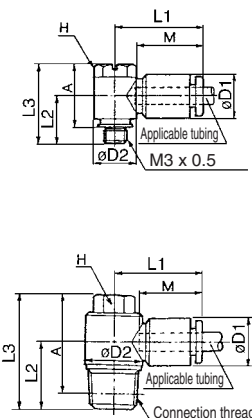
* Reference dimensions after R thread installation.
Note) ϕD : Max. diameter

<R>



Universal Male Elbow: KGV

<M5>

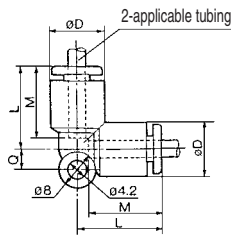


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A*	M	Effective area (mm ²)		Weight (g)	
											Nylon	Urethane		
4	M5 x 0.8	KGV04-M5	8	10.4	9.8	20.5	11	18.5	15	16	2.9	2.9	6	
	1/8	KGV04-01			13.4	22	14.5	26.5	22.5		14			
6	M5 x 0.8	KGV06-M5	8	12.8	9.8	23.5	12	18.5	15	17	3.8	3.8	7	
	1/8	KGV06-01			13.4	24	14.5	26.5	22.5		15			
	1/4	KGV06-02			10	15.3	23.5	18.5	31		25	7.5	5.9	26
8	1/8	KGV08-01	12	15.2	17.6	28.5	15.5	28.5	24.5	18.5	16	11.2	24	
	1/4	KGV08-02			14	20.6	27.5	20.5	36.5		30	20.5	14.3	47
	3/8	KGV08-03			14	20.6	27.5	20.5	36.5		30	21	27	20.3
10	1/4	KGV10-02	14	18.5	19.5	35.5	29.5	21	27	20.3	40			
	3/8	KGV10-03			20.5	36.5	30					49		
12	3/8	KGV12-03	17	20.9	22	38.5	32	22	39	30.8	63			
	1/2	KGV12-04			25	41.5	33.5					80		

* Reference dimensions after R thread installation.
Note) $\phi D1$: Max. diameter



Union Elbow: KGL

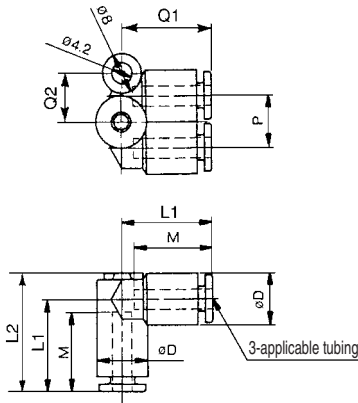


Applicable tubing O.D. (mm)	Model	$\phi D^{(1)}$	L	Q	M2	Effective area ⁽²⁾ (mm ²)		Weight (g)
						Nylon	Urethane	
4	KGL04-00	10.4	18	4.5	16	4.2	4.2	6
6	KGL06-00	12.8	20	5.3	17	11.4	9.0	6
8	KGL08-00	15.2	23	6	18.5	21.6	14.9	10
10	KGL10-00	18.2	26.5	6.8	21	35.2	25.0	17
12	KGL12-00	20.9	28.5	7.5	22	50.2	39.7	21
16	KGL16-00	26.5	34	10	25	100	(84)	29

Note 1) ϕD : Max. diameter
 Note 2) (): Values for nylon.

- K
- M
- H
- D
- MS
- T
- VMG

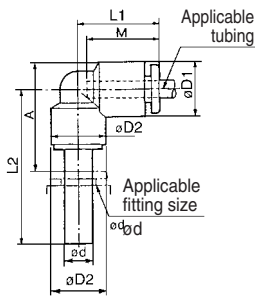
Branch Union Elbow: KGLU



Applicable tubing O.D. (mm)	Model	Note) ϕD	L1	L2	Q1	Q2	M	P	Effective area (mm ²)		Weight (g)
									Nylon	Urethane	
4	KGLU04-00	10.4	18.5	24	18.5	10	16	10.4	6.0	4.1	6
6	KGLU06-00	12.8	21	27.5	20.5	12	17	12.8	13.9	11.0	8
8	KGLU08-00	15.2	24	32	24.5	14	18.5	15.2	26.3	18.2	15
10	KGLU10-00	18.5	27	36.5	28	16	21	18.5	40.8	29.0	25
12	KGLU12-00	20.9	29	40	30	18	22	20.9	57.2	45.2	32

