

# One-touch Fittings

## Series KQ2

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

### How to Order

**KQ 2 H 06 - 01 S -**

• **One-touch fittings**

• **Product's color**

Symbol	Body	Release button
2	White	Light gray
Nil	Black	Blue

• **With thread sealant (Male thread only)**

Nil	None
S	With thread sealant

Note) Port size with sealant: Only  
R 1/8  
R 1/4  
R 3/8  
R 1/2

• **Applicable tubing O.D.**

23	ø3.2
04	ø4
06	ø6
08	ø8
10	ø10
12	ø12
16	ø16

• **Port size/Applicable tubing O.D.**

Tubing (Rod) connection	Thread connection	Applicable tubing O.D.
M5	M5	M5 x 0.8
M6	M6	M6 x 1.0
01	R 1/8, Rc 1/8	
02	R 1/4, Rc 1/4	
03	R 3/8, Rc 3/8	
04	R 1/2, Rc 1/2	
00	Same dia. tubing	
04	ø4	(Reducer) Different dia. tubing
06	ø6	
08	ø8	
10	ø10	
12	ø12	
16	ø16	
99	Same dia. rod	

• **Made to Order**  
Refer to page 58 for details.

• **Model**

<b>H</b>	Male connector	<b>T</b>	Male branch tee
	Straight union		Union tee
	Different diameter straight		Different diameter tee*
<b>S</b>	Hex. socket head male connector	<b>TW</b>	Cross*
<b>F</b>	Female connector	<b>TX</b>	Different diameter cross*
<b>L</b>	Male elbow	<b>TY</b>	Different diameter cross*
	Union elbow	<b>Y</b>	Male run tee
	Plug-in elbow	<b>D</b>	Male delta union
Reducer elbow	Delta union		
<b>LU</b>	Male branch connector	<b>U</b>	Branch "Y"
	Branch union elbow		Union "Y"
<b>K</b>	45° male elbow		Different dia. union "Y"
<b>V</b>	Universal male elbow		Plug-in "Y"
<b>VS</b>	Hexagon socket head universal male elbow		Delta branch
<b>VF</b>	Universal female elbow	<b>UD</b>	Different dia. double union "Y"
<b>LF</b>	Female elbow	<b>XD</b>	Double plug-in "Y"
<b>VD</b>	Double universal male elbow	<b>X</b>	Different diameter plug-in "Y"
<b>VT</b>	Triple universal male elbow	<b>R</b>	Plug-in reducer
<b>Z</b>	Branch universal male elbow		Bulkhead union
<b>ZF</b>	Branch universal female elbow	<b>E</b>	Bulkhead connector
<b>ZD</b>	Double branch universal male elbow		Bulkhead male elbow
<b>ZT</b>	Triple branch universal male elbow	<b>LE</b>	
	Extended plug-in elbow		
<b>W</b>	Extended male elbow		

\* Available only for white color body.

**Accessory**

Symbol	Name
<b>KQ2N</b>	Nipple
	Reducer nipple
<b>KQ2C</b>	Adaptor
	Tube cap
<b>KQ2C</b>	Color cap
<b>KQ2P</b>	Plug (White)
<b>KQP</b>	Plug (Blue)

Use the below part number to order the gasket for M5 and M6 threads.

Gasket for M5 thread: M-5G2

Gasket for M6 thread: M-6G

Series KQ2: White body  
Series KQ : Black body

**Guide**

**Collet**

**Chuck**

Suitable for use with nylon and urethane. 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 MPa.

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

**Connection thread**

M, R, Rc

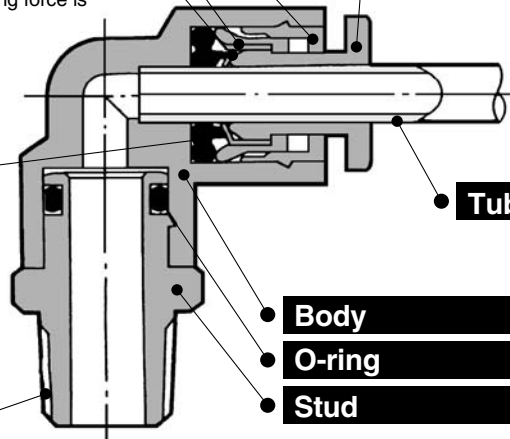
**Release button**

Series KQ2: Light gray

Series KQ : Blue

Light force for removal

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



**Tube**

**Body**

**O-ring**

**Stud**

Effective when piping in a confined space.

