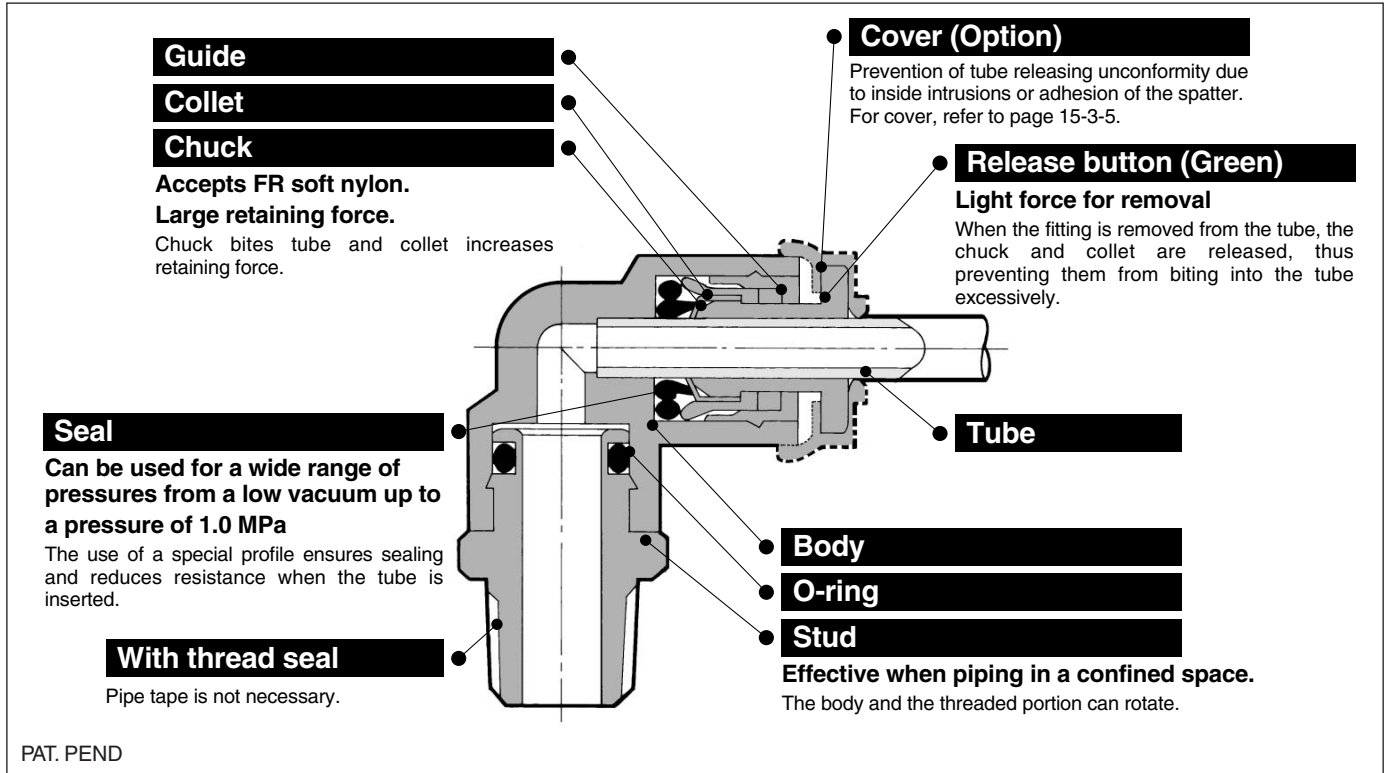


Flame Resistant (Equivalent to UL-94 Standard V-0) FR One-touch Fittings Series KR



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



Applicable Tubing

Tube material	FR double layer, FR soft nylon
Tube O.D.	ø6, ø8, ø10, ø12

Specifications


Fluid	Air/Water ^{Note)}	
Maximum operating pressure	1.0 MPa	
Proof pressure	3.0 MPa	
Ambient and fluid temperature	-5 to 60°C (Water: 0 to 60°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 (Standard)	

Note) 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.

Principal Parts Material

Body	C3604BD, Flame resistant PBT (UL-94 standard V-0)
Stud	C3604BD (Thread portion)
Chuck	Stainless steel 304
Guide	Stainless steel 304, Flame resistant PBT (UL-94 standard V-0)
Collet	POM
Release button	Flame resistant PBT (UL-94 standard V-0)
Seal, O-ring	NBR
Cover (Option)	Flame resistant PBT, Flame resistant CR (UL-94 standard V-0)

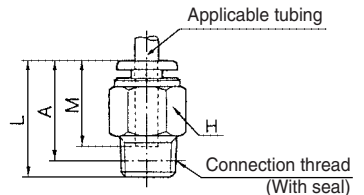
Series KR

Model		
Male connector KRH P. 2  Use to pipe in the same direction from female thread. Most general style.	Union elbow KRL P. 3  Use to connect tubes at right angles.	Plug-in reducer KRR P. 5  Use to size down One-touch fittings.
Straight union KRH P. 2  Use to connect tubes in the same direction.	Extended male elbow KRW P. 3  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.	Union "Y" KRU P. 4  Use to branch line in the same direction.
Male elbow KRL P. 3  Use to pipe at right angles to female thread. Most general style.	Male branch tee KRT P. 4  Use to branch line from female thread in both 90° directions.	Plug-in "Y" KRU P. 4  Use to branch line in the same direction from One-touch fittings.
45° male elbow KRK P. 3  Use to pipe in 45° angle direction from female thread. Model in-between of male connector and male elbow.	Union tee KRT P. 4  Use to connect tubes in both 90° directions.	Branch KRU P. 5  Use to branch line in the same direction from female thread.
Universal male elbow KRV P. 3  Universal male elbow allows thread connection by using a socket wrench for confined spaces.	Male run tee KRY P. 4  Use to branch line in the same direction from female thread and in 90° direction.	Bulkhead union KRE P. 5  Use to connect tubes through a panel.
Spatter cover KR P. 5  Prevention of tube releasing unconformity due to an inside intrusion or adhesion of the spatter.	Spatter cover KR-□C1 P. 5  Prevention of tube releasing unconformity due to an inside intrusion or adhesion of the spatter.	Plug KRP P. 5  Use to plug unused One-touch fittings.

Dimensions

Male Connector: KRH

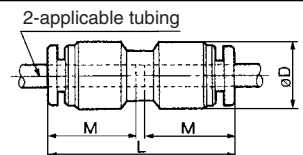
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	L	A*	M	Effective area (mm ²)		Weight (g)
							FR double layer	FR soft nylon	
6	1/8	KRH06-01S	12	22.5	18.5	17	10.4	5.6	16
	1/4	KRH06-02S	14	23	17				14
	3/8	KRH06-03S	17	22	15.5				27
8	1/8	KRH08-01S	14	28	24	18.5	26.1	18.0	21
	1/4	KRH08-02S		26.5	20.5				19
	3/8	KRH08-03S		17	22				15.5
10	1/8	KRH10-01S	17	30	26	21	26.1	26.1	19
	1/4	KRH10-02S		33.5	27.5				30
	3/8	KRH10-03S		29	22.5				53
	1/2	KRH10-04S		22	27				19
12	1/4	KRH12-02S	19	34.5	28.5	22	58.3	46.1	42
	3/8	KRH12-03S		30	23.5				34
	1/2	KRH12-04S		22	30				22



* Reference dimensions after R thread installation.

Straight Union: KRH

Applicable tubing O.D. (mm)	Model	øD (Note)	L	M	Effective area (mm ²)		Weight (g)
					FR double layer	FR soft nylon	
6	KRH06-00	12.8	34.5	17	10.4	5.6	4
8	KRH08-00	15.2	38.5	18.5	26.1	18.0	6
10	KRH10-00	18.5	42.5	21	41.5	29.5	11
12	KRH12-00	20.9	44.5	22	58.3	46.1	14



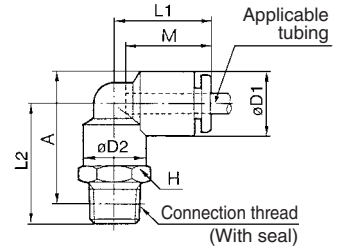
Note) øD: Max. diameter

Flame Resistant (Equivalent to UL-94 Standard V-0) FR One-touch Fittings Series KR

Male Elbow: KRL



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)
										FR double layer	FR soft nylon	
6	1/8	KRL06-01S	10	12.8	10	20	23	25.5	19	9.0	4.2	12
	1/4	KRL06-02S	14				27	27.5				22
	3/8	KRL06-03S	17				29	29				33
8	1/8	KRL08-01S	12	15.2	12	23	24.5	28	20.5	21.6	14.9	13
	1/4	KRL08-02S	14				28.5	30				21
	3/8	KRL08-03S	17				30.5	31.5				35
10	1/8	KRL10-01S	17	18.5	17	26.5	27	32	23	21.6	14.9	25
	1/4	KRL10-02S					30	33				26
	3/8	KRL10-03S					32	34.5				36
	1/2	KRL10-04S					22	36				37
12	1/4	KRL12-02S	17	20.9	17	28.5	31	35.5	24	50.2	39.7	28
	3/8	KRL12-03S					33	37				38
	1/2	KRL12-04S					22	37				39.5

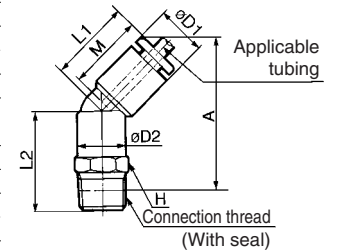


* Reference dimensions after R thread installation. Note) $\phi D1$: Max. diameter

45° Male Elbow: KRK



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)
										FR double layer	FR soft nylon	
6	1/8	KRK06-01S	10	12.8	10	18	20.5	33	19	6.9	3.4	12
	1/4	KRK06-02S	14				24.5	35				10
	3/8	KRK06-03S	17				26.5	36.5				33
8	1/8	KRK08-01S	12	15.2	12	20.5	22	37	20.5	19.7		13
	1/4	KRK08-02S	14				26	39			21	
	3/8	KRK08-03S	17				28	41			35	
10	1/8	KRK10-01S	17	18.5	17	24	24	42	23	30.9	23.2	25
	1/4	KRK10-02S					27	43.5				26
	3/8	KRK10-03S					29	45				36
	1/2	KRK10-04S					22	33				47.5
12	1/4	KRK12-02S	17	20.9	17	25	27.5	45.5	24	44.5	35.1	28
	3/8	KRK12-03S					29.5	47.5				38
	1/2	KRK12-04S					22	33.5				49.5

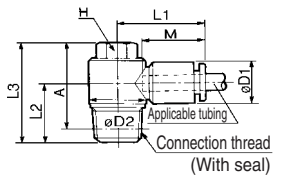


* Reference dimensions after R thread installation. Note) $\phi D1$: Max. diameter

Universal Male Elbow: KRV



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)			
											FR double layer	FR soft nylon				
6	1/8	KRV06-01S	8	12.8	13.4	24	14.5	26.5	22.5	17	5.9	2.9	15			
	1/4	KRV06-02S	10										15.4	23.5	18.5	31
8	1/8	KRV08-01S	12	15.2	17.6	28.5	18.5	28.5	24.5	18.5	16	11.2	24			
	1/4	KRV08-02S											18.5	31.5	25.5	30
	3/8	KRV08-03S											14	20.6	27.5	20.5
10	1/4	KRV10-02S	14	18.5	20.6	31	19.5	35.5	29.5	21	27	20.3	40			
	3/8	KRV10-03S											20.5	36.5	30	49
12	3/8	KRV12-03S	17	20.9	25.2	34	22	38.5	32	22	39	30.8	63			
	1/2	KRV12-04S					25	41.5	33.5				80			

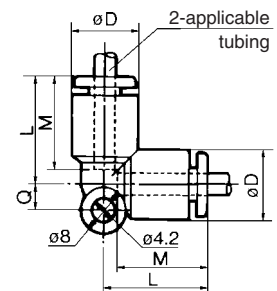


* Reference dimensions after R thread installation. Note) $\phi D1$: Max. diameter

Union Elbow: KRL



Applicable tubing O.D. (mm)	Model	ϕD Note)	L	Q	M	Effective area (mm ²)		Weight (g)
						FR double layer	FR soft nylon	
6	KRL06-00	12.8	20	5.3	17	9.0	4.2	6
8	KRL08-00	15.2	23	6	18	21.6	14.9	10
10	KRL10-00	18.5	26.5	6.8	21	35.2	25.0	17
12	KRL12-00	20.9	28.5	7.5	22	50.2	39.7	21

