

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

Made to Order
(Refer to page 75 for details.)

Port size/Applicable tubing O.D.

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

With thread sealant (Male thread)

Nil	None
S	With thread sealant



Note) Port size with sealant: 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	Triple 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).

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: White body
Series KQ: Black body

Guide

Collet

Chuck

Suitable for use with nylon and urethane.
Large retaining force.
Has large retaining force while holding force is increased by the collet.

Seal

Can be used for a wide range of pressures from a low vacuum up to a pressure of 1 MPa.
The use of a special profile ensures sealing and reduces resistance when the tube is inserted.

Connection thread

UNF, NPT

Release button

KQ2: Orange
KQ : Red

Light force for removal
When the fitting is removed from the tube, the chuck and collet are released, thus preventing them from biting into the tube excessively.

Tube

Inch size
Ø1/8", Ø5/32", Ø3/16", Ø1/4", Ø5/16", Ø3/8", Ø1/2"

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.

- K
- M
- H
- KK
- D
- MS
- LQ
- MQR
- T



Product's Color

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

Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon ⁽¹⁾ , Polyurethane
Tubing O.D.	Ø 1/8", Ø 5/32", Ø 3/16", Ø 1/4", Ø 5/16", Ø 3/8", Ø 1/2"

Note 1) Soft nylon tubing is not compatible with water.

Specifications

Fluid		Air/Water ⁽²⁾
Operating pressure range ⁽³⁾		-100 kPa to 1 MPa
Proof pressure		3 MPa
Ambient and fluid temperature		-5 to 60°C, Water: 0 to 40°C (No freezing)
Thread	Mounting section	ANSI/ASME B1.20.1 (NPT thread) JIS B0208 (UNF thread)
	Nut section	JIS B0208 (UNF thread)
Seal on the threads		With sealant or none



Note 2) The surge pressure must be under the maximum operating pressure.

Note 3) Do not use the fittings with a leak tester or for vacuum retention because they are not guaranteed for zero leakage.



Made to Order
Refer to page 75 for details.

Principal Parts Material

Body	C3604, PBT, PP
Stud	C3604 (Thread portion)
Chuck	Stainless steel 304
Guide	Stainless steel 304, C3604, PBT
Collet	POM
Release button	POM
Seal, O-ring	NBR
Gasket	Stainless steel 304, NBR

Series KQ2

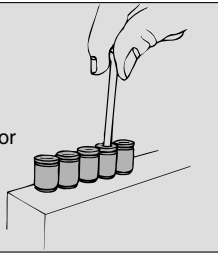
Model

Hex. socket head male connector

KQ2S P. 64



Internal hex. allows thread connection by using an allen wrench for confined spaces.

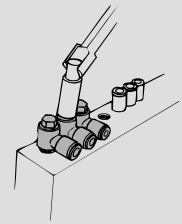


Universal male elbow

KQ2V P. 66



Universal male elbow allows thread connection by using a socket wrench for confined spaces.

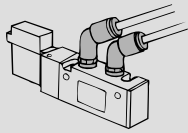


45° male elbow

KQ2K P. 66



Use to pipe in 45° angle direction from female thread. Model in-between of male connector and male elbow.

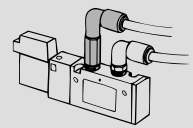


Extended male elbow

KQ2W P. 70



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

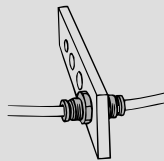


Bulkhead union

KQ2E P. 73



Use to connect tubes through a panel.

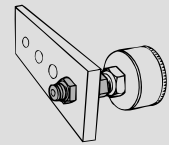


Bulkhead connector

KQ2E P. 74



Use to connect male thread and tube through a panel.

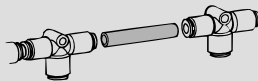


Nipple

KQ2N P. 74

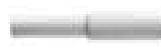


Use to connect One-touch fittings.

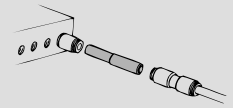


Reducer nipple

KQ2N P. 74



Use to connect One-touch fittings that are different tubing O.Ds.



Male connector

KQ2H P. 64



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

Hexagon socket head universal male elbow

KQ2VS P. 66



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

Branch universal male elbow

KQ2Z P. 68



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

Female connector

KQ2F P. 64



Use to pipe from male thread such as pressure gauge.

Universal female elbow

KQ2VF P. 67



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

Double branch universal male elbow

KQ2ZD P. 68



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

Straight union

KQ2H P. 65



Use to connect tubes in the same direction.

Female elbow

KQ2LF P. 67



Use to pipe at right angles to male thread.

Triple branch universal male elbow

KQ2ZT P. 69



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

Different diameter straight

KQ2H P. 65



Use to connect different sized tubes.

Double universal male elbow

KQ2VD P. 67



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

Union elbow

KQ2L P. 69



Use to connect tubes at right angles.

Male elbow

KQ2L P. 65



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

Triple universal male elbow

KQ2VT P. 68



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

Plug-in elbow

KQ2L P. 69



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

Reducer elbow

KQ2L

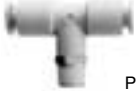


P. 69

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

Male branch tee

KQ2T



P. 70

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

Union tee

KQ2T



P. 70

Use to connect tubes in both 90° directions.

Different diameter tee

KQ2T



P. 71

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

Cross

KQ2TW



P. 71

Use to four-branch line.

Male run tee

KQ2Y



P. 71

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

Branch "Y"

KQ2U



P. 72

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

Union "Y"

KQ2U



P. 72

Use to branch line in the same direction.

Different dia. union "Y"

KQ2U



P. 72

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

Plug-in "Y"

KQ2U



P. 72

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

Different diameter plug-in "Y"

KQ2X



P. 73

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

Plug-in reducer

KQ2R



P. 73

Use to change size of One-touch fittings.

Bulkhead male elbow

KQ2LE



P. 73

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

Tube cap

KQ2C



P. 74

Use to plug unused tube.

