

Series 10-KG Stainless One-touch Fittings

RoHS

Construction

Guide
Collet
Chuck

Large retaining force

Has large retaining force while holding force is increased by the collet.

Seal

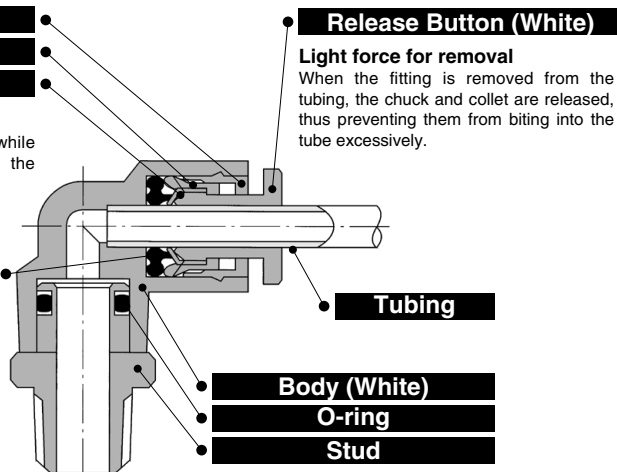
Can be used for a wide range of pressures from a low vacuum up to a pressure of 1.0 MPa

The use of a special profile ensures sealing and reduces resistance when the tube is inserted.

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.



Release Button (White)

Light force for removal
When the fitting is removed from the tubing, the chuck and collet are released, thus preventing them from biting into the tube excessively.

Effective when piping in a confined space

The body and threaded portion can rotate.

Applicable Tubing

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

Specifications

Fluid	Air, Water ^{Note 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 B0203 (Taper thread for piping)
	Nut section	JIS B0211 Class 2 (Metric fine thread)
Seal (Thread portion)	With seal or none ^{Note 2)}	
Grease	Fluorine grease	
Cleanliness class (ISO class)	Class 5	

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 (Thread portion)
Chuck	Stainless steel 304
Guide	Stainless steel 304, POM
Collet, Release button	POM
Seal, O-ring	NBR

Directional Control Valves

Air Cylinders

Rotary Actuators

Air Grippers

Air Preparation Equipment

Modular F. R.

Pressure Control Equipment

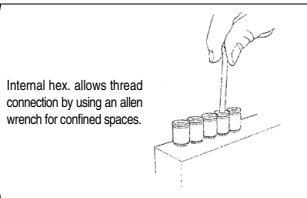
Fittings & Tubing

Flow Control Equipment

Pressure Switches/ Pressure Sensors

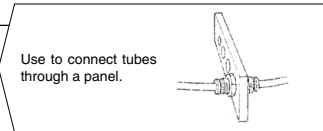
Model

Hex. socket head male connector
10-KGS



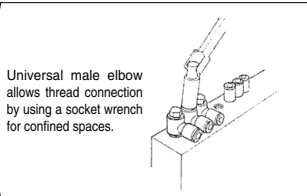
Internal hex. allows thread connection by using an allen wrench for confined spaces.

Bulkhead union
10-KGE



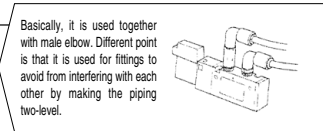
Use to connect tubes through a panel.

Universal male elbow
10-KGV



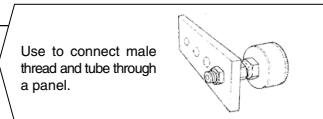
Universal male elbow allows thread connection by using a socket wrench for confined spaces.

Extended male elbow
10-KGW



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.

Bulkhead connector
10-KGE



Use to connect male thread and tube through a panel.

Male connector
10-KGH



Use to pipe in the same direction from female thread. Most general model.

Male elbow
10-KGL



Use to pipe at right angles to female thread. Most general model.

Male branch tee
10-KGT



Use to branch line from female thread in both 90° directions.

Female connector
10-KGF



Use to pipe from male thread such as pressure gauge.

Union elbow
10-KGL



Use to connect tubes at right angles.

Union tee
10-KGT



Use to connect tubes in both 90° directions.

Straight union
10-KGH



Use to connect tubes in the same direction.

Plug-in elbow
10-KGL



Use to change by 90° in a tube fetching direction from One-touch fittings.

Different diameter tee
10-KGT



Use to connect tubes with size down in both 90° directions.

Different diameter straight
10-KGH



Use to connect different size tubes.

Male delta union
10-KGD



Use to branch line in 90° direction from female thread.

Male run tee
10-KGY



Use to branch line in the same direction from female thread and in 90° direction.

Male branch connector
10-KGLU



Use to branch line at right angles to female thread.

Delta union
10-KGD



Use to branch line in triple 90° direction.

Different diameter double union "Y"
10-KGUD



Use to four-branch line in the same direction.

Branch union elbow
10-KGLU



Use to branch line at right angles.

Double branch "Y"
10-KGUD



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

Union "Y"
10-KGU



Use to branch line in the same direction.

Model

Different diameter union "Y"

10-KGU



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

Plug-in reducer

10-KGR



Use to change size of One-touch fittings.

Tube cap

10-KGC



Use to plug unused tubing.