Note) ϕD : Max. diameter

Plug-in Elbow: KGL



Applicable tube O.D. mm	Applicable fitting size ϕd	Model	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Effective area (mm ²)		Weight (g)
									Nylon	Urethane	
4	4	KGL04-99	10.4	8	18	25	14.5	16	4.2	4.2	8
6	6	KGL06-99	12.8	10	20	27.5	17	17	11.4	9.0	10
8	8	KGL08-99	15.2	12	22.5	31.5	21	18.5	21.6	14.9	14
10	10	KGL10-99	18.5	14	25.5	35.5	23.5	21	35.2	25.0	25
12	12	KGL12-99	20.9	16	27	37.5	26	22	50.2	39.7	28

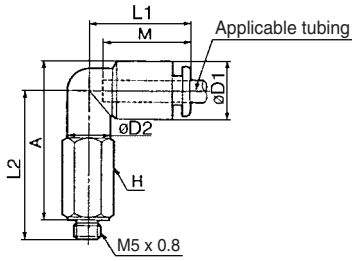
Note) $\phi D1$: Max. diameter

Series KG

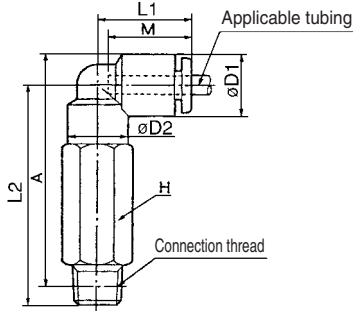


Extended Male Elbow: KGW

<M5>



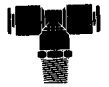
<R>



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	A*	M	Effective area (mm ²)		Weight (g)		
										Nylon	Urethane			
4	M5 x 0.8	KGW04-M5	8	10.4	8	18	30	32	16	3.0	3.0	11		
	1/8	KGW04-01	10							4.0	4.0	23		
	1/4	KGW04-02	14							43.5	42.5	38		
6	M5 x 0.8	KGW06-M5	8	12.8	8	20	30.5	33.5	17	3.0	3.0	11		
	1/8	KGW06-01	10							4.0	4.0	26		
	1/4	KGW06-02	14							46	46.5	41		
	3/8	KGW06-03	17							48	48	67		
8	1/8	KGW08-01	12	15.2	12	23	43.5	47	18.5	20.5	14.2	30		
	1/4	KGW08-02	14									49.5	51	47
	3/8	KGW08-03	17									51.5	52.5	74
10	1/4	KGW10-02	17	18.5	17	26.5	56.5	59.5	21	33.5	23.8	66		
	3/8	KGW10-03	17									58.5	61	76
	1/2	KGW10-04	22									65	66	145
12	1/4	KGW12-02	17	20.9	17	28.5	57.5	62	22	47.7	37.7	68		
	3/8	KGW12-03	17									59.5	63.5	78
	1/2	KGW12-04	22									66	68.5	147

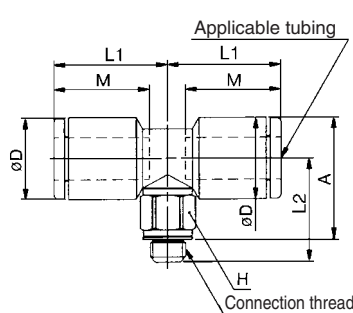


* Reference dimensions after R thread installation.
Note) $\phi D1$: Max. diameter

