

# 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	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"
	Union "Y"
U	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 *



\* Available only for KQ2 (White color body).

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

#### 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

# 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.

**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.

**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

**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 <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	ANSI/ASME B1.20.1-1983 (NTP 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	
<b>Hex. socket head male connector</b> <b>KQ2S</b> P. 13  Internal hex. allows thread connection by using an allen wrench for confined spaces.	<b>Universal male elbow</b> <b>KQ2V</b> P. 15  Universal male elbow allows thread connection by using a socket wrench for confined spaces.
<b>45° male elbow</b> <b>KQ2K</b> P. 15  Use to pipe in 45° angle direction from female thread. Model in-between of male connector and male elbow.	<b>Extended male elbow</b> <b>KQ2W</b> 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.
<b>Bulkhead union</b> <b>KQ2E</b> P. 22  Use to connect tubes through a panel.	<b>Bulkhead connector</b> <b>KQ2E</b> P. 23  Use to connect male thread and tube through a panel.
<b>Nipple</b> <b>KQ2N</b> P. 23  Use to connect One-touch fittings.	<b>Reducer nipple</b> <b>KQ2N</b> P. 23  Use to connect One-touch fittings that are different tubing O.Ds.
<b>Male connector</b> <b>KQ2H</b> P. 13  Use to pipe in the same direction from female thread. Most general style.	<b>Hexagon socket head universal male elbow</b> <b>KQ2VS</b> P. 15  Hex. on the top allows thread connection by using an allen wrench for confined spaces.
<b>Female connector</b> <b>KQ2F</b> P. 13  Use to pipe from male thread such as pressure gauge.	<b>Universal female elbow</b> <b>KQ2VF</b> P. 16  Use to branch line in the same direction or at right angles from male or female thread. Multiplex connection possible.
<b>Straight union</b> <b>KQ2H</b> P. 14  Use to connect tubes in the same direction.	<b>Female elbow</b> <b>KQ2LF</b> P. 16  Use to pipe at right angles to male thread.
<b>Different diameter straight</b> <b>KQ2H</b> P. 14  Use to connect different sized tubes.	<b>Double universal male elbow</b> <b>KQ2VD</b> P. 16  Use to branch line at right angles to female thread. Two individual parts rotate 360°.
<b>Male elbow</b> <b>KQ2L</b> P. 14  Use to pipe at right angles to female thread. Most general style.	<b>Triple universal male elbow</b> <b>KQ2VT</b> P. 17  Use to three-branch line at right angles from female thread. Three individual parts rotate 360°.
	<b>Branch universal male elbow</b> <b>KQ2Z</b> P. 17  Hexagonal head allows thread connection by using a box wrench. Use for branch connection.
	<b>Double branch universal male elbow</b> <b>KQ2ZD</b> P. 17  Use to four-branch line at right angles from female thread. Two individual parts rotate 360°.
	<b>Triple branch universal male elbow</b> <b>KQ2ZT</b> P. 18  Use to six-branch line at right angles from female thread. Three individual parts rotate 360°.
	<b>Union elbow</b> <b>KQ2L</b> P. 18  Use to connect tubes at right angles.
	<b>Plug-in elbow</b> <b>KQ2L</b> 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

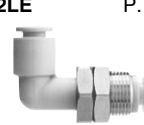


P. 22

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>

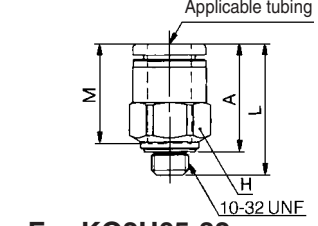


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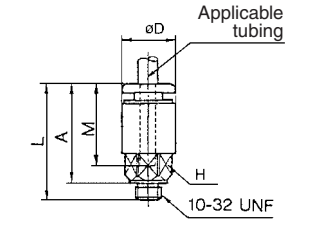


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD	L	A	M	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2H01-32	7	—	16.7	13.7	12.7	2.3	2
	1/16	KQ2H01-33S	11.11	—	22	18 *	15.5	2.5	7
	1/8	KQ2H01-34S	—	—	—	—			9
5/32	1/4	KQ2H01-35S	14.29	—	19.5	13.5 *	—	—	16
	10-32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

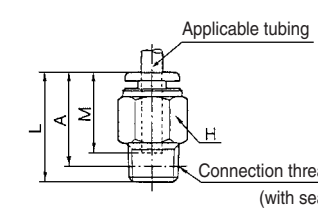
01-32  
For KQ2H03-32  
07-32



<For KQ2H05-32>



<NPT>



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

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## Hexagon Socket Head Male Connector: KQ2S

<10-32 UNF>



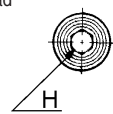
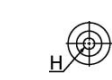
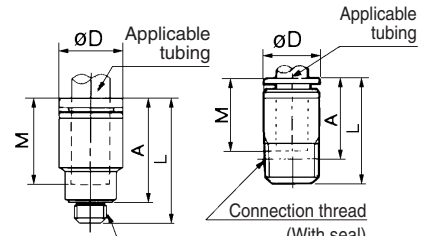
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Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD	L	A *	M	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2S01-32	2	7	19.7	16.6	12.7	2	2.8
5/32	10-32 UNF	KQ2S03-32	2.5	8	18.7	15.6	12.7	2.3	2.7
	1/8	KQ2S03-34S	2.78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

<10-32 UNF>

<NPT>

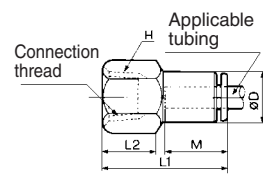


\* Reference dimensions after NPT thread installation.  
Note) øD: Max. diameter

## 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	
5/16	1/8	KQ2F09-34	14.29	14	29	10.5	18.5	6	18	
	1/4	KQ2F09-35	17.46		32.5	13.5			26	
	3/8	KQ2F09-36	22.23		34.5	13			38	
3/8	1/4	KQ2F11-35	17.46	16.5	34.5	15	21	7	30	
	3/8	KQ2F11-36	22.23		36.5				19	48
	1/2	KQ2F11-37	23.81		40.5				19	52
1/2	3/8	KQ2F13-36	22.23	20	36.5	14.5	22	9.6	48	
	1/2	KQ2F13-37	23.81		41	18.5			53	



Note) øD: Max. diameter



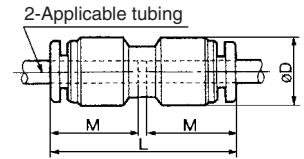
# Series KQ2

## Straight Union: KQ2H



Applicable tubing O.D. (inch)	Model	Note) $\phi D$	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)  $\phi D$ : Max. diameter

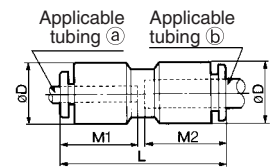


## Different Diameter Straight: KQ2H



Applicable tubing O.D. (inch)		Model	Note) $\phi D$	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		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		4
3/16	1/4	KQ2H05-07	13.2	34.5	16.5	17	3.5	5
	5/16	KQ2H07-09	15.2	38.5	17	18.5		6
1/4	3/8	KQ2H07-11	17.9	42	21	21	4.6	11
	5/16	KQ2H09-11	17.9	42	18.5	21		11
5/16	1/2	KQ2H09-13	21.7	44	22	22	6	16
	3/8	KQ2H11-13	21.7	44	21	22		7

Note)  $\phi D$ : Max. diameter



## Male Elbow: KQ2L

01-32  
For KQ2L03-32  
07-32



<For KQ2L05-32>



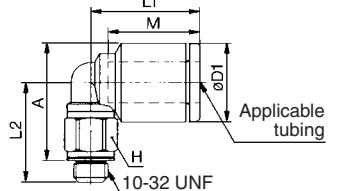
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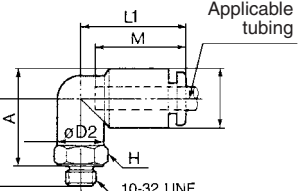
Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Min. port size	Weight (g)			
1/8	10-32 UNF	KQ2L01-32	7	8.4	—	15.3	13.2	14	12.7	2.3	2.5			
	1/16	KQ2L01-33S	11.11	9.6	10	17.5	21.5	22.5*	15.5	2.5	8			
	1/8	KQ2L01-34S	14.29									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
5/32	1/16	KQ2L03-33S	11.11	10.4	10	18	22	23*	16	3	8			
	1/8	KQ2L03-34S	14.29									26	25*	18
	1/4	KQ2L03-35S	14.29									26	26*	19
	3/16	10-32 UNF	KQ2L05-32									11.11	11.4	10
1/8	KQ2L05-34S	14.29	26.5	26*	10									
1/4	KQ2L05-35S	14.29	26.5	26*	19									
1/4	10-32 UNF	KQ2L07-32	7	12	—	16.1	15.1	18.1	13.6	2.3	3.2			
	1/8	KQ2L07-34S	11.11	13.2	10	20.5	27.5	28*	17	4.6	10			
	1/4	KQ2L07-35S	14.29									29.5	30*	32
	3/8	KQ2L07-36S	17.46									29.5	30*	32
5/16	1/8	KQ2L09-34S	12.7									15.2	12	23.5
1/4	KQ2L09-35S	14.29	30.5	30*	28									
3/8	KQ2L09-36S	17.46	30.5	31.5*	28									
3/8	1/8	KQ2L11-34S	11.11	17.9	17	25.5	26.5	31.5*	21	6	16			
	1/4	KQ2L11-35S	14.29									29.5	32.5*	23
	3/8	KQ2L11-36S	17.46									31.5	34*	33
	1/2	KQ2L11-37S	22.23									35.5	36.5*	59
1/2	1/4	KQ2L13-35S	17.46	21.7	17	28	31.5	36.5*	22	9	28			
	3/8	KQ2L13-36S	22.23									33.5	38.5*	36
	1/2	KQ2L13-37S	22.23									37.5	40*	62
	1/2	KQ2L13-37S	22.23									37.5	40*	62