Branch "Y"

10-KGU

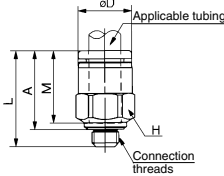


Use to branch line in the same direction from the female thread.

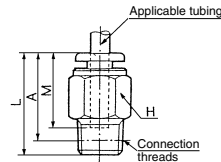


Male Connector: 10-KGH

M5



R

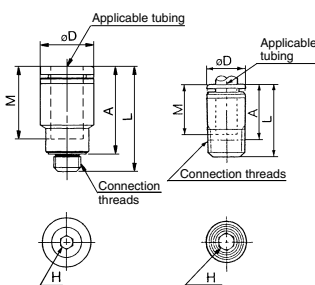


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	øD ^(Note 1)	L	A *	M	Effective area (mm ²)		Weight (g)
								Urethane		
4	M5 x 0.8	10-KGH04-M5	8	8	17	13.9	12.7	4	2.4	
		10-KGH04-01	10	—	21.1	18	16	4	9	
		10-KGH04-02	14	—	19	13.5	16	4	16	
6	M5 x 0.8	10-KGH06-M5	10	10	17.8	14.7	13.5	4	3.4	
		10-KGH06-01	12	—	21.6	18.5	17	10.4	16	
		10-KGH06-02	14	—	22.5	17	17	10.4	14	
		10-KGH06-03	17	—	20.9	15.5	17	10.4	27	
8	M5 x 0.8	10-KGH08-01	14	—	27.1	24	18.5	18.0	21	
		10-KGH08-02	14	—	26	20.5	18.5	18.0	19	
		10-KGH08-03	17	—	20.9	15.5	17	18.0	26	
10	M5 x 0.8	10-KGH10-01	17	—	29.1	26	21	29.5	19	
		10-KGH10-02	17	—	33	27.5	21	29.5	30	
		10-KGH10-03	17	—	27.9	22.5	21	29.5	30	
		10-KGH10-04	22	—	26.1	19	21	29.5	53	
12	M5 x 0.8	10-KGH12-02	19	—	34	28.5	22	46.1	42	
		10-KGH12-03	19	—	28.9	23.5	22	46.1	34	
		10-KGH12-04	22	—	29.1	22	22	46.1	51	
16	M5 x 0.8	10-KGH16-03	24	—	38.4	33	25	80.6	68	
		10-KGH16-04	24	—	34.6	27.5	25	80.6	47	

* Reference dimensions after R thread installation.
Note 1) øD indicates the maximum diameter.

Hexagon Socket Head Male Connector: 10-KGS

M5

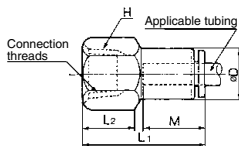


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	øD ^(Note 1)	L	A *	M	Effective area (mm ²)		Weight (g)
								Urethane		
4	M5 x 0.8	10-KGS04-M5	2.5	8	18.7	15.6	12.7	4	2.6	
		10-KGS04-01	3	9.8	23	19	16	3.6	8	
6	M5 x 0.8	10-KGS06-M5	2.5	10	19.5	16.4	13.5	4	3.2	
		10-KGS06-01	4	11.8	24	20	17	9.9	9	
		10-KGS06-02	4	13.8	24	18	17	10.0	15	
8	M5 x 0.8	10-KGS08-01	5	—	28	24	18.5	16.2	12	
		10-KGS08-02	6	14	25.5	19.5	18.5	16.2	11	
		10-KGS08-03	6	14	27.5	21.5	18.5	16.2	24	
10	M5 x 0.8	10-KGS10-01	5	—	30	26	21	26.6	18	
		10-KGS10-02	8	17	27.5	21	21	26.6	12	
		10-KGS10-03	8	17	27.5	21	21	26.6	19	
		10-KGS10-04	8	17	27.5	21	21	26.6	35	
12	M5 x 0.8	10-KGS12-02	8	19	33.5	27.5	22	44.5	23	
		10-KGS12-03	10	19	29	22.5	22	44.5	18	
		10-KGS12-04	10	19	28	20	22	44.5	30	

* Reference dimensions after R thread installation.
Note 1) øD indicates the maximum diameter.

Directional Control Valves
Air Cylinders
Rotary Actuators
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Pressure Control Equipment
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Pressure Switches/Pressure Sensors

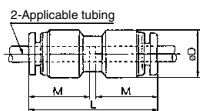
Female Connector: 10-KGF



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

Note) øD indicates the maximum diameter.

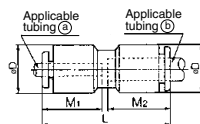
Straight Union: 10-KGH



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

Note) øD indicates the maximum diameter.

Different Diameter Straight: 10-KGH



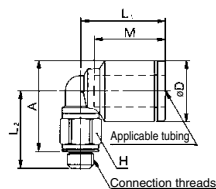
Applicable tubing O.D. (mm)		Model	øD ^(Note)	L	M ₁	M ₂	Effective area (mm ²)	Weight (g)
Ⓐ	Ⓑ						Urethane	
4	6	10-KGH04-06	12.8	34.5	16	17	4	5
6	8	10-KGH06-08	15.2	38.5	17	18.5	10.4	6
8	10	10-KGH08-10	18.5	42	18.5	21	18.0	11
10	12	10-KGH10-12	20.9	44.5	21	22	29.5	14

Note) øD indicates the maximum diameter.

