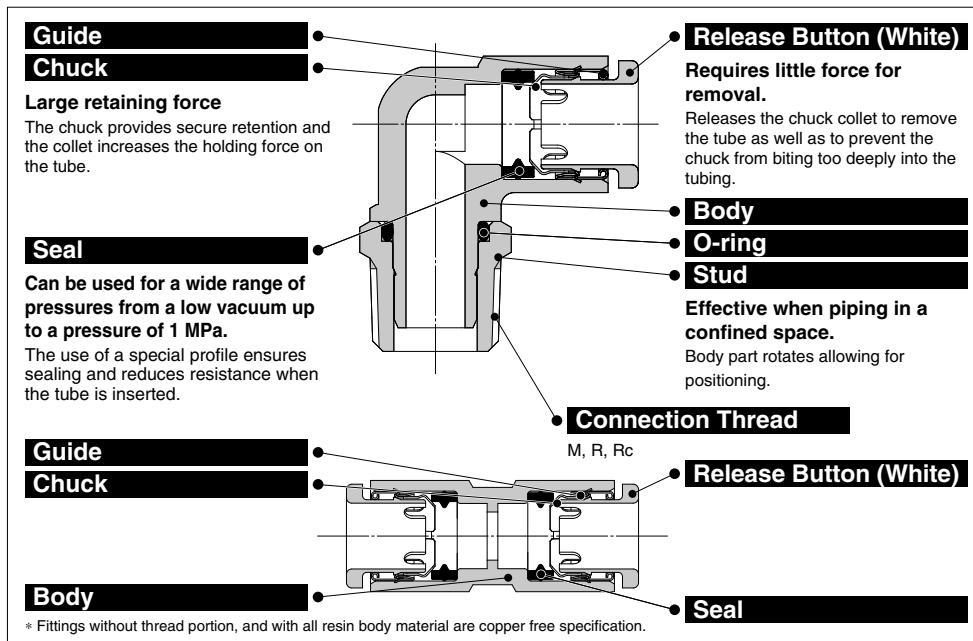


# Series 10-KQ2

Metric Size One-touch Fittings

Applicable Tubing: Metric Size, Connection Thread: M, R, Rc

RoHS



**One-touch IN/OUT connection.**  
**Possible to use in vacuum to -100 kPa**

- Applicable tubing—Metric size
- Applicable tubing material  
PFA, Polyurethane



## Applicable Tubing

Tubing material <sup>Note</sup>	PFA, Polyurethane
Tubing O.D.	ø2, ø3.2, ø4, ø6, ø8, ø10, ø12, ø16

Note) FEP, nylon and soft nylon tubing can also be used. However, the degree of clean performance will be reduced.

## Color

Series	Body	Release button
Series 10-KQ2	White	White

## Specifications

<b>Fluid</b>		Air, Water <sup>Note 1, 2)</sup>
<b>Operating pressure range</b> <sup>Note 3)</sup>		-100 kPa to 1 MPa
<b>Proof pressure (at 23°C)</b>		3 MPa
<b>Ambient and fluid temperature</b>		-5 to 60°C, Water: 0 to 40°C (No freezing)
<b>Thread</b>	<b>Mounting section</b>	JIS B0203 (Taper thread for piping) JIS B0205 (Metric coarse thread)
	<b>Nut section</b>	JIS B0205 (Metric fine thread)
<b>Seal on the threads</b>		With seal or none
<b>Grease</b>		Fluorine based grease
<b>Cleanliness class (ISO class)</b>		Class 5

Note 1) The surge pressure must be under the maximum operating pressure.

Note 2) Deionized water is not recommended for use as it may affect the material used in the fittings.

In addition, it is known to degrade the water quality.

Note 3) Do not use the fittings with a leak tester or for vacuum retention because they are not guaranteed for zero leakage.

## Principal Parts Material

Body	C3604 Electroless nickel plated, PBT, PP, Stainless steel 303
Stud	C3604 (Thread portion) Electroless nickel plated, Stainless steel 303 (Thread portion)
Chuck	Stainless steel 304
Guide	Stainless steel 304
Release button	POM
Seal, O-ring	NBR
Gasket	Stainless steel 304, 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

# Metric Size One-touch Fittings

## Variations

### Hexagon socket head male connector

10-KQ2S P.1129



Internal hexagon socket allows tightening with a hexagon wrench in confined spaces.

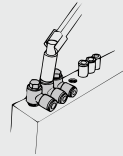


### Universal male elbow

10-KQ2V P.1134



Hexagon head of the body allows tightening with a box wrench in confined spaces.

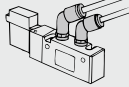


### 45° male elbow

10-KQ2K P.1133



Use to pipe a female thread at a 45° angle. The model between the male connector and male elbow.