The body and the threaded portion can rotate. (To the degree for positioning)

PAT.

- K
- M
- H
- KK
- D
- MS
- LQ
- MQR
- T

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



### Applicable Tubing

Tube material	FEP, PFA, Nylon, Soft nylon <sup>(1)</sup> , Polyurethane
Tube O.D.	ø3.2, ø4, ø6, ø8, ø10, ø12, ø16

Note 1) Soft nylon tubing is not compatible with water.

### Product's Color

Series	Body	Release button
Series KQ2	White	Light gray
Series KQ	Black	Blue

### Specifications

<b>Fluid</b>		Air/Water <sup>(2)</sup>
<b>Operating pressure range <sup>(3)</sup></b>		-100 kPa to 1 MPa
<b>Proof pressure</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 sealant or none



Note 2) The surge pressure must be under the maximum operating pressure.

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, PBT, PP
Stud	C3604 (Thread portion)
Chuck	Stainless steel 304
Guide	Stainless steel 304, C3604, PBT
Collet, Release button	POM
Seal, O-ring	NBR
Gasket	Stainless steel 304, NBR



**Made to Order**  
(Refer to page 58 for details.)

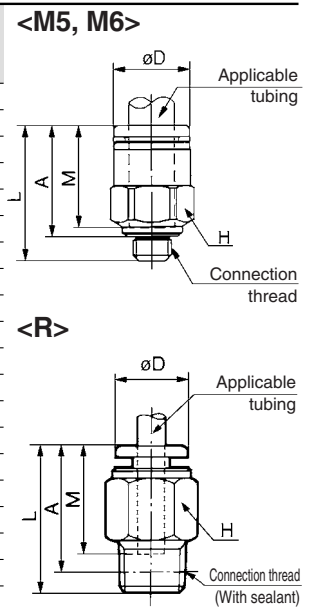
# Series KQ2

## Male Connector: KQ2H

<M5, M6>

<R>

Applicable tubing O.D. (mm)	Connection thread R M	Model	H (width across flats)	$\phi D^{(1)}$	L	A*	M	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		Mass (g)
								Nylon	Urethane	
3.2	M5 x 0.8	KQ2H23-M5	7	7	16.7	13.6	12.7	3	2.5	2.1
	1/8	KQ2H23-01S	10	-	21.1	18	15.5	3.4	2.9	9
	1/4	KQ2H23-02S	14	-	19	13.5				16
4	M5 x 0.8	KQ2H04-M5	8	-	17	13.9	12.7	4	4	2.4
	M6 x 1.0	KQ2H04-M6	8	8	18	-	16	5.6	4	2.5
	1/8	KQ2H04-01S	10	-	21.1	18				9
	1/4	KQ2H04-02S	14	-	19	13.5	16			
6	M5 x 0.8	KQ2H06-M5	10	10	17.8	14.7	13.5	4	4	3.3
	M6 x 1.0	KQ2H06-M6	10	-	19	14.9	17	13.1	10.4	3.4
	1/8	KQ2H06-01S	12	-	21.6	18.5				16
	1/4	KQ2H06-02S	14	-	22.5	17	14			
8	1/8	KQ2H08-01S	14	-	27.1	24	18.5	26.1	18.0	21
	1/4	KQ2H08-02S	-	26	20.5	19				
	3/8	KQ2H08-03S	17	-	20.9	15.5	26			
10	1/8	KQ2H10-01S	17	-	29.1	26	21	26.1	26.1	19
	1/4	KQ2H10-02S	-	33	27.5	30				
	3/8	KQ2H10-03S	17	-	27.9	22.5	41.5	29.5	30	
	1/2	KQ2H10-04S	22	-	26.1	19	53			
12	1/4	KQ2H12-02S	19	-	34	28.5	22	58.3	46.1	42
	3/8	KQ2H12-03S	-	28.9	23.5	34				
	1/2	KQ2H12-04S	22	-	29.1	22	51			
16	3/8	KQ2H16-03S	24	25.7	38.4	33	25	81	(81)	61
	1/2	KQ2H16-04S	-	34.6	27.5	113		(96)	47	



\* Reference dimensions after R thread installation.

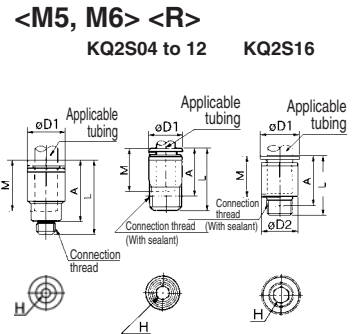
Note 1)  $\phi D$ : Max. diameter  
Note 2) ( ): Values for soft nylon.

