

# One-touch Fittings

## Series KQ2

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

### How to Order

**KQ 2 H 06 01 S**

One-touch fittings

Product's color

Symbol	Body	Release button
2	White	Light gray
Nil	Black	Blue

Applicable tubing O.D.

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

Port size/Applicable tubing O.D.

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

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

With thread seal

Nil	None
S	With thread seal

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

#### Model

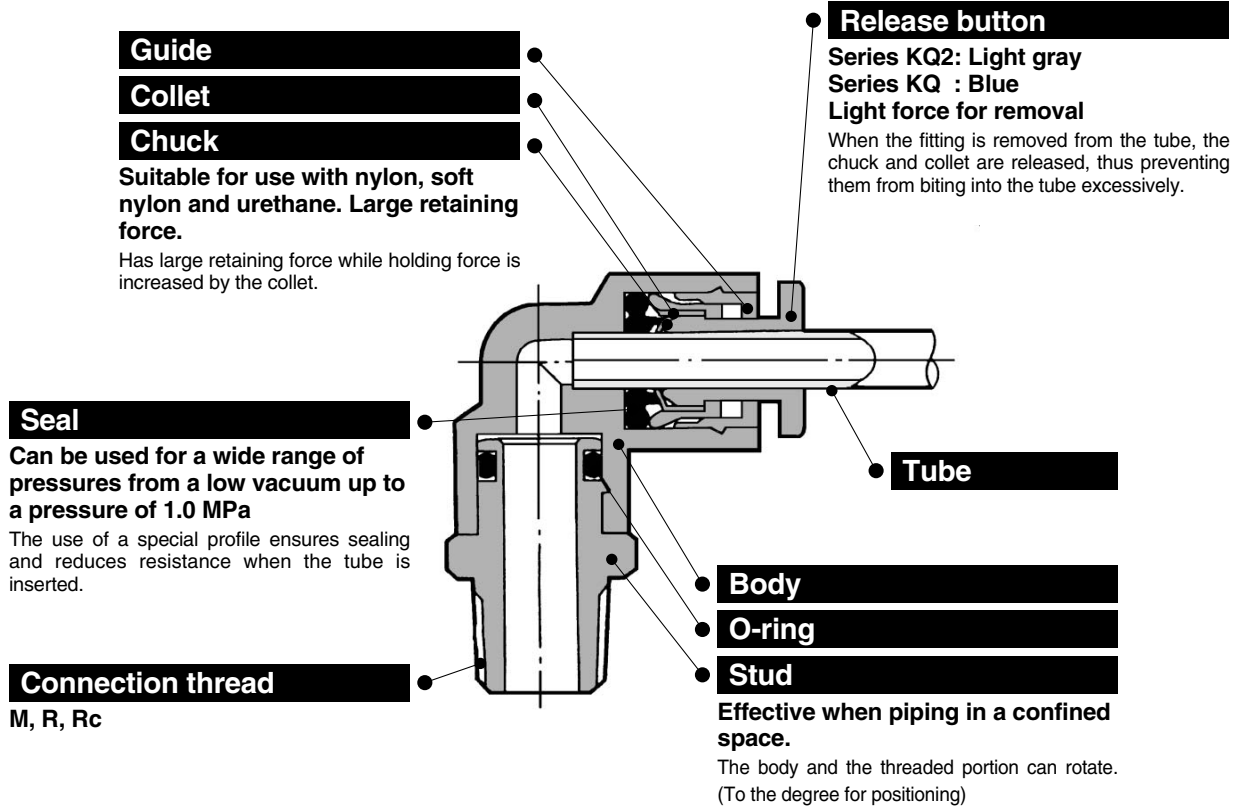
H	Male connector	T	Male branch tee
	Straight union		Union tee
S	Hex. socket head male connector	TW	Different diameter tee * (Note)
			Cross*
F	Female connector	TX	Different diameter cross*
L	Male elbow	TY	Different diameter cross*
	Union elbow	Y	Male run tee
	Plug-in elbow	D	Male delta union
	Reducer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

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

Use the below part number to order the gasket for M5 and M6 threads.  
Gasket for M5 thread: M-5G2  
Gasket for M6 thread: M-6G

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

Series KQ2: White body  
Series KQ : Black body



PAT.

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

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

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

### Applicable Tubing

Tube material	Nylon, Soft nylon, Polyurethane
Tube 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 <sup>(Note)</sup>	
Maximum operating pressure	1.0 MPa	
Operating vacuum pressure	-100 kPa	
Proof pressure	3.0 MPa	
Ambient and fluid temperature	-5 to 60°C, Water: 0 to 40°C (No freezing)	
Thread	Mounting section	JIS B 0203 (Taper thread for piping) JIS B 0209 Class 2 (Metric coarse thread)
	Nut section	JIS B 0211 Class 2 (Metric fine thread)
Seal (Thread portion)	With seal or none	

Note) Applicable for general industrial water. Please consult with SMC if using for other kinds of fluid. Also, the surge pressure must be under the maximum operating pressure.


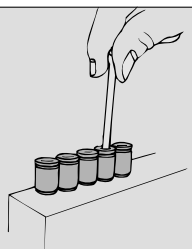

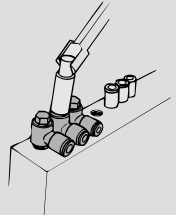

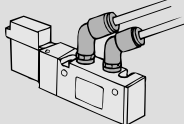

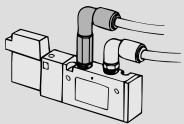

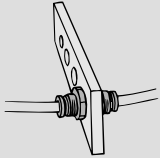

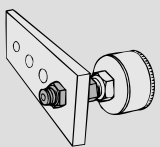

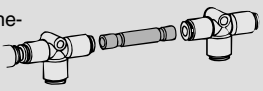

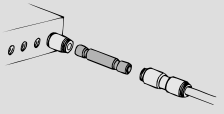









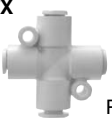





### Principal Parts Material

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



**Made to Order** P. 15-2-30

# Series KQ2

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

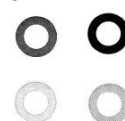
**KQ2XD** P. 27



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



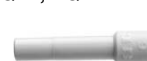
Use to branch line in the same direction from female thread and in 90° direction.

**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>

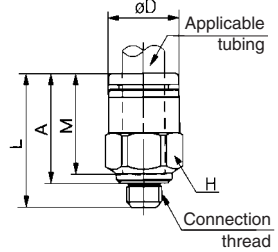


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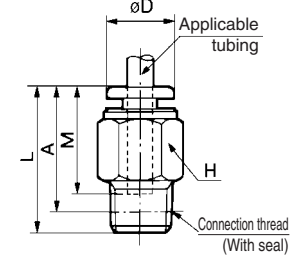


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	<sup>(1)</sup> $\phi D$	L	A*	M	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		Weight (g)
								Nylon	Urethane	
3.2	M5 x 0.8	KQ2H23-M5	7	7	16.7	13.6	12.7	3	2.5	2.1
	1/8	KQ2H23-01S	10	—	22	18	15.5	3.4	2.9	9
	1/4	KQ2H23-02S	14	—	19.5	13.5		4	2.4	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	17	16	5.6	4	2.5
	1/8	KQ2H04-01S	10	—	22	18		4	9	16
6	M5 x 0.8	KQ2H06-M5	10	10	17.8	14.7	13.5	4	4	3.3
	M6 x 1.0	KQ2H06-M6	10	—	19	14.9		17	13.1	10.4
	1/8	KQ2H06-01S	12	—	22.5	18.5	16		16	27
8	1/4	KQ2H06-02S	14	—	23	17	18.5	26.1	18.0	14
	3/8	KQ2H06-03S	17	—	22	15.5				21
	1/8	KQ2H08-01S	14	—	28	24	26.1	26.1	19	
10	1/4	KQ2H10-01S	17	—	30	26	21	41.5	29.5	19
	3/8	KQ2H10-02S	17	—	33.5	27.5				30
	1/2	KQ2H10-03S	22	—	29	22.5	27	19	53	
12	1/4	KQ2H10-04S	22	—	27	19	22	58.3	46.1	42
	3/8	KQ2H12-02S	19	—	34.5	28.5				34
	1/2	KQ2H12-03S	22	—	30	22	81	(81)	61	
16	3/8	KQ2H16-03S	24	25.7	39.5	33	25	113	(96)	61
	1/2	KQ2H16-04S	24	25.7	35.5	27.5				47

<M5, M6>



<R>



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

## Hexagon Socket Head Male Connector: KQ2S

<M5, M6>

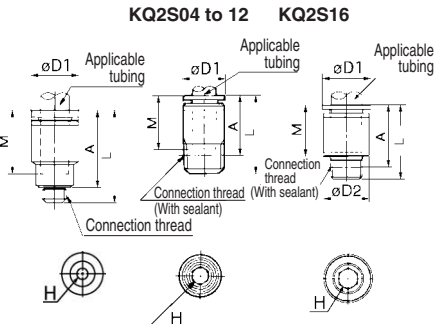


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Applicable tubing O.D. (mm)	Connection thread P	Model	H (width across flats)	<sup>(1)</sup> $\phi D1$	$\phi D2$	L	A*	M	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		Weight (g)
									Nylon	Urethane	
4	M5 x 0.8	KQ2S04-M5	2.5	8	—	18.7	15.6	12.7	4	4	2.7
	M6 x 1.0	KQ2S04-M6	3			18.2	14.1		4.1	3.6	2.8
	1/8	KQ2S04-01S	3	9.8	23	19	16	4	4	8	
6	M5 x 0.8	KQ2S06-M5	2.5	10	—	19.5	16.4	13.5	4	4	3.3
	M6 x 1.0	KQ2S06-M6	3			19.1	15		4	4	3.4
	1/8	KQ2S06-01S	4	11.8	24	20	17	10.0	9.9	9	
8	1/4	KQ2S06-02S	4	13.8	—	24	18	18.5	10.7	10.0	15
	1/8	KQ2S08-01S	5	14	28	24	17.2		12		
	3/8	KQ2S08-03S	6	17	25.5	19.5	23.3	16.2	11		
10	1/4	KQ2S10-01S	5	17	—	27.5	21	21	17.2	16.2	18
	3/8	KQ2S10-02S	8			30	26				12
	1/2	KQ2S10-03S	8	22	27.5	21.5	39.0	26.6	35		
12	1/4	KQ2S10-04S	8	19	—	28	20	22	46.0	44.5	23
	3/8	KQ2S12-02S	10			33.5	27.5				60.0
	1/2	KQ2S12-03S	10	22	29	22.5	28	20	30		
16	3/8	KQ2S16-03S	10	25.7	24	39	32.5	25	81	(81)	42
	1/2	KQ2S16-04S	12			35	27		113	(96)	34

