

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		
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	

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
	Different diameter straight		Different diameter tee * (Note)
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
	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		

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.

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.

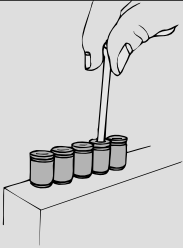
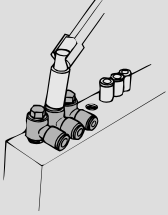
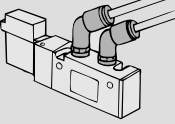
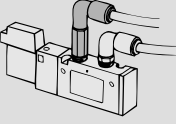
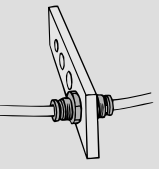
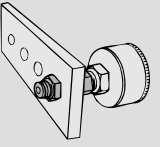
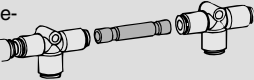
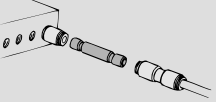
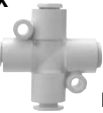
Principal Parts Material

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



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.	
			
Male branch tee			
KQ2T	P. 22	Use to branch line from female thread in both 90° directions.	
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.	
Union tee			
KQ2T	P. 23	Use to connect tubes in both 90° directions.	
Straight union			
KQ2H	P. 15	Use to connect tubes in the same direction.	
Different diameter straight			
KQ2H	P. 15	Use to connect different sized tubes.	
Plug-in elbow			
KQ2L	P. 21	Use to change by 90° in a tube fetching from One-touch direction fittings.	
Reducer elbow			
KQ2L	P. 21	Use to change by 90° in a tube fetching direction from One touch fittings and to size down.	
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.	
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.	
Different diameter cross			
KQ2TY	P. 24	Use to branch line with size down in three directions.	

Hexagon socket head universal male elbow

KQ2VS P. 17



Hex. on the top allows thread connection by using an allen wrench for confined spaces.

Triple branch universal male elbow

KQ2ZT P. 20



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

Union "Y"

KQ2U P. 26



Use to branch line in the same direction.

Male branch connector

KQ2LU P. 16



Use to branch piping at right angles to female thread.

Branch union elbow

KQ2LU P. 21



Use to branch line at right angles.

Different dia. union "Y"

KQ2U P. 26



Use to branch line with size down in the same direction.

Universal female elbow

KQ2VF P. 18



Use to branch line in the same direction or at the right angles from male or female thread. Multiplex connection possible.

Extended plug-in elbow

KQ2W P. 21



When the elbow extends over a standard elbow for ease of connection/disconnection of tube.

Plug-in "Y"

KQ2U P. 27



Use to branch line in the same direction from One-touch fittings.

Female elbow

KQ2LF P. 18



Use to pipe at right angles to male thread.

Male delta union

KQ2D P. 25



Use to branch line in 90° direction from female thread.

Branch "Y"

KQ2U P. 25



Use to branch line in the same direction from female thread.

Double universal male elbow

KQ2VD P. 18



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

Delta union

KQ2D P. 25



Use to branch in tripple 90° direction.

Plug-in reducer

KQ2R P. 28



Use to change size of One-touch fittings.

Triple universal male elbow

KQ2VT P. 19



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

Delta branch

KQ2UD P. 26



Use to four-branch line in the same direction from female thread.

Bulkhead male elbow

KQ2LE P. 28



Use to connect tubes through a panel, changing by 90° in a tube fetching direction.

Branch universal male elbow

KQ2Z P. 19



Hexagonal head allows thread connection by using a box wrench. Use for branch connection.

Different dia. double union "Y"

KQ2UD P. 26



Use to four-branch line in the same direction with size down.

Adaptor

KQ2N P. 28



Use to connect fitting and R female thread.

Branch universal female elbow

KQ2ZF P. 19



Use to branch line in the same direction or at right angles from male or female thread. Multiplex connection possible.

Different diameter plug-in "Y"

KQ2X P. 27



Use to branch line from One-touch fitting with size down.

Tube cap

KQ2C P. 29



Use to plug unused tube.

Double branch universal male elbow

KQ2ZD P. 20



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

Double plug-in "Y"

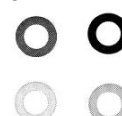
KQ2XD P. 27



Use to four-branch line from One-touch fitting.

Color cap

KQ2C P. 29



Mounted on the release button corresponding to its applications. Distinguished by color.

Male run tee

KQ2Y P. 24



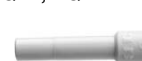
Use to branch line in the same direction from female thread and in 90° direction.

Gasket/Seal for M5 and M6 thread

Part no.: M-5G2 (For M5 thread)
M-6G (For M6 thread)
Material: Stainless steel 304, NBR

Plug

KQ2P, KQP P. 29



Use to plug unused One-touch fittings. KQP (Blue) KQ2P (White)

K□

M□

H□

D□

MS

T□

VMG

Series KQ2

Male Connector: KQ2H

<M5, M6>

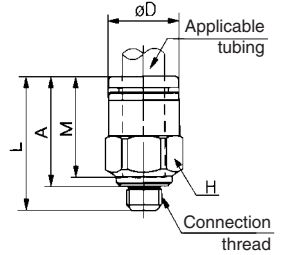


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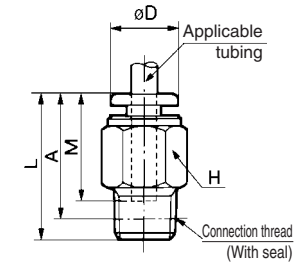


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	(1) øD	L	A*	M	Effective area (2) (mm ²)		Weight (g)
								Nylon	Urethane	
3.2	M5 x 0.8	KQ2H23-M5	7	7	16.7	13.6	12.7	3	2.5	2.1
	1/8	KQ2H23-01S	10	—	22	18	15.5	3.4	2.9	9
	1/4	KQ2H23-02S	14	—	19.5	13.5	15.5	3.4	2.9	16
4	M5 x 0.8	KQ2H04-M5	8	8	17	13.9	12.7	4	4	2.4
	M6 x 1.0	KQ2H04-M6	8	—	18	18	16	5.6	4	2.5
	1/8	KQ2H04-01S	10	—	22	18	16	5.6	4	9
6	1/4	KQ2H04-02S	14	—	19.5	13.5	16	5.6	4	16
	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	13.5	4	4	3.4
8	1/8	KQ2H06-01S	12	—	22.5	18.5	17	13.1	10.4	16
	1/4	KQ2H06-02S	14	—	23	17	17	13.1	10.4	14
	3/8	KQ2H06-03S	17	—	22	15.5	17	13.1	10.4	27
10	1/8	KQ2H08-01S	14	—	28	24	18.5	26.1	18.0	21
	1/4	KQ2H08-02S	17	—	26.5	20.5	18.5	26.1	18.0	19
	3/8	KQ2H08-03S	17	—	22	15.5	18.5	26.1	18.0	26
12	1/8	KQ2H10-01S	17	—	30	26	21	26.1	26.1	19
	1/4	KQ2H10-02S	17	—	33.5	27.5	21	41.5	29.5	30
	3/8	KQ2H10-03S	17	—	29	22.5	21	41.5	29.5	30
16	1/2	KQ2H10-04S	22	—	27	19	22	58.3	46.1	53
	1/4	KQ2H12-02S	19	—	34.5	28.5	22	58.3	46.1	42
	3/8	KQ2H12-03S	19	—	30	23.5	22	58.3	46.1	34
16	1/2	KQ2H12-04S	22	—	30	22	25	81	(81)	51
	3/8	KQ2H16-03S	24	25.7	39.5	33	25	81	(81)	61
	1/2	KQ2H16-04S	24	25.7	35.5	27.5	25	113	(96)	47

<M5, M6>



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* 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>



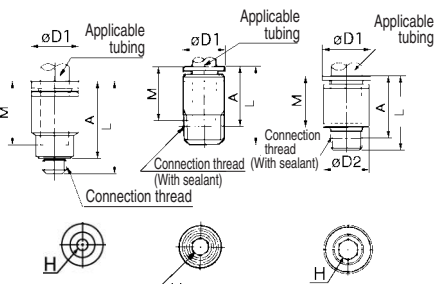
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Applicable tubing O.D. (mm)	Connection thread P	Model	H (width across flats)	(1) øD1	øD2	L	A*	M	Effective area (2) (mm ²)		Weight (g)
									Nylon	Urethane	
4	M5 x 0.8	KQ2S04-M5	2.5	8	—	18.7	15.6	12.7	4	4	2.7
	M6 x 1.0	KQ2S04-M6	3	9.8	—	18.2	14.1	12.7	4.1	3.6	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	11.8	—	19.1	15	13.5	4	4	3.4
	1/8	KQ2S06-01S	4	13.8	—	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	16.2	12
	1/4	KQ2S08-02S	6	17	—	25.5	19.5	18.5	23.3	16.2	11
10	3/8	KQ2S08-03S	6	17	—	27.5	21	18.5	23.3	16.2	24
	1/8	KQ2S10-01S	5	17	—	30	26	21	17.2	16.2	18
	1/4	KQ2S10-02S	8	19	—	27.5	21.5	21	39.0	26.6	12
12	3/8	KQ2S10-03S	8	19	—	27.5	21	21	39.0	26.6	19
	1/2	KQ2S10-04S	10	22	—	28	20	22	60.0	44.5	35
16	1/4	KQ2S12-02S	8	19	—	33.5	27.5	22	46.0	44.5	23
	3/8	KQ2S12-03S	10	22	—	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

<M5, M6> <R>

KQ2S04 to 12 KQ2S16

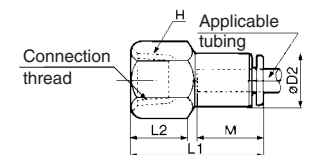


* Reference dimensions after R thread installation.
Note 1) øD: Max. diameter
Note 2) (): Values for soft nylon.

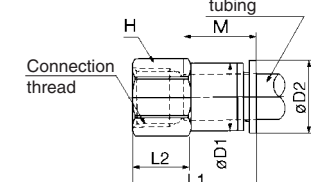
Female Connector: KQ2F

Applicable tubing O.D. (mm)	Connection thread Rc	Model	H (width across flats)	(1) øD1	øD2	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	—	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
	3/8	KQ2F08-03	19	—	14	33.5	14	18.5	26.1	18.0	24
10	1/4	KQ2F10-02	17	—	17	34.5	14	21	41.5	29.5	27
	3/8	KQ2F10-03	19	—	17	36.5	15	21	41.5	29.5	30
12	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
	1/2	KQ2F12-04	24	—	19	41	18	22	58.3	46.1	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	25	113	(96)	58

KQ2F04 to 12



KQ2F16



Note 1) øD2: Max. diameter
Note 2) (): Values for soft nylon

Straight Union: KQ2H

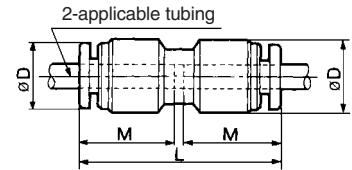


Applicable tubing O.D. (mm)	Model	øD ⁽¹⁾	L	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
					Nylon	Urethane	
3.2	KQ2H23-00	9.6	31.5	15.5	3.4	2.9	3
4	KQ2H04-00	10.4	32.5	16	5.6	4	3
6	KQ2H06-00	12.8	34.5	17	13.1	10.4	4
8	KQ2H08-00	15.2	38.5	18.5	26.1	18.0	6
10	KQ2H10-00	18.5	42.5	21	41.5	29.5	11
12	KQ2H12-00	20.9	44.5	22	58.3	46.1	14
16	KQ2H16-00	26.5	51	25	113	(96)	24



Note 1) øD: Max. diameter

Note 2) (): Values for soft nylon.



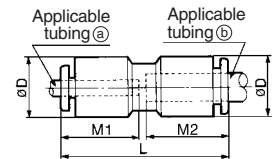
Different Diameter Straight: KQ2H



Applicable tubing O.D. (mm)		Model	Note) øD	L	M1	M2	Effective area (mm ²)		Weight (g)
①	②						Nylon	Urethane	
3.2	4	KQ2H23-04	10.4	32.5	15.5	16	3.4	2.9	3
4	6	KQ2H04-06	12.8	34.5	16	17	5.6	5.6	5
6	8	KQ2H06-08	15.2	38.5	17	18.5	13.1	10.4	6
8	10	KQ2H08-10	18.5	42	18.5	21	26.1	18.0	11
10	12	KQ2H10-12	20.9	44.5	21	22	41.5	29.5	14
12	16	KQ2H12-16	26.5	56.5	22	25	58.3	46.1	47



Note) øD: Max. diameter



Male Elbow: KQ2L

<M5>



<M6>



<R>



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	(1) øD1	(1) øD2	L1	L2	A*	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
										Nylon	Urethane	
3.2	M5 x 0.8	KQ2L23-M5	7	8.5	—	15.3	13.2	14.3	12.7	2.6	2.2	2.5
	1/8	KQ2L23-01S	10	9.6	10	17.5	21.5	22.5	15.5	3	2.5	8
	1/4	KQ2L23-02S	14	—	—	—	25.5	24.5	—	—	—	18
4	M5 x 0.8	KQ2L04-M5	7	—	—	15.6	13.7	15.3	12.7	3.5	3.5	2.7
	M6 x 1.0	KQ2L04-M6	8	—	—	—	14.7	—	—	—	—	3.6
	1/8	KQ2L04-01S	10	10.4	10	18	22	23	16	4.2	4.2	10
	1/4	KQ2L04-02S	14	—	—	—	26	25	—	—	—	19
6	M5 x 0.8	KQ2L06-M5	7	11.6	—	16.1	14.7	17.4	13.5	3.5	3.5	3.2
	M6 x 1.0	KQ2L06-M6	8	—	—	—	15.7	—	—	—	—	4.1
	1/8	KQ2L06-01S	10	—	—	—	23	25.5	17	11.4	9.0	12
	1/4	KQ2L06-02S	14	12.8	10	20	27	27.5	—	—	—	22
	3/8	KQ2L06-03S	17	—	—	—	29	29	—	—	—	33
8	1/8	KQ2L08-01S	12	—	—	—	24.5	28	—	—	—	13
	1/4	KQ2L08-02S	14	15.2	12	23	28.5	30	18.5	21.6	14.9	21
	3/8	KQ2L08-03S	17	—	—	—	30.5	31.5	—	—	—	35
10	1/8	KQ2L10-01S	—	—	—	—	27	32	—	21.6	14.9	25
	1/4	KQ2L10-02S	17	18.5	17	26.5	30	33	21	35.2	25.0	26
	3/8	KQ2L10-03S	—	—	—	—	32	34.5	—	—	—	36
	1/2	KQ2L10-04S	22	—	—	—	36	37	—	—	—	63
12	1/4	KQ2L12-02S	—	—	—	—	31	35.5	—	—	—	28
	3/8	KQ2L12-03S	17	20.9	17	28.5	33	37	22	50.2	39.7	38
	1/2	KQ2L12-04S	22	—	—	—	37	39.5	—	—	—	65
16	3/8	KQ2L16-03S	—	—	—	—	38	44.5	25	71	(71)	101
	1/2	KQ2L16-04S	22	26.5	20.9	34	41	46	—	100	(84)	105

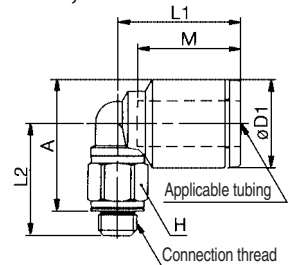


* Reference dimensions after R thread installation.

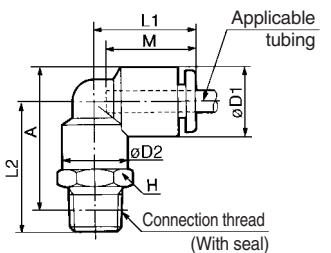
Note 1) øD1: Max. diameter

Note 2) (): Values for soft nylon.

<M5, M6>



<R>



Series KQ2

Male Branch Connector: KQ2LU

<M5, M6>



<R>

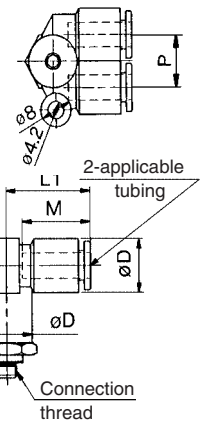


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) øD	L1	L2	L3	A*	M	P	Effective area (mm²)		Weight (g)		
											Nylon	Urethane			
4	M5 x 0.8	KQ2LU04-M5	11	10.4	18.5	24	29.5	25.5	16	10.4	4.3	4.1	10		
	M6 x 1.0	KQ2LU04-M6				24.5	30				12				
	1/8	KQ2LU04-01S	14			26.5	32	27.5			6.0	4.1	21		
	1/4	KQ2LU04-02S				30.5	36	30							
6	M5 x 0.8	KQ2LU06-M5	13	12.8	21	26.5	33	29.5	17	12.8	4.3	4.3	13		
	M6 x 1.0	KQ2LU06-M6				27	33.5				15				
	1/8	KQ2LU06-01S	14			29.5	36	32			13.9	11.0	22		
	1/4	KQ2LU06-02S				33	39.5	33.5					22		
	3/8	KQ2LU06-03S	17			35	41.5	35					35	35	
8	1/8	KQ2LU08-01S	17	15.2	24	34	41.5	38	18.5	15.2	26.3	18.2	27		
	1/4	KQ2LU08-02S				37	44.5	38.5					35		
	3/8	KQ2LU08-03S				38	45.5	39					35	35	
10	1/4	KQ2LU10-02S	19	18.5	27	40	49.5	43.5	21	18.5	40.8	29.0	41		
	3/8	KQ2LU10-03S				41	50.5	44					42		
	1/2	KQ2LU10-04S	22			44.5	54	45.5					64		
12	1/4	KQ2LU12-02S	22	20.9	29	42.5	53	47	22	20.9	57.2	45.2	57		
	3/8	KQ2LU12-03S				43.5	54	47.5					58		
	1/2	KQ2LU12-04S				46.5	57	49					65		

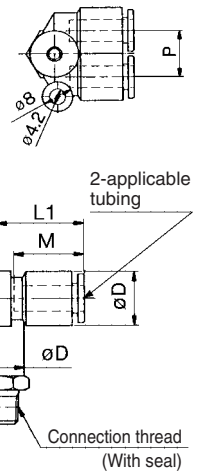


* Reference dimensions after R thread installation.
Note) øD: Max. diameter

<M5, M6>



<R>



45° Male Elbow: KQ2K

<M5, M6>



<R>

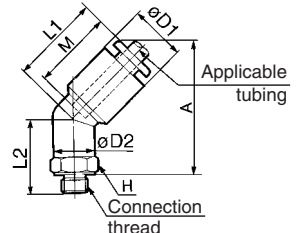


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	øD1 ⁽¹⁾	øD2	L1	L2	A*	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
										Nylon	Urethane	
4	M5 x 0.8	KQ2K04-M5	8	10.4	8	17	14.5	26	1/8	3.4	3.4	4
	M6 x 1.0	KQ2K04-M6					15	5				
	1/8	KQ2K04-01S	10		20.5		32	10				
	1/4	KQ2K04-02S	14		24.5		34	19				
6	M5 x 0.8	KQ2K06-M5	8	12.8	8	18	14.5	27.5	17	3.4	3.4	6
	M6 x 1.0	KQ2K06-M6				18.5	15					5
	1/8	KQ2K06-01S	10		20.5	33	8.7	6.9		12		
	1/4	KQ2K06-02S	14		24.5	35				10		
	3/8	KQ2K06-03S	17		26.5	36.5				33		
8	1/8	KQ2K08-01S	12	15.2	12	20.5	22	37	18.5	19.7	19.7	13
	1/4	KQ2K08-02S	14				26	39				21
	3/8	KQ2K08-03S	17				28	41				35
10	1/8	KQ2K10-01S	17	18.5	17	24	24	42	21	30.9	23.2	25
	1/4	KQ2K10-02S					27	43.5				26
	3/8	KQ2K10-03S	29				45	36				
	1/2	KQ2K10-04S	22				33	47.5				63
12	1/4	KQ2K12-02S	17	20.9	17	25	27.5	45.5	22	44.5	35.1	28
	3/8	KQ2K12-03S					29.5	47.5				38
	1/2	KQ2K12-04S	22				33.5	49.5				65
16	3/8	KQ2K16-03S	22	26.5	20.9	30	32	55	25	65.8	(65.8)	52
	1/2	KQ2K16-04S					35	56.5		91.9	(78.3)	58

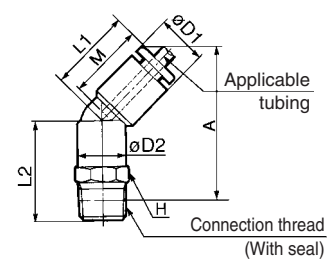


* Reference dimensions after R thread installation.
Note 1) øD: Max. diameter
Note 2) (): Values for soft nylon.

<M5, M6>



<R>



Universal Male Elbow: KQ2V

<M5>



<R>



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	(1) øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²)		Weight (g)
											Nylon	Urethane	
4	M5 x 0.8	KQ2V04-M5	8	10.4	9.8	20.5	11	18.5	15	16	2.9	2.9	6
	1/8	KQ2V04-01S			13.4	22	14.5	26.5	22.5		3.8	3.8	14
6	M5 x 0.8	KQ2V06-M5	8	12.8	9.8	23.5	12	18.5	15	17	3.8	3.8	7
	1/8	KQ2V06-01S			13.4	24	14.5	26.5	22.5		7.5	5.9	15
	1/4	KQ2V06-02S	10		15.4	23.5	18.5	31	25				26
8	1/8	KQ2V08-01S	12	15.2	17.6	28.5	15.5	28.5	24.5	18.5	16	11.2	24
	1/4	KQ2V08-02S			18.5	31.5	25.5	30			20.5	14.3	47
	3/8	KQ2V08-03S	14		20.6	27.5	20.5	36.5	30				
10	1/4	KQ2V10-02S	14	18.5	20.6	31	19.5	35.5	29.5	21	27	20.3	40
	3/8	KQ2V10-03S					20.5	36.5	30				49
12	3/8	KQ2V12-03S	17	20.9	25.2	34	22	38.5	32	22	39	30.8	63
	1/2	KQ2V12-04S					25	41.5	33.5				80
16	3/8	KQ2V16-03S	21	26.5	32.3	39	26.5	46.5	40.5	25	55	(55)	103
	1/2	KQ2V16-04S					29.5	49.5	41.5		78	(65)	110

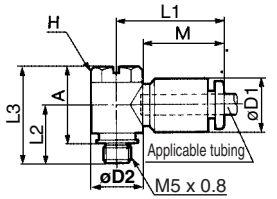


* Reference dimensions after R thread installation.

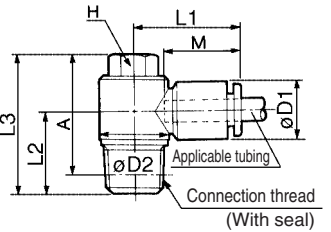
Note 1) øD: Max. diameter

Note 2) (): Values for soft nylon.

<M5>



<R>



Hexagon Socket Head Universal Male Elbow: KQ2VS

<M5>



<R>



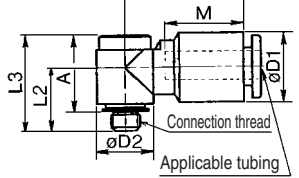
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²)		Weight (g)
											Nylon	Urethane	
4	M5	KQ2VS04-M5	4	10.4	9.8	20.5	10.5	18	15	16	2.9	2.9	6
	1/8	KQ2VS04-01S	6		13.4	22	14.5	26.5	22.5		3.8	3.8	14
6	M5	KQ2VS06-M5	4	12.8	9.8	23.5	12	18	15	17	3.8	3.8	7
	1/8	KQ2VS06-01S			13.4	24	14.5	26.5	22.5		7.5	5.9	15
	1/4	KQ2VS06-02S	6		15.3	23.5	18.5	27	21				22
8	1/8	KQ2VS08-01S	8	15.2	17.6	28.5	15.5	27	23	18.5	16	11.2	24
	1/4	KQ2VS08-02S			18.5	31	18.5	30	24		20.5	14.3	47
	3/8	KQ2VS08-03S			20.6	27.5	20.5	32.5	26				
10	1/4	KQ2VS10-02S	8	18.5	20.6	31	19.5	31.5	25	21	27	20.3	32
	3/8	KQ2VS10-03S					20.5	32.5	26				39
12	3/8	KQ2VS12-03S	10	20.9	25.2	34	22	36	30	22	39	30.8	48
	1/2	KQ2VS12-04S					25	39	31				67



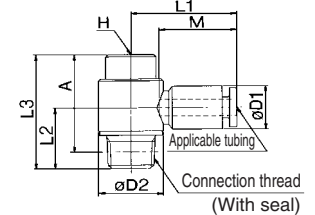
* Reference dimensions after R thread installation.