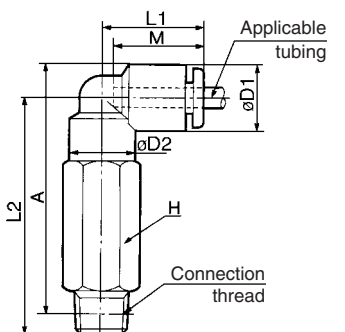


Note) ϕD : Max. diameter

Extended Male Elbow: KRW



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)
										FR double layer	FR soft nylon	
6	1/8	KRW06-01S	10	12.8	10	20	40	42.5	17	8.6	4.0	26
	1/4	KRW06-02S	14				46	46.5				41
	3/8	KRW06-03S	17				48	48				67
8	1/8	KRW08-01S	12	15.2	12	23	43.5	47	18.5	20.5	14.2	30
	1/4	KRW08-02S	14				49.5	51				47
	3/8	KRW08-03S	17				51.5	52.5				74
10	1/4	KRW10-02S	17	18.5	17	26.5	56.5	59.5	21	33.5	23.8	66
	3/8	KRW10-03S					58.5	61				76
	1/2	KRW10-04S					22	65				66
12	1/4	KRW12-02S	17	20.9	17	28.5	57.5	62	22	47.7	37.7	68
	3/8	KRW12-03S					59.5	63.5				78
	1/2	KRW12-04S					22	66				68.5



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

- K□
- M□
- H□
- D□
- MS
- T□
- VMG

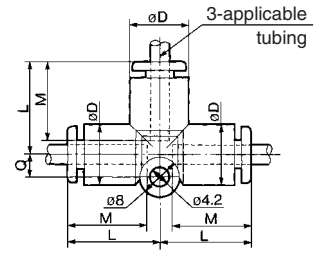
Series KR

Union Tee: KRT



Applicable tubing O.D. (mm)	Model	øD ^(Note)	L	Q	M	Effective area (mm ²)		Weight (g)
						FR double layer	FR soft nylon	
6	KRT06-00	12.8	20	5.3	17	10.6	6.4	10
8	KRT08-00	15.2	23	6	18.5	25.6	17.7	15
10	KRT10-00	18.5	26.5	6.8	21	40	28.4	25
12	KRT12-00	20.9	28.5	7.5	22	57.4	45.4	29

Note) øD: Max. diameter

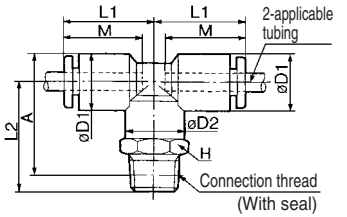


Male Branch Tee: KRT



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note ⁽¹⁾		L1	L2	A*	M	Effective area (mm ²)		Weight (g)			
				øD1	øD2					FR double layer	FR soft nylon				
6	1/8	KRT06-01S	10	12.8	10	20	23	25.5	17	11.0	6.0	12			
	1/4	KRT06-02S	14										27	27.5	20
	3/8	KRT06-03S	17										29	29	34
8	1/8	KRT08-01S	12	15.2	12	23	24.5	28	18.5	26.3	18.2	14			
	1/4	KRT08-02S	14										28.5	30	22
	3/8	KRT08-03S	17										30.5	31.5	36
10	1/8	KRT10-01S	17	18.5	17	26.5	27	32	21	40.8	29.0	31			
	1/4	KRT10-02S											30	33	29
	3/8	KRT10-03S											32	34.5	39
12	1/2	KRT10-04S	22	20.9	17	28.5	36	37	22	57.2	45.2	66			
	1/4	KRT12-02S	31										35.5	31	
	3/8	KRT12-03S	33										37	41	
	1/2	KRT12-04S	22				37	39.5				68			

* Reference dimensions after R thread installation. Note) øD1: Max. diameter

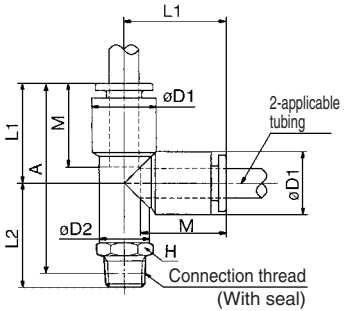


Male Run Tee: KRY



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note		L1	L2	A*	M	Effective area (mm ²)		Weight (g)			
				øD1	øD2					FR double layer	FR soft nylon				
6	1/8	KRY06-01S	10	12.8	10	20	23	39	19	10.6	6.4	12			
	1/4	KRY06-02S	14										27	41	20
	3/8	KRY06-03S	17										29	42.5	34
8	1/8	KRY08-01S	12	15.2	12	23	24.5	43.5	20.5	25.6	17.7	14			
	1/4	KRY08-02S	14										28.5	45.5	22
	3/8	KRY08-03S	17										30.5	47	36
10	1/8	KRY10-01S	17	18.5	17	26.5	27	49.5	23	40.0	28.4	31			
	1/4	KRY10-02S											30	50.5	29
	3/8	KRY10-03S											32	52	39
12	1/2	KRY10-04S	22	20.9	17	28.5	36	54.5	24	57.4	45.4	66			
	1/4	KRY12-02S	31										53.5	31	
	3/8	KRY12-03S	33										55	41	
	1/2	KRY12-04S	22				37	57.5				68			

* Reference dimensions after R thread installation. Note) øD1: Max. diameter

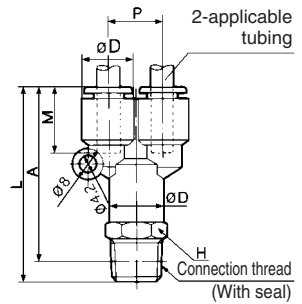


Branch: KRU



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note		L	P	A*	M	Effective area (mm ²)		Weight (g)		
				øD	L					FR double layer	FR soft nylon			
6	1/8	KRU06-01S	13	12.8	45.5	12.8	41.5	17	10.4	4.2	22			
	1/4	KRU06-02S	14									49	44.5	35
	3/8	KRU06-03S	17									51	44.5	35
8	1/8	KRU08-01S	17	15.2	55.5	15.2	48.5	18.5	25.6	17.7	24			
	1/4	KRU08-02S										52.5	49.5	24
	3/8	KRU08-03S										55.5	50	36
10	1/4	KRU10-02S	19	18.5	62	18.5	55.5	21	40	28.4	40			
	3/8	KRU10-03S										61	55	30
	1/2	KRU10-04S										62	55.5	40
12	1/4	KRU12-02S	22	20.9	64.5	20.9	58.5	22	57.4	45.4	40			
	3/8	KRU12-03S										65.5	59	40
	1/2	KRU12-04S										68.5	60.5	65

* Reference dimensions after R thread installation. Note) øD1: Max. diameter

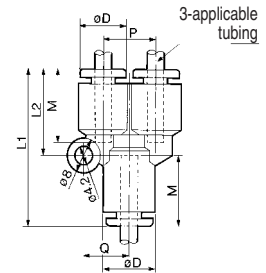


Union "Y": KRU



Applicable tubing O.D. (mm)	Model	Note øD	L1	L2	P	Q	M	Effective area (mm ²)		Weight (g)
								FR double layer	FR soft nylon	
6	KRU06-00	12.8	37	20	12.8	11.7	17	10.4	4.2	10
8	KRU08-00	15.2	42.5	24.5	15.2	13.7	18.5	25.6	17.7	12
10	KRU10-00	18.5	48	27.5	18.5	16.1	21	40	28.4	16
12	KRU12-00	20.9	51	30	20.9	18.1	22	57.4	45.4	23

Note) øD: Max. diameter

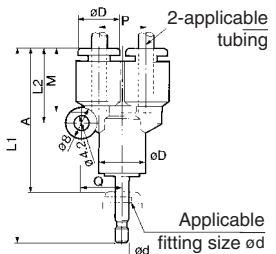


Plug-in "Y": KRU



Applicable tubing O.D. (mm)	Applicable fitting size ød	Model	Note øD	L1	L2	P	Q	A	M	Effective area (mm ²)		Weight (g)
										FR double layer	FR soft nylon	
6	6	KRU06-99	12.8	55.5	20	12.8	11.7	38.5	17	10.4	4.2	19
8	8	KRU08-99	15.2	64.5	24.5	15.2	13.7	46	18.5	25.6	17.7	22
10	10	KRU10-99	18.5	71.5	27.5	18.5	16.1	50.5	21	40	28.4	26
12	12	KRU12-99	20.9	75.5	30	20.9	18.1	53.5	22	57.4	45.4	32

Note) øD: Max. diameter



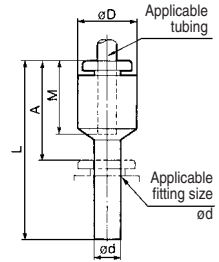
Flame Resistant (Equivalent to UL-94 Standard V-0) FR One-touch Fittings Series KR

Plug-in Reducer: KRR



Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	ϕD ^(Note)	L	A	M	Effective area (mm ²)		Weight (g)
							FR double layer	FR soft nylon	
6	8	KRR06-08	12.8	37	18.5	17	10.4	5.6	2.5
	10	KRR06-10		39.5					9.3
8	10	KRR08-10	15.2	41	18.5	18.5	26.1	18.0	4.0
	12	KRR08-12		42					20
10	12	KRR10-12	18.5	44.5	23	21	41.5	32.8	33

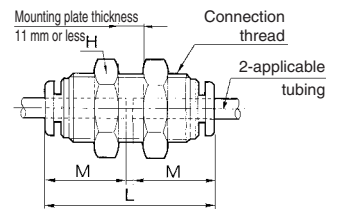
Note) ϕD : Max. diameter



Bulkhead Union: KRE



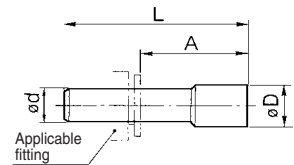
Applicable tubing O.D. (mm)	Model	T (M)	H (width across flats)	L	Mounting hole	M	Effective area (mm ²)		Weight (g)
							FR double layer	FR soft nylon	
6	KRE06-00	M14 x 1	17	34.5	15	17	10.4	5.6	33
8	KRE08-00	M16 x 1	19	38	17	18.5	26.1	18.0	52
10	KRE10-00	M20 x 1	24	42.5	21	21	41.5	29.5	70
12	KRE12-00	M22 x 1	27	44	23	22	58.3	46.1	90



Plug: KRP



Applicable fitting size ϕd	Model	ϕD	L	A	Weight (g)
6	KRP-06	8	35	16	1
8	KRP-08	10	39	18.5	2
10	KRP-10	12	43	20	3.5
12	KRP-12	14	46	22	5

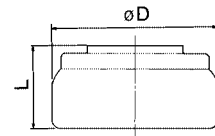


Spatter Cover 1: KR (Applicable tube: FR soft nylon)



Applicable fitting size	Model	ϕD	L	Weight (g)
6	KR-06C	15.5	9	0.9
8	KR-08C	17	9	1.0
10	KR-10C	20.8	10.5	1.5
12	KR-12C	22.8	10.5	1.6

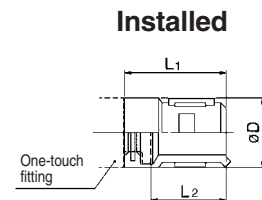
* When tube insert parts are in line as KQU Union "Y", use KR-□□C1.



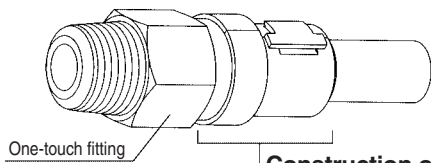
Spatter Cover 2: KR (Applicable tube: FR soft nylon, FR double layer)



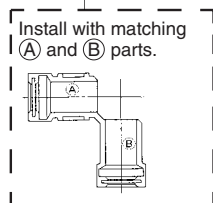
Applicable fitting size	Model	L ₁	L ₂	ϕD
6	KR-06C1	18	13.7	12.8
8	KR-08C1	20	15.7	15
10	KR-10C1	22	17.2	18
12	KR-12C1	22	17.2	20



How to install



Construction of spatter cover



K□

M□

H□

D□

MS

T□

VMG

Flame Resistant (Equivalent to UL-94 Standard V-0) FR One-touch Fittings Manifold Series *KRM*

Compact piping possible.
Manifold piping possible.
Many varieties (8 types) are available.
One-touch fittings give the most efficient operation.
Cover (Option)



Model

Model	Porting		No. of Port A	Port A size	Port B size
	Port A	Port B			
KRM11	One-touch fitting	One-touch fitting	6, 10	ø6 tube	ø10 tube
				ø8 tube	ø12 tube
KRM12	One-touch fitting	Rc female thread	6, 10	ø6 tube	Rc 1/4
				ø8 tube	Rc 3/8

Applicable Tubing

Tubing material	FR double layer, FR soft nylon
Tubing O.D.	ø6, ø8, ø10, ø12

Specifications

Model	KRM11	KRM12
Fluid	Air/Water <small>Note</small>	
Maximum operating pressure	1.0 MPa	
Proof pressure	3.0 MPa	
Ambient and fluid temperature	-5 to 60°C (Water: 0 to 60°C) (No freezing)	
Thread	—	JIS B 0203 (Taper threads for piping)
Accessory	None	Hexagon socket head blank plug with sealant: 1 pc.

