

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

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	Port size/Applicable tubing O.D.
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
06	ø6
08	ø8
10	ø10
12	ø12
16	ø16
99	Same dia. rod

Tubing (Rod) connection (Reducer) Different dia. tubing

With thread seal

Nil	None
S	With thread seal

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

Model

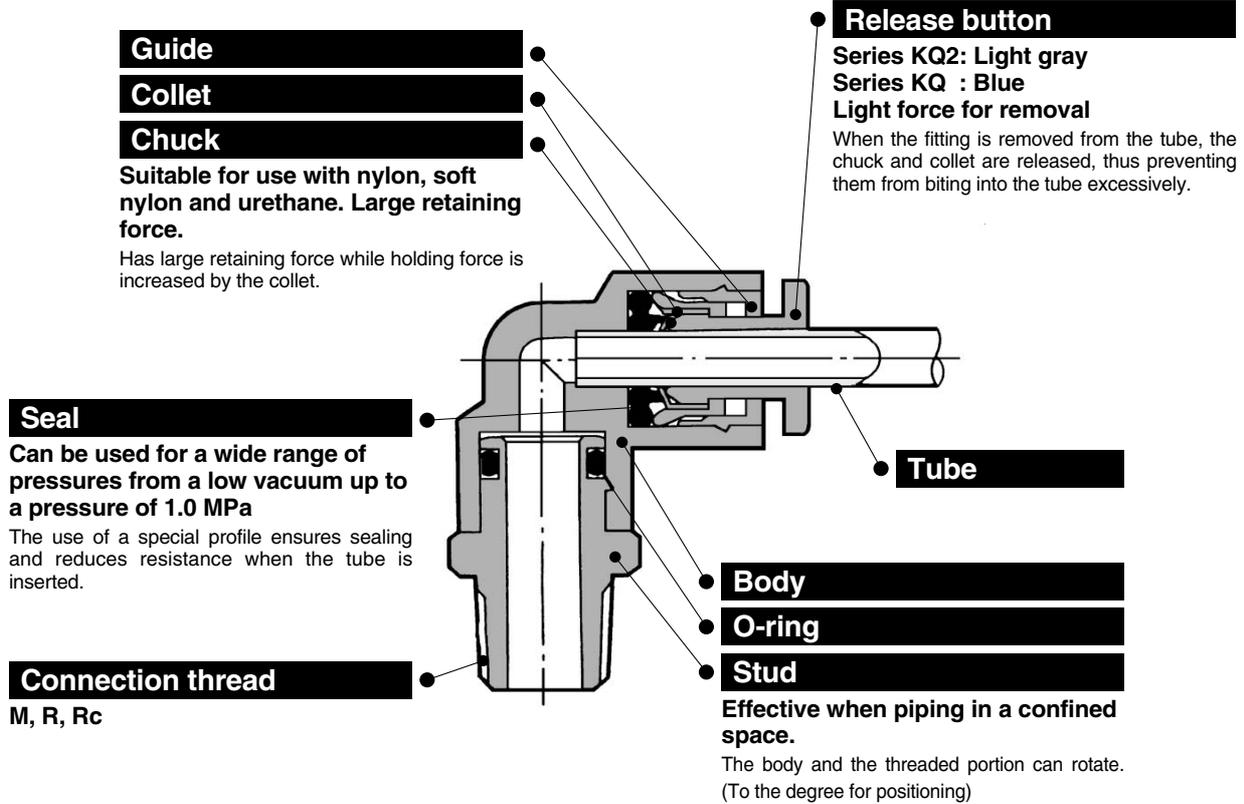
H	Male connector	T	Male branch tee
	Straight union		Union tee
S	Hex. socket head male connector	TW	Different diameter tee * Note)
			Cross*
F	Female connector	TX	Different diameter cross*
L	Male elbow	TY	Different diameter cross*
	Union elbow	Y	Male run tee
	Plug-in elbow	D	Male delta union
	Reducer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

Accessory	
Symbol	Name
KQ2N	Nipple
	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

* Available only for white color body.
Note) KQT06-04, KQT08-06, KQT10-08, and KQT12-10 are available as made to order.

Series KQ2: White body
Series KQ : Black body



PAT.

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

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

- Applications for metric size tubing
- Applicable tubing material—Nylon, Soft nylon, Polyurethane

Applicable Tubing

Tubing material	Nylon, Soft nylon, Polyurethane
Tubing O.D.	ø3.2, ø4, ø6, ø8, ø10, ø12, ø16

Product's Color

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

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)
Seal (Thread portion)		With seal or none

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.