Note) øD: Max. diameter

<M5>



<R>



Series KQ2

Universal Female Elbow: KQ2VF

<M5>

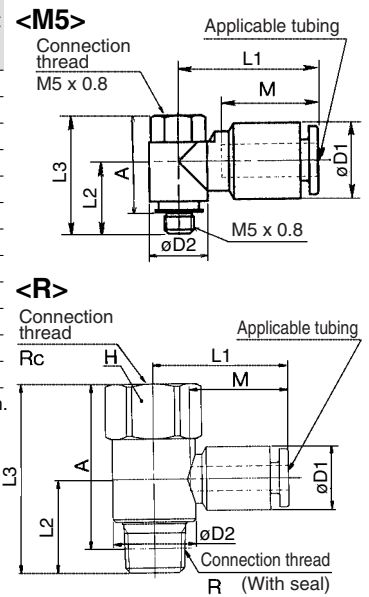


<R>



Applicable tubing O.D. (mm)	Connection thread Rc R	Model	H (width across flats)	Note) øD1	øD2	L1	L2	L3	A	M*	Weight (g)
4	M5 x 0.8	KQ2VF04-M5	8	10.4	9.8	20.5	11	20	16	16	6
	1/8	KQ2VF04-01S	14		13.4	22	15.5	29.5	25.5		19
6	M5 x 0.8	KQ2VF06-M5	8	12.8	9.8	23.5	12.5	20	16	17	7
	1/8	KQ2VF06-01S	14		13.4	24.5	15.5	29.5	25.5		19
	1/4	KQ2VF06-02S	17	15.2	17.6	25	20	38.5	32.5	18.5	37
	1/8	KQ2VF08-01S	17		17.6	28.5	17	31	27		29
8	1/4	KQ2VF08-02S	22	18.5	25.2	29.5	20	38.5	32.5	21	66
	3/8	KQ2VF08-03S	22		25.2	31.5	24.5	45.5	39		37
10	1/4	KQ2VF10-02S	19	20.9	25.2	34	24.5	45.5	39	22	48
	3/8	KQ2VF10-03S	22		25.2	34	24.5	45.5	39		68
12	3/8	KQ2VF12-03S	24	27	35	25.5	50	42			70
	1/2	KQ2VF12-04S	24		35	25.5	50	42			93

* Reference dimensions after R thread installation.
Note) øD1: Max. diameter



Female Elbow: KQ2LF

<M5, M6>

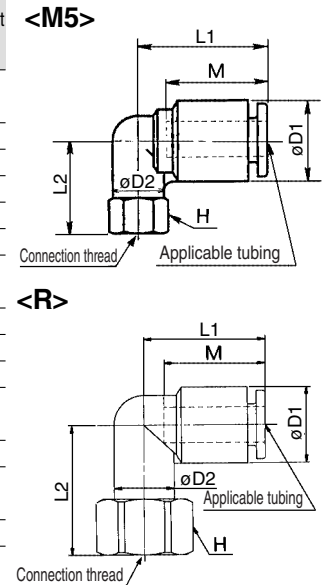


<Rc>



Applicable tubing O.D. (mm)	Connection thread Rc	Model	H (width across flats)	Note) øD1	øD2	L1	L2	M	Effective area (mm²)		Weight (g)
									Nylon	Urethane	
4	M5 x 0.8	KQ2LF04-M5	8	10.4	8	18.5	14.5	16	3.5	3.5	5
	M6 x 1.0	KQ2LF04-M6	14				15.5				
	1/8	KQ2LF04-01	14				21				
	1/4	KQ2LF04-02	17				24.5		4.2	4.2	13
6	M5 x 0.8	KQ2LF06-M5	8	12.8	8	20.5	15	17	3.5	3.5	5
	M6 x 1.0	KQ2LF06-M6	14				16				6
	1/8	KQ2LF06-01	14				22				13
	1/4	KQ2LF06-02	17				25.5		11.4	9.0	20
	3/8	KQ2LF06-03	19				26				
	1/8	KQ2LF08-01	14				23				16
8	1/4	KQ2LF08-02	17	15.2	12	23.5	26.5	18.5	21.6	14.9	22
	3/8	KQ2LF08-03	19				27				23
	1/4	KQ2LF10-02	17				28		21.6	14.9	27
	3/8	KQ2LF10-03	19				28.5		35.2	25.0	46
10	1/2	KQ2LF10-04	24	18.5	17	26.5	32.5	21			
	1/4	KQ2LF12-02	17				29.5				29
	3/8	KQ2LF12-03	19				30		50.2	39.7	48
	1/2	KQ2LF12-04	24				34				

Note) øD1: Max. diameter

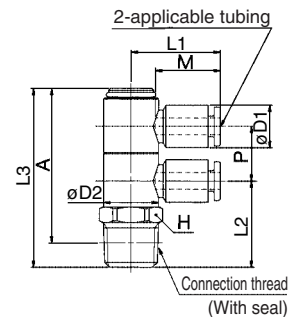


Double Universal Male Elbow: KQ2VD



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	P	Weight (g)
4	1/8	KQ2VD04-01S	14	10.4	13.4	22	18.5	41	37	16	13.4	23
	1/4	KQ2VD04-02S	17				21.5	44	38			29
	3/8	KQ2VD04-03S	17				23.5	46	40			42
6	1/8	KQ2VD06-01S	14	12.8	13.4	24.5	18.5	41	37	17	13.4	24
	1/4	KQ2VD06-02S	17				21.5	44	38			30
	3/8	KQ2VD06-03S	17				23.5	46	40			42
8	1/8	KQ2VD08-01S	19	15.2	17.6	28.5	21	48	44	18.5	15.9	53
	1/4	KQ2VD08-02S	21				24	51	45			51
	3/8	KQ2VD08-03S	21				25	52	45.5			60
	1/2	KQ2VD08-04S	21				28.5	55.5	47.5			82
10	1/4	KQ2VD10-02S	21	18.5	20.6	31.5	26.5	58	52	21	19.2	71
	3/8	KQ2VD10-03S	21				27.5	59	53			74
	1/2	KQ2VD10-04S	21				30.5	62	54			91
12	1/4	KQ2VD12-02S	26	20.9	25.2	34	28.5	64.5	58.5	22	21.6	118
	3/8	KQ2VD12-03S	26				29.5	65.5	59			113
	1/2	KQ2VD12-04S	26				32.5	68.5	60			125

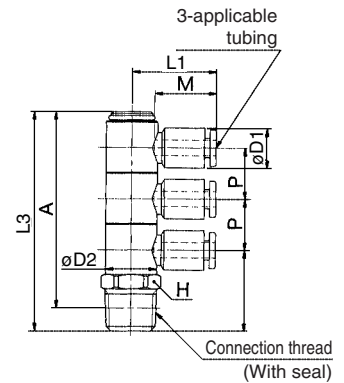
* Reference dimensions after R thread installation.
Note) øD1: Max. diameter



Triple Universal Male Elbow: KQ2VT



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	P	Weight (g)
4	1/8	KQ2VT04-01S	14	10.4	13.4	22	18.5	54.5	50.5	16	13.4	29
	1/4	KQ2VT04-02S	14				21.5	57.5	51.5			34
	3/8	KQ2VT04-03S	17				23.5	59.5	53.5			48
6	1/8	KQ2VT06-01S	14	12.8	13.4	24.5	18.5	54.5	50.5	17	13.4	31
	1/4	KQ2VT06-02S	14				21.5	57.5	51.5			37
	3/8	KQ2VT06-03S	17				23.5	59.5	53.5			50
8	1/8	KQ2VT08-01S	19	15.2	17.6	28.5	21	64	60	18.5	15.9	71
	1/4	KQ2VT08-02S	19				24	67	61			66
	3/8	KQ2VT08-03S	21				25	68	61.5			75
	1/2	KQ2VT08-04S	21				28.5	71.5	63.5			96
10	1/4	KQ2VT10-02S	21	18.5	20.6	31.5	26.5	77.5	71.5	21	19.2	94
	3/8	KQ2VT10-03S	21				27.5	78.5	72			111
	1/2	KQ2VT10-04S	21				30.5	81.5	73.5			153
12	1/4	KQ2VT12-02S	26	20.9	25.2	34	28.5	86	80	22	21.6	142
	3/8	KQ2VT12-03S	26				29.5	87	80.5			154
	1/2	KQ2VT12-04S	26				32.5	90	82			154



* Reference dimensions after R thread installation.
Note) øD1: Max. diameter

Branch Universal Male Elbow: KQ2Z

<M5>

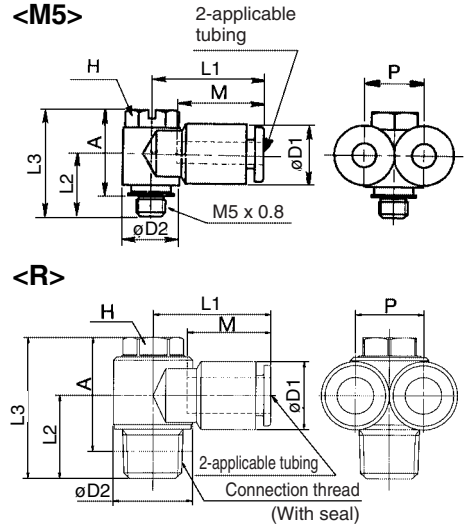


<R>



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	P	Effective area (mm²)	Weight (g)
4	M5 x 0.8	KQ2Z04-M5	8	10.4	9.8	19.5	11	18.5	15	16	10.4	Nylon 3.4	8
	1/8	KQ2Z04-01S	8		13.4	21	14.5	26.5	22.5			Urethane 4.7	16
6	1/8	KQ2Z06-01S	8	12.8	13.4	22	14.5	26.5	22.5	17	12.8	10.8	17
	1/4	KQ2Z06-02S	14		20.6	25.5	19.5	35.5	29.5				39
	3/8	KQ2Z06-03S	14		20.6	25.5	20.5	36.5	30				47
8	1/8	KQ2Z08-01S	12	15.2	17.6	26	15.5	28.5	24.5	18.5	15.2	20.5	27
	1/4	KQ2Z08-02S	14		20.6	27	18.5	31.5	25.5				33
	3/8	KQ2Z08-03S	14		20.6	27	20.5	36.5	30				49
10	1/4	KQ2Z10-02S	14	18.5	20.6	29	19.5	35.5	29.5	21	18.5	31.8	46
	3/8	KQ2Z10-03S	14		20.6	29	20.5	36.5	30				54
12	3/8	KQ2Z12-03S	17	20.9	25.2	32.5	22	39	32.5	22	20.9	44.6	71
	1/2	KQ2Z12-04S	17		25.2	32.5	25	42	34				88

* Reference dimensions after R thread installation.
Note) øD1: Max. diameter



Branch Universal Female Elbow: KQ2ZF

<M5>

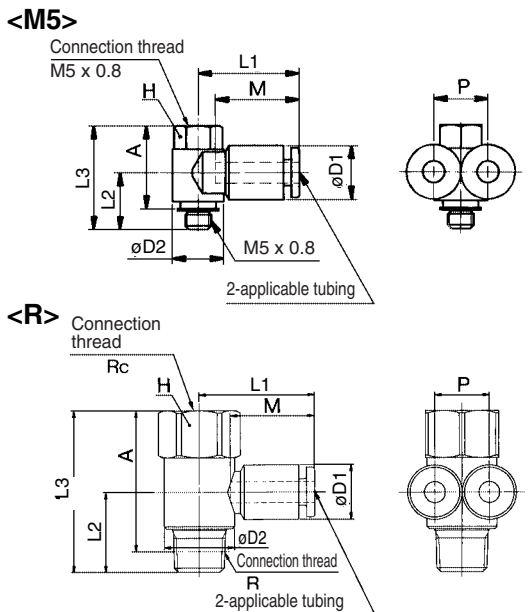


<R>



Applicable tubing O.D. (mm)	Connection thread R Rc	Model	H (width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	P	Weight (g)
4	M5 x 0.8	KQ2ZF04-M5	8	10.4	9.8	19.5	11	20	16.5	16	10.4	8
	1/8	KQ2ZF04-01S	14		13.4	21	15.5	29.5	25.5			21
6	1/8	KQ2ZF06-01S	14	12.8	13.4	22	15.5	29.5	25.5	17	12.8	21
	1/4	KQ2ZF06-02S	19		20.6	25.5	22	41	35			47
8	1/8	KQ2ZF08-01S	17	15.2	17.6	25.5	17	31	27	18.5	15.2	32
	1/4	KQ2ZF08-02S	19		20.6	27	22	41	35			49
10	1/4	KQ2ZF10-02S	19	18.5	20.6	29	22	41	35	21	18.5	54
	3/8	KQ2ZF10-03S	22		25.2	31.5	24.5	45.5	39			74
12	3/8	KQ2ZF12-03S	22	20.9	25.2	32.5	24.5	45.5	39	22	20.9	77
	1/2	KQ2ZF12-04S	24		27	33	25	50	42			101

* Reference dimensions after R thread installation.
Note) øD1: Max. diameter

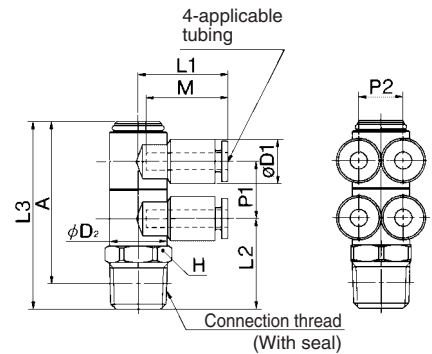


Series KQ2

Double Branch Universal Male Elbow: KQ2ZD



Applicable tubing O.D. (mm)	Connection threads R	Model	H (width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	P1	P2	Weight (g)
4	1/8	KQ2ZD04-01S	14	10.4	13.4	21	18.5	41	37	16	13.4	10.4	34
	1/4	KQ2ZD04-02S					21.5	44	38				40
	3/8	KQ2ZD04-03S	17				23.5	46	40				53
6	1/8	KQ2ZD06-01S	14	12.8	13.4	22	18.5	41	37	17	13.4	12.8	38
	1/4	KQ2ZD06-02S					21.5	44	38				43
	3/8	KQ2ZD06-03S	17				23.5	46	40				57
8	1/8	KQ2ZD08-01S	19	15.2	17.6	26	21	48	44	18.5	15.9	15.2	76
	1/4	KQ2ZD08-02S					24	51	45				72
	3/8	KQ2ZD08-03S					25	52	45.5				81
	1/2	KQ2ZD08-04S	21				28.5	55.5	47.5				102
10	1/4	KQ2ZD10-02S	21	18.5	20.6	29	26.5	58	52	21	19.2	18.5	111
	3/8	KQ2ZD10-03S					27.5	59	53				128
	1/2	KQ2ZD10-04S					30.5	62	54				178
12	1/4	KQ2ZD12-02S	26	20.9	25.2	32	28.5	64.5	58.5	22	21.6	20.9	167
	3/8	KQ2ZD12-03S					29.5	65.5	59				179
	1/2	KQ2ZD12-04S					32.5	68.5	60				

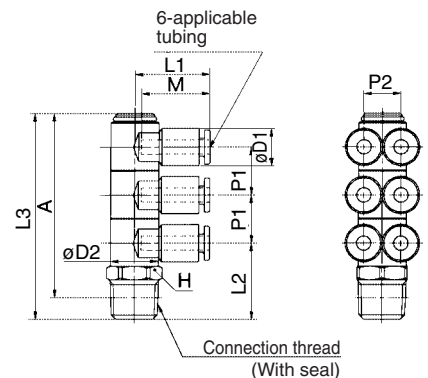


* Reference dimensions after R thread installation.
Note) øD1: Max. diameter

Triple Branch Universal Male Elbow: KQ2ZT



Applicable tubing O.D. (mm)	Connection threads R	Model	H (width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	P1	P2	Weight (g)
4	1/8	KQ2ZT04-01S	14	10.4	13.4	21	18.5	54.5	50.5	16	13.4	10.4	25
	1/4	KQ2ZT04-02S					21.5	57.5	51.5				31
	3/8	KQ2ZT04-03S	17				23.5	59.5	53.5				44
6	1/8	KQ2ZT06-01S	14	12.8	13.4	22	18.5	54.5	50.5	17	13.4	12.8	27
	1/4	KQ2ZT06-02S					21.5	57.5	51.5				33
	3/8	KQ2ZT06-03S	17				23.5	59.5	53.5				46
8	1/8	KQ2ZT08-01S	19	15.2	17.6	26	21	64	60	18.5	15.9	15.2	56
	1/4	KQ2ZT08-02S					24	67	61				54
	3/8	KQ2ZT08-03S					25	68	61.5				62
	1/2	KQ2ZT08-04S	21				28.5	71.5	63.5				85
10	1/4	KQ2ZT10-02S	21	18.5	20.6	29	26.5	77.5	71.5	21	19.2	18.5	83
	3/8	KQ2ZT10-03S					27.5	78.5	72				85
	1/2	KQ2ZT10-04S					30.5	81.5	73.5				102
12	1/4	KQ2ZT12-02S	26	20.9	25.2	32	28.5	86	80	22	21.6	20.9	134
	3/8	KQ2ZT12-03S					29.5	87	80.5				130
	1/2	KQ2ZT12-04S					32.5	90	82				141



* Reference dimensions after R thread installation.
Note) øD1: Max. diameter

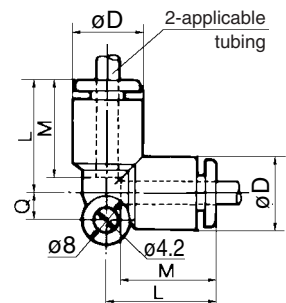
Union Elbow: KQ2L



Applicable tubing O.D. (mm)	Model	øD ⁽¹⁾	L	Q	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
						Nylon	Urethane	
3.2	KQ2L23-00	9.6	17.5	4.3	15.5	3	2.5	3
4	KQ2L04-00	10.4	18	4.5	16	4.2	4.2	6
6	KQ2L06-00	12.8	20	5.3	17	11.4	9.0	6
8	KQ2L08-00	15.2	23	6	18.5	21.6	14.9	10
10	KQ2L10-00	18.5	26.5	6.8	21	35.2	25.0	17
12	KQ2L12-00	20.9	28.5	7.5	22	50.2	39.7	21
16	KQ2L16-00	26.5	34	10	25	100	(84)	29



Note 1) øD: Max. diameter
Note 2) (): Valves for soft nylon.



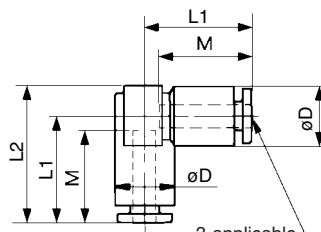
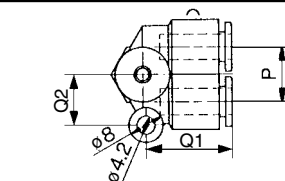
Branch Union Elbow: KQ2LU



Applicable tubing O.D. (mm)	Model	Note) ϕD	L1	L2	Q1	Q2	M	P	Effective area (mm ²)		Weight (g)
									Nylon	Urethane	
4	KQ2LU04-00	10.4	18.5	24	18.5	10	16	10.4	6.0	4.1	6
6	KQ2LU06-00	12.8	21	27.5	20.5	12	17	12.8	13.9	11.0	8
8	KQ2LU08-00	15.2	24	32	24.5	14	18.5	15.2	26.3	18.2	15
10	KQ2LU10-00	18.5	27	36.5	28	16	21	18.5	40.8	29.0	25
12	KQ2LU12-00	20.9	29	40	30	18	22	20.9	57.2	45.2	32



Note) ϕD : Max. diameter



Plug-in Elbow: KQ2L

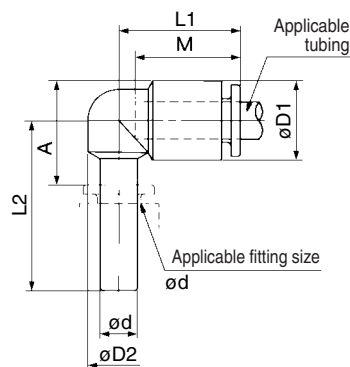


Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	Note 1) $\phi D1$		L1	L2	A	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
			$\phi D1$	$\phi D2$					Nylon	Urethane	
3.2	3.2	KQ2L23-99	9.6	7	17	24.5	14	15.5	3	2.5	2
4	4	KQ2L04-99	10.4	8	18	25	14.5	16	4.2	4.2	3
6	6	KQ2L06-99	12.8	10	20	27.5	17	17	11.4	9.0	3
8	8	KQ2L08-99	15.2	12	22.5	31.5	21	18.5	21.6	14.9	5
10	10	KQ2L10-99	18.5	14	25.5	35.5	23.5	21	35.2	25.0	9
12	12	KQ2L12-99	20.9	16	27	37.5	26	22	50.2	39.7	10
16	16	KQ2L16-99	26.5	20.9	34	53	41	25	100	(84)	42



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

Note 2) (): Values for soft nylon.



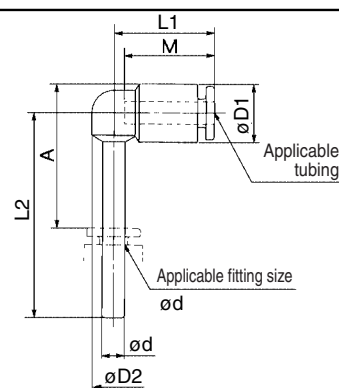
Extended Plug-in Elbow: KQ2W



Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	Note) $\phi D1$		L1	L2	A	M	Effective area (mm ²)		Weight (g)
			$\phi D1$	$\phi D2$					Nylon	Urethane	
3.2	3.2	KQ2W23-99	9.6	7	17.5	35	24.5	15.5	3	2.5	2
4	4	KQ2W04-99	10.4	8	18	37	26	16	4.2	4.2	3
6	6	KQ2W06-99	12.8	10	20	41.5	31	17	11.4	9.0	4
8	8	KQ2W08-99	15.2	10	22.5	48	37	18.5	21.6	14.9	6
10	10	KQ2W10-99	18.5	14	25.5	55	43.5	21	35.2	25.0	9
12	12	KQ2W12-99	20.9	16	27	59.5	48	22	50.2	39.7	13



Note) ϕD : Max. diameter



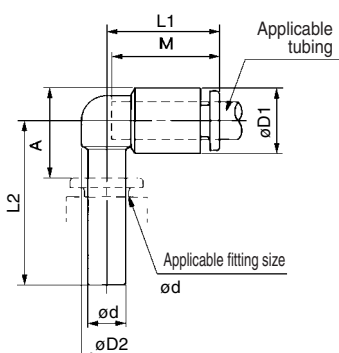
Reducer Elbow: KQ2L



Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	Note) $\phi D1$		L1	L2	A	M	Effective area (mm ²)		Weight (g)
			$\phi D1$	$\phi D2$					Nylon	Urethane	
3.2	4	KQ2L23-04	9.6	7	17	25	13.5	15.5	3	2.5	2
4	6	KQ2L04-06	10.4	8	18	26	14.5	16	4.2	4.2	3
	8	KQ2L04-08		10		35	22				11
6	8	KQ2L06-08	12.8	10	19.5	30.5	18	17	11.4	9.0	12
	10	KQ2L06-10				38.5	24				19
8	10	KQ2L08-10	15.2	12	22.5	33.5	20.5	18.5	21.6	14.9	20
	12	KQ2L08-12				40.5	26				27
10	12	KQ2L10-12	18.5	17	26.5	42	29.5	21	35.2	25.0	29
12	16	KQ2L12-16	20.9	17	28.5	49.5	34.5	22	50.2	39.7	53



Note) $\phi D1$: Max. diameter



Series KQ2

Extended Male Elbow: KQ2W

<M5>



<R>



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	⁽¹⁾		L1	L2	A *	M	Effective area ⁽²⁾ (mm²)		Weight (g)
				øD1	øD2					Nylon	Urethane	
3.2	M5 x 0.8	KQ2W23-M5	8	9.6	8	17.5	30	31	15.5	2.8	2.4	10
	1/8	KQ2W23-01S	10		37		38	19				
	1/4	KQ2W23-02S	14		43		42	41				
4	M5 x 0.8	KQ2W04-M5	8	10.4	8	18	30	32	16	3.0	3.0	11
	1/8	KQ2W04-01S	10		37.5		38.5	23				
	1/4	KQ2W04-02S	14		43.5		42.5	38				
6	M5 x 0.8	KQ2W06-M5	8	12.8	8	20	30.5	33.5	17	3	3	11
	1/8	KQ2W06-01S	10		40		42.5	26				
	1/4	KQ2W06-02S	14		46		46.5	41				
8	3/8	KQ2W06-03S	17	15.2	12	23	48	48	18.5	20.5	14.2	67
	1/8	KQ2W08-01S	12				43.5	47				30
	1/4	KQ2W08-02S	14				49.5	51				47
10	3/8	KQ2W08-03S	17	18.5	17	26.5	51.5	52.5	21	33.5	23.8	74
	1/4	KQ2W10-02S	17				56.5	59.5				66
	1/2	KQ2W10-03S	22				58.5	61				76
12	1/2	KQ2W10-04S	22	20.9	17	28.5	65	66	22	47.7	37.7	145
	1/4	KQ2W12-02S	17				57.5	62				68
	3/8	KQ2W12-03S	17				59.5	63.5				78
16	1/2	KQ2W12-04S	22	26.5	20.9	34	66	68.5	25	71	(71)	147
	3/8	KQ2W16-03S	22				69.5	76				101
	1/2	KQ2W16-04S	22				75	80				105

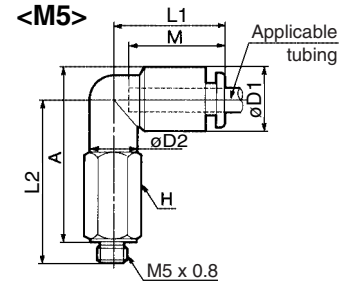


* Reference dimensions after R thread installation.

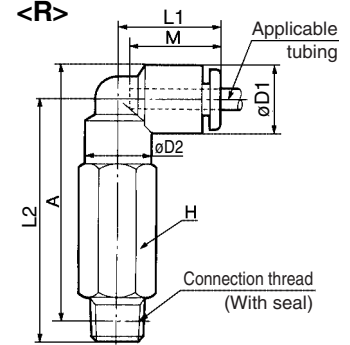
Note 1) ϕD : Max. diameter

Note 2) (): Values for soft nylon

<M5>



<R>



Male Branch Tee: KQ2T

<M5>



<M6>



<R>



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	$\phi D1^{(1)}$	$\phi D2$	L1	L2	A*	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
										Nylon	Urethane	
3.2	M5 x 0.8	KQ2T23-M5	7	9.6	10	17.5	13.2	14.3	12.7	3.2	2.7	3.2
	1/8	KQ2T23-01S	10				21.5	22.5				10
	1/4	KQ2T23-02S	14				25.5	24.5				20
4	M5 x 0.8	KQ2T04-M5	7	10.4	10	18	13.7	15.3	16	4.5	4.1	3.5
	M6 x 1.0	KQ2T04-M6	8				14.7	15.3				4.4
	1/8	KQ2T04-01S	10				22	23				13
6	1/4	KQ2T04-02S	14	11.6	—	16.1	26	25	13.5	4.5	4.5	19
	M5 x 0.8	KQ2T06-M5	7				14.7	17.4				4.4
	M6 x 1.0	KQ2T06-M6	8				15.7	15.7				5.3
8	1/8	KQ2T06-01S	10	12.8	10	20	23	25.5	17	13.9	11.0	12
	1/4	KQ2T06-02S	14				27	27.5				20
	3/8	KQ2T06-03S	17				29	29				34
10	1/8	KQ2T08-01S	12	15.2	12	23	24.5	28	18.5	26.3	18.2	14
	1/4	KQ2T08-02S	14				28.5	30				22
	3/8	KQ2T08-03S	17				30.5	31.5				36
12	1/8	KQ2T10-01S	17	18.5	17	26.5	27	32	21	40.8	29.0	31
	1/4	KQ2T10-02S	17				30	33				29
	3/8	KQ2T10-03S	17				32	34.5				39
16	1/2	KQ2T10-04S	22	20.9	17	28.5	36	37	22	57.2	45.2	66
	1/4	KQ2T12-02S	17				31	35.5				31
	3/8	KQ2T12-03S	17				33	37				41
16	1/2	KQ2T12-04S	22	26.5	20.9	34	37	39.5	25	71	(71)	68
	3/8	KQ2T16-03S	22				38	44.5				112
	1/2	KQ2T16-04S	22				40.5	46				116

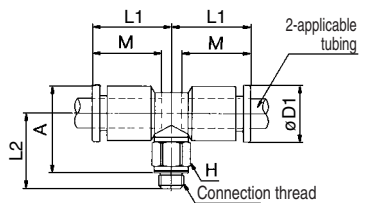


* Reference dimensions after R thread installation.

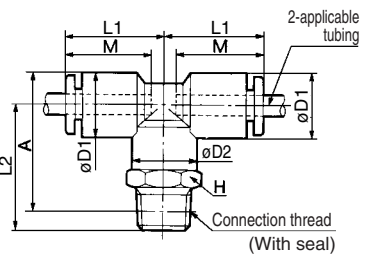
Note 1) $\phi D1$: Max. diameter

Note 2) (): Values for soft nylon.

<M5, M6>



<R>

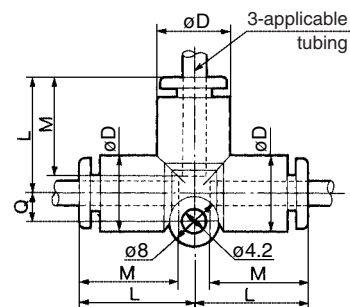


Union Tee: KQ2T



Applicable tubing O.D. (mm)	Model	øD ⁽¹⁾	L	Q	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
						Nylon	Urethane	
3.2	KQ2T23-00	9.6	17.5	4.3	15.5	3.4	2.9	5
4	KQ2T04-00	10.4	18	4.5	16	6.4	4.4	7
6	KQ2T06-00	12.8	20	5.3	17	13.4	10.6	10
8	KQ2T08-00	15.2	23	6	18.5	25.6	17.7	15
10	KQ2T10-00	18.5	26.5	6.8	21	40	28.4	25
12	KQ2T12-00	20.9	28.5	7.5	22	57.4	45.4	29
16	KQ2T16-00	26.5	34	10	25	100	(84)	40

Note 1) øD: Max. diameter
Note 2) (): Valves for soft nylon.

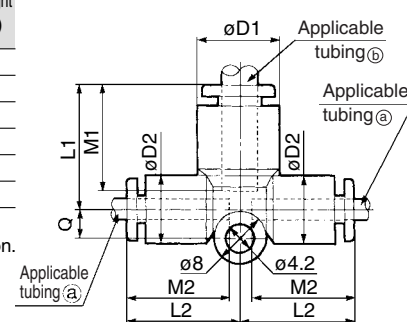


Different Diameter Tee: KQ2T



Applicable tubing O.D. (mm)		Model	øD ⁽¹⁾	øD2	L1	L2	Q	M1	M2	Effective area ⁽²⁾ (mm ²)		Weight (g)
①	②									Nylon	Urethane	
3.2	4	KQ2T23-04	10.4	9.6	18	17.5	4.3	16	15.5	3.8	3.5	5
4	6	KQ2T04-06	12.8	10.4	19.5	18	4.5	17	16	7.1	6.5	5
6	8	KQ2T06-08	15.2	12.8	22.5	20	5.3	18.5	17	16.4	16.4	8
8	10	KQ2T08-10	18.5	15.2	26.5	23	6	21	18.5	36	27.2	14
10	12	KQ2T10-12	20.9	18.5	28.5	26.5	6.8	22	21	56	44.5	21
12	16	KQ2T12-16	26.5	26.5	34	39	10	25	22	108.5	(92.2)	88

Note 1) øD1: Max. diameter
Note 2) (): Values for soft nylon.