<M5, M6> <R>



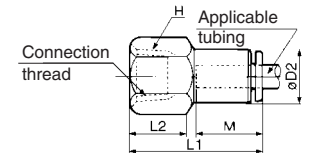
\* Reference dimensions after R thread installation.  
Note 1)  $\phi D$ : Max. diameter  
Note 2) ( ): Values for soft nylon.

## Female Connector: KQ2F

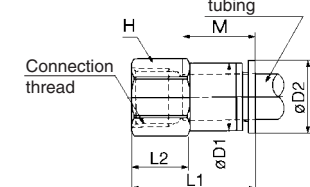


Applicable tubing O.D. (mm)	Connection thread Rc	Model	H (width across flats)	<sup>(1)</sup> $\phi D1$	$\phi D2$	L1	L2	M	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		Weight (g)
									Nylon	Urethane	
4	1/8	KQ2F04-01	14	—	10	27	11	16	5.6	4	15
	1/4	KQ2F04-02	17			31	14		4	23	
6	1/8	KQ2F06-01	14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

KQ2F04 to 12



KQ2F16

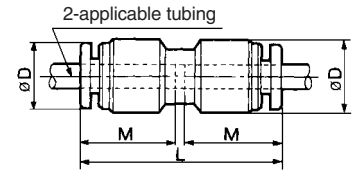


Note 1)  $\phi D2$ : Max. diameter  
Note 2) ( ): Values for soft nylon

## Straight Union: KQ2H



Applicable tubing O.D. (mm)	Model	øD <sup>(1)</sup>	L	M	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		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

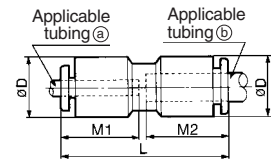


Note 1) øD: Max. diameter  
 Note 2) ( ): Values for soft nylon.

## Different Diameter Straight: KQ2H



Applicable tubing O.D. (mm)		Model	Note) øD	L	M1	M2	Effective area (mm <sup>2</sup> )		Weight (g)
Ⓐ	Ⓑ						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>



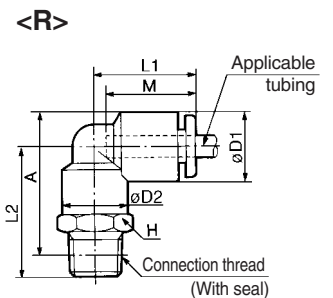
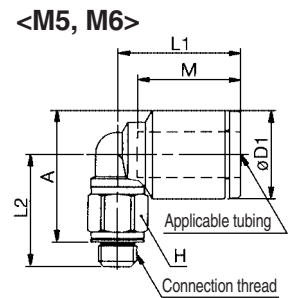
<M6>



<R>



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note 1) øD <sup>(1)</sup>		L1	L2	A*	M	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		Weight (g)
				øD1	øD2					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	9.3	—	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
6	1/4	KQ2L04-02S	14	—	—	—	26	25	—	—	—	19
	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	—	—	—	12
	1/4	KQ2L06-02S	14	12.8	10	20	27	27.5	17	11.4	9.0	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	—	—	26
	3/8	KQ2L10-03S	—	—	—	—	32	34.5	—	35.2	25.0	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.

K□

M□

H□

D□

MS

T□

VMG

# Series KQ2

## Male Branch Connector: KQ2LU

<M5, M6>



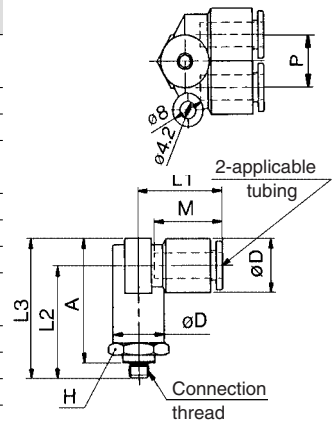
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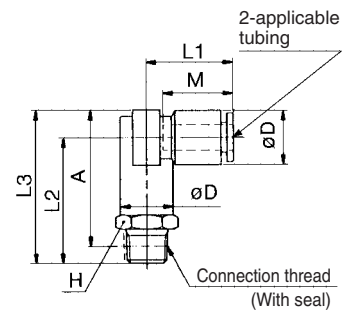
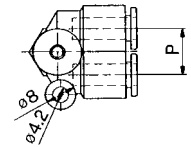
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) $\phi D$	L1	L2	L3	A*	M	P	Effective area (mm <sup>2</sup> )		Weight (g)
											Nylon	Urethane	
4	M5 x 0.8	KQ2LU04-M5	11	10.4	18.5	24	29.5	25.5	16	10.4	4.3	4.1	10
	M6 x 1.0	KQ2LU04-M6				24.5	30						
	1/8	KQ2LU04-01S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

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

<M5, M6>



<R>



## 45° Male Elbow: KQ2K

<M5, M6>



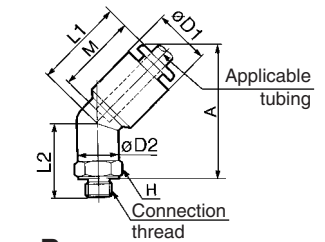
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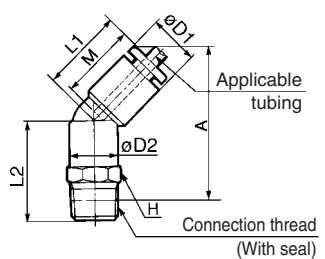
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	$\phi D1$ <sup>(1)</sup>	$\phi D2$	L1	L2	A*	M	P	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		Weight (g)
											Nylon	Urethane	
4	M5 x 0.8	KQ2K04-M5	8	10.4	8	17	14.5	26	16	3.4	3.4	4	
	M6 x 1.0	KQ2K04-M6					15						5
	1/8	KQ2K04-01S	20.5				32	10					
	1/4	KQ2K04-02S	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					15						5
	1/8	KQ2K06-01S	20.5				33	12					
	1/4	KQ2K06-02S	24.5				35	10					
3/8	KQ2K06-03S	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					26						39
	3/8	KQ2K08-03S	28				41	35					
	1/8	KQ2K10-01S	24				42	25					
10	1/4	KQ2K10-02S	17	18.5	17	24	27	43.5	21	30.9	23.2	26	
	3/8	KQ2K10-03S					29						45
	1/2	KQ2K10-04S	33				47.5	63					
	1/4	KQ2K12-02S	27.5				45.5	28					
12	3/8	KQ2K12-03S	22	20.9	17	25	29.5	47.5	22	44.5	35.1	38	
	1/2	KQ2K12-04S					33.5						49.5
	3/8	KQ2K16-03S	22				26.5	20.9				30	32
1/2	KQ2K16-04S	35	56.5	91.9	(78.3)	58							

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



<M5, M6>



<R>

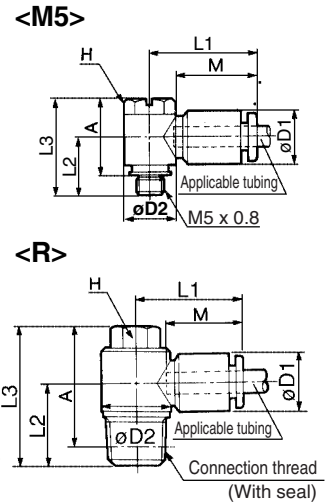


## Universal Male Elbow: KQ2V

	Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	(1) $\phi D1$	$\phi D2$	L1	L2	L3	A*	M	Effective area (mm <sup>2</sup> ) <sup>(2)</sup>		Weight (g)
												Nylon	Urethane	
<b>&lt;M5&gt;</b> 	4	M5 x 0.8	KQ2V04-M5	8	10.4	9.8	20.5	11	18.5	15	16	2.9	2.9	6
			KQ2V04-01S			13.4	22	14.5	26.5	22.5		3.8	3.8	14
<b>&lt;R&gt;</b> 	6	M5 x 0.8	KQ2V06-M5	8	12.8	9.8	23.5	12	18.5	15	17	3.8	3.8	7
			KQ2V06-01S			13.4	24	14.5	26.5	22.5		7.5	5.9	15
			KQ2V06-02S			15.4	23.5	18.5	31	25		26	24	
			KQ2V08-01S			17.6	28.5	15.5	28.5	24.5		18.5	16	11.2
	8		KQ2V08-02S	12	15.2	20.6	27.5	20.5	36.5	30	21	20.5	14.3	47
			KQ2V08-03S			20.6	27.5	20.5	36.5	30		27	20.3	49
	10		KQ2V10-02S	14	18.5	20.6	31	19.5	35.5	29.5	21	27	20.3	40
			KQ2V10-03S			20.5	36.5	30	27	20.3		49		
	12		KQ2V12-03S	17	20.9	25.2	34	22	38.5	32	22	39	30.8	63
			KQ2V12-04S			25	41.5	33.5	80					
	16		KQ2V16-03S	21	26.5	32.3	39	26.5	46.5	40.5	25	55	(55)	103
			KQ2V16-04S			29.5	49.5	41.5	78	(65)		110		