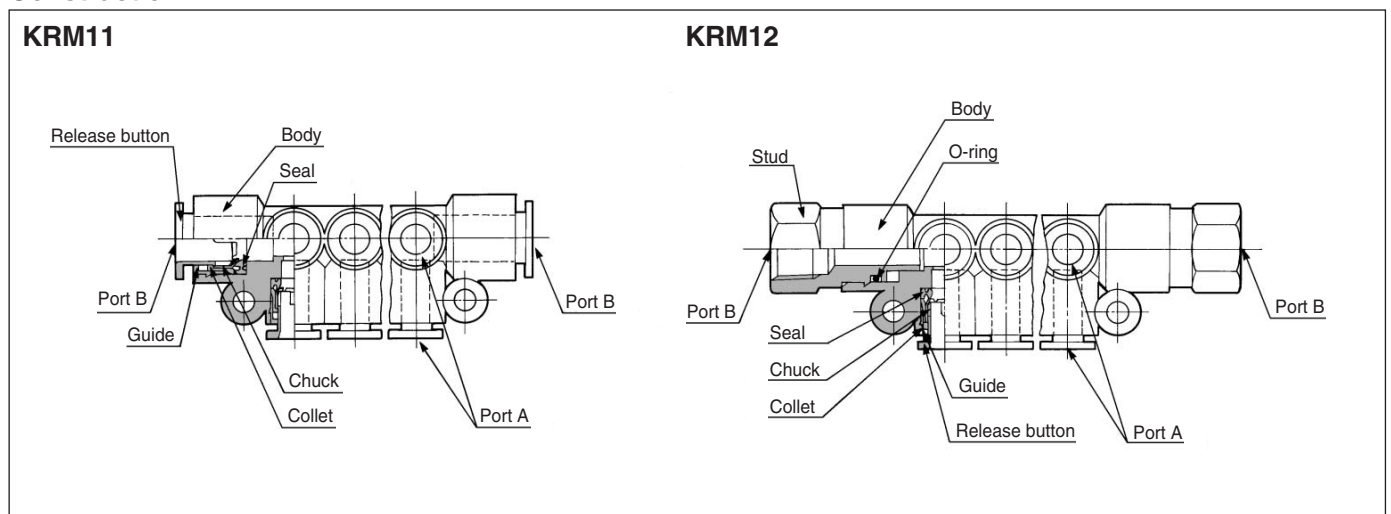


Note) Applicable for general industrial water. Please consult with SMC if using for other kinds of fluid. Also, the surge pressure must be under the maximum operating pressure.

Principal Parts Material

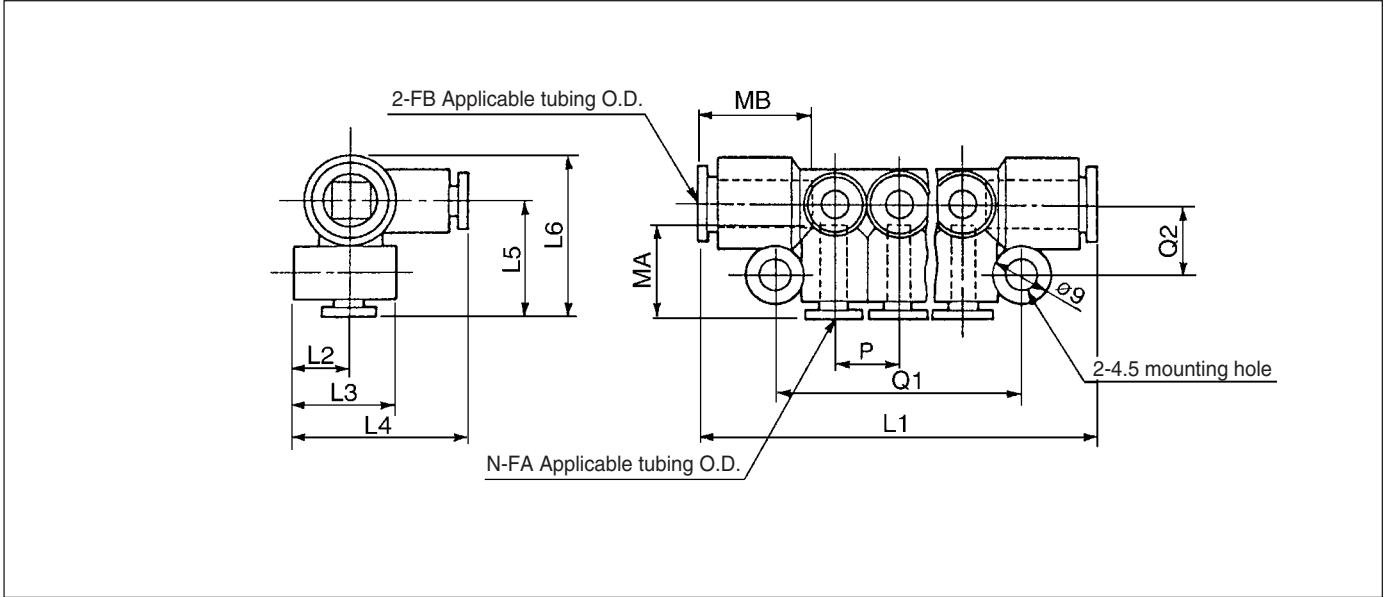
Body	Flame resistant PBT (UL-94 standard V-0)	
Stud	—	C3604BD
Chuck	Stainless steel 304	
Guide	Stainless steel 304	
Collet	POM	
Seal	NBR	
Release button	Flame resistant PBT (UL-94 standard V-0)	
Cover	Flame resistant CR (UL-94 standard V-0)	

Construction



FR One-touch Fittings Manifold Series KRM

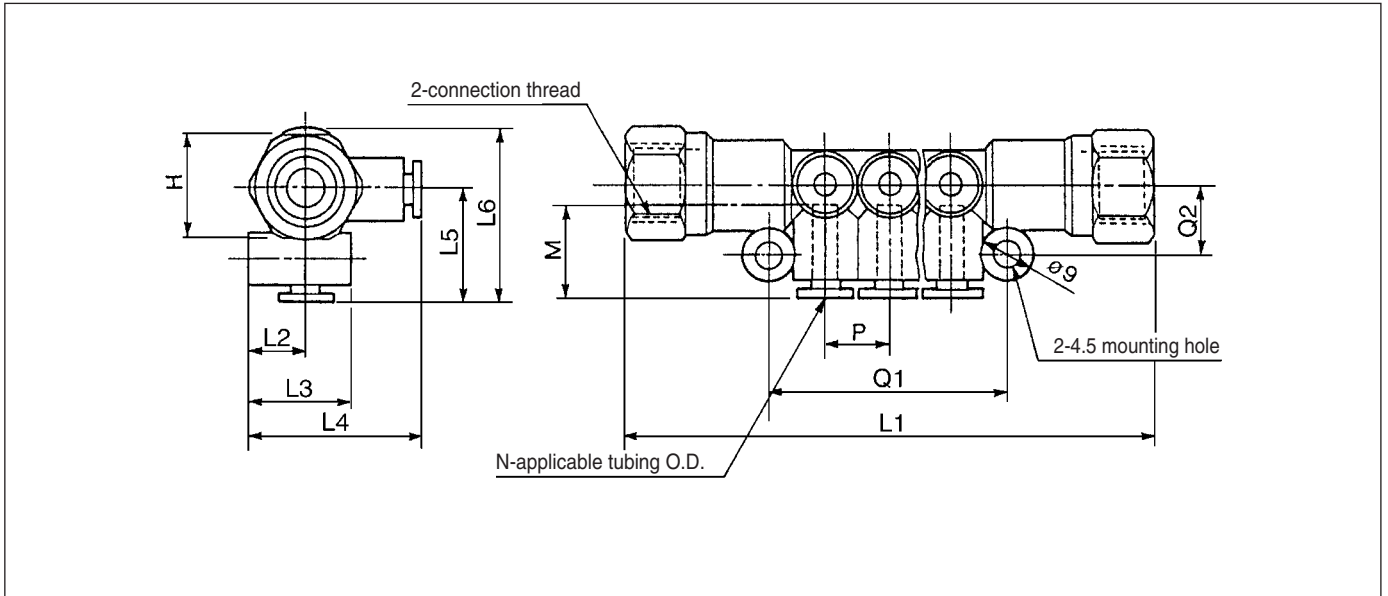
Dimensions: KRM11



Applicable tubing O.D. (mm)		Model	N	L1	L2	L3	L4	L5	L6	P	Q1	Q2	MA	MB	Port B Min. bore	Weight (g)
FA	FB															
6	10	KRM11-06-10-6	6	76	10	19.5	31.5	21.5	31	13	47	13.5	17	21	7.5	29
		KRM11-06-10-10	10	102							73					39
8	12	KRM11-08-12-6	6	85	11.5	22.5	35.5	24	34.5	15.5	55	14.7	18.5	22	9	41
		KRM11-08-12-10	10	116							86					57

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- VMG

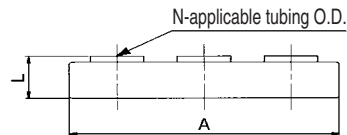
Dimensions: KRM12



Applicable tubing O.D. (mm)	Connection thread Rc	Model	N	H (width across flats)	L1	L2	L3	L4	L5	L6	P	Q1	Q2	M	Port B Min. bore	Weight (g)
6	1/4	KRM12-06-02-6	6	17	99	10	19.5	31.5	21.5	31	13	47	13.5	17	7.5	81
		KRM12-06-02-10	10	125	73							91				
8	3/8	KRM12-08-03-6	6	19	108	11.5	22.5	35.5	24	34.5	15.5	55	14.7	18.5	9	97
		KRM12-08-03-10	10	139	86							112				

Spatter Cover 3: KRMC (Applicable: FR soft nylon)

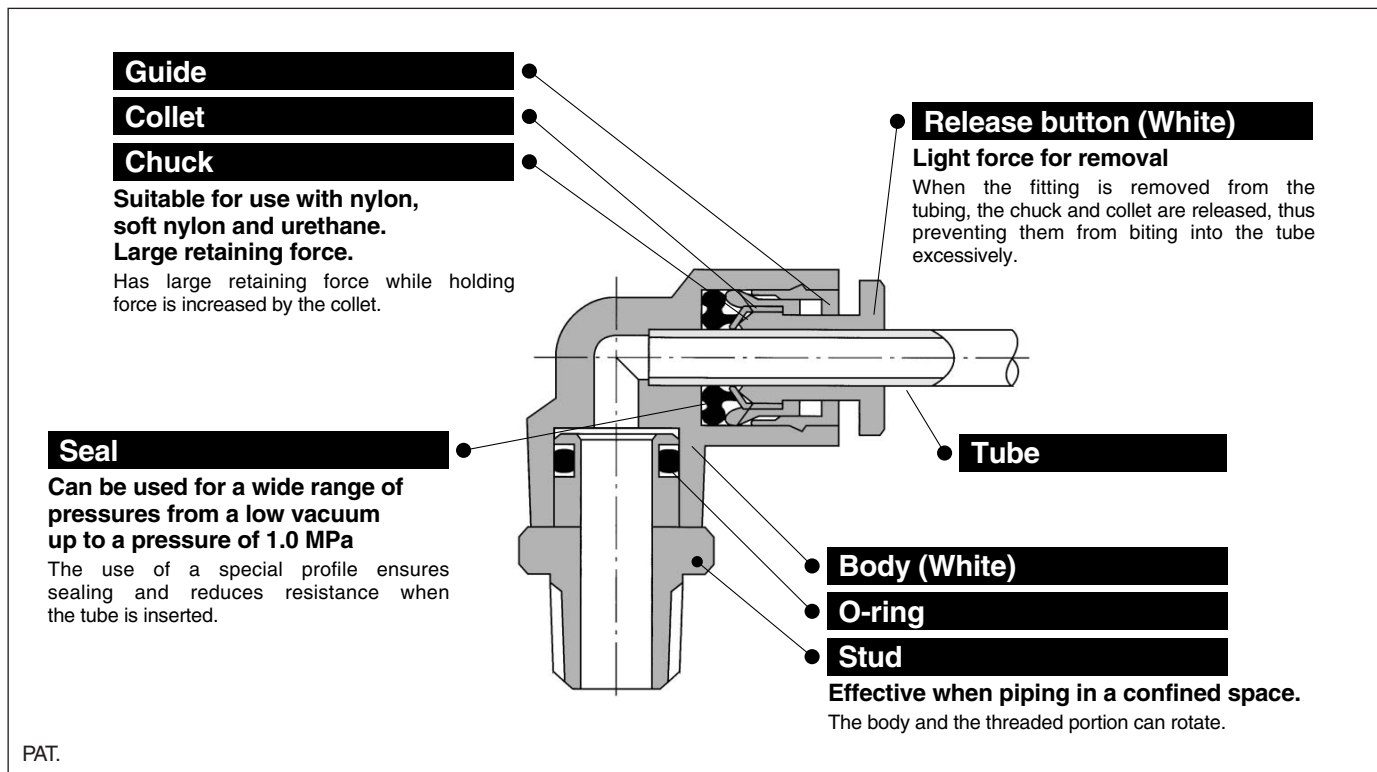
Applicable tubing O.D. (mm)	N	Model	L	A	Weight (g)
6	6	KRMC-06-6	40.5	7	2.5
	10	KRMC-06-10	66.5	7	4
8	6	KRMC-08-6	48	8	3
	10	KRMC-08-10	79	8	4.5



Refer to page 15-3-5 for spatter cover 1 and 2.