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

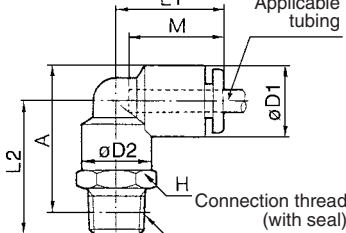
01-32  
For KQ2L03-32  
07-32



<For KQ2L05-32>



<NPT>





## 45° Male Elbow: KQ2K

<10-32 UNF>

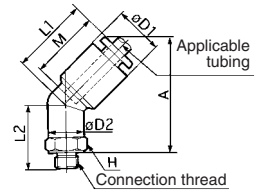


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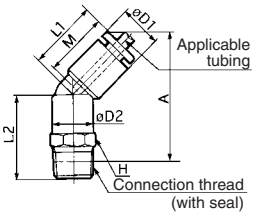


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A *	M	Min. port size	Weight (g)			
1/8	10-32 UNF	KQ2K01-32	8	9.6	8	16.5	15	25.5	15.5	2.3	4			
	1/8	KQ2K01-34S	11.11									10	16.5	22.5
5/32	10-32 UNF	KQ2K03-32	8	10.4	8	17	14.5	26	16	2.3	4			
	1/8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

<10-32 UNF>



<NPT>



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

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

## Universal Male Elbow: KQ2V

<10-32 UNF>

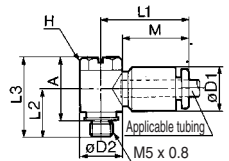


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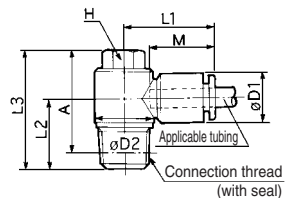


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A *	M	Min. port size	Weight (g)							
1/8	10-32 UNF	KQ2V01-32	8	8.4	9.8	17.2	11	18.5	15	12.7	2.3	5							
	1/8	KQ2V01-34S											9.6	13.4	21.5	14.5	26.5	22.5	15.5
5/32	10-32 UNF	KQ2V03-32	8	10.4	9.8	20.5	11	18.5	15	16	2.3	6							
	1/8	KQ2V03-34S											13.4	22	14.5	26.5	22.5	16	2.8
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											13.4	24	12	24	20.5	2.3	13
1/4	1/8	KQ2V07-34S	8	13.2	13.4	24	14.5	26.5	22.5	17	4.6	15							
	1/4	KQ2V07-35S											15.3	23.5	19	32.5	26.5	25	
	3/8	KQ2V09-34S											11.11	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											12.7	20.6	27.5	20.5	36.5	30	46
	1/2	KQ2V11-35S											12.7	17.9	20.6	30.5	19.5	35.5	29.5
3/8	1/4	KQ2V11-36S	12.7	17.9	20.6	30.5	20.5	36.5	30	21	7	48							
	3/8	KQ2V13-36S											21.5	36	30	22	9	68	
	1/2	KQ2V13-37S											24.5	39	31	22	9	85	

<10-32 UNF>



<NPT>



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

## Hexagon Socket Head Universal Male Elbow: KQ2VS

<10-32 UNF>

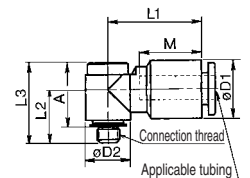


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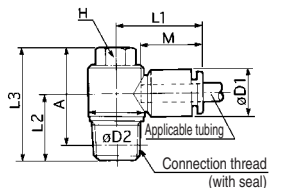


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A *	M	Min. port size	Weight (g)						
1/8	10-32 UNF	KQ2VS01-32	4	8.4	9.8	17.2	10.9	18.5	15	12.7	2.3	5						
	1/8	KQ2VS01-34S	6.35										9.6	13.4	21.5	14.5	26.5	22.5
5/32	10-32 UNF	KQ2VS03-32	4	10.4	9.8	20.5	11	18.5	15	16	2.3	6						
	1/8	KQ2VS03-34S	6.35										13.4	22	14.5	26.5	22.5	16
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	13.4										24	12	24	19	2.3	13
1/4	1/8	KQ2VS07-34S	6.35	13.2	13.4	24	14.5	26.5	22.5	17	4.6	15						
	1/4	KQ2VS07-35S											15.3	23.5	19	28.5	22	
	3/8	KQ2VS09-34S											11.11	17.6	28.5	15.5	27	23
5/16	1/4	KQ2VS09-35S	8	15.2	17.6	28.5	18.5	30	24	18.5	6	27						
	3/8	KQ2VS09-36S											20.6	27.5	20.5	32.5	26	39
	1/2	KQ2VS11-35S											12.7	17.9	20.6	31	19.5	31.5
3/8	1/4	KQ2VS11-36S	8	17.9	20.6	31	20.5	32.5	26	21	7	42						
	3/8	KQ2VS13-36S											21.5	34.5	28.5	22	9	63
	1/2	KQ2VS13-37S											24.5	37.5	29.5	22	9	81

<10-32 UNF>



<NPT>



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

# Series KQ2

## Universal Female Elbow: KQ2VF

<10-32 UNF>



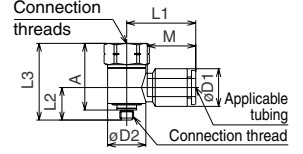
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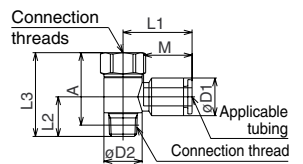
Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A *	M	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2VF01-32	8	8.4	9.8	17.2	10	20	16.5	12.7	2.3	5
	1/8	KQ2VF01-34S	14.29	9.6	13.4	21.5	14	29.5	25.5	15.5	2.5	18
5/32	10-32 UNF	KQ2VF03-32	8	10.4	9.8	20.5	11	20	16	16	2.5	6
	1/8	KQ2VF03-34S	14.29	10.4	13.4	22	15.5	29.5	25.5	16	2.8	18
3/16	10-32 UNF	KQ2VF05-34S	14.29	11.4	13.4	23	14	29.5	25.5	16.5	3.5	19
	1/8	KQ2VF07-32	14.29	13.2	13.4	24	11.5	27	23.5	17	2.3	16
1/4	1/8	KQ2VF07-34S	17.46	13.2	17.6	25	14	29.5	25.5	17	4.6	19
	1/4	KQ2VF07-35S	17.46	15.2	17.6	25	17.5	38.5	32.5	17	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	15.2	20	38.5	20	38.5	32.5	18.5	6	38
	3/8	KQ2VF09-36S	22.23	17.9	25.2	29.5	20.5	45	39	21	7	67
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	3/8	KQ2VF13-36S	22.23	21.7	21	42	21	42	39	22	9	85
	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>

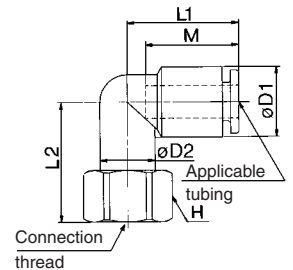


## Female Elbow: KQ2LF



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	9.6	10	17.5	23.5	15.5	2.5	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	13.2	10	20.5	26	17	4.6	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	17.9	17	25.5	32	21	7	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>