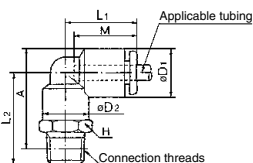
Male Elbow: 10-KGL



M5



R



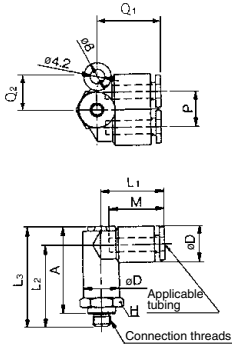
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	øD ₁ ^(M)	øD ₂	L ₁	L ₂	A *	M	Effective area (mm ²)	Weight (g)
										Urethane	
4	M5 x 0.8	10-KGL04-M5	7	9.3	—	15.6	13.7	15.3	12.7	3.5	2.7
	1/8	10-KGL04-01	10	10.4	10	18	21.1	23	16	4.2	10
	1/4	10-KGL04-02	14				25.5	25			
6	M5 x 0.8	10-KGL06-M5	7	11.6	—	16.1	14.7	17.4	13.5	3.5	3.1
	1/8	10-KGL06-01	10	12.8	10	20	22.1	25.5	17	9.0	12
	1/4	10-KGL06-02	14				26.5	27.5			10
	3/8	10-KGL06-03	17				27.9	29			33
	1/8	10-KGL08-01	12				23.6	28			13
1/4	10-KGL08-02	14	28				30	14.9			
8	3/8	10-KGL08-03	17	15.2	12	23	29.4	31.5	18.5	14.9	21
	1/8	10-KGL10-01	10				26.1	32			25
	1/4	10-KGL10-02	17				29.5	33			26
10	3/8	10-KGL10-03	17	18.5	17	26.5	30.9	34.5	21	25.0	36
	1/2	10-KGL10-04	22				35.1	37			63
	1/4	10-KGL12-02	17				30.5	35.5			28
	1/4	10-KGL12-03	17				31.9	37			38
12	3/8	10-KGL12-03	19	20.9	17	28.5	36.1	39.5	22	39.7	38
	1/2	10-KGL12-04	22				37	39.5			65
16	3/8	10-KGL16-03	19	26.5	20.9	34	36.9	44.5	25	59.6	101
	1/2	10-KGL16-04	22				40.1	46			70.6

* Reference dimensions after R thread installation.
Note 1) øD₁ indicates the maximum diameter.



Male Branch Connector: 10-KGLU

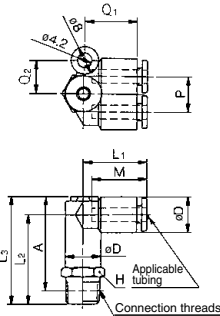
M5



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	ϕD ^(mm)	L1	L2	L3	A *	M	P	Q1	Q2	Effective area (mm ²) Urethane	Weight (g)
4	M5 x 0.8	10-KGLU04-M5	11	10.4	18.5	24	28.5	25.5	16	10.4	18.5	10	4.1	10
	1/8	10-KGLU04-01	14			25.6	31.1	27.5					4.1	12
	1/4	10-KGLU04-02	14			30	35.5	30					4.1	21
6	M5 x 0.8	10-KGLU06-M5	13	12.8	21	26.5	33	29.5	17	12.8	20.5	12	4.3	13
	1/8	10-KGLU06-01	14			28.6	35.1	32					15	
	1/4	10-KGLU06-02	14			32.5	39	33.5					11.0	22
	3/8	10-KGLU06-03	17			33.9	40.4	35					35	
8	1/8	10-KGLU08-01	17	15.2	24	33.1	40.6	38	18.5	15.2	24.5	14	18.2	27
	1/4	10-KGLU08-02				36.5	44	38.5					35	
	3/8	10-KGLU08-03				36.9	44.4	39					35	
10	1/4	10-KGLU10-02	19	18.5	27	39.5	49	43.5	21	18.5	28	16	29.0	41
	3/8	10-KGLU10-03				39.9	49.4	44					42	
	1/2	10-KGLU10-04				22	43.6	53.1					45.5	64
12	1/4	10-KGLU12-02	22	20.9	29	42	52.9	47.5	22	20.9	30	18	45.2	58
	3/8	10-KGLU12-03				45.6	56.1	49					65	
	1/2	10-KGLU12-04												

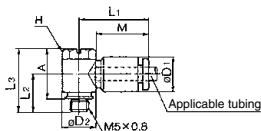
* Reference dimensions after R thread installation.
Note) ϕD indicates the maximum diameter.