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


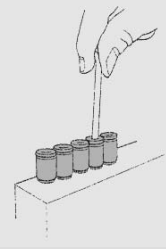

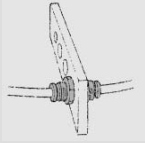

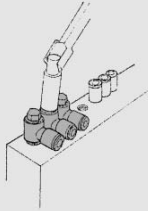

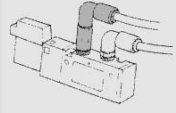


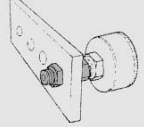










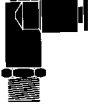




Fluid	Air/Water ⁽¹⁾	
Maximum operating pressure	1.0 MPa	
Operating vacuum pressure	-100 kPa	
Proof pressure	3.0 MPa	
Ambient and fluid temperature	-5 to 60°C (Water: 0 to 40°C) (No freezing)	
Thread	Mounting section	JIS B 0203 (Taper thread for piping)
	Nut section	JIS B 0211 Class 2 (Metric fine thread)
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


Stainless One-touch Fittings Series KG


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>	Delta union KGD P. 16  <p>Use to branch line in 90° direction from female thread.</p>
Male branch connector			
KGLU	P. 12	 <p>Use to branch line at right angles to female thread.</p>	Different dia. double union "Y" KGUD P. 17  <p>Use to four-branch line in the same direction.</p>
Branch union elbow			
KGLU	P. 13	 <p>Use to branch line at right angles.</p>	Delta branch KGUD P. 16  <p>Use to four-branch line in the same direction from female thread.</p>
			Union "Y" KGU P. 17  <p>Use to branch line in the same direction.</p>


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Series KG

Model

Different dia. union "Y"
KGU P. 17

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

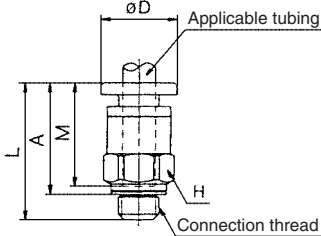
Plug-in reducer
KGR P. 17

 Use to change size of One-touch fittings.

Tube cap
KGC P. 18

 Use to plug unused tubing.

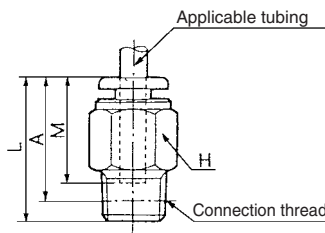
Branch
KGU P. 16

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

Male Connector: KGH

<M5>



<R>



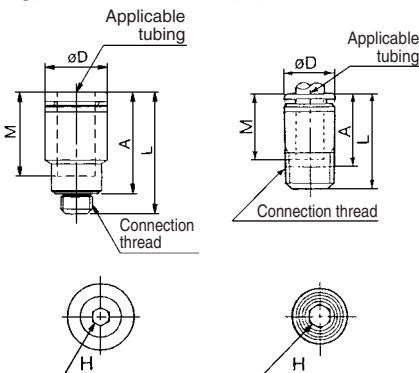
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	øD ⁽¹⁾	L	A*	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
								Nylon	Urethane	
4	M5 x 0.8	KGH04-M5	8	8	17	14	13	4	4	2.4
	1/8	KGH04-01	10	—	22	18	16	5.6	4	9
	1/4	KGH04-02	14	—	19.5	13.5				16
6	M5 x 0.8	KGH06-M5	10	10	18.5	15	14	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
8	1/8	KGH08-01	14	—	28	24	18.5	26.1	18.0	21
	1/4	KGH08-02			26.5	20.5				19
	3/8	KGH08-03	17		—	22				15.5
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				19
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		—	30				22
16	3/8	KGH16-03	24	—	39.5	32	24	81	(81)	61
	1/2	KGH16-04			35.5	26.5		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>



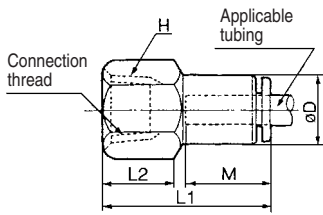
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	øD ^{Note)}	L	A*	M	Effective area (mm ²)		Weight (g)
								Nylon	Urethane	
4	M5 x 0.8	KGS04-M5	2.5	9.5	19	15.5	13	4	4	2.6
	1/8	KGS04-01	3	9.8	23	19	16	4.1	3.6	8
6	M5 x 0.8	KGS06-M5	2.5	11.5	20	16.5	14	4	4	3.2
	1/8	KGS06-01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

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

Stainless One-touch Fittings Series KG



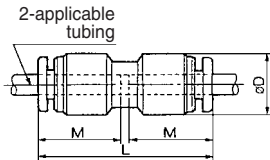
Female Connector: KGF



Applicable tubing O.D. (mm)	Connection thread Rc	Model	H (width across flats)	Note) øD	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) øD: Max. diameter

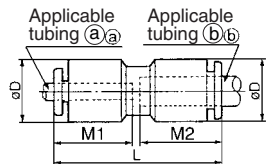
Straight Union: KGH



Applicable tubing O.D. (mm)	Model	Note) øD	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) øD: Max. diameter

Different Diameter Straight: KGH

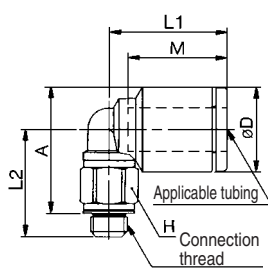


Applicable tubing O.D. (mm)		Model	Note) øD	L	M1	M2	Effective area (mm ²)		Weight (g)
øA	øB						Nylon	Urethane	
4	6	KGH04-06	12.8	34.5	16	17	5.6	4	5
6	8	KGH06-08	15.2	38.5	17	18.5	13.1	10.4	6
8	10	KGH08-10	18.5	42	18.5	21	26.1	18.0	11
10	12	KGH10-12	20.9	44.5	21	22	41.5	29.5	14

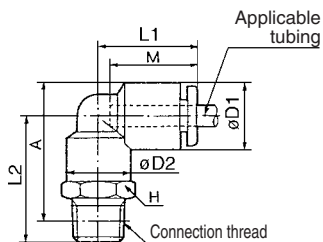
Note) øD: Max. diameter

Male Elbow: KGL

<M5>



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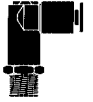


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	(1) øD1	øD2	L1	L2	A*	M	Effective area (2) mm ²		Weight (g)								
										Nylon	Urethane									
4	M5 x 0.8 1/8	KGL04-M5	7	9.5	—	16	13.5	15	13	3.5	3.5	2.7								
												10	10.4	10	18	23	16	4.2	4.2	10
												14	—	—	26	25	—	—	—	19
6	M5 x 0.8 1/8	KGL06-M5	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
8	1/4 3/8	KGL06-03	17	—	—	—	—	—	—	—	—	33								
												12	15.2	12	23	24.5	28	—	—	13
												14	—	—	28.5	30	18.5	21.6	14.9	21
10	1/4 3/8	KGL08-03	17	—	—	—	—	—	—	—	—	35								
												12	—	—	30.5	31.5	—	—	—	21
												14	17	17	26.5	27	32	21.6	14.9	25
12	1/4 3/8	KGL10-03	17	18.5	17	26.5	30	33	21	35.2	25.0	26								
												14	—	—	32	34.5	—	—	—	36
												22	—	—	36	37	—	—	—	63
16	1/4 3/8	KGL10-04	22	—	—	—	—	—	—	—	—	28								
												12	17	17	31	35.5	50.2	39.7	38	
												14	—	—	37	39.5	—	—	—	65
16	3/8 1/2	KGL12-04	22	20.9	17	28.5	33	37	22	71	(71)	101								
												12	—	—	37	39.5	—	—	—	105
												14	—	—	38	44.5	100	(84)	—	105

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

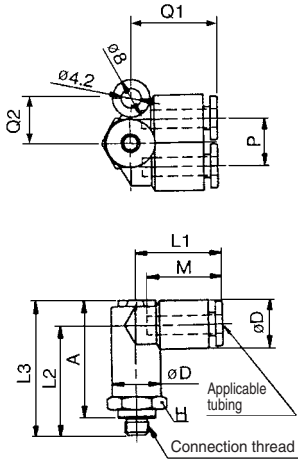
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Series KG



Male Branch Connector: KGLU

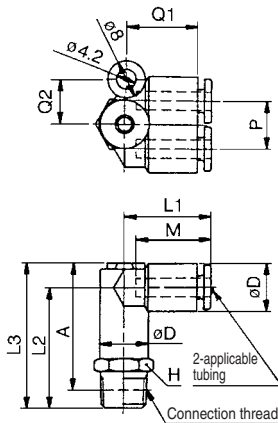
<M5>



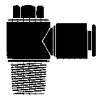
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) ϕD	L1	L2	L3	A*	M	P	Q1	Q2	Effective area (mm ²)		Weight (g)
													Nylon	Urethane	
4	M5 x 0.8	KGLU04-M5	11	10.4	18.5	24	29.5	25.5	16	10.4	18.5	10	4.3	4.1	10
	1/8	KGLU04-01	14			26.5	32	27.5					6.0	4.1	12
	1/4	KGLU04-02	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

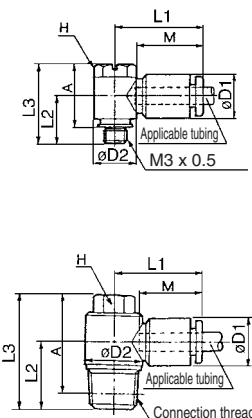
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Universal Male Elbow: KGV



<M5>



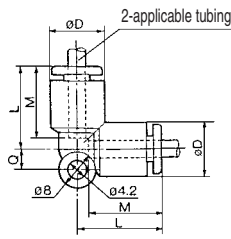
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A*	M	Effective area (mm ²)		Weight (g)
											Nylon	Urethane	
4	M5 x 0.8	KGV04-M5	8	10.4	9.8	20.5	11	18.5	15	16	2.9	2.9	6
	1/8	KGV04-01			13.4	22	14.5	22.5	14				
6	M5 x 0.8	KGV06-M5	8	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
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	18.5	31.5	25.5	30		30		
	3/8	KGV08-03			14	20.6	27.5	20.5	36.5		30	20.5	14.3
10	1/4	KGV10-02	14	18.5	19.5	35.5	29.5	21	27	20.3	40		
	3/8	KGV10-03			14	20.6	31				20.5	36.5	30
12	3/8	KGV12-03	17	20.9	22	38.5	32	22	39	30.8	63		
	1/2	KGV12-04			17	25.2	34				25	41.5	33.5

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

Stainless One-touch Fittings Series KG



Union Elbow: KGL

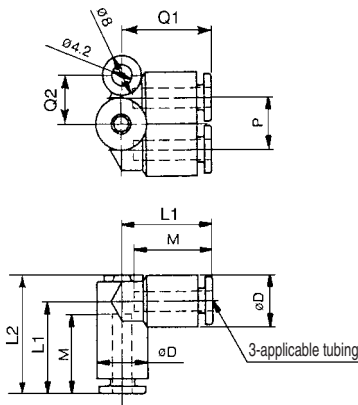


Applicable tubing O.D. (mm)	Model	øD ⁽¹⁾	L	Q	M2	Effective area ⁽²⁾ (mm ²)		Weight (g)
						Nylon	Urethane	
4	KGL04-00	10.4	18	4.5	16	4.2	4.2	6
6	KGL06-00	12.8	20	5.3	17	11.4	9.0	6
8	KGL08-00	15.2	23	6	18.5	21.6	14.9	10
10	KGL10-00	18.2	26.5	6.8	21	35.2	25.0	17
12	KGL12-00	20.9	28.5	7.5	22	50.2	39.7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

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

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

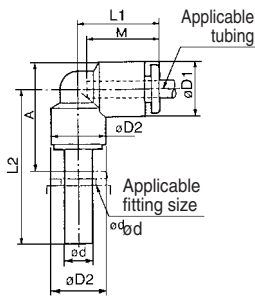
Branch Union Elbow: KGLU



Applicable tubing O.D. (mm)	Model	Note) øD	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) øD: Max. diameter

Plug-in Elbow: KGL



Applicable tube O.D. (mm)	Applicable fitting size ød	Model	Note) øD1	øD2	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

