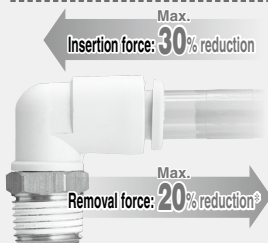


One-touch Fittings

RoHS

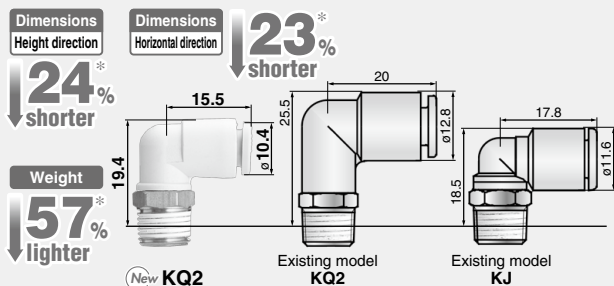
New

Improved tube insertion/removal



* Tube pulling out strength is ensured to be equivalent to existing model.

Compact and lightweight



* Existing model KQ2 series Male elbow/Applicable tubing O.D.: ø6/Connection thread: R1/8

To New "KQ2"

KQ, KQ2 and KJ consolidated into "KQ2"

Light weight

Enhanced variation

Compact

New Series KQ2

Miniature One-touch Fittings Series KJ

Body type: totaled **51** models Seal method: **3** types Thread material/Surface treatment (Treated or Non-treated): **2** types

Applicable tubing O.D.	Connection thread	Seal method Sealant	Gasket seal	New Face seal
Metric size	M R New G Uni	P.319	P.319	P.391 P.383
Inch size	UNF NPT M R Uni	P.351 P.375	P.419 P.351 P.375 P.427	P.403 P.413

Series KQ2

Selectable seal method*

* Connection thread: R, NPT



Face seal



Sealant

Selectable surface treatment

- Brass (No plating)
- Brass + Electroless nickel plated

Face seal adopted for threading

Improved installability (Reduced tool-tightening after hand-tightening)

Face seal

Number of rotations after hand-tightening
1/6 of a rotation or less

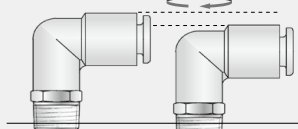


At hand-tightening

After tool-tightening

Sealant

Number of rotations after hand-tightening
2 to 3 rotations



At hand-tightening

After tool-tightening

Prevention of sealant residue/protrusion

Existing sealant type leaves residue and protrudes out from the threading when installing, making it necessary to clear away the residue using an air blower or similar. However, no residue is created when using a face seal.

Re-piping is possible.

Face seal

Repeated re-piping some 6 to 10 times is possible due to use of elastic sealant on seating.

Sealant

Sealant tape is necessary because sealant becomes separated with repeated installation.

Height with multiple usage is uniform.

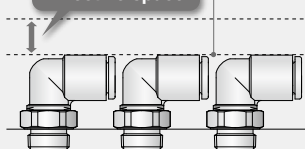


Effective space of height direction

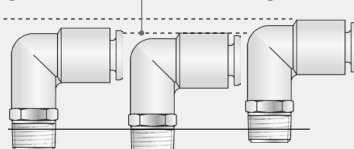
Effective space

Uniform height

Uneven heights



Face seal



Sealant

Sealant/Gasket seal

Face seal

Uni One-touch Fittings Gasket seal

Uni thread type One fitting is applicable to various threads, such as Rc, G, NPT and NPTF.



Connection thread: M, R, Rc



Connection thread: G, R, Rc



Connection thread: Rc, G, NPT, NPTF



Connection thread: UNF, NPT, M, R, Rc



Connection thread: NPT, R



Connection thread: Rc, G, NPT, NPTF

Sealant/Gasket Seal

Applicable tubing	Connection thread				
	M	R	Rc	UNF	NPT
 Metric size	●	●	●		
 Inch size				●	●
 Inch size	●	●	●		

How to Order	P.320
Variations	P.321
Dimensions	P.323
Made to Order/Clean Series/Spare Parts	P.349
How to Order	P.352
Variations	P.353
Dimensions	P.355
Made to Order/Clean Series/Spare Parts	P.374
How to Order	P.376
Variations	P.377
Dimensions	P.378
Made to Order/Clean Series/Spare Parts	P.381

Face Seal

Applicable tubing	Connection thread				
	G	R	Rc	NPT	R
 Metric size	●				
 Metric size		●			
 Inch size				●	
 Inch size					●

How to Order	P.384
Variations	P.385
Dimensions	P.386
Spare Parts	P.390
How to Order	P.392
Variations	P.393
Dimensions	P.394
How to Order	P.404
Variations	P.405
Dimensions	P.406
How to Order	P.414
Variations	P.415
Dimensions	P.416

Gasket Seal (Uni Thread)

Applicable tubing	Connection thread			
	Rc	G	NPT	NPTF
 Metric size	●	●	●	●
 Inch size	●	●	●	●

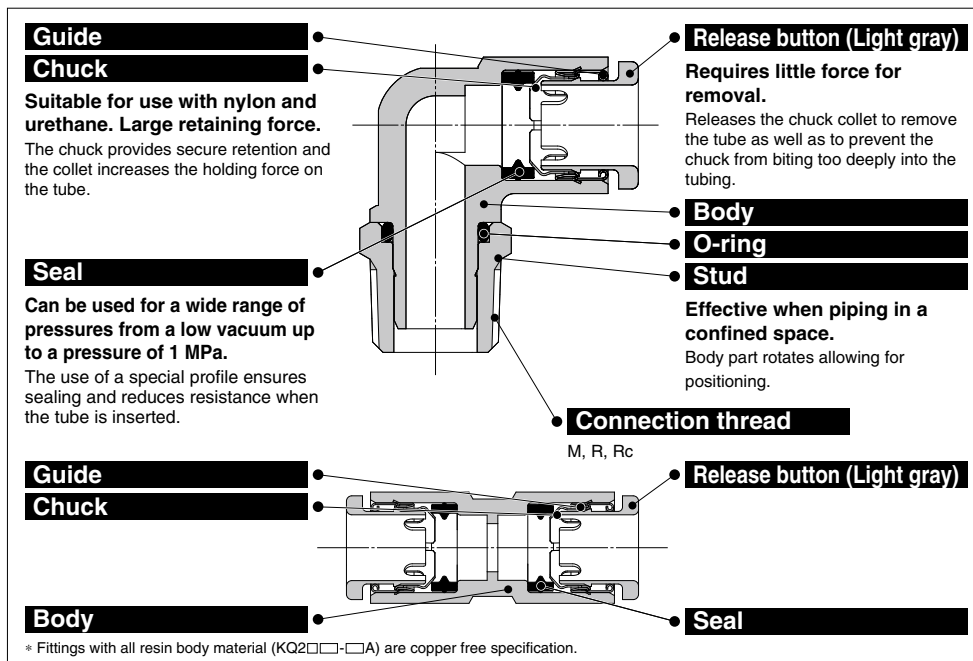
How to Order	P.420
Variations	P.421
Dimensions	P.422
Made to Order/Clean Series/Spare Parts	P.425
How to Order	P.428
Variations	P.429
Dimensions	P.430
Made to Order/Clean Series/Spare Parts	P.432

Prior to Use	P.433
Precautions	P.434

Metric Size One-touch Fittings

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

Series KQ2



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



Made to Order Specifications
(Refer to page 349 for details.)

Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon, Polyurethane
Tubing O.D.	ø2, ø3.2, ø4, ø6, ø8, ø10, ø12, ø16

Specifications

Fluid		Air/Water Note 1)
Operating pressure range Note 2)		-100 kPa to 1 MPa
Proof pressure (at 23°C)		3 MPa
Ambient and fluid temperature		-5 to 60°C, Water: 0 to 40°C (No freezing)
Thread	Mounting section	JIS B0203 (Taper thread for piping) JIS B0205 (Metric coarse thread)
	Nut section	JIS B0205 (Metric fine thread)
Seal on the threads		With sealant

Note 1) The surge pressure must be under the maximum operating pressure.

Note 2) Do not use the fittings with a leak tester or for vacuum retention because they are not guaranteed for zero leakage.

Principal Parts Material

Body	C3604, PBT, PP, Stainless steel 303
Stud	C3604 (Thread portion), Stainless steel 303 (Thread portion)
Chuck	Stainless steel 304
Guide	Stainless steel 304
Release button	POM
Seal, O-ring	NBR
Gasket	Stainless steel 304, NBR

How to Order

Threaded Type

KQ2 H 06 - 01 A S

One-touch fittings

Model

Symbol	Model
H	Male connector
S	Hexagon socket head male connector
F	Female connector
L	Male elbow
LU	Male branch connector
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
ZT	Triple universal male elbow
VT	Branch universal male elbow
ZF	Branch universal female elbow
ZD	Double branch universal male elbow
ZT	Triple branch universal male elbow
W	Extended male elbow
T	Male branch tee
Y	Male run tee
D	Male delta union
U	Branch "Y"
UD	Double branch "Y"
E	Bulkhead union
	Bulkhead connector
LE	Bulkhead male elbow
N	Adapter

Male thread seal method

Symbol	Seal method
Nil	None
S	With thread sealant

Thread material/Surface treatment

Symbol	Thread material/Surface treatment
A	Brass
N	Brass + Electroless nickel plated
G	Stainless steel 303 (Connection thread/Only male thread and M3)
Bulkhead union	☐ J Interchangeable with KJE

* ☐: A, N

Port size/Applicable tubing O.D.

Symbol	Size
Tubing connection	00* Same dia. tubing
Thread connection	M3 M3 x 0.5
	M5 M5 x 0.8
	M6 M6 x 1.0
	01 R1/8, Rc1/8
	02 R1/4, Rc1/4
	03 R3/8, Rc3/8
	04 R1/2, Rc1/2

* Only for "Bulkhead union" and "Bulkhead male elbow".

Applicable tubing O.D.

Symbol	Size
02	ø2
23	ø3.2
04	ø4
06	ø6
08	ø8
10	ø10
12	ø12
16	ø16

Spare Parts

Use the part number below to order the gasket for M3, M5 and M6 threads.

Gasket for M3 thread: M-3G2
Gasket for M5 thread: M-5G2
Gasket for M6 thread: M-6G

Tube - Tube Type

KQ2 H 06 - 00 A

One-touch fittings

Model

Symbol	Model
H	Straight union
	Different diameter straight
L	Union elbow
	Plug-in elbow
	Reducer elbow
LU	Branch union elbow
W	Extended plug-in elbow
T	Union tee
	Different diameter tee
TW	Cross
TX	Different diameter cross
TY	Different diameter cross
D	Delta union
U	Union "Y"
	Plug-in "Y"
	Different diameter union "Y"
UD	Different diameter double union "Y"
X	Different diameter plug-in "Y"
R	Plug-in reducer
XD	Double plug-in "Y"

Port size/Applicable tubing O.D.

Symbol	Size
Tubing (Rcd) connection Different dia. tubing (Reducer)	00 Same diameter tubing
	99 Same diameter rod
	23 ø3.2
	04 ø4
	06 ø6
	08 ø8
	10 ø10
	12 ø12
	16 ø16

Accessories

Symbol	Name
KQ2N	Nipple
	Reducer nipple
KQ2C	Tube cap
KQ2P	Plug

Applicable tubing O.D.

Symbol	Size
02	ø2
23	ø3.2
04	ø4
06	ø6
08	ø8
10	ø10
12	ø12
16	ø16

Fittings

KQ2

KDM6

KDM

INDEX

Metric Size One-touch Fittings

Variations

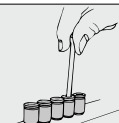
Hexagon socket head male connector

KQ2S

P.325



Internal hexagon socket allows tightening with a hexagon wrench in confined spaces.



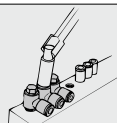
Universal male elbow

KQ2V

P.330



Hexagon head of the body allows tightening with a box wrench in confined spaces.



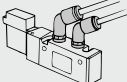
45° male elbow

KQ2K

P.329



Use to pipe a female thread at a 45° angle. The model between the male connector and male elbow.



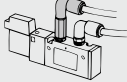
Extended male elbow

KQ2W

P.336



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



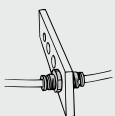
Bulkhead union

KQ2E

P.346



Use to connect tubing through a panel, etc.



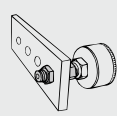
Bulkhead connector

KQ2E

P.346



Use to connect male thread and tubing through a panel, etc.



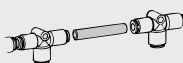
Nipple

KQ2N

P.348



Use to connect One-touch fittings.



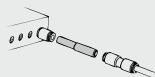
Reducer nipple

KQ2N

P.348



Use to connect One-touch fittings of different sizes.



Universal female elbow

KQ2VF

P.331



Use to branch a male or female thread at a 90° angle. Multiple connections possible.

Branch universal female elbow

KQ2ZF

P.333



Use to two-branch a male or female thread at a 90° angle. Multiple connections possible.

Male connector

KQ2H

P.323



Use to pipe a female thread. Most general model.

Cross

KQ2TW

P.339



Use to four-branch line.

Female connector

KQ2F

P.324



Use to pipe a male thread of a pressure gauge, etc.

Male elbow

KQ2L

P.326



Use to pipe a female thread at right angles. Most general model.

Reducer elbow

KQ2L

P.327



Use to change the tube direction from One-touch fittings by 90° and to reduce size.

Different diameter cross

KQ2TX

P.339



Use to branch tubing with size reduced at both 90° angles.

Straight union

KQ2H

P.323



Use to connect tubing in the same direction.

Union elbow

KQ2L

P.327



Use to connect tubing at right angles.

Male branch tee

KQ2T

P.337



Use to branch a female thread at both 90° angles.

Different diameter straight

KQ2H

P.324



Use to connect tubing of different sizes.

Plug-in elbow

KQ2L

P.327



Use to change the tube direction from One-touch fittings by 90°.

Union tee

KQ2T

P.338



Use to branch tubing at both 90° angles.

Different diameter tee

KQ2T P.338



Use to connect tubing for branching at both 90° angles with size reduced.

Different diameter tee

KQ2T P.338



Use to connect tubing for branching at 90° angle with size reduced from the same piping.

Different diameter cross

KQ2TY P.339



Use to connect tubing for branching in three directions with size reduced.

Hexagon socket head universal male elbow

KQ2VS P.330



Hexagon socket on the top allows tightening with a hexagon wrench in confined spaces.

Male branch connector

KQ2LU P.328



Use to branch a female thread at right angles.

Female elbow

KQ2LF P.335



Use to pipe a male thread at right angles.

Double universal male elbow

KQ2VD P.332



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

Triple universal male elbow

KQ2VT P.332



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

Branch universal male elbow

KQ2Z P.333



Hexagon head of the body allows tightening with a box wrench. Use for branch connections.

Double branch universal male elbow

KQ2ZD P.334



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

Male run tee

KQ2Y P.340



Use to branch a female thread at a 90° angle.

Triple branch universal male elbow

KQ2ZT P.334



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

Branch union elbow

KQ2LU P.327



Use to branch tubing at right angles.

Extended plug-in elbow

KQ2W P.335



Use to change the tube direction of One-touch fittings by 90°. Multi-level piping is also possible with the plug-in elbow.

Male delta union

KQ2D P.341



Use to branch a female thread at two right angles.

Delta union

KQ2D P.342



Use to branch tubing at three right angles.

Double branch "Y"

KQ2UD P.344



Use to four-branch a female thread.

Different diameter double union "Y"

KQ2UD P.344



Use to four-branch tubing with size reduced.

Different diameter plug-in "Y"

KQ2X P.345



Use to branch One-touch fittings with size reduced.

Double plug-in "Y"

KQ2XD P.345



Use to four-branch One-touch fittings.

Union "Y"

KQ2U P.343



Use to branch tubing in the same direction.

Different diameter union "Y"

KQ2U P.343



Use to connect tubing for branching with size reduced.

Plug-in "Y"

KQ2U P.343



Use to branch One-touch fittings.

Branch "Y"

KQ2U P.342



Use to branch a female thread.

Plug-in reducer

KQ2R P.346



Use to change size of One-touch fittings.

Bulkhead male elbow

KQ2LE P.347



Use to connect tubing through a panel, etc. and to change the tube direction by 90°.

Adapter

KQ2N P.347



Use to connect One-touch fittings and R female thread.

Tube cap

KQ2C P.348



Use to plug unused tubing.

Color cap

KQ2C P.348



Mount onto the release button and use different colors for piping according to applications.

Plug

KQ2P P.347



Use to plug unused One-touch fittings.

Series KQ2

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

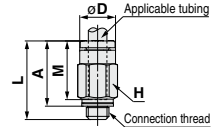
Dimensions

Male Connector: KQ2H (Gasket seal)



Applicable tubing O.D. (mm)	Connection thread M	Model	H (Width across flats)	øD	L	A	M	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø2	M3 x 0.5	KQ2H02-M3G	7	5.5	15.6	13	11.9	—	0.9	1.2	1.5
	M5 x 0.8	KQ2H02-M5□	7	5.5	13.8	10.8	11.9	—	0.9	1.4	2
ø3.2	M3 x 0.5	KQ2H23-M3G	7	6.7	17	14.4	13.3	0.9	0.9	1.2	2.4
	M5 x 0.8	KQ2H23-M5□	7	6.7	17.3	14.3	13.3	3	2.5	2.5	2.7
	M3 x 0.5	KQ2H04-M3G	8	7.7	17.1	14.5	13.3	0.9	0.9	1.2	2.9
ø4	M5 x 0.8	KQ2H04-M5□	8	7.7	17.7	14.7	13.3	4	4	2.5	3.3
	M6 x 1.0	KQ2H04-M6□	8	7.7	18.7	14.7	13.3	4	4	3	3.6
ø6	M5 x 0.8	KQ2H06-M5□	10	9.7	17.7	14.7	13.3	4	4	2.5	4.1
	M6 x 1.0	KQ2H06-M6□	10	9.7	18.8	14.8	13.3	4	4	3	4.4

□/A: Brass, N: Brass + Electroless nickel plated



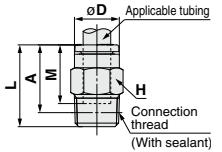
Male Connector: KQ2H (Sealant)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	øD	L	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø3.2	1/8	KQ2H23-01□S	10	6.7	14	10.9	13.3	3.4	2.9	2.5	6
	1/4	KQ2H23-02□S	14	6.7	16.7	12	13.3	3.4	2.9	2.5	15.3
ø4	1/8	KQ2H04-01□S	10	7.7	14.3	11.2	13.3	5.6	4	3	5.6
	1/4	KQ2H04-02□S	14	7.7	16.7	12	13.3	5.6	4	3	14.6
ø6	1/8	KQ2H06-01□S	10	9.7	18.4	15.3	13.3	13.1	10.4	4.5	5.8
	1/4	KQ2H06-02□S	14	9.7	16.7	12	13.3	13.1	10.4	4.5	12.5
	3/8	KQ2H06-03□S	17	9.7	18.1	13	13.3	13.1	10.4	4.5	24.5
ø8	1/8	KQ2H08-01□S	14	13	22.5	19.4	14.2	26.1	18	6	11.9
	1/4	KQ2H08-02□S	14	13	22	17.3	14.2	26.1	18	6	13.9
	3/8	KQ2H08-03□S	17	13	18.1	13	14.2	26.1	18	6	21
ø10	1/8	KQ2H10-01□S	17	15.6	23.8	20.7	15.6	26.1	26.1	6	16.9
	1/4	KQ2H10-02□S	17	15.6	27.3	22.6	15.6	41.5	29.5	7.5	22.1
	3/8	KQ2H10-03□S	17	15.6	23.5	18.4	15.6	41.5	29.5	7.5	22.5
	1/2	KQ2H10-04□S	22	15.6	22.3	15.9	15.6	41.5	29.5	7.5	44.7
ø12	1/4	KQ2H12-02□S	19	18.2	28.7	24	17	58.3	46.1	9	24.3
	3/8	KQ2H12-03□S	19	18.2	25.9	20.8	17	58.3	46.1	9	25.2
	1/2	KQ2H12-04□S	22	18.2	22.3	15.9	17	58.3	46.1	9	37.7
ø16	1/4	KQ2H16-02□S	24	23.6	32.5	27.8	20.6	58.3	46.1	9	37.4
	3/8	KQ2H16-03□S	24	23.6	33.1	28	20.6	81	67	11	42.4
	1/2	KQ2H16-04□S	24	23.6	32.1	25.7	20.6	113	67	13	44.6

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

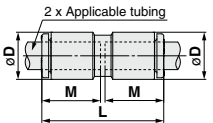


Straight Union: KQ2H



Applicable tubing O.D. (mm)	Model	øD (Note)	L	M	Effective area (mm ²)		Min. port size	Weight (g)
					Nylon	Urethane		
ø2	KQ2H02-00A	5.8	24.8	11.9	—	0.9	1.4	0.8
ø3.2	KQ2H23-00A	7.1	27.6	13.3	3.4	2.9	2.5	1.4
ø4	KQ2H04-00A	8.2	27.6	13.3	5.6	4	3	1.6
ø6	KQ2H06-00A	10.4	27.6	13.3	13.1	10.4	4.5	2.1
ø8	KQ2H08-00A	13.2	29.4	14.2	26.1	18	6	3.7
ø10	KQ2H10-00A	15.9	32.2	15.6	41.5	29.5	7.5	5.5
ø12	KQ2H12-00A	18.5	35	17	58.3	46.1	9	8.2
ø16	KQ2H16-00A	23.8	42.2	20.6	113	67	13	15.2

(Note) øD is maximum diameter.



Metric Size One-touch Fittings *Series KQ2*

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

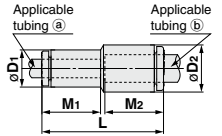
Dimensions

Different Diameter Straight: KQ2H



Applicable tubing O.D. (mm)		Model	Note) øD1	Note) øD2	L	M1	M2	Effective area (mm ²)		Min. port size	Weight (g)
(a)	(b)							Nylon	Urethane		
ø2	ø3.2	KQ2H02-23A	5.8	7.1	26.2	11.9	13.3	—	0.9	1.4	1.1
ø2	ø4	KQ2H02-04A	5.8	8.2	26.2	11.9	13.3	—	0.9	1.4	1.2
ø3.2	ø4	KQ2H23-04A	7.1	8.2	27.6	13.3	13.3	3.4	2.9	2.5	1.5
ø3.2	ø6	KQ2H23-06A	7.1	10.4	27.6	13.3	13.3	3.4	2.9	2.5	1.8
ø4	ø6	KQ2H04-06A	8.2	10.4	27.6	13.3	13.3	5.6	5.6	3	2
ø6	ø8	KQ2H06-08A	10.4	13.2	28.5	13.3	14.2	13.1	10.4	4.5	2.9
ø8	ø10	KQ2H08-10A	13.2	15.9	30.8	14.2	15.6	26.1	18	6	4.9
ø10	ø12	KQ2H10-12A	15.9	18.5	33.6	15.6	17	41.5	29.5	7.5	7.2
ø12	ø16	KQ2H12-16A	18.5	23.8	38.6	17	20.6	58.3	46.1	9	12.4

Note) øD1, øD2 are maximum diameters.



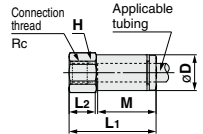
Female Connector: KQ2F



Applicable tubing O.D. (mm)	Connection thread Rc	Model	H (Width across flats)	Note) øD	L1	L2	M	Effective area (mm²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø3.2	M3 x 0.5	KQ2F23-M3□	7	6.9	17.3	5.7	13.3	3	2.5	2.5	3.1
	M5 x 0.8	KQ2F23-M5□	7	6.9	19.7	5.7	13.3	3	2.5	2.5	3.3
	M3 x 0.5	KQ2F04-M3□	8	7.9	17.3	5.7	13.3	4	4	2.5	4.1
ø4	M5 x 0.8	KQ2F04-M5□	8	7.9	19.6	5.7	13.3	4	4	3	4.5
	1/8	KQ2F04-01□	14	7.9	24.1	8.5	13.3	5.6	4	3	12
	1/4	KQ2F04-02□	17	7.9	29	12.9	13.3	5.6	4	3	21.5
ø6	M5 x 0.8	KQ2F06-M5□	10	9.9	17.6	5.7	13.3	10	10	4.1	5.5
	1/8	KQ2F06-01□	14	9.9	23.6	8.5	13.3	13.1	10.4	4.5	12.2
	1/4	KQ2F06-02□	17	9.9	28.5	12.9	13.3	13.1	10.4	4.5	21.6
	3/8	KQ2F06-03□	19	9.9	29.9	12.7	13.3	13.1	10.4	4.5	22.7
	1/8	KQ2F08-01□	14	13	24.1	8.5	14.2	26.1	18	6	12.9
ø8	1/4	KQ2F08-02□	17	13	29	12.2	14.2	26.1	18	6	22.1
	3/8	KQ2F08-03□	19	13	30.4	13.4	14.2	26.1	18	6	30.7
	1/4	KQ2F10-02□	17	15.6	30	12.9	15.6	41.5	29.5	7.5	24.2
ø10	3/8	KQ2F10-03□	19	15.6	31.3	13.3	15.6	41.5	29.5	7.5	25.5
	1/4	KQ2F12-02□	19	18.2	30.9	12.1	17	58.3	46.1	9	32.6
ø12	3/8	KQ2F12-03□	19	18.2	32.3	13.3	17	58.3	46.1	9	27.6
	1/2	KQ2F12-04□	24	18.2	36.3	15.9	17	58.3	46.1	9	46.3
ø16	3/8	KQ2F16-03□	24	23.6	34.7	12.6	20.6	81	67	13	53.8
	1/2	KQ2F16-04□	24	23.6	38.7	15.9	20.6	113	67	13	51.6

□A: Brass, N: Brass + Electroless nickel plated

Note) øD is maximum diameter.



Fittings

KQ2

KDM6

KDM

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Series KQ2

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

Dimensions

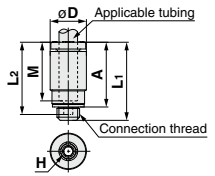
Hexagon Socket Head Male Connector: KQ2S (Gasket seal)



Applicable tubing O.D. (mm)	Connection thread M	Model	H (Width across flats)	Note) øD	L ₁	L ₂	A	M	Effective area (mm ²)		Min. port size	Weight (g)
									Nylon	Urethane		
ø2	M3 x 0.5	KQ2S02-M3G	1.5	6	15.7	14.7	13.1	11.9	—	0.9	1.5	1.7
ø3.2	M3 x 0.5	KQ2S23-M3G	1.5	7	17.1	16.1	14.5	13.3	1.4	1.4	1.5	2.2
	M5 x 0.8	KQ2S23-M5□	2	7	17.5	16.3	14.5	13.3	2.5	2.5	2	2.6
ø4	M3 x 0.5	KQ2S04-M3G	1.5	8	17.1	16.1	14.5	13.3	1.4	1.4	1.5	2.3
	M5 x 0.8	KQ2S04-M5□	2	8	17.6	16.3	14.6	13.3	2.5	2.5	2	3
ø6	M6 x 1.0	KQ2S04-M6□	3	8	20.6	19.6	16.6	13.3	4	4	3.1	4.1
	M5 x 0.8	KQ2S06-M5□	2	10	17.6	16.3	14.6	13.3	2.5	2.5	2	3.5
	M6 x 1.0	KQ2S06-M6□	3	10	20.6	19.6	16.6	13.3	4	4	3.1	5.1

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD is maximum diameter.



Hexagon Socket Head Male Connector: KQ2S (Sealant)

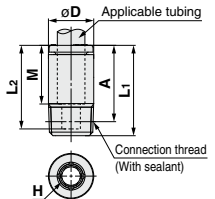


Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD	L ₁	L ₂	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
									Nylon	Urethane		
ø4	1/8	KQ2S04-01□S	3	10	20.6	19.6	17.5	13.3	4.1	3.6	3.1	8.1
ø6	1/8	KQ2S06-01□S	4	10	20.3	18.8	17.2	13.3	10	9.9	4.1	6.5
	1/4	KQ2S06-02□S	4	14	19.8	18.8	15.1	13.3	10.7	10	4.1	13.4
ø8	1/8	KQ2S08-01□S	5	13	22.9	19.7	19.8	14.2	17.2	16.2	5.1	10.2
	1/4	KQ2S08-02□S	6	14	23.2	19.5	18.5	14.2	23.3	16.2	6.1	14.3
ø10	3/8	KQ2S08-03□S	6	17	20.7	19.7	15.6	14.2	23.3	16.2	6.1	21.1
	1/8	KQ2S10-01□S	5	15.6	24.3	21.1	21.2	15.6	17.2	16.2	5.1	12
	1/4	KQ2S10-02□S	8	15.6	24.6	20.1	19.9	15.6	39	26.6	8.1	12.4
	3/8	KQ2S10-03□S	8	17	25.1	20.1	20	15.6	39	26.6	8.1	23.2
ø12	1/2	KQ2S10-04□S	8	22	21.1	20.1	14.7	15.6	39	26.6	8.1	37.4
	1/4	KQ2S12-02□S	8	18.2	29	21.5	24.3	17	46	44.5	8.1	21
	3/8	KQ2S12-03□S	10	18.2	26.4	21.8	21.3	17	60	44.5	10.1	21.2
	1/2	KQ2S12-04□S	10	22	22.8	21.8	16.4	17	60	44.5	10.1	30.5
ø16	New 1/4	KQ2S16-02□S	8	23.6	32.5	25.1	27.8	20.6	44	44	8.1	25.7
	3/8	KQ2S16-03□S	10	23.6	33.5	25.4	28.4	20.6	81	67	10.1	38.3
	1/2	KQ2S16-04□S	12	23.6	33.4	26.1	27	20.6	113	67	12.1	43.5

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) øD is maximum diameter.



Metric Size One-touch Fittings *Series KQ2*

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

Dimensions

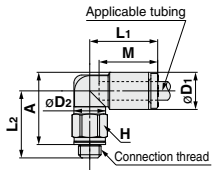
Male Elbow: KQ2L (Gasket seal)



Applicable tubing O.D. (mm)	Connection thread M	Model	H (Width across flats)	(Note)	øD1	øD2	L1	L2	A	M	Effective area (mm ²)	Min. port size	Weight (g)
				øD1							Nylon/Urethane		
ø2	M3 x 0.5	KQ2L02-M3G	5.5	5.8	5.5	12.6	12.5	12.8	11.9	—	0.8	1.2	1.6
	M5 x 0.8	KQ2L02-M5□	7	5.8	5.5	12.6	13	12.9	11.9	—	0.8	1.4	2.7
ø3.2	M3 x 0.5	KQ2L23-M3G	7	7.1	7	15.3	13.8	14.8	13.3	0.8	0.8	1.2	2.7
	M5 x 0.8	KQ2L23-M5□	7	7.1	7	15.3	14.3	14.9	13.3	2.6	2.2	2.5	3.1
ø4	M3 x 0.5	KQ2L04-M3G	7	8.2	7	15.4	14.3	15.8	13.3	0.8	0.8	1.2	2.7
	M5 x 0.8	KQ2L04-M5□	7	8.2	7	15.4	14.8	15.9	13.3	3.5	3.5	2.5	3.1
ø6	M6 x 1.0	KQ2L04-M6□	8	8.2	7	15.4	15.8	15.9	13.3	3.5	3.5	2.5	4.2
	M5 x 0.8	KQ2L06-M5□	7	10.4	7	14.5	16.5	18.7	13.3	3.5	3.5	2.5	3.2
ø6	M6 x 1.0	KQ2L06-M6□	8	10.4	7	14.5	17.5	18.7	13.3	3.5	3.5	2.5	4.3

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Male Elbow: KQ2L (Sealant)

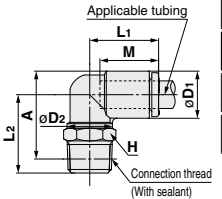


Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	(Note) øD1	øD2	L1	L2	A*	M	Effective area (mm²)	Min. port size	Weight (g)	
										Nylon/Urethane			
ø3.2	1/8	KQ2L23-01□S	10	7.1	10	14.5	16.7	17.2	13.3	3	2.5	2.5	4.6
	1/4	KQ2L23-02□S	14	7.1	10	14.5	21.2	20.1	13.3	3	2.5	2.5	14.1
ø4	1/8	KQ2L04-01□S	10	8.2	10	14.8	16.2	17.2	13.3	4.2	4.2	3	4.8
	1/4	KQ2L04-02□S	14	8.2	10	14.8	21.7	21.1	13.3	4.2	4.2	3	14.3
ø6	1/8	KQ2L06-01□S	10	10.4	10	15.5	17.3	19.4	13.3	11.4	9	4.5	5.2
	1/4	KQ2L06-02□S	14	10.4	10	15.5	22.8	23.3	13.3	11.4	9	4.5	14.7
ø8	3/8	KQ2L06-03□S	17	10.4	10	15.5	24.1	24.2	13.3	11.4	9	4.5	26.5
	1/8	KQ2L08-01□S	10	13.2	10	16.4	18.7	22.2	14.2	11.4	11.4	4.5	6.1
ø10	1/4	KQ2L08-02□S	14	13.2	12	17.2	25.4	27.3	14.2	21.6	14.9	6	17.7
	3/8	KQ2L08-03□S	17	13.2	12	17.2	25.5	27.0	14.2	21.6	14.9	6	24.7
ø12	1/8	KQ2L10-01□S	12	15.9	12	18.6	23.6	28.4	15.6	21.6	14.9	6	11.1
	1/4	KQ2L10-02□S	17	15.9	17	19.3	28.7	31.9	15.6	35.2	25	7.5	21.7
ø16	3/8	KQ2L10-03□S	17	15.9	17	19.3	29.6	32.4	15.6	35.2	25	7.5	22.2
	1/2	KQ2L10-04□S	22	15.9	17	19.3	33.6	35.1	15.6	35.2	25	7.5	44.6
ø12	1/4	KQ2L12-02□S	17	18.5	17	21.5	30.0	34.5	17	50.2	39.7	9	23.5
	3/8	KQ2L12-03□S	17	18.5	17	21.5	30.9	35.0	17	50.2	39.7	9	24.1
ø16	1/2	KQ2L12-04□S	22	18.5	17	21.5	34.9	37.7	17	50.2	39.7	9	46.5
	3/8	KQ2L16-02□S	17	23.8	17	25.1	32.6	39.8	20.6	50.2	50.2	9	27.8
ø16	3/8	KQ2L16-03□S	22	23.8	21	27.1	35.4	42.2	20.6	71	58.9	11	40.8
	1/2	KQ2L16-04□S	22	23.8	21	27.1	34.1	39.6	20.6	100	58.9	13	44.5

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) øD1 is maximum diameter.