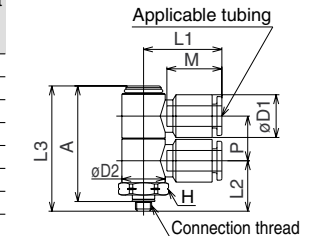
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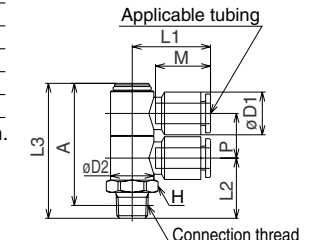
Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A *	M	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2VD01-32	8	8.4	9.8	17.2	10	20	16.5	12.7	2.3	5
	1/8	KQ2VD01-34S	14.29	9.6	13.4	21.5	14	29.5	25.5	15.5	2.5	18
5/32	10-32 UNF	KQ2VD03-32	8	10.4	9.8	20.5	11	20	16	16	2.5	6
	1/8	KQ2VD03-34S	14.29	10.4	13.4	22	15.5	29.5	25.5	16	2.8	18
3/16	10-32 UNF	KQ2VD05-34S	14.29	11.4	13.4	23	14	29.5	25.5	16.5	3.5	19
	1/8	KQ2VD07-32	14.29	13.2	13.4	24	11.5	27	23.5	17	2.3	16
1/4	1/8	KQ2VD07-34S	17.46	13.2	17.6	25	14	29.5	25.5	17	4.6	19
	1/4	KQ2VD07-35S	17.46	15.2	17.6	25	17.5	38.5	32.5	17	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	15.2	20	38.5	20	38.5	32.5	18.5	6	38
	3/8	KQ2VD09-36S	22.23	17.9	25.2	29.5	20.5	45	39	21	7	67
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	3/8	KQ2VD13-36S	22.23	21.7	21	42	21	42	39	22	9	85
	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>



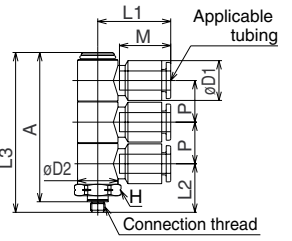
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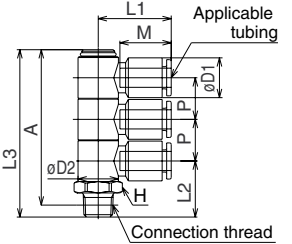
Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A *	M	P	Min. port size	Weight (g)
1/8	10-32 UNF	KQ2VT01-32	14.29	9.6	13.4	22	15.5	52	48.5	15.5	13.4	2.3	32
	1/8	KQ2VT01-34S					18	54.5	50.5				
5/32	10-32 UNF	KQ2VT03-32	14.29	10.4	13.4	22	15.5	52	48.5	16	13.4	2.3	32
	1/8	KQ2VT03-34S					18.5	54.5	50.5				
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
	1/8	KQ2VT07-32					15.5	53	49.5				
1/4	1/8	KQ2VT07-34S	14.29	13.2	13.4	24	18.5	55.5	51.5	17	13.8	4.6	35
	1/4	KQ2VT07-35S					21.5	58.5	52.5				33
	3/8	KQ2VT07-36S					23.5	60.5	54				39
5/16	1/8	KQ2VT09-35S	19	15.2	17.6	28.5	24	67	61	18.5	15.9	6	59
	1/4	KQ2VT09-36S					25	68	61.5				70
	3/8	KQ2VT09-37S					22.23	28.5	71.5				63.5
3/8	1/4	KQ2VT11-35S	22.23	17.9	20.6	31	26	77.5	71.5	21	19.2	7	98
	3/8	KQ2VT11-36S					27	78.5	72				98
	1/2	KQ2VT11-37S					30	81.5	73				114
1/2	3/8	KQ2VT13-36S	25.4	21.7	27	35.5	32	89	83	22	22.3	9.6	188
	1/2	KQ2VT13-37S					35	92	84				203

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

<10-32 UNF>



<NPT>



K□

M□

H□

D□

MS

T□

VMG

## Branch Universal Male Elbow: KQ2Z

<10-32 UNF>



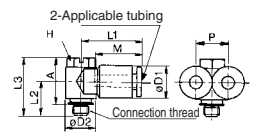
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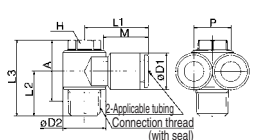
Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A *	M	P	Min. port size	Weight (g)			
1/8	10-32 UNF	KQ2Z01-32	8	8.4	9.8	16	11.2	18.5	15	12.7	8.4	2.3	6			
	1/8	KQ2Z01-34S												9.6	13.4	20.5
5/32	10-32 UNF	KQ2Z03-32	8	10.4	9.8	19.5	11	18.5	15	16	10.4	2.3	8			
	1/8	KQ2Z03-34S												13.4	21	14.5
3/16	10-32 UNF	KQ2Z07-32	8	13.2	13.4	21.5	12	24	20.5	17	13.2	2.3	15			
	1/8	KQ2Z07-34S												14.5	26.5	22.5
1/4	1/4	KQ2Z07-35S	11.11	15.2	17.6	26	18.5	31.5	25.5	18.5	15.2	6	33			
	1/8	KQ2Z09-34S											15.5	28.5	24.5	27
	1/4	KQ2Z09-35S											18.5	31.5	25.5	33
5/16	1/8	KQ2Z09-36S	12.7	20.6	27	20.5	36.5	30	21	17.9	7	49	46			
	1/4	KQ2Z11-35S											19.5	35.5	29.5	55
	3/8	KQ2Z11-36S											20.5	36.5	30	76
1/2	3/8	KQ2Z13-36S	17.46	21.7	27	33	21.5	36	30	22	21.7	9	76			
	1/2	KQ2Z13-37S											24.5	39	31	93

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

<10-32 UNF>



<NPT>

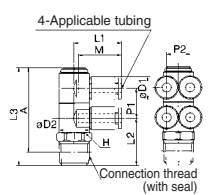


## Double Branch Universal Male Elbow: KQ2ZD



Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A *	M	P1	P2	Min. port size	Weight (g)			
1/8	1/8	KQ2ZD01-34S	14.29	9.6	13.4	20.5	18	41	37	15.5	13.4	9.6	2.5	26			
5/32	1/8	KQ2ZD03-34S	14.29	10.4	13.4	21	18.5	41	37	16	13.4	10.4	3	26			
	3/16	1/8													KQ2ZD05-34S	14.29	11.4
1/4	1/8	KQ2ZD07-34S	14.29	13.2	13.4	21.5	18.5	41.5	37.5	17	13.8	13.2	4.6	30			
	1/4	KQ2ZD07-35S												21.5	44.5	38.5	36
	3/8	KQ2ZD07-36S												23.5	46.5	40.5	49
5/16	1/8	KQ2ZD09-35S	19	15.2	17.6	26	24	51	45	18.5	15.9	15.2	6	56			
	1/4	KQ2ZD09-36S												25	52	45.5	64
	3/8	KQ2ZD09-37S												22.23	28.5	55.5	47.5
3/8	1/4	KQ2ZD11-35S	22.23	17.9	20.6	28.5	26	58	52	21	19.2	17.9	7	88			
	3/8	KQ2ZD11-36S												27	59	52.5	90
	1/2	KQ2ZD11-37S												30	62	54	106
1/2	3/8	KQ2ZD13-36S	25.4	21.7	27	33	32	66.5	60.5	22	22.3	21.7	9.6	158			
	1/2	KQ2ZD13-37S												35	69.5	61.5	176

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

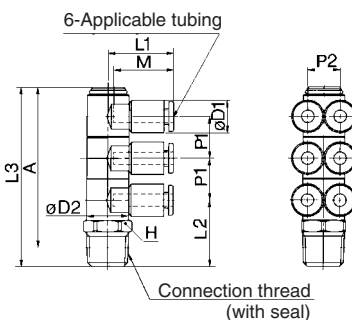


# Series KQ2

## Triple Branch Universal Male Elbow: KQ2ZT



Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	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					21.5	58.5	52.5					70
	3/8	KQ2ZT07-36S					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					25	68	61.5					80
	3/8	KQ2ZT09-37S					22.23	28.5	71.5					63.5
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					27	78.5	72					116
	1/2	KQ2ZT11-37S					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					35	92	84					228

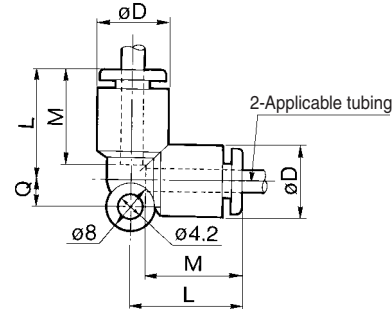


\* Reference dimensions after NPT thread installation.  
Note)  $\phi D1$ : Max. diameter

## Union Elbow: KQ2L



Applicable tubing O.D. (inch)	Model	Note) $\phi D$	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

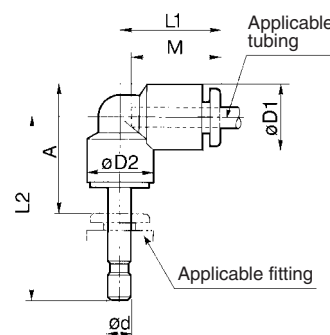


Note)  $\phi D$ : Max. diameter

## Plug-in Elbow: KQ2L



Applicable tubing O.D. (inch)	Applicable fitting size $\phi d$ (inch)	Model	Note) $\phi D1$	$\phi D2$	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