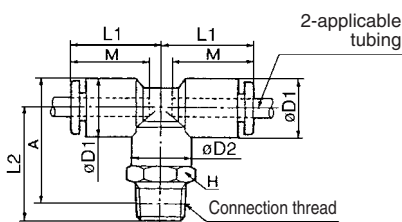


Male Branch Tee: KGT

<M5>



<R>

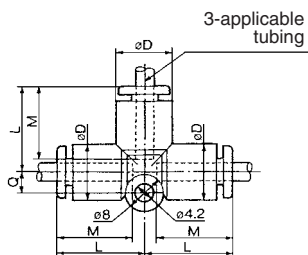


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note 1) $\phi D1$	$\phi D2$	L1	L2	A*	M	Effective area (2) (mm ²)		Weight (g)
										Nylon	Urethane	
4	M5 x 0.8	KGT04-M5	7	9.5	—	15.5	14	15.5	13	4.3	4.3	3.5
	1/8	KGT04-01	10	10.4	10	18	22	23	16	6.0	4.1	13
	1/4	KGT04-02	14	26	25	19						
6	M5 x 0.8	KGT06-M5	7	11.5	—	16	15	17.5	14	4.3	4.3	4.2
	1/8	KGT06-01	10	12.8	10	20	23	25.5	17	13.9	11.0	12
	1/4	KGT06-02	14				27	27.5				20
	3/8	KGT06-03	17				29	29				34
1/8	KGT08-01	12	15.2				12	23				24.5
1/4	KGT08-02	14		28.5	30	22						
3/8	KGT08-03	17		30.5	31.5	36						
10	1/8	KGT10-01	17	18.5	17	26.5	27	32	21	40.8	29.0	31
	1/4	KGT10-02	17				30	33				29
	3/8	KGT10-03	17				32	34.5				39
	1/2	KGT10-04	22				36	37				66
12	1/4	KGT12-02	17	20.9	17	28.5	31	35.5	22	57.2	45.2	31
	3/8	KGT12-03	17				33	37				41
	1/2	KGT12-04	22				37	39.5				68
16	3/8	KGT16-03	22	26.5	20.9	34	38	44.5	25	71	(71)	112
	1/2	KGT16-04	22				40.5	46		100	(100)	116



* Reference dimensions after R thread installation.
Note 1) $\phi D1$: Max. diameter
Note 2) (): Values for soft nylon

Union Tee: KGT



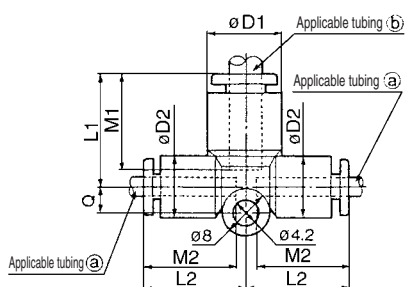
Applicable tubing O.D. (mm)	Model	ϕD (1)	L	Q	M	Effective area (2) (mm ²)		Weight (g)
						Nylon	Urethane	
4	KGT04-00	10.4	18	4.5	16	6.4	4.4	7
6	KGT06-00	12.8	20	5.3	17	13.4	10.6	10
8	KGT08-00	15.2	23	6	18.5	25.6	17.7	15
10	KGT10-00	18.5	26.5	6.8	21	40	28.4	25
12	KGT12-00	20.9	28.5	7.5	22	57.4	45.4	29
16	KGT16-00	26.5	34	10	25	100	(84)	40



Note 1) ϕD : Max. diameter
Note 2) (): Values for nylon.



Different Diameter Tee: KGT

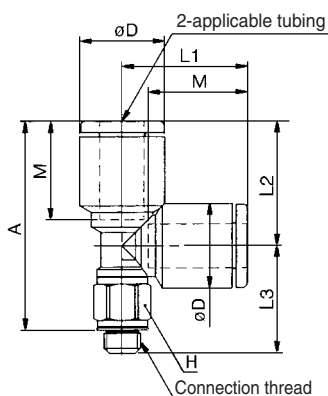


Applicable tubing O.D. (mm)		Model	Note) øD1	øD2	L1	L2	Q	M1	M2	Effective area (mm ²)		Weight (g)
(a)	(b)									Nylon	Urethane	
4	6	KGT04-06	12.8	10.4	19.5	18	4.5	17	16	7.1	6.5	5
6	8	KGT06-08	15.2	12.8	22.5	20	5.3	18.5	17	16.4	16.4	8
8	10	KGT08-10	18.5	15.2	26.5	23	6	21	18.5	36	27.2	14
10	12	KGT10-12	20.9	18.5	28.5	26.5	6.8	22	21	56	44.5	21

