

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

• Made to Order
Refer to page 58 for details.

• 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.

Thread connection		
M5	M5 x 0.8	
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	

• Model

Accessory

Symbol	Name
	Nipple
KQ2N	Reducer nipple
	Adaptor
KQ2C	Tube cap
KQ2C	Color cap
KQ2P	Plug (White)
KQP	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

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

* Available only for white color body.

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

Tubing material	FEP, PFA, Nylon, Soft nylon ⁽¹⁾ , Polyurethane
Tubing 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

Fluid		Air/Water ⁽²⁾
Operating pressure range ⁽³⁾		-100 kPa to 1 MPa
Proof pressure		3 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) JIS B0205 (Metric coarse thread)
	Nut section	JIS B0205 (Metric fine thread)
Seal on the threads		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 ⁽²⁾ (mm ²)		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	15.5	3.4	2.9	16
4	M5 x 0.8	KQ2H04-M5	8	8	17	13.9	12.7	4	4	2.4
	M6 x 1.0	KQ2H04-M6	8	8	18	13.9	12.7	4	4	2.5
	1/8	KQ2H04-01S	10	—	21.1	18	16	5.6	4	9
	1/4	KQ2H04-02S	14	—	19	13.5	16	5.6	4	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	10	19	14.9	13.5	4	4	3.4
	1/8	KQ2H06-01S	12	—	21.6	18.5	17	13.1	10.4	16
	1/4	KQ2H06-02S	14	—	22.5	17	17	13.1	10.4	14
	3/8	KQ2H06-03S	17	—	20.9	15.5	17	13.1	10.4	27
8	1/8	KQ2H08-01S	14	—	27.1	24	18.5	26.1	18.0	21
	1/4	KQ2H08-02S	17	—	26	20.5	18.5	26.1	18.0	19
	3/8	KQ2H08-03S	17	—	20.9	15.5	18.5	26.1	18.0	26
10	1/8	KQ2H10-01S	17	—	29.1	26	21	41.5	29.5	19
	1/4	KQ2H10-02S	17	—	33	27.5	21	41.5	29.5	30
	3/8	KQ2H10-03S	17	—	27.9	22.5	21	41.5	29.5	30
	1/2	KQ2H10-04S	22	—	26.1	19	21	41.5	29.5	53
12	1/4	KQ2H12-02S	19	—	34	28.5	22	58.3	46.1	42
	3/8	KQ2H12-03S	19	—	28.9	23.5	22	58.3	46.1	34
	1/2	KQ2H12-04S	22	—	29.1	22	22	58.3	46.1	51
16	3/8	KQ2H16-03S	24	25.7	38.4	33	25	81	(81)	61
	1/2	KQ2H16-04S	24	25.7	34.6	27.5	25	113	(96)	47

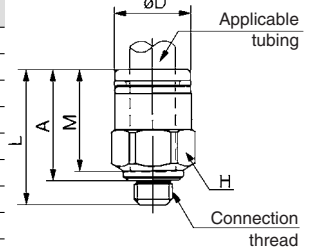
* Reference dimensions after R thread installation.



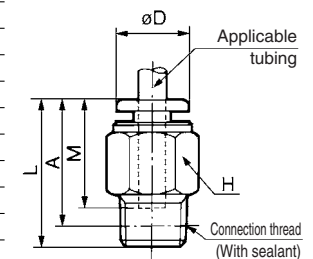
Note 1) ϕD : Max. diameter

Note 2) (): Values for soft nylon.

<M5, M6>



<R>



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 ⁽²⁾ (mm ²)		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	8	—	18.2	14.1	12.7	4	4	2.8
	1/8	KQ2S04-01S	3	9.8	—	23	19	16	4.1	3.6	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	10	—	19.1	15	13.5	4	4	3.4
	1/8	KQ2S06-01S	4	11.8	—	24	20	17	10.0	9.9	9
	1/4	KQ2S06-02S	4	13.8	—	24	18	17	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	14	—	25.5	19.5	18.5	17.2	16.2	11
	3/8	KQ2S08-03S	6	17	—	27.5	21	18.5	23.3	16.2	24
10	1/8	KQ2S10-01S	5	17	—	30	26	21	17.2	16.2	18
	1/4	KQ2S10-02S	8	17	—	27.5	21.5	21	39.0	26.6	12
	3/8	KQ2S10-03S	8	22	—	28	20	21	39.0	26.6	19
	1/2	KQ2S10-04S	8	22	—	28	20	21	39.0	26.6	35
12	1/4	KQ2S12-02S	8	19	—	34	28	22	46.0	44.5	23
	3/8	KQ2S12-03S	10	19	—	29	22.5	22	60.0	44.5	18
	1/2	KQ2S12-04S	10	22	—	28	20	22	60.0	44.5	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	25	113	(96)	34

* Reference dimensions after R thread installation.

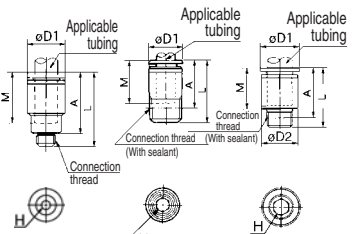


Note 1) $\phi D1$: Max. diameter

Note 2) (): Values for soft nylon.

<M5, M6> <R>

KQ2S04 to 12 KQ2S16

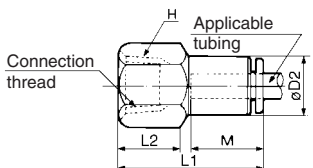


Female Connector: KQ2F

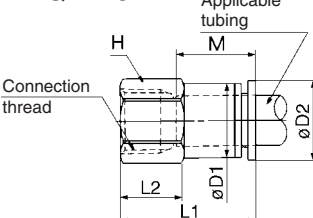


Applicable tubing O.D. (mm)	Connection thread Rc	Model	H (width across flats)	$\phi D1^{(1)}$	$\phi D2$	L1	L2	M	Effective area ⁽²⁾ (mm ²)		Mass (g)
									Nylon	Urethane	
4	1/8	KQ2F04-01	14	—	10	27	11	16	5.6	4	15
	1/4	KQ2F04-02	17	—	10	31	14	16	5.6	4	23
6	1/8	KQ2F06-01	14	—	12	27.5	11	17	13.1	10.4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

KQ2F04 to 12



KQ2F16



Note 1) $\phi D2$: Max. diameter

Note 2) (): Values for soft nylon