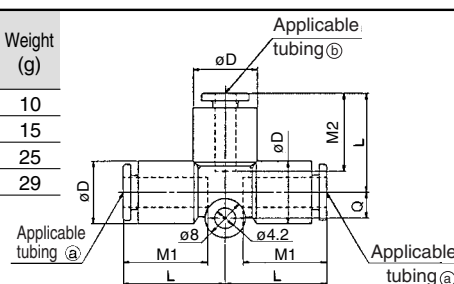


Different Diameter Tee: KQ2T



Applicable tubing O.D. (mm)		Model	Note) øD	L	Q	M1	M2	Effective area (mm ²)		Weight (g)
①	②							Nylon	Urethane	
6	4	KQ2T06-04	12.8	20	5.3	17	16	6.4	4.4	10
8	6	KQ2T08-06	15.2	23	6	18.5	17	13.4	10.6	15
10	8	KQ2T10-08	18.5	26.5	7.5	21	18.5	25.6	17.7	25
12	10	KQ2T12-10	20.9	28.5	7.5	22	21	40	28.4	29

Note) øD: Max. diameter

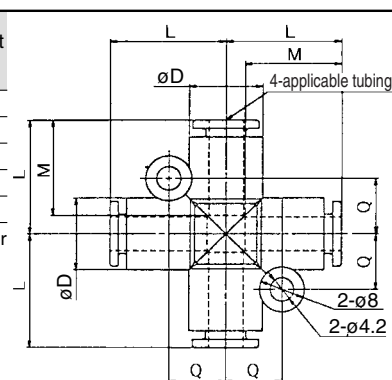


Cross: KQ2TW



Applicable tubing O.D. (mm)	Model	Note) øD	L	Q	M	Effective area (mm ²)		Weight (g)
						Nylon	Urethane	
4	KQ2TW04-00	10.4	18	8.7	16	6.4	4.4	9
6	KQ2TW06-00	12.8	20	9.9	17	13.4	10.6	13
8	KQ2TW08-00	15.2	23	11.1	18.5	25.6	17.7	20
10	KQ2TW10-00	18.5	26.5	12.8	21	40	28.4	33
12	KQ2TW12-00	20.9	28.5	13.9	22	57.4	45.4	39

Note) øD: Max. diameter

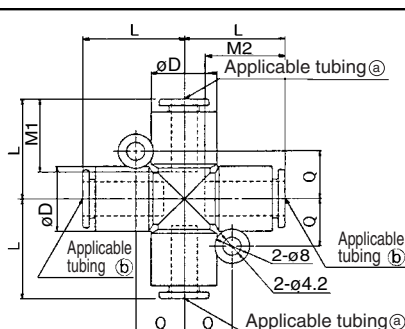


Different Diameter Cross: KQ2TX



Applicable tubing O.D. (mm)		Model	Note) øD	L	Q	M1	M2	Effective area (mm ²)		Weight (g)
①	②							Nylon	Urethane	
6	8	KQ2TX06-08	15.2	23	11.1	18.5	17	13.4	10.6	13
8	10	KQ2TX08-10	18.5	26.5	12.8	21	18.5	25.6	17.7	27
10	12	KQ2TX10-12	20.9	28.5	13.9	22	21	40	28.4	36

Note) øD: Max. diameter



Series KQ2

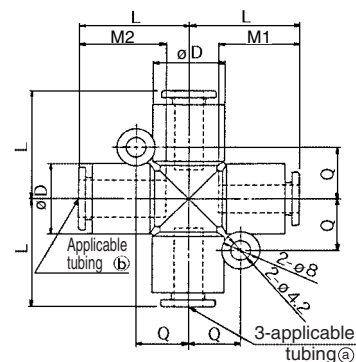
Different Diameter Cross: KQ2TY



Applicable tubing O.D. (mm)		Model	Note) øD	L	Q	M1	M2	Effective area (mm ²)		Weight (g)
①	②							Nylon	Urethane	
6	8	KQ2TY06-08	15.2	23	11.1	17	18.5	13.4	10.6	15
8	10	KQ2TY08-10	18.5	26.5	12.8	18.5	21	25.6	17.7	23
10	12	KQ2TY10-12	20.9	28.5	13.9	21	22	40	28.4	35



Note) øD: max. diameter



Male Run Tee: KQ2Y

<M5>



<M6>



<R>



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	øD ⁽¹⁾	øD2	L1	L2	L3	A*	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
											Nylon	Urethane	
3.2	M5 x 0.8	KQ2Y23-M5	7	8.4	—	15.4	13.2	14.8	24.9	12.7	3.2	2.7	3.2
	1/8	KQ2Y23-01S	10	9.6	10	17.5	21.5	—	35	15.5	3.4	2.9	10
	1/4	KQ2Y23-02S	14	9.6	10	17.5	25.5	—	37	15.5	3.4	2.9	20
4	M5 x 0.8	KQ2Y04-M5	7	9.3	—	15.6	13.7	14.8	25.4	12.7	4.5	4.5	3.5
	M6 x 1.0	KQ2Y04-M6	8	9.3	—	15.6	14.7	—	—	—	—	—	6
	1/8	KQ2Y04-01S	10	10.4	10	18	22	—	36	16	6.4	4.4	13
	1/4	KQ2Y04-02S	14	10.4	10	18	26	—	38	16	6.4	4.4	19
6	M5 x 0.8	KQ2Y06-M5	7	11.6	—	17.1	14.7	17.1	28.7	13.5	4.5	4.5	4.5
	M6 x 1.0	KQ2Y06-M6	8	11.6	—	17.1	15.7	—	—	—	—	—	7
	1/8	KQ2Y06-01S	10	12.8	10	20	23	—	39	17	13.4	10.6	12
	1/4	KQ2Y06-02S	14	12.8	10	20	27	—	41	17	13.4	10.6	20
	3/8	KQ2Y06-03S	17	12.8	10	20	29	—	42.5	17	13.4	10.6	34
8	1/8	KQ2Y08-01S	12	15.2	12	23	24.5	—	43.5	18.5	25.6	17.7	14
	1/4	KQ2Y08-02S	14	15.2	12	23	28.5	—	45.5	18.5	25.6	17.7	22
	3/8	KQ2Y08-03S	17	15.2	12	23	30.5	—	47	18.5	25.6	17.7	36
	1/2	KQ2Y10-01S	22	18.5	17	26.5	30	—	49.5	21	40.0	28.4	31
10	1/4	KQ2Y10-02S	17	18.5	17	26.5	32	—	50.5	21	40.0	28.4	29
	3/8	KQ2Y10-03S	17	18.5	17	26.5	36	—	52	21	40.0	28.4	39
	1/2	KQ2Y10-04S	22	18.5	17	26.5	36	—	54.5	21	40.0	28.4	66
12	1/4	KQ2Y12-02S	17	20.9	17	28.5	31	—	53.5	22	57.4	45.4	31
	3/8	KQ2Y12-03S	17	20.9	17	28.5	33	—	55	22	57.4	45.4	41
	1/2	KQ2Y12-04S	22	20.9	17	28.5	37	—	57.5	22	57.4	45.4	68
16	3/8	KQ2Y16-03S	22	26.5	20.9	34	38	—	65.5	25	81	(81)	112
	1/2	KQ2Y16-04S	22	26.5	20.9	34	41	—	67	25	81	(113)	116

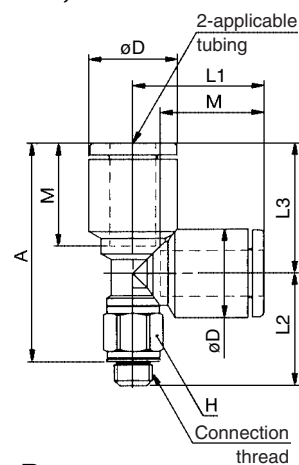


* Reference dimensions after R thread installation.

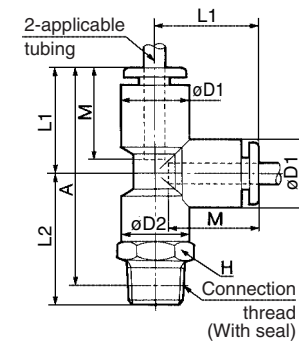
Note 1) øD: Max. diameter

Note 2) (): Values for soft nylon

<M5, M6>



<R>



Male Delta Union: KQ2D

<M5, M6>



<R>

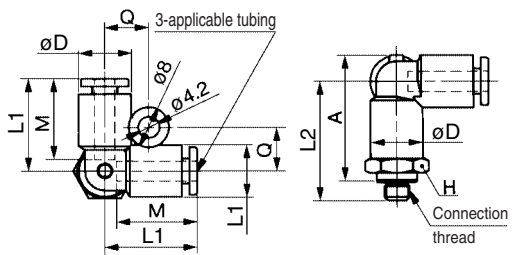


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) øD	L1	L2	A*	M	Q	Effective area (mm²)		Weight (g)		
										Nylon	Urethane			
4	M5 x 0.8	KQ2D04-M5	11	10.4	18.5	24	25.5	16	8.7	2.2	2.2	10		
	M6 x 1.0	KQ2D04-M6				24.5	27.5			4.3	4.3			
	1/8	KQ2D04-01S	14			26.5	27.5			6.0	6.0	12		
	1/4	KQ2D04-02S				30.5	29.5			6.0	6.0	21		
6	M5 x 0.8	KQ2D06-M5	13	12.8	20.5	26	28.5	17	9.9	4.3	4.3	12		
	M6 x 1.0	KQ2D06-M6				26.5	31.5			13.9	11.0			
	1/8	KQ2D06-01S	14			32.5	33			13.9	11.0	21		
	1/4	KQ2D06-02S				34.5	34.5			13.9	11.0	34		
	3/8	KQ2D06-03S	17			34.5	34.5			13.9	11.0	34		
8	1/8	KQ2D08-01S	17	15.2	23.5	33.5	37	18.5	11.1	26.3	18.2	26		
	1/4	KQ2D08-02S				36.5	38			26.3	18.2			
	3/8	KQ2D08-03S	19			37.5	38.5			40.8	29.0	35		
	1/4	KQ2D10-02S				39.5	43			40.8	29.0	39		
10	3/8	KQ2D10-03S	22	18.5	26.5	40.5	43.5	21	12.8	40.8	29.0	40		
	1/2	KQ2D10-04S				44	45			40.8	29.0	62		
	1/4	KQ2D12-02S	42			46.5	57.2			45.2	55			
12	3/8	KQ2D12-03S	22	20.9	28.5	43	47	22	13.9	57.2	45.2	56		
	1/2	KQ2D12-04S				46	48.5			57.2	45.2	63		

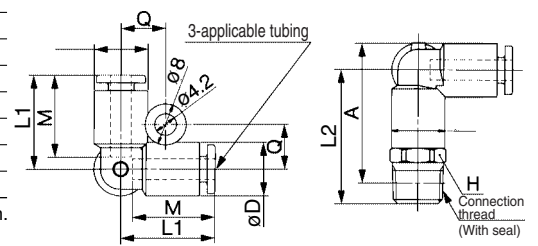


* Reference dimensions after R thread installation.
Note) øD: Max. diameter

<M5, M6>



<R>



K□
M□
H□
D□
MS
T□
VMG

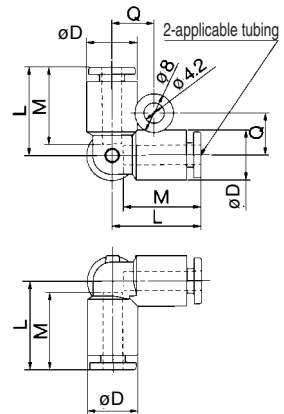
Delta Union: KQ2D



Applicable tubing O.D. (mm)	Model	Note) øD	L	Q	M	Effective area (mm ²)		Weight (g)
						Nylon	Urethane	
4	KQ2D04-00	10.4	18.5	8.7	16	6.0	4.1	5
6	KQ2D06-00	12.8	20.5	9.9	17	13.9	11.0	7
8	KQ2D08-00	15.2	23.5	11.1	18.5	26.3	18.2	11
10	KQ2D10-00	18.5	26.5	12.8	21	40.8	29.0	19
12	KQ2D12-00	20.9	28.5	13.9	22	57.2	45.2	24



Note) øD: Max. diameter



Branch "Y": KQ2U

<M5, M6>



<R>



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	øD ⁽¹⁾	L	P	A*	M	Effective area ⁽²⁾ (mm²)		Weight (g)
									Nylon	Urethane	
3.2	M5 x 0.8	KQ2U23-M5	10	9.6	38	9.6	34.5	15.5	2.2	2.2	9
	1/8	KQ2U23-01S	11		41		37		3.4	2.9	14
	1/4	KQ2U23-02S	14		44		38		3.4	2.9	14
4	M5 x 0.8	KQ2U04-M5	11	10.4	39.5	10.4	36	16	2.2	2.2	4
	M6 x 1.0	KQ2U04-M6			40		38		2.2	2.2	10
	1/8	KQ2U04-01S	42		40		4.2		4.2	11	
	1/4	KQ2U04-02S	14		46		40		4.2	4.2	20
6	M5 x 0.8	KQ2U06-M5	13	12.8	42.5	12.8	39	17	2.2	2.2	12
	M6 x 1.0	KQ2U06-M6			43		41.5		13.4	10.6	21
	1/8	KQ2U06-01S	45.5		43		13.4		10.6	34	
	1/4	KQ2U06-02S	14		49		43		13.4	10.6	21
	3/8	KQ2U06-03S	17		51		44.5		13.4	10.6	34
8	1/8	KQ2U08-01S	17	15.2	52.5	15.2	48.5	18.5	25.6	17.7	15
	1/4	KQ2U08-02S			55.5		49.5		25.6	17.7	23
	3/8	KQ2U08-03S			56.5		50		25.6	17.7	35
10	1/4	KQ2U10-02S	19	18.5	61	18.5	55	21	40	28.4	30
	3/8	KQ2U10-03S			62		55.5		40	28.4	40
	1/2	KQ2U10-04S	22		65		57		40	28.4	65
12	1/4	KQ2U12-02S	22	20.9	64.5	20.9	58.5	22	57.4	45.4	32
	3/8	KQ2U12-03S			65.5		59		57.4	45.4	40
	1/2	KQ2U12-04S			68.5		60.5		57.4	45.4	65
16	3/8	KQ2U16-03S	27	26.5	76	26.5	69.5	25	81	(81)	106
	1/2	KQ2U16-04S			79		71		113	(96)	111

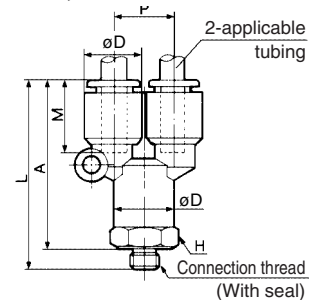


* Reference dimensions after R thread installation.

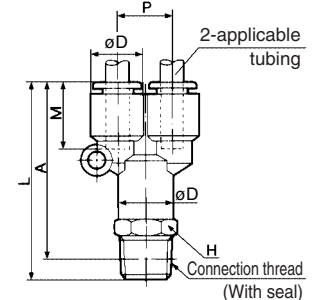
Note 1) øD1: Max. diameter

Note 2) (): Values for soft nylon

<M5, M6>



<R>



Series KQ2

Delta Branch: KQ2UD

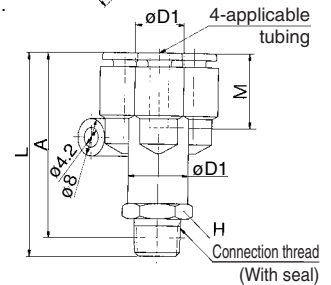
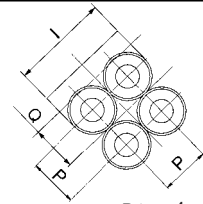


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	(Note) øD1	øD2	L	I	A*	Q	M	P	Effective area (mm ²)		Weight (g)
												Nylon	Urethane	
4	1/8	KQ2UD04-01S	13	10.4	12.8	43.5	21	39.5	9.7	16	10.4	4.2	4.2	17
	1/4	KQ2UD04-02S	14											
6	1/8	KQ2UD06-01S	17	12.8	15.2	50.5	26	46.5	11.7	17	12.8	13.4	10.6	29
	1/4	KQ2UD06-02S												



* Reference dimensions after R thread installation.

Note) øD1: Max. diameter



Union "Y": KQ2U

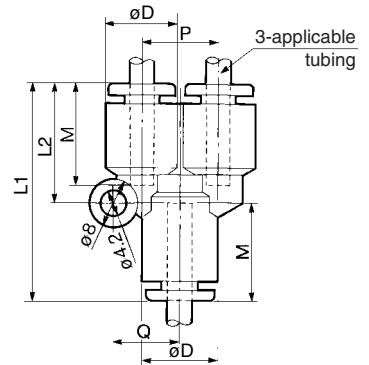


Applicable tubing O.D. (mm)	Model	(1) øD	L1	L2	P	Q	M	Effective area (mm ²) (2)		Weight (g)
								Nylon	Urethane	
3.2	KQ2U23-00	9.6	33	17.5	9.6	9	15.5	3.4	2.9	5
4	KQ2U04-00	10.4	34	18	10.4	9.7	16	4.2	4.2	7
6	KQ2U06-00	12.8	37	20	12.8	11.7	17	13.4	10.6	9
8	KQ2U08-00	15.2	42.5	24.5	15.2	13.7	18.5	25.6	17.7	11
10	KQ2U10-00	18.5	48	27.5	18.5	16.1	21	40	28.4	16
12	KQ2U12-00	20.9	51	30	20.9	18.1	22	57.4	45.4	23
16	KQ2U16-00	26.5	61.5	36.5	26.5	23	25	113	(96)	54



Note 1) øD: Max. diameter

Note 2) (): Values for soft nylon.



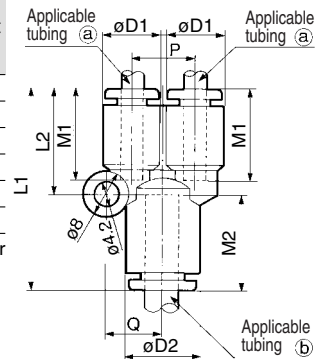
Different Diameter Union "Y": KQ2U



Applicable tubing O.D. (mm)		Model	(Note) øD1	(Note) øD2	L1	L2	P	Q	M1	M2	Effective area (mm ²)		Weight (g)
(a)	(b)										Nylon	Urethane	
3.2	4	KQ2U23-04	9.6	10.4	33.5	17.5	9.6	9	15.5	16	3.2	2.7	5
4	6	KQ2U04-06	10.4	12.8	35	18	10.4	9.7	16	17	4.2	4.2	6
6	8	KQ2U06-08	12.8	15.2	39.5	20	12.8	11.7	17	18.5	13.4	10.6	11
8	10	KQ2U08-10	15.2	18.5	45	24.5	15.2	13.7	18.5	21	25.6	17.7	18
10	12	KQ2U10-12	18.5	20.9	49	27.5	18.5	16.1	21	22	40	28.4	27
12	16	KQ2U12-16	26.5	26.5	66.5	41.5	26.5	23	22	25	57.4	45.4	100



Note) øD1, øD2: Max. diameter



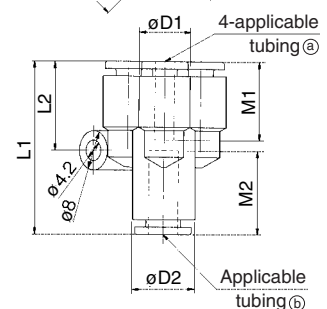
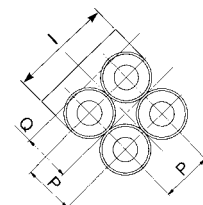
Different Diameter Double Union "Y": KQ2UD



Applicable tubing O.D. (mm)		Model	(Note) øD1	(Note) øD2	L1	L2	P	I	Q	M1	M2	Effective area (mm ²)		Weight (g)
(a)	(b)											Nylon	Urethane	
4	6	KQ2UD04-06	10.4	12.8	35.5	18.2	10.4	21	9.7	16	17	4.2	4.2	10
6	8	KQ2UD06-08	12.8	15.2	40.5	20.3	12.8	26	11.7	17	18.5	13.4	10.6	17



Note) øD1, øD2: Max. diameter



Plug-in "Y": KQ2U

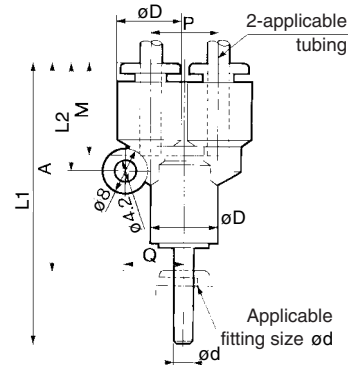


Applicable tubing O.D. (mm)	Application fitting ϕd	Model	(1)		L1	L2	P	Q	A	M	Effective area (mm ²) (2)		Weight (g)
			ϕD								Nylon	Urethane	
3.2	3.2	KQ2U23-99	9.6		50	17.5	9.6	9	35	15.5	3.4	2.9	6
4	4	KQ2U04-99	10.4		51.5	18	10.4	9.7	35.5	16	4.2	4.2	12
6	6	KQ2U06-99	12.8		55.5	20	12.8	11.7	38.5	17	13.4	10.6	18
8	8	KQ2U08-99	15.2		64.5	24.5	15.2	13.7	46	18.5	25.6	17.7	21
10	10	KQ2U10-99	18.5		71.5	27.5	18.5	16.1	50.5	21	40	28.4	26
12	12	KQ2U12-99	20.9		75.5	30	20.9	18.1	53.5	22	57.4	45.4	32
16	16	KQ2U16-99	26.5		90	36.5	26.5	23	65	25	113	(96)	78



Note 1) ϕD : Max. diameter

Note 2) (): Values for soft nylon.



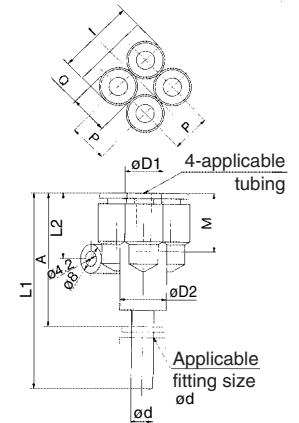
Double Plug-in "Y": KQ2XD



Applicable tubing O.D. (mm)	Application fitting Fitting size ϕd	Model	Note)		L1	L2	I	Q	A	P	M	Effective area (mm ²)		Weight (g)
			$\phi D1$	$\phi D2$								Nylon	Urethane	
4	6	KQ2XD04-06	10.4	12.8	54	18.2	21	9.7	37	10.4	16	4.2	4.2	10
6	8	KQ2XD06-08	12.8	15.2	62.5	20.3	26	11.7	44	12.8	17	13.4	10.6	23



Note) $\phi D1$: Max. diameter



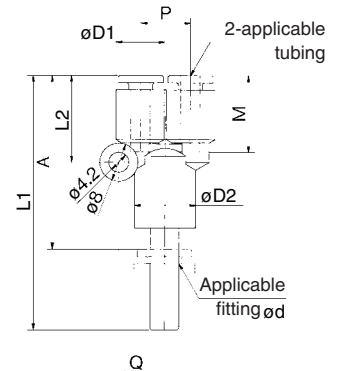
Different Diameter Plug-in "Y": KQ2X



Applicable tubing O.D. (mm)	Application fitting Fitting size ϕd	Model	Note)		L1	L2	A	P	Q	M	Effective area (mm ²)		Weight (g)
			$\phi D1$	$\phi D2$							Nylon	Urethane	
4	6	KQ2X04-06	10.4	12.8	53.5	18.5	36.5	10.4	9.7	16	4.2	4.2	7
6	8	KQ2X06-08	12.8	15.2	61.5	20.5	43	12.8	11.7	17	13.4	10.6	18
8	10	KQ2X08-10	15.2	18.5	68.5	24.5	47.5	15.2	13.7	18.5	25.6	17.7	28
10	12	KQ2X10-12	18.5	20.9	73.5	27.5	51.5	18.5	16.1	21	40	28.4	42



Note) $\phi D1$: Max. diameter



K□

M□

H□

D□

MS

T□

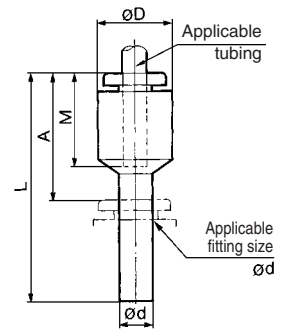
VMG

Series KQ2

Plug-in Reducer: KQ2R



Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	$\phi D^{(1)}$	L	A	M	Effective area ⁽²⁾ (mm ²)		Weight (g)
							Nylon	Urethane	
3.2	4	KQ2R23-04	9.6	33.5	18.5	15.5	3.4	2.9	2
4	6	KQ2R04-06	10.4	34.5	17.5	16	5.6	4	1.8
	8	KQ2R04-08		36.5	18				2.0
	10	KQ2R04-10	12.8	39.5	18.5				3.3
6	4	KQ2R06-04	12.8	37	21	17	4	4	2.5
	8	KQ2R06-08	12.8	37	18.5		13.1	10.4	2.5
	10	KQ2R06-10		39.5	18.5				3
	12	KQ2R06-12	15.2	42	20				4.7
8	10	KQ2R08-10	15.2	41	20	18.5	26.1	18.0	4.0
	12	KQ2R08-12	15.2	42	20				4.6
10	12	KQ2R10-12	18.5	44.5	23	21	41.5	32.8	33
	16	KQ2R10-16	20.9	50.5	25.5			(29.5)	42
12	16	KQ2R12-16	20.9	50.5	25.5	22	58.3	(46.1)	37



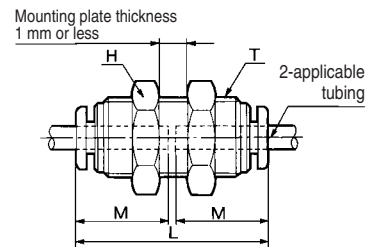
Note 1) ϕD : Max. diameter

Note 2) (): Values for soft nylon.

Bulkhead Union: KQ2E



Applicable tubing O.D. (mm)	Model	T (M)	H (width across flats)	L	Mounting hole	M	Effective area ^{Note)} (mm ²)		Weight (g)
							Nylon	Urethane	
3.2	KQ2E23-00	M12 x 1	14	31.5	13	15.5	3.4	2.9	26
4	KQ2E04-00	M12 x 1	14	32.5	13	16	5.6	4	26
6	KQ2E06-00	M14 x 1	17	34.5	15	17	13.1	10.4	33
8	KQ2E08-00	M16 x 1	19	38	17	18.5	26.1	18.0	52
10	KQ2E10-00	M20 x 1	24	42.5	21	21	41.5	29.5	70
12	KQ2E12-00	M22 x 1	27	44	23	22	58.3	46.1	90
16	KQ2E16-00	M28 x 1.5	32	51	29	25	113	(96)	115

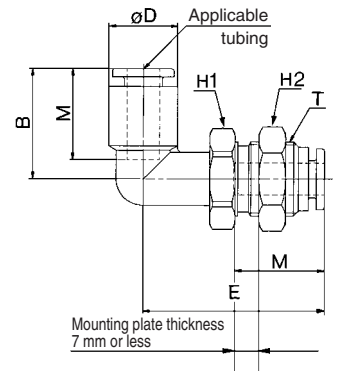


Note) (): Values for soft nylon.

Bulkhead Male Elbow: KQ2LE



Applicable tubing O.D. (mm)	Model	T	H1 (Hex. across flats)	H2 (Hex. across flats)	B	E	Note) øD	Mounting hole	M	Effective area (mm ²)		Weight (g)
										Nylon	Urethane	
4	KQ2LE04-00	M12 x 1	14	14	18.5	31	10.4	13	16	4.2	4.2	18
6	KQ2LE06-00	M14 x 1	17	17	20.5	34	12.8	15	17	11.4	9.0	25
8	KQ2LE08-00	M16 x 1	17	19	23.5	38.5	15.2	17	18.5	21.6	14.9	33
10	KQ2LE10-00	M20 x 1	22	24	26.5	43.5	18.5	21	21	35.2	25.0	63
12	KQ2LE12-00	M22 x 1	24	27	28.5	45.5	20.9	23	22	50.2	39.7	77

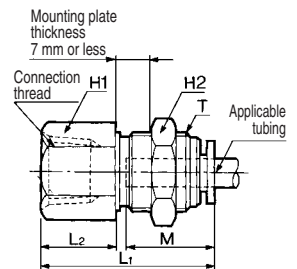


Note) ϕD : Max. diameter

Bulkhead Connector: KQ2E



Applicable tubing O.D. (mm)	Connection thread Rc	Model	T (M)	H1 (Hex. across flats)	H2 (Hex. across flats)	L1	L2	Mounting hole	M	Effective area ^{Note)} (mm ²)		Weight (g)
										Nylon	Urethane	
3.2	1/4	KQ2E23-02	M12 x 1	17	14	31.5	15	13	15.5	3.4	2.9	13
4	1/8	KQ2E04-01	M12 x 1	14	14	27.5	11	13	16	5.6	4	16
	1/4	KQ2E04-02		17	17	31	15					35
6	1/8	KQ2E06-01	M14 x 1	17	17	28	11	15	17	13.1	10.4	25
	1/4	KQ2E06-02				31.5	15					40
	3/8	KQ2E06-03				33.5	17					29
8	1/8	KQ2E08-01	M16 x 1	17	19	27.5	7.5	17	18.5	26.1	18.0	28
	1/4	KQ2E08-02				33	13					27
	3/8	KQ2E08-03				35	15					48
10	1/4	KQ2E10-02	M20 x 1	22	24	34.5	12.5	21	21	41.5	29.5	53
	3/8	KQ2E10-03		22	24	36.5	15					67
12	3/8	KQ2E12-03	M22 x 1	24	27	37	14	23	22	58.3	46.1	92
	1/2	KQ2E12-04				41	18					59
16	3/8	KQ2E16-03	M28 x 1.5	30	32	40	14	29	25	96	(96)	127
	1/2	KQ2E16-04				44	18			113	(96)	132

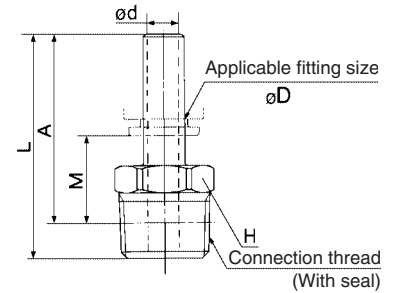


Note) (): Values for soft nylon.