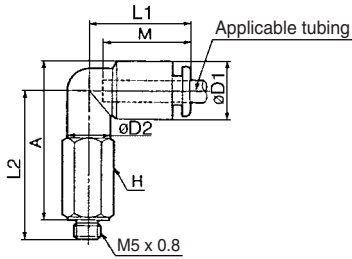
Note) øD1: Max. diameter

Series KG

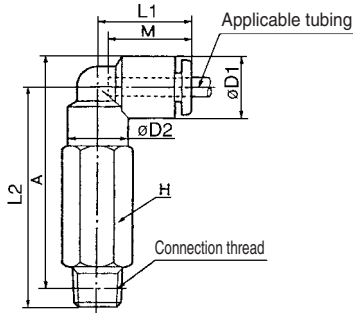


Extended Male Elbow: KGW

<M5>

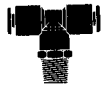


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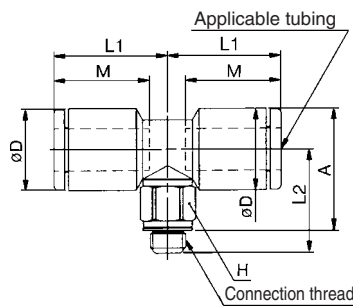
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	A*	M	Effective area (mm ²)		Weight (g)			
										Nylon	Urethane				
4	M5 x 0.8	KGW04-M5	8	10.4	8	18	30	32	16	3.0	3.0	11			
	1/8	KGW04-01	10							37.5	38.5	4.0	4.0	23	
	1/4	KGW04-02	14							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							40	42.5	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

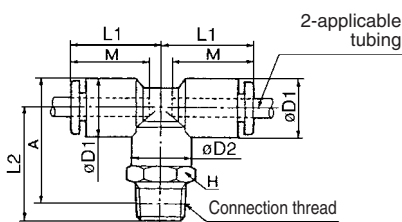


Male Branch Tee: KGT

<M5>



<R>

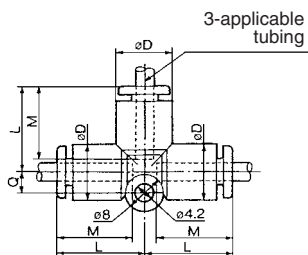


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note 1) $\phi D1$	$\phi D2$	L1	L2	A*	M	Effective area (2) (mm ²)		Weight (g)
										Nylon	Urethane	
4	M5 x 0.8	KGT04-M5	7	9.5	—	15.5	14	15.5	13	4.3	4.3	3.5
	1/8	KGT04-01	10	10.4	10	18	22	23	16	6.0	4.1	13
	1/4	KGT04-02	14				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
8	1/8	KGT08-01	12	15.2	12	23	24.5	28	18.5	26.3	18.2	14
	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		116		

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



Union Tee: KGT



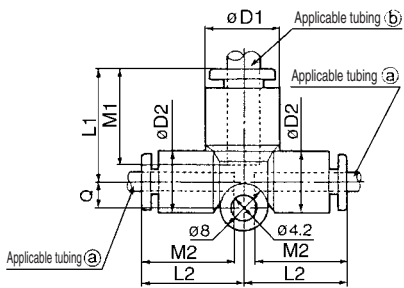
Applicable tubing O.D. (mm)	Model	ϕD (1)	L	Q	M	Effective area (2) (mm ²)		Weight (g)
						Nylon	Urethane	
4	KGT04-00	10.4	18	4.5	16	6.4	4.4	7
6	KGT06-00	12.8	20	5.3	17	13.4	10.6	10
8	KGT08-00	15.2	23	6	18.5	25.6	17.7	15
10	KGT10-00	18.5	26.5	6.8	21	40	28.4	25
12	KGT12-00	20.9	28.5	7.5	22	57.4	45.4	29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

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

Stainless One-touch Fittings Series KG



Different Diameter Tee: KGT

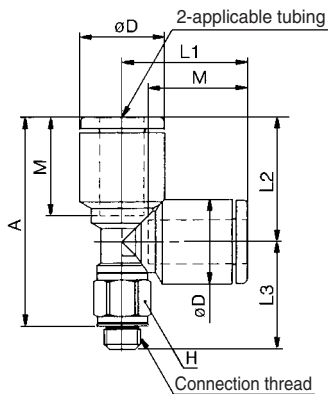


Applicable tubing O.D. (mm)		Model	Note) øD1	øD2	L1	L2	Q	M1	M2	Effective area (mm ²)		Weight (g)
(a)	(b)									Nylon	Urethane	
4	6	KGT04-06	12.8	10.4	19.5	18	4.5	17	16	7.1	6.5	5
6	8	KGT06-08	15.2	12.8	22.5	20	5.3	18.5	17	16.4	16.4	8
8	10	KGT08-10	18.5	15.2	26.5	23	6	21	18.5	36	27.2	14
10	12	KGT10-12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

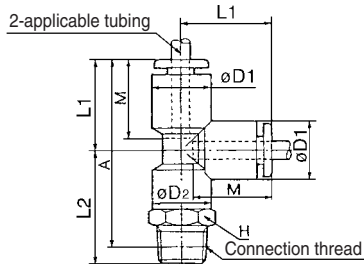
Note) øD1: Max. diameter

Male Run Tee: KGY

<M5>



<R>

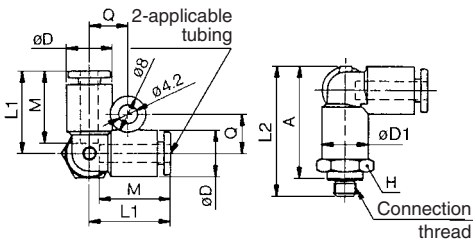


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) (1) øD1	øD2	L1	L2	L3	A*	M	Effective area (2) (mm ²)		Weight (g)
											Nylon	Urethane	
4	M5 x 0.8	KGY04-M5	7	9.5	—	16	13.5	15	25.5	13	4.6	4.6	3.5
	1/8	KGY04-01	10	10.4	10	18	22	—	36	16	6.4	4.4	13
	1/4	KGY04-02	14	—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

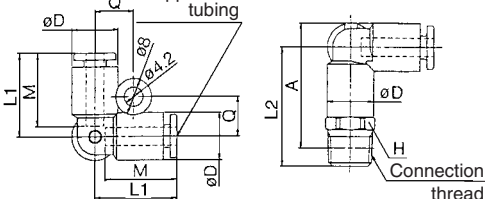
* Reference dimensions after R thread installation.
 Note 1) øD1: Max. diameter
 Note 2) (): Values for nylon.

Male Delta Union: KGD

<M5>



<R>



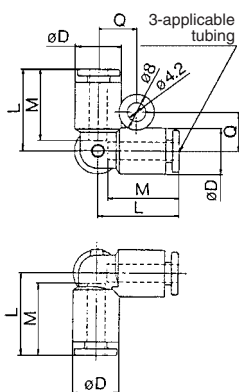
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) øD	L1	L2	A*	M	Q	Effective area (mm ²)		Weight (g)
										Nylon	Urethane	
4	M5 x 0.8	KGD04-M5	11	—	—	—	—	—	—	—	—	—
	1/8	KGD04-01	11	10.4	18.5	24	25.5	16	8.7	4.3	4.3	10
6	1/4	KGD04-02	14	—	—	—	30.5	30	—	6.0	6.0	21
	M5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

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

Series KG



Delta Union: KGD

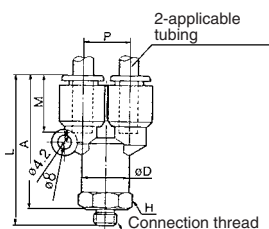


Applicable tubing O.D. (mm)	Model	Note) ϕD	L	Q	M	Effective area (mm ²)		Weight (g)
						Nylon	Urethane	
4	KGD04-00	10.4	18.5	8.7	16	6.0	4.1	5
6	KGD06-00	12.8	20.5	9.9	17	13.9	11.0	7
8	KGD08-00	15.2	23.5	11.1	18.5	26.3	18.2	11
10	KGD10-00	18.5	26.5	12.8	21	40.8	29.0	19
12	KGD12-00	20.9	28.5	13.9	22	57.2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

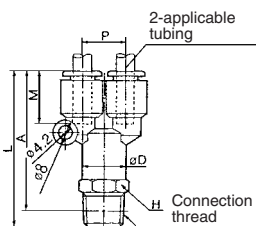
Note) ϕD : Max. diameter

Branch "Y": KGU

<M5>



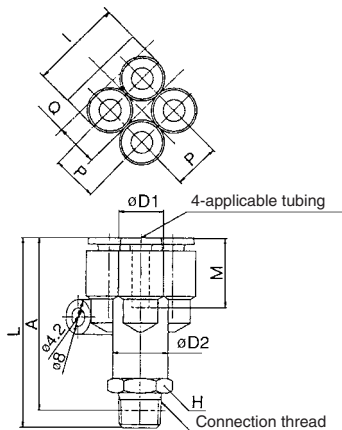
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Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) ϕD	L	P	A*	M	Effective area (mm ²)		Weight (g)
									Nylon	Urethane	
4	M5 x 0.8	KGU04-M5	11	10.4	39.5	10.4	36	16	2.2	2.2	4
	1/8	KGU04-01	42		38		4.2		4.2	11	
	1/4	KGU04-02	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		13.4		10.6	11	
	1/4	KGU06-02	49		43					21	
	3/8	KGU06-03	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	56.5		50		35				
10	1/4	KGU10-02	19	18.5	61	18.5	55	21	40	28.4	30
	3/8	KGU10-03	62		55.5		40		28.4	40	
	1/2	KGU10-04	65		57		65				
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		28.4	40	
	1/2	KGU12-04	68.5		60.5		65				

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

Delta Branch: KGUD



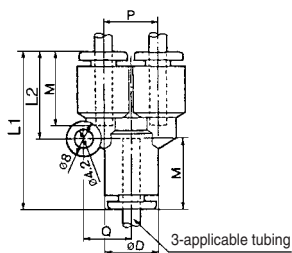
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L	I	A*	Q	M	P	Effective area (mm ²)		Weight (g)
												Nylon	Urethane	
4	1/8	KGUD04-01	13	10.4	12.8	43.5	21	39.5	9.7	16	10.4	4.2	4.2	17
	1/4	KGUD04-02	14			47		41				25		
6	1/8	KGUD06-01	17	12.8	15.2	50.5	26	46.5	11.7	17	12.8	13.4	10.6	29
	1/4	KGUD06-02	53.5			47.5		29						

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

Stainless One-touch Fittings Series KG



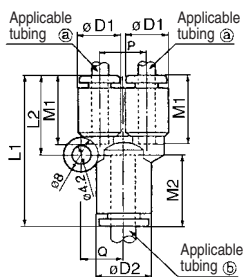
Union "Y": KGU



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

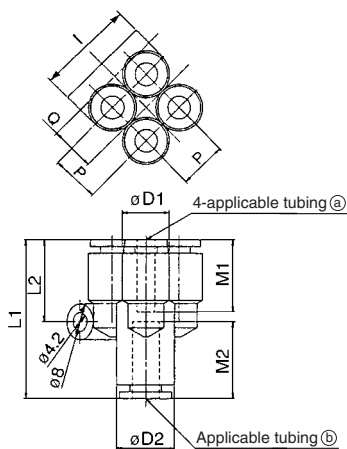
Different Diameter Union "Y": KGU



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

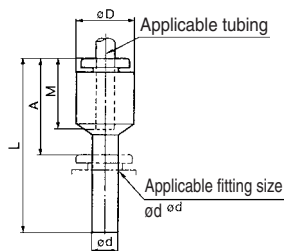
Different Diameter Double Union "Y": KGUD



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



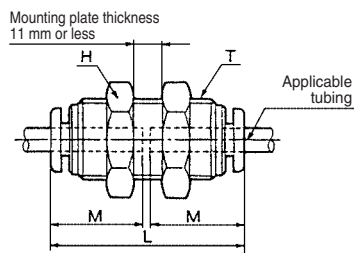
Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	ϕD ⁽¹⁾	L	A	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
							Nylon	Urethane	
4	6	KGR04-06	10.4	34.5	17.5	16	5.6	4	1.8
	8	KGR04-08		36.5	18				2.0
	10	KGR04-10		37	18.5				3.3
6	4	KGR06-04	12.8	37	21	17	13.1	10.4	3
	8	KGR06-08		37	18.5				2.5
	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



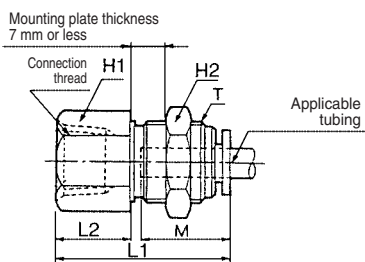
Applicable tubing O.D. (mm)	Model	T (M)	H (width across flats)	L	Mounting hole	M	Effective area ⁽¹⁾ (mm ²)		Weight (g)
							Nylon	Urethane	
4	KGE04-00	M12 x 1	14	32.5	13	16	5.6	4	26
6	KGE06-00	M14 x 1	17	34.5	15	17	13.1	10.4	33
8	KGE08-00	M16 x 1	19	38	17	18.5	26.1	18.0	52
10	KGE10-00	M20 x 1	24	42.5	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

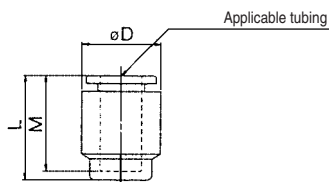


Applicable tubing O.D. (mm)	Connection thread Rc	Model	T (M)	H1 (width across flats)	H2 (width across flats)	L1	L2	Mounting hole	M	Effective area ⁽¹⁾ (mm ²)		Weight (g)
										Nylon	Urethane	
4	1/8	KGE04-01	M12 x 1	14	14	27.5	11	13	16	5.6	4	16
	1/4	KGE04-02		17		31	15					35
6	1/8	KGE06-01	M14 x 1	17	17	31.5	15	15	17	13.1	10.4	30
	3/8	KGE06-03		19		33.5	17					29
	1/8	KGE08-01		17		27.5	7.5					28
8	1/4	KGE08-02	M16 x 1	19	19	33	13	17	18.5	26.1	18.0	27
	3/8	KGE08-03		19		35	15					48
	1/4	KGE10-02		22		24	34.5					12.5
10	3/8	KGE10-03	M20 x 1	22	24	36.5	14	21	21	41.5	29.5	67
	3/8	KGE12-03		24		27	37					14
12	1/2	KGE12-04	M22 x 1	24	27	41	18	23	22	58.3	46.1	59
	3/8	KGE16-03		30		32	40					14
16	1/2	KGE16-04	M28 x 1.5	30	32	44	18	29	25	113	(96)	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

Antistatic One-touch Fittings

Series KA

One-touch fitting with antistatic prevention

One-touch IN/OUT connection.