Plug

KQ2P, KQP



P. 74

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

K

M

H

KK

D

MS

LQ

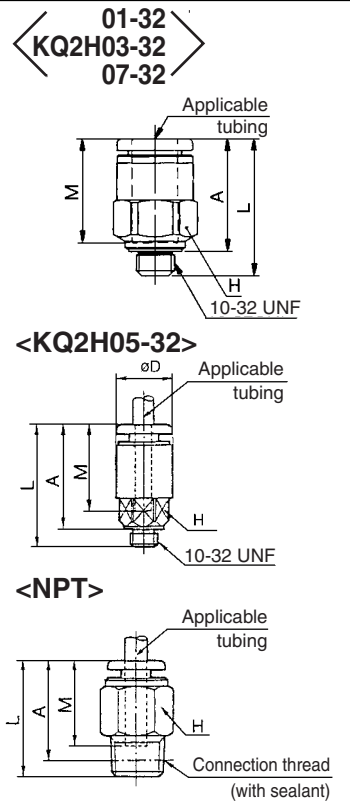
MQR

T

Series KQ2

Male Connector: KQ2H

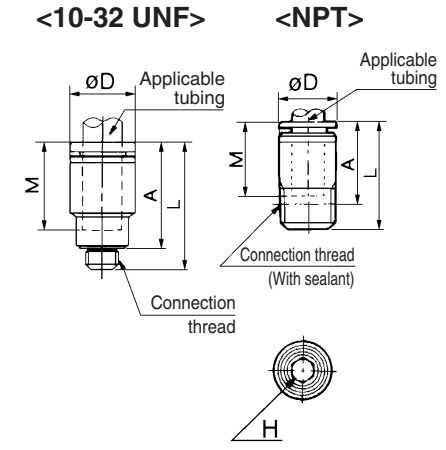
Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) ϕD	L	A*	M	Min. port size	Mass (g)		
01-32 KQ2H03-32 07-32	10-32 UNF	KQ2H01-32	7	-	16.7	13.7	12.7	2.3	2		
	1/16	KQ2H01-33S	11.11	-	22	18	15.5	2.5	7		
	1/8	KQ2H01-34S	-	21.1	-	9					
	1/4	KQ2H01-35S	14.29	-	19	13.5			16		
5/32	10-32 UNF	KQ2H03-32	8	-	17	14	12.7	2.3	2.4		
	1/16	KQ2H03-33S	11.11	-	22	18	16	3	7		
	1/8	KQ2H03-34S	-	21.1	-	9					
	1/4	KQ2H03-35S	14.29	-	19	13.5			16		
3/16	10-32 UNF	KQ2H05-32	8	11	24	20.4	16.5	2.3	6		
	1/8	KQ2H05-34S	12.7	-	21.1	18			11		
	1/4	KQ2H05-35S	14.29	-	20.5	15			12		
1/4	10-32 UNF	KQ2H07-32	11.11	-	18.4	15.4	13.6	2.3	3.3		
	1/8	KQ2H07-34S	12.7	-	21.6	18.5			17	4.6	10
	1/4	KQ2H07-35S	14.29	-	22.5	17					15
	3/8	KQ2H07-36S	17.46	-	20.9	16.5					27
5/16	1/8	KQ2H09-34S	14.29	-	27.6	24.5	18.5	6	15		
	1/4	KQ2H09-35S	-	26	20.5	16					
	3/8	KQ2H09-36S	17.46	-	20.9	15.5			24		
3/8	1/8	KQ2H11-34S	-	-	29.6	26.5	21	6	29		
	1/4	KQ2H11-35S	17.46	-	33	27.5			31		
	3/8	KQ2H11-36S	-	-	27.9	22.5			29		
	1/2	KQ2H11-37S	22.23	-	25.6	18.5			46		
1/2	1/4	KQ2H13-35S	-	-	34	28.5	22	9.6	44		
	3/8	KQ2H13-36S	22.23	-	31.9	26.5			44		
	1/2	KQ2H13-37S	-	-	29.1	22			44		



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

Hexagon Socket Head Male Connector: KQ2S

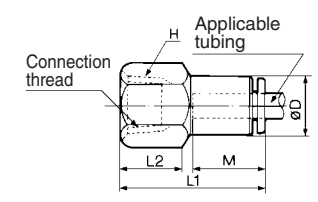
Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) ϕD	L	A*	M	Min. port size	Mass (g)
1/8	10-32 UNF	KQ2S01-32	2	7	19.7	16.6	12.7	2	2.8
	10-32 UNF	KQ2S03-32	2.5	8	18.7	15.6	12.7	2.3	2.7
5/32	1/8	KQ2S03-34S	2.78	10.5	23.5	19.5	16	2.8	8
	1/8	KQ2S05-34S	3.57	10.7	23.5	19.5	16.5	3.6	8
3/16	10-32 UNF	KQ2S07-32	2.5	10.3	19.6	16.5	13.6	2.3	3.3
	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	KQ2S11-37S	-	21.3	30	22			45
1/2	1/4	KQ2S13-35S	7.94	20	34.5	28.5	22	9.6	26
	3/8	KQ2S13-36S	-	33	26.5	27			
	1/2	KQ2S13-37S	9.53	21.3	31	22.5			36



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

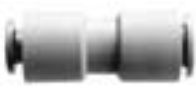
Female Connector: KQ2F

Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) ϕD	L1	L2	M	Min. port size	Mass (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	15			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



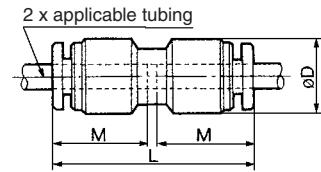
Note) ϕD : Max. diameter

Straight Union: KQ2H

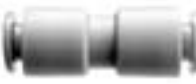


Applicable tubing O.D. (inch)	Model	Note) ϕD	L	M	Min. port size	Mass (g)
1/8	KQ2H01-00	9.6	31.5	15.5	2.5	3
5/32	KQ2H03-00	10.4	32.5	16	3	3
3/16	KQ2H05-00	11.4	34	16.5	3.5	4
1/4	KQ2H07-00	13.2	34.5	17	4.6	4
5/16	KQ2H09-00	15.2	38.5	18.5	6	6
3/8	KQ2H11-00	17.9	42.5	21	7	11
1/2	KQ2H13-00	21.7	44.5	22	9.6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

Note) ϕD : Max. diameter

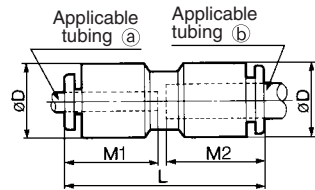


Different Diameter Straight: KQ2H



Applicable tubing O.D. (inch)		Model	Note) ϕD	L	M1	M2	Min. port size	Mass (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		5
5/32	3/16	KQ2H03-05	11.4	34	16	16.5	3	4
	1/4	KQ2H03-07	13.2	34.5		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		18.5		6
1/4	3/8	KQ2H07-11	17.9	42	17	21	4.6	11
	5/16	KQ2H09-11	17.9	42		18.5		11
5/16	3/8	KQ2H09-13	21.7	44	18.5	21	6	11
	1/2	KQ2H09-13	21.7	44		22		16
3/8	1/2	KQ2H11-13	21.7	44	21	22	7	17

Note) ϕD : Max. diameter



Male Elbow: KQ2L

01-32
KQ2L03-32
07-32



<KQ2L05-32>



<NPT>

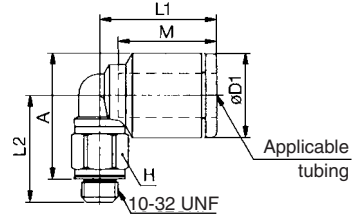


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	A*	M	Min. port size	Mass (g)	
1/8	10-32 UNF	KQ2L01-32	7	8.4	-	15.3	13.2	14.5	12.7	2.3	2.5	
	1/16	KQ2L01-33S	11.11	9.6	10	17.5	21.5	22.5	15.5	2.5	8	
	1/8	KQ2L01-34S	14.29				20.6	24.5				
	1/4	KQ2L01-35S	14.29				25	24.5				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				21.1	23				9
	1/4	KQ2L03-35S	14.29				25.5	25				18
	3/16	10-32 UNF	KQ2L05-32				11.11	11.4				10
1/8	KQ2L05-34S	14.29	21.6	24	10							
1/4	KQ2L05-35S	14.29	26	26	19							
1/4	10-32 UNF	KQ2L07-32	7	12	-	16.1	15.1		18.1	13.6	2.3	
1/4	1/8	KQ2L07-34S	11.11	13.2	10	20.5	22.6	26	17	4.6	10	
	1/4	KQ2L07-35S	14.29				27	28				20
	3/8	KQ2L07-36S	17.46				28.4	30				32
	5/16	1/8	KQ2L09-34S				12.7	15.2				12
1/4	KQ2L09-35S	14.29	28	30	20							
3/8	KQ2L09-36S	17.46	29.4	31.5	28							
3/8	1/8	KQ2L11-34S	11.11	17.9	17	25.5	25.6		31.5	21	7	
1/4	KQ2L11-35S	14.29	29				32.5	23				
3/8	KQ2L11-36S	17.46	30.4				34	33				
1/2	KQ2L11-37S	22.23	34.6				36.5	59				
1/2	1/4	KQ2L13-35S	17.46	21.7	17	28	31	36.5	22	9.6	28	
	3/8	KQ2L13-36S	22.23				32.4	38.5				36
	1/2	KQ2L13-37S	22.23				36.6	40				62

