

# Miniature One-touch Fittings

## One-touch Mini

# Series KJ

Applicable Tubing: ø3.2, ø4, ø6

Connection Thread: M3, M5, R 1/8

### Guide 1

### Guide 2

### Chuck

Suitable for use with nylon, soft nylon and urethane.

**Large retaining force.**

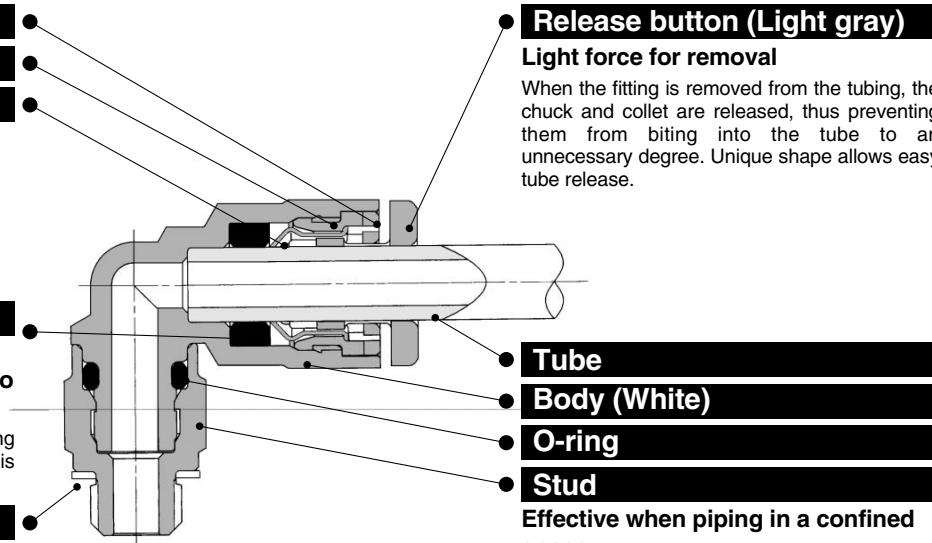
Has large retaining force.

### 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.

### Gasket



### Release button (Light gray)

#### 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 to an unnecessary degree. Unique shape allows easy tube release.

### Tube

### Body (White)

### O-ring

### Stud

**Effective when piping in a confined space.**

- The body and the threaded portion can rotate (for positioning to some extent).
- Stud is electroless nickel plated.
- Standard with preapplied thread seal 1/8

PAT.PEND

**Optimum piping in less space with 20% reduction of the outside diameter**

**Thread seal is standard.**

**Copper-free specifications (With electroless nickel plated.)**

**Possible to use in vacuum to -100 kPa**



### Applicable Tubing

Tubing material	Nylon, Soft nylon, Polyurethane
Tubing O.D.	ø3.2, ø4, ø6

### Specifications

Fluid	Air/Water <sup>Note)</sup>
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) JIS B 0209, Class 2 (Metric coarse thread)
	Nut section
	JIS B 0211 Class 2 (Metric fine thread)
Thread seal (Standard)	With thread seal
Copper-free (Standard)	Brass parts are all electroless nickel plated.

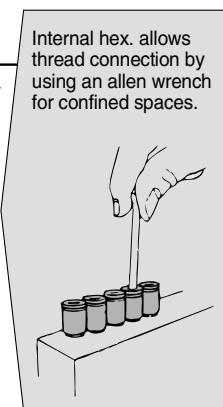
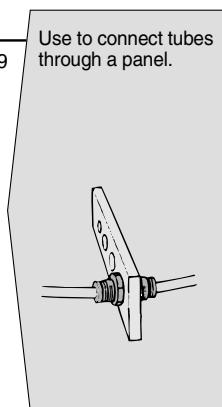
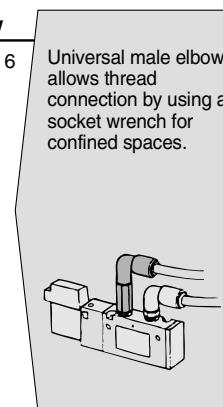
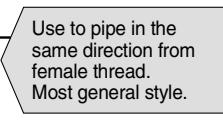
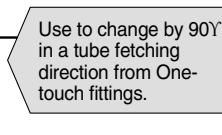
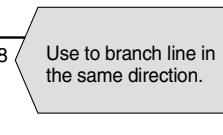
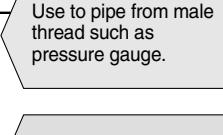
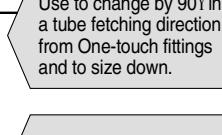
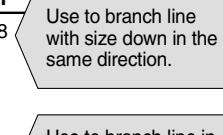
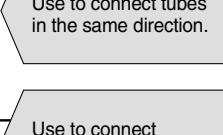
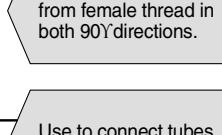
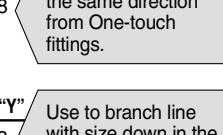
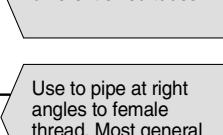
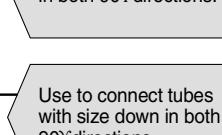
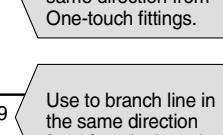
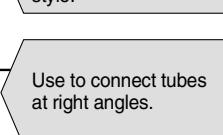
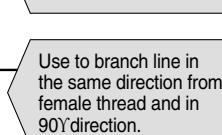
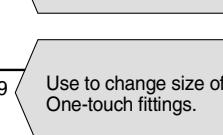
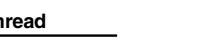
<sup>Note)</sup> Applicable for general industrial water. Please consult with SMC if using for other kinds of fluid.  
Also, the surge pressure must be under the maximum operating pressure.