R



Universal Male Elbow: 10-KGV

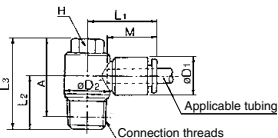
M5



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	ϕD ^(mm)	ϕD2	L1	L2	L3	A *	M	Effective area (mm ²) Urethane	Weight (g)
4	M5 x 0.8	10-KGV04-M5	8	10.4	9.8	20.5	11	18.5	15	16	2.9	6
	1/8	10-KGV04-01			13.4	22	13.6	25.6	22.5			14
6	M5 x 0.8	10-KGV06-M5	8	12.8	9.8	23.5	12	18.5	15	17	3.8	7
	1/8	10-KGV06-01			13.4	24	13.6	25.6	22.5			15
	1/4	10-KGV06-02			10	15.3	23.5	18	30.5			25
8	1/8	10-KGV08-01	12	15.2	17.6	28.5	14.6	27.6	24.5	18.5	11.2	24
	1/4	10-KGV08-02			18	31	25.5	30				
	3/8	10-KGV08-03			14	20.6	27.5	19.4	35.4			30
10	1/4	10-KGV10-02	14	18.5	19	35	29.5	21	20.3	40	49	
	3/8	10-KGV10-03			19.4	35.4	30				49	
	3/8	10-KGV12-03			17	20.9	25.2				34	20.9
12	1/2	10-KGV12-04	17	20.9	25.2	34	24.1	40.6	33.5	22	30.8	80

* Reference dimensions after R thread installation.
Note) ϕD1 indicates the maximum diameter.

R



Directional Control Valves

Air Cylinders

Rotary Actuators

Air Grippers

Air Preparation Equipment

Modular F. R.

Pressure Control Equipment

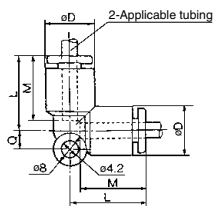
Fittings & Tubing

Flow Control Equipment

Pressure Switches/ Pressure Sensors



Union Elbow: 10-KGL

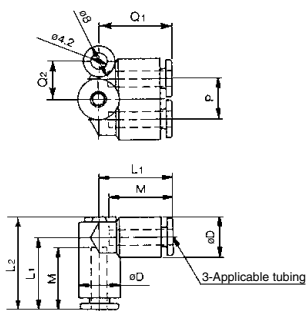


Applicable tubing O.D. (mm)	Model	ϕD ^{Note 1)}	L	Q	M2	Effective area (mm ²) Urethane	Weight (g)
4	10-KGL04-00	10.4	18	4.5	16	4.2	6
6	10-KGL06-00	12.8	20	5.3	17	9.0	6
8	10-KGL08-00	15.2	23	6	18.5	14.9	10
10	10-KGL10-00	18.2	26.5	6.8	21	25.0	17
12	10-KGL12-00	20.9	28.5	7.5	22	39.7	21
16	10-KGL16-00	26.5	34	10	25	70.6	29

Note 1) ϕD indicates the maximum diameter.



Branch Union Elbow: 10-KGLU

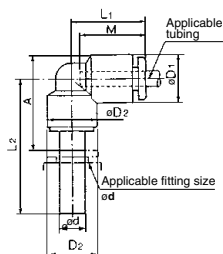


Applicable tubing O.D. (mm)	Model	ϕD ^{Note 1)}	L1	L2	Q1	Q2	M	P	Effective area (mm ²) Urethane	Weight (g)
4	10-KGLU04-00	10.4	18.5	24	18.5	10	16	10.4	4.1	6
6	10-KGLU06-00	12.8	21	27.5	20.5	12	17	12.8	11.0	8
8	10-KGLU08-00	15.2	24	32	24.5	14	18.5	15.2	18.2	15
10	10-KGLU10-00	18.5	27	36.5	28	16	21	18.5	29.0	25
12	10-KGLU12-00	20.9	29	40	30	18	22	20.9	45.2	32

Note 1) ϕD indicates the maximum diameter.



Plug-in Elbow: 10-KGL



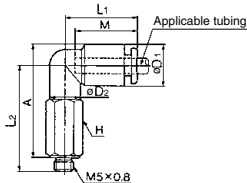
Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	ϕD_1 ^{Note 1)}	ϕD_2	L1	L2	A	M	Effective area (mm ²) Urethane	Weight (g)
4	4	10-KGL04-99	10.4	8	18	25	14.5	16	4.2	8
6	6	10-KGL06-99	12.8	10	20	27.5	17	17	9.0	10
8	8	10-KGL08-99	15.2	12	22.5	31.5	21	18.5	14.9	14
10	10	10-KGL10-99	18.5	14	25.5	35.5	23.5	21	25.0	25
12	12	10-KGL12-99	20.9	16	27	37.5	26	22	39.7	28

Note 1) ϕD_1 indicates the maximum diameter.

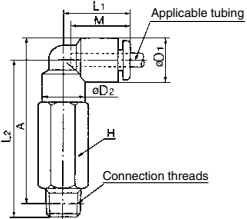


Extended Male Elbow: 10-KGW

M5



R



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	$\phi D_1^{(Note 1)}$	ϕD_2	L ₁	L ₂	A *	M	Effective area (mm ²) Urethane	Weight (g)
4	M5 x 0.8	10-KGW04-M5	8	10.4	8	18	30	32	16	3.0	11
	1/8	10-KGW04-01	10				36.6	38.5		4.0	23
	1/4	10-KGW04-02	14				43	42.5		3.0	38
6	M5 x 0.8	10-KGW06-M5	8	12.8	8	20	30.5	33.5	17	3.0	11
	1/8	10-KGW06-01	10				39.1	42.5		8.6	26
	1/4	10-KGW06-02	14				45.5	46.5		41	
8	1/8	10-KGW08-03	17	15.2	12	23	46.9	48	18.5	14.2	47
	1/4	10-KGW08-01	12				42.6	47		30	
	3/8	10-KGW08-02	14				49	51		47	
10	1/4	10-KGW10-02	17	18.5	17	26.5	50.4	52.5	21	23.8	74
	3/8	10-KGW10-03	17				56	59.5		66	
	1/2	10-KGW10-04	22				64.1	66		145	
12	1/4	10-KGW12-02	17	20.9	17	28.5	57	62	22	37.7	68
	3/8	10-KGW12-03	17				58.4	63.5		78	
	1/2	10-KGW12-04	22				65.1	68.5		147	

* Reference dimensions after R thread installation.
Note 1) ϕD_1 indicates the maximum diameter.