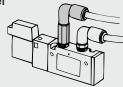


### Extended male elbow

10-KQ2W P.1140



Basically, it is used together with male elbow. Different point is that it is used for fittings to avoid interfering with each other by making the piping multi-level.

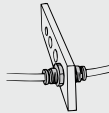


### Bulkhead union

10-KQ2E P.1150



Use to connect tubing through a panel, etc.

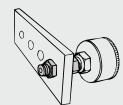


### Bulkhead connector

10-KQ2E P.1150



Use to connect male thread and tubing through a panel, etc.



### Nipple

10-KQN P.1152



Use to connect One-touch fittings.

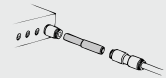


### Reducer nipple

10-KQN P.1152



Use to connect One-touch fittings of different sizes.



### Universal female elbow

10-KQ2VF P.1135



Use to branch a male or female thread at a 90° angle. Multiple connections possible.

### Branch universal female elbow

10-KQ2ZF P.1137



Use to two-branch a male or female thread at a 90° angle. Multiple connections possible.

### Male connector

10-KQ2H P.1127



Use to pipe a female thread. Most general model.

### Cross

10-KQ2TW P.1143



Use to four-branch line.

### Reducer elbow

10-KQ2L P.1131



Use to change the tube direction from One-touch fittings by 90° and to reduce size.

### Female connector

10-KQ2F P.1128



Use to pipe a male thread of a pressure gauge, etc.

### Male elbow

10-KQ2L P.1130



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

### Different diameter cross

10-KQ2TX P.1143



Use to branch tubing with size reduced at both 90° angles.

### Straight union

10-KQ2H P.1127



Use to connect tubing in the same direction.

### Union elbow

10-KQ2L P.1131



Use to connect tubing at right angles.

### Male branch tee

10-KQ2T P.1141



Use to branch a female thread at both 90° angles.

### Different diameter straight

10-KQ2H P.1128



Use to connect tubing of different sizes.

### Plug-in elbow

10-KQ2L P.1131



Use to change the tube direction from One-touch fittings by 90°.

### Union tee

10-KQ2T P.1142



Use to branch tubing at both 90° angles.

**Different diameter tee**

10-KQ2T P.1142



Use to connect tubing for branching at both 90° angles with size reduced.

**Different diameter tee**

10-KQ2T P.1142



Use to connect tubing for branching at 90° angle with size reduced from the same piping.

**Different diameter cross**

10-KQ2TY P.1143



Use to connect tubing for branching in three directions with size reduced.

**Hexagon socket head universal male elbow**

10-KQ2VS P.1134



Hexagon socket on the top allows tightening with a hexagon wrench in confined spaces.

**Male branch connector**

10-KQ2LU P.1132



Use to branch a female thread at right angles.

**Female elbow**

10-KQ2LF P.1139



Use to pipe a male thread at right angles.

**Double universal male elbow**

10-KQ2VD P.1136



Use to branch a female thread at right angles. Two individual parts rotate 360°.

**Triple universal male elbow**

10-KQ2VT P.1136



Use to three-branch a female thread at right angles. Three individual parts rotate 360°.

**Branch universal male elbow**

10-KQ2ZZ P.1137



Hexagon head of the body allows tightening with a box wrench. Use for branch connections.

**Double branch universal male elbow**

10-KQ2ZD P.1138



Use to four-branch a female thread at right angles. Two individual parts rotate 360°.

**Male run tee**

10-KQ2Y P.1144



Use to branch a female thread at a 90° angle.

**Triple branch universal male elbow**

10-KQ2ZT P.1138



Use to six-branch a female thread at right angles. Three individual parts rotate 360°.

**Branch union elbow**

10-KQ2LU P.1131



Use to branch tubing at right angles.

**Extended plug-in elbow**

10-KQ2W P.1139



Use to change the tube direction of One-touch fittings by 90°. Multi-level piping is also possible with the plug-in elbow.

**Male delta union**

10-KQ2D P.1145



Use to branch a female thread at two right angles.

**Delta union**

10-KQ2D P.1146



Use to branch tubing at three right angles.

**Union "Y"**

10-KQ2U P.1147



Use to branch tubing in the same direction.

**Different diameter union "Y"**

10-KQ2U P.1147



Use to connect tubing for branching with size reduced.

**Plug-in "Y"**

10-KQ2U P.1147



Use to branch One-touch fittings.

**Branch "Y"**

10-KQ2U P.1146



Use to branch a female thread.

**Plug-in reducer**

10-KQ2R P.1150



Use to change size of One-touch fittings.

**Bulkhead male elbow**

10-KQ2LE P.1151



Use to connect tubing through a panel, etc. and to change the tube direction by 90°.

**Adapter**

10-KQ2N P.1151



Use to connect One-touch fittings and R female thread.