### Principal Parts Material

Body	Stainless steel 303, C3604BD, PBT
Stud	C3604BD (Thread portion)
Chuck, Guide 2	Stainless steel 304
Release button, Guide 1	POM
Seal, O-ring	NBR
Gasket	Stainless steel 304, NBR

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## Model

<b>Hex. socket head male connector</b> KJS P. 4	Internal hex. allows thread connection by using an allen wrench for confined spaces. 	<b>Bulkhead union</b> KJE P. 9	Use to connect tubes through a panel. 	<b>Extended male elbow</b> KJW P. 6	Universal male elbow allows thread connection by using a socket wrench for confined spaces. 
<b>Male connector</b> KJH P. 4	Use to pipe in the same direction from female thread. Most general style. 	<b>Plug-in elbow</b> KJL P. 5	Use to change by 90° in a tube fitting direction from One-touch fittings. 	<b>Union "Y"</b> KJU P. 8	Use to branch line in the same direction. 
<b>Female connector</b> KJF P. 4	Use to pipe from male thread such as pressure gauge. 	<b>Reducer elbow</b> KJL P. 6	Use to change by 90° in a tube fitting direction from One-touch fittings and to size down. 	<b>Different dia. union "Y"</b> KJU P. 8	Use to branch line with size down in the same direction. 
<b>Straight union</b> KJH P. 4	Use to connect tubes in the same direction. 	<b>Male branch tee</b> KJT P. 6	Use to branch line from female thread in both 90° directions. 	<b>Plug-in "Y"</b> KJU P. 8	Use to branch line in the same direction from One-touch fittings. 
<b>Different diameter straight</b> KJH P. 5	Use to connect different sized tubes. 	<b>Union tee</b> KJT P. 7	Use to connect tubes in both 90° directions. 	<b>Different diameter plug-in "Y"</b> KJX P. 8	Use to branch line with size down in the same direction from One-touch fittings. 
<b>Male elbow</b> KJL P. 5	Use to pipe at right angles to female thread. Most general style. 	<b>Different diameter tee</b> KJT P. 7	Use to connect tubes with size down in both 90° directions. 	<b>Branch "Y"</b> KJU P. 9	Use to branch line in the same direction from female thread. 
<b>Union elbow</b> KJL P. 5	Use to connect tubes at right angles. 	<b>Male run tee</b> KJY P. 7	Use to branch line in the same direction from female thread and in 90° direction. 	<b>Plug-in reducer</b> KJR P. 9	Use to change size of One-touch fittings. 

### Gasket/Seal for M5 thread

Part no.: M-5G2

Material: Stainless steel 304, NBR

## 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.

### Interchangeability of Series KJ and KQ

#### Caution

1. Do not use the plug-in KQ Series with the KJ Series, it will not hold.
2. For combinations other than the plug-in KQs, they are interchangeable.

### Installation and Removal of One-touch Mini Fittings

#### Caution

##### Installing of tube

1. Cut the tube perpendicularly, using caution not to damage its surface. (Use tube cutter TK-1, 2 or 3. Do not cut the tube with cutting pliers, nippers, scissors, etc.)
2. Grasp the tube, then slowly push it until it comes to a stop.
3. Then, pull it back gently to make sure that it does not come out.

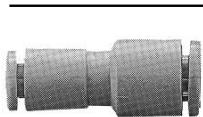
##### Removing of tube

(Use one hand for removal.)