Adaptor: KQ2N



Applicable fitting size ϕD	Connection thread R	Model	H (width across flats)	L	A*	M	ϕd	Weight (g)
4	M5 x 0.8	KQ2N04-M5	7	32	29	13	2.5	2
	1/8	KQ2N04-01S	10	34	30	14		6
6	M5 x 0.8	KQ2N06-M5	7	33	30	13	2.5	2
	1/8	KQ2N06-01S	10	35	31	14		5
	1/4	KQ2N06-02S	14	37.5	31.5	14.5	4.5	14
8	1/4	KQ2N08-02S	14	39	33	14.5	6	17
	3/8	KQ2N08-03S	17	41	34.5	16		30
10	3/8	KQ2N10-03S	17	46	39.5	18.5	7.5	31

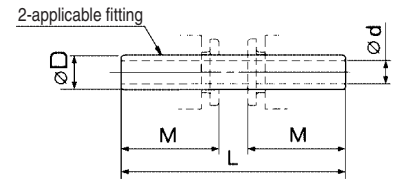


Nipple: KQ2N

* Reference dimensions after R thread is screwed in.



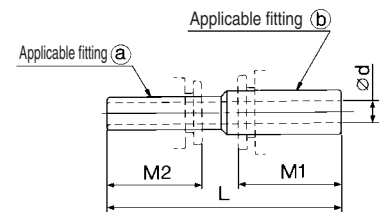
Applicable fitting ϕD	Model	L	M	ϕd	Weight (g)
4	KQ2N04-99	37	16	2.5	1
6	KQ2N06-99	39	17	4	2
8	KQ2N08-99	43	18.5	6	2
10	KQ2N10-99	49	21	7.5	4
12	KQ2N12-99	52	22	9	20.6
16	KQ2N16-99	57	25	13	31



Reducer Nipple: KQ2N



Applicable fitting		Model	L	M1	M2	ϕd	Weight (g)
(a)	(b)						
4	6	KQ2N04-06	38	17	16	2.5	2
6	8	KQ2N06-08	42	18.5	17	4	2
8	10	KQ2N08-10	47	21	18.5	6	13.2
10	12	KQ2N10-12	51	22	21	8	18.2
12	16	KQ2N12-16	55	25	22	9	29

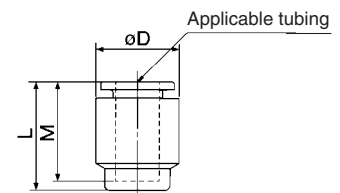


Tube Cap: KQ2C

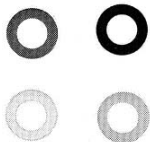


Applicable tubing O.D. (mm)	Model	Note) ϕD	L	M	Weight (g)
4	KQ2C04-00	10.4	17	16	3
6	KQ2C06-00	12.8	18.5	17	3
8	KQ2C08-00	15.2	20.5	18.5	4
10	KQ2C10-00	18.5	23	21	6
12	KQ2C12-00	20.9	24	22	8
16	KQ2C16-00	26.5	28	25	13

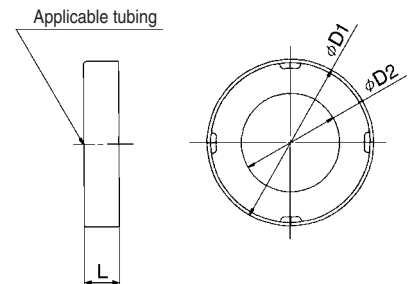
Note) ϕD : Max. diameter



Color Cap: KQ2C



Applicable tubing O.D. (mm)	Model	$\phi D1$	$\phi D2$	L	Weight (g)	Application
4	KQ2C-04□	10.1	5.2	2.9	0.1	
4	KQ2C-04A-□	8.5	5	2.2	0.1	KQH, KQ2H04-M5, M6 KQS, KQ2S04-M5, M6
4	KQ2C-04B-□	9.7	5	2.2	0.1	KQL, KQ2L04-M5, M6 KQT, KQ2T04-M5, M6 KQY, KQ2Y04-M5, M6
6	KQ2C-06□	12.1	7.2	2.9	0.1	
6	KQ2C-06A-□	10.5	7	2.2	0.1	KQH, KQ2H06-M5, M6 KQS, KQ2S06-M5, M6
6	KQ2C-06B-□	12.0	7	2.2	0.1	KQL, KQ2L06-M5, M6 KQT, KQ2T06-M5, M6 KQY, KQ2Y06-M5, M6
8	KQ2C-08□	14.1	9.2		0.1	
10	KQ2C-10□	17.1	11.2	2.9	0.2	
12	KQ2C-12□	19.1	13.2		0.2	
16	KQ2C-16□	26.3	17.2	3.9	0.3	



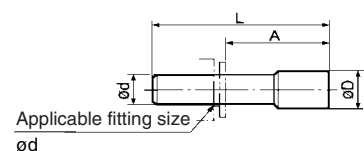
□ → B (Black), R (Red), YR (Orange), BR (Brown), Y (Yellow), G (Green), CB (Sky blue), GR (Gray), W (White), BU (Blue)

Plug: KQ2P, KQP



Applicable fitting size ϕd	Model (Note)		ϕD	L	A	Weight (g)
3.2	KQ2P-23	KQP-23	5	31.5	16	1
4	KQ2P-04	KQP-04	6	32	16	1
6	KQ2P-06	KQP-06	8	35	18	1
8	KQ2P-08	KQP-08	10	39	20.5	2
10	KQ2P-10	KQP-10	12	43	22	3.5
12	KQ2P-12	KQP-12	14	45.5	24	5
16	KQ2P-16	KQP-16	20.9	47	22	8

Note) KQ2P (White), KQP (Blue)



Series KQ2

Made to Order Specifications:

Please consult with SMC for detailed specifications, dimensions and delivery.

1. Oil-free applications using Vaseline®

For use in oil-free applications, for example, paint air lines.

Specifications Same as Series KQ2.

Dimensions Same as Series KQ2.

How to Order Add "-X12" at the end of the standard part number.
(Example: KQ2H06-02-**X12**)

2. Stainless One-touch fittings

For use in highly corrosive atmospheres where brass is not acceptable.

Specifications Same as Series KQ2.

Dimensions Same as Series KQ2. (Some may be different,
please consult with SMC)

Materials
in each part

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

* Every one of Stainless steel 303, Stainless steel 304 and
Stainless steel 316 is possible to use.

How to Order Please consult with SMC.



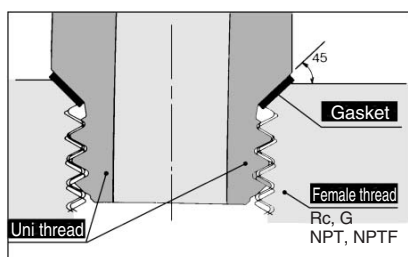
Uni One-touch Fittings

Series KQ2

Applicable Tubing: Metric Size

Connection Thread: Rc, G, NPT, NPTF

New-stand male thread for piping that reduces the screw-in time by 1/3.



Uni thread ridge shape

A gasket made of a stainless sheet covered with laminated NBR on both sides is seated on the chamfer of a female thread for a perfect sealing construction irrespective of the difference in thread diameters due to the difference in the types of female threads, variation in tolerance, or difference in the size of chamfer. (It is applicable to any female thread with an ordinary chamfer.)

A ridge shape has been created as a Uni thread for common applications for Rc, G, NPT and NPTF.

The male thread for piping drastically cuts piping man-hours.



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

Chuck

Large retaining force
Has large retaining force while holding force is increased by the collet.

Collet

Guide

Body

O-ring

Stud

Effective when piping in a confined space.

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

Gasket

Uni thread

Tube

Release bush (Gray)

Light force for removal

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

Applicable Tubing

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

Product's Color

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

Specifications

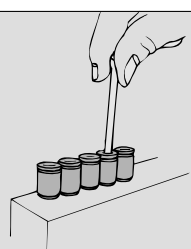
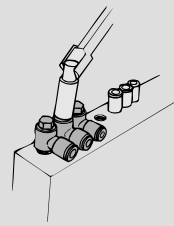
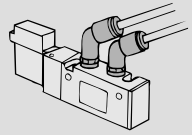
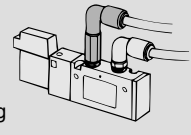
Fluid	Air/Water ^{Note)}
Maximum operating pressure	1.0 MPa
Operating vacuum pressure	-100 kPa
Proof pressure	3.0 MPa
Ambient and fluid temperature	-5 to 60°C, Water: 0 to 40°C (No freezing)



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
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

Model		
Hex. socket head male connector KQ2S P. 36	 Internal hex. allows thread connection by using an allen wrench for confined spaces. 	Universal male elbow KQ2V P. 36
		 Universal male elbow allows thread connection by using a socket wrench for confined spaces. 
45° male elbow KQ2K P. 36	 Use to pipe in 45° direction from female thread. Model in-between of male connector and male elbow. 	Extended male elbow KQ2W P. 36
		 Basically, it is used together with male elbow. Different point is that it is used for fittings to avoid with interfering with each other by making the piping two-level. 
Male connector KQ2H P. 34	 Use to pipe in the same direction from female thread. Most general style.	Male elbow KQ2L P. 34
		 Use to pipe at right angles to female thread. Most general style.
Male branch tee KQ2T P. 34	 Use to branch line from female thread in both 90° directions.	
Branch "Y" KQ2U P. 35	 Use to branch line in the same direction from female thread.	Male run tee KQ2Y P. 35
		 Use to branch line in the same direction from female thread and in 90° direction.
		Gasket KQG P. 36
		 Thread seal

How to Order

KQ 2 H 06 — U01			
One-touch fittings			
Product's color			
Symbol	Body	Release button	
2	White	Light gray	
Nil	Black	Blue	
Applicable tubing O.D.			
04	ø4		
06	ø6		
08	ø8		
10	ø10		
12	ø12		
16	ø16		
Port size			
Thread connection	U01	Uni 1/8	
	U02	Uni 1/4	
	U03	Uni 3/8	
	U04	Uni 1/2	
Model			
H	Male connector	T	Male branch tee
S	Hex. socket head male connector	Y	Male run tee
L	Male elbow	U	Branch
K	45° male elbow		
V	Universal male elbow		
W	Extended male elbow		

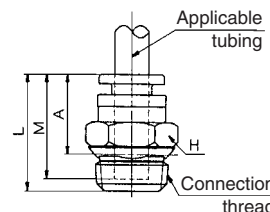
How to Order Gasket	
KQG — U01	
Gasket for Uni One-touch fittings	
Applicable port size	
U01	Uni 1/8
U02	Uni 1/4
U03	Uni 3/8
U04	Uni 1/2

Series KQ2

<Metric size> Male Connector: KQ2H



Applicable tubing O.D. (mm)	Connection thread Uni One-touch fittings	Model	H (width across flats)	L	A*	M	Effective area (mm ²)		Weight (g)
							Nylon	Urethane	
4	1/8	KQ2H04-U01	10	18.5	13.5	16	5.6	5.6	5
	1/4	KQ2H04-U02	14	16.5	10.5				10
6	1/8	KQ2H06-U01	12	19.5	14.5	17	13.1	13.1	5
	1/4	KQ2H06-U02	14		13				10
	3/8	KQ2H06-U03	17	17.5	11.5				16
8	1/8	KQ2H08-U01	14	25	20.5	18.5	26.1	18.0	11
	1/4	KQ2H08-U02	17	21.5	15.5				27
	3/8	KQ2H08-U03	17	19.5	13.5				33
10	1/8	KQ2H10-U01	17	28	23	21	41.5	29.5	17
	1/4	KQ2H10-U02		22	22				17
	3/8	KQ2H10-U03	22	24	18				14
	1/2	KQ2H10-U04	22	22	14				28
12	1/4	KQ2H12-U02	19	30.5	24.5	22	58.3	46.1	22
	3/8	KQ2H12-U03		25.5	19.5				16
	1/2	KQ2H12-U04	22	24.5	16.5				28
16	3/8	KQ2H16-U03	24	33.5	27.5	24	81	(81)	39
	1/2	KQ2H16-U04		28.5	20.5				25

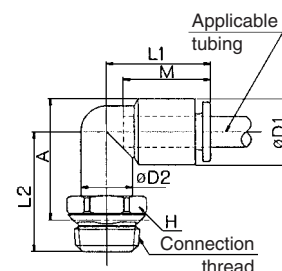


* Reference dimensions after Uni thread installation. Note) Dimensions in () are the case of soft nylon tubing.

<Metric size> Male Elbow: KQ2L



Applicable tubing O.D. (mm)	Connection thread Uni One-touch fittings	Model	H (width across flats)	øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Weight (g)
										Nylon	Urethane	
4	1/8	KQ2L04-U01	10	10.4	10	18	20	20.5	16	4.2	4.2	8
	1/4	KQ2L04-U02	14				22	21.5				14
6	1/8	KQ2L06-U01	10	12.8	10	20	21.5	23.5	17	11.4	11.4	9
	1/4	KQ2L06-U02	14				23	24.5				15
	3/8	KQ2L06-U03	17				24	24.5				23
8	1/8	KQ2L08-U01	12	15.2	12	23	22.5	25.5	18.5	21.6	14.9	11
	1/4	KQ2L08-U02	14				24.5	26				16
	3/8	KQ2L08-U03	17				25.5	27				24
10	1/8	KQ2L10-U01	17	18.5	17	26.5	25	29.5	21	35.2	25.0	24
	1/4	KQ2L10-U02					26.5	30				21
	3/8	KQ2L10-U03	22				27	30.5				25
	1/2	KQ2L10-U04	22				30	31.5				45
12	1/4	KQ2L12-U02	17	20.9	17	28.5	27	31.5	22	50.2	39.7	23
	3/8	KQ2L12-U03					28	32.5				27
	1/2	KQ2L12-U04	22				31	33.5				48
16	3/8	KQ2L16-U03	22	26.5	21	33	33	35	24	71	(71)	49
	1/2	KQ2L16-U04					35					50

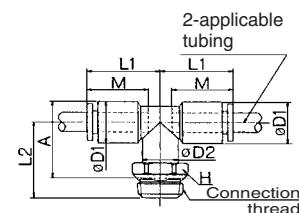


* Reference dimensions after Uni thread installation. Note) Dimensions in () are the case of soft nylon tubing.

<Metric size> Male Branch Tee: KQ2T



Applicable tubing O.D. (mm)	Connection thread Uni One-touch fittings	Model	H (width across flats)	øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Weight (g)
										Nylon	Urethane	
4	1/8	KQ2T04-U01	10	10.4	10	18	20	21.5	16	6.0	6.0	9
	1/4	KQ2T04-U02	14				22					15
6	1/8	KQ2T06-U01	10	12.8	10	20	21.5	23.5	17	13.9	13.9	11
	1/4	KQ2T06-U02	14				23	24.5				17
	3/8	KQ2T06-U03	17				24	24.5				26
8	1/8	KQ2T08-U01	12	15.2	12	23	22.5	26	18.5	26.3	18.2	15
	1/4	KQ2T08-U02	14				24.5	27				20
	3/8	KQ2T08-U03	17				25.5	27				28
10	1/8	KQ2T10-U01	17	18.5	17	26.5	25	29.5	21	40.8	29.0	30
	1/4	KQ2T10-U02					26.5	30				27
	3/8	KQ2T10-U03	22				27	30.5				31
	1/2	KQ2T10-U04	22				30	31.5				51
12	1/4	KQ2T12-U02	17	20.9	17	28.5	27	31.5	22	57.2	45.2	31
	3/8	KQ2T12-U03					28	32.5				34
	1/2	KQ2T12-U04	22				31	33.5				54
16	3/8	KQ2T16-U03	22	26.9	21	33	33	35	24	71	(71)	62
	1/2	KQ2T16-U04					35					63



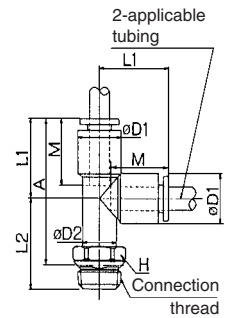
* Reference dimensions after Uni thread installation. Note) Dimensions in () are the case of soft nylon tubing.

<Metric size> Male Run Tee: KQ2Y



Applicable tubing O.D. (mm)	Connection thread Uni One-touch fittings	Model	H (width across flats)	øD1	øD2	L1	L2	A	M	Effective area (mm²)		Weight (g)
										Nylon	Urethane	
4	1/8	KQ2Y04-U01	10	10.4	10	18	20	34	16	6.4	6.4	9
	1/4	KQ2Y04-U02	14				22	34.5				15
6	1/8	KQ2Y06-U01	10	12.8	10	20	21.5	37.5	17	13.4	13.4	11
	1/4	KQ2Y06-U02	14				23	37				17
	3/8	KQ2Y06-U03	17				24	38				26
8	1/8	KQ2Y08-U01	12	15.2	12	23	22.5	41.5	18.5	25.6	17.7	15
	1/4	KQ2Y08-U02	14				24.5	42.5				19
	3/8	KQ2Y08-U03	17				25.5	42.5				28
10	1/8	KQ2Y10-U01	17	18.5	17	26.5	25	46.5	21	40.0	28.4	30
	1/4	KQ2Y10-U02					26.5	47.5				27
	3/8	KQ2Y10-U03					27	48				31
	1/2	KQ2Y10-U04					22	30				49
12	1/4	KQ2Y12-U02	17	20.9	17	28.5	27	49.5	22	57.4	45.4	31
	3/8	KQ2Y12-U03					28	50.5				35
	1/2	KQ2Y12-U04					22	31				51.5
16	3/8	KQ2Y16-U03	22	26.5	21	33	66		24	81	(81)	61
	1/2	KQ2Y16-U04					63			113	(113)	62

* Reference dimensions after Uni thread installation. Note) Dimensions in () are the case of soft nylon tubing.



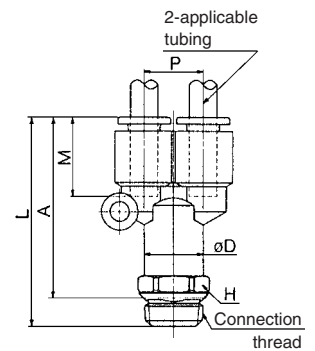
K□
M□
H□
D□
MS
T□
VMG

<Metric size> Branch: KQ2U



Applicable tubing O.D. (mm)	Connection thread Uni One-touch fittings	Model	H (width across flats)	øD	L	P	A*	M	Effective area (mm ²)		Weight (g)
									Nylon	Urethane	
4	1/8	KQ2U04-U01	11	10.4	40	10.4	36	16	4.2	4.2	11
	1/4	KQ2U04-U02	14		42						16
6	1/8	KQ2U06-U01	13	12.8	43.5	12.8	39	17	13.4	13.4	14
	1/4	KQ2U06-U02	14		45						18
	3/8	KQ2U06-U03	17		46		40				26
8	1/8	KQ2U08-U01	17	15.2	50.5	15.2	46	18.5	25.6	17.7	27
	1/4	KQ2U08-U02			52		46				25
	3/8	KQ2U08-U03			51.5		45.5				28
10	1/4	KQ2U10-U02	19	18.5	57.5	18.5	51.5	21	40	28.4	38
	3/8	KQ2U10-U03									36
	1/2	KQ2U10-U04	22		59		51				51
12	1/4	KQ2U12-U02	22	20.9	61	20.9	55	22	57.4	45.4	53
	3/8	KQ2U12-U03									52
	1/2	KQ2U12-U04			62.5		54.5				52

* Reference dimensions after Uni thread installation.

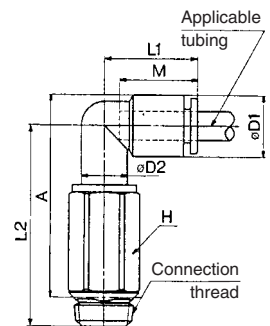


<Metric size> Extended Male Elbow: KQ2W



Applicable tubing O.D. (mm)	Connection thread Uni One-touch fittings	Model	H (width across flats)	øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Weight (g)
										Nylon	Urethane	
4	1/8	KQ2W04-U01	10	10.4	10	18	34.5	35.5	16	4.0	4.0	16
	1/4	KQ2W04-U02	14				37	38.5				26
6	1/8	KQ2W06-U01	10	12.8	10	20	38.5	41	17	10.9	10.9	18
	1/4	KQ2W06-U02	14				40.5	42				29
	3/8	KQ2W06-U03	17				41.5	42				40
8	1/8	KQ2W08-U01	12	15.2	12	23	43.5	46.5	18	20.5	14.2	28
	1/4	KQ2W08-U02	14				45.5	47				35
	3/8	KQ2W08-U03	17				46	48				46
10	1/4	KQ2W10-U02	17	18.5	17	26.5	52.5	56	21	33.5	23.8	67
	3/8	KQ2W10-U03					54.5					57
	1/2	KQ2W10-U04	22									98
12	1/4	KQ2W12-U02	17	20.9	17	28.5	54	58.5	22	47.7	37.7	69
	3/8	KQ2W12-U03										59
	1/2	KQ2W12-U04					56					99

* Reference dimensions after Uni thread installation.



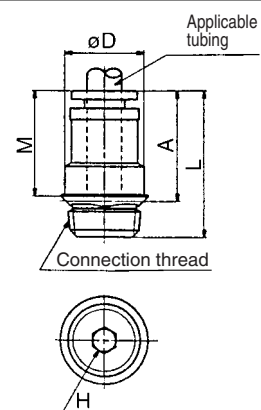
Series KQ2

<Metric size> Hexagon Socket Head Male Connector: KQ2S



Applicable tubing O.D. (mm)	Connection thread Uni One-touch fittings	Model	H (width across flats)	øD	L	A*	M	Effective area (mm²)		Weight (g)
								Nylon	Urethane	
4	1/8	KQ2S04-U01	3	10	23.5	18.5	16	4.1	3.6	7
6	1/8	KQ2S06-U01	4	11.8	24	19	17	10.0	9.9	9
	1/4	KQ2S06-U02		13.5	18	10.7		10.0	12	
8	1/8	KQ2S08-U01	5	14	27.5	22.5	18.5	17.2	16.2	12
	1/4	KQ2S08-U02	28		22	23.3		14		
	3/8	KQ2S08-U03	6	17	27.5	21.5				24
10	1/8	KQ2S10-U01	5	17	30	25	21	17.2	10.0	18
	1/4	KQ2S10-U02	29		23			17		
	3/8	KQ2S10-U03	8	28.5	22.5	39.0		26.6	19	
	1/2	KQ2S10-U04	21	29	21			36		
12	1/4	KQ2S12-U02	8	19	30.5	25	22	46.0	44.5	20
	3/8	KQ2S12-U03	31			60.0		22		
	1/2	KQ2S12-U04	9	21	28.5	20.5				30

* Reference dimensions after Uni thread installation.

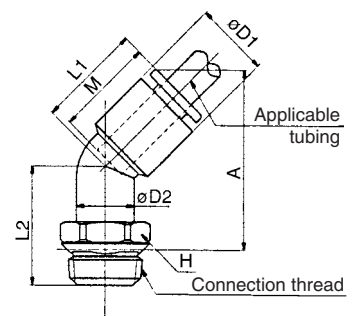


<Metric size> 45° Male Elbow: KQ2K



Applicable tubing O.D. (mm)	Connection thread Uni One-touch fittings	Model	H (width across flats)	øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Weight (g)
										Nylon	Urethane	
4	1/8	KQ2K04-U01	10	10.4	10	17	18.5	30	16	3.4	3.4	6
	1/4	KQ2K04-U02	14				20.5	30.5				13
6	1/8	KQ2K06-U01	10	12.8	10	18	18.5	31	17	8.7	8.7	7
	1/4	KQ2K06-U02	14				20.5	32				13
	3/8	KQ2K06-U03	17				21.5	32				23
	1/8	KQ2K08-U01	12				20	35				11
8	1/4	KQ2K08-U02	14	15.2	12	20.5	22	18.5	19.7	13.6	15	
	3/8	KQ2K08-U03	17				23				36	24
	1/8	KQ2K10-U01	17				18.5				17	24
1/4	KQ2K10-U02	23.5		40.5	21							
3/8	KQ2K10-U03	24		41	30.9	23.2		25				
1/2	KQ2K10-U04	22		27				42	45			
12	1/4	KQ2K12-U02	17	20.9	17	25	24	42	22	44.5	35.1	23
	3/8	KQ2K12-U03					24.5	42.5				27
	1/2	KQ2K12-U04					22	27.5				43.5

* Reference dimensions after Uni thread installation.

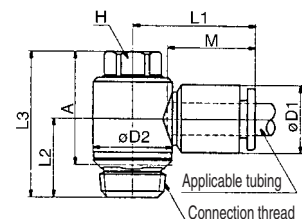


<Metric size> Universal Male Elbow: KQ2V



Applicable tubing O.D. (mm)	Connection thread Uni One-touch fittings	Model	H (width across flats)	øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²)		Weight (g)
											Nylon	Urethane	
4	1/8	KQ2V04-U01	8	10.4	13.4	22	13.5	25.5	20.5	16	2.9	2.9	12
6	1/8	KQ2V06-U01	8	12.8	13.4	24	13.5	25.5	20.5	17	7.5	7.5	13
	1/4	KQ2V06-U02	10		15.4	23.5	15.5	28	22				21
8	1/8	KQ2V08-U01	12	15.2	17.6	28.5	14.5	27.5	22.5	18.5	11.2	24	22
	1/4	KQ2V08-U02			20.6	27.5	16.5	29.5	23.5		14.3	30	25
	3/8	KQ2V08-U03	14		20.6	27.5	18.5	34	28			47	36
10	1/4	KQ2V10-U02	14	18.5	20.6	31	18.5	34	28	21	27	20.3	35
	3/8	KQ2V10-U03											38
12	3/8	KQ2V12-U03	17	20.9	25.2	34	20	36.5	30.5	22	39	30.8	52
	1/2	KQ2V12-U04					22.5	39.5	31.5				62

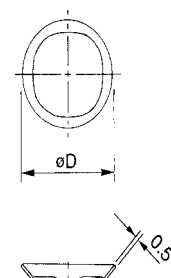
* Reference dimensions after Uni thread installation.



<Metric size> Gasket: KQG



Connection thread Uni One-touch fittings	Model	øD	Weight (g)
1/8	KQG-U01	11.8	0.12
1/4	KQG-U02	15.3	0.19
3/8	KQG-U03	18.7	0.23
1/2	KQG-U04	23.4	0.34



⚠ 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.

Handling and Precautions

⚠ Caution

1. First tighten by hand, then use a proper wrench, which could be suitable for the hexagon across flats on the body to tighten with the proper tightening torque given below.

Connecting Female Thread: Rc, NPT, NPTF

Nominal size of Uni thread	Recommended tightening torque (N·m)	Approx. spanner tightening angle after tightened by hand
1/8	5 to 7	30 to 60
1/4	11 to 13	30 to 60
3/8	14 to 16	15 to 45
1/2	20 to 22	15 to 30

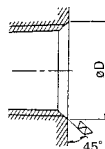
Connecting Female Thread: G

Nominal size of Uni thread	Recommended tightening torque (N·m)	Approx. spanner tightening angle after tightened by hand
1/8	3 to 4	30 to 45
1/4	4 to 5	15 to 30
3/8	8 to 9	15 to 30
1/2	14 to 15	15 to 30

2. Gasket can be recycled 6 to 10 times. It can be replaced easily when it has sustained damage. A broken gasket can be removed by holding and then turning in the same direction of loosening the thread. If it is difficult to remove, cut it with nippers, etc. In such a case, use caution not to scratch seat face because the seat face of 45° gasket of fitting is the sealing face.
3. Please consult with SMC if using for other fluids than air.
4. Other precautions on handling, etc. are the same as those of One-touch fittings.

Chamfered area for female thread (Recommended value)

By chamfering as shown in the following table, machining of threads is easier and effective for burr prevention, too.



Female thread size	Chamfered port size øD (Recommended value)	
	Rc, G	NPT, NPTF
1/8	10.2 to 11.8	10.5 to 11.8
1/4	13.6 to 15.8	14.1 to 15.8
3/8	17.1 to 19.4	17.4 to 19.4
1/2	21.4 to 25.1	21.7 to 25.1

K□

M□

H□

D□

MS

T□

VMG

Inch-size One-touch Fittings

Series KQ2

Applicable Tubing: Inch Size
Connection Thread: UNF, NPT

How to Order

KQ 2 H 05 — 34 S

One-touch fittings

Product's color

Symbol	Body	Release button
2	White	Orange
Nil	Black	Red

Applicable tubing O.D.

01	1/8
03	5/32
05	3/16
07	1/4
09	5/16
11	3/8
13	1/2

Port size/Applicable tubing O.D.