**Tube cap**

10-KQ2C P.1152



Use to plug unused tubing.

**Color cap**

10-KQ2C P.1152



Mount onto the release button and use different colors for piping according to applications.

**Plug**

10-KQP P.1151



Use to plug unused One-touch fittings.

Directional Control Valves

Air Cylinders

Rotary Actuators

Air Grippers

Air Preparation Equipment

Modular F. R.

Pressure Control Equipment

Fittings & Tubing

Flow Control Equipment

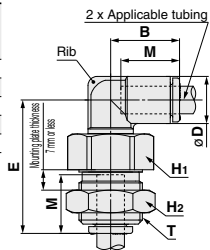
Pressure Switches/ Pressure Sensors

## Dimensions

### Bulkhead Male Elbow: 10-KQ2LE



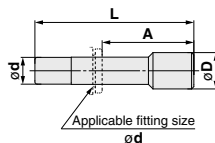
Applicable tubing O.D. (mm)	Model	T (M)	H <sub>1</sub> (Width across flats)	H <sub>2</sub> (Width across flats)	B	E	øD	Mounting hole	M	Effective area (mm <sup>2</sup> ) Urethane	Min. port size	Weight (g)	With a rib
ø4	10-KQ2LE04-00N	M12 x 1	14	14	14.8	28.5	8.2	13	13.3	4.2	3	21.2	●
ø6	10-KQ2LE06-00N	M14 x 1	17	17	15.5	29.6	10.4	15	13.3	9	4.5	29.4	—
ø8	10-KQ2LE08-00N	M16 x 1	17	19	17.2	32.3	13.2	17	14.2	14.9	6	30.4	●
ø10	10-KQ2LE10-00N	M20 x 1	22	24	19.3	37.9	15.9	21	15.6	25	7.5	53.5	●
ø12	10-KQ2LE12-00N	M22 x 1	24	27	21.5	40.8	18.5	23	17	39.7	9	61	●



### Plug: 10-KQP



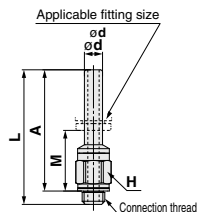
Applicable fitting size ød	Model	øD	L	A	Weight (g)
ø2	10-KJP-02	3	17	5.1	0.1
ø3.2	10-KQP-23	5	31.5	18.2	1
ø4	10-KQP-04	6	32	18.7	1
ø6	10-KQP-06	8	35	21.7	1
ø8	10-KQP-08	10	39	24.8	2
ø10	10-KQP-10	12	43	27.4	3.5
ø12	10-KQP-12	14	45.5	28.5	5
ø16	10-KQP-16	20.9	47	26.4	8



### Adapter: 10-KQ2N (Gasket seal)



Applicable fitting size ød	Connection thread M	Model	H (Width across flats)	L	A	M	Min. port size	Weight (g)
ø4	M5 x 0.8	10-KQ2N04-M5N	7	29.7	26.7	13.4	2.5	2.4
ø6	M5 x 0.8	10-KQ2N06-M5N	7	29.7	26.7	13.4	2.5	2.6

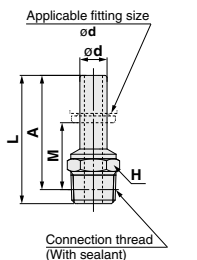


### Adapter: 10-KQ2N (Sealant)



Applicable fitting size ød	Connection thread R	Model	H (Width across flats)	L	A*	M	Min. port size	Weight (g)
ø4	1/8	10-KQ2N04-01NS	10	28.3	25.2	11.9	2.5	4
ø6	1/8	10-KQ2N06-01NS	10	28.3	25.2	11.9	4	4.1
	1/4	10-KQ2N06-02NS	14	32.8	28.1	14.8	4	13.6
ø8	1/4	10-KQ2N08-02NS	14	35.9	31.2	17	6	15.7
	3/8	10-KQ2N08-03NS	17	36	30.9	16.7	6	22.7
ø10	3/8	10-KQ2N10-03NS	17	40.6	35.5	19.9	7.5	19.1

\* Reference dimensions after installation of R thread



# Series 10-KQ2

## Made to Order

Please contact SMC for detailed dimensions, specifications, and lead times.

### 1 Made to Order

Symbol	Specifications
10-KQ2□08-01□Q□	<p>Effective area is interchangeable with the current product (KQ series).</p> <p>Applicable model: Male elbow, 45° male elbow, Female elbow, Extended male elbow, Male branch tee, Male run tee</p> <p>Applicable tubing O.D./Port size: ø8/R1/8</p> <p>Thread material/Surface treatment: Brass + Electroless nickel plating</p> <p>Example) <b>10-KQ2L08-01AQS</b></p>