Fittings

KQ2

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Series KQ2

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

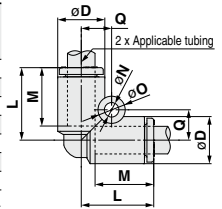
Dimensions

Union Elbow: KQ2L



Applicable tubing O.D. (mm)	Model	Note) ϕD	L	Q	M	ϕO	ϕN	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
$\phi 3.2$	KQ2L23-00A	7.1	14.9	5.4	13.3	6	3.2	3	2.5	2.5	1.6
$\phi 4$	KQ2L04-00A	8.2	15.3	5.7	13.3	6	3.2	4.2	4.2	3	1.9
$\phi 6$	KQ2L06-00A	10.4	16.3	6.8	13.3	6	3.2	11.4	9	4.5	2.7
$\phi 8$	KQ2L08-00A	13.2	18.2	8.4	14.2	8	4.2	21.6	14.9	6	4.7
$\phi 10$	KQ2L10-00A	15.9	20.6	9.6	15.6	8	4.2	35.2	25	7.5	7.1
$\phi 12$	KQ2L12-00A	18.5	23	10.7	17	8	4.2	50.2	39.7	9	10.3
$\phi 16$	KQ2L16-00A	23.8	28.6	13.4	20.6	8	4.2	100	58.9	13	19.7

Note) ϕD is maximum diameter.

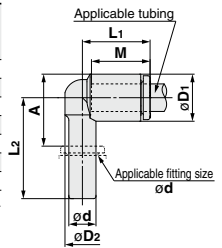


Plug-in Elbow: KQ2L



Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	Note) ϕD_1	ϕD_2	L ₁	L ₂	A	M	Effective area (mm ²)		Min. port size	Weight (g)
									Nylon	Urethane		
$\phi 3.2$	$\phi 3.2$	KQ2L23-99A	7.1	6.4	14.4	20.9	11.1	13.3	3	2.5	2.2	0.9
$\phi 4$	$\phi 4$	KQ2L04-99A	8.2	7.2	14.5	21.1	11.9	13.3	4.2	4.2	2.5	1.2
$\phi 6$	$\phi 6$	KQ2L06-99A	10.4	8	15.3	22.3	14.2	13.3	9	9	4	1.8
$\phi 8$	$\phi 8$	KQ2L08-99A	13.2	10	17.2	26.2	18.6	14.2	21.6	14.9	6	3
$\phi 10$	$\phi 10$	KQ2L10-99A	15.9	12	19.3	28.2	20.5	15.6	35.2	25	7.5	4.7
$\phi 12$	$\phi 12$	KQ2L12-99A	18.5	14	21.5	31	23.2	17	50.2	39.7	9	7
$\phi 16$	$\phi 16$	KQ2L16-99A	23.8	20	27.1	36.8	28.1	20.6	100	58.9	13	13.7

Note) ϕD_1 is maximum diameter.

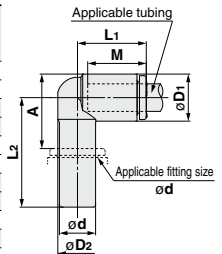


Reducer Elbow: KQ2L



Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	Note) ϕD_1	ϕD_2	L ₁	L ₂	A	M	Effective area (mm ²)		Min. port size	Weight (g)
									Nylon	Urethane		
$\phi 3.2$	$\phi 4$	KQ2L23-04A	7.1	6.4	14.5	23.9	14.1	13.3	3	2.5	2.5	1.1
	$\phi 6$	KQ2L23-06A	7.1	6.4	14.5	24.1	14.3	13.3	3	2.5	2.5	1.3
$\phi 4$	$\phi 6$	KQ2L04-06A	8.2	7.2	14.8	24.6	15.4	13.3	4.2	4.2	3	1.5
	$\phi 8$	KQ2L04-08A	8.2	7.2	14.8	29.5	19.4	13.3	4.2	4.2	3	1.8
$\phi 6$	$\phi 8$	KQ2L06-08A	10.4	9	15.5	24.2	15.2	13.3	11.4	9	4.5	2.1
	$\phi 10$	KQ2L06-10A	10.4	9	15.5	31.6	21.2	13.3	11.4	9	4.5	2.7
$\phi 8$	$\phi 10$	KQ2L08-10A	13.2	10	18.8	27.1	18.1	14.2	21.6	14.9	6	3.5
	$\phi 12$	KQ2L08-12A	13.2	10	18.8	34	23.6	14.2	21.6	14.9	6	4.9
$\phi 10$	$\phi 12$	KQ2L10-12A	15.9	12	19.3	35.6	26.5	15.6	35.2	25	7.5	5.6
	$\phi 16$	KQ2L12-16A	18.5	14	21.5	42.6	31.2	17	50.2	39.7	9	8.7

Note) ϕD_1 is maximum diameter.

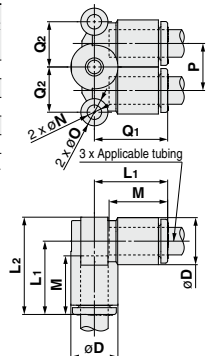


Branch Union Elbow: KQ2LU



Applicable tubing O.D. (mm)	Model	Note) ϕD	L ₁	L ₂	Q ₁	Q ₂	M	P	ϕO	ϕN	Effective area (mm ²)		Min. port size	Weight (g)
											Nylon	Urethane		
$\phi 4$	KQ2LU04-00A	8.2	15.8	19.9	15.8	7.9	13.3	8.2	6	3.2	6	4.1	3	3.1
$\phi 6$	KQ2LU06-00A	10.4	16.5	21.7	16.5	10	13.3	10.4	6	3.2	13.9	11	4.5	4.4
$\phi 8$	KQ2LU08-00A	13.2	18.2	24.8	18.2	13.1	14.2	13.2	8	4.2	26.3	18.2	6	8
$\phi 10$	KQ2LU10-00A	15.9	20.3	28.3	20.3	15.9	15.6	15.9	8	4.2	40.8	29	7.5	12.2
$\phi 12$	KQ2LU12-00A	18.5	22.5	31.7	22.5	17.9	17	18.5	8	4.2	57.2	45.2	9	18.1

Note) ϕD is maximum diameter.



Dimensions

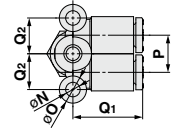
Male Branch Connector: KQ2LU (Gasket seal)



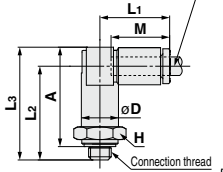
Applicable tubing O.D. (mm)	Connection thread M	Model	H (Width across flats)	Note) øD	L1	L2	L3	A	M	P	øO	øN	Q1	Q2	Effective area (mm ²) Nylon (tetra)	Min. port size	Weight (g)
ø4	M5 x 0.8	KQ2LU04-M5	10	8.2	15.8	20.7	24.8	21.8	13.3	8.2	6	3.2	15.8	7.9	4.3	4.1	6.9
	M6 x 1.0	KQ2LU04-M6	10	8.2	15.8	21.7	25.8	21.8	13.3	8.2	6	3.2	15.8	7.9	4.3	4.1	6.8
ø6	M5 x 0.8	KQ2LU06-M5	12	10.4	16.5	21.4	26.6	23.6	13.3	10.4	6	3.2	16.5	10	4.3	4.3	10.3
	M6 x 1.0	KQ2LU06-M6	12	10.4	16.5	22.4	27.6	23.6	13.3	10.4	6	3.2	16.5	10	4.3	4.3	10.3

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD is maximum diameter.



2 x Applicable tubing



Male Branch Connector: KQ2LU (Sealant)

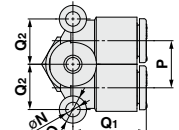


Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD	L1	L2	L3	A*	M	P	øO	øN	Q1	Q2	Effective area (mm ²) Nylon (tetra)	Min. port size	Weight (g)
ø4	1/8	KQ2LU04-01	10	8.2	15.8	23.3	27.4	24.3	13.3	8.2	6	3.2	15.8	7.9	6	4.1	9.5
	1/4	KQ2LU04-02	14	8.2	15.8	27.7	31.8	27.1	13.3	8.2	6	3.2	15.8	7.9	6	4.1	19.3
ø6	1/8	KQ2LU06-01	12	10.4	16.5	24	29.2	26.1	13.3	10.4	6	3.2	16.5	10	13.9	11	10.6
	1/4	KQ2LU06-02	14	10.4	16.5	28.4	33.6	28.9	13.3	10.4	6	3.2	16.5	10	13.9	11	19.5
	3/8	KQ2LU06-03	17	10.4	16.5	29.8	35	29.9	13.3	10.4	6	3.2	16.5	10	13.9	11	31.5
ø8	1/8	KQ2LU08-01	14	13.2	18.2	25.7	32.3	29.2	14.2	13.2	8	4.2	18.2	13.1	26.3	18.2	16.4
	1/4	KQ2LU08-02	14	13.2	18.2	30.1	36.7	32	14.2	13.2	8	4.2	18.2	13.1	26.3	18.2	21.5
	3/8	KQ2LU08-03	17	13.2	18.2	31.5	38.1	33	14.2	13.2	8	4.2	18.2	13.1	26.3	18.2	33.3
ø10	1/4	KQ2LU10-02	17	15.9	20.3	32.2	40.2	35.5	15.6	15.9	8	4.2	20.3	15.9	40.8	29	26.6
	3/8	KQ2LU10-03	17	15.9	20.3	33.6	41.6	36.5	15.6	15.9	8	4.2	20.3	15.9	40.8	29	34.4
	1/2	KQ2LU10-04	22	15.9	20.3	37.8	45.8	39.4	15.6	15.9	8	4.2	20.3	15.9	40.8	29	62.3
ø12	1/4	KQ2LU12-02	19	18.5	22.5	34.4	43.6	38.9	17	18.5	8	4.2	22.5	17.9	57.2	45.2	37.7
	3/8	KQ2LU12-03	19	18.5	22.5	35.8	45	39.9	17	18.5	8	4.2	22.5	17.9	57.2	45.2	40.6
	1/2	KQ2LU12-04	22	18.5	22.5	40	49.2	42.8	17	18.5	8	4.2	22.5	17.9	57.2	45.2	62.7

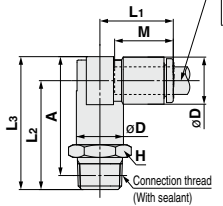
□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) øD is maximum diameter.



2 x Applicable tubing



Series KQ2

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

Dimensions

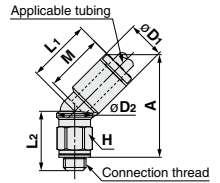
45° Male Elbow: KQ2K (Gasket seal)



Applicable tubing O.D. (mm)	Connection thread M	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
ø4	M5 x 0.8	KQ2K04-M5□	7	8.2	7	14.4	13.1	22.8	13.3	3.4	3.4	2.5	3
	M6 x 1.0	KQ2K04-M6□	8	8.2	7	14.4	14.1	22.8	13.3	3.4	3.4	2.5	4.1
ø6	M5 x 0.8	KQ2K06-M5□	7	10.4	7	14.4	17	27.4	13.3	3.4	3.4	2.5	3.5
	M6 x 1.0	KQ2K06-M6□	8	10.4	7	14.4	18	27.4	13.3	3.4	3.4	2.5	4.5

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



45° Male Elbow: KQ2K (Sealant)

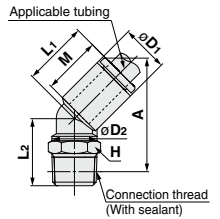


Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
ø4	1/8	KQ2K04-01□S	10	8.2	10	14.4	12.7	22.3	13.3	3.4	3.4	3	4.6
	1/4	KQ2K04-02□S	14	8.2	10	14.4	17.2	25.2	13.3	3.4	3.4	3	14.1
ø6	1/8	KQ2K06-01□S	10	10.4	10	14.7	14.8	25.3	13.3	8.7	6.9	4.5	5
	3/8	KQ2K06-03□S	14	10.4	10	14.7	19.3	28.2	13.3	8.7	6.9	4.5	14.5
ø8	1/8	KQ2K08-01□S	10	13.2	10	16	15.7	28	14.2	8.7	8.7	4.5	6
	1/4	KQ2K08-02□S	14	13.2	12	16	22.4	33.1	14.2	19.7	19.7	6	17.5
ø10	3/8	KQ2K08-03□S	17	13.2	12	16	22.5	32.8	14.2	19.7	19.7	6	24.5
	1/8	KQ2K10-01□S	12	15.9	12	18.2	21.5	36.2	15.6	30.9	23.2	6	11.1
ø12	1/4	KQ2K10-02□S	17	15.9	17	17.6	29.1	41.8	15.6	30.9	23.2	7.5	21.8
	3/8	KQ2K10-03□S	17	15.9	17	17.6	24.3	36.6	15.6	30.9	23.2	7.5	21.7
ø16	1/2	KQ2K10-04□S	22	15.9	17	17.6	28.3	39.3	15.6	30.9	23.2	7.5	44.1
	1/4	KQ2K12-02□S	17	18.5	17	19.4	29	43.8	17	44.5	35.1	9	23.3
ø12	3/8	KQ2K12-03□S	17	18.5	17	19.4	24.2	38.6	17	44.5	35.1	9	23.2
	1/2	KQ2K12-04□S	22	18.5	17	19.4	28.2	41.3	17	44.5	35.1	9	45.7
ø16	3/8	KQ2K16-02□S	17	23.8	17	24.3	29.6	49.2	20.6	44.5	44.5	9	27.7
	1/2	KQ2K16-03□S	22	23.8	21	23.8	31.4	50.2	20.6	65.8	58	11	39.2
ø16	3/8	KQ2K16-04□S	22	23.8	21	23.8	30.1	47.6	20.6	91.9	58	13	42.9

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) øD1 is maximum diameter.



Metric Size One-touch Fittings *Series KQ2*

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

Dimensions

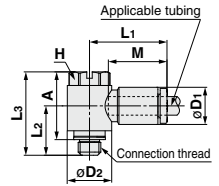
Universal Male Elbow: KQ2V (Gasket seal)



Applicable tubing O.D. (mm)	Connection thread M	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A	M	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
ø4	M5 x 0.8	KQ2V04-M5□	8	8.2	9.8	17.5	10.9	18.4	14.9	13.3	2.9 2.9	2.5	5.4
ø6	M5 x 0.8	KQ2V06-M5□	8	10.4	9.8	18.3	10.9	18.4	14.9	13.3	3.8 3.8	2.5	5.7

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



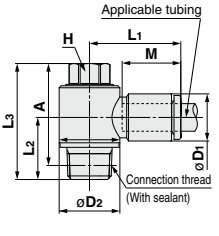
Universal Male Elbow: KQ2V (Sealant)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
ø4	1/8	KQ2V04-01□S	8	8.2	13.4	19.3	13.7	25.6	22.5	13.3	2.9 2.9	3	13.2
ø6	1/8	KQ2V06-01□S	8	10.4	13.4	20.5	13.7	25.6	22.5	13.3	7.5 5.9	4.5	13.5
	1/4	KQ2V06-02□S	10	10.4	15.3	19.9	17.9	30.5	25.8	13.3	7.5 5.9	4.5	24.9
	1/8	KQ2V08-01□S	12	13.2	17.6	23.5	15.1	27.6	24.5	14.2	16 11.2	6	22.6
ø8	1/4	KQ2V08-02□S	12	13.2	17.6	23.5	18.5	31	26.3	14.2	16 11.2	6	29.1
	3/8	KQ2V08-03□S	14	13.2	20.6	23.1	19.5	35.3	30.2	14.2	16 11.2	6	44.4
	1/4	KQ2V10-02□S	14	15.9	20.6	25.9	19.9	34.9	30.2	15.6	27 20.3	7.5	38.1
ø10	3/8	KQ2V10-03□S	14	15.9	20.6	25.9	20.3	35.3	30.2	15.6	27 20.3	7.5	45.7
	3/8	KQ2V12-03□S	17	18.5	25.2	28.5	21.4	37.6	32.5	17	39 30.8	9	59.6
ø12	1/2	KQ2V12-04□S	17	18.5	25.2	28.5	24.6	40.8	34.4	17	39 30.8	9	78.2
	3/8	KQ2V16-03□S	21	23.8	32.3	34.2	25.1	45.4	40.3	20.6	55 46	11	99.5
ø16	1/2	KQ2V16-04□S	21	23.8	32.3	34.2	28.3	48.6	42.2	20.6	78 46	13	107.9

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread
Note) øD1 is maximum diameter.



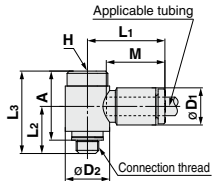
Hexagon Socket Head Universal Male Elbow: KQ2VS (Gasket seal)



Applicable tubing O.D. (mm)	Connection thread M	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A	M	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
ø4	M5 x 0.8	KQ2VS04-M5□	4	8.2	9.8	17.5	10.4	18.2	15.2	13.3	2.9 2.9	2.5	5.3
ø6	M5 x 0.8	KQ2VS06-M5□	4	10.4	9.8	18.3	10.4	18.2	15.2	13.3	3.8 3.8	2.5	5.6

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



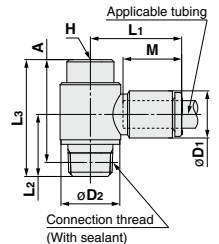
Hexagon Socket Head Universal Male Elbow: KQ2VS (Sealant)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
ø4	1/8	KQ2VS04-01□S	6	8.2	13.4	19.3	13.7	25.8	22.7	13.3	2.9 2.9	3	13.2
ø6	1/8	KQ2VS06-01□S	6	10.4	13.4	20.5	13.7	25.8	22.7	13.3	7.5 5.9	4.5	13.5
	1/4	KQ2VS06-02□S	6	10.4	15.3	19.9	17.9	26.5	21.8	13.3	7.5 5.9	4.5	20.8
	1/8	KQ2VS08-01□S	8	13.2	17.6	23.5	15.1	26	22.9	14.2	16 11.2	6	19.2
ø8	1/4	KQ2VS08-02□S	8	13.2	17.6	23.5	18.5	29.5	24.8	14.2	16 11.2	6	25.7
	3/8	KQ2VS08-03□S	8	13.2	20.6	23.1	19.5	31.4	26.3	14.2	16 11.2	6	37
	1/4	KQ2VS10-02□S	8	15.9	20.6	25.9	19.7	30.8	26.1	15.6	27 20.3	7.5	30.4
ø10	3/8	KQ2VS10-03□S	8	15.9	20.6	25.9	20.3	31.4	26.3	15.6	27 20.3	7.5	38.3
	3/8	KQ2VS12-03□S	10	18.5	25.2	28.5	21.4	35.1	30	17	39 30.8	9	51.4
ø12	1/2	KQ2VS12-04□S	10	18.5	25.2	28.5	24.6	38.3	31.9	17	39 30.8	9	70

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread
Note) øD1 is maximum diameter.



Fittings

KQ2

KDM6

KDM

INDEX

Series KQ2

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

Dimensions

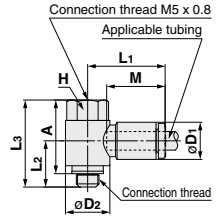
Universal Female Elbow: KQ2VF (Gasket seal)



Applicable tubing O.D. (mm)	Connection thread M	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A	M	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
ø4	M5 x 0.8	KQ2VF04-M5□	8	8.2	9.8	17.5	10.2	19.2	16.2	13.3	2.9 2.9	2.5	5.5
ø6	M5 x 0.8	KQ2VF06-M5□	8	10.4	9.8	18.3	10.2	19.2	16.2	13.3	3.8 3.8	2.5	5.8

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Universal Female Elbow: KQ2VF (Sealant)

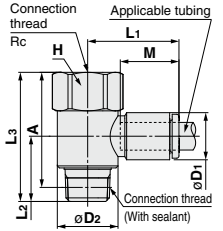


Applicable tubing O.D. (mm)	Connection thread R, Rc	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
ø4	1/8	KQ2VF04-01□S	14	8.2	13.4	19.3	14.4	28.5	25.4	13.3	2.9 2.9	3	17.3
	1/8	KQ2VF06-01□S	14	10.4	13.4	20.5	14.4	28.5	25.4	13.3	7.5 5.9	4.5	17.6
ø6	1/4	KQ2VF06-02□S	17	10.4	17.6	21.2	19.4	37.9	33.2	13.3	7.5 5.9	4.5	37
	1/8	KQ2VF08-01□S	17	13.2	17.6	23.5	15.5	30	26.9	14.2	16 11.2	6	27.5
	1/4	KQ2VF08-02□S	17	13.2	17.6	23.5	18.9	37.9	33.2	14.2	16 11.2	6	38.1
ø8	3/8	KQ2VF08-03□S	22	13.2	25.2	24.9	24	44	38.9	14.2	16 11.2	6	64.5
	1/4	KQ2VF10-02□S	19	15.9	20.6	25.9	20.4	40.3	35.6	15.6	27 20.3	7.5	46.4
	3/8	KQ2VF10-03□S	22	15.9	25.2	26.3	23.2	44	38.9	15.6	27 20.3	9	65.3
ø10	3/8	KQ2VF12-03□S	22	18.5	25.2	28.5	22.5	44	38.9	17	39 30.8	9	67.2
ø12	1/2	KQ2VF12-04□S	24	18.5	27	29.9	24.4	48.9	42.5	17	39 30.8	9	95.6

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) øD1 is maximum diameter.



Metric Size One-touch Fittings *Series KQ2*

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

Dimensions

Triple Universal Male Elbow: KQ2VT (Sealant)

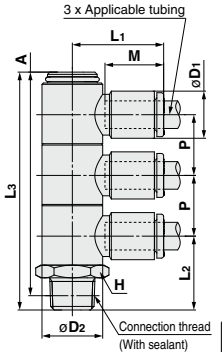


Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) ϕD_1	ϕD_2	L ₁	L ₂	L ₃	A	M	P	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)	
$\phi 4$	1/8	KQ2VT04-01□S	14	8.2	13.4	19.3	16.3	52.5	49.4	13.3	13.4	2.9	2.9	3	25.3
	1/4	KQ2VT04-02□S	14	8.2	13.4	19.3	20.7	56.9	52.2	13.3	13.4	2.9	2.9	3	32.9
	3/8	KQ2VT04-03□S	17	8.2	13.4	19.32	22.1	58.3	53.2	13.3	13.4	2.9	2.9	3	44.8
$\phi 6$	1/8	KQ2VT06-01□S	14	10.4	13.4	20.5	16.3	52.5	49.4	13.3	13.4	7.5	5.9	4.5	26.2
	1/4	KQ2VT06-02□S	14	10.4	13.4	20.5	20.7	56.9	52.2	13.3	13.4	7.5	5.9	4.5	33.9
	3/8	KQ2VT06-03□S	17	10.4	13.4	20.5	22.1	58.3	53.2	13.3	13.4	7.5	5.9	4.5	45.8
$\phi 8$	1/8	KQ2VT08-01□S	19	13.2	17.6	23.7	19	61.8	58.7	14.2	15.9	16	11.2	6	58.6
	1/4	KQ2VT08-02□S	19	13.2	17.6	23.7	22.4	65.2	60.5	14.2	15.9	16	11.2	6	56.8
	3/8	KQ2VT08-03□S	19	13.2	17.6	23.7	23	65.8	60.7	14.2	15.9	16	11.2	6	64.9
$\phi 10$	1/2	KQ2VT10-04□S	22	13.2	17.6	23.7	27.2	70	63.6	14.2	15.9	16	11.2	6	91.5
	1/4	KQ2VT10-02□S	21	15.9	20.6	25.7	24.3	75.5	70.8	15.6	19.2	27	20.3	7.5	82
	3/8	KQ2VT10-03□S	21	15.9	20.6	25.7	24.7	75.9	70.8	15.6	19.2	27	20.3	7.5	81.9
$\phi 12$	1/2	KQ2VT12-04□S	22	15.9	20.6	25.7	28.7	79.9	73.5	15.6	19.2	27	20.3	7.5	103.9
	1/4	KQ2VT12-02□S	26	18.5	25.2	28.9	26.5	84.1	79.4	17	21.6	39	30.8	9	139.3
	3/8	KQ2VT12-03□S	26	18.5	25.2	28.9	26.9	84.5	79.4	17	21.6	39	30.8	9	120.7
	1/2	KQ2VT12-04□S	26	18.5	25.2	28.9	30.1	87.7	81.3	17	21.6	39	30.8	9	142.2

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) ϕD_1 is maximum diameter.



Double Universal Male Elbow: KQ2VD (Sealant)

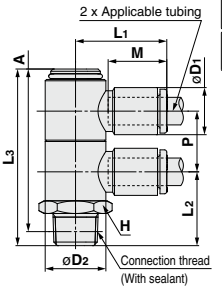


Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) ϕD_1	ϕD_2	L ₁	L ₂	L ₃	A *	M	P	Effective area (mm ²)		Min. port size	Weight (g)
												Nylon	Urethane		
$\phi 4$	1/8	KQ2VD04-01□S	14	8.2	13.4	19.3	16.3	39	35.9	13.3	13.4	2.9	2.9	3	19.7
	1/4	KQ2VD04-02□S	14	8.2	13.4	19.3	20.7	43.4	38.7	13.3	13.4	2.9	2.9	3	27.4
	3/8	KQ2VD04-03□S	17	8.2	13.4	19.3	22.1	44.8	39.7	13.3	13.4	2.9	2.9	3	39.3
$\phi 6$	1/8	KQ2VD06-01□S	14	10.4	13.4	20.5	16.3	39	35.9	13.3	13.4	7.5	5.9	4.5	20.3
	1/4	KQ2VD06-02□S	14	10.4	13.4	20.5	20.7	43.4	38.7	13.3	13.4	7.5	5.9	4.5	28
	3/8	KQ2VD06-03□S	17	10.4	13.4	20.5	22.1	44.8	39.7	13.3	13.4	7.5	5.9	4.5	39.9
$\phi 8$	1/8	KQ2VD08-01□S	19	13.2	17.6	23.7	19	45.8	42.7	14.2	15.9	16	11.2	6	45.1
	1/4	KQ2VD08-02□S	19	13.2	17.6	23.7	22.4	49.4	44.5	14.2	15.9	16	11.2	6	44.3
	3/8	KQ2VD08-03□S	19	13.2	17.6	23.7	23	49.8	44.7	14.2	15.9	16	11.2	6	52.3
$\phi 10$	1/2	KQ2VD08-04□S	22	13.2	17.6	23.7	27.2	54	47.6	14.2	15.9	16	11.2	6	78.4
	1/4	KQ2VD10-02□S	21	15.9	20.6	25.7	24.3	56.2	51.5	15.6	19.2	27	20.3	7.5	63.1
	3/8	KQ2VD10-03□S	21	15.9	20.6	25.7	24.7	56.6	51.5	15.6	19.2	27	20.3	7.5	65.1
$\phi 12$	1/2	KQ2VD10-04□S	22	15.9	20.6	25.7	28.7	60	53.6	15.6	19.2	27	20.3	7.5	87
	1/4	KQ2VD12-02□S	26	18.5	25.2	28.9	26.5	62.4	57.7	17	21.6	39	30.8	9	107
	3/8	KQ2VD12-03□S	26	18.5	25.2	28.9	26.9	62.8	57.7	17	21.6	39	30.8	9	102.1
	1/2	KQ2VD12-04□S	26	18.5	25.2	28.9	30.1	66	59.6	17	21.6	39	30.8	9	116.1

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) ϕD_1 is maximum diameter.



Fittings

KQ2

KDM6

KDM

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Series KQ2

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

Dimensions

Branch Universal Male Elbow: KQ2Z (Gasket seal)



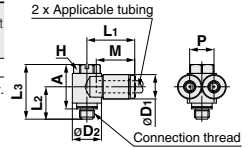
Applicable tubing O.D. (mm)	Connection thread M	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A	M	P	Effective area (mm²) Nylon Urethane	Min. port size	Weight (g)
ø4	M5 x 0.8	KQ2Z04-M5□	8	8.2	9.8	16.5	10.9	18.4	14.9	13.3	8.2	3.4	3.4	2.5

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Branch Universal Male Elbow: KQ2Z (Sealant)

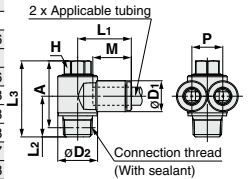


Applicable tubing O.D. (mm)	Connection thread R	Model	H (With across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	P	Effective area (mm ²)		Min. port size	Weight (g)
												Nylon	Urethane		
ø4	1/8	KQ2Z04-01□	8	8.2	13.4	18.5	13.7	25.6	22.5	13.3	8.2	4.7	4.7	3	14
	1/8	KQ2Z06-01□	8	10.4	13.4	18.4	13.7	25.6	22.5	13.3	10.4	10.8	8.6	4.5	14.6
ø6	1/4	KQ2Z06-02□	14	10.4	20.6	21.5	19.1	34.9	30.2	13.3	10.4	10.8	8.6	4.5	37
	3/8	KQ2Z06-03□	14	10.4	20.6	21.5	19.5	35.3	30.2	13.3	10.4	10.8	8.6	4.5	44.6
ø8	1/8	KQ2Z08-01□	12	13.2	17.6	21.2	15.1	27.6	24.5	14.2	13.2	20.5	14.2	6	24.3
	1/4	KQ2Z08-02□	12	13.2	17.6	21.2	18.5	31	26.3	14.2	13.2	20.5	14.2	6	30.8
	3/8	KQ2Z08-03□	14	13.2	20.6	22.3	19.5	35.3	30.2	14.2	13.2	20.5	14.2	6	46.3
	1/4	KQ2Z10-02□	14	15.9	21.6	23.6	19.9	34.9	30.2	15.6	15.9	31.8	22.6	7.5	41.7
ø10	3/8	KQ2Z10-03□	14	15.9	21.6	23.6	20.3	35.3	30.2	15.6	15.9	31.8	22.6	7.5	49.3
ø12	3/8	KQ2Z12-03□	17	18.5	24.1	26.9	21.2	37.6	32.5	17	18.5	44.6	35.3	9	63.4
	1/2	KQ2Z12-04□	17	18.5	24.1	26.9	24.4	40.8	34.4	17	18.5	44.6	35.3	9	82

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) øD1 is maximum diameter.



Branch Universal Female Elbow: KQ2ZF (Gasket seal)



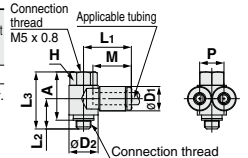
Applicable tubing O.D. (mm)	Connection thread M	Model	H (Width across flats) Note) øD1	øD2	L1	L2	L3	A	M	P	Effective area (mm ²)		Min. port size	Weight (g)	
											Nylon	Urethane			
ø4	M5 x 0.8	KQ2ZF04-M5□	8	8.2	9.8	16.5	10.2	19.2	16.2	13.3	8.2	3.4	3.4	2.5	6.3

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter of

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Branch Universal Female Elbow: KQ2ZF (Sealant)

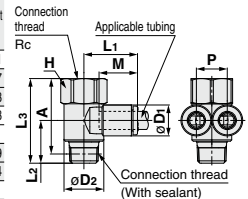


Applicable tubing O.D. (mm)	Connection thread R, Rc	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	P	Effective area (mm²)		Min. port size	Weight (g)
												Nylon	Urethane		
ø4	1/8	KQ2ZF04-01□	14	8.2	13.4	18.5	14.4	28.5	25.4	13.3	8.2	4.7	4.7	3	18.1
	1/8	KQ2ZF06-01□	14	10.4	13.4	18.4	14.4	28.5	25.4	13.3	10.4	10.8	8.6	4.5	18.7
ø6	1/4	KQ2ZF06-02□	19	10.4	20.6	21.5	21.2	40.3	35.6	13.3	10.4	10.8	8.6	4.5	45.3
	1/8	KQ2ZF08-01□	17	13.2	17.6	21.2	15.5	30	26.9	14.2	13.2	20.5	14.2	6	29.3
ø8	1/4	KQ2ZF08-02□	19	13.2	20.6	22.3	21.2	40.3	35.6	14.2	13.2	20.5	14.2	6	47
	1/4	KQ2ZF10-02□	19	15.9	21.6	23.6	20.4	40.3	35.6	15.6	15.9	31.8	22.6	7.5	49.9
ø10	3/8	KQ2ZF10-03□	22	15.9	25.2	25.5	23.2	44	38.9	15.6	15.9	31.8	22.6	7.5	68.4
	3/8	KQ2ZF12-03□	22	18.5	24.1	26.9	22.7	44	38.9	17	18.5	44.6	35.3	9	71
ø12	1/2	KQ2ZF12-04□	24	18.5	27	29.9	24.4	48.9	42.5	17	18.5	44.6	35.3	9	100.5

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) øD1 is maximum diameter.



Metric Size One-touch Fittings *Series KQ2*

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

Dimensions

Double Branch Universal Male Elbow: KQ2ZD (Sealant)

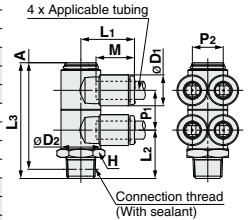


Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	P1	P2	Effective area (mm ²)	Min. port size	Weight (g)	
													Nylon/Jethane			
ø4	1/8	KQ2ZD04-01CS	14	8.2	13.4	18.5	16.3	39	35.9	13.3	13.4	8.2	4.7	4.7	3	21.3
	1/4	KQ2ZD04-02CS	14	8.2	13.4	18.5	20.7	43.4	38.7	13.3	13.4	8.2	4.7	4.7	3	29
	3/8	KQ2ZD04-03CS	17	8.2	13.4	18.5	22.1	44.8	39.7	13.3	13.4	8.2	4.7	4.7	3	40.9
ø6	1/8	KQ2ZD06-01CS	14	10.4	13.4	18.4	16.3	39	35.9	13.3	13.4	10.4	10.8	8.6	4.5	22.5
	1/4	KQ2ZD06-02CS	14	10.4	13.4	18.4	20.7	43.4	38.7	13.3	13.4	10.4	10.8	8.6	4.5	30.2
	3/8	KQ2ZD06-03CS	17	10.4	13.4	18.4	22.1	44.8	39.7	13.3	13.4	10.4	10.8	8.6	4.5	42.1
ø8	1/8	KQ2ZD08-01CS	19	13.2	17.6	21.2	19	45.8	42.7	14.2	15.9	13.2	20.5	14.2	6	48.7
	1/4	KQ2ZD08-02CS	19	13.2	17.6	21.2	22.4	49.2	44.5	14.2	15.9	13.2	20.5	14.2	6	48
	3/8	KQ2ZD08-03CS	19	13.2	17.6	21.2	23	49.8	44.7	14.2	15.9	13.2	20.5	14.2	6	55.9
ø10	1/2	KQ2ZD10-04CS	22	13.2	17.6	21.2	27.2	54	47.6	14.2	15.9	13.2	20.5	14.2	6	82.1
	3/4	KQ2ZD10-02CS	21	15.9	20.6	23.6	24.3	56.2	51.5	15.6	19.2	15.9	31.8	21.6	7.5	69
	1/2	KQ2ZD10-03CS	22	15.9	20.6	23.6	24.7	56.6	51.5	15.6	19.2	15.9	31.8	21.6	7.5	72
ø12	3/8	KQ2ZD10-04CS	22	15.9	20.6	23.6	28.7	60	53.6	15.6	19.2	15.9	31.8	21.6	7.5	92.9
	1/4	KQ2ZD12-02CS	26	18.5	25.2	26.8	26.5	62.4	57.7	17	21.6	18.5	44.6	35.3	9	115.6
	3/8	KQ2ZD12-03CS	26	18.5	25.2	26.8	26.9	62.8	57.7	17	21.6	18.5	44.6	35.3	9	110.7
	1/2	KQ2ZD12-04CS	26	18.5	25.2	26.8	30.1	66	59.6	17	21.6	18.5	44.6	35.3	9	124.7

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) øD1 is maximum diameter.