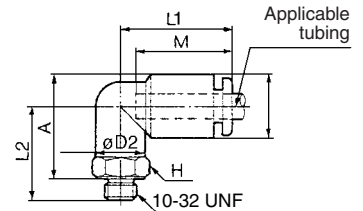
* Reference dimensions after NPT thread installation.
Note) $\phi D1$: Max. diameter



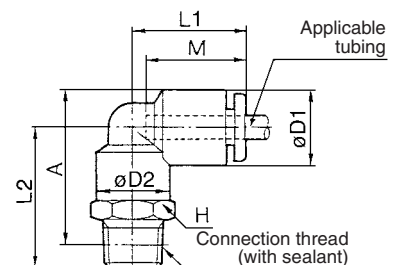
01-32
KQ2L03-32
07-32



<KQ2L05-32>



<NPT>



Series KQ2

45° Male Elbow: KQ2K

<10-32 UNF>

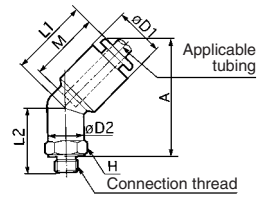


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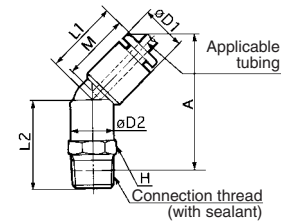


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A*	M	Min. port size	Mass (g)
1/8	10-32 UNF	KQ2K01-32	8	9.6	8	16.5	15	25.5	15.5	2.3	4
	1/8	KQ2K01-34S	11.11		10	16.5	21.6	33	15.5	2.5	9
5/32	10-32 UNF	KQ2K03-32	8	10.4	8	17	14.5	26	16	2.3	4
	1/8	KQ2K03-34S	11.11		10	19.6	32	16	2.8	9	
3/16	1/8	KQ2K05-34S	11.11	11.4	10	18	19.6	32.5	16.5	3.6	10
	1/8	KQ2K07-32	11.11		18	32	2.3	8			
1/4	1/8	KQ2K07-34S	11.11	13.2	10	19	19.6	34	17	4.6	10
	1/4	KQ2K07-35S	14.29				24	36			19
	3/8	KQ2K07-36S	17.46				25.4	37.5			32
	1/8	KQ2K09-34S	12.7				21.1	37			11
5/16	1/4	KQ2K09-35S	14.29	15.2	12	20.5	25.5	39	18.5	6	19
	3/8	KQ2K09-36S	17.46				26.9	41			32
	1/8	KQ2K11-34S	12.7				23.1	42			25
3/8	1/4	KQ2K11-35S	17.46	17.9	17	23.5	26.5	43	21	7	25
	3/8	KQ2K11-36S					27.9	44.5			32
	1/2	KQ2K11-37S					32.1	46.5			58
	1/4	KQ2K13-35S					17.46	27			46.5
1/2	3/8	KQ2K13-36S	17.46	21.7	17	25.5	28.4	48	22	9.6	35
	1/2	KQ2K13-37S					32.6	50			61

<10-32 UNF>



<NPT>



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

Universal Male Elbow: KQ2V

<10-32 UNF>

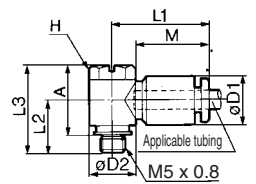


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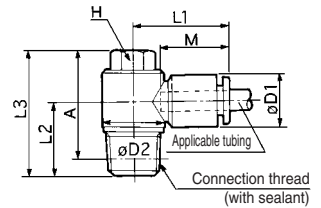


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	Min. port size	Mass (g)
1/8	10-32 UNF	KQ2V01-32	8	8.4	9.8	17.2	11	18.5	15	12.7	2.3	5
	1/8	KQ2V01-34S		9.6	13.4	21.5	13.6	25.6	22.5	15.5	2.5	14
5/32	10-32 UNF	KQ2V03-32	8	10.4	9.8	20.5	11	18.5	15	16	2.3	6
	1/8	KQ2V03-34S			13.4	22	13.6	25.6	22.5	16	2.8	14
3/16	1/8	KQ2V05-34S	8	11.4	13.4	23	13.6	25.6	22.5	16.5	3.5	15
	10-32 UNF	KQ2V07-32			13.4	24	12	24	20.5	17	2.3	13
1/4	1/8	KQ2V07-34S	8	13.2	15.3	23.5	18.5	32	26.5	17	4.6	15
	1/4	KQ2V07-35S										25
	1/8	KQ2V09-34S										11.11
5/16	1/4	KQ2V09-35S	12.7	15.2	20.6	27.5	19.4	35.4	30	21	7	30
	3/8	KQ2V09-36S										46
	1/4	KQ2V11-35S										12.7
3/8	3/8	KQ2V11-36S	12.7	17.9	20.6	30.5	19.4	35.4	30	21	7	48
	1/2	KQ2V13-36S										68
	1/2	KQ2V13-37S										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>

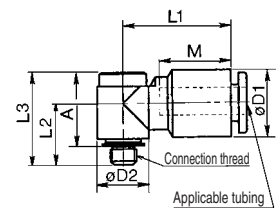


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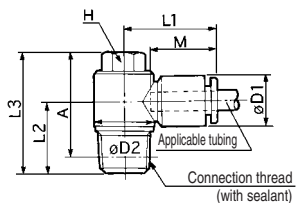


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	Min. port size	Mass (g)
1/8	10-32 UNF	KQ2VS01-32	4	8.4	9.8	17.2	10.9	18.5	15	12.7	2.3	5
	1/8	KQ2VS01-34S	6.35	9.6	13.4	21.5	13.6	25.6	22.5	15.5	2.5	14
5/32	10-32 UNF	KQ2VS03-32	4	10.4	9.8	20.5	11	18.5	15	16	2.3	6
	1/8	KQ2VS03-34S	6.35		13.4	22	13.6	25.6	22.5	16	2.8	14
3/16	1/8	KQ2VS05-34S	8	11.4	13.4	23	13.6	25.6	22.5	16.5	3.5	15
	10-32 UNF	KQ2VS07-32										
1/4	1/8	KQ2VS07-34S	6.35	13.2	15.3	23.5	18.5	28	22.5	17	4.6	15
	1/4	KQ2VS07-35S										22
	1/8	KQ2VS09-34S										11.11
5/16	1/4	KQ2VS09-35S	12.7	15.2	20.6	27.5	19.4	31.4	26	21	7	27
	3/8	KQ2VS09-36S										39
	1/4	KQ2VS11-35S										12.7
3/8	3/8	KQ2VS11-36S	12.7	17.9	20.6	31	19.4	31.4	26	21	7	42
	1/2	KQ2VS13-36S										63
	1/2	KQ2VS13-37S										81