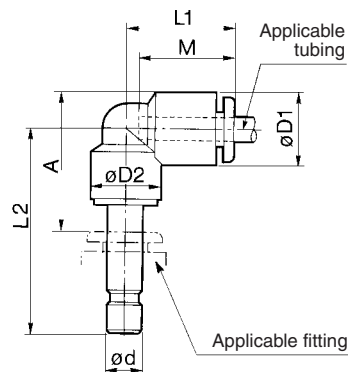


Note)  $\phi D1$ : Max. diameter

## Reducer Elbow: KQ2L



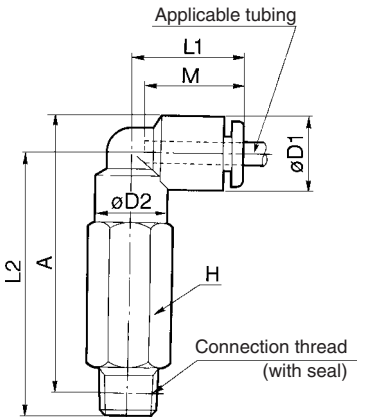
Applicable tubing O.D. (inch)	Applicable fitting size $\phi d$ (inch)	Model	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Min. port size	Weight (g)
1/8	5/32	KQ2L01-03	9.6	7	17	25	13.5	15.5	2.2	3
	3/16	KQ2L01-05			10	17.5	33		21.5	2.5
5/32	3/16	KQ2L03-05	10.4	10	18	33.5	22.5	16	3	6
	1/4	KQ2L03-07			8	26	14.5		2.5	3
3/16	1/4	KQ2L05-07	11.4	10	19	26.5	15.5	16.5	3.5	8
	5/16	KQ2L05-09			19.5	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			39.5	23.5	17		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	21		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 NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	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			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>

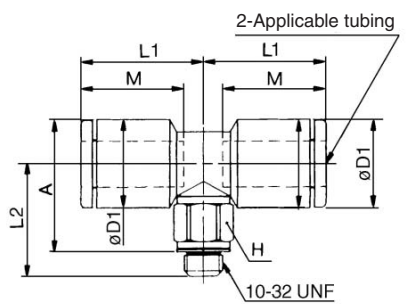


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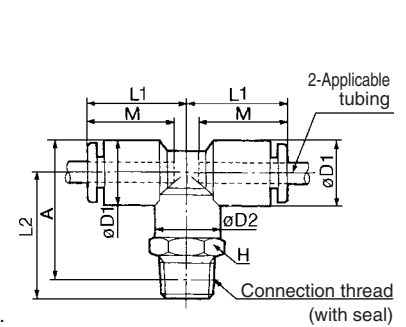


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Min. port size	Weight (g)		
1/8	10-32 UNF	KQ2T01-32	7	8.4	—	15.3	13.2	14.4	12.7	2.3	3.2		
	1/16	KQ2T01-33S	11.11	9.6	10	17.5	21.5	22.5*	15.5	2.5	10		
	1/8	KQ2T01-34S	11.11								25.5	24.5*	20
	1/4	KQ2T01-35S	14.29								25.5	24.5*	20
5/32	10-32 UNF	KQ2T03-32	7	9.3	—	15.6	13.7	15.4	12.7	2.3	3.5		
	1/16	KQ2T03-33S	11.11	10.4	10	18	22	23*	16	3	10		
	1/8	KQ2T03-34S	11.11								26	25*	20
	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
1/4	10-32 UNF	KQ2T07-32	7	12	—	16.1	15.1	18.1	13.6	2.3	4.4		
	1/8	KQ2T07-34S	11.11	13.2	10	20.5	23.5	26*	17	4.6	11		
	1/4	KQ2T07-35S	14.29								27.5	28*	21
3/8	KQ2T07-36S	17.46	29.5								30*	34	
5/16	1/8	KQ2T09-34S	12.7	15.2	12	23	24.5	28*	18.5	6	15		
	1/4	KQ2T09-35S	14.29								28.5	30*	23
	3/8	KQ2T09-36S	17.46								30.5	31.5*	35
3/8	1/8	KQ2T11-34S	11.11	17.9	17	25.5	26.5	31.5*	21	7	31		
	1/4	KQ2T11-35S	14.29								29.5	32.5*	29
	3/8	KQ2T11-36S	17.46								31.5	34.5*	38
	1/2	KQ2T11-37S	22.23								35.5	36.5*	64
1/2	1/4	KQ2T13-35S	17.46	21.7	17	28	31.5	36.5*	22	9	34		
	3/8	KQ2T13-36S	17.46								33.5	38.5*	43
	1/2	KQ2T13-37S	22.23								37.5	40*	69

<10-32 UNF>



<NPT>

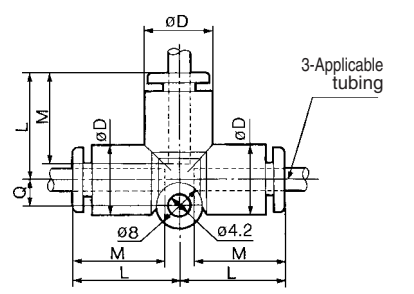


\* Reference dimensions after NPT thread installation.  
 Note)  $\phi D1$ : Max. diameter

## Union Tee: KQ2T



Applicable tubing O.D. (inch)	Model	Note) $\phi D$	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



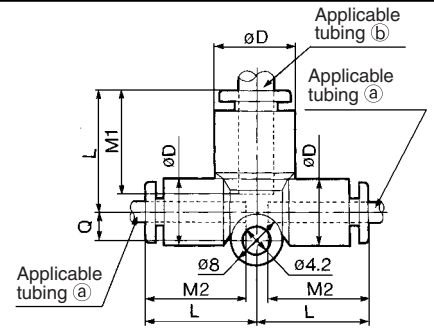
Note)  $\phi D$ : Max. diameter

# 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

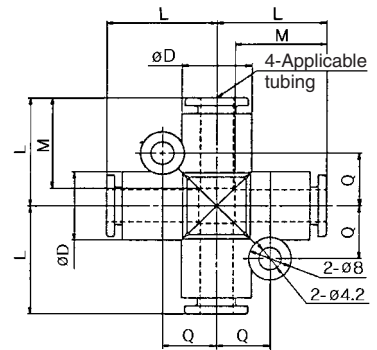


Note) øD: Max. diameter

## 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

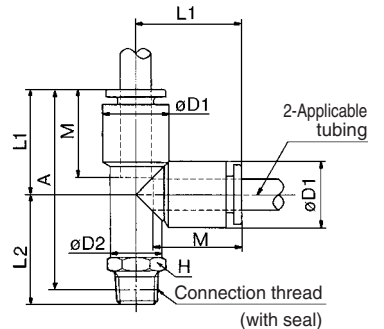


Note) øD: Max. diameter

## 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	14.29								25.5	37	20
	1/4	KQ2Y01-35S	14.29								25.5	37	20
5/32	1/16	KQ2Y03-33S	11.11	10.4	10	18	22	36	16	3	10		
	1/8	KQ2Y03-34S	14.29								26	38	11
	1/4	KQ2Y03-35S	14.29								26	38	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
1/4	1/8	KQ2Y07-34S	11.11	13.2	10	20.5	23.5	40	17	4.6	11		
	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	9.6	9		
	3/8	KQ2Y13-36S	17.46								33.5	55.5	43
	1/2	KQ2Y13-37S	22.23								37.5	57	69



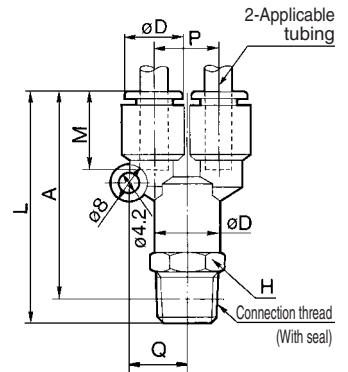
\* Reference dimensions after NPT thread installation.  
Note) øD1: Max. diameter

# Inch-size One-touch Fittings Series KQ2

## Branch "Y": KQ2U



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) $\phi D$	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			22.23			64.5			56.5
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



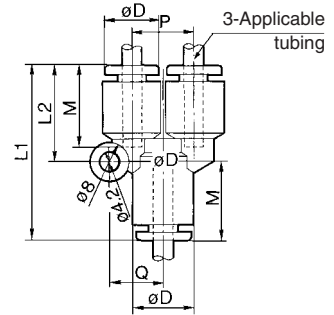
\* Reference dimensions after NPT thread installation.  
Note)  $\phi D$ : Max. diameter

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

## Union "Y": KQ2U



Applicable tubing O.D. (inch)	Model	Note) $\phi D$	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

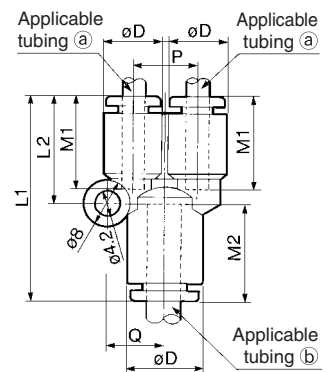


Note)  $\phi D$ : Max. diameter

## Branch "Y": KQ2U



Applicable tubing O.D. (inch)		Model	Note) $\phi D$	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
	5/16	KQ2U07-09	15.2	42.5	24.5	15.2	13.7		17		18.5
1/4	3/8	KQ2U07-11	17.9	47	27.5	17.9	15.6	17	21	4.6	23
	3/8	KQ2U09-11	17.9	47	27.5	17.9	15.6		21		22
5/16	1/2	KQ2U09-13	21.7	51	30	21.7	18.8	18.5	22	6	34
	3/8	KQ2U11-13	21.7	51.5	30.5	21.7	18.8		21		22