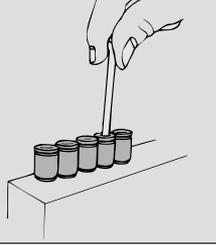
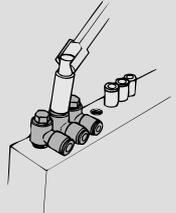
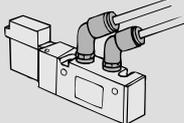
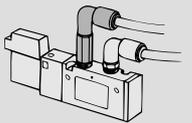
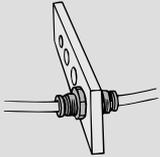
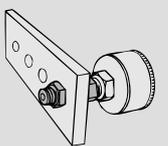
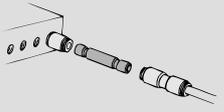
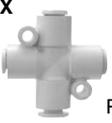
Principal Parts Material

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



Made to Order P. 15-2-30

Series KQ2

Model			
Hex. socket head male connector KQ2S P. 14 	Internal hex. allows thread connection by using an allen wrench for confined spaces. 	Universal male elbow KQ2V P. 17 	Universal male elbow allows thread connection by using a socket wrench for confined spaces. 
45° male elbow KQ2K P. 16 	Use to pipe in 45° direction from female thread. Model in-between of male connector and male elbow. 	Extended male elbow KQ2W P. 22 	Basically, it is used together with male elbow. Different point is that it is used for with fittings to avoid from interfering with each other by making the piping two-level. 
Bulkhead union KQ2E P. 28 	Use to connect tubes through a panel. 	Bulkhead connector KQ2E P. 28 	Use to connect male thread and tube through a panel. 
Nipple KQ2N P. 29 	Use to connect One-touch fittings. 	Reducer nipple KQ2N P. 29 	Use to connect One-touch fittings that are different tubing O.D.s. 
Male connector KQ2H P. 14 	Use to pipe in the same direction from female thread. Most general style. 	Male elbow KQ2L P. 15 	Use to pipe at right angles to female thread. Most general style.
Female connector KQ2F P. 14 	Use to pipe from male thread such as pressure gauge. 	Union elbow KQ2L P. 20 	Use to connect tubes at right angles.
Straight union KQ2H P. 15 	Use to connect tubes in the same direction. 	Plug-in elbow KQ2L P. 21 	Use to change by 90° in a tube fetching from One-touch direction fittings.
Different diameter straight KQ2H P. 15 	Use to connect different sized tubes. 	Reducer elbow KQ2L P. 21 	Use to change by 90° in a tube fetching direction from One touch fittings and to size down.
Cross KQ2TW P. 23 	Use to four-branch line. 	Different diameter cross KQ2TX P. 23 	Use to connect tubes with size down in all 90° directions.
		Male branch tee KQ2T P. 22 	Use to branch line from female thread in both 90° directions.
		Union tee KQ2T P. 23 	Use to connect tubes in both 90° directions.
		Different diameter tee KQ2T P. 23 	Use to connect tubes with size down in both 90° directions.
		Different diameter tee KQ2T P. 23 	Use to branch line with size down in both side 90° direction.
		Different diameter cross KQ2TY P. 24 	Use to branch line with size down in three directions.

Series KQ2

Male Connector: KQ2H

<M5, M6>

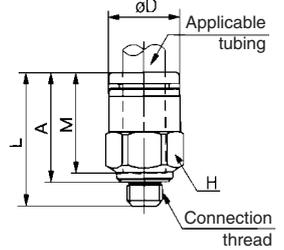


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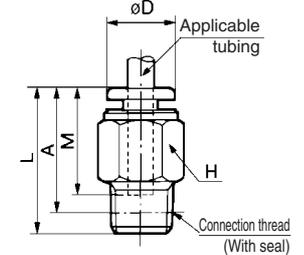