<10-32 UNF>



<NPT>



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

Universal Female Elbow: KQ2VF

<10-32 UNF>



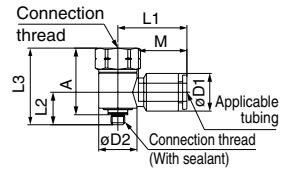
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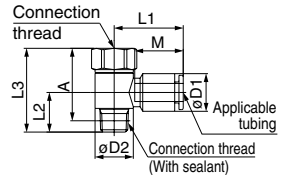
Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A*	M	Min. port size	Mass (g)
1/8	10-32 UNF	KQ2VF01-32	8	8.4	9.8	17.2	10	20	16.5	12.7	2.3	5
	1/8	KQ2VF01-34S	14.29	9.6	13.4	21.5	13.1	28.6	25.5	15.5	2.5	18
5/32	10-32 UNF	KQ2VF03-32	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	14.6	28.6	25.5	16	2.8	18
3/16	10-32 UNF	KQ2VF05-34S	14.29	11.4	13.4	23	13.1	28.6	25.5	16.5	3.5	19
	1/8	KQ2VF07-34S	14.29	13.2	13.4	24	11.5	27	23.5	17	2.3	16
1/4	10-32 UNF	KQ2VF07-32	8	13.2	13.4	24	13.1	28.6	25.5	17	4.6	19
	1/4	KQ2VF07-35S	17.46	13.2	17.6	25	17	38	32.5	17	4.6	37
5/16	1/8	KQ2VF09-34S	17.46	15.2	17.6	28.5	16.1	30.1	27	18.5	6	30
	1/4	KQ2VF09-35S	17.46	15.2	19.5	38	32.5	39	39	18.5	6	38
	3/8	KQ2VF09-36S	22.23	17.9	25.2	29.5	19.4	43.9	39	21	7	67
3/8	1/4	KQ2VF11-35S	22.23	17.9	20.6	31	17	40.5	35	21	7	60
	3/8	KQ2VF11-36S	22.23	17.9	25.2	31.5	18.4	43.9	39	21	7	70
1/2	3/8	KQ2VF13-36S	22.23	21.7	19.9	40.9	39	39	39	22	9	85
	1/2	KQ2VF13-37S	25.4	21.7	27	35.5	23.1	49.1	41.5	22	9	104

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

<10-32 UNF>



<NPT>



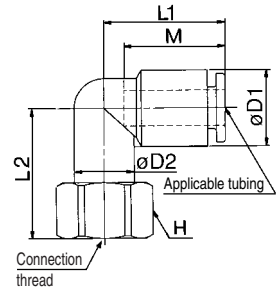
- K
- M
- H
- KK
- D
- MS
- LQ
- MQR
- T

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	Mass (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				23.5			20
5/32	1/8	KQ2LF03-34	14.29	10.4	10	18	20.5	16	3	12
	1/4	KQ2LF03-35	17.46				24			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				25.5			21
	3/8	KQ2LF07-36	22.23				26			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				28			40
	1/2	KQ2LF11-37	23.81				32			45
1/2	3/8	KQ2LF13-36	22.23	21.7	17	28	30	22	9.6	44
	1/2	KQ2LF13-37	23.81				34			49

Note) $\phi D1$: Max. diameter



Double Universal Male Elbow: KQ2VD

<10-32 UNF>



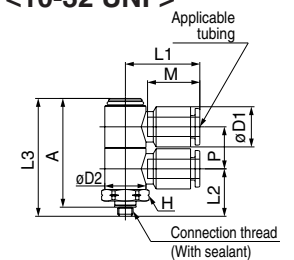
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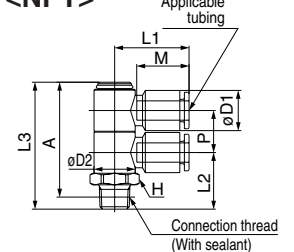
Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A*	M	P	Min. port size	Mass (g)		
1/8	10-32 UNF	KQ2VD01-32	14.29	9.6	13.4	22	15.5	38.5	35	15.5	13.4	2.3	24		
	1/8	KQ2VD01-34S	14.29				17.1						40.1	37	2.5
5/32	10-32 UNF	KQ2VD03-32	14.29	10.4	13.4	22	15.5	38.5	35	16	13.4	2.3	24		
	1/8	KQ2VD03-34S	14.29				17.6						40.1	37	3
3/16	10-32 UNF	KQ2VD05-34S	14.29	11.4	13.4	23	17.1	40.1	37	16.5	13.4	3.5	24		
	1/8	KQ2VD07-32	8				15.5						39	35.5	26
1/4	10-32 UNF	KQ2VD07-34S	14.29	13.2	13.4	24	17.6	40.6	37.5	17	13.8	4.6	25		
	1/4	KQ2VD07-35S	17.46				22.1						44	38.5	31
	3/8	KQ2VD09-36S	22.23				22.4						45.4	40.5	44
5/16	1/8	KQ2VD09-35S	17.46	19	17.6	28.5	23.1	50.1	45	18.5	15.9	6	49		
	1/4	KQ2VD09-36S	22.23				24.5						51.5	45.5	57
	3/8	KQ2VD09-37S	22.23				27.4						54.4	47.5	81
3/8	1/4	KQ2VD11-35S	17.46	17.9	20.6	31	25.5	57.5	52	21	19.2	7	76		
	3/8	KQ2VD11-36S	22.23				25.9						57.9	52.5	77
	1/2	KQ2VD11-37S	22.23				29.1						61.1	54	94
1/2	3/8	KQ2VD13-36S	22.23	21.7	27	35.5	30.9	65.4	60.5	22	22.3	9.6	142		
	1/2	KQ2VD13-37S	25.4				34.1						68.6	61.5	159

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

<10-32 UNF>



<NPT>



Series KQ2

Triple Universal Male Elbow: KQ2VT

<10-32 UNF>

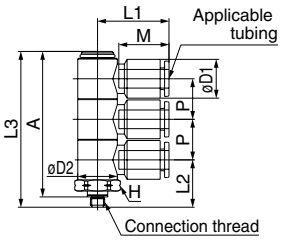


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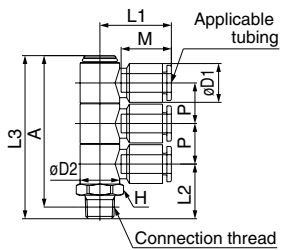


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A*	M	P	Min. port size	Mass (g)
1/8	10-32 UNF	KQ2VT01-32	14.29	9.6	13.4	22	15.5	52	48.5	15.5	13.4	2.3	32
	1/8	KQ2VT01-34S					17.1	53.6	50.5				
5/32	10-32 UNF	KQ2VT03-32	14.29	10.4	13.4	22	15.5	52	48.5	16	13.4	2.3	32
	1/8	KQ2VT03-34S					17.6	53.6	50.5				
3/16	1/8	KQ2VT05-34S	14.29	11.4	13.4	23	17.1	53.6	50.5	16.5	13.4	3.5	31
	10-32 UNF	KQ2VT07-32					15.5	53	49.5				
1/4	1/8	KQ2VT07-34S	14.29	13.2	13.4	24	17.6	54.6	51.5	17	13.8	4.6	33
	1/4	KQ2VT07-35S					22.1	58	52.5				
	3/8	KQ2VT07-36S					22.4	59.4	54				
5/16	1/4	KQ2VT09-35S	19	15.2	17.6	28.5	23.1	66.1	61	18.5	15.9	6	59
	3/8	KQ2VT09-36S					24.5	67.5	61.5				
	1/2	KQ2VT09-37S					27.4	70.4	63.5				
3/8	1/4	KQ2VT11-35S	22.23	17.9	20.6	31	25.5	77	71.5	21	19.2	7	98
	3/8	KQ2VT11-36S					25.9	77.4	72				
	1/2	KQ2VT11-37S					29.1	80.6	73				
1/2	3/8	KQ2VT13-36S	25.4	21.7	27	35.5	30.9	87.9	83	22	22.3	9.6	188
	1/2	KQ2VT13-37S					34.1	91.1	84				