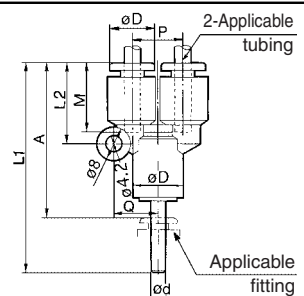


Note)  $\phi D$ : Max. diameter

## Plug-in "Y": KQ2U



Applicable tubing O.D. (inch)	Applicable fitting size $\phi d$ (inch)	Model	Note) $\phi D$	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)  $\phi D$ : Max. diameter



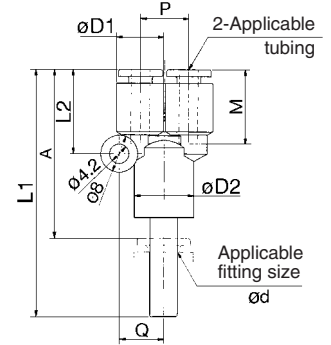
# Series KQ2

## Different Diameter Plug-in “Y”: KQ2X



Applicable tubing O.D. (inch)	Applicable fitting size $\phi d$	Model	Note) $\phi D$	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)  $\phi D$ : Max. diameter

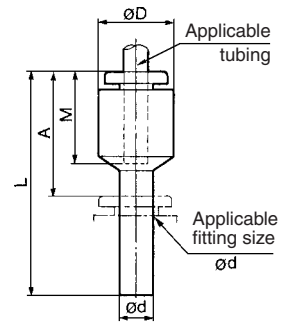


## Plug-in Reducer: KQ2R



Applicable tubing O.D. (inch)	Applicable fitting size $\phi d$ (inch)	Model	Note) $\phi D$	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	17.5			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

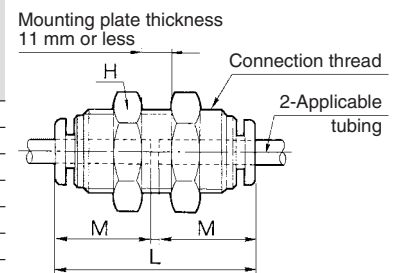
Note)  $\phi D$ : Max. diameter



## 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

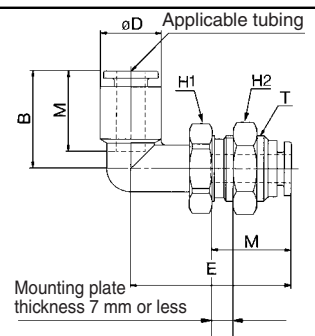


## Bulkhead Male Elbow: KQ2LE



Applicable tubing O.D. (inch)	Model	T	H1 (Width across flats)	H2 (Width across flats)	B	E	Note) $\phi D$	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)  $\phi D$ : Max. diameter

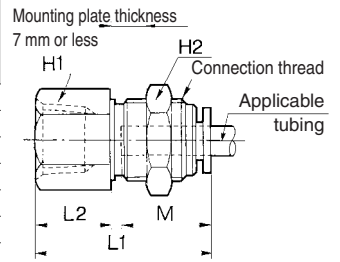




## Bulkhead Connector: KQ2E



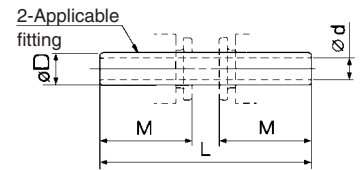
Applicable tubing O.D. (inch)	Connection thread NPT	Model	Connection thread UNF	H1 (Width across flats)	H2 (Width across flats)	L1	L2	M	Min. port size	Mounting hole	Weight (g)
1/8	1/4	<b>KQ2E01-35</b>	1/2 -20	17.46	17.46	31	15	15.5	2.5	13.5	36
5/32	1/4	<b>KQ2E03-35</b>	1/2 -20	17.46	17.46	31	15	16	3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



## Nipple: KQ2N



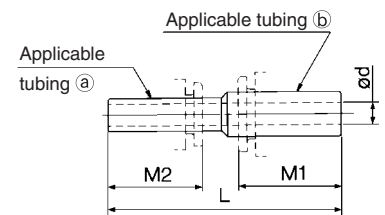
Applicable fitting $\phi D$	Model	L	M	$\phi d$	Weight (g)
1/8	<b>KQ2N01-99</b>	36	15.5	2.2	0.2
3/16	<b>KQ2N05-99</b>	38	16.5	3.5	0.4
1/4	<b>KQ2N07-99</b>	39	17	4.6	1
3/8	<b>KQ2N11-99</b>	49	21	7.5	10
1/2	<b>KQ2N13-99</b>	51	22	10	15



## Reducer Nipple: KQ2N



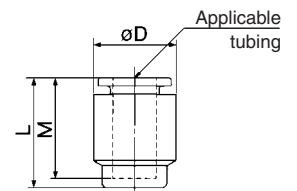
Applicable tubing O.D. (inch)	Model		L	M1	M2	$\phi d$	Weight (g)
	(a)	(b)					
1/8	5/32	<b>KQ2N01-03</b>	36.5	16	15.5	2.2	0.2
	3/16	<b>KQ2N01-05</b>	37	16.5			0.4
5/32	3/16	<b>KQ2N03-05</b>	37.5	16.5	16	2.5	0.4
	1/4	<b>KQ2N03-07</b>	38	17			0.6
3/16	1/4	<b>KQ2N05-07</b>	38.5	17	16.5	3.5	0.6
	5/16	<b>KQ2N05-09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



## Tube Cap: KQ2C



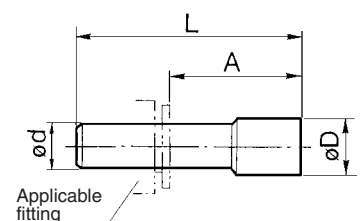
Applicable tubing O.D. (inch)	Model	$\phi D1$	L	M	Weight (g)
5/32	<b>KQ2C03-00</b>	10.4	17	16	1
1/4	<b>KQ2C07-00</b>	13.2	18	17	2
5/16	<b>KQ2C09-00</b>	15.2	20.5	18.5	3
3/8	<b>KQ2C11-00</b>	17.9	22.5	21	6



## Plug: KQ2P, KQP



Applicable fitting size $\phi d$ (inch)	Model <sup>Note)</sup>		$\phi D$	L	A	Weight (g)
1/8	<b>KQ2P-01</b>	<b>KQP-01</b>	5	31.5	16	1
5/32	<b>KQ2P-03</b>	<b>KQP-03</b>	6	32	16	1
3/16	<b>KQ2P-05</b>	<b>KQP-05</b>	6.8	34	17.5	1
1/4	<b>KQ2P-07</b>	<b>KQP-07</b>	8.5	35	18	1
5/16	<b>KQ2P-09</b>	<b>KQP-09</b>	10	39	20.5	2
3/8	<b>KQ2P-11</b>	<b>KQP-11</b>	11.5	43	22	3.5
1/2	<b>KQ2P-13</b>	<b>KQP-13</b>	15	46	24	5