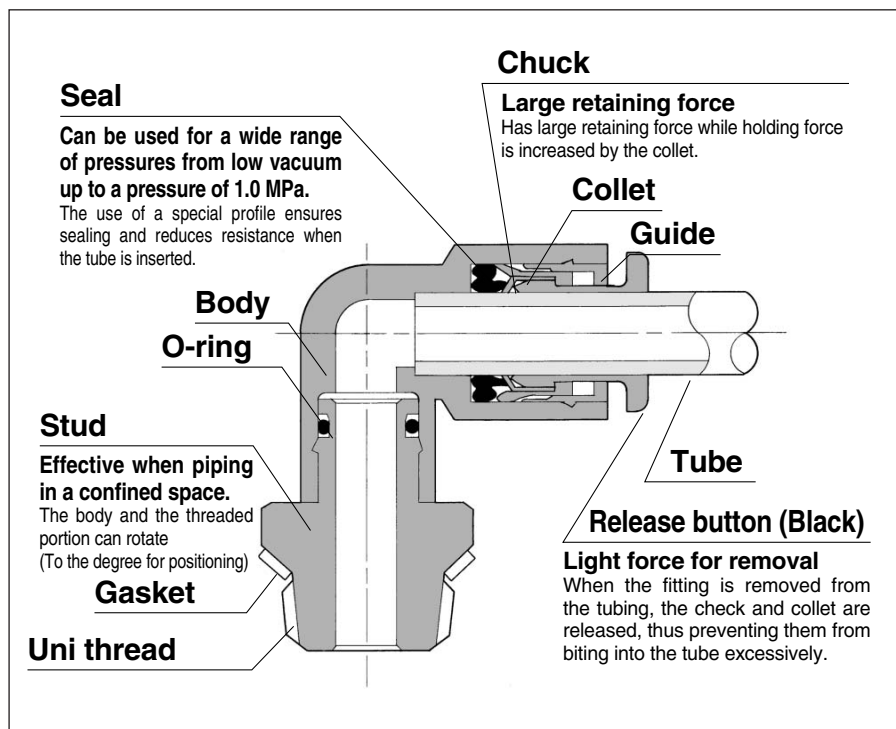
Possible to use from vacuum (-100 kPa).

Can be used in copper-free application.

Flame resistance (Equivalent to UL-94 standard, material V-0)

Surface resistance 10^4 to $10^7 \Omega$

Conductive resin is used for body and seals in fittings and tubing.



Principal Parts Material

Body	C3604BD, PBT
Stud	C3604BD
Chuck	Stainless steel 304
Guide	Stainless steel 304, C3604BD, PBT
Collet, Release button	PBT
Seal, O-ring	NBR

- C3604BD is all electroless nickel plated.
- PBT parts have conductive (10^4 to $10^7 \Omega$) and flame resistant applications. (UL-standard, V-0)
- Conductive NBR (10^4 to $10^7 \Omega$) is used for seals.

Applicable Tubing

Tubing material	Antistatic soft nylon, Polyurethane
Tubing O.D.	$\phi 3.2, \phi 4, \phi 6, \phi 8, \phi 10, \phi 12$

Specifications

Fluid	Air
Maximum operating pressure	1.0 MPa
Operating vacuum pressure	-100 kPa
Proof pressure	3.0 MPa
Ambient and fluid temperature	0 to 40°C
Thread	Uni thread JIS B 0209 Class 2 (Metric coarse thread)
Seal (Thread portion)	Gasket
Copper-free	Brass parts are all electroless nickel plated.
Surface resistance	10^4 to $10^7 \Omega$

Antistatic One-touch Fittings Series KA

Male Connector: KAH

<M5, M6>



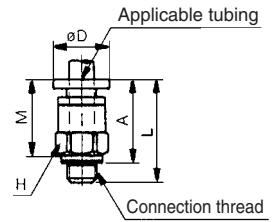
<Uni thread>



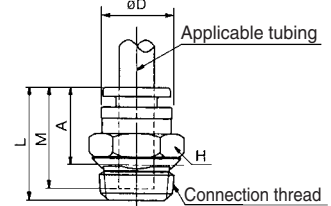
Applicable tubing O.D. (mm)	Connection thread M thread Uni thread	Model	H (width across flats)	øD	L	A*	M	Effective area (mm ²)		Weight (g)		
								Soft nylon	Urethane			
3.2	M5 x 0.8	KAH23-M5	7	8.5	17	14	13	3.4	2.9	2.1		
	M6 x 1	KAH23-M6	8		17.5							
	1/8	KAH23-U01	10		12.5						8.5	
4	M5 x 0.8	KAH04-M5	8	9.5	17	14	13	4	4	2		
	M6 x 1	KAH04-M6			17.5							
	1/8	KAH04-U01			10						18.5	13.5
	1/4	KAH04-U02			14						16.5	10.5
6	M5 x 0.8	KAH06-M5	10	11.5	18.5	15	14	4	4	3		
	M6 x 1	KAH06-M6			19							
	1/8	KAH06-U01			12						19.5	14.5
	1/4	KAH06-U02			14						17	13.1
8	1/8	KAH08-U01	14	14	25	17	18.5	18.0	18.0	11		
	1/4	KAH08-U02			21.5						15.5	
	3/8	KAH08-U03			17						19.5	13.5
10	1/8	KAH10-U01	17	17	28	21	29.5	29.5	29.5	17		
	1/4	KAH10-U02			23						22	
	3/8	KAH10-U03			24						18	
	1/2	KAH10-U04			22						14	
12	1/4	KAH12-U02	19	19	30.5	22	46.1	46.1	46.1	22		
	3/8	KAH12-U03			24.5						19.5	
	1/2	KAH12-U04			22						24.5	16.5

* Reference dimensions after Uni thread installation.

<M5, M6>



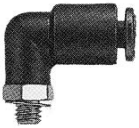
<Uni thread>



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

Male Elbow: KAL

<M5, M6>



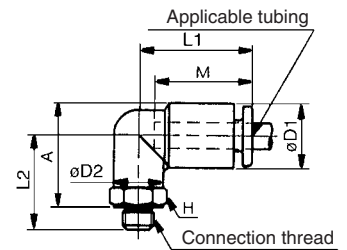
<Uni thread>



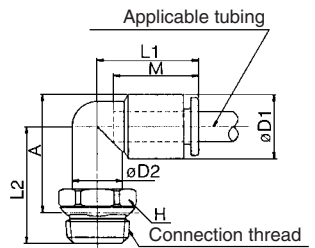
Applicable tubing O.D. (mm)	Connection thread M thread Uni thread	Model	H (width across flats)	øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Weight (g)		
										Soft nylon	Urethane			
3.2	M5 x 0.8	KAL23-M5	8	9.6	8	17.5	15	16	15.5	3.4	2.9	6		
	M6 x 1	KAL23-M6					15.5							
	1/8	KAL23-U01					10						19.5	21
4	M5 x 0.8	KAL04-M5	8	10.4	8	18	15.5	16	16	3.5	3.5	4		
	M6 x 1	KAL04-M6					16							
	1/8	KAL04-U01					10						20	20.5
	1/4	KAL04-U02					14						22	21.5
6	M5 x 0.8	KAL06-M5	10	12.8	8	20	16	18	17	3.5	3.5	6		
	M6 x 1	KAL06-M6					16.5							
	1/8	KAL06-U01					10						21.5	23.5
	1/4	KAL06-U02					14						23	24
8	1/8	KAL08-U01	12	15.2	12	23	22.5	21	18.5	14.9	14.9	11		
	1/4	KAL08-U02					24.5						26	
	3/8	KAL08-U03					17						25.5	27
10	1/8	KAL10-U01	17	18.5	17	26.5	25	21	21	14.9	14.9	24		
	1/4	KAL10-U02					30						30.5	
	3/8	KAL10-U03					27						30.5	
	1/2	KAL10-U04					22						30	31.5
12	1/4	KAL12-U02	17	20.9	17	28.5	27	22	39.7	39.7	39.7	23		
	3/8	KAL12-U03					31.5							
	1/2	KAL12-U04					22						31	33.5

* Reference dimensions after Uni thread installation.

<M5, M6>



<Uni thread>

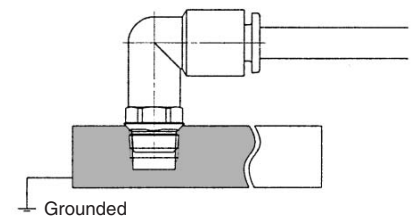


⚠️ Precautions

Be sure to read before handling.
 Refer to pages 15-18-3 to 15-18-4 for Safety Instructions and Common Precautions on the products mentioned in this catalog, and refer to pages 15-1-10 to 15-1-11 for Precautions on every series.



⚠️ Caution

- Female thread portion connected with fitting must be grounded, otherwise static electricity will remain in the fittings and tubes.

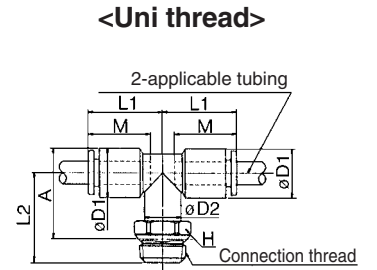
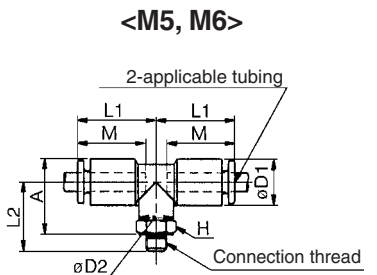


Series KA


Male Branch Tee: KAT

<M5, M6>	Applicable tubing O.D. (mm)	Connection thread M thread Uni thread	Model	H (width across flats)	øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Weight (g)	
											Soft nylon	Urethane		
	3.2	M5 x 0.8	KAT23-M5	8	9.6	8	17.5	15	16	15.5	3.4	2.9	8	
		M6 x 1	KAT23-M6	10				15.5						
		1/8	KAT23-U01	10				19.5						21
	4	M5 x 0.8	KAT04-M5	8	10.4	8	18	15.5	17	16	4.3	4.3	6	
		M6 x 1	KAT04-M6	10				16						
		1/8	KAT04-U01	10				20						21.5
		1/4	KAT04-U02	14				22						21.5
		1/4	KAT06-M5	8				16						18
6	6	M6 x 1	KAT06-M6	10	12.8	10	20	16.5	23.5	17	13.9	13.9	10	
		1/8	KAT06-U01	10				21.5						23.5
		1/4	KAT06-U02	14				23						24.5
		3/8	KAT06-U03	17				24						24.5
		1/8	KAT08-U01	12				22.5						26
8	8	1/4	KAT08-U02	14	15.2	12	23	24.5	26	18.5	18.2	18.2	19	
		3/8	KAT08-U03	17				25.5						27
		1/8	KAT10-U01	17				25						29.5
10	10	1/4	KAT10-U02	17	18.5	17	26.5	26.5	30	21	29.0	29.0	27	
		3/8	KAT10-U03	17				27						30.5
		1/2	KAT10-U04	22				30						31.5
		1/4	KAT12-U02	17				27						31.5
12	12	3/8	KAT12-U03	17	20.9	17	28.5	28	32.5	22	45.2	45.2	34	
		1/2	KAT12-U04	22				31						33.5
		1/2	KAT12-U04	22				31						33.5

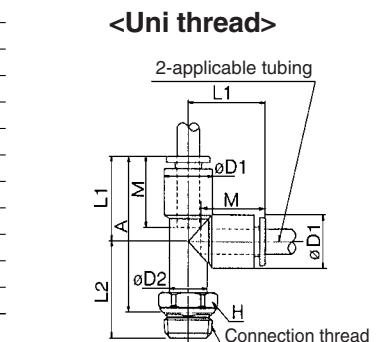
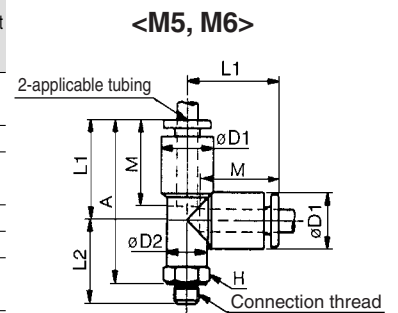
* Reference dimensions after Uni thread installation.