Directional Control Valves

Air Cylinders

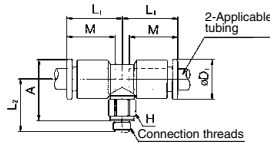
Rotary Actuators

Air Grippers

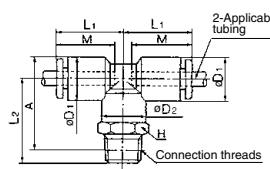


Male Branch Tee: 10-KGT

M5



R



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	$\phi D_1^{(Note 1)}$	ϕD_2	L ₁	L ₂	A *	M	Effective area (mm ²) Urethane	Weight (g)
4	M5 x 0.8	10-KGT04-M5	7	9.3	—	15.6	13.7	15.3	12.7	4.5	3.5
	1/8	10-KGT04-01	10	10.4	10	18	21.1	23	16	4.1	13
	1/4	10-KGT04-02	14	—	—	—	25.5	25	—	—	19
6	M5 x 0.8	10-KGT06-M5	7	11.6	—	16.1	14.7	17.4	13.5	4.5	4.4
	1/8	10-KGT06-01	10	12.8	10	20	22.1	25.5	17	11.0	12
	1/4	10-KGT06-02	14	—	—	—	26.5	27.5	—	—	20
8	1/8	10-KGT08-03	17	15.2	12	23	27.9	29	18.5	18.2	34
	1/4	10-KGT08-01	12				23.6	28		14	
	3/8	10-KGT08-02	14				28	30		22	
10	1/4	10-KGT10-02	17	18.5	17	26.5	29.4	31.5	21	29.0	36
	3/8	10-KGT10-03	17				26.1	32		31	
	1/2	10-KGT10-04	22				35.1	37		66	
12	1/4	10-KGT12-02	17	20.9	17	28.5	30.5	35.5	22	45.2	31
	3/8	10-KGT12-03	17				31.9	37		41	
	1/2	10-KGT12-04	22				36.1	39.5		68	
16	3/8	10-KGT16-03	22	26.5	20.9	34	36.9	44.5	25	59.6	112
	1/2	10-KGT16-04	22				39.6	46		84	116

* Reference dimensions after R thread installation.
Note 1) ϕD_1 indicates the maximum diameter.

Air Preparation Equipment

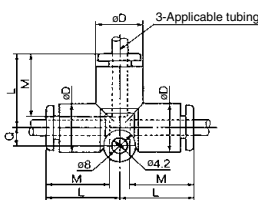
Modular F. R.

Pressure Control Equipment

Fittings & Tubing



Union Tee: 10-KGT



Applicable tubing O.D. (mm)	Model	$\phi D^{(Note 1)}$	L	Q	M	Effective area (mm ²) Urethane	Weight (g)
4	10-KGT04-00	10.4	18	4.5	16	4.4	7
6	10-KGT06-00	12.8	20	5.3	17	10.6	10
8	10-KGT08-00	15.2	23	6	18.5	17.7	15
10	10-KGT10-00	18.5	26.5	6.8	21	28.4	25
12	10-KGT12-00	20.9	28.5	7.5	22	45.4	29
16	10-KGT16-00	26.5	34	10	25	70.6	40

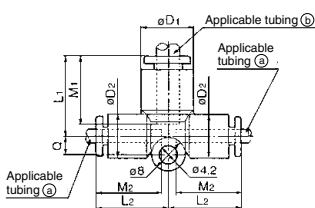
Note 1) ϕD indicates the maximum diameter.

Flow Control Equipment

Pressure Switches/ Pressure Sensors



Different Diameter Tee: 10-KGT



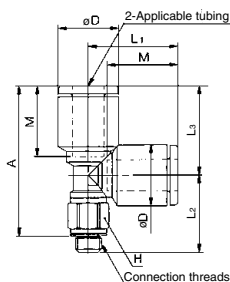
Applicable tubing O.D. (mm)		Model	ϕD_1^{Nom}	ϕD_2	L ₁	L ₂	Q	M ₁	M ₂	Effective area (mm ²) Urethane	Weight (g)
(A)	(B)										
4	6	10-KGT04-06	12.8	10.4	19.5	18	4.5	17	16	6.5	5
6	8	10-KGT06-08	15.2	12.8	22.5	20	5.3	18.5	17	16.4	8
8	10	10-KGT08-10	18.5	15.2	26.5	23	6	21	18.5	27.2	14
10	12	10-KGT10-12	20.9	18.5	28.5	26.5	6.8	22	21	44.5	21

Note) ϕD_1 indicates the maximum diameter.