Triple Branch Universal Male Elbow: KQ2ZT (Sealant)

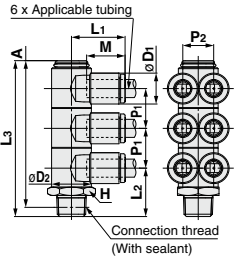


Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	P1	P2	Effective area (mm ²) Nylon/Jethane	Min. port size	Weight (g)	
ø4	1/8	KQ2ZT04-01CS	14	8.2	13.4	18.5	16.3	52.5	49.4	13.3	13.4	8.2	4.7	4.7	3	27.7
	1/4	KQ2ZT04-02CS	14	8.2	13.4	18.5	20.7	56.9	52.2	13.3	13.4	8.2	4.7	4.7	3	35.3
	3/8	KQ2ZT04-03CS	17	8.2	13.4	18.5	22.1	58.3	53.2	13.3	13.4	8.2	4.7	4.7	3	47.2
ø6	1/8	KQ2ZT06-01CS	14	10.4	13.4	18.4	16.3	52.5	49.4	13.3	13.4	10.4	10.8	8.6	4.5	29.5
	1/4	KQ2ZT06-02CS	14	10.4	13.4	18.4	20.7	56.9	52.2	13.3	13.4	10.4	10.8	8.6	4.5	37.2
	3/8	KQ2ZT06-03CS	17	10.4	13.4	18.4	22.1	58.3	53.2	13.3	13.4	10.4	10.8	8.6	4.5	49.1
ø8	1/8	KQ2ZT08-01CS	19	13.2	17.6	21.2	19	61.8	58.7	14.2	15.9	13.2	20.5	14.2	6	65.1
	1/4	KQ2ZT08-02CS	19	13.2	17.6	21.2	22.4	65.2	60.5	14.2	15.9	13.2	20.5	14.2	6	62.3
	3/8	KQ2ZT08-03CS	19	13.2	17.6	21.2	23	65.8	60.7	14.2	15.9	13.2	20.5	14.2	6	70.4
ø10	1/2	KQ2ZT10-04CS	22	13.2	17.6	21.2	27.2	70	63.6	14.2	15.9	13.2	20.5	14.2	6	97
	3/4	KQ2ZT10-02CS	21	15.9	20.6	23.6	24.3	75.5	70.8	15.6	19.2	15.9	31.8	21.6	7.5	90.9
	1/2	KQ2ZT10-04CS	22	15.9	20.6	23.6	24.7	75.9	70.8	15.6	19.2	15.9	31.8	21.6	7.5	112.7
ø12	1/4	KQ2ZT12-03CS	26	18.5	25.2	26.8	26.5	84.1	79.4	17	21.6	18.5	44.6	35.3	9	152.2
	3/8	KQ2ZT12-03CS	26	18.5	25.2	26.8	26.9	84.5	79.4	17	21.6	18.5	44.6	35.3	9	142.6
	1/2	KQ2ZT12-04CS	26	18.5	25.2	26.8	30.1	87.7	81.3	17	21.6	18.5	44.6	35.3	9	155.1

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) øD1 is maximum diameter.



Fittings

KQ2

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Series KQ2

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

Dimensions

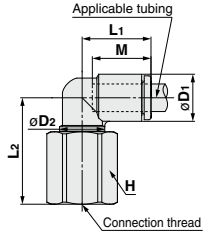
Female Elbow: KQ2LF



	Applicable tubing O.D. (mm)	Connection thread M, Rc	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø4	M5 x 0.8		KQ2LF04-M5□	8	8.2	7	15.4	15.3	13.3	3.5	3.5	2.5	4.7
	M6 x 1.0		KQ2LF04-M6□	8	8.2	7	15.4	16.1	13.3	3.5	3.5	2.5	4.6
	1/8		KQ2LF04-01□	14	8.2	10	14.8	22.4	13.3	4.2	4.2	3	17.6
	1/4		KQ2LF04-02□	17	8.2	10	14.8	26.9	13.3	4.2	4.2	3	29.6
ø6	M5 x 0.8		KQ2LF06-M5□	8	10.4	7	14.5	17	13.3	3.5	3.5	2.5	4.8
	M6 x 1.0		KQ2LF06-M6□	8	10.4	7	14.5	17.8	13.3	3.5	3.5	2.5	4.7
	1/8		KQ2LF06-01□	14	10.4	10	15.5	23.5	13.3	11.4	9	4.5	18
	1/4		KQ2LF06-02□	17	10.4	10	15.5	28	13.3	11.4	9	4.5	30.1
ø8	3/8		KQ2LF06-03□	19	10.4	10	15.5	28.5	13.3	11.4	9	4.5	34
	1/8		KQ2LF08-01□	14	13.2	10	16.4	24.9	14.2	11.4	11.4	4.5	18.8
	1/4		KQ2LF08-02□	17	13.2	12	17.2	28.8	14.2	21.6	14.9	6	28.7
	3/8		KQ2LF08-03□	19	13.2	12	17.2	29.3	14.2	21.6	14.9	6	32.3
ø10	1/4		KQ2LF10-02□	17	15.9	17	19.3	27.4	15.6	21.6	14.9	7.5	26.4
	3/8		KQ2LF10-03□	19	15.9	17	19.3	33.5	15.6	35.2	25	7.5	31
	1/2		KQ2LF10-04□	24	15.9	17	19.3	36.5	15.6	35.2	25	7.5	57.6
	1/4		KQ2LF12-02□	17	18.5	17	21.5	28.7	17	50.2	39.7	9	28.2
ø12	3/8		KQ2LF12-03□	19	18.5	17	21.5	34.8	17	50.2	39.7	9	32.9
	1/2		KQ2LF12-04□	24	18.5	17	21.5	37.8	17	50.2	39.7	9	59.5

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.

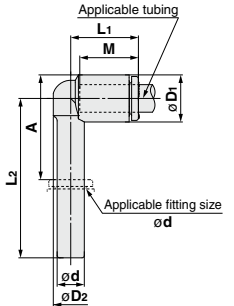


Extended Plug-in Elbow: KQ2W



	Applicable tubing O.D. (mm)	Applicable fitting size ød	Model	Note) øD1	øD2	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø3.2	ø3.2		KQ2W23-99A	7.1	6.4	14.4	30.5	20.8	13.3	3	2.5	2.5	1
ø4	ø4		KQ2W04-99A	8.2	7.2	14.5	31.8	22.6	13.3	4.2	4.2	3	1.3
ø6	ø6		KQ2W06-99A	10.4	8	15.3	35.2	27.1	13.3	9	9	4	2
ø8	ø8		KQ2W08-99A	13.2	10	17.2	41.9	34.3	14.2	21.6	14.9	6	3.5
ø10	ø10		KQ2W10-99A	15.9	12	19.3	46.6	38.9	15.6	35.2	25	7.5	5.5
ø12	ø12		KQ2W12-99A	18.5	14	21.5	52	44.2	17	50.2	39.7	9	8.4

Note) øD1 is maximum diameter.



Metric Size One-touch Fittings *Series KQ2*

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

Dimensions

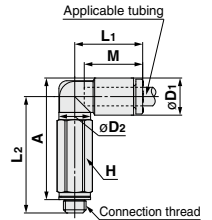
Extended Male Elbow: KQ2W (Gasket seal)



Applicable tubing O.D. (mm)	Connection thread M	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø2	M3 x 0.5	KQ2W02-M3G	5.5	5.8	5.5	12.6	18.8	19.1	11.9	—	0.8	1.2	2.6
	M5 x 0.8	KQ2W02-M5□	7	5.8	5.5	12.6	19.3	19.2	11.9	—	0.8	1.2	4.6
ø3.2	M3 x 0.5	KQ2W23-M3G	7	7.1	7	15.3	22.5	23.4	13.3	0.8	0.8	1.2	4.8
	M5 x 0.8	KQ2W23-M5□	7	7.1	7	15.3	25.2	25.7	13.3	2.8	2.4	2.5	5.8
ø4	M3 x 0.5	KQ2W04-M3G	7	8.2	7	15.4	23	24.5	13.3	0.8	0.8	1.2	4.9
	M5 x 0.8	KQ2W04-M5□	7	8.2	7	15.4	25.7	26.8	13.3	3	3	2.5	5.8
ø6	M5 x 0.8	KQ2W06-M5□	7	10.4	7	14.5	27.4	29.6	13.3	3	3	2.5	5.9

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Extended Male Elbow: KQ2W (Sealant)

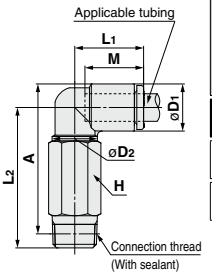


Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A*	M	Effective area (mm²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø3.2	1/8	KQ2W23-01□S	10	7.1	10	14.5	30.3	30.8	13.3	2.8	2.4	2.5	10.8
	1/4	KQ2W23-02□S	14	7.1	10	14.5	32.8	31.7	13.3	2.8	2.4	2.5	27.3
ø4	1/8	KQ2W04-01□S	10	8.2	10	14.8	29.9	30.9	13.3	4	4	3	11
	1/4	KQ2W04-02□S	14	8.2	10	14.8	33.3	32.7	13.3	4	4	3	27.5
ø6	1/8	KQ2W06-01□S	10	10.4	10	15.5	31	33.1	13.3	10.9	8.6	4.5	11.4
	1/4	KQ2W06-02□S	14	10.4	10	15.5	34.4	34.9	13.3	10.9	8.6	4.5	28
	3/8	KQ2W06-03□S	17	10.4	10	15.5	35.7	35.8	13.3	10.9	8.6	4.5	47.4
ø8	1/8	KQ2W08-01□S	10	13.2	10	16.4	32.4	35.9	14.2	10.9	10.9	4.5	12.2
	1/4	KQ2W08-02□S	14	13.2	12	17.2	39.1	41	14.2	20.5	14.2	6	40
	3/8	KQ2W08-03□S	17	13.2	12	17.2	39.2	40.7	14.2	20.5	14.2	6	47
ø10	1/4	KQ2W10-02□S	17	15.9	17	19.3	52.9	56.2	15.6	33.5	23.8	7.5	59
	3/8	KQ2W10-03□S	17	15.9	17	19.3	48.5	51.4	15.6	33.5	23.8	7.5	51.3
	1/2	KQ2W10-04□S	22	15.9	17	19.3	52.5	54.1	15.6	33.5	23.8	7.5	92
ø12	1/4	KQ2W12-02□S	17	18.5	17	21.5	54.2	58.8	17	47.7	37.7	9	60.7
	3/8	KQ2W12-03□S	17	18.5	17	21.5	49.8	54	17	47.7	37.7	9	53.2
	1/2	KQ2W12-04□S	22	18.5	17	21.5	53.8	56.7	17	47.7	37.7	9	93.9
ø16	Now 1/4	KQ2W16-02□S	17	23.8	21	25.1	59	66.2	20.6	47.7	47.7	9	67.4
	3/8	KQ2W16-03□S	22	23.8	21	27.1	59.7	66.5	20.6	71	58.9	11	105.5
	1/2	KQ2W16-04□S	22	23.8	21	27.1	58.4	63.9	20.6	100	58.9	13	101.7

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) øD1 is maximum diameter.



Fittings

KQ2

KDM6

KDM

INDEX

Series KQ2

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

Dimensions

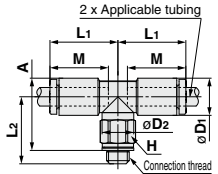
Male Branch Tee: KQ2T (Gasket seal)



Applicable tubing O.D (mm)	Connection thread M	Model	H (Width across flats)	(Note) øD1	øD2	L1	L2	A	M	Effective area (mm ²) NylonUrethane	Min. port size	Weight (g)	
ø2	M3 x 0.5	KQ2T02-M3G	5.5	5.8	5.5	12.6	12.5	12.8	11.9	—	0.9	1.2	1.9
	M5 x 0.8	KQ2T02-M5□	7	5.8	5.5	12.6	13	12.9	11.9	—	0.9	1.4	3
ø3.2	M3 x 0.5	KQ2T23-M3G	7	7.1	7	15.3	13.8	14.7	13.3	0.9	0.9	1.2	3.1
	M5 x 0.8	KQ2T23-M5□	7	7.1	7	15.3	14.3	14.8	13.3	3.2	2.7	2.5	3.5
ø4	M3 x 0.5	KQ2T04-M3G	7	8.2	7	15.4	14.3	15.8	13.3	0.9	0.9	1.2	3.4
	M5 x 0.8	KQ2T04-M5□	7	8.2	7	15.4	14.8	15.9	13.3	4.5	4.5	2.5	3.9
ø6	M6 x 1.0	KQ2T04-M6□	8	8.2	7	15.4	15.8	15.9	13.3	4.5	4.5	2.5	4.9
	M5 x 0.8	KQ2T06-M5□	7	10.4	7	14.5	16.5	18.7	13.3	4.5	4.5	2.5	4.4
	M6 x 1.0	KQ2T06-M6□	8	10.4	7	14.5	17.5	18.7	13.3	4.5	4.5	2.5	5.4

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Male Branch Tee: KQ2T (Sealant)

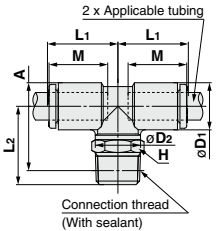


Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note)		L ₁	L ₂	A *	M	Effective area (mm ²)	Min. port size	Weight (g)	
				øD1	øD2					Nylon			Urethane
ø3.2	1/8	KQ2T23-01□S	10	7.1	10	14.5	16.6	17.1	13.3	3.4	2.9	2.5	5.2
	1/4	KQ2T23-02□S	14	7.1	10	14.5	21.1	20	13.3	3.4	2.9	2.5	14.7
ø4	1/8	KQ2T04-01□S	10	8.2	10	14.8	16.2	17.2	13.3	6	4.1	3	5.5
	1/4	KQ2T04-02□S	14	8.2	10	14.8	21.7	21.1	13.3	6	4.1	3	15
ø6	1/8	KQ2T06-01□S	10	10.4	10	15.5	17.3	19.4	13.3	13.9	11	4.5	6.1
	1/4	KQ2T06-02□S	14	10.4	10	15.5	22.8	23.3	13.3	13.9	11	4.5	15.6
ø8	3/8	KQ2T06-03□S	17	10.4	10	15.5	24.1	24.2	13.3	13.9	11	4.5	27.4
	1/8	KQ2T08-01□S	10	13.2	10	16.4	18.7	22.2	14.2	14	14	4.5	7.9
ø10	1/4	KQ2T08-02□S	14	13.2	12	17.2	25.4	27.3	14.2	26.3	18.2	6	19.4
	3/8	KQ2T08-03□S	17	13.2	12	17.2	25.5	27	14.2	26.3	18.2	6	26.5
ø12	1/8	KQ2T10-01□S	12	15.9	12	18.6	23.5	28.4	15.6	21.6	14.9	6	13.9
	1/4	KQ2T10-02□S	17	15.9	17	19.3	28.6	31.9	15.6	35.2	25	7.5	24.3
ø16	3/8	KQ2T10-03□S	17	15.9	17	19.3	29.5	32.4	15.6	35.2	25	7.5	24.8
	1/2	KQ2T10-04□S	22	15.9	17	19.3	33.5	35.1	15.6	35.2	25	7.5	47.3
ø12	1/4	KQ2T12-02□S	17	18.5	17	21.5	29.9	34.5	17	57.2	45.2	9	27.3
	3/8	KQ2T12-03□S	17	18.5	17	21.5	30.8	35	17	57.2	45.2	9	28
ø16	1/2	KQ2T12-04□S	22	18.5	17	21.5	34.8	37.7	17	57.2	45.2	9	50.4
	3/8	KQ2T16-02□S	17	23.8	17	25.1	32.6	39.8	20.6	57.2	57.2	9	35.5
ø16	1/2	KQ2T16-03□S	22	23.8	21	27.1	35.4	42.2	20.6	71	58.9	11	47.7
	1/2	KQ2T16-04□S	22	23.8	21	27.1	34.1	39.6	20.6	100	58.9	13	51.4

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) øD1 is maximum diameter.



Metric Size One-touch Fittings *Series KQ2*

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

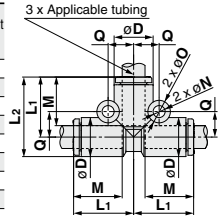
Dimensions

Union Tee: KQ2T



Applicable tubing O.D. (mm)	Model	Note) ϕD	L1	L2	M	Q	ϕO	ϕN	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
$\phi 2$	KQ2T02-00A	5.8	12.9	15.8	11.9	4.5	6	3.2	—	0.9	1.4
$\phi 3.2$	KQ2T23-00A	7.1	14.9	18.5	13.3	5.4	6	3.2	3.4	2.9	2.3
$\phi 4$	KQ2T04-00A	8.2	15.3	19.4	13.3	5.7	6	3.2	6.4	4.4	3
$\phi 6$	KQ2T06-00A	10.4	16.3	21.5	13.3	6.8	6	3.2	13.4	10.6	4.5
$\phi 8$	KQ2T08-00A	13.2	18.2	24.8	14.2	8.4	8	4.2	25.6	17.7	6
$\phi 10$	KQ2T10-00A	15.9	20.6	28.6	15.6	9.6	8	4.2	40	28.4	7.5
$\phi 12$	KQ2T12-00A	18.5	23	32.3	17	10.7	8	4.2	57.4	45.4	9
$\phi 16$	KQ2T16-00A	23.8	28.6	40.5	20.6	13.4	8	4.2	100	58.9	13

Note) ϕD is maximum diameter.

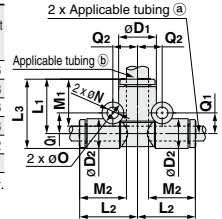


Different Diameter Tee: KQ2T



Applicable tubing O.D. (mm)	Model	Note) ϕD_1	ϕD_2	L1	L2	M1	M2	Q1	Q2	ϕO	ϕN	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
$\phi 3.2$ $\phi 4$	KQ2T23-04A	8.2	7.1	14.9	15.3	18.5	13.3	13.3	5.4	5.8	6	3.2	3.8	3.5
$\phi 4$ $\phi 6$	KQ2T04-06A	10.4	8.2	15.3	16.3	19.4	13.3	13.3	5.7	6.8	6	3.2	7.1	6.6
$\phi 6$ $\phi 8$	KQ2T06-08A	13.2	10.4	17.2	17.3	22.4	14.2	13.3	7.3	8.4	8	4.2	16.4	16.4
$\phi 8$ $\phi 10$	KQ2T08-10A	15.9	13.2	19.6	19.2	26.2	15.6	14.2	8.4	9.6	8	4.2	36	27.2
$\phi 10$ $\phi 12$	KQ2T10-12A	18.5	15.9	22	21.6	30	17	15.6	9.6	10.7	8	4.2	56	44.5
$\phi 12$ $\phi 16$	KQ2T12-16A	23.8	18.5	26.6	25	35.9	20.6	17	10.7	13.4	8	4.2	108.5	74

Note) ϕD_1 is maximum diameter.

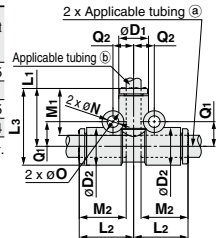


Different Diameter Tee: KQ2T



Applicable tubing O.D. (mm)	Model	Note) ϕD_1	ϕD_2	L1	L2	M1	M2	Q1	Q2	ϕO	ϕN	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
$\phi 6$ $\phi 4$	KQ2T06-04A	8.2	10.4	16.3	15.3	21.5	13.3	13.3	6.8	5.7	6	3.2	6.4	4.4
$\phi 8$ $\phi 6$	KQ2T08-06A	10.4	13.2	17.3	17.2	23.9	13.3	14.2	8.4	7.3	8	4.2	13.4	10.6
$\phi 10$ $\phi 8$	KQ2T10-08A	13.2	15.9	19.2	19.6	27.2	14.2	15.6	9.6	8.4	8	4.2	25.6	17.7
$\phi 12$ $\phi 10$	KQ2T12-10A	15.9	18.5	21.6	22	30.9	15.6	17	10.7	9.6	8	4.2	40	28.4

Note) ϕD_1 is maximum diameter.



Fittings

KQ2

KDM6

KDM

Series KQ2

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

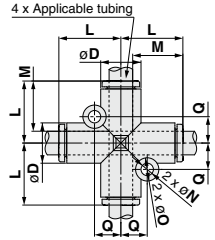
Dimensions

Cross: KQ2TW



Applicable tubing O.D. (mm)	Model	Note) ϕD	L	Q	M	ϕO	ϕN	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
$\phi 4$	KQ2TW04-00A	8.2	15.3	5.7	13.3	6	3.2	6.4	4.4	3	3.5
$\phi 6$	KQ2TW06-00A	10.4	16.3	6.8	13.3	6	3.2	13.4	10.6	4.5	4.9
$\phi 8$	KQ2TW08-00A	13.2	18.2	8.4	14.2	8	4.2	25.6	17.7	6	8.5
$\phi 10$	KQ2TW10-00A	15.9	20.6	9.6	15.6	8	4.2	40	28.4	7.5	12.7
$\phi 12$	KQ2TW12-00A	18.5	23	10.7	17	8	4.2	57.4	45.4	9	18.4

Note) ϕD is maximum diameter.

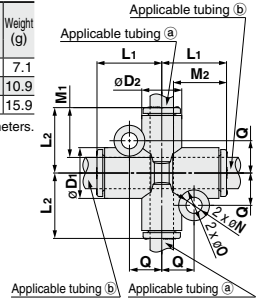


Different Diameter Cross: KQ2TX



Applicable tubing O.D. (mm)		Model	Note) ϕD_1	Note) ϕD_2	L ₁	L ₂	Q	M ₁	M ₂	ϕO	ϕN	Effective area (mm ²)		Min. port size	Weight (g)
(a)	(b)											Nylon	Urethane		
$\phi 6$	$\phi 8$	KQ2TX06-08A	10.4	13.2	17.2	17.3	8.4	13.3	14.2	8	4.2	13.4	10.6	4.5	7.1
$\phi 8$	$\phi 10$	KQ2TX08-10A	13.2	15.9	19.6	19.2	9.6	14.2	15.6	8	4.2	25.6	17.7	6	10.9
$\phi 10$	$\phi 12$	KQ2TX10-12A	15.9	18.5	22	21.6	10.7	15.6	17	8	4.2	40	28.4	7.5	15.9

Note) ϕD_1 , ϕD_2 are maximum diameters.

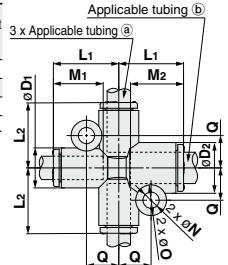


Different Diameter Cross: KQ2TY



Applicable tubing O.D. (mm)		Model	Note) ϕD_1	Note) ϕD_2	L ₁	L ₂	Q	M ₁	M ₂	ϕO	ϕN	Effective area (mm ²)		Min. port size	Weight (g)
(a)	(b)											Nylon	Urethane		
$\phi 6$	$\phi 8$	KQ2TY06-08A	10.4	13.2	17.3	17.2	8.4	13.3	14.2	8	4.2	13.4	10.6	4.5	6.5
$\phi 8$	$\phi 10$	KQ2TY08-10A	13.2	15.9	19.2	19.6	9.6	14.2	15.6	8	4.2	25.6	17.7	6	10.2
$\phi 10$	$\phi 12$	KQ2TY10-12A	15.9	18.5	21.6	22	10.7	15.6	17	8	4.2	40	28.4	7.5	14.9

Note) ϕD_1 , ϕD_2 are maximum diameters.



Metric Size One-touch Fittings *Series KQ2*

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

Dimensions

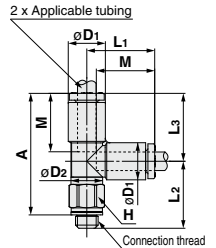
Male Run Tee: KQ2Y (Gasket seal)



Applicable tubing O.D. (mm)	Connection thread M	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A	M	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
ø2	M3 x 0.5	KQ2Y02-M3G	5.5	5.8	5.5	12.9	12.5	12.9	22.8	11.9	—	0.9	1.2
	M5 x 0.8	KQ2Y02-M5□	7	5.8	5.5	12.9	13	12.9	22.9	11.9	—	0.9	1.4
ø3.2	M3 x 0.5	KQ2Y23-M3G	7	7.1	7	15.3	13.8	15.3	26.5	13.3	0.9	0.9	1.2
	M5 x 0.8	KQ2Y23-M5□	7	7.1	7	15.3	14.3	15.3	26.6	13.3	3.2	2.7	2.5
ø4	M3 x 0.5	KQ2Y04-M3G	7	8.2	7	15.4	14.3	15.4	27.1	13.3	0.9	0.9	1.2
	M5 x 0.8	KQ2Y04-M5□	7	8.2	7	15.4	14.8	15.4	27.2	13.3	4.5	4.5	2.5
ø6	M6 x 1.0	KQ2Y04-M6□	8	8.2	7	15.4	15.8	15.4	27.2	13.3	4.5	4.5	2.5
	M5 x 0.8	KQ2Y06-M5□	7	10.4	7	16.3	16.5	16.3	29.8	13.3	4.5	4.5	2.5
	M6 x 1.0	KQ2Y06-M6□	8	10.4	7	16.3	17.5	16.3	29.8	13.3	4.5	4.5	2.5

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Male Run Tee: KQ2Y (Sealant)

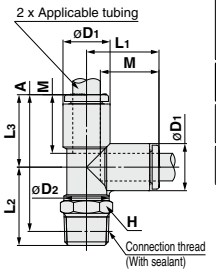


Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
ø3.2	1/8	KQ2Y23-01□S	10	7.1	10	14.9	16.6	14.9	28.5	13.3	3.4	2.9	2.5
	1/4	KQ2Y23-02□S	14	7.1	10	14.9	21.1	14.9	31.4	13.3	3.4	2.9	2.5
ø4	1/8	KQ2Y04-01□S	10	8.2	10	15.3	16.2	15.3	28.4	13.3	6.4	4.4	3
	1/4	KQ2Y04-02□S	14	8.2	10	15.3	21.7	15.3	32.3	13.3	6.4	4.4	3
ø6	1/8	KQ2Y06-01□S	10	10.4	10	16.3	17.3	16.3	30.5	13.3	13.4	10.6	4.5
	1/4	KQ2Y06-02□S	14	10.4	10	16.3	22.8	16.3	34.4	13.3	13.4	10.6	4.5
ø8	3/8	KQ2Y06-03□S	17	10.4	10	16.3	24.1	16.3	35.3	13.3	13.4	10.6	4.5
	1/8	KQ2Y08-01□S	10	13.2	10	18.2	18.7	18.2	33.8	14.2	13.4	13.4	4.5
ø10	1/4	KQ2Y08-02□S	14	13.2	12	18.2	25.4	18.2	38.9	14.2	25.6	17.7	6
	3/8	KQ2Y08-03□S	17	13.2	12	18.2	25.5	18.2	38.6	14.2	25.6	17.7	6
ø12	1/8	KQ2Y10-01□S	12	15.9	12	20.6	23.5	20.6	41.1	15.6	40	28.4	6
	1/4	KQ2Y10-02□S	17	15.9	17	20.6	28.6	20.6	44.6	15.6	40	28.4	7.5
ø16	3/8	KQ2Y10-03□S	17	15.9	17	20.6	29.5	20.6	45.1	15.6	40	28.4	7.5
	1/2	KQ2Y10-04□S	22	15.9	17	20.6	33.5	20.6	47.8	15.6	40	28.4	7.5
ø12	1/4	KQ2Y12-02□S	17	18.5	17	23	29.9	23	48.3	17	57.4	45.4	9
	3/8	KQ2Y12-03□S	17	18.5	17	23	30.8	23	48.8	17	57.4	45.4	9
ø16	1/2	KQ2Y12-04□S	22	18.5	17	23	34.8	23	51.5	17	57.4	45.4	9
	3/8	KQ2Y16-02□S	17	23.8	17	28.6	32.6	28.6	56.5	20.6	57.4	45.4	9
ø16	3/8	KQ2Y16-03□S	22	23.8	21	28.6	35.4	28.6	58.9	20.6	81	60	11
	1/2	KQ2Y16-04□S	22	23.8	21	28.6	34.1	28.6	56.3	20.6	113	60	13

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) øD1 is maximum diameter.



Fittings

KQ2

KDM6

KDM

INDEX

Series KQ2

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

Dimensions

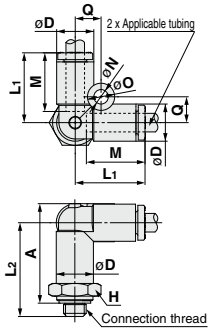
Male Delta Union: KQ2D (Gasket seal)



Applicable tubing O.D. (mm)	Connection thread M	Model	H (Width across flats)	Note) øD	L1	L2	A	M	Q	øO	øN	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)	
ø4	M5 x 0.8	KQ2D04-M5□	10	8.2	15.8	20.7	21.8	13.3	5.7	6	3.2	2.2	2.2	1.8	6.6
	M6 x 1.0	KQ2D04-M6□	10	8.2	15.8	21.7	21.8	13.3	5.7	6	3.2	4.3	4.3	3	6.4
ø6	M5 x 0.8	KQ2D06-M5□	12	10.4	16.8	21.7	23.9	13.3	6.7	6	3.2	4.3	4.3	1.8	9.8
	M6 x 1.0	KQ2D06-M6□	12	10.4	16.8	22.7	23.9	13.3	6.7	6	3.2	4.3	4.3	3	9.7

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD is maximum diameter.



Male Delta Union: KQ2D (Sealant)

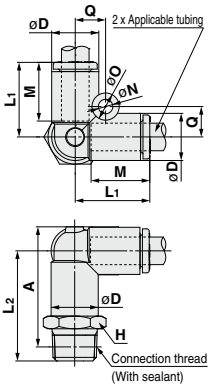


Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD	L1	L2	A*	M	Q	øO	øN	Effective area (mm ²) Nylon/Urethane	Min. port size	Weight (g)	
ø4	1/8	KQ2D04-01□S	10	8.2	15.8	23.3	24.3	13.3	5.7	6	3.2	6	6	3.6	9.2
	1/4	KQ2D04-02□S	14	8.2	15.8	27.7	27.1	13.3	5.7	6	3.2	6	6	3.6	19
ø6	1/8	KQ2D06-01□S	12	10.4	16.8	24.3	26.4	13.3	6.7	6	3.2	13.9	11	5.4	10.2
	1/4	KQ2D06-02□S	14	10.4	16.8	28.7	29.2	13.3	6.7	6	3.2	13.9	11	5.4	19.1
	3/8	KQ2D06-03□S	17	10.4	16.8	30.1	30.2	13.3	6.7	6	3.2	13.9	11	5.4	31
ø8	1/8	KQ2D08-01□S	14	13.2	18.8	26.3	29.8	14.2	8.4	8	4.2	26.3	18.2	6	15.3
	1/4	KQ2D08-02□S	14	13.2	18.8	30.7	32.6	14.2	8.4	8	4.2	26.3	18.2	7.3	20.4
	3/8	KQ2D08-03□S	17	13.2	18.8	32.1	33.6	14.2	8.4	8	4.2	26.3	18.2	7.3	32.1
ø10	1/4	KQ2D10-02□S	17	15.9	21.2	33.1	36.3	15.6	9.6	8	4.2	40.8	29	9	24.9
	3/8	KQ2D10-03□S	17	15.9	21.2	34.5	37.3	15.6	9.6	8	4.2	40.8	29	9.4	32.7
	1/2	KQ2D10-04□S	22	15.9	21.2	38.7	40.2	15.6	9.6	8	4.2	40.8	29	9.4	60.6
ø12	1/4	KQ2D12-02□S	19	18.5	23.6	35.5	40	17	10.7	8	4.2	57.2	45.2	9	35
	3/8	KQ2D12-03□S	19	18.5	23.6	36.9	41	17	10.7	8	4.2	57.2	45.2	11	38
	1/2	KQ2D12-04□S	22	18.5	23.6	41.1	43.9	17	10.7	8	4.2	57.2	45.2	11.6	60

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) øD is maximum diameter.



Metric Size One-touch Fittings *Series KQ2*

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

Dimensions

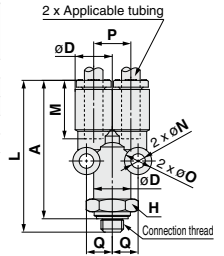
Branch "Y": KQ2U (Gasket seal)



Applicable tubing O.D. (mm)	Connection thread M	Model	H (Width across flats)	Note) øD	L	A	M	P	Q	øO	øN	Effective area (mm ²) Nylon/Urethane	Min. port size	Weight (g)	
ø3.2	M5 x 0.8	KQ2U23-M5□	10	7.1	33.8	30.8	13.3	7.1	5.2	6	3.2	2.2	2.2	1.8	5.8
	M5 x 0.8	KQ2U04-M5□	10	8.2	33.9	30.9	13.3	8.2	5.7	6	3.2	2.2	2.2	1.8	6.7
ø4	M5 x 1.0	KQ2U04-M6□	10	8.2	34.9	30.9	13.3	8.2	5.7	6	3.2	2.2	2.2	3	6.6
	M5 x 0.8	KQ2U06-M5□	12	10.4	35	32	13.3	10.4	6.8	6	3.2	2.2	2.2	1.8	10
ø6	M5 x 1.0	KQ2U06-M6□	12	10.4	36	32	13.3	10.4	6.8	6	3.2	2.2	2.2	3	9.8

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD is maximum diameter.