<10-32 UNF>



<NPT>



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

Branch Universal Male Elbow: KQ2Z

<10-32 UNF>

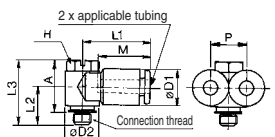


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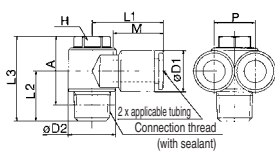


Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A*	M	P	Min. port size	Mass (g)
1/8	10-32 UNF	KQ2Z01-32	8	8.4	9.8	16	11.2	18.5	15	12.7	8.4	2.3	6
	1/8	KQ2Z01-34S											
5/32	10-32 UNF	KQ2Z03-32	8	10.4	9.8	19.5	11	18.5	15	16	10.4	2.3	8
	1/8	KQ2Z03-34S											
3/16	1/8	KQ2Z05-34S	8	11.4	13.4	21.5	13.6	25.6	22.5	16.5	11.4	3.5	17
	10-32 UNF	KQ2Z07-32											
1/4	1/8	KQ2Z07-34S	8	13.2	13.4	21.5	13.6	25.6	22.5	17	13.2	4.6	17
	1/4	KQ2Z07-35S					18	31	25.5				
5/16	1/8	KQ2Z09-34S	11.11	15.2	17.6	26	14.6	27.6	24.5	18.5	15.2	6	27
	1/4	KQ2Z09-35S					18	31	25.5				
	3/8	KQ2Z09-36S					20.6	27	19.4				
3/8	1/4	KQ2Z11-35S	12.7	17.9	20.6	28.5	19	35	29.5	21	17.9	7	46
	3/8	KQ2Z11-36S					19.4	35.4	30				
1/2	3/8	KQ2Z13-36S	17.46	21.7	27	33	20.4	34.9	30	22	21.7	9	76
	1/2	KQ2Z13-37S					23.6	38.1	31				

<10-32 UNF>



<NPT>

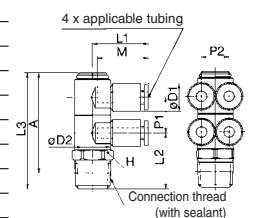


* Reference dimensions after NPT thread installation.
Note) $\phi D1$: Max. diameter

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	Mass (g)
1/8	1/8	KQ2ZD01-34S	14.29	9.6	13.4	20.5	17.1	40.1	37	15.5	13.4	9.6	2.5	26
5/32	1/8	KQ2ZD03-34S	14.29	10.4	13.4	21	17.6	40.1	37	16	13.4	10.4	3	29
	1/8	KQ2ZD05-34S												
1/4	1/8	KQ2ZD07-34S	14.29	13.2	13.4	21.5	17.6	40.6	37.5	17	13.8	13.2	4.6	30
	1/4	KQ2ZD07-35S					22.1	44	38.5					
	3/8	KQ2ZD07-36S					22.4	45.4	40.5					
5/16	1/4	KQ2ZD09-35S	19	15.2	17.6	26	23.1	50.1	45	18.5	15.9	15.2	6	56
	3/8	KQ2ZD09-36S					24.5	51.5	45.5					
	1/2	KQ2ZD09-37S					27.4	54.4	47.5					
3/8	1/4	KQ2ZD11-35S	22.23	17.9	20.6	28.5	25.5	57.5	52	21	19.2	17.9	7	88
	3/8	KQ2ZD11-36S					25.9	57.9	52.5					
	1/2	KQ2ZD11-37S					29.1	61.1	54					
1/2	3/8	KQ2ZD13-36S	25.4	21.7	27	33	30.9	65.4	60.5	22	22.3	21.7	9.6	158
	1/2	KQ2ZD13-37S					34.1	68.6	61.5					

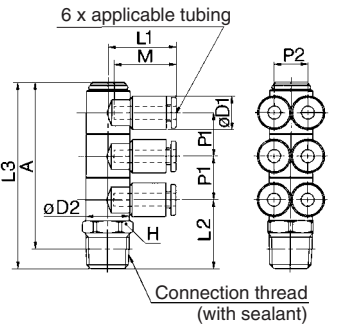


* Reference dimensions after NPT thread installation.
Note) $\phi D1$: Max. diameter

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	Mass (g)
1/8	1/8	KQ2ZT01-34S	14.29	9.6	13.4	20.5	17.1	53.6	50.5	15.5	13.4	9.6	2.5	34
5/32	1/8	KQ2ZT03-34S	14.29	10.4	13.4	21	17.6	53.6	50.5	16	13.4	10.4	3	34
3/16	1/8	KQ2ZT05-34S	14.29	11.4	13.4	21.5	17.1	53.6	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	17.6	54.6	51.5	17	13.8	13.2	4.6	40
	1/4	KQ2ZT07-35S					22.1	58	52.5					46
	3/8	KQ2ZT07-36S					22.4	59.4	54					59
5/16	1/4	KQ2ZT09-35S	19	15.2	17.6	26	23.1	66.1	61.5	18.5	15.9	15.2	6	70
	3/8	KQ2ZT09-36S					24.5	67.5	61.5					80
	1/2	KQ2ZT09-37S					22.23	27.4	70.4					63.5
3/8	1/4	KQ2ZT11-35S	22.23	17.9	20.6	28.5	25.5	77	71.5	21	19.2	17.9	7	116
	3/8	KQ2ZT11-36S					25.9	77.4	72					116
	1/2	KQ2ZT11-37S					29.1	80.6	73					132
1/2	3/8	KQ2ZT13-36S	25.4	21.7	27	33	30.9	87.9	83	22	22.3	21.7	9.6	213
	1/2	KQ2ZT13-37S					34.1	91.1	84					228



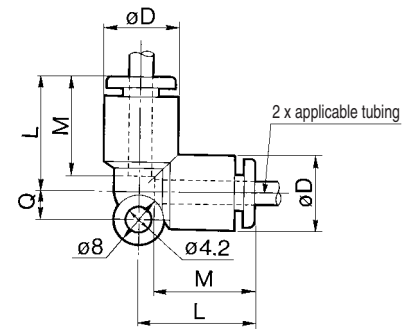
* Reference dimensions after NPT thread installation.
Note) $\phi D1$: Max. diameter

- K
- M
- H
- KK
- D
- MS
- LQ
- MQR
- T

Union Elbow: KQ2L



Applicable tubing O.D. (inch)	Model	Note) ϕD	L	Q	M	Min. port size	Mass (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

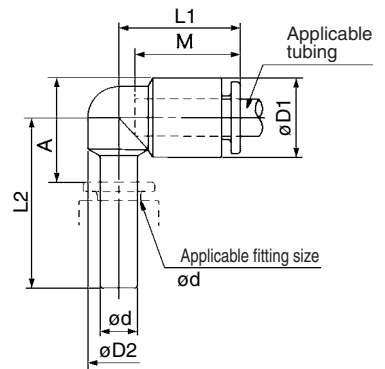


Note) ϕD : Max. diameter

Plug-in Elbow: KQ2L



Applicable tubing O.D. (inch)	Applicable fitting size ϕd (inch)	Model	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Min. port size	Mass (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	28.8	44.7	34	22	9.6	27