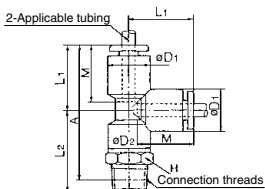


Male Run Tee: 10-KGY

M5



R



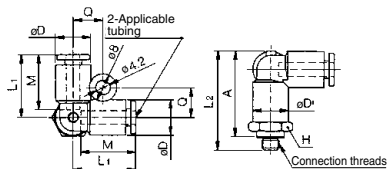
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	ϕD_1^{Nom}	ϕD_2	L ₁	L ₂	L ₃	A*	M	Effective area (mm ²) Urethane	Weight (g)
4	M5 x 0.8	10-KGY04-M5	7	9.3	—	15.6	13.7	14.8	25.4	12.7	4.5	3.5
	1/8	10-KGY04-01	10	10	18	21.1	—	36	16	4.4	13	
	1/4	10-KGY04-02	14	10.4	10	25.5	—	38	16	4.4	19	
6	M5 x 0.8	10-KGY06-M5	7	11.6	—	17.1	14.7	17.1	28.7	13.5	4.5	4.3
	1/8	10-KGY06-01	10	—	—	—	22.1	—	39	—	12	
	1/4	10-KGY06-02	14	12.8	10	20	26.5	—	41	17	10.6	20
	3/8	10-KGY06-03	17	—	—	—	27.9	—	42.5	—	34	
8	1/8	10-KGY08-01	12	—	—	—	23.6	—	43.5	17	10.6	14
	1/4	10-KGY08-02	14	15.2	12	23	28	—	45.5	18.5	17.7	22
	3/8	10-KGY08-03	17	—	—	—	29.4	—	47	—	36	
	1/2	10-KGY08-04	22	—	—	—	35.1	—	54.5	—	66	
10	1/8	10-KGY10-01	12	—	—	—	26.1	—	49.5	—	31	
	1/4	10-KGY10-02	17	18.5	17	26.5	29.5	—	50.5	21	28.4	29
	3/8	10-KGY10-03	17	—	—	—	30.9	—	52	—	39	
	1/2	10-KGY10-04	22	—	—	—	35.1	—	54.5	—	66	
12	1/4	10-KGY12-02	17	—	—	—	30.5	—	53.5	—	31	
	3/8	10-KGY12-03	17	20.9	17	28.5	31.9	—	55	22	45.4	41
	1/2	10-KGY12-04	22	—	—	—	36.1	—	57.5	—	68	
	3/8	10-KGY16-03	22	26.5	20.9	34	36.9	—	65.5	25	68	112
1/2	10-KGY16-04	22	—	—	—	40.1	—	67	—	94.9	116	

* Reference dimensions after R thread installation.
Note 1) ϕD_1 indicates the maximum diameter.

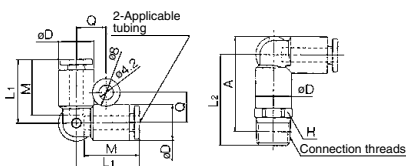


Male Delta Union: 10-KGD

M5



R

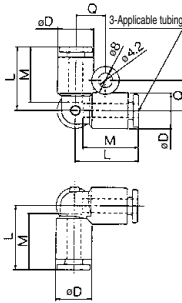


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	ϕD^{Nom}	L ₁	L ₂	A*	M	Q	Effective area (mm ²) Urethane	Weight (g)	
4	M5 x 0.8	10-KGD04-M5	11	—	—	24	25.5	—	—	—	4.3	10
	1/8	10-KGD04-01	14	10.4	18.5	25.6	27.5	16	8.7	—	6.0	12
	1/4	10-KGD04-02	14	—	—	30	30	—	—	—	21	
6	M5 x 0.8	10-KGD06-M5	13	—	—	26	28.5	—	—	—	4.3	12
	1/8	10-KGD06-01	13	12.8	20.5	28.1	31.5	17	9.9	—	14	
	1/4	10-KGD06-02	14	—	—	32	33	—	—	—	21	
	3/8	10-KGD06-03	17	—	—	33.4	34.5	—	—	—	34	
8	1/8	10-KGD08-01	13	—	—	32.6	37	—	—	—	26	
	1/4	10-KGD08-02	17	15.2	23.5	36	38	18.5	11.1	18.2	35	
	3/8	10-KGD08-03	17	—	—	36.4	38.5	—	—	—	39	
	1/2	10-KGD08-04	22	—	—	39	43	—	—	—	39	
10	1/4	10-KGD10-02	19	—	—	39.4	43.5	21	12.8	29.0	40	
	3/8	10-KGD10-03	19	18.5	26.5	43.1	45	—	—	—	62	
	1/2	10-KGD10-04	22	—	—	41.5	46.5	—	—	—	62	
12	1/4	10-KGD12-02	19	—	—	41.5	46.5	—	—	—	55	
	3/8	10-KGD12-03	22	20.9	28.5	41.9	47	22	13.9	45.2	56	
	1/2	10-KGD12-04	22	—	—	45.1	48.5	—	—	—	63	

* Reference dimensions after R thread installation.
Note) ϕD indicates the maximum diameter.