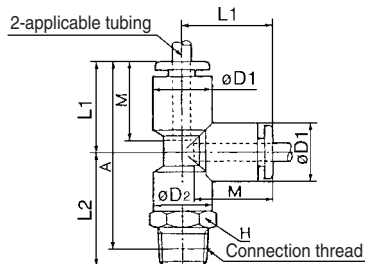
Note) øD1: Max. diameter

Male Run Tee: KGY

<M5>



<R>

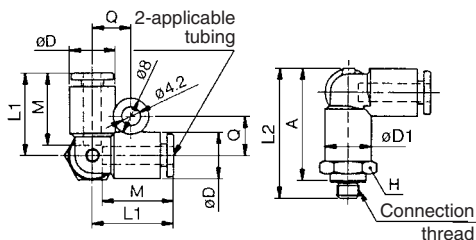


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats) (1)	øD1	øD2	L1	L2	L3	A*	M	Effective area (2) (mm ²)		Weight (g)
											Nylon	Urethane	
4	M5 x 0.8	KGY04-M5	7	9.5	—	16	13.5	15	25.5	13	4.6	4.6	3.5
	1/8	KGY04-01	10	10.4	10	18	22	—	36	16	6.4	4.4	13
	1/4	KGY04-02	14	10.4	10	18	26	—	38	16	6.4	4.4	19
6	M5 x 0.8	KGY06-M5	7	11.5	—	17.5	14.5	17.5	29	14	4.6	4.6	4.3
	1/8	KGY06-01	10	12.8	10	20	23	—	39	17	13.4	10.6	12
	1/4	KGY06-02	14	12.8	10	20	27	—	41	17	13.4	10.6	20
8	3/8	KGY06-03	17	12.8	10	20	29	—	42.5	17	13.4	10.6	34
	1/8	KGY08-01	12	15.2	12	23	24.5	—	43.5	17	13.4	10.6	14
	1/4	KGY08-02	14	15.2	12	23	28.5	—	45.5	18.5	25.6	17.7	22
10	3/8	KGY08-03	17	15.2	12	23	30.5	—	47	18.5	25.6	17.7	36
	1/8	KGY10-01	17	18.5	17	26.5	27	—	49.5	21	40.0	28.4	31
	1/4	KGY10-02	17	18.5	17	26.5	30	—	50.5	21	40.0	28.4	29
12	3/8	KGY10-03	22	18.5	17	26.5	32	—	52	21	40.0	28.4	39
	1/2	KGY10-04	22	18.5	17	26.5	36	—	54.5	21	40.0	28.4	66
	1/4	KGY12-02	17	20.9	17	28.5	31	—	53.5	22	57.4	45.4	31
16	3/8	KGY12-03	22	20.9	17	28.5	33	—	55	22	57.4	45.4	41
	1/2	KGY12-04	22	20.9	17	28.5	37	—	57.5	22	57.4	45.4	68
	3/8	KGY16-03	22	26.5	20.9	34	38	—	65.5	25	81	(81)	112
	1/2	KGY16-04	22	26.5	20.9	34	41	—	67	25	113	(113)	116

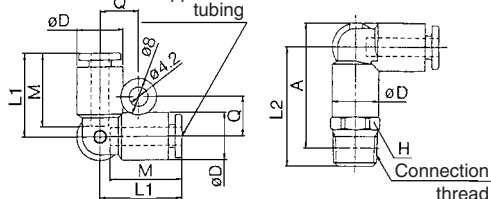
* Reference dimensions after R thread installation.
 Note 1) øD1: Max. diameter
 Note 2) (): Values for nylon.