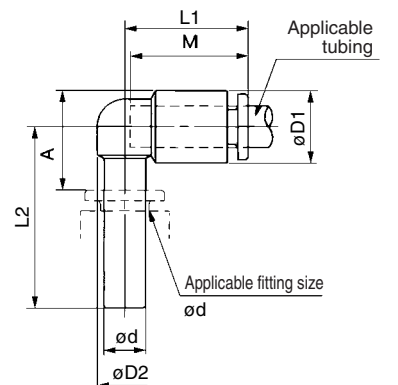


Note) $\phi D1$: Max. diameter

Reducer Elbow: KQ2L



Applicable tubing O.D. (inch)	Applicable fitting size ϕd (inch)	Model	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Min. port size	Mass (g)
1/8	5/32	KQ2L01-03	9.6	7	17	25	13.5	15.5	2.2	3
	3/16	KQ2L01-05		10	17.5	33	21.5		2.5	7
5/32	3/16	KQ2L03-05	10.4	10	18	33.5	22.5	16	3	6
	1/4	KQ2L03-07		8	26	14.5	2.5		3	
3/16	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		13.2	39.5	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		15.2	41.5	30				30
3/8	1/2	KQ2L11-13	17.9	17	25.5	43	30	21	7	25

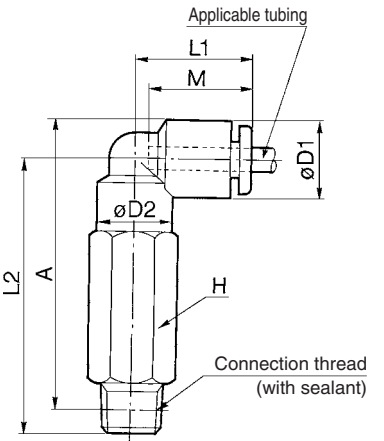


Note) $\phi D1$: Max. diameter

Series KQ2

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	Mass (g)
1/8	1/8	KQ2W01-34S	11.11	9.6	10	17.5	36.1	38	15.5	2.5	19
	1/4	KQ2W01-35S	14.29				42.5	42			41
5/32	1/8	KQ2W03-34S	11.11	10.4	10	18	36.6	38.5	16	3	19
	1/4	KQ2W03-35S	14.29				43	42.5			41
3/16	1/8	KQ2W05-34S	11.11	11.4	10	19.5	37.1	40	16.5	3.5	41
	1/4	KQ2W05-35S	14.29				43.5	43.5			19
1/4	1/8	KQ2W07-34S	11.11	13.2	10	20.5	39.6	43	17	4.6	20
	1/4	KQ2W07-35S	14.29				46	47			42
	3/8	KQ2W07-36S	17.46				47.4	49			69
5/16	1/8	KQ2W09-34S	12.7	15.2	12	23.5	42.6	47	18.5	6	30
	1/4	KQ2W09-35S	14.29				49	51			47
	3/8	KQ2W09-36S	17.46				50.4	53			74
3/8	1/4	KQ2W11-35S	17.46	17.9	17	25.5	55.5	59	21	7	69
	3/8	KQ2W11-36S	17.46				56.9	61			76
	1/2	KQ2W11-37S	22.23				63.6	65.5			147
1/2	1/4	KQ2W13-35S	17.46	21.7	17	28	57.5	63	22	9	72
	3/8	KQ2W13-36S	17.46				58.9	64.5			78
	1/2	KQ2W13-37S	22.23				65.6	69			149



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



Male Branch Tee: KQ2T

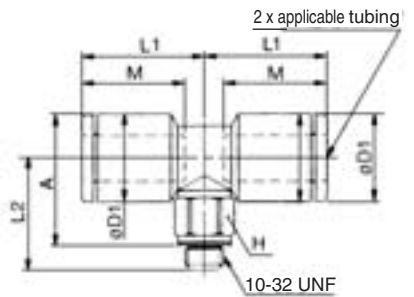
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Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Min. port size	Mass (g)	
1/8	10-32 UNF	KQ2T01-32	7	8.4	-	15.3	13.2	14.4	12.7	2.3	3.2	
	1/16	KQ2T01-33S	11.11	9.6	10	17.5	21.5	22.5*	15.5	2.5	10	
	1/8	KQ2T01-34S					20.6					
	1/4	KQ2T01-35S	14.29	25	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					21.1					
	1/4	KQ2T03-35S	14.29	25.5	25*	20						
3/16	1/8	KQ2T05-34S	11.11	11.4	10	19.5	21.6	24*	16.5	3.5	12	
	1/4	KQ2T05-35S	14.29				26	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	22.6	26*	17	4.6	11	
	1/4	KQ2T07-35S	14.29				27	28*			21	
	3/8	KQ2T07-36S	17.46				28.4	30*			34	
5/16	KQ2T09-34S	12.7	23.6				28*	15				
5/16	1/4	KQ2T09-35S	14.29	15.2	12	23	28	30*	18.5	6	23	
	3/8	KQ2T09-36S	17.46				29.4	31.5*			35	
	1/2	KQ2T11-34S	17.46				25.6	31.5*			31	
3/8	1/4	KQ2T11-35S	17.46	17.9	17	25.5	29	32.5*	21	7	29	
	3/8	KQ2T11-36S					30.4	34.5*			38	
	1/2	KQ2T11-37S					22.23	34.6			36.5*	64
	1/4	KQ2T13-35S					17.46	31			36.5*	34
1/2	3/8	KQ2T13-36S	17.46	21.7	17	28	32.4	38.5*	22	9.6	43	
	1/2	KQ2T13-37S	22.23				36.6	40*			69	

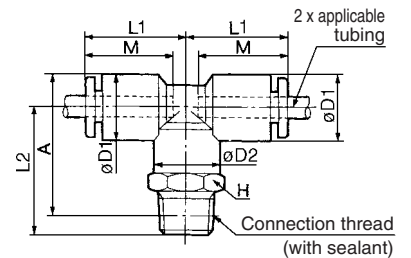
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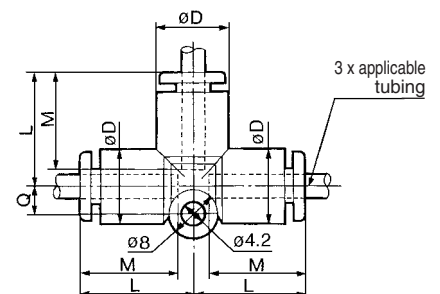


* Reference dimensions after NPT thread installation.
Note) $\phi D1$: Max. diameter



Union Tee: KQ2T

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



Note) ϕD : Max. diameter

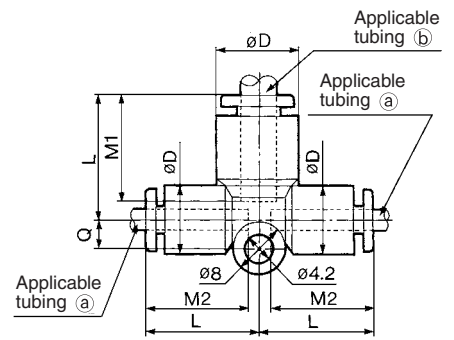


Different Diameter Tee: KQ2T



Applicable tubing O.D. (inch)		Model	Note) øD	L	Q	M1	M2	Min. port size	Mass (g)
Ⓐ	Ⓑ								
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