Delta Union: 10-KGD



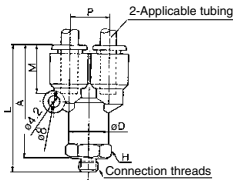
Applicable tubing O.D. (mm)	Model	øD ^(Note)	L	Q	M	Effective area (mm ²)		Weight (g)
						Urethane		
4	10-KGD04-00	10.4	18.5	8.7	16	4.1	5	
6	10-KGD06-00	12.8	20.5	9.9	17	11.0	7	
8	10-KGD08-00	15.2	23.5	11.1	18.5	18.2	11	
10	10-KGD10-00	18.5	26.5	12.8	21	29.0	19	
12	10-KGD12-00	20.9	28.5	13.9	22	45.2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

Note) øD indicates the maximum diameter.

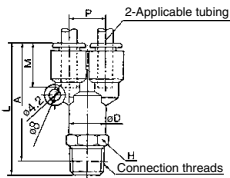


Branch "Y": 10-KGU

M5



R

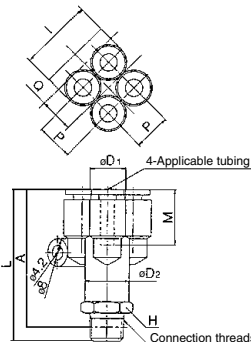


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	øD ^(Note)	L	P	A *	M	Effective area (mm ²)		Weight (g)		
									Urethane				
4	M5 x 0.8	10-KGU04-M5	11	10.4	39.5	36	10.4	38	16	2.2	4		
	1/8	10-KGU04-01	14							45.5	40	4.2	11
	1/4	10-KGU04-02	14							42.5	39	2.2	12
6	M5 x 0.8	10-KGU06-M5	13	12.8	44.6	42.8	41.5	17	10.6	4.6	11		
	1/8	10-KGU06-01	14							48.5	43	2.1	21
	1/4	10-KGU06-02	14							49.9	44.5	2.1	34
	3/8	10-KGU06-03	17							51.6	48.5	1.5	15
8	1/8	10-KGU08-01	17	15.2	55	15.2	49.5	18.5	17.7	2.3	23		
	1/4	10-KGU08-02	17							55.4	50	3.5	35
	3/8	10-KGU08-03	17							60.5	55	3.0	30
10	1/8	10-KGU10-01	19	18.5	60.9	18.5	55.5	21	28.4	4.0	40		
	1/4	10-KGU10-04	22							64.1	57	6.5	65
	3/8	10-KGU10-03	22							64	58.5	3.2	32
12	1/4	10-KGU12-02	22	20.9	64.4	20.9	59	22	45.4	4.0	40		
	1/2	10-KGU12-04	22							67.6	60.5	6.5	65

* Reference dimensions after R thread installation. Note) øD indicates the maximum diameter.



Double Branch "Y": 10-KGUD



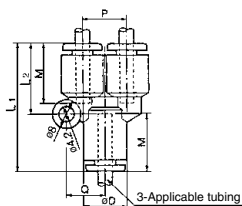
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	øD1 ^(Note)	øD2	L	I	A *	Q	M	P	Effective area (mm ²)		Weight (g)
												Urethane		
4	1/8	10-KGUD04-01	13	10.4	12.8	42.6	21	39.5	9.7	16	10.4	4.2	17	
	1/4	10-KGUD04-02	14									46.5	41	2.5
6	1/8	10-KGUD06-01	17	12.8	15.2	49.6	26	46.5	11.7	17	12.8	10.6	29	
	1/4	10-KGUD06-02	17									53	47.5	2.9

* Reference dimensions after R thread installation. Note) øD indicates the maximum diameter.

Directional Control Valves
Air Cylinders
Rotary Actuators
Air Grippers
Air Preparation Equipment
Modular F. R.
Pressure Control Equipment
Fittings & Tubing
Flow Control Equipment
Pressure Switches/ Pressure Sensors



Union "Y": 10-KGU

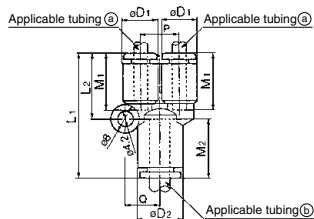


Applicable tubing O.D. (mm)	Model	Note) øD	L ₁	L ₂	P	Q	M	Effective area (mm ²)		Weight (g)
								Urethane		
4	10-KGU04-00	10.4	34	18	10.4	9.7	16	4.2		7
6	10-KGU06-00	12.8	37	20	12.8	11.7	17	10.6		9
8	10-KGU08-00	15.2	42.5	24.5	15.2	13.7	18.5	17.7		11
10	10-KGU10-00	18.5	48	27.5	18.5	16.1	21	28.4		16
12	10-KGU12-00	20.9	51	30	20.9	18.1	22	45.4		23

Note) øD indicates the maximum diameter.



Different Diameter Union "Y": 10-KGU

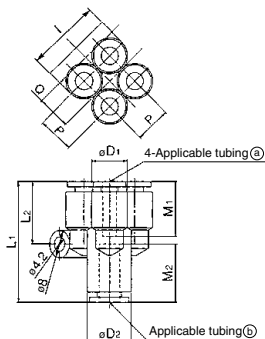


Applicable tubing O.D. (mm)		Model	Note) øD1	Note) øD2	L ₁	L ₂	P	Q	M ₁	M ₂	Effective area (mm ²)		Weight (g)
(a)	(b)										Urethane		
4	6	10-KGU04-06	10.4	12.8	35	18	10.4	9.7	16	17	4.2		6
6	8	10-KGU06-08	12.8	15.2	39.5	20	12.8	11.7	17	18.5	10.6		11
8	10	10-KGU08-10	15.2	18.5	45	24.5	15.2	13.7	18.5	21	17.7		18
10	12	10-KGU10-12	18.5	20.9	49	27.5	18.5	16.1	21	22	28.4		27

Note) øD1 and øD2 indicate the maximum diameter.