Thread connection	Tubing (Rod) connection	Port size/Applicable tubing O.D.
32		10-32 UNF
33		NPT 1/16
34		NPT 1/8
35		NPT 1/4
36		NPT 3/8
37		NPT 1/2
00		Same dia. tubing
99		Same dia. rod
01		1/8 tubing
03		5/32 tubing
05		3/16 tubing
07		1/4 tubing
09		5/16 tubing
11		3/8 tubing
13		1/2 tubing

With thread seal

Nil	None
S	With thread seal

Note) Port size with seal: Only
NPT 1/16
NPT 1/8
NPT 1/4
NPT 3/8
NPT 1/2

Model

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

Accessory

Symbol	Name
KQ2N	Nipple
	Reducer nipple
KQ2C	Tube cap
KQ2P (KQP)	Plug (Orange)

Use the below part number to order the gasket for sealing 10-32 UNF thread.
Gasket for 10-32 UNF: M-10/32G



* Available only for KQ2 (White color body).

Series KQ2

Series KQ2: White body
Series KQ: Black body

Guide

Collet

Chuck

Suitable for use with nylon, soft 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 1.0 MPa

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

Connection thread

UNF, NPT

Release button

KQ2: Orange

KQ : Red

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

Inch size

1/8", 5/32", 3/16", 1/4", 5/16", 3/8", 1/2"

Body

O-ring

Stud

Effective when piping in a confined space.

The body and the threaded portion can rotate (for positioning to some extent).

PAT.



Product's Color

Series	Body	Release button
Series KQ2	White	Orange
Series KQ	Black	Red

Applicable Tubing

Tubing material	Nylon, Soft nylon, Polyurethane
Tubing O.D. (inch)	ø1/8, ø5/32, ø3/16, ø1/4, ø5/16, ø3/8, ø1/2

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	ANSI/ASME B1.20.1-1983 (NPT thread) JIS B 0212 2A, Class 2B (UNF thread)
	Nut section	JIS B 0212 2A, Class 2B (UNF thread)
Seal (Thread portion)	With thread seal	

 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	POM
Release button	POM
Seal, O-ring	NBR
Gasket	Stainless steel 304, NBR

Model		
Hex. socket head male connector		
KQ2S P. 13		Internal hex. allows thread connection by using an allen wrench for confined spaces.
Universal male elbow		
KQ2V P. 15		Universal male elbow allows thread connection by using a socket wrench for confined spaces.
45° male elbow		
KQ2K P. 15		Use to pipe in 45° angle direction from female thread. Model in-between of male connector and male elbow.
Extended male elbow		
KQ2W P. 19		Basically, it is used together with male elbow. Different point is that it is used for fittings to avoid from interfering with each other by making the piping two-level.
Bulkhead union		
KQ2E P. 22		Use to connect tubes through a panel.
Bulkhead connector		
KQ2E P. 23		Use to connect male thread and tube through a panel.
Nipple		
KQ2N P. 23		Use to connect One-touch fittings.
Reducer nipple		
KQ2N P. 23		Use to connect One-touch fittings that are different tubing O.Ds.
Male connector		
KQ2H P. 13		Use to pipe in the same direction from female thread. Most general style.
Hexagon socket head universal male elbow		
KQ2VS P. 15		Hex. on the top allows thread connection by using an allen wrench for confined spaces.
Branch universal male elbow		
KQ2Z P. 17		Hexagonal head allows thread connection by using a box wrench. Use for branch connection.
Female connector		
KQ2F P. 13		Use to pipe from male thread such as pressure gauge.
Universal female elbow		
KQ2VF P. 16		Use to branch line in the same direction or at right angles from male or female thread. Multiplex connection possible.
Double branch universal male elbow		
KQ2ZD P. 17		Use to four-branch line at right angles from female thread. Two individual parts rotate 360°.
Straight union		
KQ2H P. 14		Use to connect tubes in the same direction.
Female elbow		
KQ2LF P. 16		Use to pipe at right angles to male thread.
Triple branch universal male elbow		
KQ2ZT P. 18		Use to six-branch line at right angles from female thread. Three individual parts rotate 360°.
Different diameter straight		
KQ2H P. 14		Use to connect different sized tubes.
Double universal male elbow		
KQ2VD P. 16		Use to branch line at right angles to female thread. Two individual parts rotate 360°.
Union elbow		
KQ2L P. 18		Use to connect tubes at right angles.
Male elbow		
KQ2L P. 14		Use to pipe at right angles to female thread. Most general style.
Triple universal male elbow		
KQ2VT P. 17		Use to three-branch line at right angles from female thread. Three individual parts rotate 360°.
Plug-in elbow		
KQ2L P. 18		Use to change by 90° in a tube fetching direction from One-touch fittings and to size down.

K□

M□

H□

D□

MS

T□

VMG

Series KQ2

Reducer elbow

KQ2L



P. 18

Use to change by 90° in tube fetching direction from One-touch fittings and to size down.

Male branch tee

KQ2T



P. 19

Use to branch line from female thread in both 90° directions.

Union tee

KQ2T



P. 19

Use to connect tubes in both 90° directions.

Different diameter tee

KQ2T



P. 20

Use to connect tubes with size down in both 90° directions.

Cross

KQ2TW



P. 20

Use to four-branch line.

Male run tee

KQ2Y



P. 20

Use to branch line in the same direction from female thread and in 90° direction.

Branch "Y"

KQ2U



P. 21

Use to branch line in the same direction from female thread.

Union "Y"

KQ2U



P. 21

Use to branch line in the same direction.

Different dia. union "Y"

KQ2U



P. 21

Use to branch line with size down in the same direction.

Plug-in "Y"

KQ2U



P. 21

Use to branch line in the same direction from One-touch fittings.

Different diameter plug-in "Y"

KQ2X



P. 22

Use to four-branch line from One-touch fitting with size down.

Plug-in reducer

KQ2R

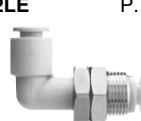


P. 22

Use to change size of One-touch fittings.

Bulkhead male elbow

KQ2LE



P. 22

Use to connect tubes through a panel, changing by 90° in a tube fetching direction.

Tube cap

KQ2C



P. 23

Use to plug unused tube.

Plug

KQ2P, KQP

P. 23



Use to plug unused One-touch fittings. KQP (Orange) KQ2P (Orange)

Gasket/10-32 UNF seal on thread

Part no.: M-10/32G

Material: Stainless steel 304, NBR

Inch-size One-touch Fittings Series KQ2

Male Connector: KQ2H

01-32
For KQ2H03-32
07-32



<For KQ2H05-32>



<NPT>

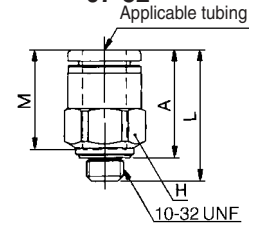


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD	L	A	M	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2H01-32	7	—	16.7	13.7	12.7	2.3	2
	1/16	KQ2H01-33S	11.11	—	22	18 *	15.5	2.5	7
	1/8	KQ2H01-34S	—	—	—	—		—	9
	1/4	KQ2H01-35S	14.29	—	19.5	13.5 *		—	16
5/32	10-32 UNF	KQ2H03-32	8	—	17	14	12.7	2.3	2.4
	1/16	KQ2H03-33S	11.11	—	22	18 *	16	3	7
	1/8	KQ2H03-34S	—	—	—	—		—	9
	1/4	KQ2H03-35S	14.29	—	19.5	13.5 *		—	16
3/16	10-32 UNF	KQ2H05-32	8	11	24	20.4	16.5	2.3	6
	1/8	KQ2H05-34S	12.7	—	22	18 *		3.5	11
	1/4	KQ2H05-35S	14.29	—	21	15 *		—	12
	10-32 UNF	KQ2H07-32	11.11	—	18.4	15.4	13.6	2.3	3.3
1/4	1/8	KQ2H07-34S	12.7	—	22.5	18.5 *	17	4.6	10
	1/4	KQ2H07-35S	14.29	—	23	17 *		—	15
	3/8	KQ2H07-36S	17.46	—	22	16.5 *		—	27
	1/8	KQ2H09-34S	14.29	—	28.5	24.5 *	18.5	6	15
5/16	1/4	KQ2H09-35S	—	—	26.5	20.5 *		—	16
	3/8	KQ2H09-36S	17.46	—	22	15.5 *		—	24
	1/8	KQ2H11-34S	—	—	30.5	26.5 *	21	6	29
	1/4	KQ2H11-35S	17.46	—	33.5	27.5 *		—	31
3/8	3/8	KQ2H11-36S	—	—	29	22.5 *		7	29
	1/2	KQ2H11-37S	22.23	—	26.5	18.5 *	22	—	46
	1/4	KQ2H13-35S	—	—	34.5	28.5 *		9	44
	3/8	KQ2H13-36S	—	—	33	26.5 *		9.6	44
1/2	1/2	KQ2H13-37S	22.23	—	30	22 *	—	—	44

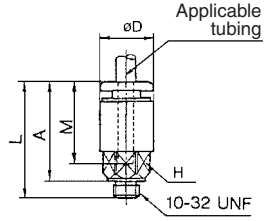


* Reference dimensions after NPT thread installation.
Note) øD: Max. diameter

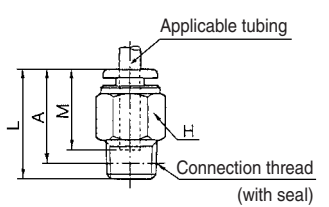
01-32
For KQ2H03-32
07-32



<For KQ2H05-32>



<NPT>



Hexagon Socket Head Male Connector: KQ2S

<10-32 UNF>



<NPT>



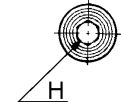
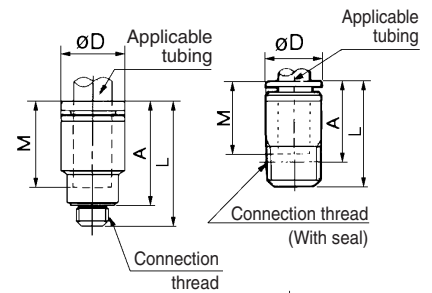
Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD	L	A *	M	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2S01-32	2	7	19.7	16.6	12.7	2	2.8
5/32	10-32 UNF	KQ2S03-32	2.5	8	18.7	15.6	12.7	2.3	2.7
	1/8	KQ2S03-34S	2.78	10.5	23.5	19.5	16	2.8	8
3/16	1/8	KQ2S05-34S	3.57	10.7	23.5	19.5	16.5	3.6	8
	10-32 UNF	KQ2S07-32	2.5	10.3	19.6	16.5	13.6	2.3	3.3
1/4	1/8	KQ2S07-34S	—	12.5	22	18	17	4.9	7
	1/4	KQ2S07-35S	4.76	13.8	23	17		—	12
	3/8	KQ2S07-36S	—	17	27	21		—	27
	1/8	KQ2S09-34S	5.56	14	28	24	18.5	5.7	12
5/16	1/4	KQ2S09-35S	6.35	—	25.5	19.5		6.5	11
	3/8	KQ2S09-36S	—	17.5	27.5	21		—	25
	1/8	KQ2S11-34S	5.56	16.5	30	26	21	5.7	17
	1/4	KQ2S11-35S	—	16.5	32	26		—	21
3/8	3/8	KQ2S11-36S	6.35	17.2	29	23		6.5	25
	1/2	KQ2S11-37S	—	21.3	30	22	22	—	45
	1/4	KQ2S13-35S	7.94	20	34.5	28.5		8	26
	3/8	KQ2S13-36S	—	—	33	26.5		9.6	27
1/2	1/2	KQ2S13-37S	9.53	21.3	31	22.5	—	—	36



* Reference dimensions after NPT thread installation.
Note) øD: Max. diameter

<10-32 UNF>

<NPT>



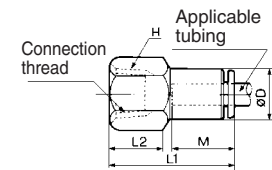
Female Connector: KQ2F



Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD	L1	L2	M	Min. port size	Weight (g)
1/8	1/8	KQ2F01-34	14.29	9.2	26.5	11.5	15.5	2.5	16
	1/4	KQ2F01-35	17.46		30.5	14.5			26
5/32	1/8	KQ2F03-34	14.29	10	27	11	16	3	15
	1/4	KQ2F03-35	17.46		31	13.5			24
1/4	1/8	KQ2F07-34	14.29	12.5	27.5	10.5	17	4.6	17
	1/4	KQ2F07-35	17.46		31	13.5			25
	3/8	KQ2F07-36	22.23		33.5	15.5			44
	1/8	KQ2F09-34	14.29		29	10.5	18.5	6	18
5/16	1/4	KQ2F09-35	17.46	14	32.5	13.5			26
	3/8	KQ2F09-36	22.23		34.5	13			38
	1/4	KQ2F11-35	17.46		34.5	15		21	30
	3/8	KQ2F11-36	22.23		36.5	19			48
3/8	1/2	KQ2F11-37	23.81	16.5	40.5	19			52
	3/8	KQ2F13-36	22.23		36.5	14.5	22	9.6	48
	1/2	KQ2F13-37	23.81		41	18.5			53
	1/2	KQ2F13-37	23.81		—	—	—	—	—



Note) øD: Max. diameter



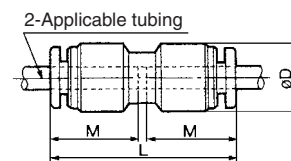
Series KQ2

Straight Union: KQ2H



Applicable tubing O.D. (inch)	Model	Note) øD	L	M	Min. port size	Weight (g)
1/8	KQ2H01-00	9.6	31.5	15.5	2.5	3
5/32	KQ2H03-00	10.4	32.5	16	3	3
3/16	KQ2H05-00	11.4	34	16.5	3.5	4
1/4	KQ2H07-00	13.2	34.5	17	4.6	4
5/16	KQ2H09-00	15.2	38.5	18.5	6	6
3/8	KQ2H11-00	17.9	42.5	21	7	11
1/2	KQ2H13-00	21.7	44.5	22	9.6	16

Note) øD: Max. diameter

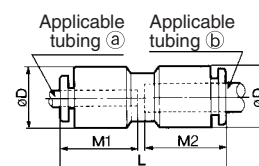


Different Diameter Straight: KQ2H



Applicable tubing O.D. (inch)		Model	Note) øD	L	M1	M2	Min. port size	Weight (g)
(a)	(b)							
1/8	5/32	KQ2H01-03	10.4	32.5	15.5	16	2.5	3
	1/4	KQ2H01-07	13.2	34.5	17	17	2.5	5
5/32	3/16	KQ2H03-05	11.4	34	16	16.5	3	4
	1/4	KQ2H03-07	13.2	34.5	17	17	3	4
3/16	1/4	KQ2H05-07	13.2	34.5	16.5	17	3.5	5
1/4	5/16	KQ2H07-09	15.2	38.5	17	18.5	4.6	6
	3/8	KQ2H07-11	17.9	42	21	21	4.6	11
5/16	3/8	KQ2H09-11	17.9	42	18.5	21	6	11
	1/2	KQ2H09-13	21.7	44	22	22	6	16
3/8	1/2	KQ2H11-13	21.7	44	21	22	7	17

Note) øD: Max. diameter



Male Elbow: KQ2L

01-32
For KQ2L03-32
07-32



<For KQ2L05-32>



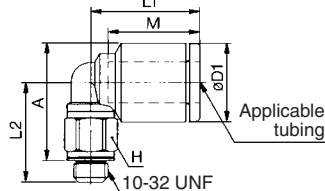
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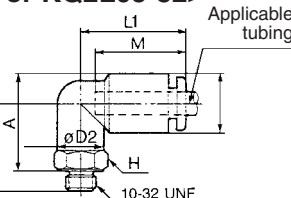
Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A	M	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2L01-32	7	8.4	—	15.3	13.2	14	12.7	2.3	2.5
	1/16	KQ2L01-33S	11.11	9.6	10	17.5	21.5	22.5 *	15.5	2.5	8
	1/8	KQ2L01-34S	14.29	—	—	—	25.5	24.5 *	—	—	18
	1/4	KQ2L01-35S	14.29	—	—	—	26	25 *	—	—	18
5/32	10-32 UNF	KQ2L03-32	7	9.3	—	15.6	13.7	15.4	12.7	2.3	2.7
	1/16	KQ2L03-33S	11.11	10.4	10	18	22	23 *	16	3	8
	1/8	KQ2L03-34S	14.29	—	—	—	26	25 *	—	—	9
	1/4	KQ2L03-35S	14.29	—	—	—	26	25 *	—	—	18
3/16	10-32 UNF	KQ2L05-32	11.11	11.4	10	19.5	20	22	16.5	2.3	5
	1/8	KQ2L05-34S	14.29	—	—	—	22.5	24 *	—	—	10
	1/4	KQ2L05-35S	14.29	—	—	—	26.5	26 *	—	—	19
	10-32 UNF	KQ2L07-32	7	12	—	16.1	15.1	18.1	13.6	2.3	3.2
1/4	1/8	KQ2L07-34S	11.11	13.2	10	20.5	23.5	26 *	17	4.6	10
	1/4	KQ2L07-35S	14.29	—	—	—	27.5	28 *	—	—	20
	3/8	KQ2L07-36S	17.46	—	—	—	29.5	30 *	—	—	32
	1/8	KQ2L09-34S	12.7	—	—	—	24.5	28 *	—	—	12
5/16	1/4	KQ2L09-35S	14.29	15.2	12	23.5	28.5	30 *	18.5	6	20
	3/8	KQ2L09-36S	17.46	—	—	—	30.5	31.5 *	—	—	28
	1/8	KQ2L11-34S	11.11	—	—	—	26.5	31.5 *	—	6	16
	1/4	KQ2L11-35S	17.46	17.9	17	25.5	29.5	32.5 *	21	7	23
3/8	3/8	KQ2L11-36S	22.23	—	—	—	31.5	34 *	—	—	33
	1/2	KQ2L11-37S	22.23	—	—	—	35.5	36.5 *	—	—	59
	1/4	KQ2L13-35S	17.46	21.7	17	28	31.5	36.5 *	—	9	28
	3/8	KQ2L13-36S	22.23	—	—	—	33.5	38.5 *	—	9.6	36
1/2	1/2	KQ2L13-37S	22.23	—	—	—	37.5	40 *	—	—	62

* Reference dimensions after NPT thread installation.
Note) øD1: Max. diameter

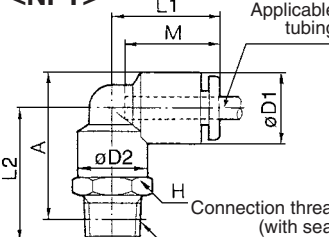
01-32
For KQ2L03-32
07-32



<For KQ2L05-32>



<NPT>



45° Male Elbow: KQ2K

<10-32 UNF>



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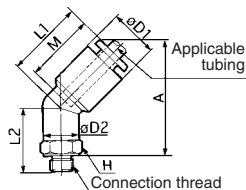


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A *	M	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2K01-32	8	9.6	8	16.5	15	25.5	15.5	2.3	4
	1/8	KQ2K01-34S	11.11		10	16.5	22.5	33	15.5	2.5	9
5/32	10-32 UNF	KQ2K03-32	8	10.4	8	17	14.5	26	16	2.3	4
	1/8	KQ2K03-34S	11.11		10	17	20.5	32	16	2.8	9
3/16	10-32 UNF	KQ2K05-34S	11.11	11.4	10	18	20.5	32.5	16.5	3.6	10
	1/8	KQ2K07-32	11.11		18	32	18	32	17	2.3	8
1/4	1/8	KQ2K07-34S	12.7	13.2	10	19	20.5	34	17	4.6	10
	1/4	KQ2K07-35S	14.29		24.5	36	26.5	37.5			19
	3/8	KQ2K07-36S	17.46		22	37	28	41			32
	1/8	KQ2K09-34S	12.7		22	37	22	37			11
5/16	1/4	KQ2K09-35S	14.29	15.2	12	20.5	26	39	18.5	6	19
	3/8	KQ2K09-36S	17.46		28	41	28	41			32
	1/8	KQ2K11-34S	17.46		24	42	24	42			25
	1/4	KQ2K11-35S	17.46		27	43	27	43			25
3/8	3/8	KQ2K11-36S	17.46	17.9	17	23.5	29	44.5	21	7	32
	1/2	KQ2K11-37S	17.46		33	46.5	33	46.5			58
	1/4	KQ2K13-35S	17.46		27.5	46.5	27.5	46.5			27
	3/8	KQ2K13-36S	17.46		29.5	48	29.5	48			35
1/2	1/2	KQ2K13-37S	22.23	21.7	17	25.5	33.5	50	22	9.6	61
	1/2	KQ2K13-37S	22.23		33.5	50	33.5	50			61

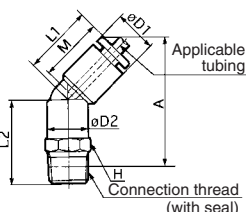


* Reference dimensions after NPT thread installation.
Note) øD1: Max. diameter

<10-32 UNF>



<NPT>



K□

M□

H□

D□

MS

T□

VMG

Universal Male Elbow: KQ2V

<10-32 UNF>



<NPT>

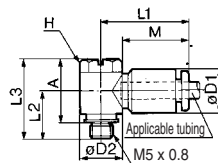


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A *	M	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2V01-32	8	8.4	9.8	17.2	11	18.5	15	12.7	2.3	5
	1/8	KQ2V01-34S		9.6	13.4	21.5	14.5	26.5	22.5	15.5	2.5	14
5/32	10-32 UNF	KQ2V03-32	8	10.4	9.8	20.5	11	18.5	15	16	2.3	6
	1/8	KQ2V03-34S		10.4	13.4	22	14.5	26.5	22.5	16	2.8	14
3/16	10-32 UNF	KQ2V05-34S	8	11.4	13.4	23	14.5	26.5	22.5	16.5	3.5	15
	1/8	KQ2V07-32		11.4	13.4	23	14.5	26.5	22.5	16.5	3.5	15
1/4	1/8	KQ2V07-34S	8	13.2	13.4	24	12	24	20.5	17	4.6	13
	1/4	KQ2V07-35S			14.5	26.5	14.5	26.5	22.5			15
	3/8	KQ2V07-36S			15.3	23.5	19	32.5	26.5			25
	1/8	KQ2V09-34S			17.6	28.5	15.5	28.5	24.5			24
5/16	1/4	KQ2V09-35S	11.11	15.2	17.6	28.5	18.5	31.5	25.5	18.5	6	30
	3/8	KQ2V09-36S			20.6	27.5	20.5	36.5	30			46
	1/4	KQ2V11-35S			19.5	35.5	19.5	35.5	29.5			40
	3/8	KQ2V11-36S			20.5	36.5	20.5	36.5	30			48
1/2	3/8	KQ2V13-36S	17.46	21.7	27	35.5	21.5	36	30	22	9	68
	1/2	KQ2V13-37S			24.5	39	24.5	39	31			85

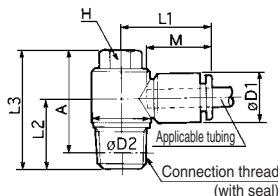


* Reference dimensions after NPT thread installation.
Note) øD1: Max. diameter

<10-32 UNF>



<NPT>



Hexagon Socket Head Universal Male Elbow: KQ2VS

<10-32 UNF>



<NPT>

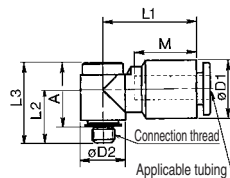


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A *	M	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2VS01-32	4	8.4	9.8	17.2	10.9	18.5	15	12.7	2.3	5
	1/8	KQ2VS01-34S	6.35	9.6	13.4	21.5	14.5	26.5	22.5	15.5	2.5	14
5/32	10-32 UNF	KQ2VS03-32	4	10.4	9.8	20.5	11	18.5	15	16	2.3	6
	1/8	KQ2VS03-34S	6.35	10.4	13.4	22	14.5	26.5	22.5	16	2.8	14
3/16	10-32 UNF	KQ2VS05-34S	8	11.4	13.4	23	14.5	26.5	22.5	16.5	3.5	15
	1/8	KQ2VS07-32	8	11.4	13.4	23	14.5	26.5	22.5	16.5	3.5	15
1/4	1/8	KQ2VS07-34S	6.35	13.2	13.4	24	12	24	19	17	4.6	13
	1/4	KQ2VS07-35S			15.3	23.5	19	28.5	22.5			15
	3/8	KQ2VS07-36S			17.6	28.5	15.5	27	23			21
	1/8	KQ2VS09-34S			17.6	28.5	18.5	30	24			27
5/16	1/4	KQ2VS09-35S	8	15.2	20.6	27.5	20.5	32.5	26	18.5	6	39
	3/8	KQ2VS09-36S			20.5	32.5	20.5	32.5	26			33
	1/4	KQ2VS11-35S			19.5	31.5	19.5	31.5	25.5			42
	3/8	KQ2VS11-36S			20.5	32.5	20.5	32.5	26			63
1/2	3/8	KQ2VS13-36S	9.53	21.7	27	34.5	21.5	34.5	28.5	22	9	81
	1/2	KQ2VS13-37S			24.5	37.5	24.5	37.5	29.5			81

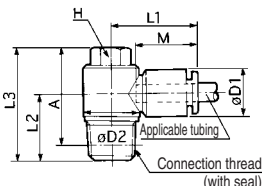


* Reference dimensions after NPT thread installation.
Note) øD1: Max. diameter

<10-32 UNF>



<NPT>



Series KQ2

Universal Female Elbow: KQ2VF

<10-32 UNF>



<NPT>

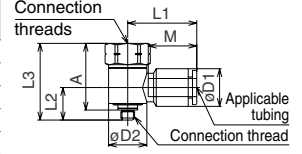


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A *	M	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2VF01-32	8	8.4	9.8	17.2	10	20	16.5	12.7	2.3	5
	1/8	KQ2VF01-34S	14.29	9.6	13.4	21.5	14	29.5	25.5	15.5	2.5	18
	5/32	KQ2VF03-32	8	10.4	9.8	20.5	11	20	16	16	2.5	6
5/32	1/8	KQ2VF03-34S	14.29	10.4	13.4	22	15.5	29.5	25.5	16	2.8	18
	3/16	KQ2VF05-34S	14.29	11.4	13.4	23	14	29.5	25.5	16.5	3.5	19
1/4	10-32 UNF	KQ2VF07-32	14.29	13.2	13.4	24	11.5	27	23.5	17	2.3	16
	1/8	KQ2VF07-34S	14.29	13.2	13.4	24	11.5	27	23.5	17	2.3	16
	1/4	KQ2VF07-35S	17.46	15.2	17.6	25	17.5	38.5	32.5	18.5	4.6	37
5/16	1/8	KQ2VF09-34S	17.46	15.2	17.6	28.5	17	31	27	18.5	6	30
	1/4	KQ2VF09-35S	22.23	17.9	20.6	31	17.5	41	35	21	7	60
	3/8	KQ2VF09-36S	22.23	17.9	25.2	29.5	20.5	45	39	21	7	70
3/8	1/4	KQ2VF11-35S	22.23	17.9	20.6	31	17.5	41	35	21	7	60
	3/8	KQ2VF11-36S	22.23	17.9	25.2	31.5	19.5	45	39	21	7	70
	1/2	KQ2VF13-36S	22.23	21.7	21	42	39	39	39	22	9	85
1/2	1/2	KQ2VF13-37S	25.4	21.7	27	35.5	24	50	41.5	22	9	104

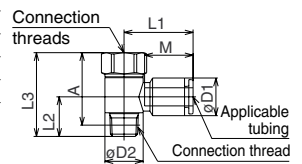


* Reference dimensions after NPT thread installation.
Note) $\phi D1$: Max. diameter

<10-32 UNF>



<NPT>



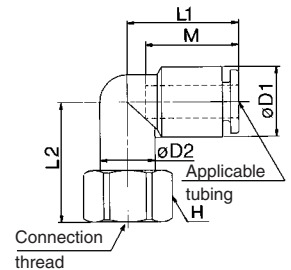
Female Elbow: KQ2LF



Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	M	Min. port size	Weight (g)
1/8	1/8	KQ2LF01-34	14.29	9.6	10	17.5	20	15.5	2.5	12
	1/4	KQ2LF01-35	17.46	10.4	10	18	20.5	16	3	20
5/32	1/8	KQ2LF03-34	14.29	10.4	10	18	20.5	16	3	12
	1/4	KQ2LF03-35	17.46	10.4	10	18	24	16	3	20
1/4	1/8	KQ2LF07-34	14.29	13.2	10	20.5	22	17	4.6	13
	1/4	KQ2LF07-35	17.46	13.2	10	20.5	25.5	17	4.6	21
	3/8	KQ2LF07-36	22.23	17.9	17	25.5	26	21	7	33
3/8	1/4	KQ2LF11-35	17.46	17.9	17	25.5	27.5	21	7	28
	3/8	KQ2LF11-36	22.23	17.9	17	25.5	28	21	7	40
	1/2	KQ2LF11-37	23.81	21.7	17	28	32	22	9.6	45
1/2	3/8	KQ2LF13-36	22.23	21.7	17	28	30	22	9.6	44
	1/2	KQ2LF13-37	23.81	21.7	17	28	34	22	9.6	49