## Hexagon Socket Head Male Connector: KQ2S

<M5, M6>

<R>

Applicable tubing O.D. (mm)	Connection thread R M	Model	H (width across flats)	$\phi D1^{(1)}$	$\phi D2$	L	A*	M	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		Mass (g)
									Nylon	Urethane	
4	M5 x 0.8	KQ2S04-M5	2.5	8	-	18.7	15.6	12.7	4	4	2.7
	M6 x 1.0	KQ2S04-M6	3	9.8	-	18.2	14.1	16	4.1	3.6	2.8
	1/8	KQ2S04-01S	3	9.8	-	23	19				8
6	M5 x 0.8	KQ2S06-M5	2.5	10	-	19.5	16.4	13.5	4	4	3.3
	M6 x 1.0	KQ2S06-M6	3	11.8	-	19.1	15	17	10.0	9.9	3.4
	1/8	KQ2S06-01S	4	13.8	-	24	20				9
	1/4	KQ2S06-02S	4	13.8	-	24	18	10.7	10.0	15	
8	1/8	KQ2S08-01S	5	14	-	28	24	18.5	17.2	16.2	12
	1/4	KQ2S08-02S	6	17	-	25.5	19.5				11
	3/8	KQ2S08-03S	6	17	-	27.5	21	23.3	24		
10	1/8	KQ2S10-01S	5	17	-	30	26	21	17.2	16.2	18
	1/4	KQ2S10-02S	8	22	-	27.5	21.5				12
	3/8	KQ2S10-03S	8	22	-	28	20	39.0	26.6	19	
	1/2	KQ2S10-04S	10	22	-	28	20	35			
12	1/4	KQ2S12-02S	8	19	-	34	28	22	46.0	44.5	23
	3/8	KQ2S12-03S	10	22	-	29	22.5				18
	1/2	KQ2S12-04S	10	22	-	28	20	60.0	30		
16	3/8	KQ2S16-03S	10	25.7	24	39	32.5	25	81	(81)	42
	1/2	KQ2S16-04S	12	25.7	24	35	27		113	(96)	34



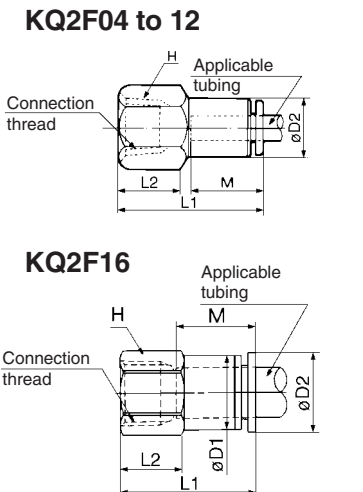
\* Reference dimensions after R thread installation.

Note 1)  $\phi D1$ : Max. diameter  
Note 2) ( ): Values for soft nylon.

## Female Connector: KQ2F



Applicable tubing O.D. (mm)	Connection thread Rc	Model	H (width across flats)	$\phi D1^{(1)}$	$\phi D2$	L1	L2	M	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		Mass (g)
									Nylon	Urethane	
4	1/8	KQ2F04-01	14	-	10	27	11	16	5.6	4	15
	1/4	KQ2F04-02	17	-	31	14	23				
6	1/8	KQ2F06-01	14	-	12	27.5	11	17	13.1	10.4	15
	1/4	KQ2F06-02	17	-	31	13	22				
	3/8	KQ2F06-03	19	-	33.5	15	25				
8	1/8	KQ2F08-01	14	-	14	29	11	18.5	26.1	18.0	17
	1/4	KQ2F08-02	17	-	32.5	13	24				
	3/8	KQ2F08-03	19	-	33.5	14	24				
10	1/4	KQ2F10-02	17	-	17	34.5	14	21	41.5	29.5	27
	3/8	KQ2F10-03	19	-	36.5	15	30				
12	1/4	KQ2F12-02	19	-	19	35	14	22	58.3	46.1	36
	3/8	KQ2F12-03	24	-	37	14	31				
	1/2	KQ2F12-04	24	-	41	18	52				
16	3/8	KQ2F16-03	24	24	25.7	38	15	25	81	(81)	59
	1/2	KQ2F16-04	24	24	25.7	43	19		113	(96)	58



Note 1)  $\phi D2$ : Max. diameter  
Note 2) ( ): Values for soft nylon