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



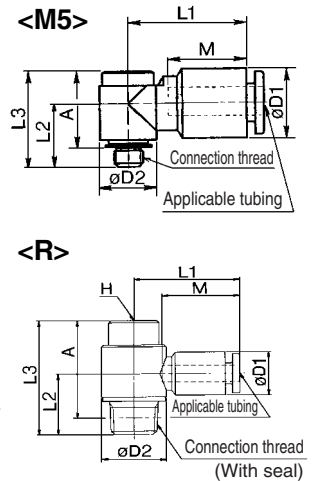
- K
- M
- H
- D
- MS
- T
- VMG

## Hexagon Socket Head Universal Male Elbow: KQ2VS

	Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A*	M	Effective area (mm <sup>2</sup> )		Weight (g)
												Nylon	Urethane	
<b>&lt;M5&gt;</b> 	4	M5	KQ2VS04-M5	4	10.4	9.8	20.5	10.5	18	15	16	2.9	2.9	6
			KQ2VS04-01S			13.4	22	14.5	26.5	22.5		3.8	3.8	14
<b>&lt;R&gt;</b> 	6	M5	KQ2VS06-M5	4	12.8	9.8	23.5	12	18	15	17	3.8	3.8	7
			KQ2VS06-01S			13.4	24	14.5	26.5	22.5		7.5	5.9	15
			KQ2VS06-02S			15.3	23.5	18.5	27	21		22	24	
			KQ2VS08-01S			17.6	28.5	15.5	27	23		18.5	16	11.2
	8		KQ2VS08-02S	8	15.2	20.6	27.5	20.5	32.5	26	21	20.5	14.3	47
			KQ2VS08-03S			20.6	27.5	20.5	32.5	26		27	20.3	39
	10		KQ2VS10-02S	8	18.5	20.6	31	19.5	31.5	25	21	27	20.3	32
			KQ2VS10-03S			20.5	32.5	26	27	20.3		39		
	12		KQ2VS12-03S	10	20.9	25.2	34	22	36	30	22	39	30.8	48
			KQ2VS12-04S			25	39	31	25	39		31	67	



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





# Series KQ2

## Universal Female Elbow: KQ2VF

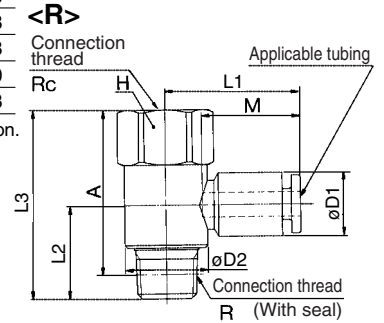
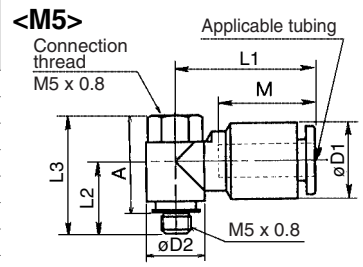
<M5>



<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)
	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		17.6	25	20	38.5	32.5		36
8	1/8	KQ2VF08-01S	17	15.2	17.6	28.5	17	31	27	18.5	29
	1/4	KQ2VF08-02S	22		20	38.5	32.5	37			
	3/8	KQ2VF08-03S	22		25.2	29.5	25.5	45.5	39		66
10	1/4	KQ2VF10-02S	19	18.5	20.6	31.5	22	41	35	21	48
	3/8	KQ2VF10-03S	22		25.2	34	24.5	45.5	39		68
12	3/8	KQ2VF12-03S	22	20.9	25.2	34	24.5	45.5	39	22	70
	1/2	KQ2VF12-04S	24		27	35	25.5	50	42		93



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

## Female Elbow: KQ2LF

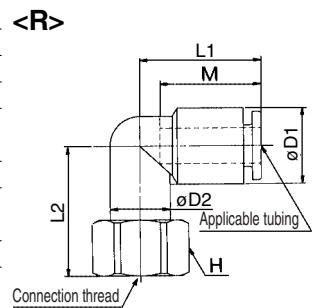
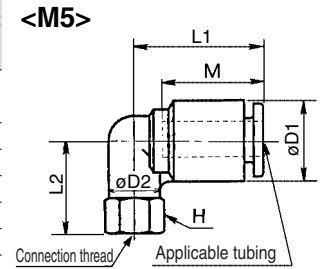
<M5, M6>



<Rc>



Applicable tubing O.D. (mm)	Connection thread Rc	Model	H (width across flats)	Note) øD1	øD2	L1	L2	M	Effective area (mm <sup>2</sup> )		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	15.5											
	1/8	KQ2LF04-01	21											
	1/4	KQ2LF04-02	24.5											
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	16											
	1/8	KQ2LF06-01	22											
	1/4	KQ2LF06-02	25.5											
	3/8	KQ2LF06-03	19		26		11.4	9.0		20				
8	1/8	KQ2LF08-01	14	15.2	12	23.5	23	18.5	21.6	14.9	16			
	1/4	KQ2LF08-02	17											
	3/8	KQ2LF08-03	19											
	1/4	KQ2LF10-02	17				28					21.6	14.9	22
10	3/8	KQ2LF10-03	19	18.5	17	26.5	27	21	35.2	25.0	23			
	1/2	KQ2LF10-04	24											
	1/4	KQ2LF12-02	17				28.5							27
	3/8	KQ2LF12-03	19				29.5							46
12	3/8	KQ2LF12-03	19	20.9	17	28.5	30	22	50.2	39.7	29			
	1/2	KQ2LF12-04	24				34							48

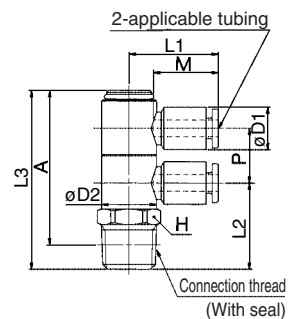


Note) øD1: Max. diameter

## 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)
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	19	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

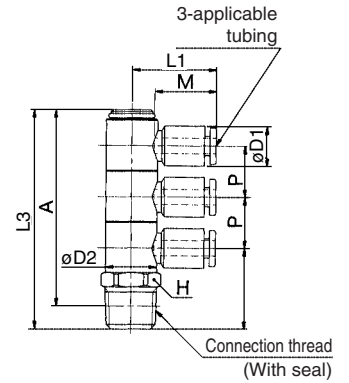


\* Reference dimensions after R thread installation.  
Note) øD1: Max. diameter

## Triple Universal Male Elbow: KQ2VT



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	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					21.5	57.5	51.5			34
	3/8	KQ2VT04-03S					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					21.5	57.5	51.5			37
	3/8	KQ2VT06-03S					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					24	67	61			66
	3/8	KQ2VT08-03S					25	68	61.5			75
	1/2	KQ2VT08-04S					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					27.5	78.5	72			111
	1/2	KQ2VT10-04S					30.5	81.5	73.5			
12	1/4	KQ2VT12-02S	26	20.9	25.2	34	28.5	86	80	22	21.6	153
	3/8	KQ2VT12-03S					29.5	87	80.5			142
	1/2	KQ2VT12-04S					32.5	90	82			154



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

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

## Branch Universal Male Elbow: KQ2Z

<M5>

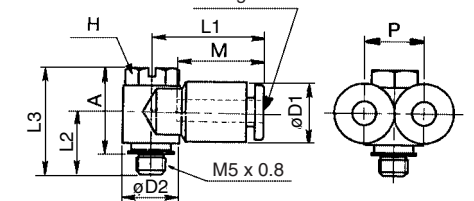


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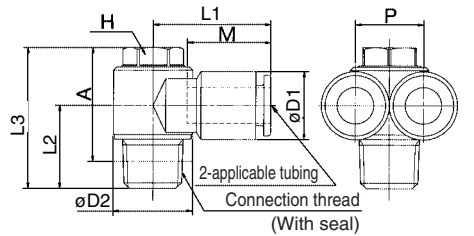


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A*	M	P	Effective area (mm <sup>2</sup> )		Weight (g)
												Nylon	Urethane	
4	M5 x 0.8	KQ2Z04-M5	8	10.4	9.8	19.5	11	18.5	15	16	10.4	3.4	3.4	8
												4.7	4.7	16
6	1/8	KQ2Z06-01S	8	12.8	13.4	21	14.5	26.5	22.5	17	12.8	10.8	8.6	17
														39
														47
8	1/8	KQ2Z08-01S	12	15.2	17.6	26	15.5	28.5	24.5	18.5	15.2	20.5	14.2	27
														33
														49
10	1/4	KQ2Z10-02S	14	18.5	20.6	29	19.5	35.5	29.5	21	18.5	31.8	22.6	46
														54
														71
12	3/8	KQ2Z12-03S	17	20.9	25.2	32.5	22	39	32.5	22	20.9	44.6	35.3	71
							25	42	34					88