* Reference dimensions after NPT thread installation.
Note) $\phi D1$: Max. diameter



Double Universal Male Elbow: KQ2VD

<10-32 UNF>



<NPT>

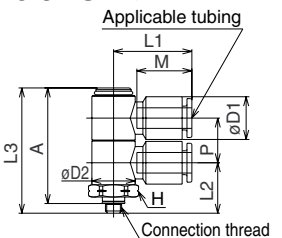


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A *	M	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2VD01-32	8	8.4	9.8	17.2	10	20	16.5	12.7	2.3	5
	1/8	KQ2VD01-34S	14.29	9.6	13.4	21.5	14	29.5	25.5	15.5	2.5	18
	5/32	KQ2VD03-32	8	10.4	9.8	20.5	11	20	16	16	2.5	6
5/32	1/8	KQ2VD03-34S	14.29	10.4	13.4	22	15.5	29.5	25.5	16	2.8	18
	3/16	KQ2VD05-34S	14.29	11.4	13.4	23	14	29.5	25.5	16.5	3.5	19
1/4	10-32 UNF	KQ2VD07-32	14.29	13.2	13.4	24	11.5	27	23.5	17	2.3	16
	1/8	KQ2VD07-34S	14.29	13.2	13.4	24	11.5	27	23.5	17	2.3	16
	1/4	KQ2VD07-35S	17.46	15.2	17.6	25	17.5	38.5	32.5	18.5	4.6	37
5/16	1/8	KQ2VD09-34S	17.46	15.2	17.6	28.5	17	31	27	18.5	6	30
	1/4	KQ2VD09-35S	22.23	17.9	20.6	31	17.5	41	35	21	7	60
	3/8	KQ2VD09-36S	22.23	17.9	25.2	29.5	20.5	45	39	21	7	70
3/8	1/4	KQ2VD11-35S	22.23	17.9	20.6	31	17.5	41	35	21	7	60
	3/8	KQ2VD11-36S	22.23	17.9	25.2	31.5	19.5	45	39	21	7	70
	1/2	KQ2VD13-36S	22.23	21.7	21	42	39	39	39	22	9	85
1/2	1/2	KQ2VD13-37S	25.4	21.7	27	35.5	24	50	41.5	22	9	104

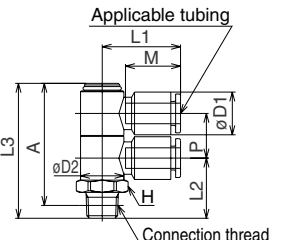


* Reference dimensions after NPT thread installation.
Note) $\phi D1$: Max. diameter

<10-32 UNF>



<NPT>



Triple Universal Male Elbow: KQ2VT

<10-32 UNF>



<NPT>

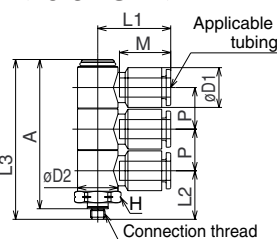


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A *	M	P	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2VT01-32	14.29	9.6	13.4	22	15.5	52	48.5	15.5	13.4	2.3	32
		KQ2VT01-34S					18	54.5	50.5			2.5	30
5/32	10-32 UNF	KQ2VT03-32	14.29	10.4	13.4	22	15.5	52	48.5	16	13.4	2.3	32
		KQ2VT03-34S					18.5	54.5	50.5			3	29
3/16	10-32 UNF	KQ2VT05-34S	14.29	11.4	13.4	23	18	54.5	50.5	16.5	13.4	3.5	31
		KQ2VT07-32					15.5	53	49.5				35
1/4	10-32 UNF	KQ2VT07-34S	14.29	13.2	13.4	24	18.5	55.5	51.5	17	13.8	4.6	33
		KQ2VT07-35S					21.5	58.5	52.5				39
		KQ2VT07-36S					23.5	60.5	54				52
5/16	10-32 UNF	KQ2VT09-35S	19	15.2	17.6	28.5	24	67	61	18.5	15.9	6	59
		KQ2VT09-36S					25	68	61.5				70
		KQ2VT09-37S					28.5	71.5	63.5				94
3/8	10-32 UNF	KQ2VT11-35S	22.23	17.9	20.6	31	26	77.5	71.5	21	19.2	7	98
		KQ2VT11-36S					27	78.5	72				98
		KQ2VT11-37S					30	81.5	73				114
1/2	10-32 UNF	KQ2VT13-36S	25.4	21.7	27	35.5	32	89	83	22	22.3	9.6	188
		KQ2VT13-37S					35	92	84				203

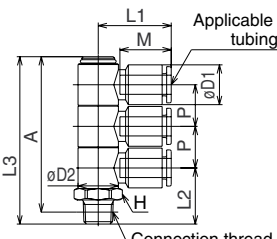


* Reference dimensions after NPT thread installation.
Note) øD1: Max. diameter

<10-32 UNF>



<NPT>



K□

M□

H□

D□

MS

T□

VMG

Branch Universal Male Elbow: KQ2Z

<10-32 UNF>



<NPT>

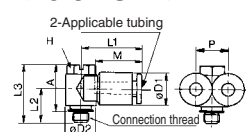


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A *	M	P	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2Z01-32	8	8.4	9.8	16	11.2	18.5	15	12.7	8.4	2.3	6
		KQ2Z01-34S		9.6	13.4	20.5	14.5	26.5	22.5	15.5	9.6	2.5	16
5/32	10-32 UNF	KQ2Z03-32	8	10.4	9.8	19.5	11	18.5	15	16	10.4	2.3	8
		KQ2Z03-34S			13.4	21	14.5	26.5	22.5			2.8	16
3/16	10-32 UNF	KQ2Z05-34S	8	11.4	13.4	21.5	14.5	26.5	22.5	16.5	11.4	3.5	17
		KQ2Z07-32		13.2	13.4	21.5	12	24	20.5			2.3	15
1/4	10-32 UNF	KQ2Z07-34S	11.11	15.2	17.6	26	14.5	26.5	22.5	17	13.2	4.6	17
		KQ2Z07-35S					18.5	31.5	25.5				33
		KQ2Z09-34S					15.5	28.5	24.5				27
5/16	10-32 UNF	KQ2Z09-35S	11.11	15.2	17.6	26	18.5	31.5	25.5	18.5	15.2	6	33
		KQ2Z09-36S					20.5	36.5	30				49
		KQ2Z11-35S					19.5	35.5	29.5				46
3/8	10-32 UNF	KQ2Z11-36S	12.7	17.9	20.6	28.5	20.5	36.5	30	21	17.9	7	55
		KQ2Z13-36S					21.5	36	30				76
		KQ2Z13-37S					24.5	39	31				93

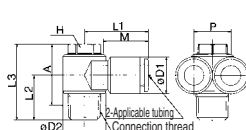


* Reference dimensions after NPT thread installation.
Note) øD1: Max. diameter

<10-32 UNF>



<NPT>



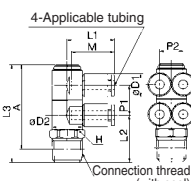
Double Branch Universal Male Elbow: KQ2ZD



Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A *	M	P1	P2	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2ZD01-34S	14.29	9.6	13.4	20.5	18	41	37	15.5	13.4	9.6	2.5	26
5/32	10-32 UNF	KQ2ZD03-34S	14.29	10.4	13.4	21	18.5	41	37	16	13.4	10.4	3	26
3/16	10-32 UNF	KQ2ZD05-34S	14.29	11.4	13.4	21.5	18	41	37	16.5	13.4	11.4	3.5	29
		KQ2ZD07-34S					18.5	41.5	37.5					
		KQ2ZD07-35S					21.5	44.5	38.5					
1/4	10-32 UNF	KQ2ZD07-36S	17.46	13.2	13.4	21.5	23.5	46.5	40.5	17	13.8	13.2	4.6	30
		KQ2ZD09-35S					24	51	45					
		KQ2ZD09-36S					25	52	45.5					
5/16	10-32 UNF	KQ2ZD09-37S	22.23	15.2	17.6	26	28.5	55.5	47.5	18.5	15.9	15.2	6	56
		KQ2ZD11-35S					26	58	52					
		KQ2ZD11-36S					27	59	52.5					
3/8	10-32 UNF	KQ2ZD11-37S	22.23	17.9	20.6	28.5	30	62	54	21	19.2	17.9	7	106
		KQ2ZD13-36S					32	66.5	60.5					
		KQ2ZD13-37S					35	69.5	61.5					



* Reference dimensions after NPT thread installation.
Note) øD1: Max. diameter

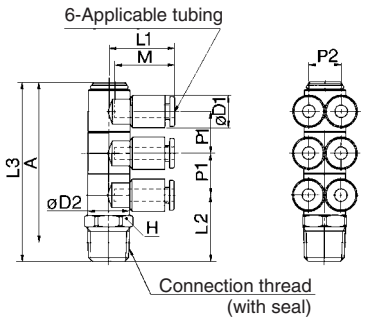


Series KQ2

Triple Branch Universal Male Elbow: KQ2ZT



Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A *	M	P1	P2	Min. port size	Weight (g)
1/8	1/8	KQ2ZT01-34S	14.29	9.6	13.4	20.5	18	54.5	50.5	15.5	13.4	9.6	2.5	34
5/32	1/8	KQ2ZT03-34S	14.29	10.4	13.4	21	18.5	54.5	50.5	16	13.4	10.4	3	34
3/16	1/8	KQ2ZT05-34S	14.29	11.4	13.4	21.5	18	54.5	50.5	16.5	13.4	11.4	3.5	38
1/4	1/8	KQ2ZT07-34S	14.29	13.2	13.4	21.5	18.5	55.5	51.5	17	13.8	13.2	4.6	40
	1/4	KQ2ZT07-35S	17.46				21.5	58.5	52.5					46
	3/8	KQ2ZT07-36S	17.46				23.5	60.5	54					59
5/16	1/8	KQ2ZT09-35S	19	15.2	17.6	26	24	67	61	18.5	15.9	15.2	6	70
	1/4	KQ2ZT09-36S	22.23				25	68	61.5					80
	3/8	KQ2ZT09-37S	22.23				28.5	71.5	63.5					104
3/8	1/4	KQ2ZT11-35S	22.23	17.9	20.6	28.5	26	77.5	71.5	21	19.2	17.9	7	116
	3/8	KQ2ZT11-36S	22.23				27	78.5	72					116
	1/2	KQ2ZT11-37S	22.23				30	81.5	73					132
1/2	3/8	KQ2ZT13-36S	25.4	21.7	27	33	32	89	83	22	22.3	21.7	9.6	213
	1/2	KQ2ZT13-37S	25.4				35	92	84					228

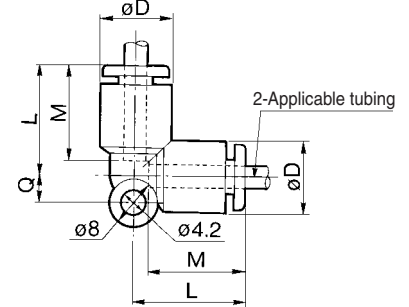


* Reference dimensions after NPT thread installation.
Note) øD1: Max. diameter

Union Elbow: KQ2L



Applicable tubing O.D. (inch)	Model	Note) øD	L	Q	M	Min. port size	Weight (g)
1/8	KQ2L01-00	9.6	17.5	4.3	15.5	2.5	3
5/32	KQ2L03-00	10.4	18	4.5	16	3	4
3/16	KQ2L05-00	11.4	19.5	4.8	16.5	3.5	5
1/4	KQ2L07-00	13.2	20.5	5.3	17	4.6	5
5/16	KQ2L09-00	15.2	23	6	18.5	6	7
3/8	KQ2L11-00	17.9	26	6.6	21	7	13
1/2	KQ2L13-00	21.7	29	7.8	22	9.6	18

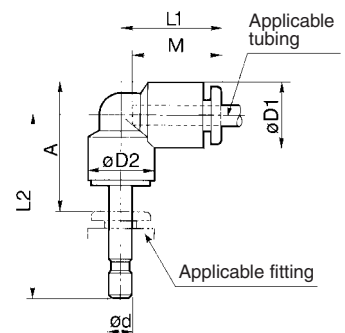


Note) øD: Max. diameter

Plug-in Elbow: KQ2L



Applicable tubing O.D. (inch)	Applicable fitting size ød (inch)	Model	Note) øD1	øD2	L1	L2	A	M	Min. port size	Weight (g)
1/8	1/8	KQ2L01-99	9.6	7	17	24.5	14	15	2.2	3
5/32	5/32	KQ2L03-99	10.4	8	18	25	14.5	16	2.5	3
3/16	3/16	KQ2L05-99	11.4	10	19.5	34	23.5	16.5	3.5	7
1/4	1/4	KQ2L07-99	13.2	10	20	27.5	17.5	17	4.6	8
5/16	5/16	KQ2L09-99	15.2	12	22.5	31.5	21	18.5	6	6
3/8	3/8	KQ2L11-99	17.9	13.6	25	35	23	21	7	19
1/2	1/2	KQ2L13-99	21.7	17	28	44.5	34	22	9.6	27

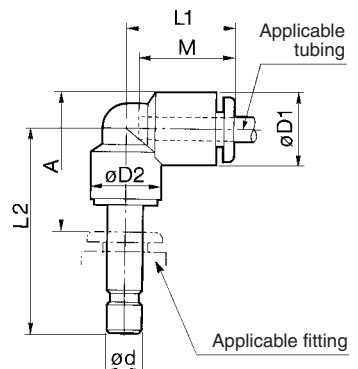


Note) øD1: Max. diameter

Reducer Elbow: KQ2L



Applicable tubing O.D. (inch)	Applicable fitting size ød (inch)	Model	Note) øD1	øD2	L1	L2	A	M	Min. port size	Weight (g)
1/8	5/32	KQ2L01-03	9.6	7	17	25	13.5	15.5	2.2	3
	3/16	KQ2L01-05		10	17.5	33	21.5		2.5	7
5/32	3/16	KQ2L03-05	10.4	10	18	33.5	22.5	16	3	6
	1/4	KQ2L03-07		8	26	14.5	2.5		3	3
3/16	1/4	KQ2L05-07	11.4	19	26.5	15.5	16.5	3.5	8	8
	5/16	KQ2L05-09		19.5	35.5	23			11	11
1/4	5/16	KQ2L07-09	13.2	10	20.5	36.5	24.5	17	4.6	12
	3/8	KQ2L07-11		39.5	23.5	27.5	18.5		6	17
5/16	3/8	KQ2L09-11	15.2	12	23.5	40.5	27.5	18.5	6	17
	1/2	KQ2L09-13		41.5	21	7	25		30	30
3/8	1/2	KQ2L11-13	17.9	17	25.5	43	30	21	7	25



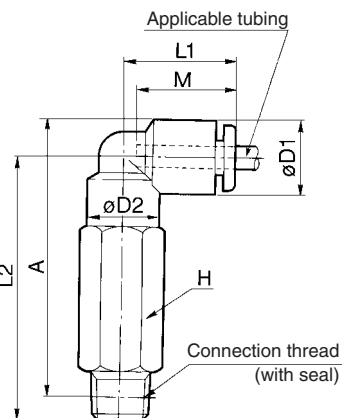
Note) øD1: Max. diameter

Extended Male Elbow: KQ2W



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	(Note) øD1	øD2	L1	L2	A *	M	Min. port size	Weight (g)
1/8	1/8	KQ2W01-34S	11.11	9.6	10	17.5	37	38	15.5	2.5	19
	1/4	KQ2W01-35S	14.29				43	42			41
5/32	1/8	KQ2W03-34S	11.11	10.4	10	18	37.5	38.5	16	3	19
	1/4	KQ2W03-35S	14.29				43.5	42.5			41
3/16	1/8	KQ2W05-34S	11.11	11.4	10	19.5	38	40	16.5	3.5	41
	1/4	KQ2W05-35S	14.29				44	43.5			19
1/4	1/8	KQ2W07-34S	11.11	13.2	10	20.5	40.5	43	17	4.6	20
	1/4	KQ2W07-35S	14.29				46.5	47			42
	3/8	KQ2W07-36S	17.46				48.5	49			69
5/16	1/8	KQ2W09-34S	12.7	15.2	12	23.5	43.5	47	18.5	6	30
	1/4	KQ2W09-35S	14.29				49.5	51			47
	3/8	KQ2W09-36S	17.46				51.5	53			74
3/8	1/4	KQ2W11-35S	17.46	17.9	17	25.5	56	59	21	7	69
	3/8	KQ2W11-36S	17.46				58	61			76
	1/2	KQ2W11-37S	22.23				64.5	65.5			147
1/2	1/4	KQ2W13-35S	17.46	21.7	17	28	58	63	22	9	72
	3/8	KQ2W13-36S	17.46				60	64.5		9.6	78
	1/2	KQ2W13-37S	22.23				66.5	69		149	

* Reference dimensions after NPT thread installation.
Note) $\phi D1$: Max. diameter



K□

M□

H□

D□

MS

T□

VMG

Male Branch Tee: KQ2T

<10-32 UNF>

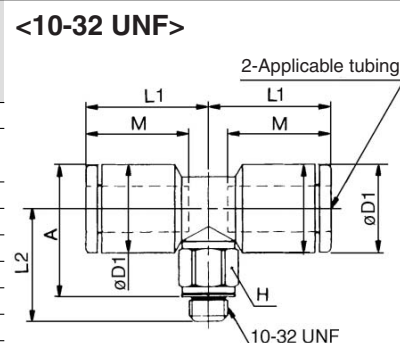


<NPT>

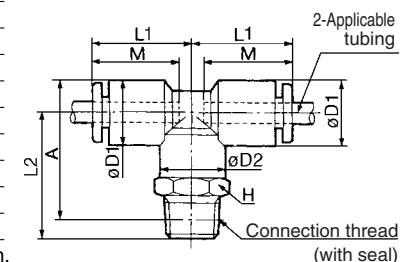


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2T01-32	7	9.6	10	17.5	21.5	22.5 *	15.5	2.5	3.2
	1/16	KQ2T01-33S	11.11								10
	1/8	KQ2T01-34S	11.11								10
	1/4	KQ2T01-35S	14.29				25.5	24.5 *			20
5/32	10-32 UNF	KQ2T03-32	7	9.3	10	15.6	13.7	15.4	12.7	2.3	3.5
	1/16	KQ2T03-33S	11.11								10
	1/8	KQ2T03-34S	11.11				22	23 *			11
	1/4	KQ2T03-35S	14.29				26	25 *			20
3/16	1/8	KQ2T05-34S	11.11	11.4	10	19.5	22.5	24 *	16.5	3.5	12
	1/4	KQ2T05-35S	14.29				26.5	26 *			21
	10-32 UNF	KQ2T07-32	7				15.1	18.1			4.4
	1/8	KQ2T07-34S	11.11				23.5	26 *			11
1/4	1/4	KQ2T07-35S	14.29	13.2	10	20.5	27.5	28 *	17	4.6	21
	3/8	KQ2T07-36S	17.46				29.5	30 *			34
	1/8	KQ2T09-34S	12.7				24.5	28 *			15
	1/4	KQ2T09-35S	14.29				28.5	30 *			23
5/16	3/8	KQ2T09-36S	17.46	15.2	12	23	30.5	31.5 *	18.5	6	35
	1/8	KQ2T11-34S	11.11				26.5	31.5 *			31
	1/4	KQ2T11-35S	17.46				29.5	32.5 *			29
	3/8	KQ2T11-36S	17.46				31.5	34.5 *			38
3/8	1/2	KQ2T11-37S	22.23	17.9	17	25.5	35.5	36.5 *	21	7	64
	1/4	KQ2T13-35S	17.46				31.5	36.5 *			34
	3/8	KQ2T13-36S	17.46				33.5	38.5 *			43
	1/2	KQ2T13-37S	22.23				37.5	40 *			69

* Reference dimensions after NPT thread installation.
Note) $\phi D1$: Max. diameter



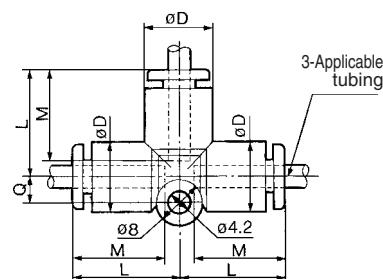
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Union Tee: KQ2T

Applicable tubing O.D. (inch)	Model	Note) ϕD	L	Q	M	Min. port size	Weight (g)
1/8	KQ2T01-00	9.6	17.5	4.3	15.5	2.5	5
5/32	KQ2T03-00	10.4	18	4.5	16	3	4
3/16	KQ2T05-00	11.4	19.5	4.8	16.5	3.5	7
1/4	KQ2T07-00	13.2	20.5	5.3	17	4.6	8
5/16	KQ2T09-00	15.2	23	6	18.5	6	11
3/8	KQ2T11-00	17.9	26	6.6	21	7	18
1/2	KQ2T13-00	21.7	29	7.8	22	9.6	26

Note) ϕD : Max. diameter



Series KQ2

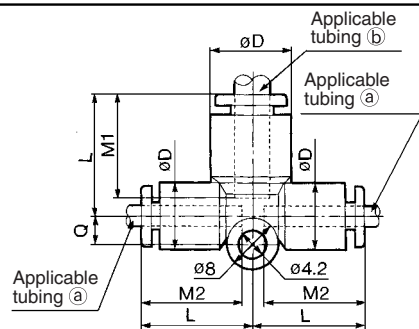
Different Diameter Tee: KQ2T



Applicable tubing O.D. (inch)		Model	Note) øD	L	Q	M1	M2	Min. port size	Weight (g)
(a)	(b)								
1/8	5/32	KQ2T01-03	10.4	18	4.5	16	15.5	2.5	5
	1/4	KQ2T01-07	13.2	20.5	5.3	17			8
5/32	3/16	KQ2T03-05	11.4	19.5	4.8	16.5	16	3	6
	1/4	KQ2T03-07	13.2	20.5	5.3	17			8
3/16	1/4	KQ2T05-07	13.2	20.5	5.3	17	16.5	3.5	8
1/4	5/16	KQ2T07-09	15.2	23	6	18.5	17	4.6	11
	3/8	KQ2T07-11	17.9	26	6.6	21			17
5/16	3/8	KQ2T09-11	17.9	26	6.6	21	18.5	6	17
	1/2	KQ2T09-13	21.7	29	7.8	22			26
3/8	1/2	KQ2T11-13	21.7	29	7.8	22	21	7	28



Note) øD: Max. diameter



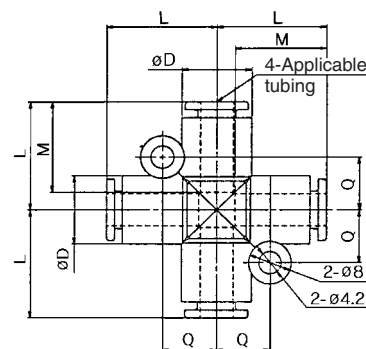
Cross: KQ2TW



Applicable tubing O.D. (inch)	Model	Note) øD	L	Q	M	Min. port size	Weight (g)
5/32	KQ2TW03-00	10.4	18	8.7	16	3	6
1/4	KQ2TW07-00	13.2	20.5	10.1	17	4.6	10
5/16	KQ2TW09-00	15.2	23	11.1	18.5	6	14
3/8	KQ2TW11-00	17.9	26	12.5	21	7	25
1/2	KQ2TW13-00	21.7	29	14.4	22	9.6	36



Note) øD: Max. diameter



Male Run Tee: KQ2Y

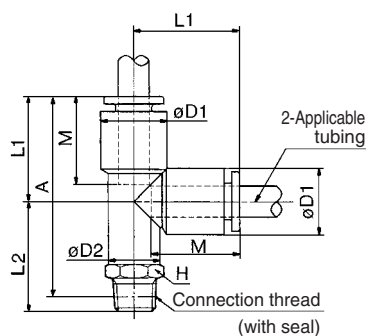


Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A *	M	Min. port size	Weight (g)
1/8	1/16	KQ2Y01-33S	11.11	9.6	10	17.5	21.5	35	15.5	2.5	10
	1/8	KQ2Y01-34S	11.11				25.5	37			20
	1/4	KQ2Y01-35S	14.29				29.5	44			34
5/32	1/16	KQ2Y03-33S	11.11	10.4	10	18	22	36	16	3	10
	1/8	KQ2Y03-34S	11.11				26	38			11
	1/4	KQ2Y03-35S	14.29				26.5	40			20
3/16	1/8	KQ2Y05-34S	11.11	11.4	10	19.5	22.5	38	16.5	3.5	12
	1/4	KQ2Y05-35S	14.29				26.5	40			21
	3/8	KQ2Y07-34S	11.11	13.2	10	20.5	23.5	40	17	4.6	11
1/4	1/4	KQ2Y07-35S	14.29				27.5	42			21
	3/8	KQ2Y07-36S	17.46				29.5	44			34
5/16	1/8	KQ2Y09-34S	12.7	15.2	12	23.5	24.5	44	18.5	6	15
	1/4	KQ2Y09-35S	14.29				28.5	46			23
	3/8	KQ2Y09-36S	17.46				30.5	48			35
3/8	1/4	KQ2Y11-35S	17.46	17.9	17	25.5	29.5	49	21	7	29
	3/8	KQ2Y11-36S	17.46				31.5	51			38
	1/2	KQ2Y11-37S	22.23				35.5	53			64
1/2	1/4	KQ2Y13-35S	17.46	21.7	17	28	31.5	53.5	22	9	34
	3/8	KQ2Y13-36S	17.46				33.5	55.5			43
	1/2	KQ2Y13-37S	22.23				37.5	57			69



* Reference dimensions after NPT thread installation.