Different Diameter Double Union "Y": 10-KGUD

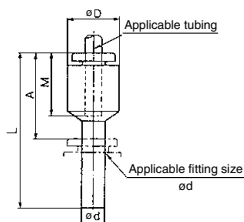


Applicable tubing O.D. (mm)		Model	Note) øD1	Note) øD2	L ₁	L ₂	P	I	Q	M ₁	M ₂	Effective area (mm ²)		Weight (g)
(a)	(b)											Urethane		
4	6	10-KGUD04-06	10.4	12.8	35.5	18.2	10.4	21	9.7	16	17	4.2		10
6	8	10-KGUD06-08	12.8	15.2	40.5	20.3	12.8	26	11.7	17	18.5	10.6		17

Note) øD1 and øD2 indicate the maximum diameter.



Plug-in Reducer: 10-KGR

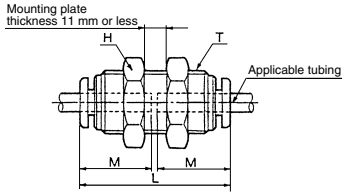


Applicable tubing O.D. (mm)	Applicable fitting size ød	Model	Note 1) øD	L	A	M	Effective area (mm ²)		Weight (g)
							Urethane		
4	6	10-KGR04-06	10.4	34.5	17.5	16	4		1.8
	8	10-KGR04-08					4		2.0
	10	10-KGR04-10					4		3.3
6	4	10-KGR06-04	12.8	37	21	17	4		3
	8	10-KGR06-08					4		2.5
	10	10-KGR06-10					10.4		3
	12	10-KGR06-12					10.4		4.7
8	10	10-KGR08-10	15.2	41	20	18.5	18.0		4.0
	12	10-KGR08-12					18.0		4.6
	12	10-KGR08-12					18.0		4.6
10	12	10-KGR10-12	18.5	44.5	23	21	32.8		33
	16	10-KGR10-16					24.8		42
12	16	10-KGR12-16	20.9	50.5	25.5	22	38.7		37

Note) øD indicates the maximum diameter.



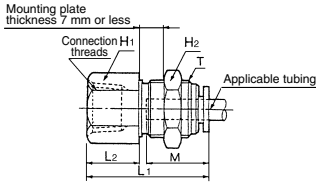
Bulkhead Union: 10-KGE



Applicable tubing O.D. (mm)	Model	T (M)	H (width across flats)	L	Mounting hole		Effective area (mm ²) Urethane	Weight (g)
					M	M		
4	10-KGE04-00	M12 x 1	14	32.5	13	16	4	26
6	10-KGE06-00	M14 x 1	17	34.5	15	17	10.4	33
8	10-KGE08-00	M16 x 1	19	38	17	18.5	18.0	52
10	10-KGE10-00	M20 x 1	24	42.5	21	21	29.5	70
12	10-KGE12-00	M22 x 1	27	44	23	22	46.1	90
16	10-KGE16-00	M28 x 1.5	32	51	29	25	80.6	115

Directional Control Valves
Air Cylinders

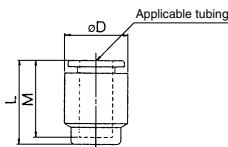
Bulkhead Connector: 10-KGE



Applicable tubing O.D. (mm)	Connection thread Rc	Model	T (M)	H ₁ (width across flats)	H ₂ (width across flats)	L ₁	L ₂	Mounting hole	M	Effective area (mm ²) Urethane	Weight (g)
				14	14						
4	1/8	10-KGE04-01	M12 x 1	14	27.5	11	13	16	16	4	16
	1/4	10-KGE04-02		17	31	15					
6	1/8	10-KGE06-01	M14 x 1	17	17	28	15	15	17	10.4	30
	1/4	10-KGE06-02				31.5					
	3/8	10-KGE06-03				33.5					
8	1/8	10-KGE08-01	M16 x 1	17	19	27.5	17	17	18.5	18.0	29
	1/4	10-KGE08-02				33					
	3/8	10-KGE08-03				35					
10	1/4	10-KGE10-02	M20 x 1	22	24	34.5	12.5	21	21	29.5	67
	3/8	10-KGE10-03				36.5					
	1/2	10-KGE10-04				41					
12	3/8	10-KGE12-03	M22 x 1	24	27	37	14	23	22	46.1	92
	1/2	10-KGE12-04				41					
16	3/8	10-KGE16-03	M28 x 1.5	30	32	40	18	29	25	80.6	127
	1/2	10-KGE16-04				44					

Rotary Actuators
Air Grippers
Air Preparation Equipment

Tube Cap: 10-KGC



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

Note) øD indicates the maximum diameter.

Modular F. R.
Pressure Control Equipment

Fittings & Tubing

Flow Control Equipment

Pressure Switches/
Pressure Sensors