Branch "Y": KQ2U (Sealant)

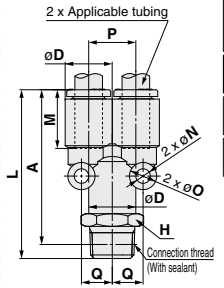


Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD	L	A*	M	P	Q	øO	øN	Effective area (mm ²) Nylon/Urethane	Min. port size	Weight (g)	
ø3.2	1/8	KQ2U23-01□S	10	7.1	36.4	33.3	13.3	7.1	5.2	6	3.2	3.4	2.9	2.7	8.6
	1/4	KQ2U23-02□S	14	7.1	40.8	36.1	13.3	7.1	5.2	6	3.2	3.4	2.9	2.7	19
ø4	1/8	KQ2U04-01□S	10	8.2	36.5	33.4	13.3	8.2	5.7	6	3.2	4.2	4.2	3.6	9.3
	1/4	KQ2U04-02□S	14	8.2	40.9	36.2	13.3	8.2	5.7	6	3.2	4.2	4.2	3.6	19.1
ø6	1/8	KQ2U06-01□S	12	10.4	37.6	34.5	13.3	10.4	6.8	6	3.2	13.4	10.6	5.4	10.3
	1/4	KQ2U06-02□S	14	10.4	42	37.3	13.3	10.4	6.8	6	3.2	13.4	10.6	5.4	19.2
ø8	3/8	KQ2U06-03□S	17	10.4	43.4	38.3	13.3	10.4	6.8	6	3.2	13.4	10.6	5.4	31.2
	1/2	KQ2U08-01□S	14	13.2	40.7	37.6	14.2	13.2	8.7	8	4.2	25.6	17.7	6	15.8
ø10	1/4	KQ2U08-02□S	14	13.2	45.1	40.4	14.2	13.2	8.7	8	4.2	25.6	17.7	7.3	20.9
	3/8	KQ2U08-03□S	17	13.2	46.5	41.4	14.2	13.2	8.7	8	4.2	25.6	17.7	7.3	32.7
ø12	1/4	KQ2U10-02□S	17	15.9	49	44.3	15.6	15.9	10.1	8	4.2	40	28.4	9	25.6
	3/8	KQ2U10-03□S	17	15.9	50.4	45.3	15.6	15.9	10.1	8	4.2	40	28.4	9.4	33.4
ø16	1/2	KQ2U10-04□S	22	15.9	54.6	48.2	15.6	15.9	10.1	8	4.2	40	28.4	9.4	61.3
	1/4	KQ2U12-02□S	19	18.5	53	48.3	17	18.5	11.4	8	4.2	57.4	45.4	9	36
ø16	3/8	KQ2U12-03□S	19	18.5	54.4	49.3	17	18.5	11.4	8	4.2	57.4	45.4	11	38.9
	1/2	KQ2U12-04□S	22	18.5	58.6	52.2	17	18.5	11.4	8	4.2	57.4	45.4	11.6	61
ø16	New 1/4	KQ2U16-02□S	24	23.8	62.4	57.7	20.6	23.8	14	8	4.2	57.4	45.4	9	67.6
	3/8	KQ2U16-03□S	24	23.8	63.8	58.7	20.6	23.8	14	8	4.2	81	60	11	71.5
	1/2	KQ2U16-04□S	24	23.8	68	61.6	20.6	23.8	14	8	4.2	113	60	13	82.6

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) øD is maximum diameter.

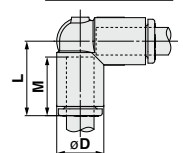
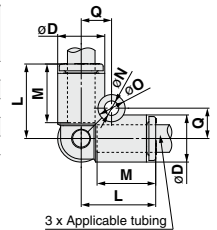


Delta Union: KQ2D



Applicable tubing O.D. (mm)	Model	Note) øD	L	M	Q	øO	øN	Effective area (mm²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø4	KQ2D04-00A	8.2	15.8	13.3	5.7	6	3.2	6	4.1	3	2.7
ø6	KQ2D06-00A	10.4	16.8	13.3	6.7	6	3.2	13.9	11	4.5	3.8
ø8	KQ2D08-00A	13.2	18.8	14.2	8.4	8	4.2	26.3	18.2	6	6.8
ø10	KQ2D10-00A	15.9	21.2	15.6	9.6	8	4.2	40.8	29	7.5	10.3
ø12	KQ2D12-00A	18.5	23.6	17	10.7	8	4.2	57.2	45.2	9	15.2

Note) øD is maximum diameter.



Fittings

KQ2

KDM6

KDM

INDEX

Series KQ2

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

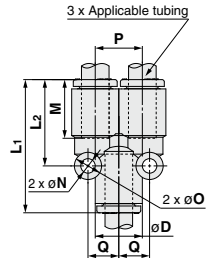
Dimensions

Union "Y": KQ2U



Applicable tubing O.D. (mm)	Model	Note) øD	L1	L2	P	M	Q	øO	øN	Effective area (mm ²) Nylon/Urethane	Min. port size	Weight (g)
ø2	KQ2U02-00A	5.8	25.8	16.1	5.8	11.9	4.5	6	3.2	—	0.9	1.6
ø3.2	KQ2U23-00A	7.1	28.9	18	7.1	13.3	5.2	6	3.2	3.4	2.9	2.4
ø4	KQ2U04-00A	8.2	29	18.2	8.2	13.3	5.7	6	3.2	4.2	4.2	3
ø6	KQ2U06-00A	10.4	30.1	19.4	10.4	13.3	6.8	6	3.2	13.4	10.6	4.5
ø8	KQ2U08-00A	13.2	33.2	22.3	13.2	14.2	8.7	8	4.2	25.6	17.7	6
ø10	KQ2U10-00A	15.9	37.1	25	15.9	15.6	10.1	8	4.2	40	28.4	7.5
ø12	KQ2U12-00A	18.5	41.1	27.8	18.5	17	11.4	8	4.2	57.4	45.4	9
ø16	KQ2U16-00A	23.8	51.5	35	23.8	20.6	14	8	4.2	113	60	13

Note) øD is maximum diameter.

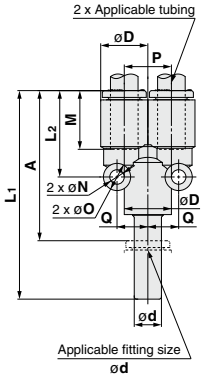


Plug-in "Y": KQ2U



Applicable tubing O.D. (mm)	Applicable fitting size ød	Model	Note) øD	L1	L2	P	A	M	Q	øO	øN	Effective area (mm ²) Nylon/Urethane	Min. port size	Weight (g)
ø3.2	ø3.2	KQ2U23-99A	7.1	45.1	18	7.1	31.8	13.3	5.2	6	3.2	3.4	2.9	2.5
ø4	ø4	KQ2U04-99A	8.2	44.8	18.2	8.2	31.5	13.3	5.7	6	3.2	4.2	4.2	3.1
ø6	ø6	KQ2U06-99A	10.4	46.3	19.4	10.4	33	13.3	6.8	6	3.2	13.4	10.6	4
ø8	ø8	KQ2U08-99A	13.2	52.1	22.3	13.2	37.9	14.2	8.7	8	4.2	25.6	17.7	6
ø10	ø10	KQ2U10-99A	15.9	57.3	25	15.9	41.7	15.6	10.1	8	4.2	40	28.4	7.5
ø12	ø12	KQ2U12-99A	18.5	63	27.8	18.5	46	17	11.4	8	4.2	57.4	45.4	9
ø16	ø16	KQ2U16-99A	23.8	75.9	35	23.8	55.3	20.6	14	8	4.2	113	60	13

Note) øD is maximum diameter.

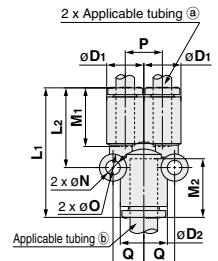


Different Diameter Union "Y": KQ2U



Applicable tubing O.D. (mm)	Model	Note) øD1	Note) øD2	L1	L2	P	M1	M2	Q	øO	øN	Effective area (mm ²) Nylon/Urethane	Min. port size	Weight (g)
ø2	ø3.2	KQ2U02-23A	5.8	7.1	28.2	16.6	5.8	11.9	13.3	5.2	6	3.2	—	0.9
ø2	ø4	KQ2U02-04A	5.8	8.2	27.6	15.7	5.8	11.9	13.3	5.7	6	3.2	—	0.9
ø3.2	ø4	KQ2U23-04A	7.1	8.2	28.9	18	7.1	13.3	13.3	5.7	6	3.2	3.2	2.7
ø4	ø6	KQ2U04-06A	8.2	10.4	29	18	8.2	13.3	13.3	6.8	6	3.2	4.2	4.2
ø6	ø8	KQ2U06-08A	10.4	13.2	31	19.3	10.4	13.3	14.2	8.2	6	3.2	13.4	10.6
ø8	ø10	KQ2U08-10A	13.2	15.9	34.6	22.3	13.2	14.2	15.6	10.1	8	4.2	25.6	17.7
ø10	ø12	KQ2U10-12A	15.9	18.5	38.5	25	15.9	15.6	17	11.4	8	4.2	40	28.4
ø12	ø16	KQ2U12-16A	18.5	23.8	47.9	31	18.5	17	20.6	14	8	4.2	57.4	45.4

Note) øD1, øD2 are maximum diameters.



Dimensions

Double Branch “Y”: KQ2UD (Sealant)

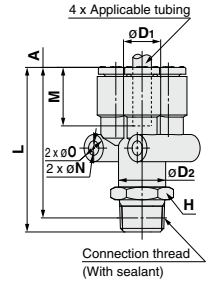
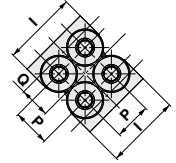


Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	(Note) ϕD_1	ϕD_2	L	I	A*	M	P	Q	ϕO	ϕN	Effective area (mm ²) Nylon Uetane	Min. port size	Weight (g)	
$\phi 4$	1/8	KQ2UD04-01US	12	8.2	10.4	36.7	16.6	33.6	13.3	8.2	6.8	6	3.2	4.2	4.2	5.4	11.7
	1/4	KQ2UD04-02US	14	8.2	10.4	41.1	16.6	36.4	13.3	8.2	6.8	6	3.2	4.2	4.2	5.4	20.6
$\phi 6$	1/8	KQ2UD06-01US	14	10.4	13.2	39.5	21	36.4	13.3	10.4	8.2	6	3.2	13.4	10.6	6	16.4
	1/4	KQ2UD06-02US	14	10.4	13.2	43.9	21	39.2	13.3	10.4	8.2	6	3.2	13.4	10.6	7.3	21.6

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread

Note) ϕD_1 is maximum diameter.

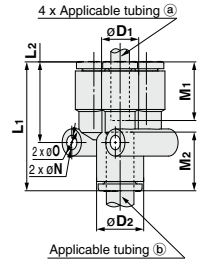
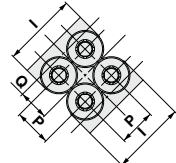


Different Diameter Double Union “Y”: KQ2UD



Applicable tubing O.D. (mm)		Model	Note) ϕD_1	Note) ϕD_2	L ₁	L ₂	P	I	M ₁	M ₂	Q	ϕO	ϕN	Effective area (mm ²) Nylon Uetane	Min. port size	Weight (g)	
(a)	(b)																
$\phi 4$	$\phi 6$	KQ2UD04-06A	8.2	10.4	29.2	18.2	8.2	16.6	13.3	13.3	6.8	6	3.2	4.2	4.2	3	5.4
$\phi 6$	$\phi 8$	KQ2UD06-08A	10.4	13.2	32	20.5	10.4	21	13.3	14.2	8.2	6	3.2	13.4	10.6	4.5	8.1

Note) ϕD_1 , ϕD_2 are maximum diameters.



Series KQ2

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

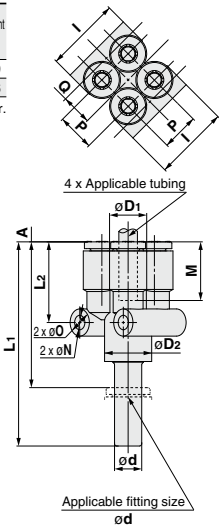
Dimensions

Double Plug-in “Y”: KQ2XD

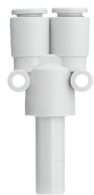


Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	Note)		ϕD_1	ϕD_2	L_1	L_2	A	I	P	M	Q	ϕO	ϕN	Effective area (mm ²)		Min. port size	Weight (g)
																Nylon	Urethane		
$\phi 4$	$\phi 6$	KQ2XD04-06A	8.2	10.4	45.4	18.2	32.1	16.6	8.2	13.3	6.8	6	3.2	4.2	4.2	3	5.9		
$\phi 6$	$\phi 8$	KQ2XD06-08A	10.4	13.2	50.9	20.5	36.7	21	10.4	13.3	8.2	6	3.2	13.4	10.6	4.5	8.6		

Note) ϕD_1 is maximum diameter.

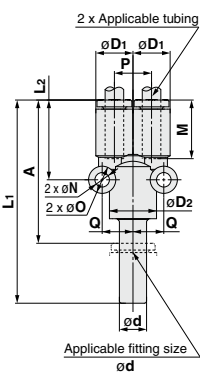


Different Diameter Plug-in “Y”: KQ2X



Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	Note)		ϕD_1	ϕD_2	L_1	L_2	A	P	M	Q	ϕO	ϕN	Effective area (mm ²)		Min. port size	Weight (g)
															Nylon	Urethane		
$\phi 3.2$	$\phi 4$	KQ2X23-04A	7.1	8.2	44.7	18	31.4	7.1	13.3	5.7	6	3.2	3.2	2.7	2.5	2.8		
$\phi 4$	$\phi 6$	KQ2X04-06A	8.2	10.4	45.2	18	31.9	8.2	13.3	6.8	6	3.2	4.2	4.2	3	3.8		
$\phi 6$	$\phi 8$	KQ2X06-08A	10.4	13.2	49.9	19.3	35.7	10.4	13.3	8.2	6	3.2	13.4	10.6	4.5	5.5		
$\phi 8$	$\phi 10$	KQ2X08-10A	13.2	15.9	54.8	22.3	39.2	13.2	14.2	10.1	8	4.2	25.6	17.7	6	9.8		
$\phi 10$	$\phi 12$	KQ2X10-12A	15.9	18.5	60.4	25	43.4	15.9	15.6	11.4	8	4.2	40	28.4	7.5	14.6		

Note) ϕD_1 , ϕD_2 are maximum diameters.



Metric Size One-touch Fittings *Series KQ2*

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

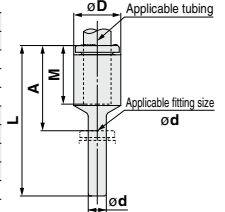
Dimensions

Plug-in Reducer: KQ2R

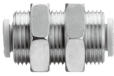


Applicable tubing O.D. (mm)	Applicable fitting size ϕ D	Model	Note) ϕ D	L	A	M	Effective area (mm ²)		Min. port size	Weight (g)
							Nylon	Urethane		
ϕ 2	ϕ 4	KQ2R02-04A	5.8	27.8	14.5	11.9	—	0.9	1.4	0.6
	ϕ 3.2	ϕ 4 KQ2R23-04A	7.1	28.6	15.3	13.3	3.4	2.9	2.5	0.8
	ϕ 6	KQ2R23-06A	7.1	29.1	15.8	13.3	3.4	2.9	2.5	1
ϕ 4	ϕ 6	KQ2R04-06A	8.2	28.6	15.3	13.3	5.6	4	3	1.1
	ϕ 8	KQ2R04-08A	8.2	29.6	15.4	13.3	5.6	4	3	1.3
	ϕ 10	KQ2R04-10A	10.4	31.7	16.1	13.3	5.6	4	3	2.2
ϕ 6	ϕ 4	KQ2R06-04A	10.4	33.6	20.3	13.3	4	4	2.5	1.4
	ϕ 8	KQ2R06-08A	10.4	31.6	17.4	13.3	13.1	10.4	4.5	1.7
	ϕ 10	KQ2R06-10A	10.4	33.9	18.3	13.3	13.1	10.4	4.5	2.1
ϕ 8	ϕ 12	KQ2R08-12A	12	35.7	18.7	13.3	13.1	10.4	4.5	3.2
	ϕ 10	KQ2R08-10A	13.2	35.1	19.5	14.2	26.1	18	6	2.9
	ϕ 12	KQ2R08-12A	13.2	36.5	19.5	14.2	26.1	18	6	3.4
ϕ 10	ϕ 12	KQ2R10-12A	15.9	39.2	22.2	15.6	41.5	32.8	7.5	4.5
	ϕ 16	KQ2R10-16A	16	44.7	24.1	15.6	41.5	32.8	7.5	6
	ϕ 12	KQ2R12-16A	18.5	45.7	25.1	17	58.3	46.1	9	7

Note) ϕ D is maximum diameter.

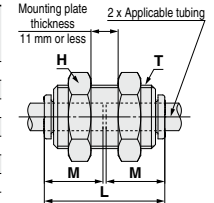


Bulkhead Union: KQ2E (Interchangeable with KQ)



Applicable tubing O.D. (mm)	Model	T (M)	H (Width across flats)	L	Mounting hole	M	Effective area (mm ²)		Min. port size	Weight (g)
							Nylon	Urethane		
ϕ 3.2	KQ2E23-00□	M12 x 1	14	27.3	13	13.3	3.4	2.9	2.5	24.1
ϕ 4	KQ2E04-00□	M12 x 1	14	27.3	13	13.3	5.6	4	3	22.9
ϕ 6	KQ2E06-00□	M14 x 1	17	27.3	15	13.3	13.1	10.4	4.5	28
ϕ 8	KQ2E08-00□	M16 x 1	19	29.1	17	14.2	26.1	18	6	34
ϕ 10	KQ2E10-00□	M20 x 1	24	31.9	21	15.6	41.5	29.5	7.5	64.4
ϕ 12	KQ2E12-00□	M22 x 1	27	34.7	23	17	58.3	46.1	9	63.8
ϕ 16	KQ2E16-00□	M28 x 1.5	32	41.9	29	20.6	113	67	13	120.1

□/A: Brass, N: Brass + Electroless nickel plated

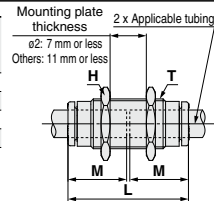


Bulkhead Union: KQ2E (Interchangeable with KJ)



Applicable tubing O.D. (mm)	Model	T (M)	H (Width across flats)	L	Mounting hole	M	Effective area (mm ²)		Min. port size	Weight (g)
							Nylon	Urethane		
ϕ 2	KQ2E02-00□J	M7 x 0.75	9	24.5	8	11.9	—	0.9	1.4	5.2
ϕ 3.2	KQ2E23-00□J	M8 x 0.75	10	27.3	9	13.3	3	2.5	2.5	6.9
ϕ 4	KQ2E04-00□J	M9 x 0.75	11	27.3	10	13.3	4	4	3	8.3
ϕ 6	KQ2E06-00□J	M11 x 0.75	14	27.3	12	13.3	10	10	4.5	11.2

□/A: Brass, N: Brass + Electroless nickel plated

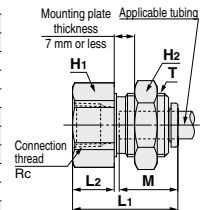


Bulkhead Connector: KQ2E



Applicable tubing O.D. (mm)	Connection thread Rc	Model	T (M)	H1 (Width across flats)	H2 (Width across flats)	L1	L2	Mounting hole	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ϕ 3.2	1/4	KQ2E23-02□	M12 x 1	17	14	28.7	14.3	13	13.3	3.4	2.9	2.5	31.2
	1/8	KQ2E04-01□	M12 x 1	14	14	24.4	10	13	13.3	5.6	4	3	21.2
ϕ 4	1/4	KQ2E04-02□	M12 x 1	17	14	29	14.6	13	13.3	5.6	4	3	30.9
	1/8	KQ2E06-01□	M14 x 1	17	17	23.6	9.2	15	13.3	13.1	10.4	4.5	28.9
	1/4	KQ2E06-02□	M14 x 1	17	17	28.4	14	15	13.3	13.1	10.4	4.5	32.4
ϕ 6	3/8	KQ2E06-03□	M14 x 1	19	17	30.7	16.3	15	13.3	13.1	10.4	4.5	35.9
	1/8	KQ2E08-01□	M16 x 1	17	19	24.1	6.7	17	14.2	26.1	18	6	30.5
	1/4	KQ2E08-02□	M16 x 1	17	19	28.4	11	17	14.2	26.1	18	6	33.1
ϕ 8	3/8	KQ2E08-03□	M16 x 1	19	19	31.7	14.3	17	14.2	26.1	18	6	37.4
	1/4	KQ2E10-02□	M20 x 1	22	24	29.3	9.9	21	15.6	41.5	29.5	7.5	63.8
	3/8	KQ2E10-03□	M20 x 1	22	24	31.4	12	21	15.6	41.5	29.5	7.5	71.6
ϕ 10	3/8	KQ2E12-03□	M22 x 1	24	27	32.3	11.9	23	17	58.3	46.1	9	69.3
	1/2	KQ2E12-04□	M22 x 1	24	27	37.7	17.3	23	17	58.3	46.1	9	72.7
ϕ 12	3/8	KQ2E16-03□	M28 x 1.5	30	32	34.4	11.5	29	20.6	96	67	13	122.2
	1/2	KQ2E16-04□	M28 x 1.5	30	32	38.8	15.9	29	20.6	113	67	13	132.1

□/A: Brass, N: Brass + Electroless nickel plated



Fittings

KQ2

KDM6

KDM

INDEX

Series KQ2

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

Dimensions

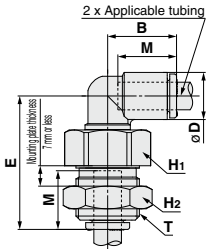
Bulkhead Male Elbow: KQ2LE



Applicable tubing O.D. (mm)	Model	T (M)	H ₁ (Width across flats)	H ₂ (Width across flats)	B	E	Note) øD	Mounting hole	M	Effective area (mm ²)	Min. port size	Weight (g)
ø4	KQ2LE04-00□	M12 x 1	14	14	14.8	28.5	8.2	13	13.3	4.2	4.2	21.2
ø6	KQ2LE06-00□	M14 x 1	17	17	15.5	29.6	10.4	15	13.3	11.4	9	29.4
ø8	KQ2LE08-00□	M16 x 1	17	19	17.2	32.3	13.2	17	14.2	21.6	14.9	30.4
ø10	KQ2LE10-00□	M20 x 1	22	24	19.3	37.9	15.9	21	15.6	35.2	25	7.5
ø12	KQ2LE12-00□	M22 x 1	24	27	21.5	40.8	18.5	23	17	50.2	39.7	9

□/A: Brass, N: Brass + Electroless nickel plated

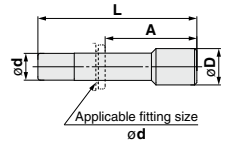
Note) øD is maximum diameter.



Plug: KQ2P



Applicable fitting size ød	Model	øD	L	A	Weight (g)
ø2	KJP-02	3	17	10.4	0.1
ø3.2	KQ2P-23	5	31.5	18.2	1
ø4	KQ2P-04	6	32	18.7	1
ø6	KQ2P-06	8	35	21.7	1
ø8	KQ2P-08	10	39	24.8	2
ø10	KQ2P-10	12	43	27.4	3.5
ø12	KQ2P-12	14	45.5	28.5	5
ø16	KQ2P-16	20.9	47	26.4	8

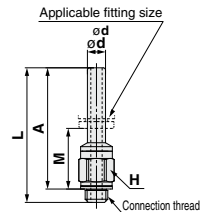


Adapter: KQ2N (Gasket seal)



Applicable fitting size ød	Connection thread M	Model	H (Width across flats)	L	A	M	Min. port size	Weight (g)
ø4	M5 x 0.8	KQ2N04-M5□	7	29.7	26.7	13.4	2.5	2.4
ø6	M5 x 0.8	KQ2N06-M5□	7	29.7	26.7	13.4	2.5	2.6

□/A: Brass, N: Brass + Electroless nickel plated



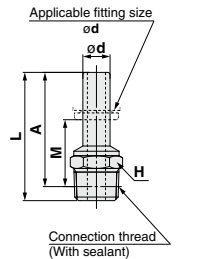
Adapter: KQ2N (Sealant)



Applicable fitting size ød	Connection thread R	Model	H (Width across flats)	L	A*	M	Min. port size	Weight (g)
ø4	1/8	KQ2N04-01□S	10	28.3	25.2	11.9	2.5	4
ø6	1/8	KQ2N06-01□S	10	28.3	25.2	11.9	4	4.1
	1/4	KQ2N06-02□S	14	32.8	28.1	14.8	4	13.6
ø8	1/4	KQ2N08-02□S	14	35.9	31.2	17	6	15.7
	3/8	KQ2N08-03□S	17	36	30.9	16.7	6	22.7
ø10	3/8	KQ2N10-03□S	17	40.6	35.5	19.9	7.5	19.1

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread



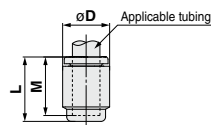
Dimensions

Tube Cap: KQ2C



Applicable tubing O.D. (mm)	Model	øD ^{Note)}	L	M	Weight (g)
ø4	KQ2C04-00A	8.2	14.5	13.3	0.8
ø6	KQ2C06-00A	10.4	14.6	13.3	1.1
ø8	KQ2C08-00A	13.2	15.7	14.2	2
ø10	KQ2C10-00A	15.9	17.3	15.6	2.9
ø12	KQ2C12-00A	18.5	18.9	17	4.5
ø16	KQ2C16-00A	23.8	23	20.6	8.4

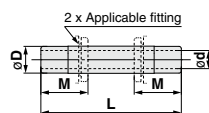
Note) øD is maximum diameter.



Nipple: KQ2N



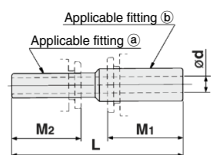
Applicable fitting øD	Model	L	M	ød	Min. port size	Weight (g)
ø4	KQ2N04-99	37	13.3	2.5	2.5	1
ø6	KQ2N06-99	39	13.3	4	4	2
ø8	KQ2N08-99	43	14.2	6	6	2
ø10	KQ2N10-99	49	15.6	7.5	7.5	4
ø12	KQ2N12-99	52	17	9	9	3.3
ø16	KQ2N16-99	57	17	13	13	4.8



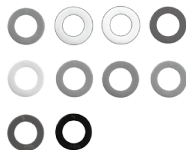
Reducer Nipple: KQ2N



Applicable fitting (a)	Applicable fitting (b)	Model	L	M ₁	M ₂	ød Min. port size	Weight (g)
ø4	ø6	KQ2N04-06	38	13.3	13.3	2.5	2
ø6	ø8	KQ2N06-08	42	14.2	13.3	4	2
ø8	ø10	KQ2N08-10	47	15.6	14.2	6	2
ø10	ø12	KQ2N10-12	51	17	15.6	7.5	3.1
ø12	ø16	KQ2N12-16	55	20.6	17	9	4.9

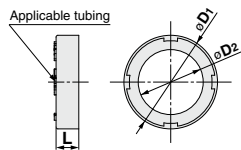


Color Cap: KQ2C



Applicable tubing O.D. (mm)	Model	øD ₁	øD ₂	L	Weight (g)	Note
ø2	KQ2C-02□A	6.1	3.2	2.6	0.1	Applicable for products with enlarged outside diameter of release button
ø3.2	KQ2C-23□A	7.3	4.3	2.6	0.1	
ø4	KQ2C-04□A	8.3	5.2	2.6	0.1	
ø6	KQ2C-06□A	10.3	7.2	2.6	0.1	
ø8	KQ2C-08□B	13.6	9.2	2.6	0.1	
ø10	KQ2C-10□B	16.2	11.2	2.7	0.1	
ø12	KQ2C-12□B	18.8	13.2	2.7	0.2	
ø16	KQ2C-16□B	24.2	17.2	3.2	0.3	

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



In order to improve the operability, the outside diameter of the release button has been enlarged for the New KQ2 series. Along with this change, the usable color caps differ before and after the change. Refer to page 439 for details.

Series KQ2

Made to Order/Clean Series/Spare Parts

Please contact SMC for detailed dimensions, specifications, and lead times.

1 Made to Order

Symbol	Specifications
X12	Lubricant: White vaseline Release button color: White
X35 (Note)	Body color: Black Release button color: Light gray

Note) The following models are not available as made-to-order: Hexagon socket head male connector/KQ2S, Bulkhead union/KQ2E, Bulkhead connector/KQ2E, Nipple/KQ2N, Reducer nipple/KQ2N, Male connector/KQ2H, Female connector/KQ2F, Color cap/KQ2C, Plug/KQ2P

2 Clean Series

Please consult with SMC separately for applicable models.

Symbol	Specifications
10-	Brass parts: With electroless nickel plated Lubricant: Fluorine grease Air blow in a clean room Double package Resin body/Release button color: White

Example) **10-KQ2H06-02NS** (With thread)

10-KQ2H06-00A (Without thread)

3 Spare Parts

Description	Part no.	Applicable thread
Gasket	M-3G2	M3
	M-5G2	M5
	M-6G	M6

Brass

Description	Part no.	Applicable model
Pipe nut	KQ02-P01AJ	KQ2E02-00AJ
	KQ23-P01AJ	KQ2E23-00AJ
	KQ04-P01AJ	KQ2E04-00AJ
	KQ06-P01AJ	KQ2E06-00AJ
	KQ04-P01A	KQ2E23-00A, KQ2E04-00A, KQ2E23-02A
	KQ06-P01A	KQ2E04-01A, KQ2E04-02A, KQ2LE04-00A
	KQ06-P01A	KQ2E06-00A, KQ2E06-01A, KQ2E06-02A
	KQ08-P01A	KQ2E06-03A, KQ2LE06-00A
	KQ08-P01A	KQ2E08-00A, KQ2E08-01A, KQ2E08-02A
	KQ10-P01A	KQ2E08-03A, KQ2LE08-00A
	KQ10-P01A	KQ2E10-00A, KQ2E10-02A, KQ2E10-03A
	KQ12-P01A	KQ2LE10-00A
	KQ12-P01A	KQ2E12-00A, KQ2E12-03A, KQ2E12-04A
	KQ16-P01A	KQ2LE12-00A
	KQ16-P01A	KQ2E16-00A
	KQ16-P01A	KQ2E16-03A, KQ2E16-04A

Brass + Electroless nickel plated

Description	Part no.	Applicable model
Pipe nut	KQ02-P01NJ	KQ2E02-00NJ
	KQ23-P01NJ	KQ2E23-00NJ
	KQ04-P01NJ	KQ2E04-00NJ
	KQ06-P01NJ	KQ2E06-00NJ
	KQ04-P01N	KQ2E23-00N, KQ2E04-00N, KQ2E23-02N
	KQ06-P01N	KQ2E04-01N, KQ2E04-02N, KQ2LE04-00N
	KQ06-P01N	KQ2E06-00N, KQ2E06-01N, KQ2E06-02N
	KQ08-P01N	KQ2E06-03N, KQ2LE06-00N
	KQ08-P01N	KQ2E08-00N, KQ2E08-01N, KQ2E08-02N
	KQ10-P01N	KQ2E08-03N, KQ2LE08-00N
	KQ10-P01N	KQ2E10-00N, KQ2E10-02N, KQ2E10-03N
	KQ12-P01N	KQ2LE10-00N
	KQ12-P01N	KQ2E12-00N, KQ2E12-03N, KQ2E12-04N
	KQ16-P01N	KQ2LE12-00N
	KQ16-P01N	KQ2E16-00N
	KQ16-P01N	KQ2E16-03N, KQ2E16-04N

Color Cap

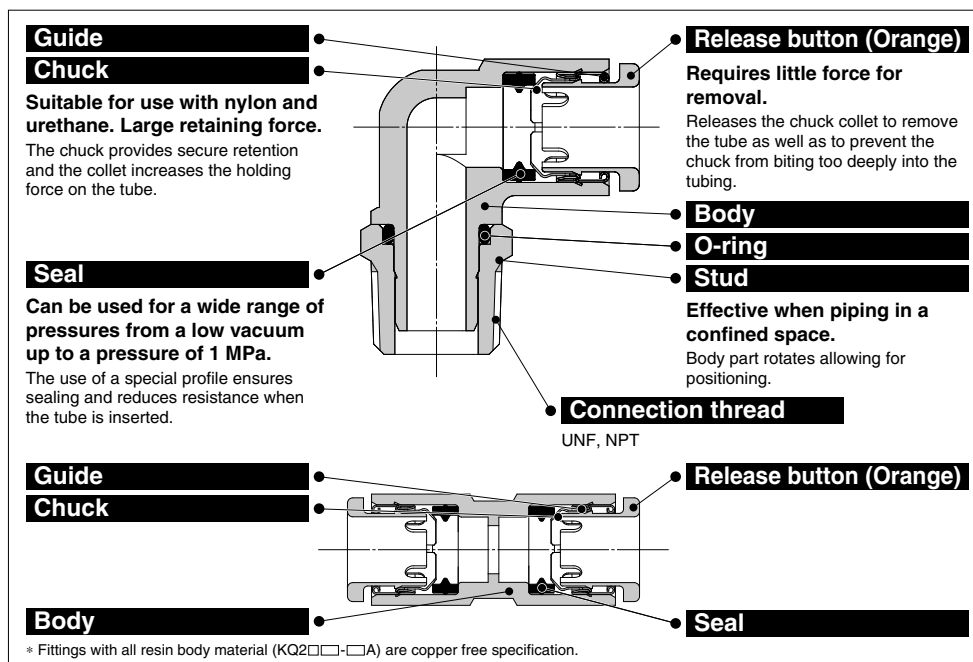
Applicable tubing O.D. mm	Model	φD1	φD2	L	Weight g	Note
φ8	KQ2C-08□A	12.8	9.2	2.6	0.1	Applicable for products before enlargement of outside diameter of release button
φ10	KQ2C-10□A	15.2	11.2	2.7	0.1	
φ12	KQ2C-12□A	17.6	13.2	2.7	0.1	
φ16	KQ2C-16□A	22.4	17.2	3.2	0.2	

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

Inch Size One-touch Fittings

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

Series KQ2



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



Made to Order Specifications
(Refer to page 374 for details.)

Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon, Polyurethane
Tubing O.D.	ø1/8", ø5/32", ø3/16", ø1/4", ø5/16", ø3/8", ø1/2"

Specifications

Fluid		Air/Water Note 1)
Operating pressure range Note 2)		-100 kPa to 1 MPa
Proof pressure (at 23°C)		3 MPa
Ambient and fluid temperature		-5 to 60°C, Water: 0 to 40°C (No freezing)
Thread	Mounting section	ANSI/ASME1.20.1 (NPT thread) JIS B0208 (UNF thread)
	Nut section	JIS B0208 (UNF thread)
Seal on the threads		With sealant

Note 1) The surge pressure must be under the maximum operating pressure.