<M5>



<R>



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

## Branch Universal Female Elbow: KQ2ZF

<M5>

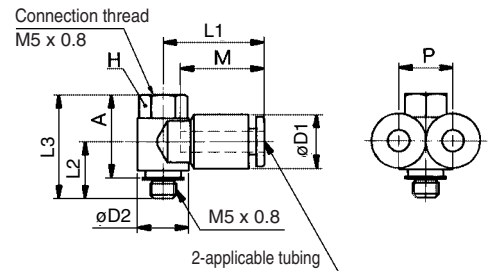


<R>

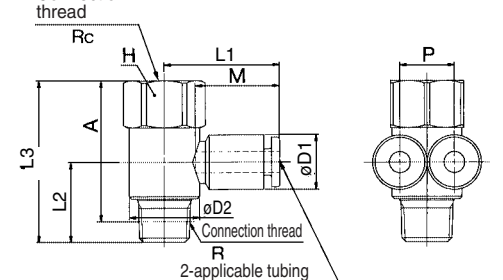


Applicable tubing O.D. (mm)	Connection thread R Rc	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A*	M	P	Weight (g)
4	M5 x 0.8	KQ2ZF04-M5	8	10.4	9.8	19.5	11	20	16.5	16	10.4	8
												21
6	1/8	KQ2ZF06-01S	14	12.8	13.4	22	15.5	29.5	25.5	17	12.8	21
												47
8	1/8	KQ2ZF08-01S	17	15.2	17.6	25.5	17	31	27	18.5	15.2	32
												49
												54
10	1/4	KQ2ZF10-02S	19	18.5	20.6	29	22	41	35	21	18.5	74
												77
												101
12	3/8	KQ2ZF12-03S	22	20.9	25.2	32.5	24.5	45.5	39	22	20.9	77
												101

<M5>



<R>



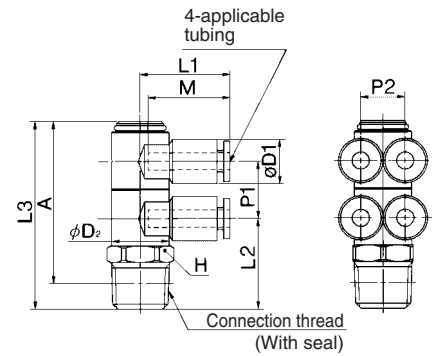
\* Reference dimensions after R thread installation.  
Note)  $\phi D1$ : Max. diameter

# Series KQ2

## Double Branch Universal Male Elbow: KQ2ZD



Applicable tubing O.D. (mm)	Connection threads R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	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					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					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					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				

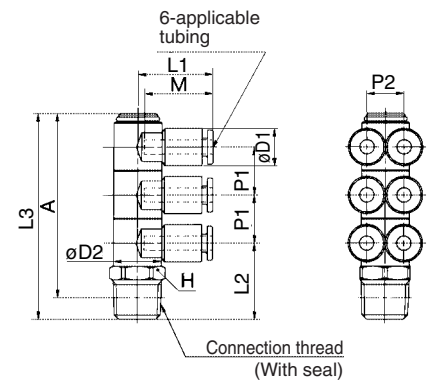


\* Reference dimensions after R thread installation.  
Note)  $\phi D1$ : Max. diameter

## Triple Branch Universal Male Elbow: KQ2ZT



Applicable tubing O.D. (mm)	Connection threads R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	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					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					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					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

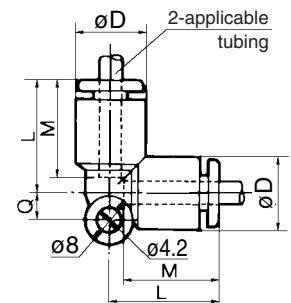


\* Reference dimensions after R thread installation.  
Note)  $\phi D1$ : Max. diameter

## Union Elbow: KQ2L



Applicable tubing O.D. (mm)	Model	$\phi D^{(1)}$	L	Q	M	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		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



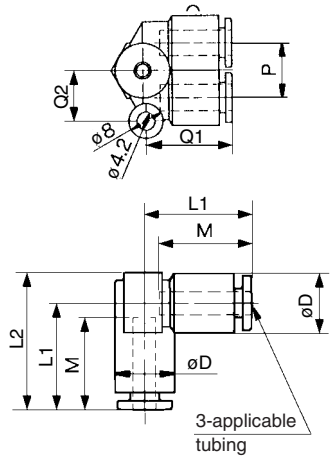
Note 1)  $\phi D$ : Max. diameter  
Note 2) ( ): Valves for soft nylon.

## Branch Union Elbow: KQ2LU



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

Note)  $\phi D$ : Max. diameter

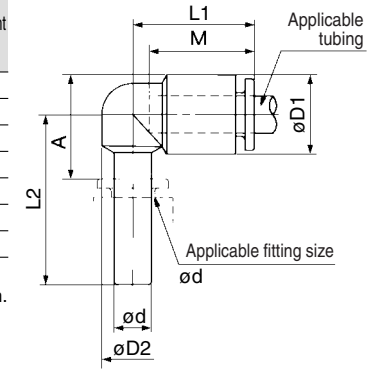


## Plug-in Elbow: KQ2L



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

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

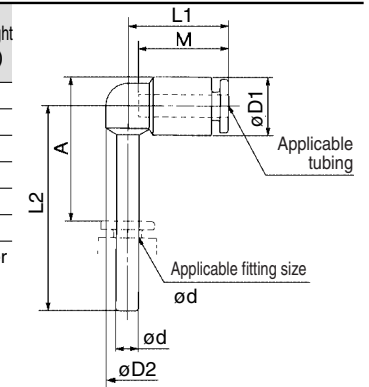


## Extended Plug-in Elbow: KQ2W



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

Note)  $\phi D$ : Max. diameter

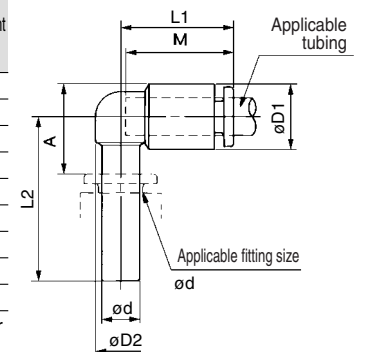


## Reducer Elbow: KQ2L



Applicable tubing O.D. (mm)	Applicable fitting size $\phi d$	Model	Note)		L1	L2	A	M	Effective area (mm <sup>2</sup> )		Weight (g)
			$\phi D1$	$\phi D2$					Nylon	Urethane	
3.2	4	<b>KQ2L23-04</b>	9.6	7	17	25	13.5	15.5	3	2.5	2
4	6	<b>KQ2L04-06</b>	10.4	8	18	26	14.5	16	4.2	4.2	3
	8	<b>KQ2L04-08</b>		35		22					
6	8	<b>KQ2L06-08</b>	12.8	10	19.5	30.5	18	17	11.4	9.0	12
	10	<b>KQ2L06-10</b>			20	38.5	24				
8	10	<b>KQ2L08-10</b>	15.2	12	22.5	33.5	20.5	18.5	21.6	14.9	20
	12	<b>KQ2L08-12</b>			23	40.5	26				
10	12	<b>KQ2L10-12</b>	18.5	17	26.5	42	29.5	21	35.2	25.0	29
12	16	<b>KQ2L12-16</b>	20.9	17	28.5	49.5	34.5	22	50.2	39.7	53








Note)  $\phi D1$ : Max. diameter

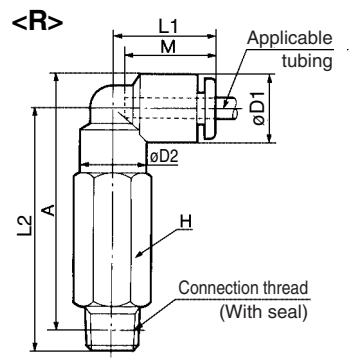
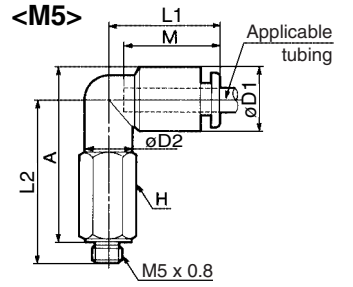


- K
- M
- H
- D
- MS
- T
- VMG

# Series KQ2







## Extended Male Elbow: KQ2W

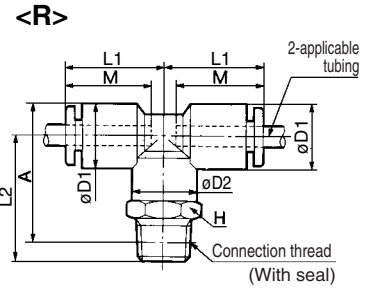
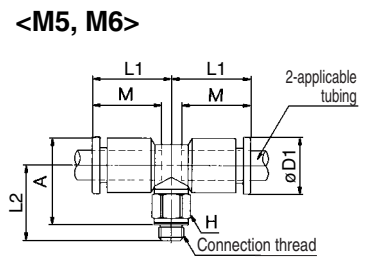
<M5>	Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	<sup>(1)</sup>		L1	L2	A*	M	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		Weight (g)
					øD1	øD2					Nylon	Urethane	
	3.2	M5 x 0.8	KQ2W23-M5	8	9.6	10	17.5	30	31	15.5	2.8	2.4	10
			KQ2W23-01S	10				37	38				19
			KQ2W23-02S	14				43	42				41
	4	M5 x 0.8	KQ2W04-M5	8	10.4	10	18	30	32	16	3.0	3.0	11
			KQ2W04-01S	10				37.5	38.5				23
			KQ2W04-02S	14				43.5	42.5				38
	6	M5 x 0.8	KQ2W06-M5	8	12.8	10	20	30.5	33.5	17	3	3	11
			KQ2W06-01S	10				40	42.5				26
			KQ2W06-02S	14				46	46.5				41
	6	M5 x 0.8	KQ2W06-03S	17	12.8	10	20	48	48	17	10.9	8.6	67
			KQ2W08-01S	12				43.5	47				30
			KQ2W08-02S	14				49.5	51				47
	8	M5 x 0.8	KQ2W08-03S	17	15.2	12	23	51.5	52.5	18.5	20.5	14.2	74
			KQ2W10-02S	17				56.5	59.5				66
			KQ2W10-03S	17				58.5	61				76
	10	M5 x 0.8	KQ2W10-04S	22	18.5	17	26.5	65	66	21	33.5	23.8	145
			KQ2W12-02S	17				57.5	62				68
			KQ2W12-03S	17				59.5	63.5				78
	12	M5 x 0.8	KQ2W12-04S	22	20.9	17	28.5	66	68.5	22	47.7	37.7	147
			KQ2W16-03S	22				69.5	76				101
			KQ2W16-04S	22				75	80				105
	16	M5 x 0.8	KQ2W16-03S	22	26.5	20.9	34	69.5	76	25	71	(71)	101
			KQ2W16-04S	22				75	80		105		
												100	(84)