K□

M□

H□

D□

MS

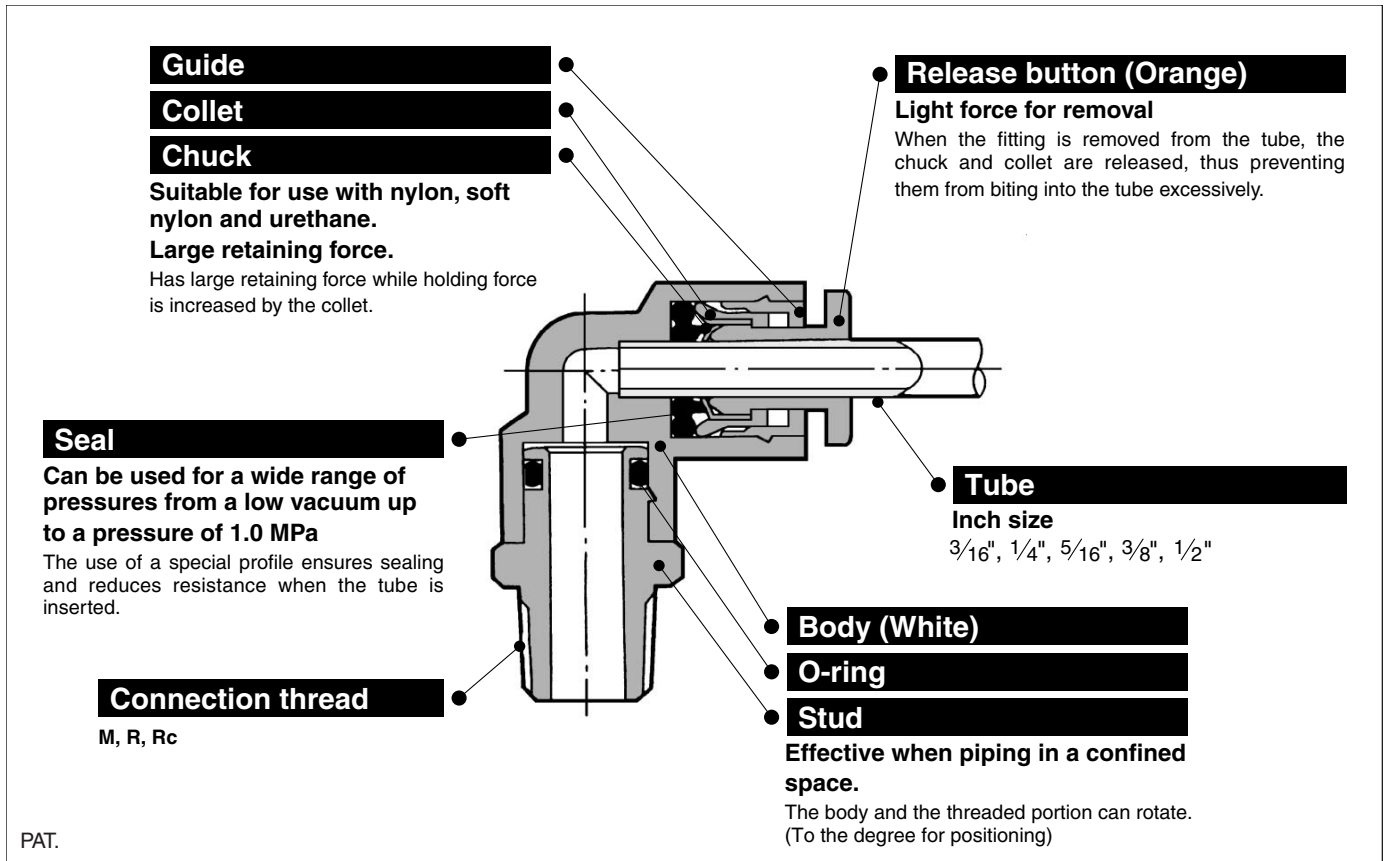
T□

VMG

# 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 <sup>Note)</sup>
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

Model					
<b>Male connector</b> <b>KQ2H</b> P. 26 	Use to pipe in the same direction from female thread. Most general style.	<b>Extended male elbow</b> <b>KQ2W</b> 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.	<b>Plug-in "Y"</b> <b>KQ2U</b> P. 29 	Use to branch line in the same direction from One-touch fittings.
<b>Straight union</b> <b>KQ2H</b> P. 26 	Use to connect tubes in the same direction.	<b>Male branch tee</b> <b>KQ2T</b> P. 27 	Use to branch line from female thread in both 90° directions.	<b>Branch "Y"</b> <b>KQ2U</b> P. 29 	Use to branch line in the same direction from female thread.
<b>Male elbow</b> <b>KQ2L</b> P. 26 	Use to pipe at right angles to female thread. Most general style.	<b>Union tee</b> <b>KQ2T</b> P. 28 	Use to connect tubes in both 90° directions.	<b>Bulkhead union</b> <b>KQ2E</b> P. 29 	Use to connect male thread and tube through a panel.
<b>Union elbow</b> <b>KQ2L</b> P. 26 	Use to connect tubes at the right angles.	<b>Male run tee</b> <b>KQ2Y</b> P. 28 	Use to branch line in the same direction from female thread and 90° direction.	<b>Bulkhead connector</b> <b>KQ2E</b> P. 29 	Use to connect male thread and tube through a panel.
<b>Plug-in elbow</b> <b>KQ2L</b> P. 27 	Use to change by 90° in a tube fetching direction from One-touch fitting.	<b>Plug-in reducer</b> <b>KQ2R</b> P. 28 	Use to size down One-touch fittings.	<b>Gasket/Seal for M5 thread</b> Part no. M-5G2 Material Stainless steel 304, NBR	
<b>Reducer elbow</b> <b>KQ2L</b> P. 27 	Use to change by 90° in a tube fetching direction from One-touch fitting and to size down.	<b>Union "Y"</b> <b>KQ2U</b> P. 28 	Use to branch line in the same direction.		

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

## How to Order

One-touch fittings

**KQ2 H 05 02 S**

- **Model**

H	Male connector *
	Straight union
L	Male elbow *
	Union elbow
	Plug-in elbow
	Reducer elbow
W	Extended male elbow *
T	Male branch tee *
	Union tee
Y	Male run tee *
	Union "Y"
U	Plug-in "Y"
	Branch "Y" *
R	Plug-in reducer
E	Bulkhead union
	Bulkhead connector
- **Applicable tubing O.D.**

01	1/8
05	3/16
07	1/4
09	5/16
11	3/8
13	1/2
- **Port size**

M5	M5 x 0.8
01	1/8
02	1/4
03	3/8
04	1/2
00	Same dia. tubing
99	Same dia. rod
- **With thread seal**

Nil	Without seal
S	With thread seal

\*mark: With seal is available.

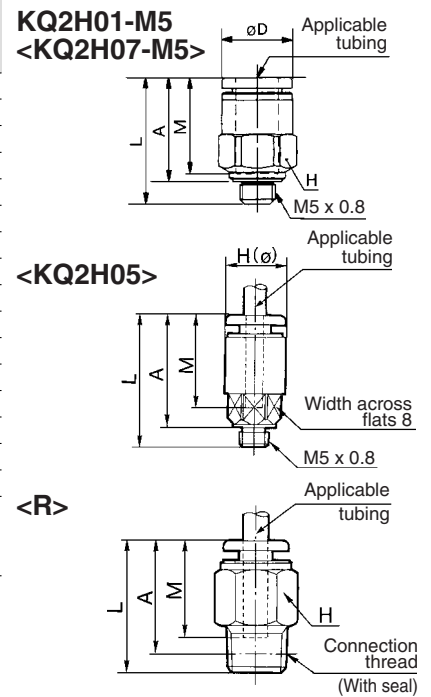
# Series KQ2

## Male Connector: KQ2H



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

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

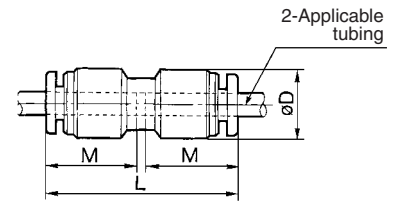


## Straight Union: KQ2H



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

Note)  $\phi D$ : Max. diameter

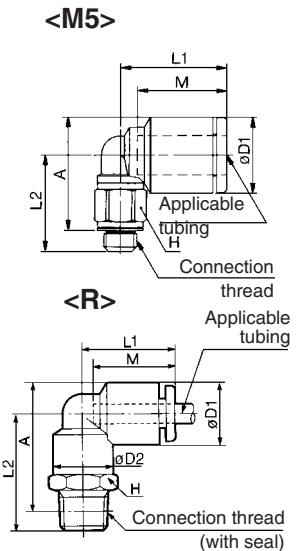


## Male Elbow: KQ2L



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)	
1/8	M5 x 0.8	<b>KQ2L01-M5</b>	7	8.4	—	15.3	13.2	14.3	12.7	2.3	2.5	
	1/8	<b>KQ2L05-01S</b>	10	11.4	10	19.5	22.5	24	16.5	3.5	10	
3/16	<b>KQ2L05-02S</b>	14	26.5				26	19				
1/4	M5 x 0.8	<b>KQ2L07-M5</b>	7	12	—	16.1	15.1	18	13.6	2.3	3.2	
	1/8	<b>KQ2L07-01S</b>	10	13.2	10	20.5	23.5	26	17	4.6	10	
	1/4	<b>KQ2L07-02S</b>	14				27.5	28			20	
	3/8	<b>KQ2L07-03S</b>	17				29.5	29.5			32	
5/16	<b>KQ2L09-01S</b>	12	15.2				12	23.5			24.5	28
1/4	<b>KQ2L09-02S</b>	14		28.5	30	20						
3/8	<b>KQ2L09-03S</b>	17		30.5	31.5	28						
3/8	<b>KQ2L11-02S</b>	17		29.5	32.5	23						
3/8	3/8	<b>KQ2L11-03S</b>	17	17.9	17	25.5	31.5	34	21	7	33	
	1/2	<b>KQ2L11-04S</b>					22	35.5			36.5	59
	1/4	<b>KQ2L13-02S</b>					17	31.5			36.5	28
1/2	3/8	<b>KQ2L13-03S</b>	17	21.7	17	28	33.5	38.5	22	9	36	
	1/2	<b>KQ2L13-04S</b>					22	37.5			40	62