Note 2) Do not use the fittings with a leak tester or for vacuum retention because they are not guaranteed for zero leakage.

Principal Parts Material

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

How to Order

Threaded Type

KQ2 H 05 - 34 A S

One-touch fittings

Model

Symbol	Model
H	Male connector
S	Hexagon socket head male connector
F	Female connector
L	Male 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
T	Male branch tee
Y	Male run tee
U	Branch "Y"
E	Bulkhead union
	Bulkhead connector
LE	Bulkhead male elbow

Male thread seal method

Symbol	Seal method
Nil	None
S	With thread sealant

Thread material/Surface treatment

Symbol	Thread material/Surface treatment
A	Brass
N	Brass + Electroless nickel plated
Bulkhead union	☐ J Interchangeable with KJE

* ☐: A, N

Port size/Applicable tubing O.D.

Symbol	Size
32	10-32UNF
33	NPT1/16
34	NPT1/8
35	NPT1/4
36	NPT3/8
37	NPT1/2
Tubing connection	00* Same diameter tubing

* Only for "Bulkhead union" and "Bulkhead male elbow".

Applicable tubing O.D.

Symbol	Size
01	ø1/8"
03	ø5/32"
05	ø3/16"
07	ø1/4"
09	ø5/16"
11	ø3/8"
13	ø1/2"

Spare Parts

Use the part number below to order the gasket for sealing 10-32UNF thread.
Gasket for 10-32UNF: M-5G2

Fittings

KQ2

KDM6

KDM

Tube - Tube Type

KQ2 H 05 - 00 A

One-touch fittings

Model

Symbol	Model
H	Straight union
	Different diameter straight
L	Union elbow
	Plug-in elbow
	Reducer elbow
R	Plug-in reducer
T	Union tee
	Different diameter tee
TW	Cross
	Union "Y"
U	Plug-in "Y"
	Different diameter union "Y"
X	Different diameter plug-in "Y"

Port size/Applicable tubing O.D.

Symbol	Size
00	Same diameter tubing
99	Same diameter rod
01	ø1/8"
03	ø5/32"
05	ø3/16"
07	ø1/4"
09	ø5/16"
11	ø3/8"
13	ø1/2"

Applicable tubing O.D.

Symbol	Size
01	ø1/8"
03	ø5/32"
05	ø3/16"
07	ø1/4"
09	ø5/16"
11	ø3/8"
13	ø1/2"

Accessories

Symbol	Name
KQ2N	Nipple
KQ2C	Reducer nipple
KQ2P	Tube cap
	Plug

Inch Size One-touch Fittings

Variations

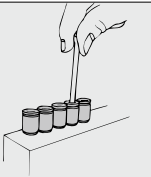
Hexagon socket head male connector

KQ2S

P.357



Internal hexagon socket allows tightening with a hexagon wrench in confined spaces.



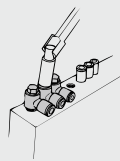
Universal male elbow

KQ2V

P.360



Hexagon head of the body allows tightening with a box wrench in confined spaces.



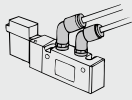
45° male elbow

KQ2K

P.360



Use to pipe a female thread at a 45° angle. The model between the male connector and male elbow.



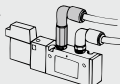
Extended male elbow

KQ2W

P.365



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



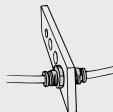
Bulkhead union

KQ2E

P.371



Use to connect tubing through a panel, etc.



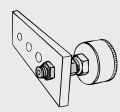
Bulkhead connector

KQ2E

P.372



Use to connect male thread and tubing through a panel, etc.



Nipple

KQ2N

P.373



Use to connect One-touch fittings.



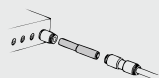
Reducer nipple

KQ2N

P.373



Use to connect One-touch fittings of different sizes.



Male connector

KQ2H

P.355



Use to pipe a female thread. Most general model.

Hexagon socket head universal male elbow

KQ2VS

P.361



Hexagon socket on the top allows tightening with a hexagon wrench in confined spaces.

Branch universal male elbow

KQ2Z

P.364



Hexagon head of the body allows tightening with a box wrench. Use for branch connections.

Female connector

KQ2F

P.356



Use to pipe a male thread of a pressure gauge, etc.

Universal female elbow

KQ2VF

P.361



Use to branch a male or female thread at a 90° angle. Multiple connections possible.

Double branch universal male elbow

KQ2ZD

P.364



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

Straight union

KQ2H

P.356



Use to connect tubing in the same direction.

Female elbow

KQ2LF

P.359



Use to pipe a male thread at right angles.

Triple branch universal male elbow

KQ2ZT

P.365



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

Different diameter straight

KQ2H

P.356



Use to connect tubing of different sizes.

Double universal male elbow

KQ2VD

P.362



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

Union elbow

KQ2L

P.359



Use to connect tubing at right angles.

Male elbow

KQ2L

P.358



Use to pipe a female thread at right angles. Most general model.

Triple universal male elbow

KQ2VT

P.363



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

Plug-in elbow

KQ2L

P.359



Use to change the tube direction from One-touch fittings by 90°.

Reducer elbow

KQ2L

P.359



Use to change the tube direction from One-touch fittings by 90° and to reduce size.

Male branch tee

KQ2T

P.366



Use to branch a female thread at both 90° angles.

Union tee

KQ2T

P.367



Use to branch tubing at both 90° angles.

Different diameter tee

KQ2T

P.367



Use to connect tubing for branching at 90° angle with size reduced from the same piping.

Cross

KQ2TW

P.367



Use to four-branch line.

Male run tee

KQ2Y

P.368



Use to branch a female thread at a 90° angle.

Branch "Y"

KQ2U

P.369



Use to branch a female thread.

Union "Y"

KQ2U

P.370



Use to branch tubing in the same direction.

Different diameter union "Y"

KQ2U

P.370



Use to connect tubing for branching with size reduced.

Plug-in "Y"

KQ2U

P.370



Use to branch One-touch fittings.

Different diameter plug-in "Y"

KQ2X

P.371



Use to branch One-touch fittings with size reduced.

Plug-in reducer

KQ2R

P.371



Use to change size of One-touch fittings.

Bulkhead male elbow

KQ2LE

P.372



Use to connect tubing through a panel, etc. and to change the tube direction by 90°.

Tube cap

KQ2C

P.373



Use to plug unused tubing.

Plug

KQ2P

P.372



Use to plug unused One-touch fittings.

Color cap

KQ2C

P.373



Mount onto the release button and use different colors for piping according to applications.

Fittings

KQ2

KDM6

KDM

Series KQ2

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

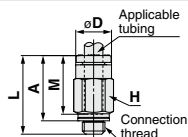
Dimensions

Male Connector: KQ2H (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread UNF	Model	H (Width across flats)	øD	L	A	M	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø1/8	10-32UNF	KQ2H01-32□	7	6.7	17.4	13.9	13.3	3	2.5	2.3	2.7
ø5/32	10-32UNF	KQ2H03-32□	8	7.7	17.6	14.1	13.3	3.3	3.3	2.3	3.3
ø3/16	10-32UNF	KQ2H05-32□	8	8.3	17.7	14.2	13.3	3.4	3.4	2.3	3.4
ø1/4	10-32UNF	KQ2H07-32□	11.11	10.9	18	14.5	13.3	3.4	3.4	2.3	5.2

□/A: Brass, N: Brass + Electroless nickel plated



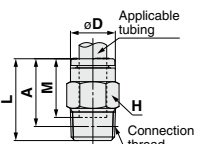
Male Connector: KQ2H (Sealant)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	øD	L	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø1/8	1/16	KQ2H01-33□S	9.5	6.7	19.3	15.2	13.3	3	2.5	2.5	6
	1/8	KQ2H01-34□S	11.11	6.7	14	10.8	13.3	3	2.5	2.5	7.1
	1/4	KQ2H01-35□S	14.29	6.7	16.7	12.3	13.3	3.4	2.9	2.5	16.2
ø5/32	1/16	KQ2H03-33□S	9.5	7.7	20	15.9	13.3	5.6	4	3	6.1
	1/8	KQ2H03-34□S	11.11	7.7	14	10.8	13.3	5.6	4	3	6.5
	1/4	KQ2H03-35□S	14.29	7.7	16.7	12.3	13.3	5.6	4	3	15.6
ø3/16	1/8	KQ2H05-34□S	11.11	8.3	17.4	14.2	13.3	7.8	6.5	3.5	7.4
	1/4	KQ2H05-35□S	14.29	8.3	16.7	12.3	13.3	7.8	6.5	3.5	14.9
ø1/4	1/16	KQ2H07-33□S	11.11	10.9	22.5	18.4	13.3	13.5	11.5	4.6	7.6
	1/8	KQ2H07-34□S	11.11	10.9	18	14.8	13.3	13.5	11.5	4.6	6.5
	1/4	KQ2H07-35□S	14.29	10.9	16.7	12.3	13.3	13.5	11.5	4.6	13.1
ø5/16	3/8	KQ2H07-36□S	17.46	10.9	18.1	13.4	13.3	13.5	11.5	4.6	25.7
	1/8	KQ2H09-34□S	14.29	13	22.2	19	14.2	26.1	18	6	12.6
	1/4	KQ2H09-35□S	14.29	13	22.1	17.7	14.2	26.1	18	6	15.2
ø3/8	3/8	KQ2H09-36□S	17.46	13	18.1	13.4	14.2	26.1	18	6	22.5
	1/8	KQ2H11-34□S	17.46	15.1	24.1	20.9	15.6	26	26	6	19.5
	1/4	KQ2H11-35□S	17.46	15.1	25.1	20.7	15.6	35.3	29.1	7	21
ø1/2	3/8	KQ2H11-36□S	17.46	15.1	22.7	18	15.6	35.3	29.1	7	23.5
	1/2	KQ2H11-37□S	22.23	15.1	22.3	15.9	15.6	35.3	29.1	7	49.1
	1/4	KQ2H13-35□S	22.23	19	28.8	24.4	17	58.5	51.7	9	34.4
	3/8	KQ2H13-36□S	22.23	19	27.5	22.8	17	66	51.7	9.6	36.2
	1/2	KQ2H13-37□S	22.23	19	28	21.6	17	66	51.7	9.6	47.1

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread

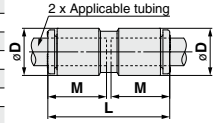


Dimensions

Straight Union: KQ2H



Applicable tubing O.D. (inch)	Model	øD (Note)	L	M	Effective area (mm ²)		Min. port size	Weight (g)
					Nylon	Urethane		
ø1/8	KQ2H01-00A	7.1	27.6	13.3	3.4	2.9	2.5	1.4
ø5/32	KQ2H03-00A	8.2	27.6	13.3	5.6	4	3	1.6
ø3/16	KQ2H05-00A	9.1	27.6	13.3	7.8	6.5	3.5	1.9
ø1/4	KQ2H07-00A	11.1	27.6	13.3	13.5	11.5	4.6	2.4
ø5/16	KQ2H09-00A	13.2	29.4	14.2	26.1	18	6	3.7
ø3/8	KQ2H11-00A	15.4	32.2	15.6	35.3	29.1	7	5.2
ø1/2	KQ2H13-00A	19.3	35	17	66	51.7	9.6	8.7

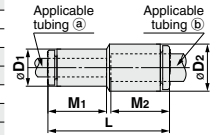


(Note) øD is maximum diameter.

Different Diameter Straight: KQ2H



Applicable tubing O.D. (inch)		Model	Note øD1	Note øD2	L	M1	M2	Effective area (mm ²)		Min. port size	Weight (g)
(a)	(b)							Nylon	Urethane		
ø1/8	ø5/32	KQ2H01-03A	7.1	8.2	27.6	13.3	13.3	3.4	2.9	2.5	1.5
	ø1/4	KQ2H01-07A	7.1	11.1	27.6	13.3	13.3	3.4	2.9	2.5	2
ø5/32	ø3/16	KQ2H03-05A	8.2	9.1	27.6	13.3	13.3	5.6	5.6	3	1.8
	ø1/4	KQ2H03-07A	8.2	11.1	27.6	13.3	13.3	5.6	5.6	3	2.1
ø3/16	ø1/4	KQ2H05-07A	9.1	11.1	27.6	13.3	13.3	7.8	6.5	3.5	2.2
	ø5/16	KQ2H07-09A	11.1	13.2	28.5	13.3	14.2	13.5	11.5	4.6	3.2
ø1/4	ø3/8	KQ2H07-11A	11.1	15.4	29.9	13.3	15.6	13.5	11.5	4.6	4.1
	ø5/16	KQ2H09-11A	13.2	15.4	30.8	14.2	15.6	26.1	18	6	4.7
ø5/16	ø1/2	KQ2H09-13A	13.2	19.3	32.2	14.2	17	26.1	18	6	6.6
	ø3/8	KQ2H11-13A	15.4	19.3	33.6	15.6	17	35.3	29.1	7	7.3

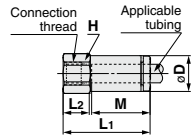


(Note) øD1, øD2 are maximum diameters.

Female Connector: KQ2F



Applicable tubing O.D. (inch)	Connection thread UNF, NPT	Model	H (Width across flats)	Note øD	L1	L2	M	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø1/8	10-32UNF	KQ2F01-32□	7	6.9	19.7	5.7	13.3	3	2.5	2.5	3.4
	1/8	KQ2F01-34□	14.29	6.9	25	9.5	13.3	3	2.5	2.5	13.4
	1/4	KQ2F01-35□	17.46	6.9	29.8	13.3	13.3	3	2.5	2.5	24.4
ø5/32	10-32UNF	KQ2F03-32□	8	7.9	19.5	5.7	13.3	4	4	3	4.5
	1/8	KQ2F03-34□	14.29	7.9	24.8	9.5	13.3	5.6	4	3	13.7
	1/4	KQ2F03-35□	17.46	7.9	29.7	13.3	13.3	5.6	4	3	24.7
ø1/4	10-32UNF	KQ2F07-32□	11.11	10.9	17.7	5.5	13.3	10.1	10.1	3.9	6.7
	1/8	KQ2F07-34□	14.29	10.9	24.4	9.5	13.3	13	11.5	4.6	14.2
	1/4	KQ2F07-35□	17.46	10.9	29.2	13.3	13.3	13	11.5	4.6	25.1
ø5/16	3/8	KQ2F07-36□	22.23	10.9	30.5	13.2	13.3	13	11.5	4.6	38.7
	1/8	KQ2F09-34□	14.29	13	24.8	9.2	14.2	26.1	18	6	15.2
	1/4	KQ2F09-35□	17.46	13	29.7	11.8	14.2	26.1	18	6	26.2
ø3/8	3/8	KQ2F09-36□	22.23	13	31	12.4	14.2	26.1	18	6	39.8
	1/4	KQ2F11-35□	17.46	15.1	30.5	11.8	15.6	35.3	29.1	8	27.2
	3/8	KQ2F11-36□	22.23	15.1	31.8	12.4	15.6	35.3	29.1	8	40.7
ø1/2	1/2	KQ2F13-37□	23.81	15.1	34.9	15.8	15.6	35.3	29.1	8	45.6
	3/8	KQ2F13-36□	22.23	19	32.6	12.4	17	66	51.7	10	43.8
	1/2	KQ2F13-37□	23.81	19	35.7	15.8	17	66	51.7	10	48.6



□/A: Brass, N: Brass + Electroless nickel plated

(Note) øD is maximum diameter.

Series KQ2

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

Dimensions

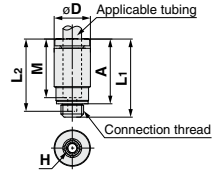
Hexagon Socket Head Male Connector: KQ2S (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread UNF	Model	H (Width across flats)	Note) øD	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
									Nylon	Urethane		
ø1/8	10-32UNF	KQ2S01-32□	2	7	17.5	16.3	14.5	13.3	2.5	2.5	2	2.6
ø5/32	10-32UNF	KQ2S03-32□	2	8	17.8	16.3	14.8	13.3	2.5	2.5	2	3
ø1/4	10-32UNF	KQ2S07-32□	2	11	17.8	16.3	14.8	13.3	2.5	2.5	2	3.7

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD is maximum diameter.



Hexagon Socket Head Male Connector: KQ2S (Sealant)

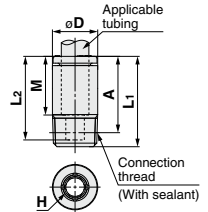


Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
									Nylon	Urethane		
ø5/32	1/16	KQ2S03-33□S	2.78	8	19.8	18.8	15.7	13.3	4.1	3.6	2.8	4.5
	1/8	KQ2S03-34□S	2.78	11	17.3	16.3	14.1	13.3	4.1	3.6	2.8	6
ø3/16	1/8	KQ2S05-34□S	3.57	11	19.8	18.8	16.6	13.3	7.8	6.5	3.6	7.5
	1/16	KQ2S07-33□S	3.57	11	20.9	18.8	16.8	13.3	8.4	8.4	3.6	6.3
ø1/4	1/8	KQ2S07-34□S	4.76	11	19.8	18.8	16.6	13.3	13.5	11.5	4.8	7.4
	1/4	KQ2S07-35□S	4.76	14	19.8	18.8	15.4	13.3	13.5	11.5	4.8	13.2
	3/8	KQ2S07-36□S	4.76	18	20.8	19.8	16.1	13.3	13.5	11.5	4.8	24
ø5/16	1/8	KQ2S09-34□S	5.56	13	22.3	19.7	19.1	14.2	17.2	16.2	5.6	9.7
	1/4	KQ2S09-35□S	6.35	14	21.2	20.1	16.8	14.2	23.3	16.2	6.4	12.6
	3/8	KQ2S09-36□S	6.35	18	20.7	19.7	16	14.2	23.3	16.2	6.4	21
ø3/8	1/8	KQ2S11-34□S	5.56	15.1	23.7	21.1	20.5	15.6	22.7	22.7	5.6	12.1
	1/4	KQ2S11-35□S	6.35	15.1	24.4	21.1	20	15.6	29.6	29.1	6.4	15.2
	3/8	KQ2S11-36□S	6.35	18	22.1	21.1	17.4	15.6	29.6	29.1	6.4	22.7
ø1/2	1/2	KQ2S11-37□S	6.35	22	22.1	21.1	15.7	15.6	29.6	29.1	6.4	40.6
	1/4	KQ2S13-35□S	8	19	28.5	22.5	24.1	17	48	48	8.1	18.9
	3/8	KQ2S13-36□S	9.53	19	26.3	22.5	21.6	17	66	51.7	9.6	20.7
	1/2	KQ2S13-37□S	9.53	22	23.5	22.5	17.1	17	66	51.7	9.6	33.3

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread

Note) øD is maximum diameter.



Inch Size One-touch Fittings *Series KQ2*

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

Dimensions

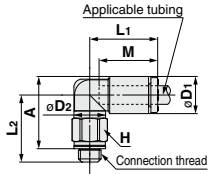
Male Elbow: KQ2L (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread UNF	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø1/8	10-32UNF	KQ2L01-32□	7	7.1	7	15.3	14.2	14.3	13.3	2.6	2.2	2.5	3
ø5/32	10-32UNF	KQ2L03-32□	7	8.2	7	15.4	14.7	15.3	13.3	3.5	3.5	2.5	3.1
ø3/16	10-32UNF	KQ2L05-32□	7	9.1	7	14.5	15.8	16.9	13.3	3.5	3.5	2.5	3.2
ø1/4	10-32UNF	KQ2L07-32□	7	11.1	7	15.4	16	18.1	13.3	3.5	3.5	2.5	3.5

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Male Elbow: KQ2L (Sealant)

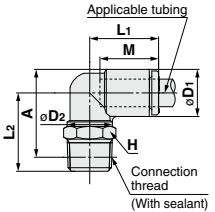


Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A *	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø1/8	1/16	KQ2L01-33□S	11.11	7.1	10	14.5	24.3	23.8	13.3	3	2.5	2.5	9.1
	1/8	KQ2L01-34□S	11.11	7.1	10	14.5	16.7	17.1	13.3	3	2.5	2.5	5.5
	1/4	KQ2L01-35□S	14.29	7.1	10	14.5	21.1	20.3	13.3	3	2.5	2.5	15
ø5/32	1/16	KQ2L03-33□S	11.11	8.2	10	14.8	23.8	23.8	13.3	4.2	4.2	3	9.3
	1/8	KQ2L03-34□S	11.11	8.2	10	14.8	16.2	17.1	13.3	4.2	4.2	3	5.6
	1/4	KQ2L03-35□S	14.29	8.2	10	14.8	21.6	21.3	13.3	4.2	4.2	3	15.2
ø3/16	1/8	KQ2L05-34□S	11.11	9.1	10	15	16.7	18.1	13.3	6.8	5.6	3.5	5.8
	1/4	KQ2L05-35□S	14.29	9.1	10	15	22.1	22.3	13.3	6.8	5.6	3.5	15.4
	1/16	KQ2L07-33□S	11.11	11.1	10	15.6	25.3	26.8	13.3	6.8	6.8	3.5	9.8
ø1/4	1/8	KQ2L07-34□S	11.11	11.1	10	15.6	17.7	20.1	13.3	11.3	10	4.5	6.1
	1/4	KQ2L07-35□S	14.29	11.1	10	15.6	23.1	24.3	13.3	11.3	10	4.5	15.7
	3/8	KQ2L07-36□S	17.46	11.1	10	15.6	24.5	25.4	13.3	11.3	10	4.5	28
ø5/16	1/8	KQ2L09-34□S	11.11	13.2	10	16.4	18.7	22.1	14.2	11.4	11.4	4.5	6.9
	1/4	KQ2L09-35□S	14.29	13.2	12	17.2	24.1	26.3	14.2	21.6	14.9	6	14.1
	3/8	KQ2L09-36□S	17.46	13.2	12	17.2	25.5	27.4	14.2	21.6	14.9	6	26.2
ø3/8	1/8	KQ2L11-34□S	12.7	15.4	12	18.6	23.2	27.7	15.6	21.2	21.2	6	11.8
	1/4	KQ2L11-35□S	17.46	15.4	17	19.3	28.6	31.9	15.6	28.8	23.8	7.5	21.7
	3/8	KQ2L11-36□S	17.46	15.4	17	19.3	29.2	32.2	15.6	28.8	23.8	7.5	19.8
ø1/2	1/2	KQ2L11-37□S	22.23	15.4	17	19.3	33.4	34.7	15.6	28.8	23.8	7.5	46.2
	1/4	KQ2L13-35□S	17.46	19.3	17	21.5	30.5	35.7	17	50.3	44.4	9	24
	3/8	KQ2L13-36□S	17.46	19.3	17	21.8	26.3	31.2	17	56	44.4	9.5	20.3
	1/2	KQ2L13-37□S	22.23	19.3	17	21.8	30.5	33.7	17	56	44.4	9.5	46.3

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread

Note) øD1 is maximum diameter.



Fittings

KQ2

KDM6

KDM

INDEX

Series KQ2

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

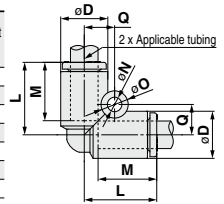
Dimensions

Union Elbow: KQ2L



Applicable tubing O.D. (inch)	Model	Note) ϕD	L	Q	M	ϕO	ϕN	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
$\phi 1/8$	KQ2L01-00A	7.1	14.9	5.4	13.3	6	3.2	3	2.5	2.5	1.6
$\phi 5/32$	KQ2L03-00A	8.2	15.3	5.7	13.3	6	3.2	4.2	4.2	3	1.9
$\phi 3/16$	KQ2L05-00A	9.1	15.7	6.2	13.3	6	3.2	6.8	5.6	3.5	2.2
$\phi 1/4$	KQ2L07-00A	11.1	16.5	7.2	13.3	6	3.2	11.6	10	4.6	2.9
$\phi 5/16$	KQ2L09-00A	13.2	18.2	8.4	14.2	8	4.2	21.6	14.9	6	4.7
$\phi 3/8$	KQ2L11-00A	15.4	20.4	9.9	15.6	8	4.2	28.8	23.8	7	6.7
$\phi 1/2$	KQ2L13-00A	19.3	23.4	11.8	17	8	4.2	56.7	44.4	9.6	10.8

Note) ϕD is maximum diameter.

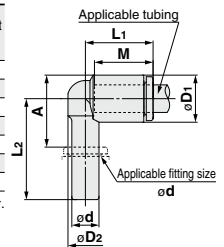


Plug-in Elbow: KQ2L



Applicable tubing O.D. (inch)	Applicable fitting size ϕd (inch)	Model	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
									Nylon	Urethane		
$\phi 1/8$	$\phi 1/8$	KQ2L01-99A	7.1	6.4	14.5	20.9	11.1	13.3	3	2.5	2.2	0.9
$\phi 5/32$	$\phi 5/32$	KQ2L03-99A	8.2	7.2	14.5	21.1	11.9	13.3	4.2	4.2	2.5	1.2
$\phi 3/16$	$\phi 3/16$	KQ2L05-99A	9.1	8	15	22.2	13.4	13.3	6.8	5.6	3.5	1.4
$\phi 1/4$	$\phi 1/4$	KQ2L07-99A	11.1	8	15.6	22.8	15	13.3	11.6	10	4.6	1.9
$\phi 5/16$	$\phi 5/16$	KQ2L09-99A	13.2	10	17.2	26.2	18.6	14.2	21.6	14.9	6	3
$\phi 3/8$	$\phi 3/8$	KQ2L11-99A	15.4	12	19.1	28	20.1	15.6	28.8	23.8	7	4.5
$\phi 1/2$	$\phi 1/2$	KQ2L13-99A	19.3	14	21.8	38.7	31.3	17	56.7	44.4	9.6	7.8

Note) $\phi D1$ is maximum diameter.

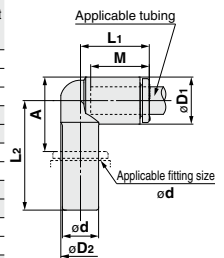


Reducer Elbow: KQ2L



Applicable tubing O.D. (inch)	Applicable fitting size ϕd (inch)	Model	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
									Nylon	Urethane		
$\phi 1/8$	$\phi 5/32$	KQ2L01-03A	7.1	6.4	14.5	23.9	14.1	13.3	3	2.5	2.5	1.1
	$\phi 3/16$	KQ2L01-05A	7.1	6.4	14.5	28.4	18.6	13.3	3	2.5	2.5	1.1
	$\phi 1/4$	KQ2L01-07A	7.1	6.4	14.5	24.5	14.7	13.3	3	2.5	2.5	1.3
$\phi 5/32$	$\phi 3/16$	KQ2L03-05A	8.2	7.2	14.8	29.1	19.9	13.3	4.2	4.2	3	1.3
	$\phi 1/4$	KQ2L03-07A	8.2	7.2	14.8	21.1	11.9	13.3	4.2	4.2	3	1.4
	$\phi 1/4$	KQ2L05-07A	9.1	8	15	21.6	12.8	13.3	6.8	5.6	3.5	1.5
$\phi 3/16$	$\phi 5/16$	KQ2L05-09A	9.1	8	15	30	20.3	13.3	6.8	5.6	3.5	1.9
	$\phi 5/16$	KQ2L07-09A	11.1	8	15.6	30.7	22	13.3	11.6	10	4.6	2.3
	$\phi 3/8$	KQ2L07-11A	11.1	8	15.6	31.1	21	13.3	11.6	10	4.6	3
$\phi 5/16$	$\phi 3/8$	KQ2L09-11A	13.2	10	18.8	34.1	25.1	14.2	21.6	14.9	6	3.7
	$\phi 1/2$	KQ2L09-13A	13.2	10	18.8	35.6	25.2	14.2	21.6	14.9	6	4.6
$\phi 3/8$	$\phi 1/2$	KQ2L11-13A	15.4	12	19.1	36.5	27.2	15.6	28.8	23.8	7	5.6

Note) $\phi D1$ is maximum diameter.

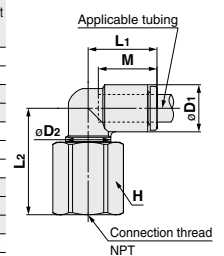


Female Elbow: KQ2LF



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	M	Effective area (mm ²)		Min. port size	Weight (g)
									Nylon	Urethane		
$\phi 1/8$	1/8	KQ2LF01-34	14.29	7.1	10	14.5	22.8	13.3	3	2.5	2.5	18.2
	1/4	KQ2LF01-35	17.46	7.1	10	14.5	26.3	13.3	3	2.5	2.5	31.7
	1/8	KQ2LF03-34	14.29	8.2	10	14.8	22.4	13.3	4.2	4.2	3	18.3
$\phi 5/32$	1/4	KQ2LF03-35	17.46	8.2	10	14.8	26.9	13.3	4.2	4.2	3	31.9
	1/8	KQ2LF07-34	14.29	11.1	10	15.6	23.9	13.3	11.3	10	4.5	18.9
	1/4	KQ2LF07-35	17.46	11.1	10	15.6	28.4	13.3	11.3	10	4.5	32.4
$\phi 1/4$	3/8	KQ2LF07-36	22.23	11.1	10	15.6	28.9	13.3	11.3	10	4.5	53.1
	1/4	KQ2LF11-35	17.46	15.4	17	19.3	27.1	15.6	28.8	23.8	7	28
	3/8	KQ2LF11-36	22.23	15.4	17	19.3	33.3	15.6	28.8	23.8	7	49.6
$\phi 3/8$	1/2	KQ2LF11-37	23.81	15.4	17	19.3	36.3	15.6	28.8	23.8	7	56.9
	3/8	KQ2LF13-36	22.23	19.3	17	21.8	30.4	17	56	44.4	9.5	51.4
$\phi 1/2$	1/2	KQ2LF13-37	23.81	19.3	17	21.8	33.7	17	56	44.4	9.5	58

Note) $\phi D1$ is maximum diameter.



□/A: Brass, N: Brass + Electroless nickel plated

Dimensions

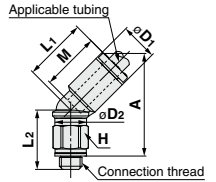
45° Male Elbow: KQ2K (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread UNF	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A	M	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
ø1/8	10-32UNF	KQ2K01-32□	7	7.1	7	14.4	13	21.9	13.3	3	2.5	2.5
ø5/32	10-32UNF	KQ2K03-32□	7	8.2	7	14.4	13	22.2	13.3	3.4	3.4	2.5
ø1/4	10-32UNF	KQ2K07-32□	7	11.1	7	14.9	16.5	26.8	13.3	3.5	3.5	2.5
											3.6	

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



45° Male Elbow: KQ2K (Sealant)

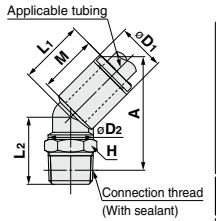


Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A*	M	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
ø1/8	1/8	KQ2K01-34□S	11.11	7.1	10	14.3	12.7	21.8	13.3	3	2.5	2.5
ø5/32	1/8	KQ2K03-34□S	11.11	8.2	10	14.4	12.7	22.2	13.3	4.2	4.2	3
ø3/16	1/8	KQ2K05-34□S	11.11	9.1	10	14.5	13.2	23.1	13.3	6.8	5.6	3.5
											5.6	
ø1/4	1/4	KQ2K07-34□S	11.11	11.1	10	14.8	15.2	25.8	13.3	11.3	10	4.5
	3/8	KQ2K07-36□S	14.29	11.1	10	14.8	19.6	29	13.3	11.3	10	4.5
											15.6	
	3/8	KQ2K07-36□S	17.46	11.1	10	14.8	21	30.1	13.3	11.3	10	4.5
											27.8	
ø5/16	1/8	KQ2K09-34□S	11.11	13.2	10	16	15.7	27.9	14.2	11.3	11.3	4.5
	1/4	KQ2K09-35□S	14.29	13.2	12	16	21.1	32.1	14.2	19.7	19.7	6
											13.9	
	3/8	KQ2K09-36□S	17.46	13.2	12	16	22.5	33.2	14.2	19.7	19.7	6
											26	
	1/8	KQ2K11-34□S	12.7	15.4	12	18.1	21.1	35.5	15.6	21.2	21.2	6
	1/4	KQ2K11-35□S	17.46	15.4	17	17.7	28.6	41.5	15.6	28.8	23.8	7
											21.8	
ø3/8	3/8	KQ2K11-36□S	17.46	15.4	17	17.7	23.5	36.1	15.6	28.8	23.8	7
											19.2	
	1/2	KQ2K11-37□S	22.23	15.4	17	17.7	27.7	38.6	15.6	28.8	23.8	7
											45.7	
	1/4	KQ2K13-35□S	17.46	19.3	17	19.4	28.7	44.1	17	50.3	44.4	9
	3/8	KQ2K13-36□S	17.46	19.3	17	19.4	23.6	38.7	17	56	44.4	9.5
											19.9	
ø1/2	1/2	KQ2K13-37□S	22.23	19.3	17	19.4	27.8	41.2	17	56	44.4	9.5
											46	

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread

Note) øD1 is maximum diameter.



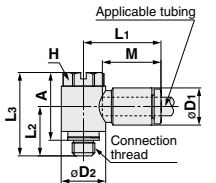
Universal Male Elbow: KQ2V (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread UNF	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A	M	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
ø1/8	10-32UNF	KQ2V01-32□	8	7.1	9.8	17.5	10.4	17.9	14.4	13.3	2.2	1.9	2.5
ø5/32	10-32UNF	KQ2V03-32□	8	8.2	9.8	17.5	10.4	17.9	14.4	13.3	2.9	2.9	2.5
ø1/4	10-32UNF	KQ2V07-32□	8	11.1	13.4	20.6	12.1	24	20.5	13.3	2.9	2.9	2.5
											12.3		5.3

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Universal Male Elbow: KQ2V (Sealant)

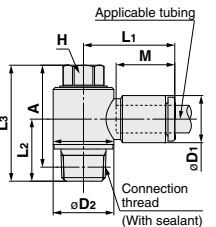


Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
ø1/8	1/8	KQ2V01-34□S	8	7.1	13.4	19.3	13.7	25.6	22.4	13.3	2.2	1.9	2.5
ø5/32	1/8	KQ2V03-34□S	8	8.2	13.4	19.3	13.7	25.6	22.4	13.3	2.9	2.9	3
ø3/16	1/8	KQ2V05-34□S	8	9.1	13.4	19.6	13.7	25.6	22.4	13.3	4.5	3.7	3.5
											13.7		
ø1/4	1/8	KQ2V07-34□S	8	11.1	13.4	20.6	13.7	25.6	22.4	13.3	7.5	6.6	4.5
	1/4	KQ2V07-35□S	8	11.1	15.3	19.9	18.7	32.1	27.7	13.3	7.5	6.6	4.5
											14.1		
	1/8	KQ2V09-34□S	11.11	13.2	17.6	23.5	15.1	27.6	24.4	14.2	16	11.2	6
ø5/16	1/4	KQ2V09-35□S	11.11	13.2	17.6	23.5	18.5	31	26.6	14.2	16	11.2	6
											29.2		
	3/8	KQ2V09-36□S	12.7	13.2	20.6	23.1	19.5	35.3	30.6	14.2	16	11.2	6
											44.1		
	1/4	KQ2V11-35□S	12.7	15.4	20.6	25.8	19.6	34.9	30.5	15.6	23.4	19.3	7
											37.5		
ø3/8	3/8	KQ2V11-36□S	12.7	15.4	20.6	25.8	20	35.3	30.6	15.6	23.4	19.3	7
											45.2		
	3/8	KQ2V13-36□S	17.46	19.3	27	30.5	20.2	35.1	30.4	17	38.8	34.3	9
											64		
ø1/2	1/2	KQ2V13-37□S	17.46	19.3	27	30.5	23.4	38.3	31.9	17	38.8	34.3	9
											82.6		

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread

Note) øD1 is maximum diameter.