Male Run Tee: KAY



<M5, M6>	Applicable tubing O.D. (mm)	Connection thread M thread Uni thread	Model	H (width across flats)	øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Weight (g)		
											Soft nylon	Urethane			
	3.2	M5 x 0.8	KAY23-M5	8	9.6	8	17.5	15	28.5	15.5	3.4	2.9	8		
		M6 x 1	KAY23-M6	10				15.5						33	
		1/8	KAY23-U01	10				19.5						33	
4	4	M5 x 0.8	KAY04-M5	8	10.4	8	18	15.5	29.5	16	4.6	4.6	6		
		M6 x 1	KAY04-M6	10				18.5						16	
		1/8	KAY04-U01	10				18						20	34
		1/4	KAY04-U02	14				22						34.5	
6	6	M5 x 0.8	KAY06-M5	8	12.8	8	20	16	32	17	4.6	4.6	7		
		M6 x 1	KAY06-M6	10				20.5						16.5	
		1/8	KAY06-U01	10				21.5						37.5	
		1/4	KAY06-U02	14				23						37	
8	8	3/8	KAY06-U03	17	15.2	12	23	24	38	18.5	17.7	17.7	18		
		1/8	KAY08-U01	12				22.5						41.5	
		1/4	KAY08-U02	14				24.5						42.5	
10	10	3/8	KAY08-U03	17	18.5	17	26.5	25.5	49	21	28.4	28.4	27		
		1/8	KAY10-U01	17				25						46.5	
		1/4	KAY10-U02	17				26.5						47.5	
		3/8	KAY10-U03	17				27						48	
12	12	1/2	KAY10-U04	22	20.9	17	28.5	30	49	22	45.4	45.4	31		
		1/4	KAY12-U02	17				27						49.5	
		3/8	KAY12-U03	17				28						50.5	
12	12	1/2	KAY12-U04	22	20.9	17	28.5	31	51.5	22	45.4	45.4	35		
		1/2	KAY12-U04	22				31						51.5	

* Reference dimensions after Uni thread installation.

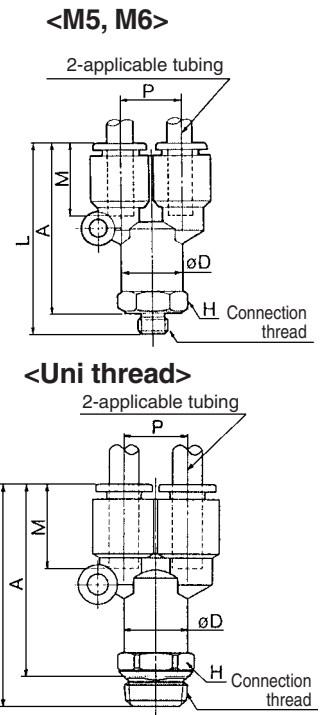


Antistatic One-touch Fittings Series KA

Branch "Y": KAU

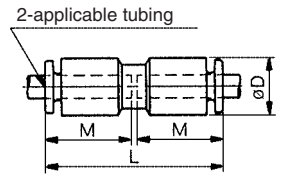
<M5, M6>	Applicable tubing O.D. (mm)	Connection thread M thread Uni thread	Model	H (width across flats)	øD	L	P	A*	M	Effective area (mm ²)		Weight (g)
										Soft nylon	Urethane	
	3.2	M5 x 0.8	KAU23-M5	10	9.6	38	9.6	34.5	15.5	2.2	2.2	9
		M6 x 1	KAU23-M6	11		38.5				3.4	2.9	11
		1/8	KAU23-U01	11	39.5	4						
	4	M5 x 0.8	KAU04-M5	11	10.4	40	10.4	36	16	2.2	2.2	10
		M6 x 1	KAU04-M6			42				4.2	4.2	11
		1/8	KAU04-U01	14	43	16						
		1/4	KAU04-U02	14	45	17	13.4	13.4	17			
6	6	M5 x 0.8	KAU06-M5	13	12.8	42.5	12.8	39	17	2.2	2.2	12
		M6 x 1	KAU06-M6			43				25		
	1/8	KAU06-U01	14	46	17	13.4	13.4	17				
	1/4	KAU06-U02	14	45	17	13.4	13.4	17				
	3/8	KAU06-U03	17	46	17	13.4	13.4	17				
8	8	1/8	KAU08-U01	17	15.2	50.5	15.2	46.5	18.5	17.7	17.7	24
		1/4	KAU08-U02			52				17.7	17.7	24
	3/8	KAU08-U03	17	51.5	17	17.7	17.7	24				
10	10	1/4	KAU10-U02	19	18.5	57.5	18.5	51.5	21	28.4	28.4	36
		3/8	KAU10-U03			59				21	28.4	28.4
	1/2	KAU10-U04	22	59	21	28.4	28.4	36				
12	12	1/4	KAU12-U02	22	20.9	61	20.9	55	22	45.4	45.4	52
		3/8	KAU12-U03			62.5				22	45.4	45.4
	1/2	KAU12-U04	22	62.5	22	45.4	45.4	52				

* Reference dimensions after Uni thread installation.



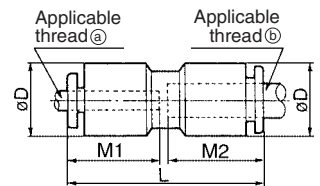
Straight Union: KAH

Applicable tubing O.D. (mm)	Model	øD	L	M	Effective area (mm ²)		Weight (g)
					Soft nylon	Urethane	
3.2	KAH23-00	9.6	31.5	15.5	3.4	2.9	3
4	KAH04-00	10.4	32.5	16	5.6	5.6	3
6	KAH06-00	12.8	34.5	17	13.1	13.1	4
8	KAH08-00	15.2	38.5	18.5	18.0	18.0	6
10	KAH10-00	18.5	42.5	21	29.5	29.5	11
12	KAH12-00	20.9	44.5	22	46.1	46.1	14



Different Diameter Straight: KAH

Applicable tubing O.D. (mm)		Model	øD	L	M1	M2	Effective area (mm ²)		Weight (g)
Ⓐ	Ⓑ						Soft nylon	Urethane	
3.2	4	KAH23-04	10.4	32.5	15.5	16	3.2	2.7	3
4	6	KAH04-06	12.8	34.5	16	17	4.2	4.2	4
6	8	KAH06-08	15.2	38.5	17	18.5	10.7	10.7	6
8	10	KAH08-10	18.5	42	18.5	21	16.7	16.7	11
10	12	KAH10-12	20.9	44.5	21	22	28.2	28.2	14

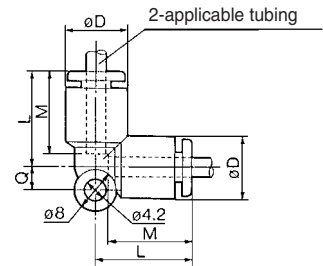


Series KA

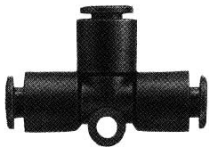
Union Elbow: KAL



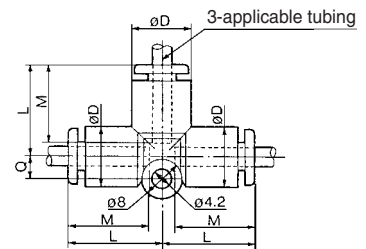
Applicable tubing O.D. (mm)	Model	øD	L	Q	M	Effective area (mm ²)		Weight (g)
						Soft nylon	Urethane	
3.2	KAL23-00	9.6	17.5	4.3	15.5	3.4	2.9	3
4	KAL04-00	10.4	18	4.5	16	4.2	4.2	6
6	KAL06-00	12.8	20	5.3	17	11.4	11.4	6
8	KAL08-00	15.2	23	6	18.5	14.9	14.9	10
10	KAL10-00	18.5	26.5	6.8	21	25.0	25.0	17
12	KAL12-00	20.9	28.5	7.5	22	39.7	39.7	21



Union Tee: KAT



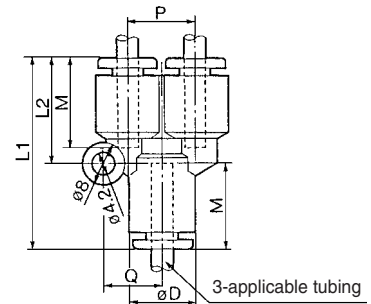
Applicable tubing O.D. (mm)	Model	øD	L	Q	M	Effective area (mm ²)		Weight (g)
						Soft nylon	Urethane	
3.2	KAT23-00	9.6	17.5	4.3	15.5	3.4	2.9	5
4	KAT04-00	10.4	18	4.5	16	6.4	6.9	7
6	KAT06-00	12.8	20	5.3	17	13.4	13.4	10
8	KAT08-00	15.2	23	6	18.5	17.7	17.7	15
10	KAT10-00	18.5	26.5	6.8	21	28.4	28.4	25
12	KAT12-00	20.9	28.5	7.5	22	45.4	45.4	29



Union "Y": KAU



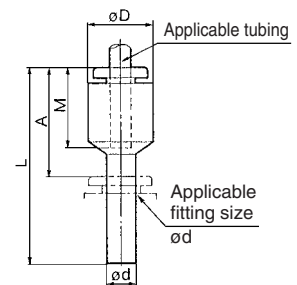
Applicable tubing O.D. (mm)	Model	øD	L1	L2	P	Q	M	Effective area (mm ²)		Weight (g)
								Soft nylon	Urethane	
3.2	KAU23-00	9.6	33	17.5	9.6	9	15.5	3.4	2.9	5
4	KAU04-00	10.4	34	18	10.4	9.7	16	4.2	4.2	7
6	KAU06-00	12.8	37	20	12.8	11.7	17	13.4	13.4	9
8	KAU08-00	15.2	42.5	24.5	15.2	13.7	18.5	17.7	17.7	11
10	KAU10-00	18.5	48	27.5	18.5	16.1	21	28.4	28.4	16
12	KAU12-00	20.9	51	30	20.9	18.1	22	45.4	45.4	23



Plug-in Reducer: KAR



Applicable tubing O.D. (mm)	Applicable fitting size ød	Model	øD	L	A	M	Effective area (mm ²)		Weight (g)	
							Soft nylon	Urethane		
3.2	4	KAR23-04	9.6	33.5	18.5	15.5	3.4	2.9	5	
4	6	KAR04-06	10.4	34.5	17.5	16	5.6	5.6	1.8	
	8	KAR04-08		36.5	18				2.0	
	10	KAR04-10	39.5	18.5	3.3					
6	8	KAR06-08	12.8	37	18.5	17	13.1	13.1	2.5	
	10	KAR06-10		39.5					20	3.0
	12	KAR06-12		42					20	4.7
8	10	KAR08-10	15.2	41	20	18.5	18.0	18.0	4.0	
	12	KAR08-12		42					20	4.6
10	12	KAR10-12	18.5	44.5	20	21	32.8	32.8	33	



Miniature Fittings Stainless Steel 316 Series MS

For use in corrosive environments
Stainless steel

Compact piping space

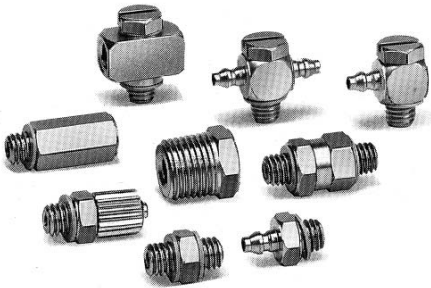
Tube has a large retaining force. Hose nipple assures easy installation and removal.

Line up various types

Possible for special tubing in the same direction. Accepts many styles of plastic tubing

Hose nipple and hose elbow

Accepts nylon, soft nylon, and polyurethane tubing.



Hose nipple

Barb

Configuration for easy insertion into the tube
Holds the tube tightly.