Male Delta Union: KGD

<M5>



<R>



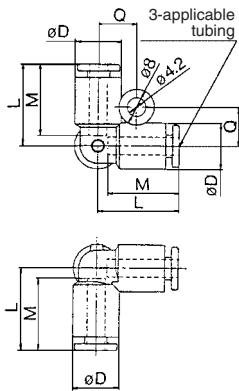
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) øD	L1	L2	A*	M	Q	Effective area (mm ²)		Weight (g)
										Nylon	Urethane	
4	M5 x 0.8	KGD04-M5	11	10.4	18.5	24	25.5	16	8.7	4.3	4.3	10
	1/8	KGD04-01	14	10.4	18.5	26.5	27.5	16	8.7	6.0	6.0	12
6	1/4	KGD04-02	14	10.4	18.5	30.5	30	16	8.7	6.0	6.0	21
	M5 x 0.8	KGD06-M5	13	12.8	20.5	26	28.5	17	9.9	4.3	4.3	12
	1/8	KGD06-01	13	12.8	20.5	29	31.5	17	9.9	13.9	11.0	14
8	1/4	KGD06-02	14	12.8	20.5	32.5	33	17	9.9	13.9	11.0	21
	3/8	KGD06-03	17	12.8	20.5	34.5	34.5	17	9.9	13.9	11.0	34
	1/8	KGD08-01	17	15.2	23.5	33.5	37	18.5	11.1	26.3	18.2	26
10	1/4	KGD08-02	17	15.2	23.5	36.5	38	18.5	11.1	26.3	18.2	35
	3/8	KGD08-03	17	15.2	23.5	37.5	38.5	18.5	11.1	26.3	18.2	39
	1/4	KGD10-02	19	18.5	26.5	39.5	43	21	12.8	40.8	29.0	39
12	3/8	KGD10-03	22	18.5	26.5	40.5	43.5	21	12.8	40.8	29.0	40
	1/2	KGD10-04	22	18.5	26.5	44	45	21	12.8	40.8	29.0	62
	1/4	KGD12-02	22	20.9	28.5	42	46.5	22	13.9	57.2	45.2	55
12	3/8	KGD12-03	22	20.9	28.5	43	47	22	13.9	57.2	45.2	56
	1/2	KGD12-04	22	20.9	28.5	46	48.5	22	13.9	57.2	45.2	63

* Reference dimensions after R thread installation.
 Note) øD: Max. diameter

Series KG



Delta Union: KGD

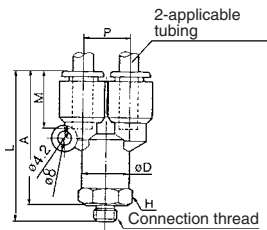


Applicable tubing O.D. (mm)	Model	Note) ϕD	L	Q	M	Effective area (mm ²)		Weight (g)
						Nylon	Urethane	
4	KGD04-00	10.4	18.5	8.7	16	6.0	4.1	5
6	KGD06-00	12.8	20.5	9.9	17	13.9	11.0	7
8	KGD08-00	15.2	23.5	11.1	18.5	26.3	18.2	11
10	KGD10-00	18.5	26.5	12.8	21	40.8	29.0	19
12	KGD12-00	20.9	28.5	13.9	22	57.2	45.2	24

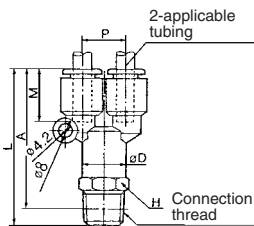
Note) ϕD : Max. diameter

Branch "Y": KGU

<M5>



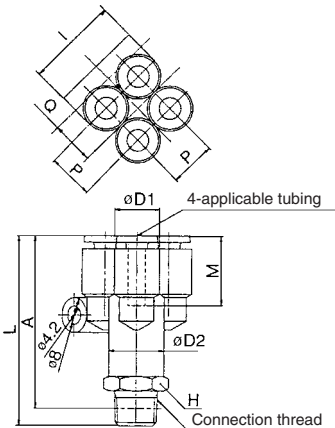
<R>



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) ϕD	L	P	A*	M	Effective area (mm ²)		Weight (g)		
									Nylon	Urethane			
4	M5 x 0.8	KGU04-M5	11	10.4	39.5	10.4	36	16	2.2	2.2	4		
	1/8	KGU04-01							4.2	4.2	11		
	1/4	KGU04-02							14	46	40	20	
6	M5 x 0.8	KGU06-M5	13	12.8	42.5	12.8	39	17	2.2	2.2	12		
	1/8	KGU06-01							45.5	41.5	11		
	1/4	KGU06-02							14	49	43	21	
	3/8	KGU06-03							17	51	44.5	34	
8	1/8	KGU08-01	17	15.2	52.5	15.2	48.5	18.5	25.6	17.7	15		
	1/4	KGU08-02									55.5	49.5	23
	3/8	KGU08-03									17	56.5	50
10	1/4	KGU10-02	19	18.5	61	18.5	55.5	21	40	28.4	30		
	3/8	KGU10-03									62	57	40
	1/2	KGU10-04									22	65	57
12	1/4	KGU12-02	22	20.9	64.5	20.9	58.5	22	57.4	45.4	32		
	3/8	KGU12-03									65.5	59	40
	1/2	KGU12-04									22	68.5	60.5