Series KQ2

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

Dimensions

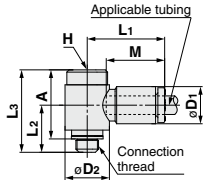
Hexagon Socket Head Universal Male Elbow: KQ2VS (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread UNF	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A	M	Effective area (mm ²) Nylon/Urethane	Min. port size	Weight (g)	
ø1/8	10-32UNF	KQ2VS01-32□	4.4	7.1	9.8	17.5	10.4	18.2	14.7	13.3	2.2	1.9	2.3	5.3
ø5/32	10-32UNF	KQ2VS03-32□	4.4	8.2	9.8	17.5	10.4	18.2	14.7	13.3	2.9	2.9	2.3	5.4
ø1/4	10-32UNF	KQ2VS07-32□	6.35	11.1	13.4	20.6	11.1	23.2	19.7	13.3	2.9	2.9	2.5	11.3

□/A: Brass, N: Brass + Electroless nickel plated

Note) ϕD_1 is maximum diameter.



Hexagon Socket Head Universal Male Elbow: KQ2VS (Sealant)

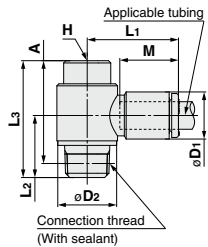


Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	(Note) ϕD_1	ϕD_2	L ₁	L ₂	L ₃	A*	M	Effective area (mm ²) Nylon/urethane	Min. port size	Weight (g)	
$\phi 1/8$	1/8	KQ2VS01-34□S	6.35	7.1	13.4	19.3	13.7	25.8	22.6	13.3	2.2	1.9	2.5	13.1
$\phi 5/32$	1/8	KQ2VS03-34□S	6.35	8.2	13.4	19.3	13.7	25.8	22.6	13.3	2.9	2.9	3	13.2
$\phi 3/16$	1/8	KQ2VS05-34□S	6.35	9.1	13.4	19.6	13.7	25.8	22.6	13.3	4.5	3.7	3.5	13.3
$\phi 1/4$	1/8	KQ2VS07-34□S	6.35	11.1	13.4	20.6	13.7	25.8	22.6	13.3	7.7	6.6	4.6	13.7
	1/4	KQ2VS07-35□S	6.35	11.1	15.3	19.9	18.7	28.1	23.7	13.3	7.7	6.6	4.6	20.8
$\phi 5/16$	1/8	KQ2VS09-34□S	8	13.2	17.6	23.5	15.1	26	22.8	14.2	16	11.2	6	19.3
	1/4	KQ2VS09-35□S	8	13.2	17.6	23.5	18.5	29.5	25.1	14.2	16	11.2	6	24.6
	3/8	KQ2VS09-36□S	8	13.2	20.6	23.1	19.5	31.4	26.7	14.2	16	11.2	6	37.6
$\phi 3/8$	1/4	KQ2VS11-35□S	8	15.4	20.6	25.8	19.6	30.8	26.4	15.6	23.4	19.3	7	29
	3/8	KQ2VS11-36□S	8	15.4	20.6	25.8	20	31.4	26.7	15.6	23.4	19.3	7	38.6
$\phi 1/2$	3/8	KQ2VS13-36□S	9.53	19.3	27	30.5	20.2	33.6	28.9	17	38.8	34.3	9	59.2
	1/2	KQ2VS13-37□S	9.53	19.3	27	30.5	23.4	36.8	30.4	17	38.8	34.3	9	78.3

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread

Note) ϕD_1 is maximum diameter.



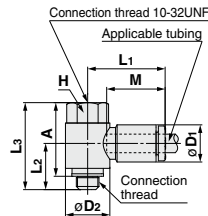
Universal Female Elbow: KQ2VF (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread UNF	Model	H (Wid across flats)	Note) φD1	φD2	L1	L2	L3	A	M	Effective area (mm ²)		Min. port size	Weight (g)
											Nylon	Urethane		
φ1/8	10-32UNF	KQ2VF01-32□	8	7.1	9.8	17.5	10.4	19.4	15.9	13.3	2.2	1.9	2.5	5.4
φ5/32	10-32UNF	KQ2VF03-32□	8	8.2	9.8	17.5	10.4	19.4	15.9	13.3	2.9	2.9	2.5	5.5
φ1/4	10-32UNF	KQ2VF07-32□	14.29	11.1	13.4	20.6	12.8	22.4	18.9	13.3	2.9	2.9	2.5	14.2

□/A: Brass, N: Brass + Electroless nickel plated

Note) ϕD_1 is maximum diameter.



Universal Female Elbow: KQ2VF (Sealant)

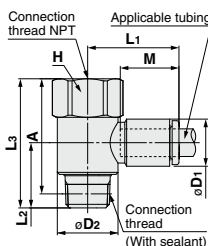


Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) ϕD_1	ϕD_2	L ₁	L ₂	L ₃	A*	M	Effective area (mm ²) Nylon/Urethane	Min. port size	Weight (g)	
$\phi 1/8$	1/8	KQ2VF01-34□S	14.29	7.1	13.4	19.3	14.4	28.5	25.3	13.3	2.2	1.9	2.5	18
$\phi 5/32$	1/8	KQ2VF03-34□S	14.29	8.2	13.4	19.3	14.4	28.5	25.3	13.3	2.9	2.9	3	18.1
$\phi 3/16$	1/8	KQ2VF05-34□S	14.29	9.1	13.4	19.6	14.4	28.5	25.3	13.3	4.5	3.7	3.5	18.2
$\phi 1/4$	1/8	KQ2VF07-34□S	14.29	11.1	13.4	20.6	14.4	28.5	25.3	13.3	7.7	6.6	4.6	18.5
	1/4	KQ2VF07-35□S	17.46	11.1	17.6	21.3	19.4	37.9	33.5	13.3	7.7	6.6	4.6	38.4
$\phi 5/16$	1/8	KQ2VF09-34□S	17.46	13.2	17.6	23.5	15.5	30	26.8	14.2	16	11.2	6	28.7
	1/4	KQ2VF09-35□S	17.46	13.2	17.6	23.5	18.9	37.9	33.5	14.2	16	11.2	6	39.3
	3/8	KQ2VF09-36□S	22.23	13.2	25.2	24.9	24	44	39.3	14.2	16	11.2	6	67.2
$\phi 3/8$	1/4	KQ2VF11-35□S	22.23	15.4	20.6	25.8	20.7	40.3	35.9	15.6	23.4	19.3	7	58.7
	3/8	KQ2VF11-36□S	22.23	15.4	25.2	26.3	23.2	44	39.3	15.6	23.4	19.3	7	67.9
$\phi 1/2$	3/8	KQ2VF13-36□S	25.4	19.3	27	30.5	21.2	40.7	36	17	38.8	34.3	9	69.8
	1/2	KQ2VF13-37□S	25.4	19.3	27	30.5	24.4	48.9	42.5	17	38.8	34.3	9	105.7

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread

Note) ϕD_1 is maximum diameter.



Inch Size One-touch Fittings *Series KQ2*

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

Dimensions

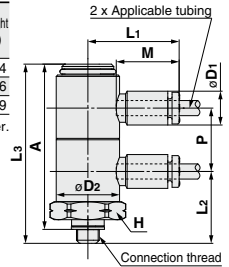
Double Universal Male Elbow: KQ2VD (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread UNF	Model	H (Width across flats)	Note) ϕD_1	ϕD_2	L1	L2	L3	A	M	P	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
$\phi 1/8$	10-32UNF	KQ2VD01-32□	14.29	7.1	13.4	19.3	15.2	37.9	34.4	13.3	13.4	2.2 1.9	2.3	24.4
$\phi 5/32$	10-32UNF	KQ2VD03-32□	14.29	8.2	13.4	19.3	15.2	37.9	34.4	13.3	13.4	2.5 2.5	2.3	24.6
$\phi 1/4$	10-32UNF	KQ2VD07-32□	14.29	11.1	13.4	20.6	15.6	38.7	35.2	13.3	13.8	2.5 2.5	2.3	26.9

□/A: Brass, N: Brass + Electroless nickel plated

Note) ϕD_1 is maximum diameter.



Double Universal Male Elbow: KQ2VD (Sealant)

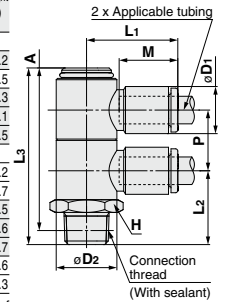


Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) ϕD_1	ϕD_2	L ₁	L ₂	L ₃	A*	M	P	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
$\phi 1/8$	1/8	KQ2VD01-34□S	14.29	7.1	13.4	19.3	16.3	39	35.8	13.3	13.4	2.2 1.9	2.5	20
$\phi 5/32$	1/8	KQ2VD03-34□S	14.29	8.2	13.4	19.3	16.3	39	35.8	13.3	13.4	2.9 2.9	3	20.2
$\phi 3/16$	1/8	KQ2VD05-34□S	14.29	9.1	13.4	19.6	16.3	39	35.8	13.3	13.4	4.5 3.7	3.5	20.5
$\phi 1/4$	1/8	KQ2VD07-34□S	14.29	11.1	13.4	20.6	17.7	40.8	37.6	13.3	13.8	7.7 6.6	4.6	23.3
	1/4	KQ2VD07-35□S	14.29	11.1	13.4	20.6	21.1	44.2	39.8	13.3	13.8	7.7 6.6	4.6	30.1
	3/8	KQ2VD07-36□S	17.46	11.1	13.4	20.6	22.5	45.6	40.9	13.3	13.8	7.7 6.6	4.6	42.5
$\phi 5/16$	1/4	KQ2VD09-35□S	19	13.2	17.6	23.7	22.4	49.2	44.8	14.2	15.9	16	11.2	6 45
	3/8	KQ2VD09-36□S	19	13.2	17.6	23.7	23	49.8	45.1	14.2	15.9	16	11.2	6 53.2
	1/2	KQ2VD09-37□S	22.23	13.2	17.6	23.7	27.2	54	47.6	14.2	15.9	16	11.2	6 79.7
$\phi 3/8$	1/4	KQ2VD11-35□S	22.23	15.4	20.6	25.3	24.4	56.3	51.9	15.6	19.2	23.4	19.3	7 65.5
	3/8	KQ2VD11-36□S	22.23	15.4	20.6	25.3	24.8	56.7	52	15.6	19.2	23.4	19.3	7 67.6
	1/2	KQ2VD11-37□S	22.23	15.4	20.6	25.3	28.7	60.6	54.2	15.6	19.2	23.4	19.3	7 87.7
$\phi 1/2$	3/8	KQ2VD13-36□S	25.4	19.3	27	30.5	29.6	64.4	59.7	17	22.3	43.8	34.3	9.6 128.6
	1/2	KQ2VD13-37□S	25.4	19.3	27	30.5	32.8	67.6	61.2	17	22.3	43.8	34.3	9.6 146.3

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread

Note) ϕD_1 is maximum diameter.



Fittings

KQ2

KDM6

KDM

INDEX

Series KQ2

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

Dimensions

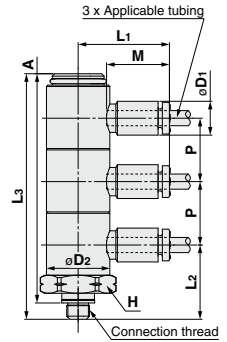
Triple Universal Male Elbow: KQ2VT (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread UNF	Model	H (Width across flats)	(Note)								Effective area (mm ²)	Min. port size	Weight (g)	
				øD1	øD2	L1	L2	L3	A	M	P				
ø1/8	10-32UNF	KQ2VT01-32□	14.29	7.1	13.4	19.3	15.7	51.9	48.4	13.3	13.4	2.2	1.9	2.5	32.4
ø5/32	10-32UNF	KQ2VT03-32□	14.29	8.2	13.4	19.3	15.7	51.9	48.4	13.3	13.4	2.9	2.9	2.5	32.7
ø1/4	10-32UNF	KQ2VT07-32□	14.29	11.1	13.4	20.6	16.1	53	49.5	13.3	13.8	2.3	2.3	2.5	35.4

□/A: Brass, N: Brass + Electroless nickel plated

(Note) øD1 is maximum diameter.



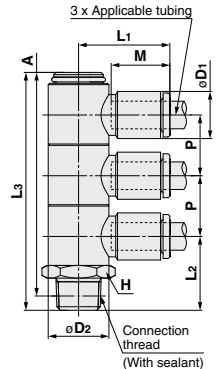
Triple Universal Male Elbow: KQ2VT (Sealant)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	(Note) øD1	øD2	L1	L2	L3	A *	M	P	Effective area (mm ²)		Min. port size	Weight (g)
												Nylon	Urethane		
ø1/8	1/8	KQ2VT01-34□S	14.29	7.1	13.4	19.3	16.3	52.5	49.3	13.3	13.4	2.2	1.9	2.5	25.5
ø5/32	1/8	KQ2VT03-34□S	14.29	8.2	13.4	19.3	16.3	52.5	49.3	13.3	13.4	2.9	2.9	3	25.8
ø3/16	1/8	KQ2VT05-34□S	14.29	9.1	13.4	19.6	16.3	52.5	49.3	13.3	13.4	4.5	3.7	3.5	26.2
	1/8	KQ2VT07-34□S	14.29	11.1	13.4	20.6	17.7	54.6	51.4	13.3	13.8	7.7	6.6	4.6	29.7
ø1/4	3/8	KQ2VT07-35□S	14.29	11.1	13.4	20.6	21.1	58	53.6	13.3	13.8	7.7	6.6	4.6	36.6
	3/8	KQ2VT07-36□S	17.46	11.1	13.4	20.6	22.5	59.4	54.7	13.3	13.8	7.7	6.6	4.6	49
ø5/16	1/4	KQ2VT09-35□S	17.46	13.2	17.6	23.7	22.4	65.2	60.8	14.2	15.9	16	11.2	6	55.4
	3/8	KQ2VT09-36□S	19	13.2	17.6	23.7	23	65.8	61.1	14.2	15.9	16	11.2	6	65.3
	1/2	KQ2VT09-37□S	22.23	13.2	17.6	23.7	27.2	70	63.6	14.2	15.9	16	11.2	6	91.8
ø3/8	1/4	KQ2VT11-35□S	22.23	15.4	20.6	25.3	24.4	75.6	71.2	15.6	19.2	23.4	19.3	7	84.2
	3/8	KQ2VT11-36□S	22.23	15.4	20.6	25.3	24.8	76	71.3	15.6	19.2	23.4	19.3	7	91.8
ø1/2	1/2	KQ2VT11-37□S	22.23	15.4	20.6	25.3	28.7	79.9	73.5	15.6	19.2	23.4	19.3	7	104.4
	3/8	KQ2VT13-36□S	25.4	19.3	27	30.5	29.6	86.8	82.1	17	22.3	43.8	34.3	9.6	169.3
	1/2	KQ2VT13-37□S	25.4	19.3	27	30.5	32.8	90	83.6	17	22.3	43.8	34.3	9.6	187

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread
(Note) øD1 is maximum diameter.



Inch Size One-touch Fittings *Series KQ2*

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

Dimensions

Branch Universal Male Elbow: KQ2Z (Gasket seal)

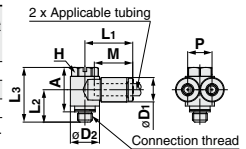


Applicable tubing O.D. (inch)	Connection thread UNF	Model	H (Width across flats)	(Note) øD1	øD2	L1	L2	L3	A	M	P	Effective area (mm ²) Nylon/Urethane	Min. port size	Weight (g)	
ø1/8	10-32UNF	KQ2Z01-32□	8	7.1	9.8	16.5	10.4	17.9	14.4	13.3	7.1	2.2	1.9	2.5	5.9
ø5/32	10-32UNF	KQ2Z03-32□	8	8.2	9.8	16.5	10.4	17.9	14.4	13.3	8.2	2.9	2.9	2.5	6.2
ø1/4	10-32UNF	KQ2Z07-32□	8	11.1	13.4	18.4	12.1	24	20.5	13.3	11.1	2.9	2.9	2.5	13.4

□A: Brass, N: Brass + Electroless nickel plated
Note) øD1 is maximum diameter.

□/A: Brass, N: Brass + Electroless nickel plated

(Note) øD1 is maximum diameter.



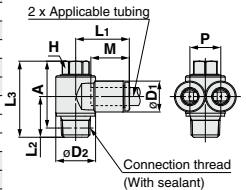
Branch Universal Male Elbow: KQ2Z (Sealant)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	(Note) øD1	øD2	L1	L2	L3	A*	M	P	Effective area (mm ²) Nylon/urethane	Min. port size	Weight (g)	
ø1/8	1/8	KQ2Z01-34□S	8	7.1	13.4	18.5	13.7	25.6	22.4	13.3	7.1	2.2	1.9	2.5	14.1
ø5/32	1/8	KQ2Z03-34□S	8	8.2	13.4	18.5	13.7	25.6	22.4	13.3	8.2	2.9	2.9	3	14.4
ø3/16	1/8	KQ2Z05-34□S	8	9.1	13.4	18.4	13.7	25.6	22.4	13.3	9.1	4.5	3.7	3.5	14.7
ø1/4	1/8	KQ2Z07-34□S	8	11.1	13.4	18.4	13.7	25.6	22.4	13.3	11.1	7.5	6.6	4.5	15.2
	1/4	KQ2Z07-35□S	11.1	11.1	17.6	20.4	18	31	26.6	13.3	11.1	7.7	6.6	4.5	29.5
ø5/16	1/4	KQ2Z09-34□S	11.1	13.2	17.6	21.2	15.1	27.6	24.4	14.2	13.2	20.5	14.2	6	24.1
	1/4	KQ2Z09-35□S	11.1	13.2	17.6	21.2	18.5	31	26.6	14.2	13.2	20.5	14.2	6	31
	3/8	KQ2Z09-36□S	12.7	13.2	20.6	22.3	19.5	35.3	30.6	14.2	13.2	20.5	14.2	6	46
ø3/8	1/4	KQ2Z11-35□S	12.7	15.4	20.6	25.9	19.1	34.9	30.5	15.6	15.4	23.4	19.3	7	40.7
	3/8	KQ2Z11-36□S	12.7	15.4	20.6	25.9	19.5	35.3	30.6	15.6	15.4	23.4	19.3	7	48.4
ø1/2	3/8	KQ2Z13-36□S	17.46	19.3	27	30.1	20.2	35.1	30.4	17	19.3	38.8	34.3	9	69.5
	1/2	KQ2Z13-37□S	17.46	19.3	27	30.1	23.4	38.3	31.9	17	19.3	38.8	34.3	9	88.1

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread
(Note) øD1 is maximum diameter.



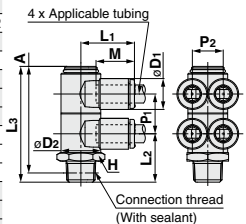
Double Branch Universal Male Elbow: KQ2ZD (Sealant)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	(Note) øD1	øD2	L1	L2	L3	A*	M	P1	P2	Effective area (mm ²) Nylon/Urethane	Min. port size	Weight (g)
ø1/8	1/8	KQ2ZD01-34□S	14.29	7.1	13.4	18.5	16.3	39	35.8	13.3	13.4	7.1	2.2	1.9	21.2
ø5/32	1/8	KQ2ZD03-34□S	14.29	8.2	13.4	18.5	16.3	39	35.8	13.3	13.4	8.2	2.9	2.9	21.8
ø3/16	1/8	KQ2ZD05-34□S	14.29	9.1	13.4	18.4	16.3	39	35.8	13.3	13.4	9.1	4.5	3.7	22.4
ø1/4	1/8	KQ2ZD07-34□S	14.29	11.1	13.4	18.3	17.7	40.8	37.6	13.3	13.8	11.1	7.7	6.6	25.5
	1/4	KQ2ZD07-35□S	14.29	11.1	13.4	18.3	21.1	44.2	39.8	13.3	13.8	11.1	7.7	6.6	32.4
	3/8	KQ2ZD07-36□S	17.46	11.1	13.4	18.3	22.5	45.6	40.9	13.3	13.8	11.1	7.7	6.6	44.8
ø5/16	1/4	KQ2ZD09-35□S	19	13.2	17.6	21.95	22.4	49.2	44.8	14.2	15.9	13.2	20.5	14.2	48.7
	3/8	KQ2ZD09-36□S	19	13.2	17.6	21.95	23	49.8	45.1	14.2	15.9	13.2	20.5	14.2	56.8
	1/2	KQ2ZD09-37□S	22.23	13.2	17.6	21.95	27.2	54	47.6	14.2	15.9	13.2	20.5	14.2	83.3
ø3/8	1/4	KQ2ZD11-35□S	22.23	15.4	20.6	23.6	24.4	56.3	51.9	15.6	19.2	15.4	23.4	19.3	71.1
	3/8	KQ2ZD11-36□S	22.23	15.4	20.6	23.6	24.8	56.7	52	15.6	19.2	15.4	23.4	19.3	73.2
	1/2	KQ2ZD11-37□S	22.23	15.4	20.6	23.6	28.7	60.6	54.2	15.6	19.2	15.4	23.4	19.3	93.3
ø1/2	3/8	KQ2ZD13-36□S	25.4	19.3	27	27.9	29.6	64.4	59.7	17	22.3	19.3	43.8	34.3	137.2
	1/2	KQ2ZD13-37□S	25.4	19.3	27	27.9	32.8	67.6	61.2	17	22.3	19.3	43.8	34.3	155

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread
(Note) øD1 is maximum diameter.



Fittings

KQ2

KDM6

KDM

Series KQ2

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

Dimensions

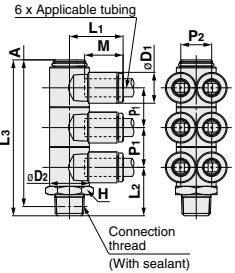
Triple Universal Male Elbow: KQ2ZT (Sealant)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	(Note) φD ₁	φD ₂	L ₁	L ₂	L ₃	A*	M	P ₁	P ₂	Effective area (mm ²) Nylon(Urethane)	Min. port size	Weight (g)	
ø1/8	1/8	KQ2ZT01-34CS	14.29	7.1	13.4	18.5	16.3	52.5	49.3	13.3	13.4	7.1	2.2	1.9	2.5	27.3
	1/8	KQ2ZT03-34CS	14.29	8.2	13.4	18.5	16.3	52.5	49.3	13.3	13.4	8.2	2.9	2.9	3	28.2
ø5/32	1/8	KQ2ZT05-34CS	14.29	9.1	13.4	18.4	16.3	52.5	49.3	13.3	13.4	9.1	4.5	3.7	3.5	29
	1/8	KQ2ZT07-34CS	14.29	11.1	13.4	18.3	17.7	54.6	51.4	13.3	13.8	11.1	7.7	6.6	4.6	33.1
ø1/4	1/8	KQ2ZT07-35CS	14.29	11.1	13.4	18.3	21.1	58	53.6	13.3	13.8	11.1	7.7	6.6	4.6	40
	3/4	KQ2ZT07-36CS	17.46	11.1	13.4	18.3	22.5	59.4	54.7	13.3	13.8	11.1	7.7	6.6	4.6	52.4
ø5/16	1/4	KQ2ZT09-35CS	17.46	13.2	17.6	21.2	22.4	65.2	60.8	14.2	15.9	13.2	20.5	14.2	6	60.9
	3/8	KQ2ZT09-36CS	19	13.2	17.6	21.2	23	65.8	61.1	14.2	15.9	13.2	20.5	14.2	6	70.8
ø3/8	1/2	KQ2ZT09-37CS	22.23	13.2	17.6	21.2	27.2	70	63.6	14.2	15.9	13.2	20.5	14.2	6	97.3
	1/4	KQ2ZT11-35CS	22.23	15.4	20.6	23.6	24.4	75.6	71.2	15.6	19.2	15.4	23.4	19.3	7	100.2
ø1/2	3/8	KQ2ZT11-36CS	22.23	15.4	20.6	23.6	24.8	76	71.3	15.6	19.2	15.4	23.4	19.3	7	100.2
	1/2	KQ2ZT11-37CS	22.23	15.4	20.6	23.6	28.7	79.9	73.5	15.6	19.2	15.4	23.4	19.3	7	100.2
ø1/2	3/8	KQ2ZT13-36CS	25.4	19.3	27	27.9	29.6	86.8	82.1	17	22.3	19.3	43.8	34.3	9.6	182.3
	1/2	KQ2ZT13-37CS	25.4	19.3	27	27.9	32.8	90	83.6	17	22.3	19.3	43.8	34.3	9.6	200

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread
Note) ϕD_1 is maximum diameter.



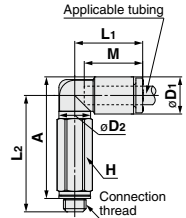
Extended Male Elbow: KQ2W (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread UNF	Model	H (Width across flats)	(Note) øD1	øD2	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø1/8	10-32UNF	KQ2W01-32□	7	7.1	7	15.3	25.8	25.9	13.3	2.8	2.4	2.5	5.9
ø5/32	10-32UNF	KQ2W03-32□	7	8.2	7	15.4	26.3	26.9	13.3	3	3	2.5	6
ø1/4	10-32UNF	KQ2W07-32□	7	11.1	7	15.4	27.6	29.7	13.3	3.5	3.5	2.5	6.4

□/A: Brass, N: Brass + Electroless nickel plated

Note) ϕD_1 is maximum diameter.



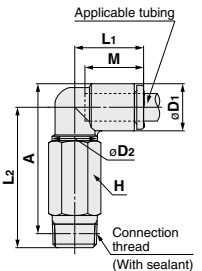
Extended Male Elbow: KQ2W (Sealant)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) ϕD_1	ϕD_2	L ₁	L ₂	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
$\phi 1/8$	1/16	KQ2W01-33□S	11.11	7.1	10	14.5	35.9	35.4	13.3	2.8	2.4	2.5	16.6
	1/8	KQ2W01-34□S	11.11	7.1	10	14.5	30.3	30.7	13.3	2.8	2.4	2.5	13.9
	1/4	KQ2W01-35□S	14.29	7.1	10	14.5	32.7	31.9	13.3	2.8	2.4	2.5	27.3
$\phi 5/32$	1/16	KQ2W03-33□S	11.11	8.2	10	14.8	35.4	35.4	13.3	4	4	3	16.7
	1/8	KQ2W03-34□S	11.11	8.2	10	14.8	29.9	30.8	13.3	4	4	3	14.1
	1/4	KQ2W03-35□S	14.29	8.2	10	14.8	33.2	32.9	13.3	4	4	3	27.5
$\phi 3/16$	1/8	KQ2W05-34□S	11.11	9.1	10	15	30.4	31.7	13.3	6.8	5.6	3.5	14.3
	1/4	KQ2W05-35□S	14.29	9.1	10	15	33.7	33.9	13.3	6.8	5.6	3.5	27.7
	1/16	KQ2W07-33□S	11.11	11.1	10	15.6	36.9	38.4	13.3	6.8	6.8	3.5	17.3
$\phi 1/4$	1/8	KQ2W07-34□S	11.11	11.1	10	15.6	31.4	33.7	13.3	11.3	10	4.5	14.6
	1/4	KQ2W07-35□S	14.29	11.1	10	15.6	34.7	35.9	13.3	11.3	10	4.5	28
	3/8	KQ2W07-36□S	17.46	11.1	10	15.6	36.1	37	13.3	11.3	10	4.5	50.2
$\phi 5/16$	1/8	KQ2W09-34□S	11.11	13.2	10	16.4	32.4	35.8	14.2	11.3	11.3	4.5	15.4
	1/4	KQ2W09-35□S	14.29	13.2	12	17.2	37.8	40	14.2	20.5	14.2	6	26.5
	3/8	KQ2W09-36□S	17.46	13.2	12	17.2	39.2	41.1	14.2	20.5	14.2	6	50
$\phi 3/8$	1/4	KQ2W11-35□S	17.46	15.4	17	19.3	48.3	51.6	15.6	28.8	23.8	7.5	54.3
	3/8	KQ2W11-36□S	17.46	15.4	17	19.3	45.1	48.1	15.6	28.8	23.8	7.5	37.8
	1/2	KQ2W11-37□S	22.23	15.4	17	19.3	49.3	50.6	15.6	28.8	23.8	7.5	86.5
$\phi 1/2$	1/4	KQ2W13-35□S	17.46	19.3	17	21.5	50.2	55.5	17	50.3	44.4	9	56.6
	3/8	KQ2W13-36□S	17.46	19.3	17	21.8	46	51	17	56	44.4	9.5	42.8
	1/2	KQ2W13-37□S	22.23	19.3	17	21.8	50.2	53.5	17	56	44.4	9.5	95.5

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread
Note) ϕD_1 is maximum diameter.



Dimensions

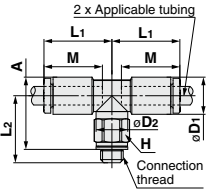
Male Branch Tee: KQ2T (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread UNF	Model	H (Width across flats)	Note)		L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
				øD1	øD2					Nylon	Urethane		
ø1/8	10-32UNF	KQ2T01-32□	7	7.1	7	15.3	14.2	14.2	13.3	3.2	2.7	2.5	3.5
ø5/32	10-32UNF	KQ2T03-32□	7	8.2	7	15.4	14.7	15.3	13.3	4.5	4.5	2.5	3.8
ø1/4	10-32UNF	KQ2T07-32□	7	11.1	7	15.4	16	18	13.3	4.5	4.5	2.5	4.7

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Male Branch Tee: KQ2T (Sealant)

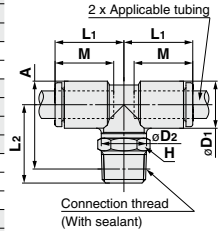


Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	(Note) øD1	øD2	L1	L2	A*	M	Effective area (mm²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø1/8	1/16	KQ2T01-33□S	11.11	7.1	10	14.5	24.2	23.7	13.3	3.4	2.9	2.5	9.7
	1/8	KQ2T01-34□S	11.11	7.1	10	14.5	16.6	17	13.3	3.4	2.9	2.5	6
	1/4	KQ2T01-35□S	14.29	7.1	10	14.5	21	20.2	13.3	3.4	2.9	2.5	15.6
ø5/32	1/16	KQ2T03-33□S	11.11	8.2	10	14.8	23.8	23.8	13.3	6	4.1	3	10
	1/8	KQ2T03-34□S	11.11	8.2	10	14.8	16.2	17.1	13.3	6	4.1	3	6.3
	1/4	KQ2T03-35□S	14.29	8.2	10	14.8	21.6	21.3	13.3	6	4.1	3	15.9
ø3/16	1/8	KQ2T05-34□S	11.11	9.1	10	15	16.7	18	13.3	8.4	7	3.5	6.6
	1/4	KQ2T05-35□S	14.29	9.1	10	15	22.1	22.2	13.3	8.4	7	3.5	16.2
	1/16	KQ2T07-33□S	11.11	11.1	10	15.6	25.3	26.8	13.3	8.5	8.5	3.5	11
ø1/4	1/8	KQ2T07-34□S	11.11	11.1	10	15.6	17.7	20	13.3	14	12.4	4.5	7.3
	1/4	KQ2T07-35□S	14.29	11.1	10	15.6	23.1	24.2	13.3	14	12.4	4.5	16.9
	3/8	KQ2T07-36□S	17.46	11.1	10	15.6	24.5	25.3	13.3	14	12.4	4.5	29.2
	1/8	KQ2T09-34□S	11.11	13.2	10	16.4	18.7	22.1	14.2	14	14	4.5	8.7
ø5/16	1/4	KQ2T09-35□S	14.29	13.2	12	17.2	24.1	26.3	14.2	26.3	18.2	6	15.9
	3/8	KQ2T09-36□S	17.46	13.2	12	17.2	25.5	27.4	14.2	26.3	18.2	6	27.9
	1/8	KQ2T11-34□S	12.7	15.4	12	18.6	23.1	27.6	15.6	21.2	21.2	6	14.4
ø3/8	1/4	KQ2T11-35□S	17.46	15.4	17	19.3	28.5	31.8	15.6	28.8	23.8	7.5	24.1
	3/8	KQ2T11-36□S	17.46	15.4	17	19.3	29.1	32.1	15.6	28.8	23.8	7.5	22.2
	1/2	KQ2T11-37□S	22.23	15.4	17	19.3	33.3	34.6	15.6	28.8	23.8	7.5	48.7
ø1/2	1/4	KQ2T13-35□S	17.46	19.3	17	21.5	30.4	35.7	17	57.3	50.6	9	28.1
	3/8	KQ2T13-36□S	17.46	19.3	17	21.8	26.2	31.2	17	63.8	50.6	9.5	24.4
	1/2	KQ2T13-37□S	22.23	19.3	17	21.8	30.4	33.7	17	63.8	50.6	9.5	50.5

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread

Note) øD1 is maximum diameter.



Fittings

KQ2

KDM6

KDM

INDEX

Series KQ2

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

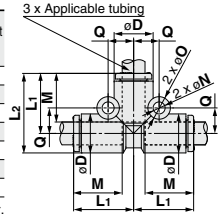
Dimensions

Union Tee: KQ2T



Applicable tubing O.D. (inch)	Model	Note) ϕD	L1	L2	M	Q	ϕO	ϕN	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
$\phi 1/8$	KQ2T01-00A	7.1	14.9	18.5	13.3	5.4	6	3.2	3.4	2.9	2.3
$\phi 5/32$	KQ2T03-00A	8.2	15.3	19.4	13.3	5.7	6	3.2	6.4	4.4	2.8
$\phi 3/16$	KQ2T05-00A	9.1	15.7	20.3	13.3	6.2	6	3.2	8.4	7	3.2
$\phi 1/4$	KQ2T07-00A	11.1	16.5	22.1	13.3	7.2	6	3.2	14.4	12.4	4.3
$\phi 5/16$	KQ2T09-00A	13.2	18.2	24.8	14.2	8.4	8	4.2	25.6	17.7	6
$\phi 3/8$	KQ2T11-00A	15.4	20.4	28.1	15.6	9.9	8	4.2	28.8	23.8	10.2
$\phi 1/2$	KQ2T13-00A	19.3	23.4	33	17	11.8	8	4.2	64.6	50.6	16.9

Note) ϕD is maximum diameter.