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

## Male Branch Tee: KQ2T

<M5>	Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	<sup>(1)</sup>		L1	L2	A*	M	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		Weight (g)
					øD1	øD2					Nylon	Urethane	
	3.2	M5 x 0.8	KQ2T23-M5	7	8.4	—	15.3	13.2	14.3	12.7	3.2	2.7	3.2
			KQ2T23-01S	10	9.6	10	17.5	21.5	22.5	15.5	3.4	2.9	10
			KQ2T23-02S	14	9.6	10	17.5	25.5	24.5	15.5	3.4	2.9	20
	4	M5 x 0.8	KQ2T04-M5	7	9.3	—	15.6	13.7	15.3	12.7	4.5	4.5	3.5
			KQ2T04-M6	8	9.3	—	15.6	14.7	15.3	12.7	4.5	4.5	4.4
			KQ2T04-01S	10	10.4	10	18	22	23	16	6.0	4.1	13
	4	M5 x 0.8	KQ2T04-02S	14	10.4	10	18	26	25	16	6.0	4.1	19
			KQ2T06-M5	7	11.6	—	16.1	14.7	17.4	13.5	4.5	4.5	4.4
			KQ2T06-M6	8	11.6	—	16.1	15.7	17.4	13.5	4.5	4.5	5.3
	6	M6 x 1.0	KQ2T06-01S	10	12.8	10	20	23	25.5	17	13.9	11.0	12
			KQ2T06-02S	14	12.8	10	20	27	27.5	17	13.9	11.0	20
			KQ2T06-03S	17	12.8	10	20	29	29	17	13.9	11.0	34
	8	M5 x 0.8	KQ2T08-01S	12	15.2	12	23	24.5	28	18.5	26.3	18.2	14
			KQ2T08-02S	14	15.2	12	23	28.5	30	18.5	26.3	18.2	22
			KQ2T08-03S	17	15.2	12	23	30.5	31.5	18.5	26.3	18.2	36
	10	M5 x 0.8	KQ2T10-01S	12	18.5	17	26.5	27	32	21	40.8	29.0	31
			KQ2T10-02S	17	18.5	17	26.5	30	33	21	40.8	29.0	29
			KQ2T10-03S	17	18.5	17	26.5	32	34.5	21	40.8	29.0	39
	10	M5 x 0.8	KQ2T10-04S	22	18.5	17	26.5	36	37	21	40.8	29.0	66
			KQ2T12-02S	17	20.9	17	28.5	31	35.5	22	57.2	45.2	31
			KQ2T12-03S	17	20.9	17	28.5	33	37	22	57.2	45.2	41
	12	M5 x 0.8	KQ2T12-04S	22	20.9	17	28.5	37	39.5	22	57.2	45.2	68
			KQ2T16-03S	22	26.5	20.9	34	38	44.5	25	71	(71)	112
			KQ2T16-04S	22	26.5	20.9	34	40.5	46	25	100	(100)	116



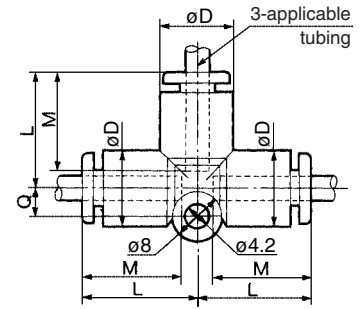
\* Reference dimensions after R thread installation.  
 Note 1) øD1: Max. diameter  
 Note 2) ( ): Values for soft nylon.

## Union Tee: KQ2T



Applicable tubing O.D. (mm)	Model	øD <sup>(1)</sup>	L	Q	M	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		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.

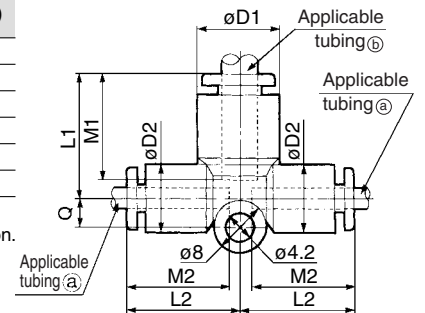


## Different Diameter Tee: KQ2T



Applicable tubing O.D. (mm)		Model	øD <sup>(1)</sup>	øD2	L1	L2	Q	M1	M2	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		Weight (g)
Ⓐ	Ⓑ									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.

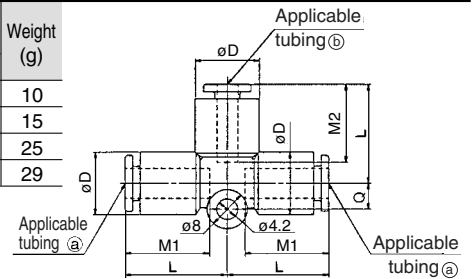


## Different Diameter Tee: KQ2T



Applicable tubing O.D. (mm)		Model	øD <sup>Note)</sup>	L	Q	M1	M2	Effective area (mm <sup>2</sup> )		Weight (g)
Ⓐ	Ⓑ							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

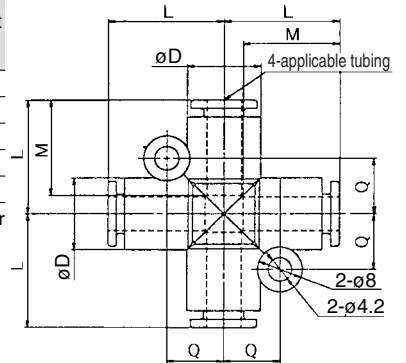


## Cross: KQ2TW



Applicable tubing O.D. (mm)	Model	øD <sup>Note)</sup>	L	Q	M	Effective area (mm <sup>2</sup> )		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

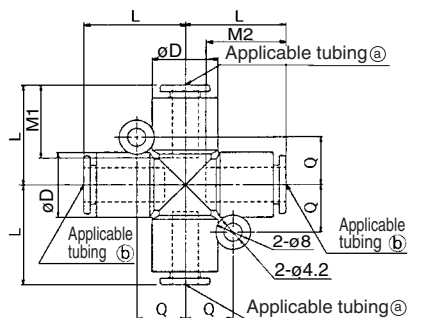


## Different Diameter Cross: KQ2TX



Applicable tubing O.D. (mm)		Model	øD <sup>Note)</sup>	L	Q	M1	M2	Effective area (mm <sup>2</sup> )		Weight (g)
Ⓐ	Ⓑ							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



- K□
- M□
- H□
- D□
- MS
- T□
- VMG

# Series KQ2

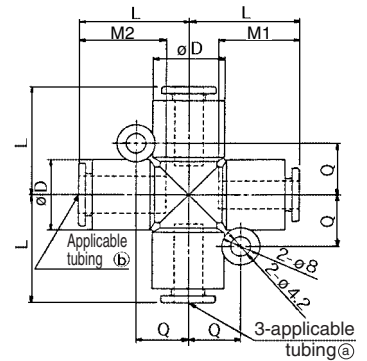
## Different Diameter Cross: KQ2TY



Applicable tubing O.D. (mm)		Model	Note) øD	L	Q	M1	M2	Effective area (mm <sup>2</sup> )		Weight (g)
Ⓐ	Ⓑ							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 <sup>(1)</sup>	øD2	L1	L2	L3	A*	M	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		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				25.5	37	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				14.7						—
	1/8	KQ2Y04-01S	10	10.4	10	18	22	—	36	16	6.4	4.4	13
	1/4	KQ2Y04-02S	14				26	38	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				15.7						—
	1/8	KQ2Y06-01S	10	12.8	10	20	23	—	39	17	13.4	10.6	12
	1/4	KQ2Y06-02S	14				27	—	41				20
	3/8	KQ2Y06-03S	17	12	23	27	29	—	42.5	18.5	25.6	17.7	34
	1/8	KQ2Y08-01S	12				24.5	—	43.5				14
8	1/4	KQ2Y08-02S	14	15.2	12	23	28.5	—	45.5	21	40.0	28.4	22
	3/8	KQ2Y08-03S	17				30.5	—	47				36
	1/8	KQ2Y10-01S	12	18.5	17	26.5	27	—	49.5	22	57.4	45.4	31
1/4	KQ2Y10-02S	17	30				—	50.5	29				
10	3/8	KQ2Y10-03S	17	20.9	17	28.5	32	—	52	25	81	(81)	39
	1/2	KQ2Y10-04S	22				36	—	54.5				66
	1/4	KQ2Y12-02S	17	26.5	20.9	34	31	—	53.5	25	113	(113)	31
	3/8	KQ2Y12-03S	17				33	—	55				41
12	1/2	KQ2Y12-04S	22	26.5	20.9	34	37	—	57.5	25	113	(113)	68
	3/8	KQ2Y16-03S	17				38	—	65.5				81
	1/2	KQ2Y16-04S	22	41	—	67	116						

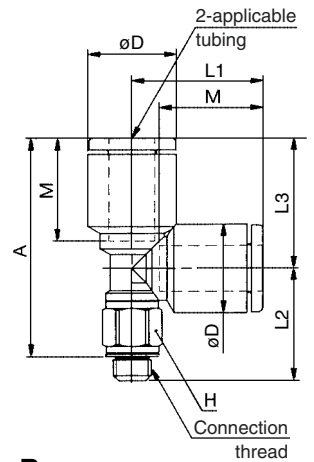


\* Reference dimensions after R thread installation.

