

Miniature One-touch Fittings

One-touch Mini

Series KJ



Applicable Tubing: $\varnothing 3.2$, $\varnothing 4$, $\varnothing 6$
 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

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

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.	$\varnothing 3.2$, $\varnothing 4$, $\varnothing 6$


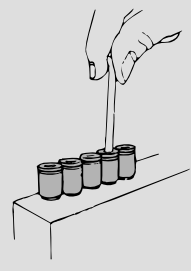

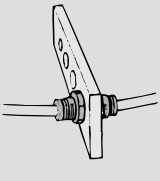

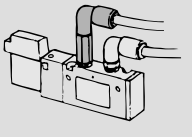


















Specifications

Fluid	Air/Water ^{Note)}	
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.	

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	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

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

- K□
- M□
- H□
- D□
- MS
- T□
- VMG

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

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

Installation and Removal of One-touch Mini Fittings

⚠ Caution

Installing of tube

- 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.)
- Grasp the tube, then slowly push it until it comes to a stop.
- Then, pull it back gently to make sure that it does not come out.



Removing of tube

(Use one hand for removal.)

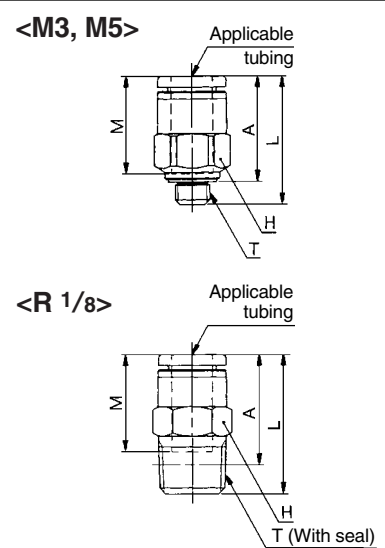
- Hold the release button with the thumb and forefinger.
- Grasp the tube with the remaining three fingers and palm.
- Then, pull out the tube with three fingers and palm while pushing in the release button with the thumb and the forefinger.
- To reuse the released tube, cut off the damaged portion of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

Series KJ



Male Connector: KJH

<M3, M5>  <R 1/8> 	Applicable tubing O.D. (mm)	Connection thread T	Model	H (width across flats)	L	A	M	Effective area (mm ²)		Weight (g)
								Nylon	Urethane	
	3.2	M3 x 0.5	KJH23-M3	7	16.3	13.7	12.7	0.9	0.9	1.6
		M5 x 0.8	KJH23-M5		16.7	13.6		2		
		R 1/8	KJH23-01S	10	13.8	9.8*		3	2.5	4.7
	4	M3 x 0.5	KJH04-M3	8	16.3	13.7	12.7	0.9	0.9	1.9
		M5 x 0.8	KJH04-M5		17	13.9		2.4		
		R 1/8	KJH04-01S	10	14.8	10.8*		4	4	4.6
	6	M5 x 0.8	KJH06-M5	10	17.8	14.7	13.5	4	4	3.3
		R 1/8	KJH06-01S		19.4	15.4*		10	10	5.2

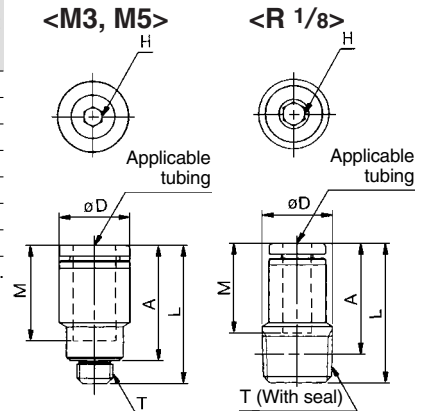
* Reference dimensions after R thread installation.



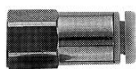
Hexagon Socket Head Male Connector: KJS

<M3, M5>  <R 1/8> 	Applicable tubing O.D. (mm)	Connection thread T	Model	H (width across flats)	Note) ϕD	L	A	M	Effective area (mm ²)		Weight (g)
									Nylon	Urethane	
	3.2	M3 x 0.5	KJS23-M3	1.5	7	16.3	13.7	12.7	1.4	1.4	1.3
		M5 x 0.8	KJS23-M5	2		19.7	16.6		2.5	2.5	2.8
	4	M3 x 0.5	KJS04-M3	1.5	8	16.3	13.7	12.7	1.4	1.4	1.6
		M5 x 0.8	KJS04-M5	2.5		18.7	15.6		4	4	2.7
		R 1/8	KJS04-01S	3		9.8	19.7		15.7*	5.4	
	6	M5 x 0.8	KJS06-M5	2.5	10	19.5	16.4	13.5	4	4	3.3
		R 1/8	KJS06-01S	4		20	16*		10	10	5.2

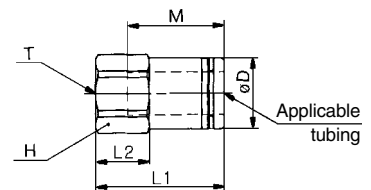
* Reference dimensions after R thread installation. Note) ϕD : Max. diameter




Female Connector: KJF

	Applicable tubing O.D. (mm)	Connection thread T	Model	H (width across flats)	Note) ϕD	L1	L2	M	Effective area (mm ²)		Weight (g)
									Nylon	Urethane	
	3.2	M3 x 0.5	KJF23-M3	7	7	16.5	6.8	12.7	3	2.5	2.6
		M5 x 0.8	KJF23-M5			18.8	7.9		2.8		
	4	M3 x 0.5	KJF04-M3	8	8	16.1	6.4	12.7	4	4	3.2
		M5 x 0.8	KJF04-M5			18.7	7.8		3.8		
	6	M5 x 0.8	KJF06-M5	10	10	18	7.5	13.5	10	10	5.3

Note) ϕD : Max. diameter



Straight Union: KJH

	Applicable tubing O.D. (mm)	Model	Note) ϕD	L	M	Effective area (mm ²)		Weight (g)
						Nylon	Urethane	
	3.2	KJH23-00	8.4	26.3	12.7	3	2.5	1.4
	4	KJH04-00	9.3	26.3	12.7	4	4	1.7
	6	KJH06-00	11.6	28	13.5	10	10	2.5

Note) ϕD : Max. diameter