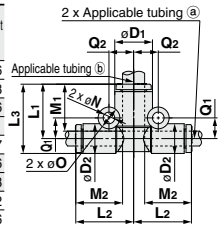


Different Diameter Tee: KQ2T



Applicable tubing O.D. (inch)	Model	Note) ϕD_1	ϕD_2	L1	L2	L3	M1	M2	Q1	Q2	ϕO	ϕN	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
$\phi 1/8$	$\phi 5/32$ KQ2T01-03A	8.2	7.1	14.9	15.3	18.5	13.3	13.3	5.4	5.8	6	3.2	3.8	3.5	2.6
$\phi 1/4$	KQ2T01-07A	11.1	7.1	14.9	16.5	18.5	13.3	13.3	5.3	7.2	6	3.2	3.8	3.5	3.2
$\phi 5/32$	KQ2T03-05A	9.1	8.2	15.3	15.7	19.4	13.3	13.3	5.7	6.2	6	3.2	7.1	6.6	2.6
$\phi 1/4$	KQ2T03-07A	11.1	8.2	15.3	16.5	19.4	13.3	13.3	5.7	7.2	6	3.2	7.1	6.6	4.1
$\phi 3/16$	KQ2T05-07A	11.1	9.1	15.7	16.5	20.3	13.3	13.3	6.2	7.2	6	3.2	8.4	7	4.6
$\phi 5/16$	KQ2T07-09A	13.2	11.1	17.4	17.3	23	14.2	13.3	7.4	8.4	8	4.2	14.4	12.4	6
$\phi 1/4$	KQ2T07-11A	15.4	11.1	18.8	18.1	24.4	15.6	13.3	7.7	9.9	8	4.2	14.4	12.4	6.4
$\phi 3/8$	KQ2T09-11A	15.4	13.2	19.6	19	26.2	15.6	14.2	8.7	9.9	8	4.2	26.3	18.3	7
$\phi 5/16$	KQ2T09-13A	19.3	13.2	21	20.6	27.6	17	14.2	8.7	11.8	8	4.2	26.3	18.3	8.1
$\phi 3/8$	KQ2T11-13A	19.3	15.4	21.8	22	29.5	17	15.6	9.9	11.8	8	4.2	28.8	23.8	9.6

Note) ϕD_1 is maximum diameter.

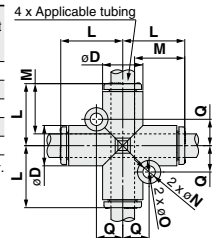


Cross: KQ2TW



Applicable tubing O.D. (inch)	Model	Note) ϕD	L	Q	M	ϕO	ϕN	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
$\phi 5/32$	KQ2TW03-00A	8.2	15.3	5.7	13.3	6	3.2	6.4	4.4	3
$\phi 1/4$	KQ2TW07-00A	11.1	16.5	7.2	13.3	6	3.2	14.4	12.4	4.6
$\phi 5/16$	KQ2TW09-00A	13.2	18.2	8.4	14.2	8	4.2	25.6	17.7	6
$\phi 3/8$	KQ2TW11-00A	15.4	20.4	9.9	15.6	8	4.2	28.8	23.8	7
$\phi 1/2$	KQ2TW13-00A	19.3	23.4	11.8	17	8	4.2	64.6	50.6	9.6

Note) ϕD is maximum diameter.



Dimensions

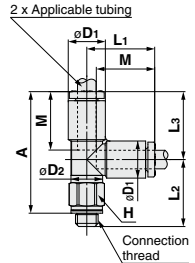
Male Run Tee: KQ2Y (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread UNF	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A	M	Effective area (mm²) Nylon Urethane	Min. port size	Weight (g)
ø1/8	10-32UNF	KQ2Y01-32□	7	7.1	7	15.3	14.2	15.3	26	13.3	3.2 2.7	2.5	3.5
ø5/32	10-32UNF	KQ2Y03-32□	7	8.2	7	15.4	14.7	15.4	26.6	13.3	4.5 4.5	2.5	3.8
ø1/4	10-32UNF	KQ2Y07-32□	7	11.1	7	16.5	16	16.5	29	13.3	4.5 4.5	2.5	4.7

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Male Run Tee: KQ2Y (Sealant)

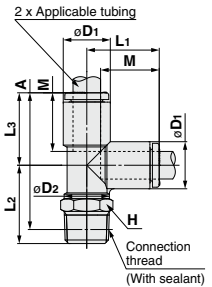


Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	Effective area (mm²) Nylon Urethane	Min. port size	Weight (g)
ø1/8	1/16	KQ2Y01-33□S	11.11	7.1	10	14.9	24.2	14.9	35.1	13.3	3.4 2.9	2.5	9.8
	1/8	KQ2Y01-34□S	11.11	7.1	10	14.9	16.6	14.9	28.4	13.3	3.4 2.9	2.5	6.1
	1/4	KQ2Y01-35□S	14.29	7.1	10	14.9	21	14.9	31.6	13.3	3.4 2.9	2.5	15.6
ø5/32	1/16	KQ2Y03-33□S	11.11	8.2	10	15.3	23.8	15.3	35	13.3	6.4 4.4	3	10.1
	1/8	KQ2Y03-34□S	11.11	8.2	10	15.3	16.2	15.3	28.3	13.3	6.4 4.4	3	6.4
	1/4	KQ2Y03-35□S	14.29	8.2	10	15.3	21.6	15.3	32.5	13.3	6.4 4.4	3	15.9
ø3/16	1/8	KQ2Y05-34□S	11.11	9.1	10	15.7	16.7	15.7	29.2	13.3	8.4 7	3.5	6.7
	1/4	KQ2Y05-35□S	14.29	9.1	10	15.7	22.1	15.7	33.4	13.3	8.4 7	3.5	16.3
	1/16	KQ2Y07-33□S	11.11	11.1	10	16.5	25.3	16.5	37.7	13.3	8.5 8.5	3.5	11
ø1/4	1/8	KQ2Y07-34□S	11.11	11.1	10	16.5	17.7	16.5	31	13.3	14	12.4	7.3
	1/4	KQ2Y07-35□S	14.29	11.1	10	16.5	23.1	16.5	35.2	13.3	14	12.4	16.9
	3/8	KQ2Y07-36□S	17.46	11.1	10	16.5	24.5	16.5	36.3	13.3	14	12.4	29.2
ø5/16	1/8	KQ2Y09-34□S	11.11	13.2	10	18.2	18.7	18.2	33.7	14.2	14	14	8.8
	1/4	KQ2Y09-35□S	14.29	13.2	12	18.2	24.1	18.2	37.9	14.2	25.6	17.7	16
	3/8	KQ2Y09-36□S	17.46	13.2	12	18.2	25.5	18.2	39	14.2	25.6	17.7	28
ø3/8	1/4	KQ2Y11-35□S	17.46	15.4	17	20.4	28.5	20.4	44.5	15.6	28.8	23.8	24.3
	3/8	KQ2Y11-36□S	17.46	15.4	17	20.4	29.1	20.4	44.8	15.6	28.8	23.8	7.5 22.3
	1/2	KQ2Y11-37□S	22.23	15.4	17	20.4	33.3	20.4	47.3	15.6	28.8	23.8	7.5 48.8
ø1/2	1/4	KQ2Y13-35□S	17.46	19.3	17	23.4	30.4	23.4	49.4	17	57.3	50.6	9 28.5
	3/8	KQ2Y13-36□S	17.46	19.3	17	23.4	26.2	23.4	44.9	17	63.8	50.6	9.5 24.7
	1/2	KQ2Y13-37□S	22.23	19.3	17	23.4	30.4	23.4	47.4	17	63.8	50.6	9.5 50.7

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread

Note) øD1 is maximum diameter.



Series KQ2

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

Dimensions

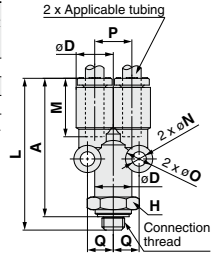
Branch “Y”: KQ2U (Gasket seal)



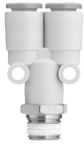
Applicable tubing O.D. (inch)	Connection thread UNF	Model	H (Width across flats)	Note) øD	L	P	A	M	Q	øO	øN	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
ø1/8	10-32UNF	KQ2U01-32□	8	7.1	33.8	7.1	30.3	13.3	5.2	6	3.2	2.2 2.2	1.8	5
ø5/32	10-32UNF	KQ2U03-32□	10	8.2	33.9	8.2	30.4	13.3	5.7	6	3.2	2.2 2.2	1.8	6.6
ø1/4	10-32UNF	KQ2U07-32□	12	11.1	35.2	11.1	31.7	13.3	7.6	8	4	2.2 2.2	1.8	11.2

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD is maximum diameter.



Branch “Y”: KQ2U (Sealant)

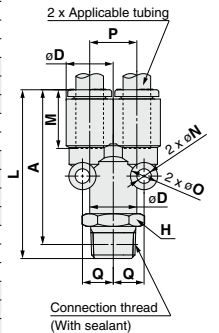


Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD	L	P	A*	M	Q	øO	øN	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
ø1/8	1/16	KQ2U01-33□S	9	7.1	37.3	7.1	33.2	13.3	5.2	6	3.2	3.4 2.9	2.5	7.1
	1/8	KQ2U01-34□S	11.11	7.1	36.4	7.1	33.2	13.3	5.2	6	3.2	3.4 2.9	2.7	9.5
	1/4	KQ2U01-35□S	14.29	7.1	40.8	7.1	36.4	13.3	5.2	6	3.2	3.4 2.9	2.7	20
ø5/32	1/16	KQ2U03-33□S	9	8.2	37.4	8.2	33.3	13.3	5.7	6	3.2	4.2 4.2	3.6	7.3
	1/8	KQ2U03-34□S	11.11	8.2	36.5	8.2	33.3	13.3	5.7	6	3.2	4.2 4.2	3.6	9.8
	1/4	KQ2U03-35□S	14.29	8.2	40.9	8.2	36.5	13.3	5.7	6	3.2	4.2 4.2	3.6	20.1
ø3/16	1/8	KQ2U05-34□S	11.11	9.1	37.1	9.1	33.9	13.3	6.2	6	3.2	8.4 7	4.1	10.2
	1/4	KQ2U05-35□S	14.29	9.1	41.5	9.1	37.1	13.3	6.2	6	3.2	8.4 7	4.1	20.5
ø1/4	1/16	KQ2U07-33□S	12.7	11.1	38.7	11.1	34.6	13.3	7.6	8	4	14.4 12.4	4.6	11.6
	1/8	KQ2U07-34□S	12.7	11.1	37.8	11.1	34.6	13.3	7.6	8	4	14.4 12.4	5.6	12
	1/4	KQ2U07-35□S	14.29	11.1	42.2	11.1	37.8	13.3	7.6	8	4	14.4 12.4	5.6	21.1
	3/8	KQ2U07-36□S	17.46	11.1	43.6	11.1	38.9	13.3	7.6	8	4	14.4 12.4	5.6	33.5
	1/8	KQ2U09-34□S	14.29	13.2	40.7	13.2	37.5	14.2	8.7	8	4.2	25.6 17.7	6	16.4
ø5/16	1/4	KQ2U09-35□S	14.29	13.2	45.1	13.2	40.7	14.2	8.7	8	4.2	25.6 17.7	7.3	21.9
	3/8	KQ2U09-36□S	17.46	13.2	46.5	13.2	41.8	14.2	8.7	8	4.2	25.6 17.7	7.3	34.1
	1/4	KQ2U11-35□S	17.46	15.4	48.6	15.4	44.2	15.6	9.9	8	4.2	28.8 23.8	8.9	25.7
ø3/8	3/8	KQ2U11-36□S	17.46	15.4	50	15.4	45.3	15.6	9.9	8	4.2	28.8 23.8	8.9	35
	1/2	KQ2U11-37□S	22.23	15.4	54.2	15.4	47.8	15.6	9.9	8	4.2	28.8 23.8	8.9	62.8
	1/4	KQ2U13-35□S	22	19.3	53.4	19.3	49	17	11.8	8	4.2	57.3 50.6	9	42
ø1/2	3/8	KQ2U13-36□S	22	19.3	54.8	19.3	50.1	17	11.8	8	4.2	64.6 50.6	11	45.8
	1/2	KQ2U13-37□S	22.23	19.3	59	19.3	52.6	17	11.8	8	4.2	64.6 50.6	12.1	62.1

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread

Note) øD is maximum diameter.



Inch Size One-touch Fittings *Series KQ2*

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

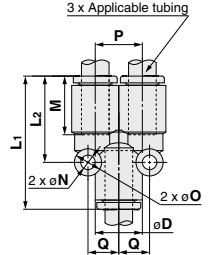
Dimensions

Union "Y": KQ2U



Applicable tubing O.D. (inch)	Model	Note) øD	L1	L2	P	M	Q	øO	øN	Effective area (mm ²)	Min. port size	Weight (g)
ø1/8	KQ2U01-00A	7.1	28.9	18	7.1	13.3	5.2	6	3.2	3.4	2.9	3.2
ø5/32	KQ2U03-00A	8.2	29	18.2	8.2	13.3	5.7	6	3.2	4.2	4.2	4.1
ø3/16	KQ2U05-00A	9.1	29.6	18.9	9.1	13.3	6.2	6	3.2	8.4	7	4.8
ø1/4	KQ2U07-00A	11.1	30.3	20.2	11.1	13.3	7.6	8	4	14.4	12.4	6.4
ø5/16	KQ2U09-00A	13.2	33.2	22.3	13.2	14.2	8.7	8	4.2	25.6	17.7	8.1
ø3/8	KQ2U11-00A	15.4	36.7	24.6	15.4	15.6	9.9	8	4.2	28.8	23.8	9.6

Note) øD is maximum diameter.

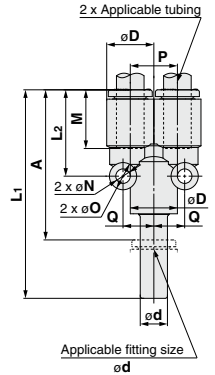


Plug-in "Y": KQ2U



Applicable tubing O.D. (inch)	Applicable fitting size ød (inch)	Model	Note) øD	L1	L2	P	A	M	Q	øO	øN	Effective area (mm ²)	Min. port size	Weight (g)	
ø1/8	ø1/8	KQ2U01-99A	7.1	45.1	18	7.1	31.8	13.3	5.2	6	3.2	3.4	2.9	2	2.5
ø5/32	ø5/32	KQ2U03-99A	8.2	44.8	18.2	8.2	31.5	13.3	5.7	6	3.2	4.2	4.2	2.5	3.1
ø3/16	ø3/16	KQ2U05-99A	9.1	46.1	18.9	9.1	32.8	13.3	6.2	6	3.2	8.4	7	3.5	3.6
ø1/4	ø1/4	KQ2U07-99A	11.1	46.8	20.2	11.1	33.5	13.3	7.6	8	4	14.4	12.4	4.6	5.5
ø5/16	ø5/16	KQ2U09-99A	13.2	52.1	22.3	13.2	37.9	14.2	8.7	8	4.2	25.6	17.7	6	8

Note) øD is maximum diameter.

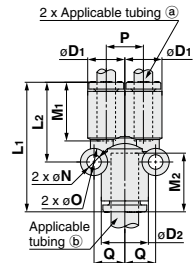


Different Diameter Union "Y": KQ2U



Applicable tubing O.D. (inch)		Model	Note) øD1	Note) øD2	L1	L2	P	M1	M2	Q	øO	øN	Effective area (mm ²)	Min. port size	Weight (g)	
(a)	(b)												Nylon			
ø1/8	ø5/32	KQ2U01-03A	7.1	8.2	28.9	18	7.1	13.3	13.3	5.7	6	3.2	3.2	2.7	3.3	2.7
	ø1/4	KQ2U01-07A	7.1	11.1	30.3	18.5	7.1	13.3	13.3	7.2	6	3.2	3.2	2.7	3.3	3.3
ø5/32	ø3/16	KQ2U03-05A	8.2	9.1	29.6	18.8	8.2	13.3	13.3	6.2	6	3.2	4.2	4.2	4.1	3.2
	ø1/4	KQ2U03-07A	8.2	11.1	30.3	19	8.2	13.3	13.3	7.2	6	3.2	4.2	4.2	4.1	3.6
ø3/16	ø1/4	KQ2U05-07A	9.1	11.1	30.6	19.8	9.1	13.3	13.3	7.2	6	3.2	8.4	7	4.8	3.9
ø1/4	ø5/16	KQ2U07-09A	11.1	13.2	32.3	21.3	11.1	13.3	14.2	8.6	8	4	14.4	12.4	6.4	6
	ø3/8	KQ2U07-11A	11.1	15.4	34.4	21.7	11.1	13.3	15.6	9.8	8	4	14.4	12.4	6.4	7.2
ø5/16	ø3/8	KQ2U09-11A	13.2	15.4	35.3	23	13.2	14.2	15.6	9.9	8	4.2	26.3	18.3	8.1	8.5
	tubing 1/2	KQ2U09-13A	13.2	19.3	38.7	24.2	13.2	14.2	17	11.8	8	4.2	26.3	18.3	8.1	11.2
ø3/8	ø1/2	KQ2U11-13A	15.4	19.3	40.1	26.6	15.4	15.6	17	11.8	8	4.2	28.8	23.8	9.6	13

Note) øD1, øD2 are maximum diameters.



Fittings

KQ2

KDM6

KDM

Series KQ2

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

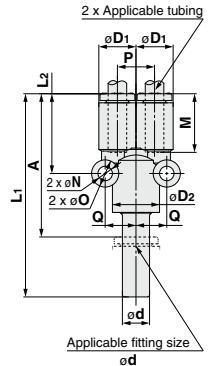
Dimensions

Different Diameter Plug-in “Y”: KQ2X



Applicable tubing O.D. (inch)	Applicable fitting size ød (inch)	Model	Note) øD1	Note) øD2	L1	L2	A	P	M	Q	øO	øN	Effective area (mm ²)		Min. port size	Weight (g)
													Nylon	Urethane		
ø1/8	ø5/32	KQ2X01-03A	7.1	8.2	44.7	18	42.2	7.1	13.3	5.7	6	3.2	3.2	2.7	2.5	2.8
ø5/32	ø3/16	KQ2X03-05A	8.2	9.1	46.1	18.8	42.6	8.2	13.3	6.2	6	3.2	3.4	2.9	3.5	3.3
	ø1/4	KQ2X03-07A	8.2	11.1	46.8	19	42.2	8.2	13.3	7.2	6	3.2	3.4	2.9	4.1	4
ø3/16	ø1/4	KQ2X05-07A	9.1	11.1	47.1	19.8	42.5	9.1	13.3	7.2	6	3.2	8.4	7	4.6	4.4
ø1/4	ø5/16	KQ2X07-09A	11.1	13.2	51.2	21.3	45.2	11.1	13.3	8.6	8	4	14.4	12.4	6	6.5

Note) øD1, øD2 are maximum diameters.

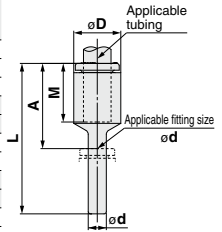


Plug-in Reducer: KQ2R



Applicable tubing O.D. (inch)	Applicable fitting size ød (inch)	Model	Note) øD	L	A	M	Effective area (mm ²)		Min. port size	Weight (g)
							Nylon	Urethane		
ø1/8	ø5/32	KQ2R01-03A	7.1	28.6	15.3	13.3	3.4	2.9	2.5	0.8
	ø3/16	KQ2R01-05A	7.1	28.7	15.4	13.3	3.4	2.9	2.5	0.8
	ø1/4	KQ2R01-07A	7.1	28.4	15.1	13.3	3.4	2.9	2.5	1
ø5/32	ø3/16	KQ2R03-05A	8.2	28.7	15.4	13.3	5.6	4	3	1
	ø1/4	KQ2R03-07A	8.2	31.8	18.5	13.3	5.6	4	3	1.2
ø3/16	ø1/4	KQ2R05-07A	9.1	31.4	18.1	13.3	7.8	6.5	3.5	1.3
	ø5/16	KQ2R05-09A	9.1	33.4	19.2	13.3	7.8	6.5	3.5	1.5
	ø5/16	KQ2R07-09A	11.1	33.3	19.1	13.3	13.5	11.5	4.6	1.7
ø1/4	ø3/8	KQ2R07-11A	11.1	35.9	20.3	13.3	13.5	11.5	4.6	2.2
	ø3/8	KQ2R09-11A	13.2	36.2	20.6	14.2	26	18.1	6	2.8
ø5/16	ø1/2	KQ2R09-13A	13.2	37.2	20.2	14.2	26	18.1	6	3.5
	ø3/8	KQ2R11-13A	15.4	39.5	22.5	15.6	35.3	29.1	7	4.2

Note) øD is maximum diameter.

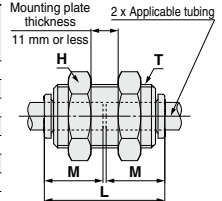


Bulkhead Union: KQ2E (Interchangeable with KQ)



Applicable tubing O.D. (inch)	Model	T (UNF)	H (Width across flats)	L	Mounting hole	M	Effective area (mm ²)		Min. port size	Weight (g)
							Nylon	Urethane		
ø1/8	KQ2E01-00□	1/2-20UNF	17.46	27.8	13.5	13.3	3.4	2.9	2.5	26.9
ø5/32	KQ2E03-00□	1/2-20UNF	17.46	27.8	13.5	13.3	5.6	4	3	25.7
ø3/16	KQ2E05-00□	9/16-18UNF	17.46	29.8	15	13.3	7.8	6.5	3.5	40.3
ø1/4	KQ2E07-00□	9/16-18UNF	17.46	29.8	15	13.3	13.5	11.5	4.6	36.9
ø5/16	KQ2E09-00□	3/4-16UNF	22.23	31.8	20	14.2	26.1	18	6	61.2
ø3/8	KQ2E11-00□	7/8-14UNF	25.4	33.8	23	15.6	35.3	29.1	7	83.4
ø1/2	KQ2E13-00□	1-12UNF	28.57	37.8	26	17	66	51.7	9.6	109.2

□/A: Brass, N: Brass + Electroless nickel plated

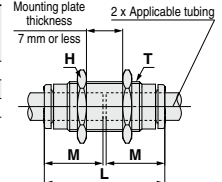


Bulkhead Union: KQ2E (Interchangeable with KJ)



Applicable tubing O.D. (inch)	Model	T (UNF)	H (Width across flats)	L	Mounting hole	M	Effective area (mm ²)		Min. port size	Weight (g)
							Nylon	Urethane		
ø1/8	KQ2E01-00□J	3/8-24UNF	12.7	27.3	10.5	13.3	3	2.5	2.5	12.6
ø5/32	KQ2E03-00□J	3/8-24UNF	12.7	27.3	10.5	13.3	4	4	3	11.9
ø1/4	KQ2E07-00□J	1/2-20UNF	15.88	27.3	14	13.3	13.5	11.5	4.6	19.2

□/A: Brass, N: Brass + Electroless nickel plated



Inch Size One-touch Fittings *Series KQ2*

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

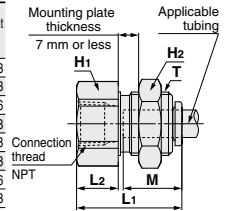
Dimensions

Bulkhead Connector: KQ2E



Applicable tubing O.D. (inch)	Connection thread NPT	Model	T (UNF)	H ₁ (Width across flats)	H ₂ (Width across flats)	L ₁	L ₂	Mounting hole	M	Effective area (mm ²)		Min. port size	Weight (g)
ø1/8	1/4	KQ2E01-35□	1/2-20UNF	17.46	17.46	28.7	13.3	13.5	13.3	3.4	2.9	2.5	33.3
ø5/32	1/4	KQ2E03-35□	1/2-20UNF	17.46	17.46	29	13.6	13.5	13.3	5.6	4	3	33.3
ø3/16	1/8	KQ2E05-34□	9/16-18UNF	17.46	17.46	25.6	9.2	15	13.3	7.8	6.5	3.5	36.6
ø1/4	1/4	KQ2E07-35□	9/16-18UNF	17.46	17.46	29.9	13.5	15	13.3	13.5	11.5	4.6	38.8
ø5/16	3/8	KQ2E09-36□	3/4-16UNF	22.23	22.23	31	13.6	20	14.2	26.1	18	6	61.8
ø3/8	3/8	KQ2E11-36□	7/8-14UNF	25.4	25.4	31.4	12	23	15.6	35.3	29.1	7	83.8
ø1/2	3/8	KQ2E13-36□	1-12UNF	28.57	28.57	32	11.6	26	17	66	51.7	9.6	106.6
	1/2	KQ2E13-37□	1-12UNF	28.57	28.57	36.1	15.7	26	17	66	51.7	9.6	114.3

□/A: Brass, N: Brass + Electroless nickel plated



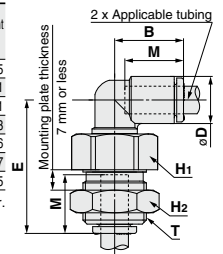
Bulkhead Male Elbow: KQ2LE



Applicable tubing O.D. (inch)	Model	T (UNF)	H1 (Width across flats)	H2 (Width across flats)	B	E	Note) øD	Mounting hole	M	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)
ø1/8	KQ2LE01-00□	1/2-20UNF	17.46	17.46	14.5	28.9	7.1	13.5	13.3	3	2.5	2.5
ø5/32	KQ2LE03-00□	1/2-20UNF	17.46	17.46	14.8	28.5	8.2	13.5	13.3	4.2	4.2	3
ø3/16	KQ2LE05-00□	9/16-18UNF	17.46	17.46	15	29.7	9.1	15	13.3	6.8	5.6	3.5
ø1/4	KQ2LE07-00□	9/16-18UNF	17.46	17.46	15.6	30.7	11.1	15	13.3	11.3	10	4.5
ø5/16	KQ2LE09-00□	3/4-16UNF	22.23	22.23	17.2	34.2	13.2	20	14.2	21.6	14.9	6
ø3/8	KQ2LE11-00□	7/8-14UNF	25.4	25.4	19.3	32.6	15.4	23	15.6	28.8	23.8	7
ø1/2	KQ2LE13-00□	1-12UNF	28.57	28.57	21.8	43.2	19.3	26	17	56	44.4	9.5

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD is maximum diameter.

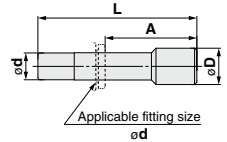


Plug: KQ2P



Applicable fitting size ød (inch)	Model	Note) øD	L	A	Weight (g)
ø1/8	KQ2P-01	5	31.5	18.2	1
ø5/32	KQ2P-03	6	32	18.7	1
ø3/16	KQ2P-05	6.8	34	20.7	1
ø1/4	KQ2P-07	8.5	35	21.7	1
ø5/16	KQ2P-09	10	39	24.8	2
ø3/8	KQ2P-11	11.5	43	27.4	3.5
ø1/2	KQ2P-13	15	45.5	28.5	5

Note) øD is maximum diameter.



Fittings

KQ2

KDM6

KDM

Series KQ2

Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

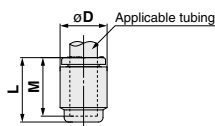
Dimensions

Tube Cap: KQ2C



Applicable tubing O.D. (inch)	Model	Note) ϕD	L	M	Weight (g)
$\phi 5/32$	KQ2C03-00A	8.2	14.5	13.3	0.8
$\phi 1/4$	KQ2C07-00A	11.1	14.8	13.3	1.3
$\phi 5/16$	KQ2C09-00A	13.2	15.7	14.2	2
$\phi 3/8$	KQ2C11-00A	15.4	17.3	15.6	2.8

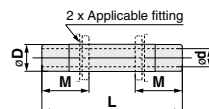
Note) ϕD is maximum diameter.



Nipple: KQ2N



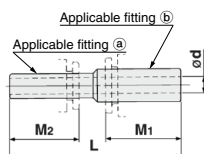
Applicable fitting ϕD	Model	L	M	ϕd Min. port size	Weight (g)
$\phi 1/8$	KQ2N01-99	36	13.3	2.1	0.2
$\phi 3/16$	KQ2N05-99	38	13.3	3.4	0.4
$\phi 1/4$	KQ2N07-99	39	13.3	4.6	1
$\phi 3/8$	KQ2N11-99	49	15.6	7	2
$\phi 1/2$	KQ2N13-99	51	17	9.5	3.5



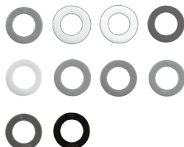
Reducer Nipple: KQ2N



Applicable fitting		Model	L	M1	M2	ϕd Min. port size	Weight (g)
(a)	(b)						
$\phi 1/8$	$\phi 5/32$	KQ2N01-03	36.5	13.3	13.3	2.1	0.2
	$\phi 3/16$	KQ2N01-05	37	13.3	13.3	2.1	0.4
$\phi 5/32$	$\phi 3/16$	KQ2N03-05	37.5	13.3	13.3	2.5	0.4
	$\phi 1/4$	KQ2N03-07	38	13.3	13.3	2.5	0.6
$\phi 3/16$	$\phi 1/4$	KQ2N05-07	38.5	13.3	13.3	3.4	0.6
	$\phi 5/16$	KQ2N05-09	41	13.3	13.3	3.4	1
$\phi 1/4$	$\phi 5/16$	KQ2N07-09	41.5	13.3	13.3	4.6	1
	$\phi 3/8$	KQ2N07-11	45	15.6	13.3	4.6	1
$\phi 5/16$	$\phi 3/8$	KQ2N09-11	46.5	15.6	14.2	6	1.8
	$\phi 1/2$	KQ2N09-13	47.5	17	14.2	6	2.6
$\phi 3/8$	$\phi 1/2$	KQ2N11-13	50	17	15.6	7	3.2

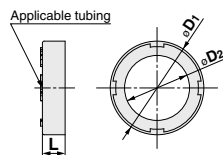


Color Cap: KQ2C



Applicable tubing O.D. (inch)	Model	$\phi D1$	$\phi D2$	L	Weight (g)	Note
$\phi 1/8$	KQ2C-01A	7.3	4.3	2.6	0.1	Applicable for products with enlarged outside diameter of release button
$\phi 3/16$	KQ2C-05A	9	5.9	2.6	0.1	
$\phi 1/4$	KQ2C-07B	11.5	7.5	2.6	0.1	
$\phi 3/8$	KQ2C-11B	15.7	10.7	2.7	0.1	
$\phi 1/2$	KQ2C-13B	19.6	13.9	2.7	0.2	

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



In order to improve the operability, the outside diameter of the release button has been enlarged for the New KQ2 series. Along with this change, the usable color caps differ before and after the change. Refer to page 439 for details.

1 Made to Order

Symbol	Specifications
X12	Lubricant: White vaseline Release button color: White
X35 (Note)	Body color: Black Release button color: Orange

Note) The following models are not available as made-to-order: Hexagon socket head male connector/KQ2S, Bulkhead union/KQ2E, Bulkhead connector/KQ2E, Nipple/KQ2N, Reducer nipple/KQ2N, Male connector/KQ2H, Female connector/KQ2F, Color cap/KQ2C, Plug/KQ2P

2 Clean Series

Please consult with SMC separately for applicable models.

Symbol	Specifications
10-	Brass parts: With electroless nickel plated Lubricant: Fluorine grease Air blow in a clean room Double package Resin body/Release button color: White

Example) **10-KQ2H07-35NS** (With thread)
10-KQ2H07-00A (Without thread)

3 Spare Parts

Description	Part no.	Applicable thread
Gasket	M-5G2	10-32UNF

Brass

Description	Part no.	Applicable model
Pipe nut	KQ01-P01AJ	KQ2E01-00AJ, KQ2E03-00AJ
	KQ07-P01AJ	KQ2E07-00AJ
	KQ01-P01A	KQ2E01-00A, KQ2E03-00A, KQ2E01-35A
		KQ2E03-35A, KQ2LF01-00A, KQ2LE03-00A
	KQ05-P01A	KQ2E05-00A, KQ2E07-00A, KQ2E05-34A
		KQ2E07-35A, KQ2LF05-00A, KQ2LE07-00A
	KQ09-P01A	KQ2E09-00A, KQ2E09-36A, KQ2LE09-00A
	KQ11-P01A	KQ2E11-00A, KQ2E11-36A, KQ2LE11-00A
	KQ13-P01A	KQ2E13-00A, KQ2E13-36A
		KQ2E13-37A, KQ2LE13-00A

Brass + Electroless nickel plated

Description	Part no.	Applicable model
Pipe nut	KQ01-P01NJ	KQ2E01-00NJ, KQ2E03-00NJ
	KQ07-P01NJ	KQ2E07-00NJ
	KQ01-P01N	KQ2E01-00N, KQ2E03-00N, KQ2E01-35N
		KQ2E03-35N, KQ2LF01-00N, KQ2LE03-00N
	KQ05-P01N	KQ2E05-00N, KQ2E07-00N, KQ2E05-34N
		KQ2E07-35N, KQ2LF05-00N, KQ2LE07-00N
	KQ09-P01N	KQ2E09-00N, KQ2E09-36N, KQ2LE09-00N
	KQ11-P01N	KQ2E11-00N, KQ2E11-36N, KQ2LE11-00N
	KQ13-P01N	KQ2E13-00N, KQ2E13-36N
		KQ2E13-37N, KQ2LE13-00N

Color Cap

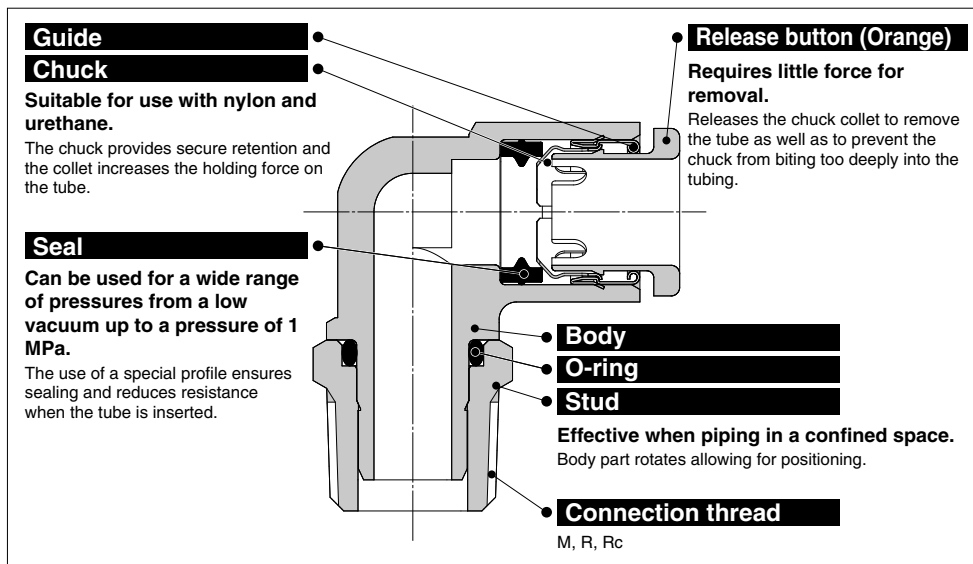
Applicable tubing O.D. inch	Model	øD1	øD2	L	Weight g	Note
ø1/4	KQ2C-07□A	10.7	7.5	2.6	0.1	Applicable for products before enlargement of outside diameter of release button
ø3/8	KQ2C-11□A	14.8	10.7	2.7	0.1	
ø1/2	KQ2C-13□A	18.5	13.9	2.7	0.1	

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

Inch Size One-touch Fittings

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

Series KQ2



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

Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon, Polyurethane
Tubing O.D.	ø1/8", ø3/16", ø1/4", ø5/16", ø3/8", ø1/2"

Specifications

Fluid		Air/Water ^{Note 1)}
Operating pressure range ^{Note 2)}		-100 kPa to 1 MPa
Proof pressure (at 23°C)		3 MPa
Ambient and fluid temperature		-5 to 60°C, Water: 0 to 40°C (No freezing)
Thread	Mounting section	JIS B0203 (Taper thread for piping) JIS B0205 (Metric coarse thread)
	Nut section	JIS B0205 (Metric fine thread)
Seal on the threads		With sealant

Note 1) The surge pressure must be under the maximum operating pressure.