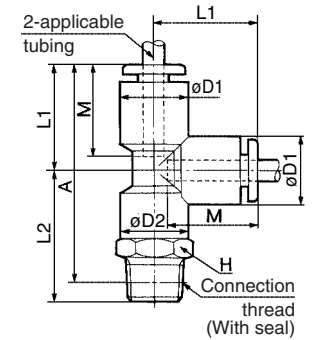
Note 1) øD: Max. diameter

Note 2) ( ): Values for soft nylon

<M5, M6>



<R>



## Male Delta Union: KQ2D

<M5, M6>



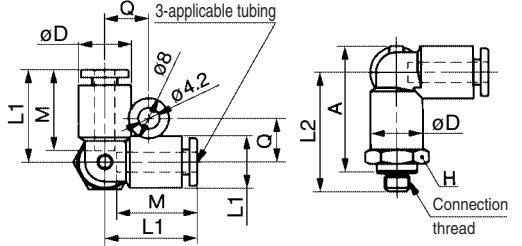
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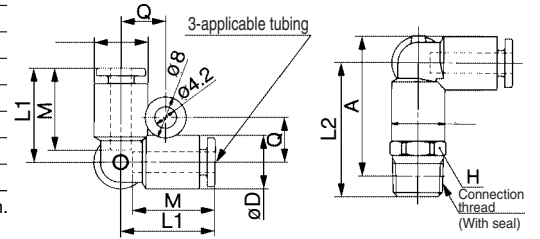
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) øD	L1	L2	A*	M	Q	Effective area (mm <sup>2</sup> )		Weight (g)
										Nylon	Urethane	
4	M5 x 0.8	KQ2D04-M5	11	10.4	18.5	24	25.5	16	8.7	2.2	2.2	10
	M6 x 1.0	KQ2D04-M6				24.5				4.3	4.3	
	1/8	KQ2D04-01S	26.5			6.0	6.0			12		
	1/4	KQ2D04-02S	30.5			29.5	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				13.9	11.0	
	1/8	KQ2D06-01S	29			31.5	14					
	1/4	KQ2D06-02S	32.5			33				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	35	
	3/8	KQ2D08-03S	34.5			34.5	39					
	1/4	KQ2D10-02S	37.5			38.5				39		
10	1/4	KQ2D10-02S	19	18.5	26.5	39.5	43	21	12.8	40.8	29.0	40
	3/8	KQ2D10-03S				40.5				43.5	62	
	1/2	KQ2D10-04S	44			45	55					
	1/4	KQ2D12-02S	42			46.5				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	63	

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

<M5, M6>



<R>



K□

M□

H□

D□

MS

T□

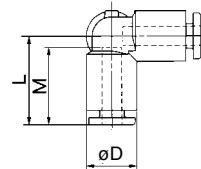
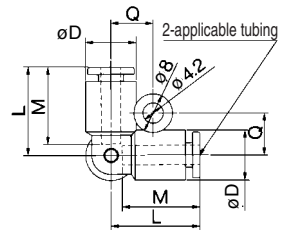
VMG

## Delta Union: KQ2D



Applicable tubing O.D. (mm)	Model	Note) øD	L	Q	M	Effective area (mm <sup>2</sup> )		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>



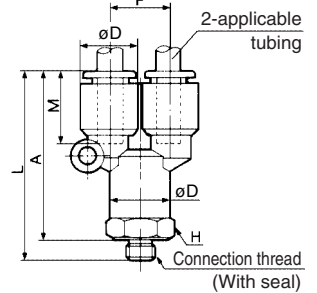
<R>



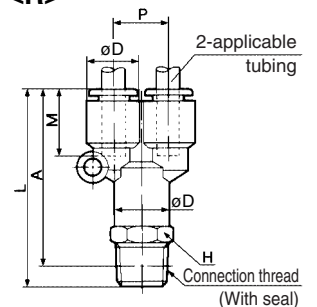
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note 1) øD <sup>(1)</sup>	L	P	A*	M	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		Weight (g)
									Nylon	Urethane	
3.2	M5 x 0.8	KQ2U23-M5	10	9.6	38	9.6	34.5	15.5	2.2	2.2	9
	1/8	KQ2U23-01S	11		41		37		3.4	2.9	
	1/4	KQ2U23-02S	14		44		38				
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		36		10		
	1/8	KQ2U04-01S	42		38		4.2		4.2		
	1/4	KQ2U04-02S	46		40					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		39		13.4	10.6	
	1/8	KQ2U06-01S	45.5		41.5		11				
	1/4	KQ2U06-02S	49		43				21		
3/8	KQ2U06-03S	51	44.5	34							
8	1/8	KQ2U08-01S	17		15.2	52.5	15.2	48.5	18.5	25.6	17.7
	1/4	KQ2U08-02S		55.5		49.5		23			
	3/8	KQ2U08-03S	56.5	50		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	
	1/2	KQ2U10-04S	65		57		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		40	45.4	
	1/2	KQ2U12-04S	68.5		60.5		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)	

\* Reference dimensions after R thread installation.  
Note 1) øD1: Max. diameter  
Note 2) (:): Values for soft nylon

<M5, M6>



<R>





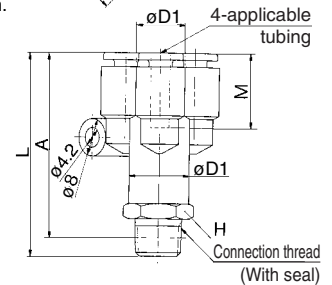
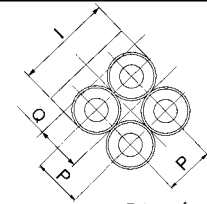
# Series KQ2

## Delta Branch: KQ2UD



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L	I	A*	Q	M	P	Effective area (mm <sup>2</sup> )		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			47		41				25		
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				53.5		47.5						

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

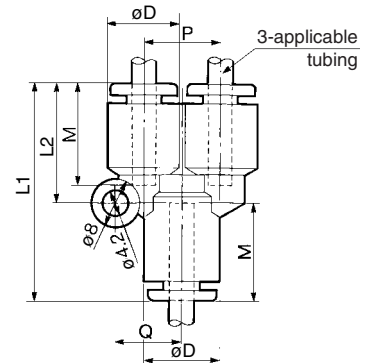


## Union "Y": KQ2U



Applicable tubing O.D. (mm)	Model	$\phi D^{(1)}$	L1	L2	P	Q	M	Effective area (mm <sup>2</sup> ) <sup>(2)</sup>		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)  $\phi D$ : Max. diameter  
Note 2) ( ): Values for soft nylon.

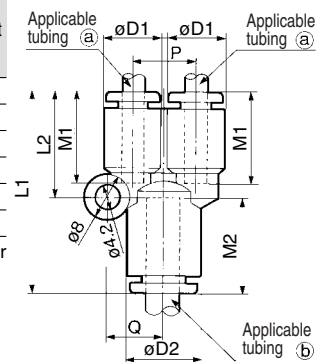


## Different Diameter Union "Y": KQ2U



Applicable tubing O.D. (mm)		Model	Note) $\phi D1$	Note) $\phi D2$	L1	L2	P	Q	M1	M2	Effective area (mm <sup>2</sup> )		Weight (g)
Ⓐ	Ⓑ										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)  $\phi D1, \phi D2$ : Max. diameter

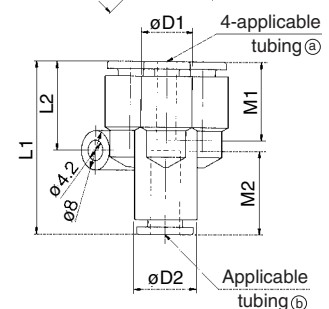
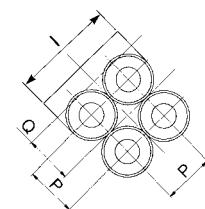


## Different Diameter Double Union "Y": KQ2UD



Applicable tubing O.D. (mm)		Model	Note) $\phi D1$	Note) $\phi D2$	L1	L2	P	I	Q	M1	M2	Effective area (mm <sup>2</sup> )		Weight (g)
Ⓐ	Ⓑ											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)  $\phi D1, \phi D2$ : Max. diameter

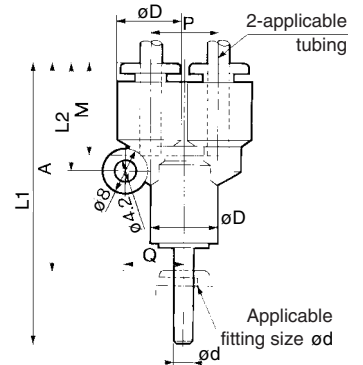


## Plug-in "Y": KQ2U



Applicable tubing O.D. (mm)	Application fitting $\phi d$	Model	(1)		L1	L2	P	Q	A	M	Effective area (mm <sup>2</sup> ) (2)		Weight (g)
			$\phi D$								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)  $\phi D$ : Max. diameter  
 Note 2) ( ): Values for soft nylon.