Note) øD1: Max. diameter



Inch-size One-touch Fittings Series KQ2

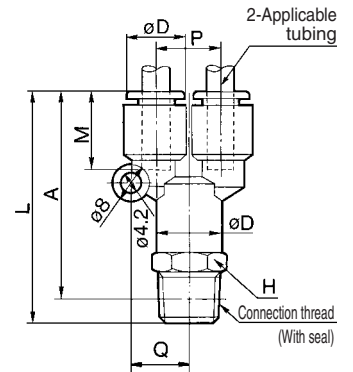
Branch "Y": KQ2U



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD	L	P	Q	A *	M	Min. port size	Weight (g)
1/8	1/8	KQ2U01-34S	12.7	9.6	40.5	9.6	9	36.5	15.5	2.5	14
	1/4	KQ2U01-35S	14.29		44.5			38.5			
5/32	1/8	KQ2U03-34S	12.7	10.4	42	10.4	9.7	38	16	3	16
	1/4	KQ2U03-35S	14.29		46			40			
3/16	1/8	KQ2U05-34S	12.7	11.4	44	11.4	10.6	40	16.5	3.5	18
	1/4	KQ2U05-35S	14.9		48.5			42.5			
1/4	1/8	KQ2U07-34S	14.29	13.2	46.5	13.2	12	42.5	17	4.6	19
	1/4	KQ2U07-35S			49.5			43.5			
	3/8	KQ2U07-36S	17.46		51.5			45			
5/16	1/8	KQ2U09-34S	17.46	15.2	52.5	15.2	13.7	48.5	18.5	6	21
	1/4	KQ2U09-35S			55.5			49.5			22
	3/8	KQ2U09-36S			56.5			50			35
3/8	1/4	KQ2U11-35S	19.05	17.9	60	17.9	15.6	54	21	7	42
	3/8	KQ2U11-36S			61			54.5			43
	1/2	KQ2U11-37S			64.5			56.5			56
1/2	1/4	KQ2U13-35S	22.23	21.7	64.5	21.7	18.8	58.5	22	9.6	31
	3/8	KQ2U13-36S			65.5			59			41
	1/2	KQ2U13-37S			68.5			60.5			68



* Reference dimensions after NPT thread installation.
Note) øD: Max. diameter



K□

M□

H□

D□

MS

T□

VMG

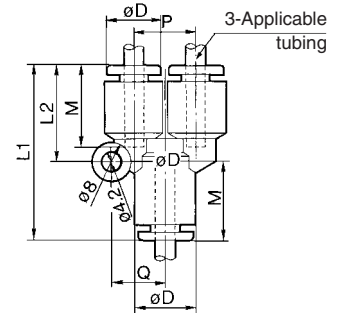
Union "Y": KQ2U



Applicable tubing O.D. (inch)	Model	Note) øD	L1	L2	P	Q	M	Min. port size	Weight (g)
1/8	KQ2U01-00	9.6	33	17.5	9.6	9	15.5	2.5	6
5/32	KQ2U03-00	10.4	34	18	10.4	9.7	16	3	7
3/16	KQ2U05-00	11.4	36.5	20.5	11.4	10.6	16.5	3.5	9
1/4	KQ2U07-00	13.2	38	21.5	13.2	12	17	4.6	9
5/16	KQ2U09-00	15.2	42.5	24.5	15.2	13.7	18.5	6	11
3/8	KQ2U11-00	17.9	48	27.5	17.9	15.6	21	7	16



Note) øD: Max. diameter



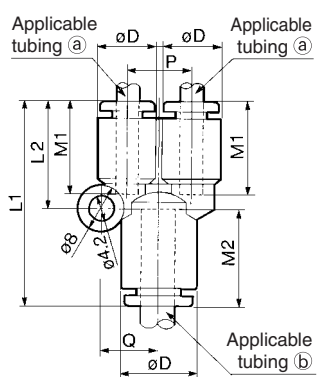
Branch "Y": KQ2U



Applicable tubing O.D. (inch)		Model	Note) øD	L1	L2	P	Q	M1	M2	Min. port size	Weight (g)
a	b										
1/8	5/32	KQ2U01-03	10.4	18	18	10.4	9.7	15.5	16	2.5	5
	1/4	KQ2U01-07	13.2	38	21.5	13.2	12		17		9
5/32	3/16	KQ2U03-05	11.4	36.5	20.5	11.4	10.6	16	16.5	3	8
	1/4	KQ2U03-07	13.2	38	21.5	13.2	12		17		10
3/16	1/4	KQ2U05-07	13.2	38	21.5	13.2	12	16.5	17	3.5	9
1/4	5/16	KQ2U07-09	15.2	42.5	24.5	15.2	13.7	17	18.5	4.6	12
	3/8	KQ2U07-11	17.9	47	27.5	17.9	15.6		21		23
5/16	3/8	KQ2U09-11	17.9	47	27.5	17.9	15.6	18.5	21	6	22
	1/2	KQ2U09-13	21.7	51	30	21.7	18.8		22		34
3/8	1/2	KQ2U11-13	21.7	51.5	30.5	21.7	18.8	21	22	7	36



Note) øD: Max. diameter



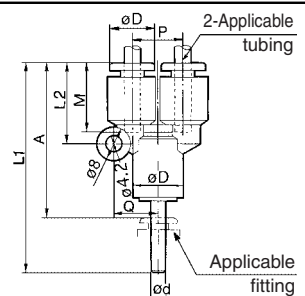
Plug-in "Y": KQ2U



Applicable tubing O.D. (inch)	Applicable fitting size ød (inch)	Model	Note) øD	L1	L2	P	Q	A	M	Min. port size	Weight (g)
1/8	1/8	KQ2U01-99	9.6	50	17.5	9.6	9	35	15.5	2	10
5/32	5/32	KQ2U03-99	10.4	51.5	18	10.4	9.7	35.5	16	2.5	12
3/16	3/16	KQ2U05-99	11.4	56	20.5	11.4	10.6	39.5	16.5	3.5	17
1/4	1/4	KQ2U07-99	13.2	56.5	21.5	13.2	12	39.5	17	4.6	18
5/16	5/16	KQ2U09-99	15.2	64.5	24.5	15.2	13.7	46	18.5	6	21



Note) øD: Max. diameter



Series KQ2

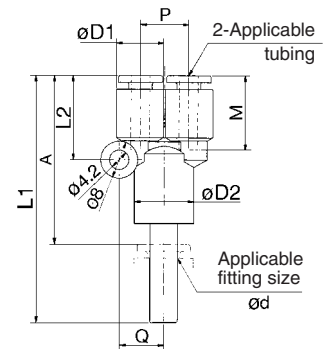
Different Diameter Plug-in “Y”: KQ2X



Applicable tubing O.D. (inch)	Applicable fitting size ϕd	Model	Note) ϕD	L1	L2	A	P	Q	M	Min. port size	Weight (g)
1/8	5/32	KQ2X01-03	10.4	51.5	18	35.5	10.4	9.7	15.5	2.5	5
5/32	3/16	KQ2X03-05	11.4	56	20.5	39.5	11.4	10.6	16	3.5	10
3/16	1/4	KQ2X05-07	13.2	56.5	21.5	39.5	13.2	12	16.5	4.6	9
1/4	5/16	KQ2X07-09	15.2	64.5	24.5	46	15.2	13.7	17	6	21



Note) ϕD : Max. diameter



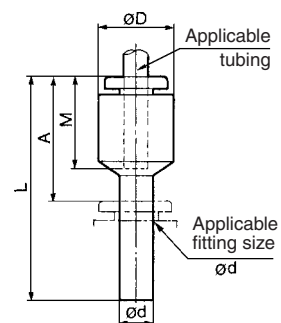
Plug-in Reducer: KQ2R



Applicable tubing O.D. (inch)	Applicable fitting size ϕd (inch)	Model	Note) ϕD	L	A	M	Min. port size	Weight (g)
1/8	5/32	KQ2R01-03	9.6	34.5	18.5	15.5	2.5	2
	3/16	KQ2R01-05	9.2	34	17.5			7
	1/4	KQ2R01-07			17			9
5/32	3/16	KQ2R03-05	10	34	17.5	16	3	8
	1/4	KQ2R03-07	10.4	34.5				9
3/16	1/4	KQ2R05-07	11.4	34.5	18.5	16.5	3.5	4
	5/16	KQ2R05-09	10.7	36.5	18			14
1/4	5/16	KQ2R07-09	13.2	37	18.5	17	4.6	17
	3/8	KQ2R07-11		40	19.5			19
5/16	3/8	KQ2R09-11	14	40	19	18.5	6	24
	1/2	KQ2R09-13		41				32
3/8	1/2	KQ2R11-13	17.9	44	22	21	7	32



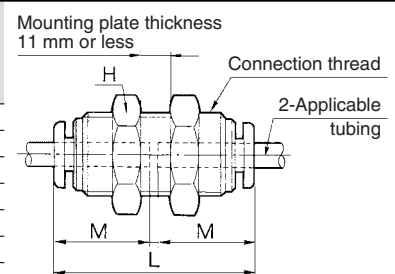
Note) ϕD : Max. diameter



Bulkhead Union: KQ2E



Applicable tubing O.D. (inch)	Model	Connection thread UNF	H (Width across flats)	L	Mounting hole	M	Min. port size	Weight (g)
1/8	KQ2E01-00	1/2-20	17.46	32.5	13.5	15.5	2.5	26
5/32	KQ2E03-00	1/2-20	17.46	32.5	13.5	16	3	26
3/16	KQ2E05-00	9/16-18	17.46	34	15	16.5	3.5	33
1/4	KQ2E07-00	9/16-18	17.46	34.5	15	17	4.6	33
5/16	KQ2E09-00	3/4-16	22.23	38	20	18.5	6	52
3/8	KQ2E11-00	7/8-14	25.4	42.5	23	21	7	70
1/2	KQ2E13-00	1-12	28.6	44.5	26	22	9.6	97



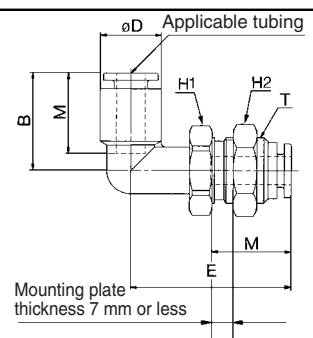
Bulkhead Male Elbow: KQ2LE



Applicable tubing O.D. (inch)	Model	T	H1 (Width across flats)	H2 (Width across flats)	B	E	Note) ϕD	Mounting hole	M	Min. port size	Weight (g)
1/8	KQ2LE01-00	1/2-20 UNF	17.46	17.46	17.5	31	9.6	13.5	15.5	2.5	27
5/32	KQ2LE03-00	1/2-20 UNF	17.46	17.46	18	31	10.4	13.5	16	3	26
3/16	KQ2LE05-00	9/16-18 UNF	17.46	17.46	19.5	34.5	11.4	15	16.5	3.5	32
1/4	KQ2LE07-00	9/16-18 UNF	17.46	17.46	20.5	35	13.2	15	17	4.6	29
5/16	KQ2LE09-00	3/4-16 UNF	22.23	22.23	23.5	38.5	15.2	20	18.5	6	53
3/8	KQ2LE11-00	7/8-14 UNF	25.4	25.4	25.5	43	17.9	23	21	7	85
1/2	KQ2LE13-00	1-12 UNF	28.6	28.6	28	46	21.7	26	22	9.6	105



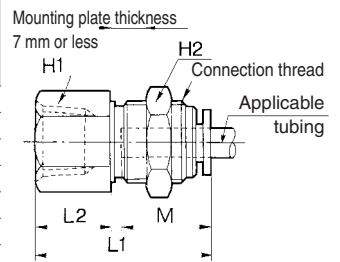
Note) ϕD : Max. diameter



Bulkhead Connector: KQ2E



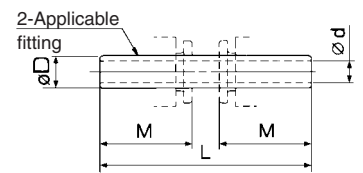
Applicable tubing O.D. (inch)	Connection thread NPT	Model	Connection thread UNF	H1 (Width across flats)	H2 (Width across flats)	L1	L2	M	Min. port size	Mounting hole	Weight (g)
1/8	1/4	KQ2E01-35	1/2 -20	17.46	17.46	31	15	15.5	2.5	13.5	36
5/32	1/4	KQ2E03-35	1/2 -20	17.46	17.46	31	15	16	3	13.5	36
3/16	1/8	KQ2E05-34	9/16-18	17.46	17.46	28	10	16.5	3.5	15	34
1/4	1/4	KQ2E07-35	9/16-18	17.46	17.46	32.5	14.5	17	4.6	15	34
5/16	3/8	KQ2E09-36	3/4 -16	22.23	22.23	35	15	18.5	6	20	52
3/8	3/8	KQ2E11-36	7/8 -14	25.4	25.4	37	14.5	21	7	23	96
1/2	3/8	KQ2E13-36	1-12	28.6	28.6	37	14	22	9.6	26	125
	1/2	KQ2E13-37	1-12			41.5	18				128



Nipple: KQ2N



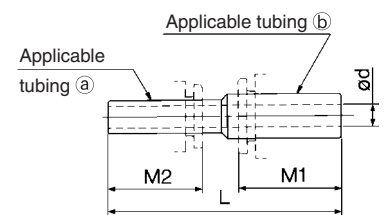
Applicable fitting øD	Model	L	M	ød	Weight (g)
1/8	KQ2N01-99	36	15.5	2.2	0.2
3/16	KQ2N05-99	38	16.5	3.5	0.4
1/4	KQ2N07-99	39	17	4.6	1
3/8	KQ2N11-99	49	21	7.5	10
1/2	KQ2N13-99	51	22	10	15



Reducer Nipple: KQ2N



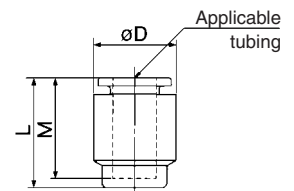
Applicable tubing O.D. (inch)		Model	L	M1	M2	ød	Weight (g)
(a)	(b)						
1/8	5/32	KQ2N01-03	36.5	16	15.5	2.2	0.2
	3/16	KQ2N01-05	37	16.5			0.4
5/32	3/16	KQ2N03-05	37.5	16.5	16	2.5	0.4
	1/4	KQ2N03-07	38	17			0.6
3/16	1/4	KQ2N05-07	38.5	17	16.5	3.5	0.6
	5/16	KQ2N05-09	41	18.5			1
1/4	5/16	KQ2N07-09	41.5	18.5	17	4.6	1
	3/8	KQ2N07-11	45	21			1
5/16	3/8	KQ2N09-11	46.5	21	18.5	6	11
	1/2	KQ2N09-13	47.5	22			22
3/8	1/2	KQ2N11-13	50	22	21	7	24



Tube Cap: KQ2C



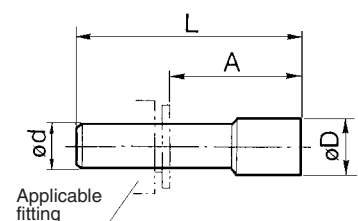
Applicable tubing O.D. (inch)	Model	øD1	L	M	Weight (g)
5/32	KQ2C03-00	10.4	17	16	1
1/4	KQ2C07-00	13.2	18	17	2
5/16	KQ2C09-00	15.2	20.5	18.5	3
3/8	KQ2C11-00	17.9	22.5	21	6



Plug: KQ2P, KQP



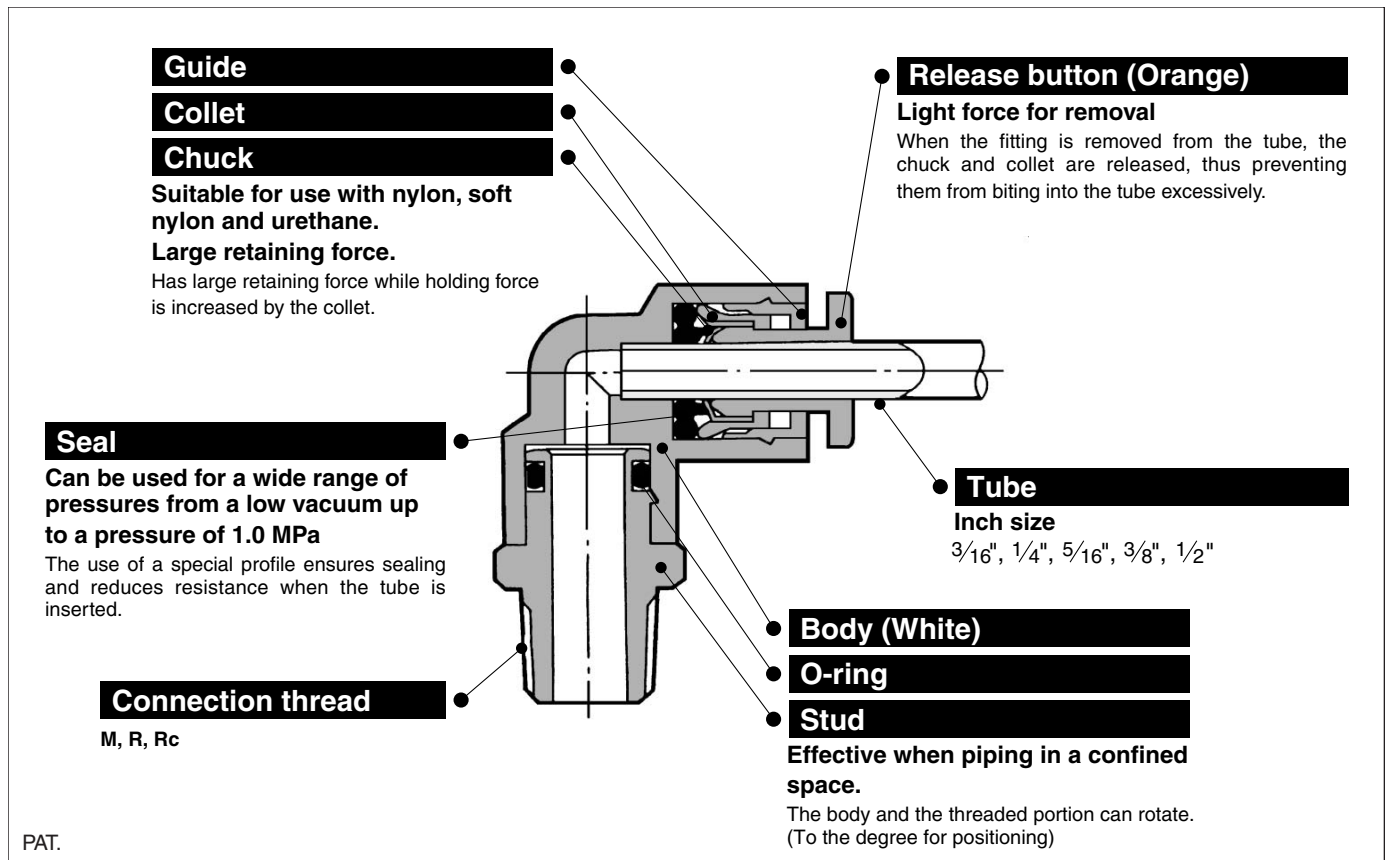
Applicable fitting size ød (inch)	Model ^{Note)}		øD	L	A	Weight (g)
1/8	KQ2P-01	KQP-01	5	31.5	16	1
5/32	KQ2P-03	KQP-03	6	32	16	1
3/16	KQ2P-05	KQP-05	6.8	34	17.5	1
1/4	KQ2P-07	KQP-07	8.5	35	18	1
5/16	KQ2P-09	KQP-09	10	39	20.5	2
3/8	KQ2P-11	KQP-11	11.5	43	22	3.5
1/2	KQ2P-13	KQP-13	15	46	24	5



Inch-size One-touch Fittings

Series KQ2

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



Applicable Tubing

Tubing material	Nylon, Soft nylon, Polyurethane
Tubing O.D. (inch)	ø3/16, ø1/4, ø5/16, ø3/8, ø1/2

Specifications

Fluid	Air/Water ^{Note)}	
Maximum operating pressure	1.0 MPa	
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)
	Nut section	JIS B 0211, Class 2 (Metric fine thread)
Thread seal	With seal	

 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	POM
Release button	POM
Seal, O-ring	NBR
Gasket	Stainless steel 304, NBR

Inch-size One-touch Fittings Series KQ2

Model		
Male connector		
KQ2H	P. 26	Use to pipe in the same direction from female thread. Most general style.
		
Extended male elbow		
KQ2W	P. 27	Basically, it is used together with male elbow. Different point is that it is used for fittings to avoid from interfering with each other by making the piping two-level.
		
Plug-in "Y"		
KQ2U	P. 29	Use to branch line in the same direction from One-touch fittings.
		
Straight union		
KQ2H	P. 26	Use to connect tubes in the same direction.
		
Male branch tee		
KQ2T	P. 27	Use to branch line from female thread in both 90° directions.
		
Male elbow		
KQ2L	P. 26	Use to pipe at right angles to female thread. Most general style.
		
Union tee		
KQ2T	P. 28	Use to connect tubes in both 90° directions.
		
Branch "Y"		
KQ2U	P. 29	Use to branch line in the same direction from female thread.
		
Bulkhead union		
KQ2E	P. 29	Use to connect male thread and tube through a panel.
		
Union elbow		
KQ2L	P. 26	Use to connect tubes at the right angles.
		
Male run tee		
KQ2Y	P. 28	Use to branch line in the same direction from female thread and 90° direction.
		
Bulkhead connector		
KQ2E	P. 29	Use to connect male thread and tube through a panel.
		
Plug-in elbow		
KQ2L	P. 27	Use to change by 90° in a tube fetching direction from One-touch fitting.
		
Plug-in reducer		
KQ2R	P. 28	Use to size down One-touch fittings.
		
Reducer elbow		
KQ2L	P. 27	Use to change by 90° in a tube fetching direction from One-touch fitting and to size down.
		
Union "Y"		
KQ2U	P. 28	Use to branch line in the same direction.
		

K□
M□
H□
D□
MS
T□
VMG

Gasket/Seal for M5 thread
Part no. M-5G2
Material Stainless steel 304, NBR

How to Order

KQ2 H 05 02 S			● With thread seal	
One-touch fittings ●	● Model		● Applicable tubing O.D.	● Port size
	H	Male connector *	01	M5
		Straight union		M5 x 0.8
	L	Male elbow *	05	01
		Union elbow	07	02
		Plug-in elbow	09	03
		Reducer elbow	11	04
	W	Extended male elbow *	13	00
		Male branch tee *		99
	T	Union tee		
		Male run tee *		
	Y	Union "Y"		
		Plug-in "Y"		
	U	Branch "Y" *		
		Plug-in reducer		
	R	Bulkhead union		
		Bulkhead connector		
	E			

*mark: With seal is available.

Series KQ2

Male Connector: KQ2H

KQ2H01-M5
KQ2H07-M5



<KQ2H05-M5>



<R>

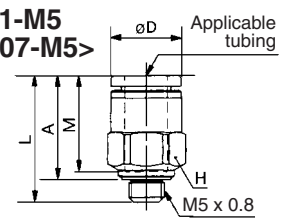


Applicable tubing O.D. (inch)	Connection thread M R	Model	H (Width across flats)	Note) øD	L	A *	M	Min. port size	Weight (g)
1/8	M5 x 0.8	KQ2H01-M5	7	—	16.7	13.6	12.7	2.5	2
	1/8	KQ2H01-01S	10	—	22	18	15.5		9
	1/4	KQ2H01-02S	14	—	19.5	13.5	15.5		16
3/16	M5 x 0.8	KQ2H05-M5	10.7	—	24	20.5	16.5	3.5	6
	1/8	KQ2H05-01S	11	—	22	18	16.5		11
	1/4	KQ2H05-02S	14	—	21	15	16.5		12
1/4	M5 x 0.8	KQ2H07-M5	11	10.3	18.4	15.3	13.6	4.6	3.3
	1/8	KQ2H07-01S	14	—	22.5	18.5	17		10
	1/4	KQ2H07-02S	14	—	23	17	17		15
	3/8	KQ2H07-03S	17	—	23	16.5	17		27
5/16	1/8	KQ2H09-01S	14	—	28	24	18.5	6	15
	1/4	KQ2H09-02S	17	—	26.5	20.5	18.5		16
	3/8	KQ2H09-03S	17	—	22.5	15.5	18.5		24
3/8	1/4	KQ2H11-02S	17	—	33.5	27.5	21	7	31
	3/8	KQ2H11-03S	17	—	29	22.5	21		29
	1/2	KQ2H11-04S	22	—	27	19	21		46
1/2	1/4	KQ2H13-02S	22	—	34.5	28.5	22	9.6	9
	3/8	KQ2H13-03S	22	—	33.5	27	22		9.6
	1/2	KQ2H13-04S	22	—	30	22	22		44

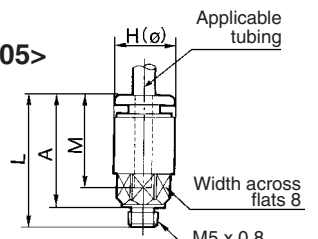


* Reference dimensions after R thread installation.
Note) øD: Max. diameter

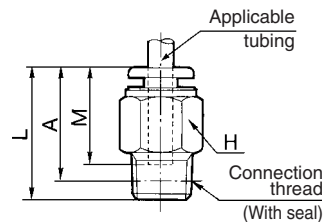
KQ2H01-M5
<KQ2H07-M5>



<KQ2H05>



<R>



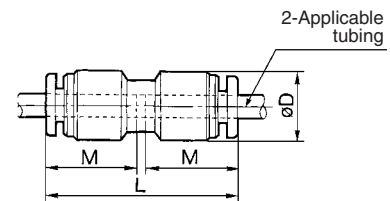
Straight Union: KQ2H



Applicable tubing O.D. (inch)	Model	Note) øD	L	M	Min. port size	Weight (g)
3/16	KQ2H05-00	11.4	34	16.5	3.5	4
1/4	KQ2H07-00	13.2	34.5	17	4.6	4
5/16	KQ2H09-00	15.2	38.5	18.5	6	6
3/8	KQ2H11-00	17.9	42.5	21	7	11
1/2	KQ2H13-00	21.7	44.5	22	9.6	16



Note) øD: Max. diameter



Male Elbow: KQ2L

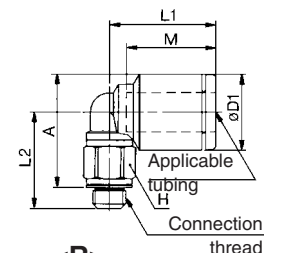


Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A *	M	Min. port size	Weight (g)
1/8	M5 x 0.8	KQ2L01-M5	7	8.4	—	15.3	13.2	14.3	12.7	2.3	2.5
	1/8	KQ2L05-01S	10	11.4	10	19.5	22.5	24	16.5	3.5	10
3/16	1/4	KQ2L05-02S	14	—	—	—	26.5	26	16.5	3.5	19
	M5 x 0.8	KQ2L07-M5	7	12	—	16.1	15.1	18	13.6	2.3	3.2
	1/8	KQ2L07-01S	10	—	—	—	23.5	26	17	4.6	10
1/4	1/4	KQ2L07-02S	14	13.2	10	20.5	27.5	28	17	4.6	20
	3/8	KQ2L07-03S	17	—	—	—	29.5	29.5	17	4.6	32
5/16	1/8	KQ2L09-01S	12	15.2	12	23.5	24.5	28	18.5	6	12
	1/4	KQ2L09-02S	14	—	—	—	28.5	30	18.5	6	20
	3/8	KQ2L09-03S	17	—	—	—	30.5	31.5	18.5	6	28
3/8	1/4	KQ2L11-02S	17	17.9	17	25.5	29.5	32.5	21	7	23
	3/8	KQ2L11-03S	17	—	—	—	31.5	34	21	7	33
	1/2	KQ2L11-04S	22	—	—	—	35.5	36.5	21	7	59
1/2	1/4	KQ2L13-02S	17	21.7	17	28	31.5	36.5	22	9	28
	3/8	KQ2L13-03S	17	—	—	—	33.5	38.5	22	9.6	36
	1/2	KQ2L13-04S	22	—	—	—	37.5	40	22	9.6	62

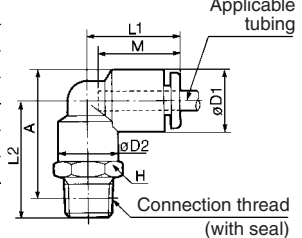


* Reference dimensions after R thread installation.
Note) øD1: Max. diameter

<M5>



<R>



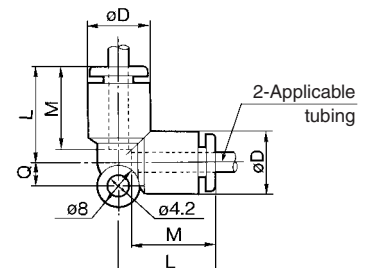
Union Elbow: KQ2L



Applicable tubing O.D. (inch)	Model	Note) øD	L	Q	M	Min. port size	Weight (g)
3/16	KQ2L05-00	11.4	19.5	4.8	16.5	3.5	5
1/4	KQ2L07-00	13.2	20.5	5.3	17	4.6	5
5/16	KQ2L09-00	15.2	23	6	18.5	6	7
3/8	KQ2L11-00	17.9	26	6.6	21	7	13
1/2	KQ2L13-00	21.7	29	7.8	22	9.6	18



Note) øD: Max. diameter



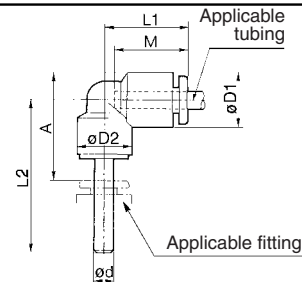
Plug-in Elbow: KQ2L



Applicable tubing O.D. (inch)	Applicable fitting size ϕd (inch)	Model	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Min. port size	Weight (g)
3/16	3/16	KQ2L05-99	11.4	10	19.5	34	23.5	16.5	3.5	7
1/4	1/4	KQ2L07-99	13.2	10	20	27.5	17.5	17	4.6	8
5/16	5/16	KQ2L09-99	15.2	12	22.5	31.5	21	18.5	6	6
3/8	3/8	KQ2L11-99	17.9	13.6	25	35	23	21	7	19
1/2	1/2	KQ2L13-99	21.7	17	28	44.5	34	22	9.6	27



Note) $\phi D1$: Max. diameter



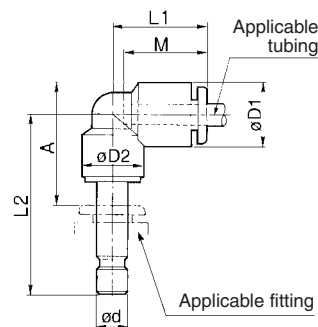
Reducer Elbow: KQ2L



Applicable tubing O.D. (inch)	Applicable fitting size ϕd (inch)	Model	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Min. port size	Weight (g)
3/16	1/4	KQ2L05-07	11.4	10	19.5	34.5	23.5	16.5	3.5	8
	5/16	KQ2L05-09				35.5	23			11
1/4	5/16	KQ2L07-09	13.2	10	20.5	36.5	24.5	17	4.6	12
	3/8	KQ2L07-11				37.5	23.5			17
5/16	3/8	KQ2L09-11	15.2	12	23.5	40.5	27.5	18.5	6	17
	1/2	KQ2L09-13				41.5				30
3/8	1/2	KQ2L11-13	17.9	17	25.5	43	30	21	7	25