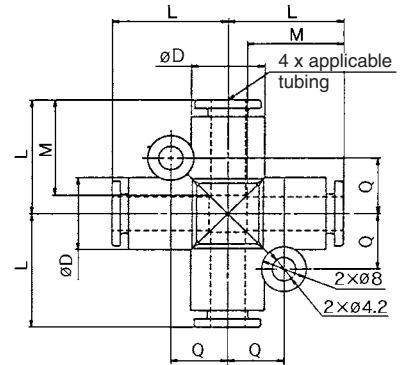
- K
- M
- H
- KK
- D
- MS
- LQ
- MQR
- T

Cross: KQ2TW



Applicable tubing O.D. (inch)	Model	Note) øD	L	Q	M	Min. port size	Mass (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

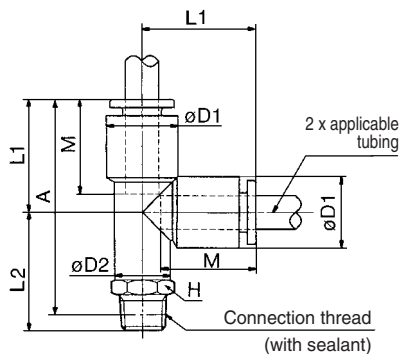


Male Run Tee: KQ2Y



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A*	M	Min. port size	Mass (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					20.6						
	1/4	KQ2Y01-35S					25					37	20
5/32	1/16	KQ2Y03-33S	11.11	10.4	10	18	22	36	16	3	10		
	1/8	KQ2Y03-34S					21.1					38	11
	1/4	KQ2Y03-35S					25.5					38	20
3/16	1/8	KQ2Y05-34S	11.11	11.4	10	19.5	21.6	38	16.5	3.5	12		
	1/4	KQ2Y05-35S					26					40	21
1/4	1/8	KQ2Y07-34S	11.11	13.2	10	20.5	22.6	40	17	4.6	11		
	1/4	KQ2Y07-35S					27					42	21
	3/8	KQ2Y07-36S					28.4					44	34
5/16	1/8	KQ2Y09-34S	12.7	15.2	12	23.5	23.6	44	18.5	6	15		
	1/4	KQ2Y09-35S					28					46	23
	3/8	KQ2Y09-36S					29.4					48	35
3/8	1/4	KQ2Y11-35S	17.46	17.9	17	25.5	29	49	21	7	29		
	3/8	KQ2Y11-36S					30.4					51	38
	1/2	KQ2Y11-37S					34.6					53	64
1/2	1/4	KQ2Y13-35S	17.46	21.7	17	28	31	53.5	22	9.6	34		
	3/8	KQ2Y13-36S					32.4					55.5	43
	1/2	KQ2Y13-37S					36.6					57	69

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



Series KQ2

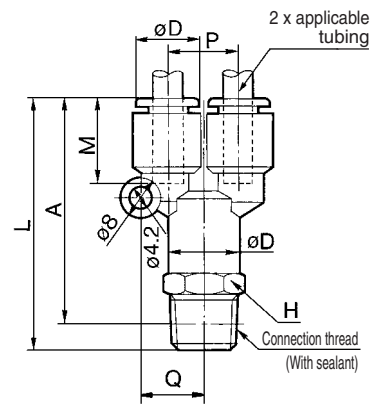
Branch "Y": KQ2U



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) ϕD	L	P	Q	A*	M	Min. port size	Mass (g)
1/8	1/8	KQ2U01-34S	12.7	9.6	39.6	9.6	9	36.5	15.5	2.5	14
	1/4	KQ2U01-35S	14.29		44			38.5			
5/32	1/8	KQ2U03-34S	12.7	10.4	41.1	10.4	9.7	38	16	3	16
	1/4	KQ2U03-35S	14.29		45.5			40			
3/16	1/8	KQ2U05-34S	12.7	11.4	43.1	11.4	10.6	40	16.5	3.5	18
	1/4	KQ2U05-35S	14.9		48			42.5			
1/4	1/8	KQ2U07-34S	14.29	13.2	45.6	13.2	12	42.5	17	4.6	19
	1/4	KQ2U07-35S			49			43.5			
	3/8	KQ2U07-36S			50.4			45			
5/16	1/8	KQ2U09-34S	17.46	15.2	51.6	15.2	13.7	48.5	18.5	6	21
	1/4	KQ2U09-35S			55			49.5			22
	3/8	KQ2U09-36S			55.4			50			35
3/8	1/4	KQ2U11-35S	19.05	17.9	59.5	17.9	15.6	54	21	7	42
	3/8	KQ2U11-36S			59.9			54.5			43
	1/2	KQ2U11-37S			63.6			56.5			56
1/2	1/4	KQ2U13-35S	22.23	21.7	64	21.7	18.8	58.5	22	9.6	31
	3/8	KQ2U13-36S			64.4			59			41
	1/2	KQ2U13-37S			67.6			60.5			68

* Reference dimensions after NPT thread installation.

Note) ϕD : Max. diameter

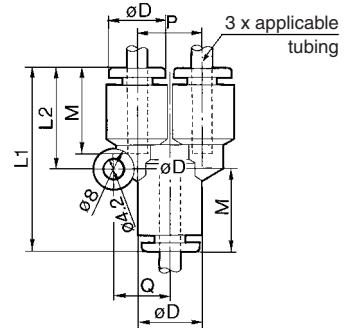


Union "Y": KQ2U



Applicable tubing O.D. (inch)	Model	Note) ϕD	L1	L2	P	Q	M	Min. port size	Mass (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) ϕD : Max. diameter

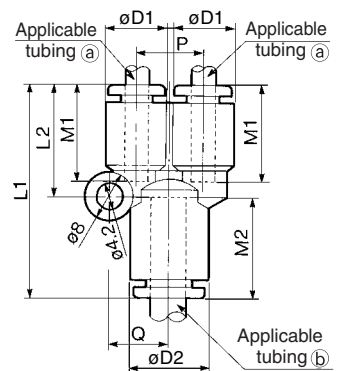


Different diameter union "Y": KQ2U



Applicable tubing O.D. (inch)		Model	Note) $\phi D1$	Note) $\phi D2$	L1	L2	P	Q	M1	M2	Min. port size	Mass (g)
1/8	5/32	KQ2U01-03	9.6	10.4	33.5	17.5	9.6	9	15.5	16	2.5	5
	1/4	KQ2U01-07			13.2	38	21.5	13.2		12		17
5/32	3/16	KQ2U03-05	10.4	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
3/16	1/4	KQ2U05-07	11.4	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
1/4	3/8	KQ2U07-11	13.2	17.9	47	27.5	17.9	15.6	17	21	4.6	23
	5/16	KQ2U09-11			17.9	47	27.5	17.9		15.6		18.5
5/16	1/2	KQ2U09-13	15.2	21.7	51	30	21.7	18.8	18.5	22	6	34
	3/8	KQ2U11-13			17.9	21.7	51.5	30.5		21.7		18.8

Note) $\phi D1, \phi D2$: Max. diameter

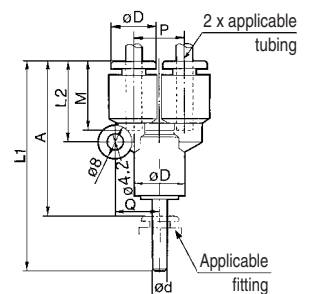


Plug-in "Y": KQ2U



Applicable tubing O.D. (inch)	Applicable fitting size ϕd (inch)	Model	Note) ϕD	L1	L2	P	Q	A	M	Min. port size	Mass (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) ϕD : Max. diameter