* Reference dimensions after R thread installation.
Note) ϕD : Max. diameter

Delta Branch: KGUD

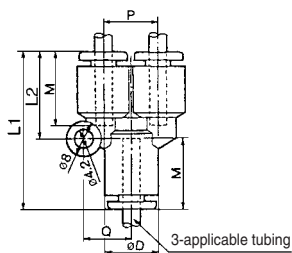


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L	I	A*	Q	M	P	Effective area (mm ²)		Weight (g)
												Nylon	Urethane	
4	1/8	KGUD04-01	13	10.4	12.8	43.5	21	39.5	9.7	16	10.4	4.2	4.2	17
	1/4	KGUD04-02	14									47	41	25
6	1/8	KGUD06-01	17	12.8	15.2	50.5	26	46.5	11.7	17	12.8	13.4	10.6	29
	1/4	KGUD06-02												

* Reference dimensions after R thread installation.
Note) $\phi D1$: Max. diameter



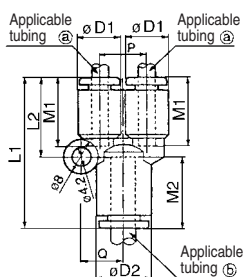
Union "Y": KGU



Applicable tubing O.D. (mm)	Model	Note) ϕD	L1	L2	P	Q	M	Effective area (mm ²)		Weight (g)
								Nylon	Urethane	
4	KGU04-00	10.4	34	18	10.4	9.7	16	4.2	4.2	7
6	KGU06-00	12.8	37	20	12.8	11.7	17	13.4	10.6	9
8	KGU08-00	15.2	42.5	24.5	15.2	13.7	18.5	25.6	17.7	11
10	KGU10-00	18.5	48	27.5	18.5	16.1	21	40	28.4	16
12	KGU12-00	20.9	51	30	20.9	18.1	22	57.4	45.4	23

Note) ϕD : Max. diameter

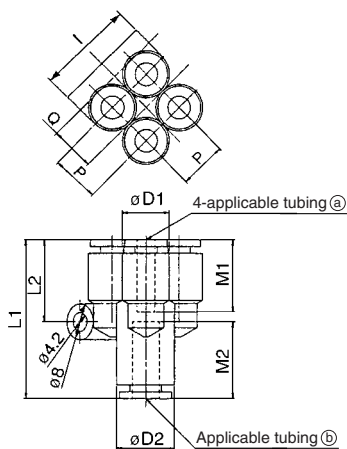
Different Diameter Union "Y": KGU



Applicable tubing O.D. (mm)		Model	Note) $\phi D1$	Note) $\phi D2$	L1	L2	P	Q	M1	M2	Effective area (mm ²)		Weight (g)
(a)	(b)										Nylon	Urethane	
4	6	KGU04-06	10.4	12.8	35	18	10.4	9.7	16	17	4.2	4.2	6
6	8	KGU06-08	12.8	15.2	39.5	20	12.8	11.7	17	18.5	13.4	10.6	11
8	10	KGU08-10	15.2	18.5	45	24.5	15.2	13.7	18.5	21	25.6	17.7	18
10	12	KGU10-12	18.5	20.9	49	27.5	18.5	16.1	21	22	40	28.4	27

Note) $\phi D1$, $\phi D2$: Max. diameter

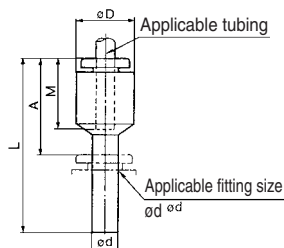
Different Diameter Double Union "Y": KGUD



Applicable tubing O.D. (mm)		Model	Note) $\phi D1$	Note) $\phi D2$	L1	L2	P	I	Q	M1	M2	Effective area (mm ²)		Weight (g)
(a)	(b)											Nylon	Urethane	
4	6	KGUD04-06	10.4	12.8	35.5	18.2	10.4	21	9.7	16	17	4.2	4.2	10
6	8	KGUD06-08	12.8	15.2	40.5	20.3	12.8	26	11.7	17	18.5	13.4	10.6	17