Note) $\phi D1$: Max. diameter



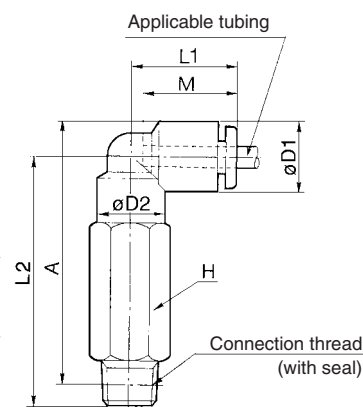
Extended Male Elbow: KQ2W



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A *	M	Min. port size	Weight (g)
3/16	1/8	KQ2W05-01S	10	11.4	10	19.5	38	40	16.5	3.5	19
	1/4	KQ2W05-02S	14				44	43.5			41
1/4	1/8	KQ2W07-01S	10	13.2	10	20.5	40.5	43	17	4.6	20
	1/4	KQ2W07-02S	14				46.5	47			45
	3/8	KQ2W07-03S	17				48.5	49			69
	1/8	KQ2W09-01S	12				43.5	47			30
5/16	1/4	KQ2W09-02S	14	15.2	12	23.5	49.5	51	18.5	6	47
	3/8	KQ2W09-03S	17				51.5	53			74
3/8	1/4	KQ2W11-02S	17	17.9	17	25.5	56	59	21	7	69
	3/8	KQ2W11-03S	17				58	61			76
	1/2	KQ2W11-04S	22				64.5	65.5			147
1/2	1/4	KQ2W13-02S	17	21.7	17	28	58	63	22	9	72
	3/8	KQ2W13-03S	17				60	64.5		9.6	78
	1/2	KQ2W13-04S	22				66.5	69		149	



* Reference dimensions after R thread installation.
Note) $\phi D1$: Max. diameter



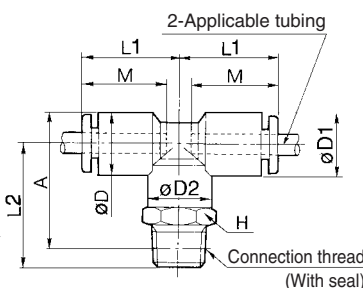
Male Branch Tee: KQ2T



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A *	M	Min. port size	Weight (g)
3/16	1/8	KQ2T05-01S	10	11.4	10	19.5	22.5	24	16.5	3.5	12
	1/4	KQ2T05-02S	14				26.5	26			21
1/4	1/8	KQ2T07-01S	10	13.2	10	20.5	23.5	26	17	4.6	11
	1/4	KQ2T07-02S	14				27.5	28			21
	3/8	KQ2T07-03S	17				29.5	30			34
	1/8	KQ2T09-01S	12				24.5	28			15
5/16	1/4	KQ2T09-02S	14	15.2	12	23	28.5	30	18.5	6	23
	3/8	KQ2T09-03S	17				30.5	31.5			35
	1/4	KQ2T11-02S	17				17.9	17			25.5
3/8	KQ2T11-03S	17	31.5	34.5	38						
1/2	KQ2T11-04S	22	35.5	36.5	64						
1/2	1/4	KQ2T13-02S	17	21.7	17	28	31.5	36.5	22	9	34
	3/8	KQ2T13-03S	17				33.5	38.5		9.6	43
	1/2	KQ2T13-04S	22				37.5	40		69	



* Reference dimensions after R thread installation.
Note) $\phi D1$: Max. diameter



K□

M□

H□

D□

MS

T□

VMG

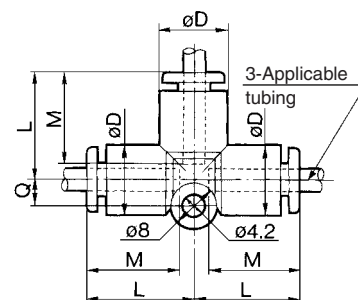
Series KQ2

Union Tee: KQ2T



Applicable tubing O.D. (inch)	Model	Note) ϕD	L	Q	M	Min. port size	Weight (g)
3/16	KQ2T05-00	11.4	19.5	4.8	16.5	3.5	7
1/4	KQ2T07-00	13.2	20.5	5.3	17	4.6	8
5/16	KQ2T09-00	15.2	23	6	18.5	6	11
3/8	KQ2T11-00	17.9	26	6.6	21	7	18
1/2	KQ2T13-00	21.7	29	7.8	22	9.6	26

Note) ϕD : Max. diameter

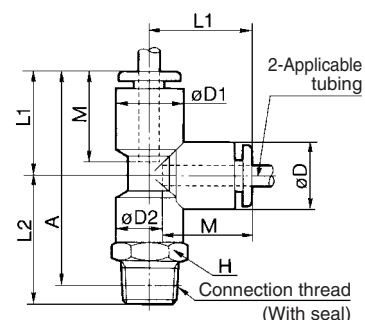


Male Run Tee: KQ2Y



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	A *	M	Min. port size	Weight (g)
3/16	1/8	KQ2Y05-01S	10	11.4	10	19.5	22.5	38	16.5	3.5	12
	1/4	KQ2Y05-02S	14				26.5	40			21
1/4	1/8	KQ2Y07-01S	10	13.2	10	20.5	23.5	40	17	4.6	11
	1/4	KQ2Y07-02S	14				27.5	42			21
	3/8	KQ2Y07-03S	17				29.5	44			34
5/16	1/8	KQ2Y09-01S	12	15.2	12	23.5	24.5	40	18.5	6	15
	1/4	KQ2Y09-02S	14				28.5	40			23
	3/8	KQ2Y09-03S	17				30.5	48			35
3/8	1/4	KQ2Y11-02S	17	17.9	17	25.5	29.5	49	21	7	29
	3/8	KQ2Y11-03S					31.5	51			38
	1/2	KQ2Y11-04S					35.5	53			64
1/2	1/4	KQ2Y13-02S	17	21.7	17	28	31.5	53.5	22	9.5	34
	3/8	KQ2Y13-03S					33.5	55.5			43
	1/2	KQ2Y13-04S					37.5	57			69

* Reference dimensions after R thread installation.
Note) $\phi D1$: Max. diameter

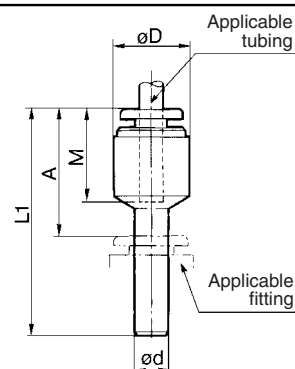


Plug-in Reducer: KQ2R



Applicable tubing O.D. (inch)	Applicable fitting size ϕd (inch)	Model	Note) ϕD	L1	A	M	Min. port size	Weight (g)
3/16	1/4	KQ2R05-07	11.4	34.5	18.5	16.5	3.5	12
	5/16	KQ2R05-09	10.7	36.5	18			14
1/4	5/16	KQ2R07-09	12.5	37	18.5	17	4.6	17
	3/8	KQ2R07-11	13.2	40	19.5			19
5/16	3/8	KQ2R09-11	14	40	19	18.5	6	24
	1/2	KQ2R09-13		41				32
3/8	1/2	KQ2R11-13	17.9	44	22	21	7	32

Note) ϕD : Max. diameter

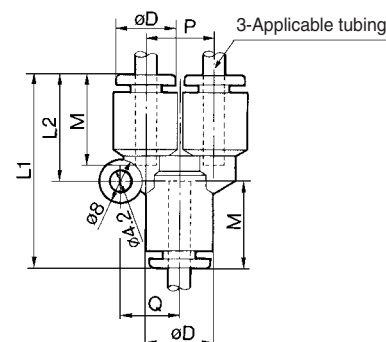


Union "Y": KQ2U



Applicable tubing O.D. (inch)	Model	Note) ϕD	L1	L2	P	Q	M	Min. port size	Weight (g)
3/16	KQ2U05-00	11.4	36.5	20.5	11.4	10.6	16.5	3.5	9
1/4	KQ2U07-00	13.2	38	21.5	13.2	12	17	4.6	9
5/16	KQ2U09-00	15.2	42.5	24.5	15.2	13.7	18.5	6	11

Note) ϕD : Max. diameter



Inch-size One-touch Fittings Series KQ2

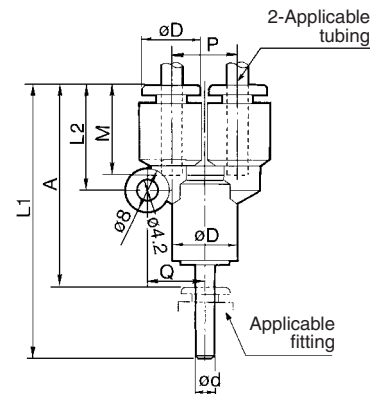
Plug-in "Y": KQ2U



Applicable tubing O.D. (inch)	Applicable fitting size ϕd (inch)	Model	Note) ϕD	L1	L2	P	Q	A	M	Min. port size	Weight (g)
3/16	3/16	KQ2U05-99	11.4	56	20.5	11.4	10.6	39.5	16.5	3.5	17
1/4	1/4	KQ2U07-99	13.2	56.5	21.5	13.2	12	39.5	17	4.6	18
5/16	5/16	KQ2U09-99	15.2	64.5	24.5	15.2	13.7	46	18.5	6	21



Note) ϕD : Max. diameter



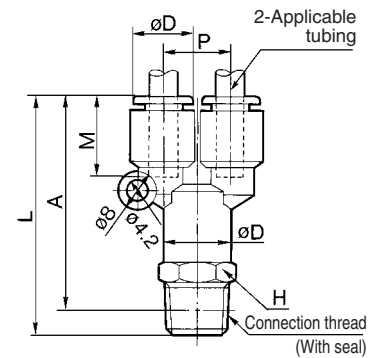
Branch "Y": KQ2U



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note) ϕD	L	P	A *	M	Min. port size	Weight (g)
3/16	1/8	KQ2U05-01S	12	11.4	44	11.4	40	16.5	3.5	18
	1/4	KQ2U05-02S	14		48.5		42.5			18
1/4	1/8	KQ2U07-01S	14	13.2	46.5	13.2	42.5	17	4.6	19
	1/4	KQ2U07-02S			49.5					19
	3/8	KQ2U07-03S			51.5		45			19
5/16	1/8	KQ2U09-01S	17	15.2	52.5	15.2	48.5	18.5	6	21
	1/4	KQ2U09-02S			55.5		49.5			22
	3/8	KQ2U09-03S			56.5		50			35
3/8	1/4	KQ2U11-02S	19	17.9	60	17.9	54	21	7	42
	3/8	KQ2U11-03S			61		54.5			43
	1/2	KQ2U11-04S			64.5		56.5			56
1/2	3/8	KQ2U13-02S	22	21.7	64.5	21.7	58.5	22	9.5	31
	3/8	KQ2U13-03S			65.5		59			41
	1/2	KQ2U13-04S			68.5		60.5			68



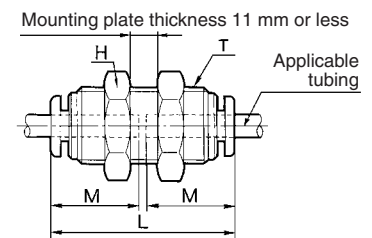
* Reference dimensions after R thread installation.
Note) ϕD : Max. diameter



Bulkhead Union: KQ2E



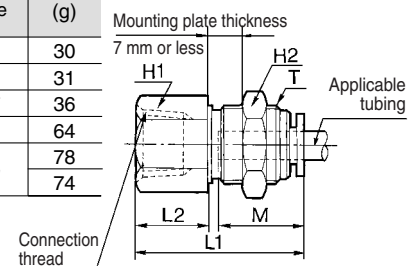
Applicable tubing O.D. (inch)	Model	T (M)	H (Width across flats)	L	Mounting hole	M	Min. port size	Weight (g)
3/16	KQ2E05-00M	M14 x 1	17	34	15	16.5	3.5	30
1/4	KQ2E07-00M	M14 x 1	17	34.5	15	17	4.6	30
5/16	KQ2E09-00M	M16 x 1	19	38	17	18.5	6	48
3/8	KQ2E11-00M	M20 x 1	24	42.5	21	21	7	62
1/2	KQ2E13-00M	M22 x 1	27	44.5	23	22	9.6	85



Bulkhead Connector: KQ2E



Applicable tubing O.D. (inch)	Connection thread R	Model	T (M)	H1 (Width across flats)	H2 (Width across flats)	L1	L2	M	Min. port size	Mounting hole	Weight (g)
3/16	1/8	KQ2E05-01	M14 x 1	17	17	28	11.5	16.5	3.5	15	30
1/4	1/4	KQ2E07-02	M14 x 1	17	17	32.5	14.5	17	4.6	15	31
5/16	3/8	KQ2E09-03	M16 x 1	19	19	35	15	18.5	6	17	36
3/8	3/8	KQ2E11-03	M20 x 1	22	24	35	14.5	21	7	21	64
1/2	3/8	KQ2E13-03	M22 x 1	24	27	37	14.5	22	9.6	23	78
	1/2	KQ2E13-04	M22 x 1			41.5	18.5				74



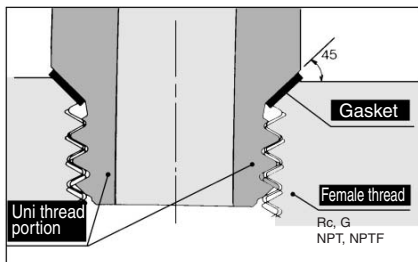
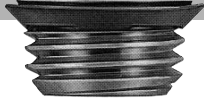
Inch-size Uni One-touch Fittings

Series KQ2

Applicable Tubing: Inch Size

Connection Thread: Rc, G, NPT, NPTF

New-stand male thread for piping that reduces the screw-in time by 1/3.



Uni thread ridge shape

A gasket made of a stainless sheet covered with laminated NBR on both sides is seated on the chamfer of a female thread for a perfect sealing construction irrespective of the difference in thread diameters due to the difference in the types of female threads, variation in tolerance, or difference in the size of chamfer.

A ridge shape has been created as a Uni thread for common applications for Rc, G, NPT and NPTF.

The male thread for piping drastically cuts piping man-hours.



Product's Color

Series	Body	Release button
Series KQ2	White	Orange
Series KQ	Black	Red

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.

Body

O-ring

Stud

Effective when piping in a confined space.

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

Gasket

Uni thread

Chuck

Large retaining force.

Has large retaining force while holding force is increased by the collet.

Collet

Guide

Tube

Release button (Orange)

Light force for removal

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

Applicable Tubing

Tubing material	Nylon, Soft nylon, Polyurethane
Tubing O.D. (inch)	$\phi 1/8$, $\phi 5/32$, $\phi 3/16$, $\phi 1/4$, $\phi 5/16$, $\phi 3/8$, $\phi 1/2$

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)



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
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

K□

M□

H□

D□

MS

T□

VMG

Series KQ2

Model

Male connector

KQ2H

P. 33



Use to pipe in the same direction from female thread. Most general style.

Male elbow

KQ2L

P. 33



Use to pipe at right angles to female thread. Most general style.

Male branch tee

KQ2T

P. 33



Use to branch line from female thread in both 90° directions.

Male run tee

KQ2Y

P. 34



Use to branch line in the same direction from female thread and in 90° direction.

Branch "Y"

KQ2U

P. 34



Use to branch line in the same direction from female thread.

Extended male elbow

KQ2W

P. 34



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

Gasket

KQG



Thread seal

How to Order

KQ

2

H

05

U01

One-touch fittings

Product's color

Model

Applicable tubing O.D.

Port size

Symbol	Body	Release button
2	White	Orange
Nil	Black	Red

H	Male connector
L	Male elbow
W	Extended male elbow
T	Male branch tee
Y	Male run tee
U	Branch "Y"

01	1/8
03	5/32
05	3/16
07	1/4
09	5/16
11	3/8
13	1/2

U01	Uni 1/8
U02	Uni 1/4
U03	Uni 3/8
U04	Uni 1/2

How to Order Gasket

KQG

U01

Gasket for Uni One-touch fittings

Applicable port size

U01	Uni 1/8
U02	Uni 1/4
U03	Uni 3/8
U04	Uni 1/2

<Inch size> Male Connector: KQ2H

Applicable tubing O.D. (inch)	Connection thread Uni thread	Model	H (Width across flats)	L	A *	M	Min. port size	Weight (g)	
1/8	1/8	KQ2H01-U01	11.11	18.5	13.5	15.5	2.5	7	
	1/4	KQ2H01-U02	14.29	16	10			10	
5/32	1/8	KQ2H03-U01	11.11	18.5	13.5	16	3	6	
	1/4	KQ2H03-U02	14.29	16.5	10.5			10	
3/16	1/8	KQ2H05-U01	12.7	18.5	13.5	16	3.5	7	
	1/4	KQ2H05-U02	14.29	17	11			9	
1/4	1/8	KQ2H07-U01	14.29	22.5	17.5	17	4.6	9	
	1/4	KQ2H07-U02		20.5	14.5			11	
	3/8	KQ2H07-U03	17.46	17.5	11.5			16	
5/16	1/8	KQ2H09-U01	14.29	25	20.5	18.5	6	12	
	1/4	KQ2H09-U02		21.5	15.5			9	
	3/8	KQ2H09-U03	17.46	19.5	13.5			16	
3/8	1/4	KQ2H11-U02	17.46	28	22	21	7	19	
	3/8	KQ2H11-U03						16	
	1/2	KQ2H11-U04	22.23	22	14			30	
1/2	1/4	KQ2H13-U02	22.23	30	24	22	9	33	
	3/8	KQ2H13-U03		28.5	22.5			30	
	1/2	KQ2H13-U04		25	17			28	

* Reference dimensions after Uni thread installation.

<Inch size> Male Elbow: KQ2L

Applicable tubing O.D. (inch)	Connection thread Uni thread	Model	H (Width across flats)	øD1	øD2	L1	L2	A *	M	Min. port size	Weight (g)	
1/8	1/8	KQ2L01-U01	11.11	9.6	10	17.5	20	20.5	15.5	2.5	6	
	1/4	KQ2L01-U02	14.29				22	21			13	
5/32	1/8	KQ2L03-U01	11.11	10.4	10	18	20	21.5	16	3	7	
	1/4	KQ2L03-U02	14.29				22.5	21.5			13	
3/16	1/8	KQ2L05-U01	11.11	11.4	10	19.5	20.5	22.5	16	3.5	8	
	1/4	KQ2L05-U02	14.29				23	22.5			14	
1/4	1/8	KQ2L07-U01	11.11	13.2	10	20.5	21.5	24	17	4.6	8	
	1/4	KQ2L07-U02	14.29				23.5	24.5			15	
	3/8	KQ2L07-U03	17.46				24.5	25			21	
5/16	1/8	KQ2L09-U01	12.7	15.2	12	23.5	22.5	25.5	18.5	6	10	
	1/4	KQ2L09-U02	14.29				24.5	26.5			15	
	3/8	KQ2L09-U03	17.46				25.5	27			17	
3/8	1/4	KQ2L11-U02	17.46	17.9	17	25.5	26.5	29.5	21	7	18	
	3/8	KQ2L11-U03					27	30			22	
	1/2	KQ2L11-U04	22.23				30	31			41	
1/2	1/4	KQ2L13-U02	17.46	21.7	17	28	28.5	33	22	9	23	
	3/8	KQ2L13-U03					28.5	33.5			31	
	1/2	KQ2L13-U04	22.23				32	35			44	

* Reference dimensions after Uni thread installation.

<Inch size> Male Branch tee: KQ2T

Applicable tubing O.D. (inch)	Connection thread Uni thread	Model	H (Width across flats)	øD1	øD2	L1	L2	A *	M	Min. port size	Weight (g)	
1/8	1/8	KQ2T01-U01	11.11	9.6	10	17.5	20	21	15.5	2.5	8	
	1/4	KQ2T01-U02	14.29				22	21			15	
5/32	1/8	KQ2T03-U01	11.11	10.4	10	18	20	21.5	16	3	9	
	1/4	KQ2T03-U02	14.29				22.5	21.5			15	
3/16	1/8	KQ2T05-U01	11.11	11.4	10	19.5	20.5	22.5	16.5	3.5	10	
	1/4	KQ2T05-U02	14.29				23	22.5			16	
1/4	1/8	KQ2T07-U01	11.11	13.2	10	20.5	21.5	24	17	4.6	10	
	1/4	KQ2T07-U02	14.29				23.5	24.5			17	
	3/8	KQ2T07-U03	17.46				24.5	25			24	
5/16	1/8	KQ2T09-U01	12.7	15.2	12	23.5	22.5	26	18.5	6	14	
	1/4	KQ2T09-U02	14.29				24.5	26.5			19	
	3/8	KQ2T09-U03	17.46				25.5	27			25	
3/8	1/4	KQ2T11-U02	17.46	17.9	17	25.5	26.5	29.5	21	7	24	
	3/8	KQ2T11-U03					27	30			27	
	1/2	KQ2T11-U04	22.23				30	31			46	
1/2	1/4	KQ2T13-U02	17.46	21.7	17	28	28.5	33	22	9	29	
	3/8	KQ2T13-U03					28.5	33.5			32	
	1/2	KQ2T13-U04	22.23				32	35			51	

* Reference dimensions after Uni thread installation.

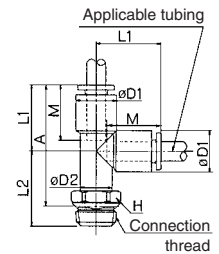
Series KQ2

<Inch size> Male Run Tee: KQ2Y



Applicable tubing O.D. (inch)	Connection thread Uni thread	Model	H (Width across flats)	øD1	øD2	L1	L2	A *	M	Min. port size	Weight (g)
1/8	1/8	KQ2Y01-U01	11.11	9.6	10	17.5	20	33.5	15.5	2.5	8
	1/4	KQ2Y01-U02	14.29				22				15
5/32	1/8	KQ2Y03-U01	11.11	10.4	10	18	20	34	16	3	9
	1/4	KQ2Y03-U02	14.29				22.5				15
3/16	1/8	KQ2Y05-U01	11.11	11.4	10	19.5	20.5	36	16.5	3.5	10
	1/4	KQ2Y05-U02	14.29				23				16
1/4	1/8	KQ2Y07-U01	11.11	13.2	10	20.5	21.5	38	17	4.6	10
	1/4	KQ2Y07-U02	14.29				23.5				17
	3/8	KQ2Y07-U03	17.46				24.5				24
	1/2	KQ2Y07-U04	22.23				30				46
5/16	1/8	KQ2Y09-U01	12.7	15.2	12	23.5	22.5	42	18.5	6	14
	1/4	KQ2Y09-U02	14.29				24.5				19
	3/8	KQ2Y09-U03	17.46				25.5				25
	1/2	KQ2Y09-U04	22.23				30				46
3/8	1/4	KQ2Y11-U01	14.29	17.9	17	25.5	26.5	46	21	7	24
	3/8	KQ2Y11-U03	17.46				27				27
	1/2	KQ2Y11-U04	22.23				30				46
	3/4	KQ2Y11-U05	27.14				36				79
1/2	1/4	KQ2Y13-U01	14.29	21.7	17	28	28.5	50.5	22	9.6	29
	3/8	KQ2Y13-U03	17.46				32				32
	1/2	KQ2Y13-U04	22.23				36				51
	3/4	KQ2Y13-U05	27.14				42				84

* Reference dimensions after Uni thread installation.

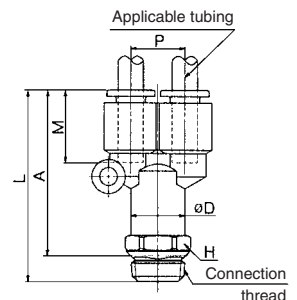


<Inch size> Branch "Y": KQ2U



Applicable tubing O.D. (inch)	Connection thread Uni thread	Model	H (Width across flats)	øD	L	P	A *	M	Min. port size	Weight (g)
1/8	1/8	KQ2U01-U01	12.7	9.6	38.5	9.6	34.5	15.5	2.5	10
	1/4	KQ2U01-U02	14.29		40.5					
5/32	1/8	KQ2U03-U01	12.7	10.4	40	10.4	36	16	3	12
	1/4	KQ2U03-U02	14.29		42					
3/16	1/8	KQ2U05-U01	12.7	11.4	42	11.4	38	16.5	3.5	14
	1/4	KQ2U05-U02	14.9		44.5		39			
1/4	1/8	KQ2U07-U01	14.29	13.2	44.5	13.2	40.5	17	4.6	15
	1/4	KQ2U07-U02	17.46		46		40			
	3/8	KQ2U07-U03	17.46		46.5		40.5			
	1/2	KQ2U07-U04	22.23		51.5		45.5			
5/16	1/8	KQ2U09-U01	12.7	15.2	50.5	15.2	46.5	18.5	6	20
	1/4	KQ2U09-U02	14.29		52		46			
	3/8	KQ2U09-U03	17.46		51.5		45.5			
	1/2	KQ2U09-U04	22.23		59		51			
3/8	1/4	KQ2U11-U01	14.29	17.9	56.5	17.9	50.5	21	7	32
	3/8	KQ2U11-U03	17.46		59		51			
	1/2	KQ2U11-U04	22.23		62.7		54.7			
	3/4	KQ2U11-U05	27.14		71.1		63.1			
1/2	1/4	KQ2U13-U01	14.29	21.7	61	21.7	55	22	9.6	30
	3/8	KQ2U13-U03	17.46		64		56			
	1/2	KQ2U13-U04	22.23		71.1		63.1			
	3/4	KQ2U13-U05	27.14		79.5		71.9			

* Reference dimensions after Uni thread installation.

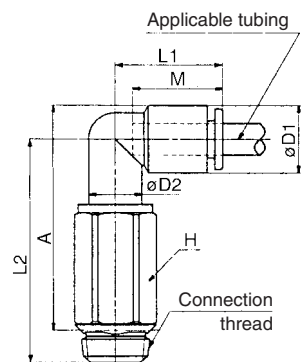


<Inch size> Extended Male Elbow: KQ2W



Applicable tubing O.D. (inch)	Connection thread Uni thread	Model	H (Width across flats)	øD1	øD2	L1	L2	A *	M	Min. port size	Weight (g)
1/8	1/8	KQ2W01-U01	11.11	9.6	10	17.5	34.5	34	15.5	2.5	17
	1/4	KQ2W01-U02	14.29				36.5				26
5/32	1/8	KQ2W03-U01	11.11	10.4	10	18	34.5	35.5	16	3	18
	1/4	KQ2W03-U02	14.29				37				26
3/16	1/8	KQ2W05-U01	11.11	11.4	10	19.5	35	36	16.5	3.5	19
	1/4	KQ2W05-U02	14.29				40				27
1/4	1/8	KQ2W07-U01	11.11	13.2	10	20.5	36	37.5	17	4.6	21
	1/4	KQ2W07-U02	14.29				41				31
	3/8	KQ2W07-U03	17.46				41.5				39
	1/2	KQ2W07-U04	22.23				43.5				59
5/16	1/8	KQ2W09-U01	12.7	15.2	12	23.5	43.5	46.5	18.5	6	26
	1/4	KQ2W09-U02	14.29				45.5				35
	3/8	KQ2W09-U03	17.46				46				39
	1/2	KQ2W09-U04	22.23				52.5				97
3/8	1/4	KQ2W11-U01	14.29	17.9	17	25.5	52.5	55.5	21	7	55
	3/8	KQ2W11-U03	17.46				52				55
	1/2	KQ2W11-U04	22.23				54.5				97
	3/4	KQ2W11-U05	27.14				60.5				159
1/2	1/4	KQ2W13-U01	14.29	21.7	17	28	54	59	22	9.6	64
	3/8	KQ2W13-U03	17.46				56				64
	1/2	KQ2W13-U04	22.23				62.7				100
	3/4	KQ2W13-U05	27.14				68.7				164

* Reference dimensions after Uni thread installation.



⚠ 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.

Handling of Uni One-touch Fittings

⚠ Caution

1. First tighten by hand, then use a proper wrench, which could be suitable for the hexagon across flats on the body to tighten with the proper tightening torque given below.

Connecting Female Thread: Rc, NPT, NPTF

Nominal size of Uni thread	Recommended tightening torque (N·m)	Approx. spanner tightening angle after tightened by hand (deg)
1/8	5 to 7	30 to 60
1/4	11 to 13	30 to 60
3/8	14 to 16	15 to 45
1/2	20 to 22	15 to 30

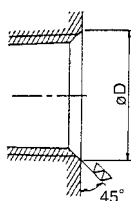
Connecting Female Thread: G

Nominal size of Uni thread	Recommended tightening torque (N·m)	Approx. spanner tightening angle after tightened by hand (deg)
1/8	3 to 4	30 to 45
1/4	4 to 5	15 to 30
3/8	8 to 9	15 to 30
1/2	14 to 15	15 to 30

2. Gasket can be recycled 6 to 10 times. It can be replaced easily when it has sustained damage. A broken gasket can be removed by holding and then turning in the same direction of loosening the thread. If it is difficult to remove, cut it with nippers, etc. In such a case, use caution not to scratch seat face because the seat face of 45° gasket of fitting is the sealing face.
3. Please consult with SMC if using for other fluids than air.
4. Other precautions on handling, etc. are the same as those of One-touch fittings.

Chamfered area for female thread (Recommended value)

By chamfering as shown in the following table, machining of threads is easier and effective for burr prevention, too.



Female thread size	Chamfered port size øD (Recommended value)	
	Rc, G	NPT, NPTF
1/8	10.2 to 11.8	10.5 to 11.8
1/4	13.6 to 15.8	14.1 to 15.8
3/8	17.1 to 19.4	17.4 to 19.4
1/2	21.4 to 25.1	21.7 to 25.1

K□

M□

H□

D□

MS

T□

VMG