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

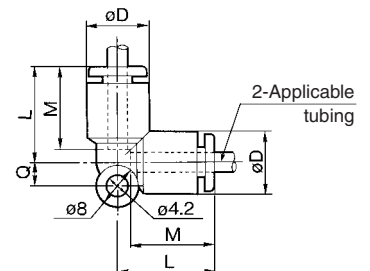


## Union Elbow: KQ2L



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

Note)  $\phi D$ : Max. diameter



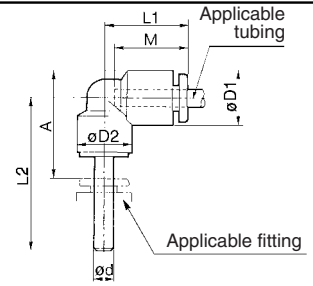
# Inch-size One-touch Fittings Series KQ2

## Plug-in Elbow: KQ2L



Applicable tubing O.D. (inch)	Applicable fitting size $\phi d$ (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

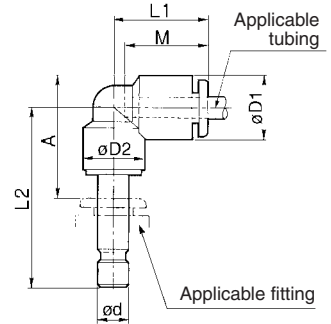


## Reducer Elbow: KQ2L



Applicable tubing O.D. (inch)	Applicable fitting size $\phi d$ (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	27.5			30
3/8	1/2	KQ2L11-13	17.9	17	25.5	43	30	21	7	25

Note)  $\phi D1$ : Max. diameter

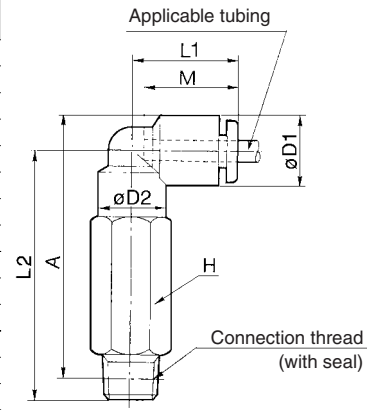


## Extended Male Elbow: KQ2W



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	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
5/16	1/8	KQ2W09-01S	12	15.2	12	23.5	43.5	47	18.5	6	30
	1/4	KQ2W09-02S	14				49.5	51			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	9.6	72
	3/8	KQ2W13-03S	17				60	64.5			78
	1/2	KQ2W13-04S	22				66.5	69			149

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

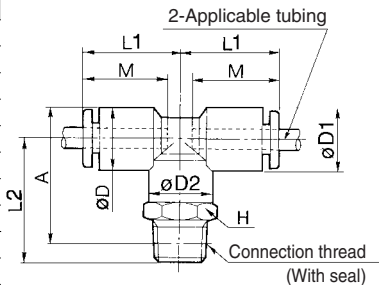


## Male Branch Tee: KQ2T



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	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
5/16	1/8	KQ2T09-01S	12	15.2	12	23	24.5	28	18.5	6	15
	1/4	KQ2T09-02S	14				28.5	30			23
	3/8	KQ2T09-03S	17				30.5	31.5			35
3/8	1/4	KQ2T11-02S	17	17.9	17	25.5	29.5	32.5	21	7	29
	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	9.6	34
	3/8	KQ2T13-03S	17				33.5	38.5			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

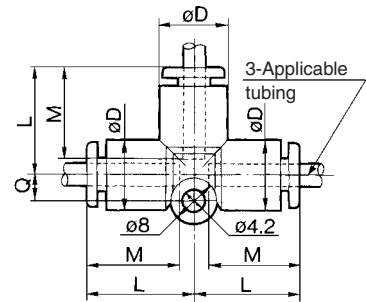
# Series KQ2

## Union Tee: KQ2T



Applicable tubing O.D. (inch)	Model	Note) $\phi D$	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)  $\phi D$ : Max. diameter

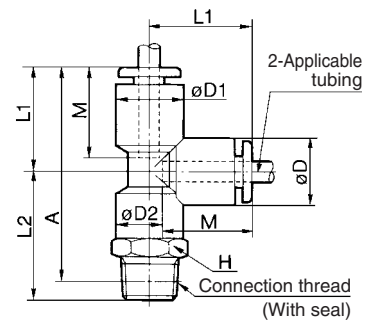


## Male Run Tee: KQ2Y



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	17				31.5	51			38
	1/2	KQ2Y11-04S	22				35.5	53			64
1/2	1/4	KQ2Y13-02S	17	21.7	17	28	31.5	53.5	22	9	34
	3/8	KQ2Y13-03S	17				33.5	55.5			43
	1/2	KQ2Y13-04S	22				37.5	57			69

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

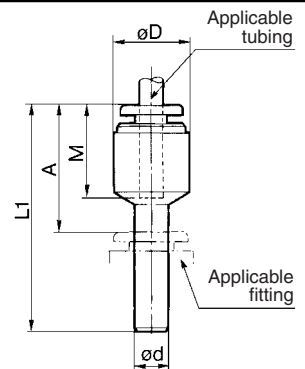


## Plug-in Reducer: KQ2R



Applicable tubing O.D. (inch)	Applicable fitting size $\phi d$ (inch)	Model	Note) $\phi D$	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)  $\phi D$ : Max. diameter

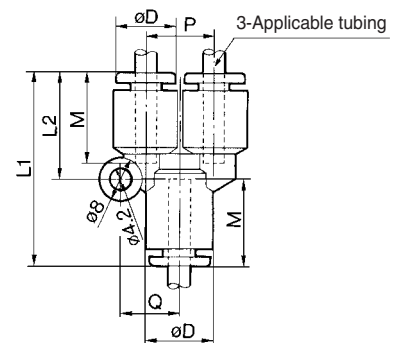


## Union "Y": KQ2U



Applicable tubing O.D. (inch)	Model	Note) $\phi D$	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)  $\phi D$ : Max. diameter





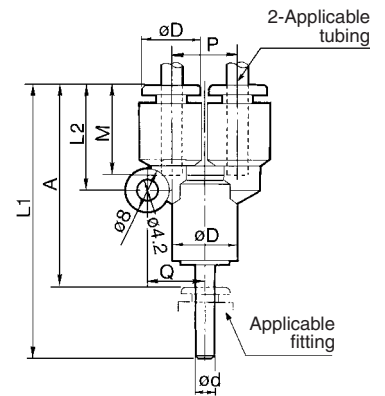
# Inch-size One-touch Fittings Series KQ2

## Plug-in "Y": KQ2U



Applicable tubing O.D. (inch)	Applicable fitting size $\phi d$ (inch)	Model	Note) $\phi D$	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)  $\phi D$ : Max. diameter

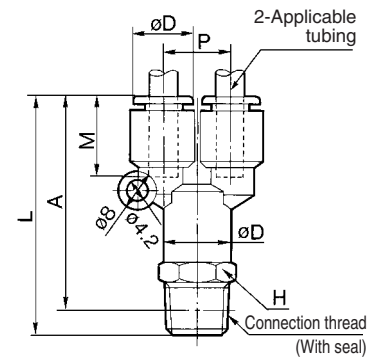


## Branch "Y": KQ2U



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note) $\phi D$	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			
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		45			19
	3/8	KQ2U07-03S			51.5		48.5			21
5/16	1/8	KQ2U09-01S	17	15.2	52.5	15.2	49.5	18.5	6	22
	1/4	KQ2U09-02S			55.5		50			35
	3/8	KQ2U09-03S			56.5		54			42
3/8	1/4	KQ2U11-02S	19	17.9	60	17.9	54.5	21	7	43
	3/8	KQ2U11-03S			61		56.5			56
	1/2	KQ2U11-04S			64.5		58.5			31
1/2	1/4	KQ2U13-02S	22	21.7	64.5	21.7	59	22	9.5	41
	3/8	KQ2U13-03S			65.5		60.5			41
	1/2	KQ2U13-04S			68.5		68.5			68

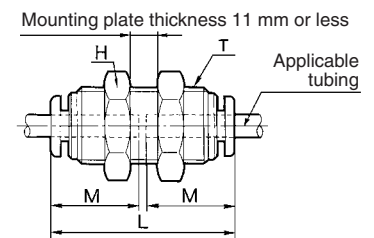
\* Reference dimensions after R thread installation.  
Note)  $\phi D$ : Max. diameter



## Bulkhead Union: KQ2E



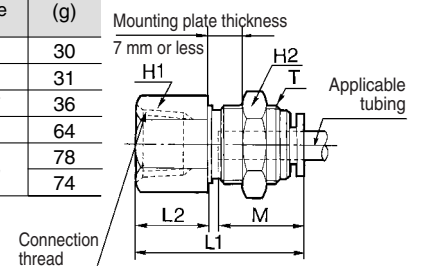
Applicable tubing O.D. (inch)	Model	T (M)	H (Width across flats)	L	Mounting hole	M	Min. port size	Weight (g)
3/16	KQ2E05-00M	M14 x 1	17	34	15	16.5	3.5	30
1/4	KQ2E07-00M	M14 x 1	17	34.5	15	17	4.6	30
5/16	KQ2E09-00M	M16 x 1	19	38	17	18.5	6	48
3/8	KQ2E11-00M	M20 x 1	24	42.5	21	21	7	62
1/2	KQ2E13-00M	M22 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
	3/8	KQ2E13-03	M22 x 1	24	27	37	14.5	22	9.6	23	78
1/2	1/2	KQ2E13-04	M22 x 1								74