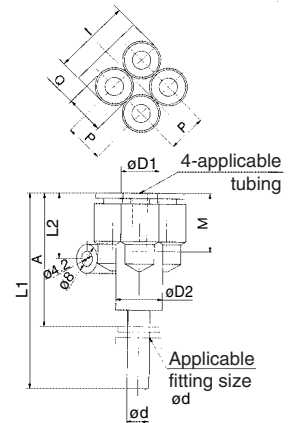


## Double Plug-in "Y": KQ2XD



Applicable tubing O.D. (mm)	Application fitting Fitting size $\phi d$	Model	Note)		L1	L2	I	Q	A	P	M	Effective area (mm <sup>2</sup> )		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

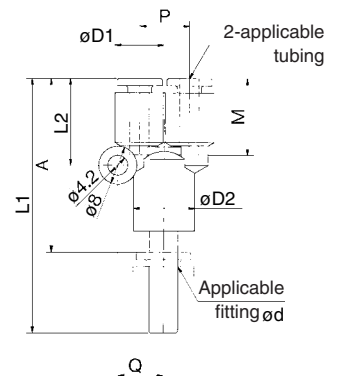


## Different Diameter Plug-in "Y": KQ2X



Applicable tubing O.D. (mm)	Application fitting Fitting size $\phi d$	Model	Note)		L1	L2	A	P	Q	M	Effective area (mm <sup>2</sup> )		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



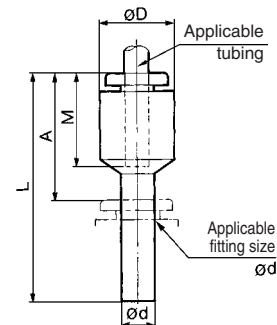
- K
- M
- H
- D
- MS
- T
- VMG

# Series KQ2

## Plug-in Reducer: KQ2R



Applicable tubing O.D. (mm)	Applicable fitting size $\phi d$	Model	$\phi D$ <sup>(1)</sup>	L	A	M	Effective area <sup>(2)</sup> (mm <sup>2</sup> )		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				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		42					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)
12	16	KQ2R12-16	20.9	50.5	25.5	22	58.3	(46.1)	37

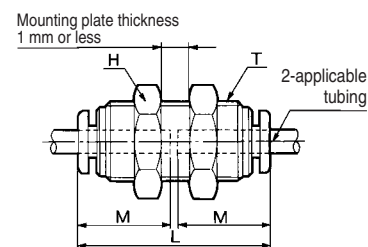


Note 1)  $\phi D$ : Max. diameter  
 Note 2) ( ): Values for soft nylon.

## Bulkhead Union: KQ2E



Applicable tubing O.D. (mm)	Model	T (M)	H (width across flats)	L	Mounting hole	M	Effective area <sup>Note)</sup> (mm <sup>2</sup> )		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

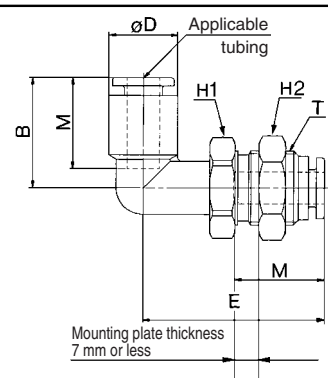


Note) ( ): Values for soft nylon.

## Bulkhead Male Elbow: KQ2LE



Applicable tubing O.D. (mm)	Model	T	H1 (Hex. across flats)	H2 (Hex. across flats)	B	E	Note) $\phi D$	Mounting hole	M	Effective area <sup>Note)</sup> (mm <sup>2</sup> )		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

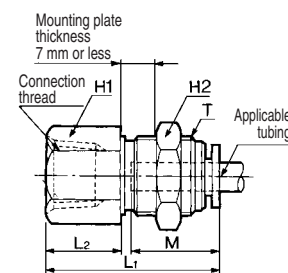


Note)  $\phi D$ : Max. diameter

## 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 <sup>Note)</sup> (mm <sup>2</sup> )		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											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
	1/8	KQ2E08-01											27.5	7.5	28
8	1/4	KQ2E08-02	M16 x 1	17	19	33	13	17	18.5	26.1	18.0	27			
	3/8	KQ2E08-03											35	15	48
	1/2	KQ2E10-02											37	14	53
10	1/4	KQ2E10-02	M20 x 1	22	24	34.5	12.5	21	21	41.5	29.5	67			
	3/8	KQ2E10-03											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

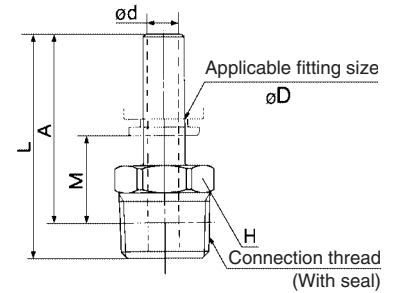


Note) ( ): Values for soft nylon.

## Adaptor: KQ2N



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

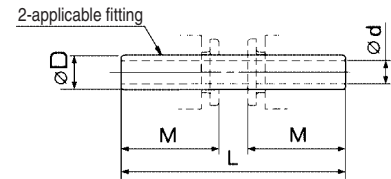


## Nipple: KQ2N

\* Reference dimensions after R thread is screwed in.



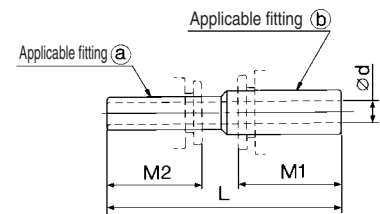
Applicable fitting $\phi D$	Model	L	M	$\phi d$	Weight (g)
4	<b>KQ2N04-99</b>	37	16	2.5	1
6	<b>KQ2N06-99</b>	39	17	4	2
8	<b>KQ2N08-99</b>	43	18.5	6	2
10	<b>KQ2N10-99</b>	49	21	7.5	4
12	<b>KQ2N12-99</b>	52	22	9	20.6
16	<b>KQ2N16-99</b>	57	25	13	31



## Reducer Nipple: KQ2N



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

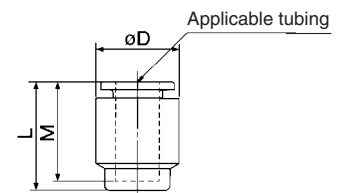


## Tube Cap: KQ2C

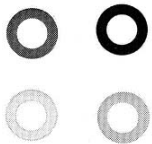


Applicable tubing O.D. (mm)	Model	Note) $\phi D$	L	M	Weight (g)
4	<b>KQ2C04-00</b>	10.4	17	16	3
6	<b>KQ2C06-00</b>	12.8	18.5	17	3
8	<b>KQ2C08-00</b>	15.2	20.5	18.5	4
10	<b>KQ2C10-00</b>	18.5	23	21	6
12	<b>KQ2C12-00</b>	20.9	24	22	8
16	<b>KQ2C16-00</b>	26.5	28	25	13

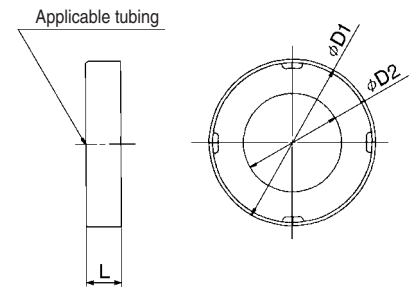
Note)  $\phi D$ : Max. diameter



## Color Cap: KQ2C



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



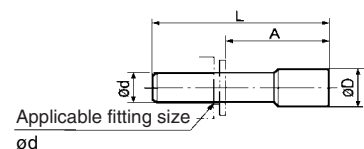
□ → B (Black), R (Red), YR (Orange), BR (Brown), Y (Yellow), G (Green), CB (Sky blue), GR (Gray), W (White), BU (Blue)

## Plug: KQ2P, KQP



Applicable fitting size $\phi d$	Model (Note)		$\phi D$	L	A	Weight (g)
3.2	<b>KQ2P-23</b>	<b>KQP-23</b>	5	31.5	16	1
4	<b>KQ2P-04</b>	<b>KQP-04</b>	6	32	16	1
6	<b>KQ2P-06</b>	<b>KQP-06</b>	8	35	18	1
8	<b>KQ2P-08</b>	<b>KQP-08</b>	10	39	20.5	2
10	<b>KQ2P-10</b>	<b>KQP-10</b>	12	43	22	3.5
12	<b>KQ2P-12</b>	<b>KQP-12</b>	14	45.5	24	5
16	<b>KQ2P-16</b>	<b>KQP-16</b>	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.