1. Hold the release button with the thumb and forefinger.
2. Grasp the tube with the remaining three fingers and palm.
3. Then, pull out the tube with three fingers and palm while pushing in the release button with the thumb and the forefinger.
4. To reuse the released tube, cut off the damaged portion of the tube.

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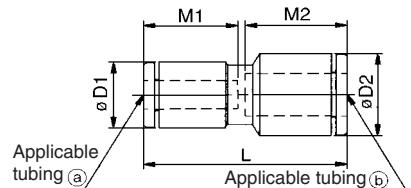
## Different Diameter Straight: KJH



Applicable tubing O.D. (mm)		Model	(Note) $\phi D1$	(Note) $\phi D2$	L	M1	M2	Effective area (mm²)		Weight (g)
(a)	(b)							Nylon	Urethane	
3.2	4	KJH23-04	8.4	9.3	26.3	12.7	12.7	3	2.5	1.6
	6	KJH23-06		11.6	27.2	13.5				2
4	6	KJH04-06	9.3	11.6	27.2	12.7	13.5	4	4	2.2



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



## Male Elbow: KJL

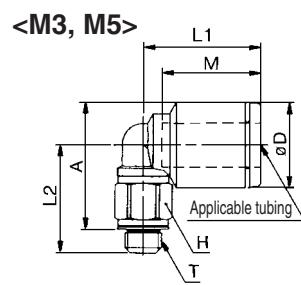


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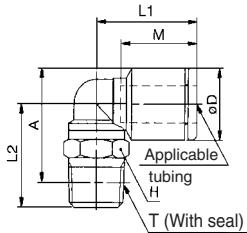


Applicable tubing O.D. (mm)		Connection threads T	Model	H (width across flats)	(Note) $\phi D$	L1	L2	A	M	Effective area (mm²)		Weight (g)
										Nylon	Urethane	
3.2	M3 x 0.5	KJL23-M3	7	8.4	12.5	14.1	12.7	12.7	12.7	0.8	0.8	2.1
	M5 x 0.8	KJL23-M5			13.2	14.3				2.6	2.2	2.5
	R 1/8	KJL23-01S			15.2	15.4*				6.7	6.7	
4	M3 x 0.5	KJL04-M3	7	9.3	13	15.1	12.7	12.7	12.7	0.8	0.8	2.2
	M5 x 0.8	KJL04-M5			13.7	15.3				3.5	3.5	2.7
	R 1/8	KJL04-01S			15.7	16.4*				6.8	6.8	
6	M5 x 0.8	KJL06-M5	7	11.6	14.7	17.4	13.5	13.5	13.5	3.5	3.5	3.2
	R 1/8	KJL06-01S			17.8	16.7				9	9	6.4

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



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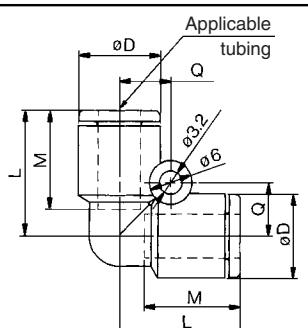


## Union Elbow: KJL



Applicable tubing O.D. (mm)		Model	(Note) $\phi D$	L	Q	M	Effective area (mm²)		Weight (g)
							Nylon	Urethane	
3.2	KJL23-00	8.4	15	5.8	12.7	2.6	2.2	1.6	
4	KJL04-00	9.3	15.8	6.3	12.7	3.5	3.5	2	
6	KJL06-00	11.6	17.1	7.3	13.5	9	9	3.1	

Note)  $\phi D$ : Max. diameter

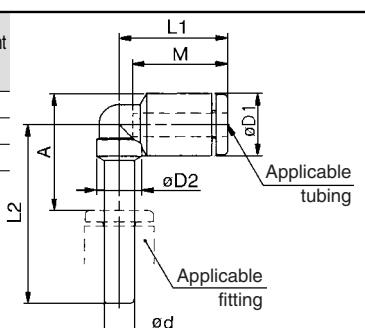


## Plug-in Elbow: KJL



Applicable tubing O.D. (mm)		Applicable fitting size $\phi d$	Model	(Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Effective area (mm²)		Weight (g)
										Nylon	Urethane	
3.2	3.2	KJL23-99	8.4	6	14.5	23.8	15.3	12.7	2.6	2.2	1	
4	4	KJL04-99	9.3	6	15.6	24.7	16.7	12.7	3.5	3.5	1.2	
6	6	KJL06-99	11.6	7	16.3	26.8	19.1	13.5	9	9	2	

Note)  $\phi D1$ : Max. diameter



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