Note) $\phi D1$, $\phi D2$: Max. diameter

Plug-in Reducer: KGR



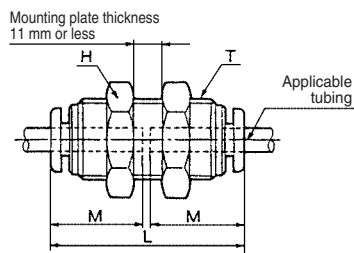
Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	ϕD ⁽¹⁾	L	A	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
							Nylon	Urethane	
4	6	KGR04-06	10.4	34.5	17.5	16	5.6	4	1.8
	8	KGR04-08		36.5	18				2.0
	10	KGR04-10		39.5	18.5				3.3
6	4	KGR06-04	12.8	37	21	17	13.1	10.4	3
	8	KGR06-08		37	18.5				2.5
	10	KGR06-10		39.5	20				3
8	10	KGR08-10	15.2	41	20	18.5	26.1	18.0	4.0
	12	KGR08-12		42	20				4.6
10	12	KGR10-12	18.5	44.5	23	21	41.5	(29.5)	33
	16	KGR10-16		50.5	25.5				42
12	16	KGR12-16	20.9	50.5	25.5	22	58.3	(46.1)	37

Note 1) ϕD : Max. diameter
Note 2) (): Values for nylon.

Series KG



Bulkhead Union: KGE

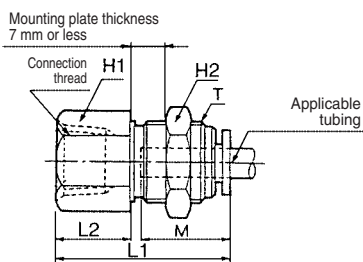


Applicable tubing O.D. (mm)	Model	T (M)	H (width across flats)	L	Mounting hole	M	Effective area ⁽¹⁾ (mm ²)		Weight (g)
							Nylon	Urethane	
4	KGE04-00	M12 x 1	14	32.5	13	16	5.6	4	26
6	KGE06-00	M14 x 1	17	34.5	15	17	13.1	10.4	33
8	KGE08-00	M16 x 1	19	38	17	18.5	26.1	18.0	52
10	KGE10-00	M20 x 1	24	42.5	21	21	41.5	29.5	70
12	KGE12-00	M22 x 1	27	44	23	22	58.3	46.1	90
16	KGE16-00	M28 x 1.5	32	51	29	25	113	(96)	115

Note) Dimensions in () are the case of soft nylon tube.



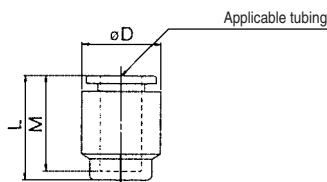
Bulkhead Connector: KGE



Applicable tubing O.D. (mm)	Connection thread Rc	Model	T (M)	H1 (width across flats)	H2 (width across flats)	L1	L2	Mounting hole	M	Effective area ⁽¹⁾ (mm ²)		Weight (g)
										Nylon	Urethane	
4	1/8	KGE04-01	M12 x 1	14	14	27.5	11	13	16	5.6	4	16
	1/4	KGE04-02		31		15	35					
6	1/8	KGE06-01	M14 x 1	17	17	28	11	15	17	13.1	10.4	30
	3/8	KGE06-03		33.5		17	29					
	1/4	KGE06-02		19		33.5	17					29
8	1/8	KGE08-01	M16 x 1	17	19	27.5	7.5	17	18.5	26.1	18.0	28
	1/4	KGE08-02		33		13	27					
	3/8	KGE08-03		35		15	48					
10	1/4	KGE10-02	M20 x 1	22	24	34.5	12.5	21	21	41.5	29.5	53
	3/8	KGE10-03		36.5		14	67					
12	3/8	KGE12-03	M22 x 1	24	27	37	14	23	22	58.3	46.1	92
	1/2	KGE12-04		41		18	59					
16	3/8	KGE16-03	M28 x 1.5	30	32	40	14	29	25	96	(96)	127
	1/2	KGE16-04		44		18	113					132

Note) Dimensions in () are the case of soft nylon tube.

Tube Cap: KGC



Applicable tubing O.D. (mm)	Model	Note) øD	L	M	Weight (g)
4	KGC04-00	10.4	17	16	3
6	KGC06-00	12.8	18.5	17	3
8	KGC08-00	15.2	20.5	18.5	4
10	KGC10-00	18.5	23	21	6
12	KGC12-00	20.9	24	22	8
16	KGC16-00	26.5	28	25	13

Note) øD: Max. diameter