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	⁽¹⁾ ϕD	L	A*	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
								Nylon	Urethane	
3.2	M5 x 0.8	KQ2H23-M5	7	7	16.7	13.6	12.7	3	2.5	2.1
	1/8	KQ2H23-01S	10	—	22	18	15.5	3.4	2.9	9
	1/4	KQ2H23-02S	14	—	19.5	13.5		4	2.4	2.5
4	M5 x 0.8	KQ2H04-M5	8	8	17	13.9	12.7	4	4	2.4
	M6 x 1.0	KQ2H04-M6	8	—	18	18	16	5.6	4	2.5
	1/8	KQ2H04-01S	10	—	22	18		4	9	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		4	3.4	3.4
	1/8	KQ2H06-01S	12	—	22.5	18.5	17	13.1	10.4	16
1/4	KQ2H06-02S	14	—	23	17	27		21	19	
8	1/8	KQ2H08-01S	14	—	28	24	18.5	26.1	18.0	21
	1/4	KQ2H08-02S	17	—	26.5	20.5		19	26	19
	3/8	KQ2H08-03S	17	—	22	15.5	21	30	30	
10	1/8	KQ2H10-01S	17	—	30	26	21	26.1	26.1	19
	1/4	KQ2H10-02S	17	—	33.5	27.5		30	30	30
	3/8	KQ2H10-03S	22	—	29	22.5	21	41.5	29.5	30
12	1/2	KQ2H10-04S	22	—	27	19	22	58.3	46.1	53
	1/4	KQ2H12-02S	19	—	34.5	28.5		42	34	42
	3/8	KQ2H12-03S	19	—	30	22	22	51	51	
16	3/8	KQ2H16-03S	24	25.7	39.5	33	25	81	(81)	61
	1/2	KQ2H16-04S	24	—	35.5	27.5		113	(96)	47

<M5, M6>



<R>



* Reference dimensions after R thread installation.
Note 1) D: Max. diameter Note 2) (): Values for soft nylon.

Hexagon Socket Head Male Connector: KQ2S

<M5, M6>



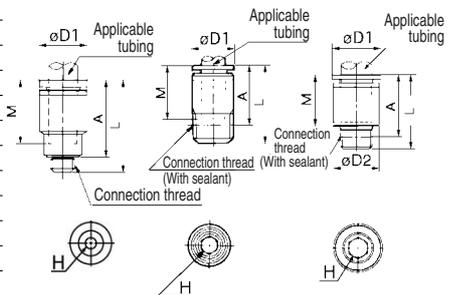
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Applicable tubing O.D. (mm)	Connection thread P	Model	H (width across flats)	⁽¹⁾ $\phi D1$	$\phi D2$	L	A*	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
									Nylon	Urethane	
4	M5 x 0.8	KQ2S04-M5	2.5	8	—	18.7	15.6	12.7	4	4	2.7
	M6 x 1.0	KQ2S04-M6	3			18.2	14.1		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			19.1	15		3.4		
	1/8	KQ2S06-01S	4	11.8	24	20	17	10.0	9.9	9	
8	1/4	KQ2S06-02S	4	13.8	24	18	17	10.7	10.0	15	
	1/8	KQ2S08-01S	5	14	—	28	24	18.5	17.2	12	
	1/4	KQ2S08-02S	6	17	—	25.5	19.5	23.3	16.2	11	
10	3/8	KQ2S08-03S	6	17	—	27.5	21	21	24	24	
	1/8	KQ2S10-01S	5	17	—	30	26	17.2	16.2	18	
	1/4	KQ2S10-02S	8	17	—	27.5	21.5	21	39.0	26.6	12
12	3/8	KQ2S10-03S	8	17	—	27.5	21	21	39.0	26.6	19
	1/2	KQ2S10-04S	22	—	28	20	22	46.0	44.5	35	
	1/4	KQ2S12-02S	8	19	—	33.5	27.5	22	60.0	44.5	23
16	3/8	KQ2S12-03S	10	19	—	29	22.5	22	60.0	44.5	18
	1/2	KQ2S12-04S	22	—	28	20	25	81	(81)	30	
	3/8	KQ2S16-03S	10	25.7	24	39	32.5	25	113	(96)	42
1/2	KQ2S16-04S	12	25.7	24	35	27	25	113	(96)	34	

<M5, M6> <R>

KQ2S04 to 12 KQ2S16

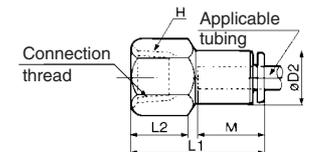


* Reference dimensions after R thread installation.
Note 1) ϕD : Max. diameter
Note 2) (): Values for soft nylon.

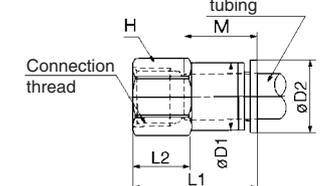
Female Connector: KQ2F

Applicable tubing O.D. (mm)	Connection thread Rc	Model	H (width across flats)	⁽¹⁾ $\phi D1$	$\phi D2$	L1	L2	M	Effective area ⁽²⁾ (mm ²)		Weight (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	19			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			43	19		58		

KQ2F04 to 12



KQ2F16



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