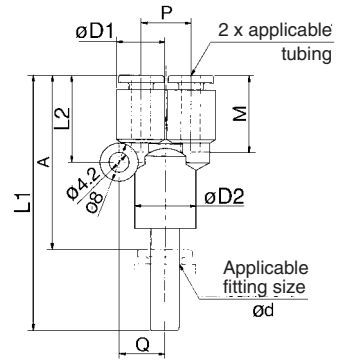


Different Diameter Plug-in “Y”: KQ2X



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

Note) ϕD : Max. diameter



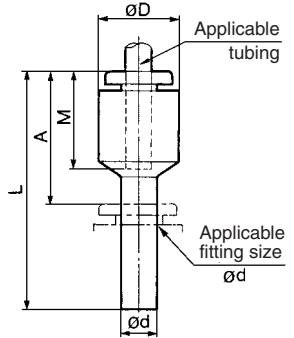
- K
- M
- H
- KK
- D
- MS
- LQ
- MQR
- T

Plug-in Reducer: KQ2R



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

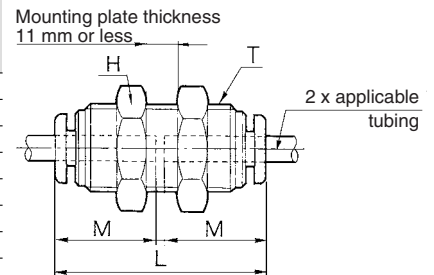
Note) ϕD : Max. diameter



Bulkhead Union: KQ2E



Applicable tubing O.D. (inch)	Model	T (UNF)	H (Width across flats)	L	Mounting hole	M	Min. port size	Mass (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

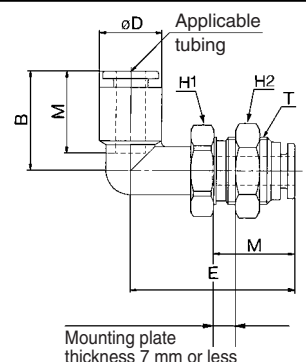


Bulkhead Male Elbow: KQ2LE



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

Note) ϕD : Max. diameter

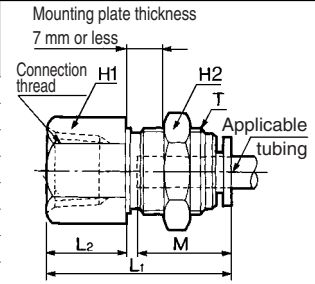


Series KQ2

Bulkhead Connector: KQ2E



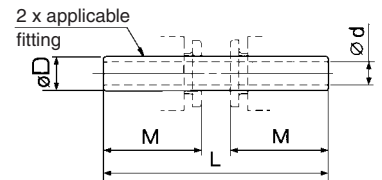
Applicable tubing O.D. (inch)	Connection thread NPT	Model	Connection thread (UNF)	H1 (Width across flats)	H2 (Width across flats)	L1	L2	M	Min. port size	Mounting hole	Mass (g)
1/8	1/4	KQ2E01-35	1/2-20	17.46	17.46	31	15	15.5	2.5	13.5	36
5/32	1/4	KQ2E03-35	1/2-20	17.46	17.46	31	15	16	3	13.5	36
3/16	1/8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



Nipple: KQ2N



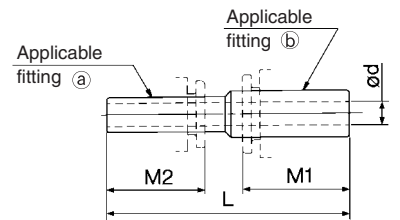
Applicable fitting ϕD	Model	L	M	ϕd	Mass (g)
1/8	KQ2N01-99	36	15.5	2.2	0.2
3/16	KQ2N05-99	38	16.5	3.5	0.4
1/4	KQ2N07-99	39	17	4.6	1
3/8	KQ2N11-99	49	21	7.5	10
1/2	KQ2N13-99	51	22	10	15



Reducer Nipple: KQ2N



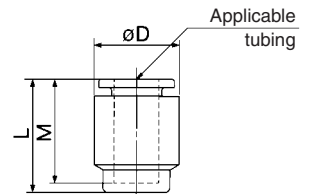
Applicable fitting O.D. (inch)	Model		L	M1	M2	ϕd	Mass (g)
	Ⓐ	Ⓑ					
1/8	5/32	KQ2N01-03	36.5	16	15.5	2.2	0.2
	3/16	KQ2N01-05	37	16.5			0.4
5/32	3/16	KQ2N03-05	37.5	16.5	16	2.5	0.4
	1/4	KQ2N03-07	38	17			0.6
3/16	1/4	KQ2N05-07	38.5	17	16.5	3.5	0.6
	5/16	KQ2N05-09	41	18.5			1
	5/16	KQ2N07-09	41.5	18.5	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



Tube Cap: KQ2C



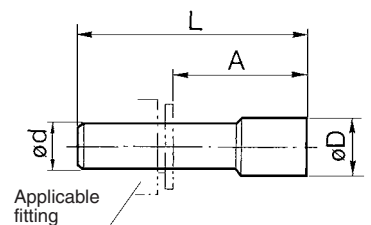
Applicable tubing O.D. (inch)	Model	$\phi D1$	L	M	Mass (g)
5/32	KQ2C03-00	10.4	17	16	1
1/4	KQ2C07-00	13.2	18	17	2
5/16	KQ2C09-00	15.2	20.5	18.5	3
3/8	KQ2C11-00	17.9	22.5	21	6



Plug: KQ2P, KQP



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



Note) KQ2P and KQP: Orange



Please contact SMC for detailed dimensions, specifications, and delivery.

1 Grease-free Specifications

Symbol	Specifications
X17	Grease-free Rubber material: NBR (With fluorine coating) Release button color: Light blue
X29	Grease-free Rubber material: NBR (With fluorine coating) Release button color: Light blue Copper-free (With electroless nickel plated)
X39	Grease-free Rubber material: NBR (With fluorine coating) Release button color: Light blue Clean (Copper-free, air blow, double package, resin body: white)
X94	Grease-free Rubber material: FKM (With fluorine coating) Release button color: Light blue

 K
 M
 H
 KK
 D
 MS
 LQ
 MQR
 T

2 Other Specifications

Symbol	Specifications
X2	Copper-free (With electroless nickel plated)
X12	Lubricant: White Vaseline Release button color: White
X23	Metal material: Stainless steel 303 Width across flats: Metric size
X34	Rubber material: FKM
X41	With fixed throttle ^{Note)}

Note) Compatible with male connector and male elbow only
Consult SMC separately for the available fixed throttle diameters.

Spare Parts

Description	Part no.	Applicable thread	Material	Applicable model
Gasket	M-10/32G	10-32 UNF	Stainless steel 304, NBR	—
Pipe nut	KQ01-P01	—	—	KQ2E01-00, KQ2E03-00, KQ2E01-35 KQ2E03-35, KQ2LF01-00, KQ2LE03-00
	KQ05-P01	—	—	KQ2E05-00, KQ2E07-00, KQ2E05-34 KQ2E07-35, KQ2LF05-00, KQ2LE07-00
	KQ09-P01	—	—	KQ2E09-00, KQ2E09-36, KQ2LE09-00
	KQ11-P01	—	—	KQ2E11-00, KQ2E11-36, KQ2LE11-00
	KQ13-P01	—	—	KQ2E13-00, KQ2E13-36 KQ2E13-37, KQ2LE13-00