Body

Stainless steel 316

Gasket

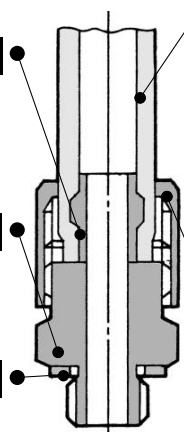
Low tightening torque
Tight seal

Tube

Possible for combination use of nylon tubing and polyurethane tubing.

Cap nut

Certainly hold the tube by manual clamping
Easy removal of tube by loosening
Stainless steel 316



Barb fitting

Barb

Configuration for easy insertion into the tube
Holds the tube tightly.

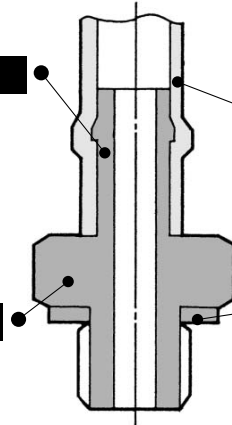
Body

Stainless steel 316

Tube

Gasket

Low tightening torque
Tight seal





















Specifications

Applicable tubing material	Nylon	Soft nylon		Polyurethane
Applicable tubing diameter	ø4, ø2.5 ø6, ø4	ø3.18, ø2.18	ø4, ø2.5 ø6, ø4	ø3.18, ø2, ø4 ø2.5, ø6, ø4
Maximum operating pressure	1.5 MPa	1.0 MPa		0.8 MPa
Connection size	M5 (JIS B 0209 Class 2 metric coarse thread)			
Material	Body	Stainless steel 316		
	Gasket	PVC, Nylon 66, GF30%		

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

Series MS

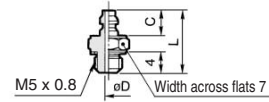
Model			
Model	Description	Application	Note
MS-5AU-3	Barb fitting for soft tube 	For soft nylon tube	ø3.18, ø2.18 x M5
		For polyurethane tube	ø3.18, ø2 x M5
MS-5AU-4		For soft nylon and polyurethane tube	ø4, ø2.5 x M5
MS-5AU-6			ø6, ø4 x M5
P. 27			
MS-5ALHU-3	Barb elbow for soft tube 	For soft nylon tube	ø3.18, ø2.18 x M5
		For polyurethane tube	ø3.18, ø2 x M5
MS-5ALHU-4		For soft nylon and polyurethane tube	ø4, ø2.5 x M5
MS-5ALHU-6			ø6, ø4 x M5
P. 27			
Body rotates at 360° around the stud axis			
MS-5H-4	Hose nipple 	For nylon, soft nylon, and polyurethane tube	ø4, ø2.5 x M5
MS-5H-6			ø6, ø4 x M5
P. 27			
MS-5HLH-4	Hose elbow 	<ul style="list-style-type: none"> For nylon, soft nylon, and polyurethane tube Body rotates at 360° around the stud axis 	ø4, ø2.5 x M5
MS-5HLH-6			ø6, ø4 x M5
P. 27			
M-5G1	Gasket 	To seal M5 thread	Material: PVC
P. 28			
MS-5UL	Universal elbow  P. 27	Body rotates at 360° around the stud axis	M5 female x M5 male
MS-5UT	Universal tee  P. 27	Body rotates at 360° around the stud axis	M5 female x M5 female x M5 male
MS-5B	Push  P. 28	For reducing Rc 1/8 female to M5 female	R 1/8 x M5 female
MS-5P	Plug  P. 28	Use to plug unused M5 port.	
MS-5J	Extension fitting  P. 28	Solid piece moves fitting up from work piece	M5 male x M5 female
MS-5N	Nipple  P. 28	Fitting to workpiece and fitting to fitting connection	M5 male x M5 male
MS-5UN	Universal nipple  P. 28	Body rotates at 360° around the stud axis	M5 male x M5 male PAT
MS-5ATHU-3	Barb tee for soft tube 	For soft nylon tube	ø3.18, ø2.18 x M5
		For polyurethane tube	ø3.18, ø2 x M5
MS-5ATHU-4		For soft nylon and polyurethane tube	ø4, ø2.5 x M5
MS-5ATHU-6			ø6, ø4 x M5
P. 28			
Body rotates at 360° around the stud axis			
M-5GH	Gasket (H)  P. 28	MS-5ALHU-6 MS-5HLH-4 MS-5HLH-6 MS-5ATHU-6 only	Material: Nylon 66 GF 30%

Miniature Fittings Stainless Steel 316 Series MS

Barb Fitting for Soft Tube: MS-5AU-3/4/6



Model	C	øD	L	Effective area (mm ²)	Weight (g)
MS-5AU-3	4.5	1.6	11.5	1.7	1.4
MS-5AU-4	5	1.8	12	2.1	1.5
MS-5AU-6	7	2.5	14	4.0	1.7

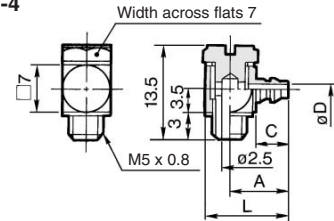


Barb Elbow for Soft Nylon: MS-5ALHU-3/4/6

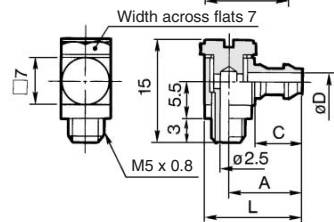


Model	A	C	øD	L	Effective area (mm ²)	Weight (g)
MS-5ALHU-3	8	4.5	1.6	11.8	1.1	3.0
MS-5ALHU-4	8.8	5.0	1.8	12.6	1.4	3.1
MS-5ALHU-6	10.8	7.0	2.5	14.6	2.4	3.7

MS-5ALHU-3, -4



MS-5ALHU-6

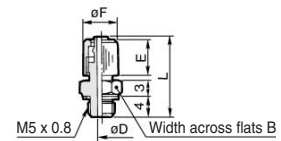


- K
- M
- H
- D
- MS
- T
- VMG

Hose Nipple: MS-5H-4/6



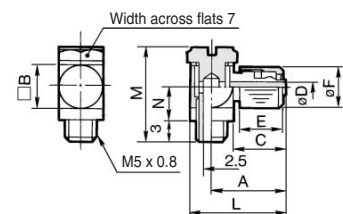
Model	B	øD	L	E	øF	Effective area (mm ²)	Weight (g)
MS-5H-4	7	1.8	15.5	7	6.5	2.1	2.5
MS-5H-6	8	2.5	16.5	8	8.5	4.0	3.7



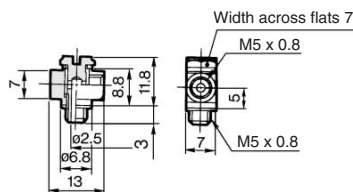
Hose Elbow: MS-5HLH-4/6



Model	A	IB	C	øD	E	øF	L	M	N	Effective area (mm ²)	Weight (g)
MS-5HLH-4	12	7	8.5	1.8	7	6.5	15.8	15	5.5	1.4	4.2
MS-5HLH-6	13.5	8	9.5	2.5	8	8.5	17.8	16	6	2.5	6.2

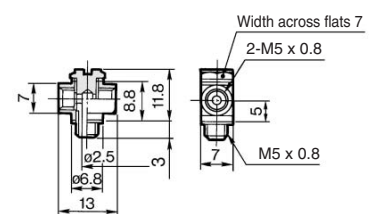


Universal Elbow: MS-5UL



Effective area: 2.4 mm²
Weight: 4.5 g

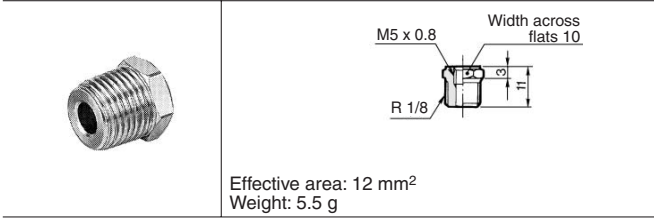
Universal Tee: MS-5UT



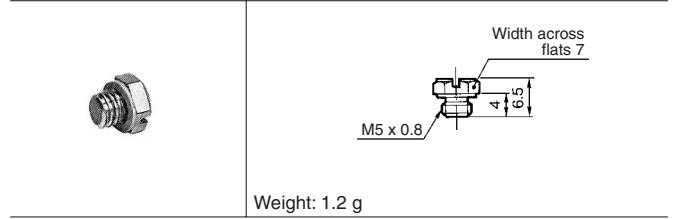
Effective area: 2.4 mm²
Weight: 4.5 g

Series MS

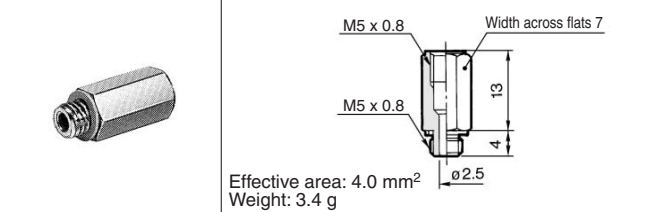
Bushing: MS-5B



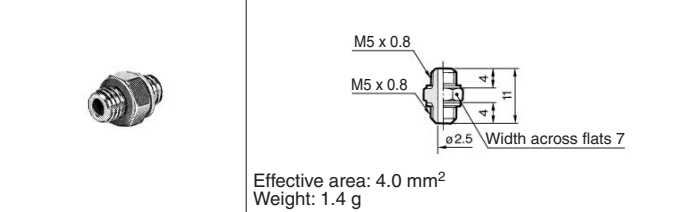
Plug: MS-5P



Extension Fitting: MS-5J



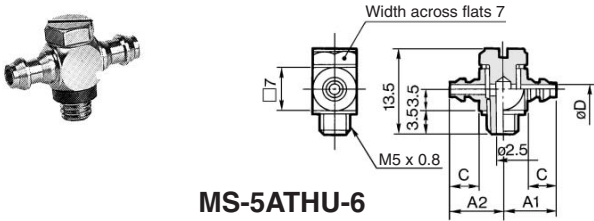
Nipple: MS-5N



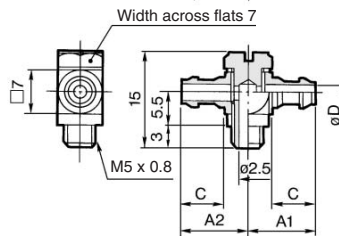
Barb Tee for Soft Tube: MS-5ATHU-3/4/6

Model	A1	A2	C	øD	Effective area (mm ²)	Weight (g)
MS-5ATHU-3	8	8.3	4.5	1.6	1.1	3.4
MS-5ATHU-4	8.8	8.8	5.0	1.8	1.4	3.6
MS-5ATHU-6	10.8	10.8	7.0	2.5	2.4	4.2

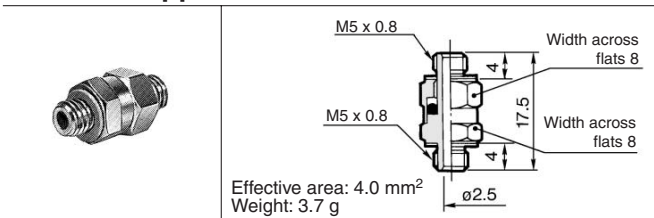
MS-5ATHU-3/4



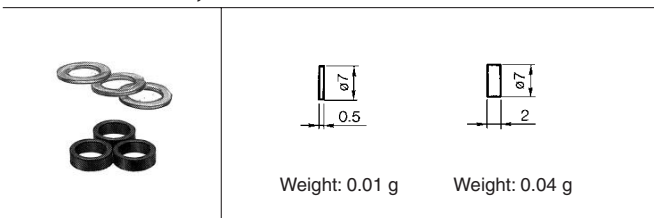
MS-5ATHU-6



Universal Nipple: MS-5UN



Gasket: M-5G1, M-5GH



⚠ Precautions

Be sure to read before handling. Refer to pages 15-8-3 to 15-8-4 for Safety Instructions and Common Precautions on the products mentioned in this catalog, and refer to pages 15-1-10 to 15-1-11 for Precautions on every series.

Tightening of M5 Thread

⚠ Caution

1. Tighten by hand, and give it an additional 1/4 rotation with a wrench. (The additional rotation should be doubled to 1/2 when using the universal elbow, universal tee, etc. which have two gaskets.) If tightened excessively, thread portion may be damaged and gasket may be deformed. This will cause air leakage. On the contrary, if tightened insufficiently, thread may loosen causing air leakage.

Use of Tube with Hose Nipple

⚠ Caution

1. Cut the tube perpendicularly to the tube axis to a little longer length than required (use tube cutter "TK-1", "TK-2" or "TK-3").
2. Pass the tube through the cap nut.
3. Push the tube until it comes to the end of the barb portion, or it may cause air leakage or hose releasing.
4. Tighten the cap nut firmly by hand on the fitting.

Use of Tube with Barb Fitting

⚠ Caution

1. Cut the tube perpendicularly to the tube axis to a little longer length than required (use tube cutter "TK-1", "TK-2" or "TK-3").
2. Push the tube until it comes to the end of the barb portion, or it may cause air leakage or release hose.