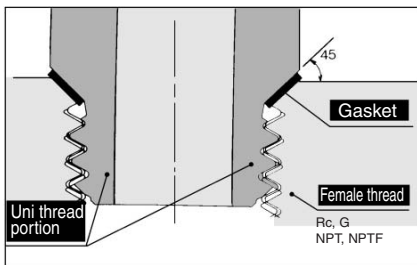
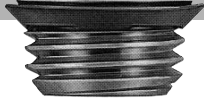
# Inch-size Uni One-touch Fittings

## 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.

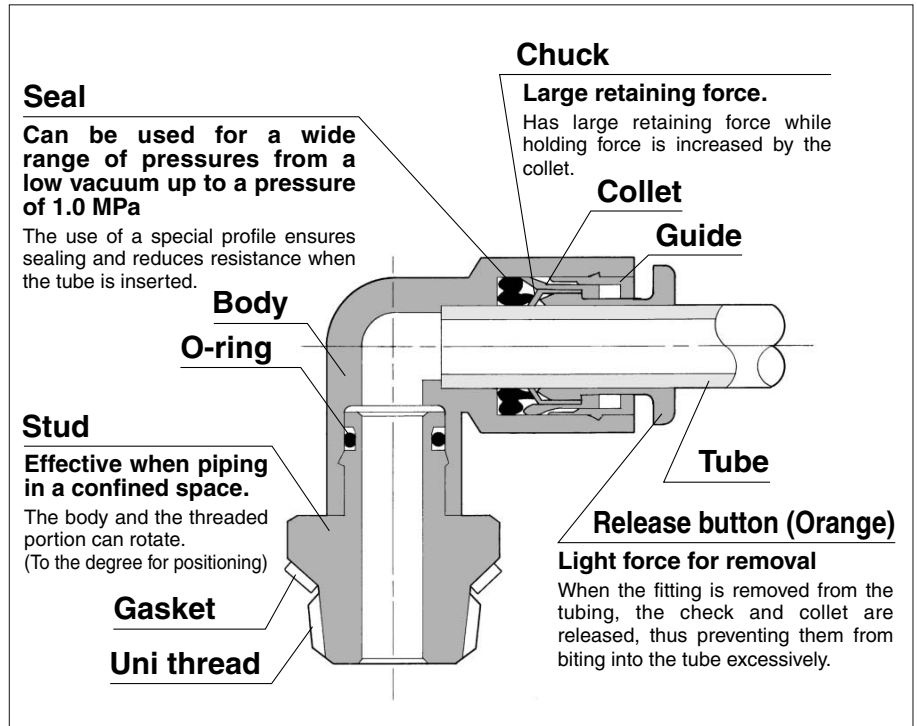
A ridge shape has been created as a Uni thread for common applications for Rc, G, NPT and NPTF.

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



### 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 <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

K□

M□

H□








D□

MS

T□

VMG

# Series KQ2

Model	
<b>Male connector</b> <b>KQ2H</b> P. 33 	Use to pipe in the same direction from female thread. Most general style.
<b>Male elbow</b> <b>KQ2L</b> P. 33 	Use to pipe at right angles to female thread. Most general style.
<b>Male branch tee</b> <b>KQ2T</b> P. 33 	Use to branch line from female thread in both 90° directions.
<b>Male run tee</b> <b>KQ2Y</b> P. 34 	Use to branch line in the same direction from female thread and in 90° direction.
<b>Branch "Y"</b> <b>KQ2U</b> P. 34 	Use to branch line in the same direction from female thread.
<b>Extended male elbow</b> <b>KQ2W</b> 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.
<b>Gasket</b> <b>KQG</b> 	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

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

Applicable tubing O.D.	Port size
01	1/8
03	5/32
05	3/16
07	1/4
09	5/16
11	3/8
13	1/2

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

**How to Order Gasket**

**KQG U01**

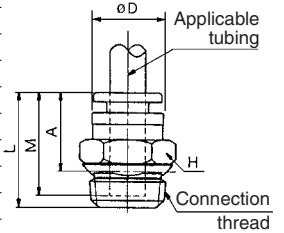
- Gasket for Uni One-touch fittings
- Applicable port size

Applicable port size	Uni
U01	1/8
U02	1/4
U03	3/8
U04	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	9.6	33
	3/8	KQ2H13-U03		28.5	22.5			30
	1/2	KQ2H13-U04	25	17	28			



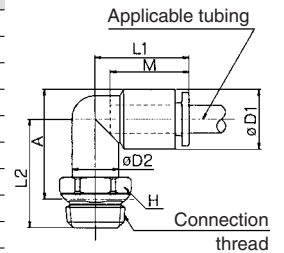
\* Reference dimensions after Uni thread installation.

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

## <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	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	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	9.6	23
	3/8	KQ2L13-U03					28.5	33.5			31
	1/2	KQ2L13-U04	22.23	32	35	44					

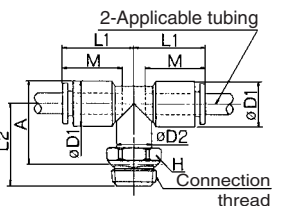


\* Reference dimensions after Uni thread installation.

## <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	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	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	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	9.6	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.

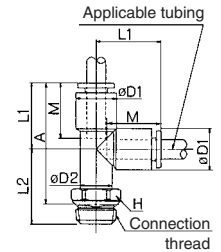
# Series KQ2

## <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				34.5	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				36.5	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				37.5	17
	3/8	KQ2Y07-U03	17.46				24.5				39	24
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				43	19
	3/8	KQ2Y09-U03	17.46				25.5				46	25
3/8	1/4	KQ2Y11-U02	17.46	17.9	17	25.5	26.5	46	21	7	24	
	3/8	KQ2Y11-U03	17.46				27				46.5	27
	1/2	KQ2Y11-U04	22.23				30				47.5	46
1/2	1/4	KQ2Y13-U02	17.46	21.7	17	28	28.5	50.5	22	9	29	
	3/8	KQ2Y13-U03	17.46				32				52	32
	1/2	KQ2Y13-U04	22.23				32				52	51

\* Reference dimensions after Uni thread installation.

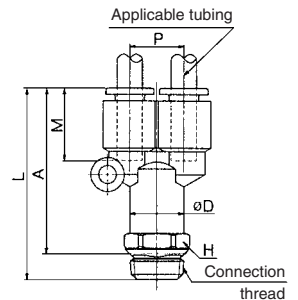


## <Inch size> Branch "Y": KQ2U



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		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	14.29		46		40			
	3/8	KQ2U07-U03	17.46		46.5		40.5			
5/16	1/8	KQ2U09-U01	17.46	15.2	50.5	15.2	46.5	18.5	6	20
	1/4	KQ2U09-U02	17.46		52		46			18
	3/8	KQ2U09-U03	17.46		51.5		45.5			25
3/8	1/4	KQ2U11-U02	19.05	17.9	56.5	17.9	50.5	21	7	37
	3/8	KQ2U11-U03	19.05		51		32			
	1/2	KQ2U11-U04	22.23		59		38			
1/2	1/4	KQ2U13-U02	22.23	21.7	61	21.7	55	22	9.6	26
	3/8	KQ2U13-U03	22.23		62.7		54.7			30
	1/2	KQ2U13-U04	22.23		62.7		54.7			50

\* Reference dimensions after Uni thread installation.

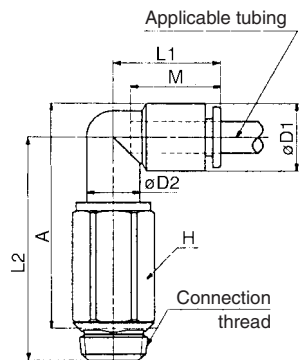


## <Inch size> Extended Male Elbow: KQ2W



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	35.5			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	36.1			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	39.5			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	41.5			31
	3/8	KQ2W07-U03	17.46				41.5	42			39
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	47			35
	3/8	KQ2W09-U03	17.46				46	48			39
3/8	1/4	KQ2W11-U02	17.46	17.9	17	25.5	52.5	55.5	21	7	59
	3/8	KQ2W11-U03	17.46				52	55			55
	1/2	KQ2W11-U04	22.23				54.5	55.5			97
1/2	1/4	KQ2W13-U02	17.46	21.7	17	28	54	59	22	9	64
	3/8	KQ2W13-U03	17.46				56				64
	1/2	KQ2W13-U04	22.23				56				9.6

\* 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

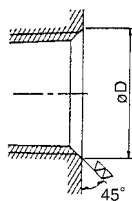
#### Connecting Female Thread: G

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