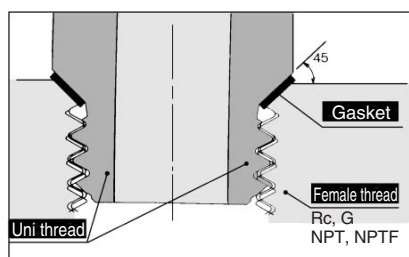
# Uni One-touch Fittings

## 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.**

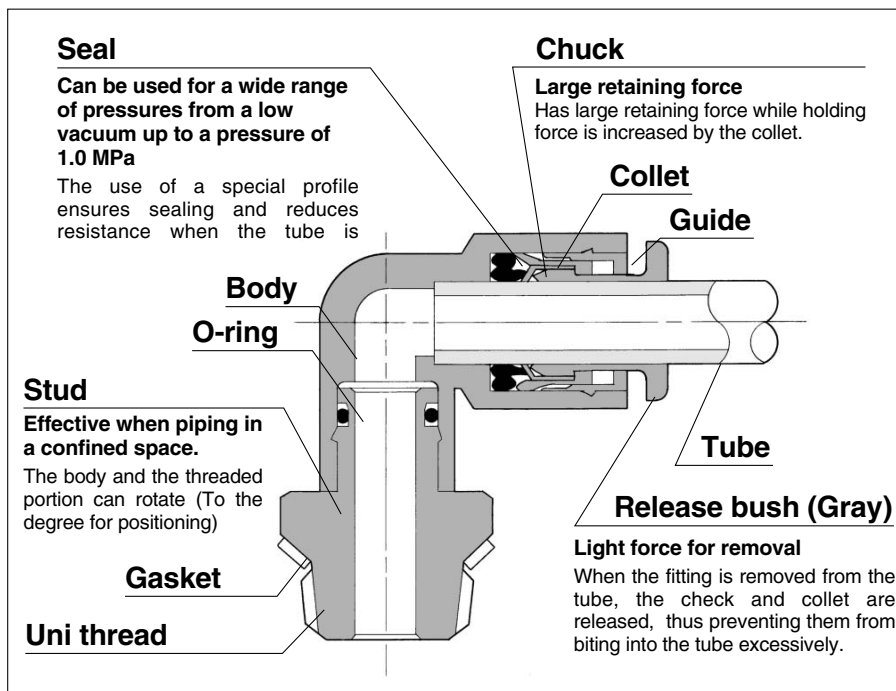


### Uni thread ridge shape

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.**



### 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


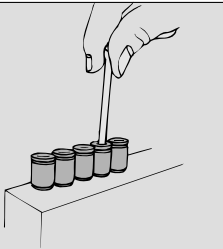

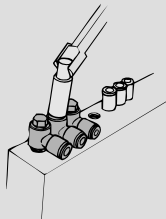

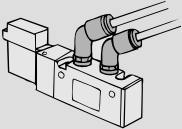

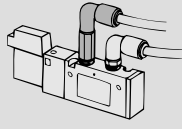

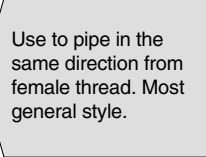

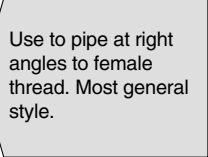

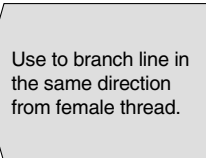

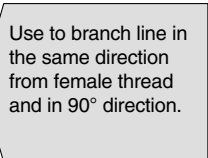

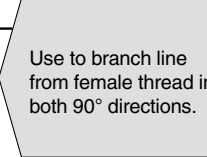


### Specifications

Fluid	Air/Water <sup>Note)</sup>
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			
<b>Hex. socket head male connector</b> <b>KQ2S</b> P. 36 	Internal hex. allows thread connection by using an allen wrench for confined spaces. 	<b>Universal male elbow</b> <b>KQ2V</b> P. 36 	Universal male elbow allows thread connection by using a socket wrench for confined spaces. 
<b>45° male elbow</b> <b>KQ2K</b> P. 36 	Use to pipe in 45° direction from female thread. Model in-between of male connector and male elbow. 	<b>Extended male elbow</b> <b>KQ2W</b> 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. 
<b>Male connector</b> <b>KQ2H</b> P. 34 	Use to pipe in the same direction from female thread. Most general style. 	<b>Male elbow</b> <b>KQ2L</b> P. 34 	Use to pipe at right angles to female thread. Most general style. 
<b>Branch "Y"</b> <b>KQ2U</b> P. 35 	Use to branch line in the same direction from female thread. 	<b>Male run tee</b> <b>KQ2Y</b> P. 35 	Use to branch line in the same direction from female thread and in 90° direction. 
		<b>Male branch tee</b> <b>KQ2T</b> P. 34 	Use to branch line from female thread in both 90° directions. 
		<b>Gasket</b> <b>KQG</b> P. 36 	Thread seal 

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

## 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

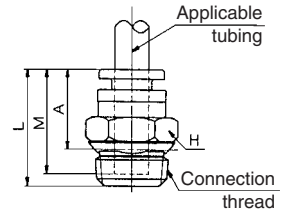
U01	Uni 1/8
U02	Uni 1/4
U03	Uni 3/8
U04	Uni 1/2

# 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 <sup>2</sup> )		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		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	17				
	3/8	KQ2H10-U03	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				113

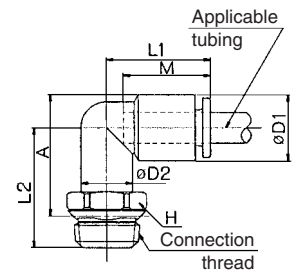


\* Reference dimensions after Uni thread installation. Note) Dimensions in ( ) are the case of soft nylon tubing.

## <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 <sup>2</sup> )		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	23				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	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	35				100

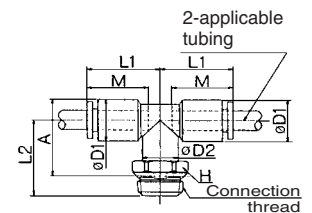


\* Reference dimensions after Uni thread installation. Note) Dimensions in ( ) are the case of soft nylon tubing.

## <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 <sup>2</sup> )		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	21.5				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	23				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	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	35				100



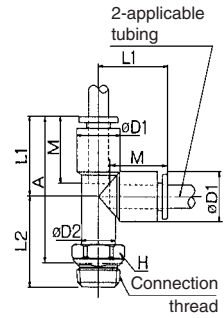
\* Reference dimensions after Uni thread installation. Note) Dimensions in ( ) are the case of soft nylon tubing.



## <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 (mm <sup>2</sup> )		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				25.5	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	40.5	66	24		81	(81)	61
	1/2	KQ2Y16-U04					63	113					(113)

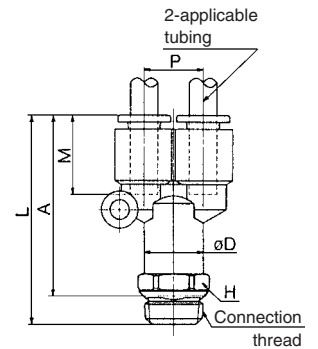


\* Reference dimensions after Uni thread installation. Note) Dimensions in ( ) are the case of soft nylon tubing.

## <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 <sup>2</sup> )		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						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						25
	3/8	KQ2U08-U03			51.5						28
10	1/4	KQ2U10-U02	19	18.5	57.5	18.5	51.5	21	40	28.4	38
	3/8	KQ2U10-U03			59						36
	1/2	KQ2U10-U04			22						51
12	1/4	KQ2U12-U02	22	20.9	61	20.9	55	22	57.4	45.4	53
	3/8	KQ2U12-U03			62.5						52
	1/2	KQ2U12-U04			54.5						52

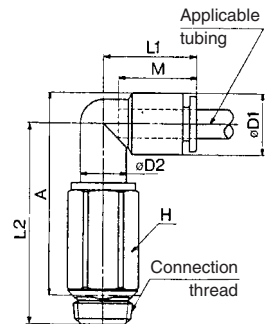


\* Reference dimensions after Uni thread installation.

## <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 <sup>2</sup> )		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	54.5					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					56	59					
	1/2	KQ2W12-U04					22	56					99



\* Reference dimensions after Uni thread installation.

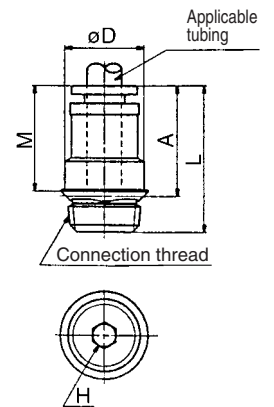
- K
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- MS
- T
- VMG

# 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 (mm <sup>2</sup> )		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						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	14				
	3/8	KQ2S08-U03	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		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	9		31	22		22		
	1/2	KQ2S12-U04	21		28.5	20.5		30		

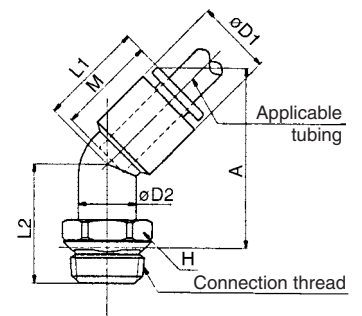


\* Reference dimensions after Uni thread installation.

## <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 <sup>2</sup> )		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
8	1/8	KQ2K08-U01	12	15.2	12	20.5	20	35	18.5	19.7	13.6	11
	1/4	KQ2K08-U02	14				22	36				15
	3/8	KQ2K08-U03	17				23	36				24
10	1/8	KQ2K10-U01	17	18.5	17	24	22	38	21	21.6	14.9	24
	1/4	KQ2K10-U02					23.5	40.5				21
	3/8	KQ2K10-U03					24	41				25
	1/2	KQ2K10-U04					22	27				42
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

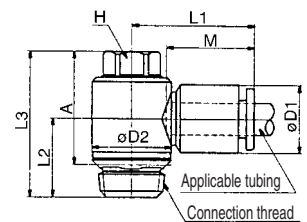


\* Reference dimensions after Uni thread installation.

## <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 <sup>2</sup> )		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
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	16.5				29.5	23.5	30				25
	3/8	KQ2V08-U03	14				20.6	27.5	18.5				34
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

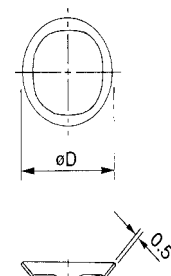


\* Reference dimensions after Uni thread installation.

## <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

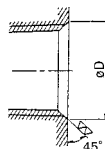
#### Connecting Female Thread: G

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