Note 2) Do not use the fittings with a leak tester or for vacuum retention because they are not guaranteed for zero leakage.

Principal Parts Material

Body	C3604, PBT, PP, Stainless steel 303
Stud	C3604 (Thread portion), Stainless steel 303 (Thread portion)
Chuck	Stainless steel 304
Guide	Stainless steel 304
Release button	POM
Seal, O-ring	NBR
Gasket	Stainless steel 304, NBR



Made to Order Specifications
(Refer to page 381 for details.)

How to Order

Threaded Type

KQ2 H 05 - 01 A S

One-touch Fittings

Model

Symbol	Model
H	Male connector
L	Male elbow
T	Male branch tee
W	Extended male elbow
Y	Male run tee
U	Branch "Y"
E	Bulkhead union
	Bulkhead connector

Applicable tubing O.D.

Symbol	Size
01	ø1/8"
05	ø3/16"
07	ø1/4"
09	ø5/16"
11	ø3/8"
13	ø1/2"

Male thread seal method

Symbol	Seal method
Nil	None
S	With thread sealant

Thread material/Surface treatment

Symbol	Thread material/Surface treatment
A	Brass
N	Brass + Electroless nickel plated
Bulkhead union	M□ Only for "Bulkhead union"

* □: A, N

Port size

Symbol	Size
M5	M5 x 0.8
01	1/8
02	1/4
03	3/8
04	1/2
00*	Same diameter tubing

* Only for "Bulkhead union".

Spare Parts

Use the part number below to order the gasket for M5 thread.
Gasket for M5 thread: M-5G2

Fittings

KQ2

KDM6

KDM

INDEX

Inch Size One-touch Fittings

Variations

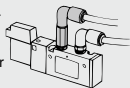
Extended male elbow

KQ2W

P.379



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



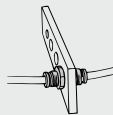
Bulkhead union

KQ2E

P.380



Use to connect tubing through a panel, etc.



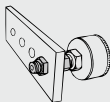
Bulkhead connector

KQ2E

P.380



Use to connect male thread and tubing through a panel, etc.



Male connector

KQ2H

P.378



Use to pipe a female thread. Most general model.

Male branch tee

KQ2T

P.379



Use to branch a female thread at both 90° angles.

Branch "Y"

KQ2U

P.380



Use to branch a female thread.

Male elbow

KQ2L

P.378



Use to pipe a female thread at right angles. Most general model.

Male run tee

KQ2Y

P.379



Use to branch a female thread at a 90° angle.

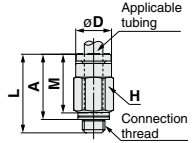
Dimensions

Male Connector: KQ2H (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread M	Model	H (Width across flats)	øD	L	A	M	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø1/8	M5 x 0.8	KQ2H01-M5□	7	6.7	17.3	14.3	13.3	3.0	2.5	2.5	2.7
ø3/16	M5 x 0.8	KQ2H05-M5□	10	8.3	17.6	14.6	13.3	4.0	4.0	2.5	4.6
ø1/4	M5 x 0.8	KQ2H07-M5□	12	10.9	18.4	15.4	13.3	4.0	4.0	2.5	6.5

□/A: Brass, N: Brass + Electroless nickel plated



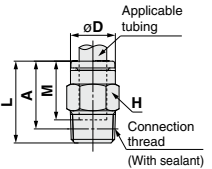
Male Connector: KQ2H (Sealant)



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	øD	L	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø1/8	1/8	KQ2H01-01□S	10	6.7	14	10.9	13.3	3.4	2.9	2.5	6
	1/4	KQ2H01-02□S	14	6.7	16.7	12	13.3	3.4	2.9	2.5	15.3
ø3/16	1/8	KQ2H05-01□S	10	8.3	17.9	14.8	13.3	7.8	6.5	3.5	6.4
	1/4	KQ2H05-02□S	14	8.3	16.7	12	13.3	7.8	6.5	3.5	13.9
ø1/4	1/8	KQ2H07-01□S	12	10.9	18.2	15.1	13.3	13.5	11.5	4.6	7.1
	1/4	KQ2H07-02□S	14	10.9	16.7	12	13.3	13.5	11.5	4.6	12.1
ø3/8	3/8	KQ2H07-03□S	17	10.9	18.1	13	13.3	13.5	11.5	4.6	24
	1/8	KQ2H09-01□S	14	13	22.5	19.4	14.2	26.1	18	6	11.9
ø5/16	1/4	KQ2H09-02□S	14	13	22	17.3	14.2	26.1	18	6	13.9
	3/8	KQ2H09-03□S	17	13	18.1	13	14.2	26.1	18	6	21
ø3/8	1/4	KQ2H11-02□S	17	15.1	26.9	22.2	15.6	35.3	29.1	7	22.5
	3/8	KQ2H11-03□S	17	15.1	23.2	18.1	15.6	35.3	29.1	7	22.9
ø1/2	1/2	KQ2H11-04□S	22	15.1	22.3	15.9	15.6	35.3	29.1	7	45.9
	1/4	KQ2H13-02□S	19	19	28.7	24	17	58.5	51.7	9	23.3
ø1/2	3/8	KQ2H13-03□S	19	19	27.2	22.1	17	66.0	51.7	9.6	26.2
	1/2	KQ2H13-04□S	22	19	22.3	15.9	17	66.0	51.7	9.6	35.4

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread



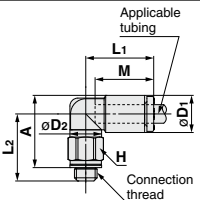
Male Elbow: KQ2L (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread M	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø1/8	M5 x 0.8	KQ2L01-M5□	7	7.1	7	15.3	14.3	14.9	13.3	2.6	2.2	2.5	3.1
ø1/4	M5 x 0.8	KQ2L07-M5□	7	11.1	7	15.4	16.1	18.7	13.3	3.5	3.5	2.5	3.6

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



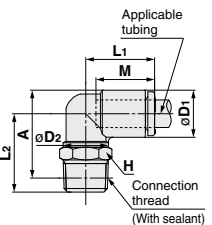
Male Elbow: KQ2L (Sealant)



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø3/16	1/8	KQ2L05-01□S	10	9.1	10	15	16.7	18.2	13.3	6.8	5.6	3.5	5
	1/4	KQ2L05-02□S	14	9.1	10	15	22.2	22.1	13.3	6.8	5.6	3.5	14.5
ø1/4	1/8	KQ2L07-01□S	10	11.1	10	15.6	17.7	20.2	13.3	11.3	10	4.5	5.3
	1/4	KQ2L07-02□S	14	11.1	10	15.6	23.2	24.1	13.3	11.3	10	4.5	14.8
ø3/8	3/8	KQ2L07-03□S	17	11.1	10	15.6	24.5	25.0	13.3	11.3	10	4.5	26.5
	1/8	KQ2L09-01□S	10	13.2	10	16.4	18.7	22.2	14.2	11.4	11.4	4.5	6.1
ø5/16	1/4	KQ2L09-02□S	14	13.2	12	17.2	25.4	27.3	14.2	21.6	14.9	6	17.7
	3/8	KQ2L09-03□S	17	13.2	12	17.2	25.5	27.0	14.2	21.6	14.9	6	24.7
ø3/8	1/4	KQ2L11-02□S	17	15.4	17	19.3	28.5	31.5	15.6	28.8	23.8	7.5	21.5
	3/8	KQ2L11-03□S	17	15.4	17	19.3	29.4	32.0	15.6	28.8	23.8	7.5	22
ø1/2	1/2	KQ2L11-04□S	22	15.4	17	19.3	33.4	34.7	15.6	28.8	23.8	7.5	44.4
	1/4	KQ2L13-02□S	17	19.3	17	21.5	30.4	35.3	17	50.3	44.4	9	23.8
ø1/2	3/8	KQ2L13-03□S	17	19.3	17	21.8	28.5	33.0	17	56.7	44.4	9.5	23.2
	1/2	KQ2L13-04□S	22	19.3	17	21.8	30.5	33.7	17	56.7	44.4	9.5	44.6

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread
Note) øD1 is maximum diameter.



Series KQ2

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

Dimensions

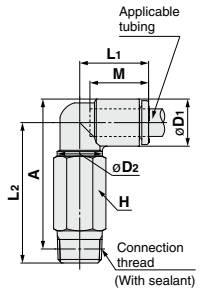
Extended Male Elbow: KQ2W (Sealant)



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø3/16	1/8	KQ2W05-01□S	10	9.1	10	15	30.4	31.8	13.3	6.8	5.6	3.5	11.2
	1/4	KQ2W05-02□S	14	9.1	10	15	33.8	33.7	13.3	6.8	5.6	3.5	27.7
ø1/4	1/8	KQ2W07-01□S	10	11.1	10	15.6	31.4	33.8	13.3	11.6	10.0	4.5	11.5
	1/4	KQ2W07-02□S	14	11.1	10	15.6	34.8	35.7	13.3	11.6	10.0	4.5	28
ø5/16	3/8	KQ2W09-03□S	17	11.1	10	15.6	36.1	36.6	13.3	11.6	10.0	4.5	47.4
	1/8	KQ2W09-01□S	10	13.2	10	16.4	32.4	35.9	14.2	11.6	11.6	4.5	12.2
ø3/8	1/4	KQ2W09-02□S	14	13.2	12	17.2	39.1	41	14.2	21.5	14.9	6	40
	3/8	KQ2W09-03□S	17	13.2	12	17.2	39.2	40.7	14.2	21.5	14.9	6	47
ø1/2	1/4	KQ2W11-02□S	17	15.4	17	19.3	52.7	55.7	15.6	28.8	23.8	7	58.8
	3/8	KQ2W11-03□S	17	15.4	17	19.3	48.3	50.9	15.6	28.8	23.8	7	51.1
ø1/2	1/2	KQ2W13-04□S	22	15.4	17	19.3	52.3	53.6	15.6	28.8	23.8	7	91.8
	1/4	KQ2W13-02□S	17	19.3	17	21.5	54.6	59.6	17	56.7	44.4	9	61
ø1/2	3/8	KQ2W13-03□S	17	19.3	17	21.8	48.2	52.8	17	56.7	44.4	9.5	48.4
	1/2	KQ2W13-04□S	22	19.3	17	21.8	50.2	53.5	17	56.7	44.4	9.5	92.3

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread
Note) øD1 is maximum diameter.



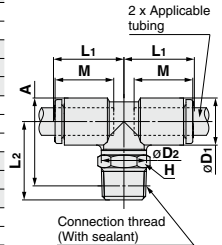
Male Branch Tee: KQ2T (Sealant)



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø3/16	1/8	KQ2T05-01□S	10	9.1	10	15	16.7	18.1	13.3	8.4	7.0	3.5	5.8
	1/4	KQ2T05-02□S	14	9.1	10	15	22.2	22	13.3	8.4	7.0	3.5	15.3
ø1/4	1/8	KQ2T07-01□S	10	11.1	10	15.6	17.7	20.1	13.3	14.4	12.4	4.5	6.5
	1/4	KQ2T07-02□S	14	11.1	10	15.6	23.2	24	13.3	14.4	12.4	4.5	16
ø5/16	3/8	KQ2T09-03□S	17	11.1	10	15.6	24.5	24.9	13.3	14.4	12.4	4.5	27.7
	1/8	KQ2T09-01□S	10	13.2	10	16.4	18.7	22.2	14.2	14.4	14.4	4.5	7.9
ø3/8	1/4	KQ2T09-02□S	14	13.2	12	17.2	25.4	27.3	14.2	26.3	18.2	6	19.4
	3/8	KQ2T09-03□S	17	13.2	12	17.2	25.5	27	14.2	26.3	18.2	6	26.5
ø1/2	1/4	KQ2T11-02□S	17	15.4	17	19.3	28.4	31.4	15.6	28.8	23.8	7.5	23.9
	3/8	KQ2T11-03□S	17	15.4	17	19.3	29.3	31.9	15.6	28.8	23.8	7.5	24.4
ø1/2	1/2	KQ2T13-04□S	22	15.4	17	19.3	33.3	34.6	15.6	28.8	23.8	7.5	46.9
	1/4	KQ2T13-02□S	17	19.3	17	21.5	30.3	35.3	17	57.3	50.6	9	27.9
ø1/2	3/8	KQ2T13-03□S	17	19.3	17	21.8	28.4	33	17	63.8	50.6	9.5	27.4
	1/2	KQ2T13-04□S	22	19.3	17	21.8	30.4	33.7	17	63.8	50.6	9.5	48.8

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread
Note) øD1 is maximum diameter.



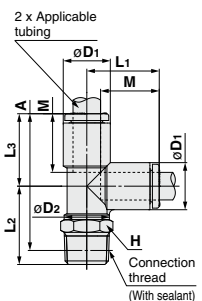
Male Run Tee: KQ2Y (Sealant)



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
											Nylon	Urethane		
ø3/16	1/8	KQ2Y05-01□S	10	9.1	10	15.7	16.7	15.7	29.3	13.3	8.4	7.0	3.5	5.9
	1/4	KQ2Y05-02□S	14	9.1	10	15.7	22.2	15.7	33.2	13.3	8.4	7.0	3.5	15.4
ø1/4	1/8	KQ2Y07-01□S	10	11.1	10	16.5	17.7	16.5	31.1	13.3	14.0	12.4	4.5	6.5
	1/4	KQ2Y07-02□S	14	11.1	10	16.5	23.2	16.5	35	13.3	14.0	12.4	4.5	16
ø5/16	3/8	KQ2Y09-03□S	17	11.1	10	16.5	24.5	16.5	35.9	13.3	14.0	12.4	4.5	27.7
	1/8	KQ2Y09-01□S	10	13.2	10	18.2	18.7	18.2	33.8	14.2	14.0	14.0	4.5	8
ø3/8	1/4	KQ2Y11-02□S	14	13.2	12	18.2	25.4	18.2	38.9	14.2	26.3	18.3	6	19.5
	3/8	KQ2Y11-03□S	17	13.2	12	18.2	25.5	18.2	38.6	14.2	26.3	18.3	6	26.5
ø1/2	1/4	KQ2Y13-02□S	17	15.4	17	20.4	28.4	20.4	44.1	15.6	28.8	23.8	7.5	24.1
	3/8	KQ2Y11-03□S	17	15.4	17	20.4	29.3	20.4	44.6	15.6	28.8	23.8	7.5	24.5
ø1/2	1/2	KQ2Y13-04□S	22	15.4	17	20.4	33.3	20.4	47.3	15.6	28.8	23.8	7.5	47
	1/4	KQ2Y13-02□S	17	19.3	17	23.4	30.3	23.4	49	17	57.3	50.6	9	28.3
ø1/2	3/8	KQ2Y13-03□S	17	19.3	17	23.4	28.4	23.4	46.7	17	64.6	50.6	9.5	27.6
	1/2	KQ2Y13-04□S	22	19.3	17	23.4	30.4	23.4	47.4	17	64.6	50.6	9.5	49

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread
Note) øD1 is maximum diameter.

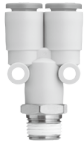


Inch Size One-touch Fittings *Series KQ2*

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

Dimensions

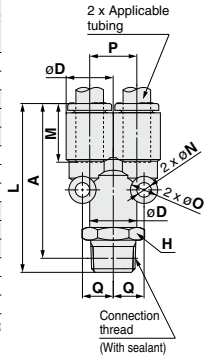
Branch "Y": KQ2U (Sealant)



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note) øD	L	P	A*	M	Q	øO	øN	Effective area (mm ²) Nylon/Urethane	Min. port size	Weight (g)
ø3/16	1/8	KQ2U05-01□S	12	9.1	37.1	9.1	34	13.3	6.2	6	3.2	8.4	7.0	10.3
	1/4	KQ2U05-02□S	14	9.1	41.5	9.1	36.8	13.3	6.2	6	3.2	8.4	7.0	19.5
ø1/4	1/8	KQ2U07-01□S	12	11.1	37.8	11.1	34.7	13.3	7.6	8	4	14.4	12.4	11.3
	1/4	KQ2U07-02□S	14	11.1	42.2	11.1	37.5	13.3	7.6	8	4	14.4	12.4	20.1
ø5/16	3/8	KQ2U09-03□S	17	11.1	43.6	11.1	38.5	13.3	7.6	8	4	14.4	12.4	4.6
	1/2	KQ2U09-01□S	14	13.2	40.7	13.2	37.6	14.2	8.7	8	4.2	26.3	18.3	6
ø3/8	1/4	KQ2U09-02□S	14	13.2	45.1	13.2	40.4	14.2	8.7	8	4.2	26.3	18.3	6
	3/8	KQ2U09-03□S	17	13.2	46.5	13.2	41.4	14.2	8.7	8	4.2	26.3	18.3	32.7
ø1/2	1/4	KQ2U11-02□S	17	15.4	48.6	15.4	43.9	15.6	9.9	8	4.2	28.8	23.8	7
	3/8	KQ2U11-03□S	17	15.4	50	15.4	44.9	15.6	9.9	8	4.2	28.8	23.8	7
ø1/2	1/2	KQ2U11-04□S	22	15.4	54.2	15.4	47.8	15.6	9.9	8	4.2	28.8	23.8	7
	3/8	KQ2U13-03□S	21	19.3	53.4	19.3	48.7	17	11.8	8	4.2	57.3	50.6	9
ø1/2	1/2	KQ2U13-04□S	22	19.3	59	19.3	52.6	17	11.8	8	4.2	64.6	50.6	9
	1/2	KQ2U13-04□S	22	19.3	59	19.3	52.6	17	11.8	8	4.2	64.6	50.6	9

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread
Note) øD is maximum diameter.

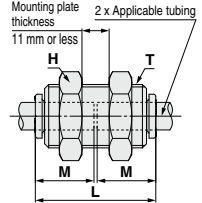


Bulkhead Union: KQ2E



Applicable tubing O.D. (inch)	Model	T (M)	H (Width across flats)	L	Mounting hole	M	Effective area (mm ²) Nylon/Urethane	Min. port size	Weight (g)
ø3/16	KQ2E05-00M□	M14 x 1	17	27.3	15	13.3	7.8	6.5	30.5
ø1/4	KQ2E07-00M□	M14 x 1	17	27.3	15	13.3	13.5	11.5	27.2
ø5/16	KQ2E09-00M□	M16 x 1	19	29.1	17	14.2	26.1	18	34
ø3/8	KQ2E11-00M□	M20 x 1	24	31.9	21	15.6	35.3	29.1	66.1
ø1/2	KQ2E13-00M□	M22 x 1	27	34.7	23	17	66.0	51.7	59.9

□/A: Brass, N: Brass + Electroless nickel plated

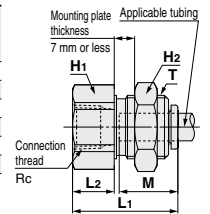


Bulkhead Connector: KQ2E



Applicable tubing O.D. (inch)	Connection thread Rc	Model	T (M)	H1 (Width across flats)	H2 (Width across flats)	L1	L2	Mounting hole	M	Effective area (mm ²) Nylon/Urethane	Min. port size	Weight (g)
ø3/16	1/8	KQ2E05-01□	M14 x 1	17	17	23.9	9.5	15	13.3	7.8	6.5	30.8
ø1/4	1/4	KQ2E07-02□	M14 x 1	17	17	28.4	14	15	13.3	13.5	11.5	32
ø5/16	3/8	KQ2E09-03□	M16 x 1	19	19	31.7	14.3	17	14.2	26.1	18	59.2
ø3/8	3/8	KQ2E11-03□	M20 x 1	22	24	31.5	12.1	21	15.6	35.3	29.1	62.7
ø1/2	3/8	KQ2E13-03□	M22 x 1	24	27	32.1	11.7	23	17	66.0	51.7	9.6
	1/2	KQ2E13-04□	M22 x 1	24	27	37.7	17.3	23	17	66.0	51.7	9.6

□/A: Brass, N: Brass + Electroless nickel plated



Fittings

KQ2

KDM6

KDM

INDEX

1 Made to Order

Symbol	Specifications
X12	Lubricant: White vaseline Release button color: White
X35 Note)	Body color: Black Release button color: Orange

Note) The following models are not available as made-to-order: Bulkhead union/KQ2E, Bulkhead connector/KQ2E, Male connector/KQ2H

2 Clean Series

Please consult with SMC separately for applicable models.

Symbol	Specifications
10-	Brass parts: With electroless nickel plated Lubricant: Fluorine grease Air blow in a clean room Double package Resin body/Release button color: White

Example) **10-KQ2H07-02NS**

3 Spare Parts

Description	Part no.	Applicable thread
Gasket	M-5G2	M5

Brass

Description	Part no.	Applicable model
Pipe nut	KQ06-P01A	KQ2E05-00MA, KQ2E07-00MA
		KQ2E05-01A, KQ2E07-02A
	KQ08-P01A	KQ2E09-00MA, KQ2E09-03A
	KQ10-P01A	KQ2E11-00MA, KQ2E11-03A
	KQ12-P01A	KQ2E13-00MA
		KQ2E13-03A, KQ2E13-04A

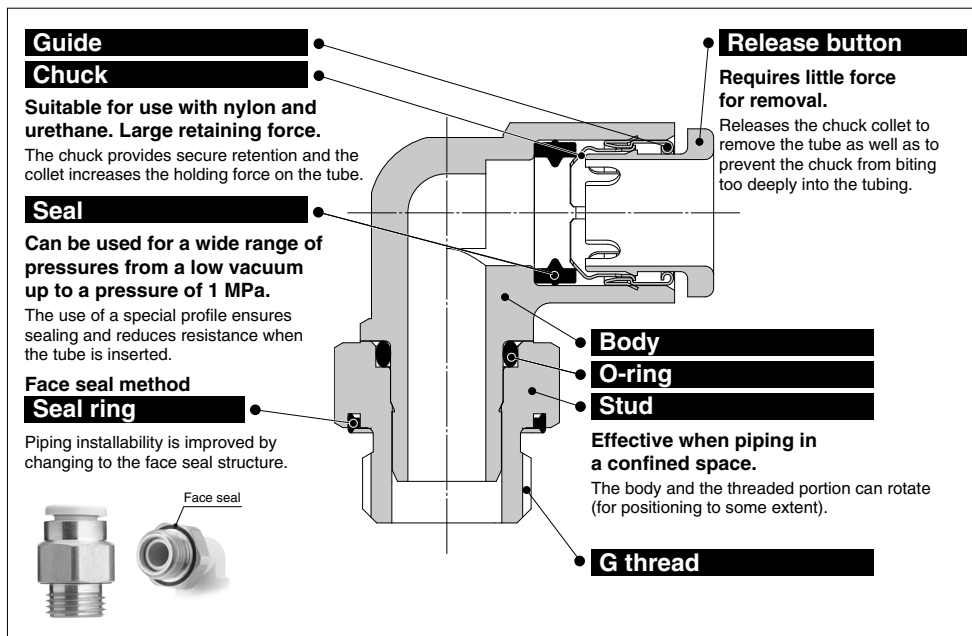
Brass + Electroless nickel plated

Description	Part no.	Applicable model
Pipe nut	KQ06-P01N	KQ2E05-00MN, KQ2E07-00MN
		KQ2E05-01N, KQ2E07-02N
	KQ08-P01N	KQ2E09-00MN, KQ2E09-03N
	KQ10-P01N	KQ2E11-00MN, KQ2E11-03N
	KQ12-P01N	KQ2E13-00MN
		KQ2E13-03N, KQ2E13-04N

Metric Size One-touch Fittings

Applicable Tubing: Metric Size, Connection Thread: G

Series KQ2



Applicable to parallel pipe thread (G).

New thread for piping that drastically reduced the screw-in time thanks to the face seal method.



Applicable Tubing

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

Specifications

Fluid		Air/Water Note 1)
Operating pressure range Note 2)		-100 kPa to 1 MPa
Proof pressure (at 23°C)		3 MPa
Ambient and fluid temperature		-5 to 60°C, Water: 0 to 40°C (No freezing)
Thread	Mounting section	ISO 16030 (Parallel pipe thread)
	Nut section	JIS B0205 (Metric fine thread)
Sealant on the threads		Seal ring

Note 1) The surge pressure must be under the maximum operating pressure.

Note 2) Do not use the fittings with a leak tester or for vacuum retention because they are not guaranteed for zero leakage.

Principal Parts Material

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

How to Order

Threaded Type

KQ2 H 06 - G01 A

One-touch fittings

Model

Symbol	Model
H	Male connector
S	Hexagon socket head male connector
F	Female connector
L	Male elbow
V	Universal male elbow
W	Extended male elbow
T	Male branch tee
Y	Male run tee
E	Bulkhead connector

Thread material/Surface treatment

Symbol	Thread material/Surface treatment
A	Brass
N	Brass + Electroless nickel plated

Port size

Symbol	Size
G01	G1/8
G02	G1/4
G03	G3/8
G04	G1/2

Applicable tubing O.D.

Symbol	Size
04	ø4
06	ø6
08	ø8
10	ø10
12	ø12
16	ø16

Fittings

KQ2

KDM6

KDM

Metric Size One-touch Fittings

Variations

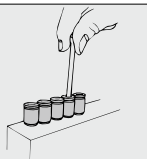
Hexagon socket head male connector

KQ2S

P.386



Internal hexagon socket allows tightening with a hexagon wrench in confined spaces.



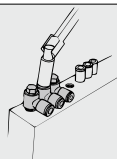
Universal male elbow

KQ2V

P.387



Hexagon head of the body allows tightening with a box wrench in confined spaces.



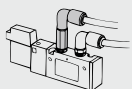
Extended male elbow

KQ2W

P.388



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



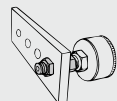
Bulkhead connector

KQ2E

P.389



Use to connect male thread and tubing through a panel, etc.



Male connector

KQ2H

P.386



Use to pipe a female thread. Most general model.

Male elbow

KQ2L

P.387



Use to pipe a female thread at right angles. Most general model.

Male run tee

KQ2Y

P.389



Use to branch a female thread at a 90° angle.

Female connector

KQ2F

P.386



Use to pipe a male thread of a pressure gauge, etc.

Male branch tee

KQ2T

P.388



Use to branch a female thread at both 90° angles.

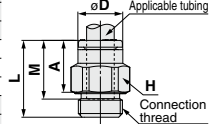
Dimensions

Male Connector: KQ2H (Face seal)



Applicable tubing O.D. (mm)	Connection thread G	Model	H (Width across flats)	øD	L	A	M	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø4	1/8	KQ2H04-G01	12	7.7	17.1	11.6	13.3	5.6	4	3	7.7
	1/4	KQ2H04-G02	17	7.7	15.4	8.9	13.3	5.6	4	3	16.8
ø6	1/8	KQ2H06-G01	12	9.7	17.3	11.8	13.3	13.1	10.4	4.5	6.6
	1/4	KQ2H06-G02	17	9.7	15.4	8.9	13.3	13.1	10.4	4.5	14.8
	3/8	KQ2H06-G03	21	9.7	16.4	8.9	13.3	13.1	10.4	4.5	27.1
ø8	1/8	KQ2H08-G01	14	13	21.4	15.9	14.2	26.1	18	6	7.5
	1/4	KQ2H08-G02	17	13	19.9	13.4	14.2	26.1	18	6	15.5
	3/8	KQ2H08-G03	21	13	16.4	8.9	14.2	26.1	18	6	23.8
ø10	1/8	KQ2H10-G01	17	15.6	23.2	17.7	15.6	26.1	26.1	6	15.7
	1/4	KQ2H10-G02	17	15.6	22.8	16.3	15.6	41.5	29.5	7.5	16.8
	3/8	KQ2H10-G03	21	15.6	21.8	14.3	15.6	41.5	29.5	7.5	26.1
	1/2	KQ2H10-G04	27	15.6	17.9	8.9	15.6	41.5	29.5	7.5	39.9
ø12	1/4	KQ2H12-G02	19	18.2	25.3	18.8	17	58.3	46.1	9	15.1
	3/8	KQ2H12-G03	21	18.2	23.6	16.1	17	58.3	46.1	9	25.6
	1/2	KQ2H12-G04	27	18.2	24.8	15.8	17	58.3	46.1	9	46.9
ø16	3/8	KQ2H16-G03	27	23.6	30.5	23	20.6	81	67	11	47.1
	1/2	KQ2H16-G04	27	23.6	29.7	20.7	20.6	113	67	13	48.8

□/A: Brass, N: Brass + Electroless nickel plated



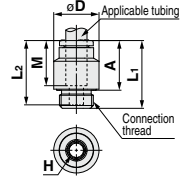
Hexagon Socket Head Male Connector: KQ2S (Face seal)



Applicable tubing O.D. (mm)	Connection thread G	Model	H (Width across flats)	Note) øD	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
									Nylon	Urethane		
ø4	1/8	KQ2S04-G01	3	13	20.6	19.6	15.1	13.3	4.1	3.6	3.1	11.6
ø6	1/8	KQ2S06-G01	4	13	19.8	18.8	14.3	13.3	10	9.9	4.1	9.7
	1/4	KQ2S06-G02	4	18	19.8	18.8	13.3	13.3	10.7	10	4.1	18
	1/8	KQ2S08-G01	5	13	21.7	19.7	16.2	14.2	17.2	16.2	5.1	9.5
ø8	1/4	KQ2S08-G02	6	18	20.5	19.5	14	14.2	23.3	16.2	6.1	17.2
	3/8	KQ2S08-G03	6	22	20.7	19.7	13.2	14.2	23.3	16.2	6.1	27.1
	1/8	KQ2S10-G01	5	15.6	23	21.1	17.5	15.6	17.2	16.2	5.1	10.9
ø10	1/4	KQ2S10-G02	8	18	24.1	20.1	17.6	15.6	39	26.6	8.1	19.2
	3/8	KQ2S10-G03	8	22	21.4	20.1	13.9	15.6	39	26.6	8.1	25
	1/2	KQ2S10-G04	8	26	21.1	20.1	12.1	15.6	39	26.6	8.1	34.1
ø12	1/4	KQ2S12-G02	8	18.2	25.6	21.5	19.1	17	46	44.5	8.1	18.3
	3/8	KQ2S12-G03	10	22	23.8	21.8	16.3	17	60	44.5	10.1	25.7
	1/2	KQ2S12-G04	10	26	22.8	21.8	13.8	17	60	44.5	10.1	35.6
ø16	3/8	KQ2S16-G03	10	23.6	30.8	25.4	23.3	20.6	81	67	10.1	29.2
	1/2	KQ2S16-G04	12	26	30.3	26.1	21.3	20.6	113	67	12.1	45.8

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD is maximum diameter.



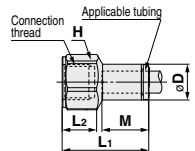
Female Connector: KQ2F



Applicable tubing O.D. (mm)	Connection thread G	Model	H (Width across flats)	Note) øD	L1	L2	M	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø4	1/8	KQ2F04-G01	14	7.9	24.7	9.5	13.3	5.6	4	3	12.4
	1/4	KQ2F04-G02	17	7.9	30.1	13.9	13.3	5.6	4	3	21.3
	1/8	KQ2F06-G01	14	9.9	24.3	9.5	13.3	13.1	10.4	4.5	12.6
ø6	1/4	KQ2F06-G02	17	9.9	29.6	13.9	13.3	13.1	10.4	4.5	21.4
	3/8	KQ2F06-G03	21	9.9	31.1	13.7	13.3	13.1	10.4	4.5	29.6
	1/8	KQ2F08-G01	14	13	24.7	9.5	14.2	26.1	18	6	15.1
ø8	1/4	KQ2F08-G02	17	13	30.1	13.9	14.2	26.1	18	6	24
	3/8	KQ2F08-G03	21	13	31.6	13.7	14.2	26.1	18	6	32.3
	1/4	KQ2F10-G02	17	15.6	31.1	13.9	15.6	41.5	29.5	7.5	24.1
ø10	3/8	KQ2F10-G03	21	15.6	32.6	13.7	15.6	41.5	29.5	7.5	32.6
	1/4	KQ2F12-G02	19	18.2	32	13.8	17	58.3	46.1	9	33
	3/8	KQ2F12-G03	21	18.2	33.5	13.7	17	58.3	46.1	9	34.1
ø12	1/2	KQ2F12-G04	27	18.2	38.6	16.9	17	58.3	46.1	9	64.9
	3/8	KQ2F16-G03	24	23.6	36	14.4	20.6	81	67	13	55.7
	1/2	KQ2F16-G04	27	23.6	41.1	16.9	20.6	113	67	13	71.7

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD is maximum diameter.



Series KQ2

Applicable Tubing: Metric Size, Connection Thread: G

Dimensions

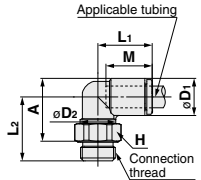
Male Elbow: KQ2L (Face seal)



Applicable tubing O.D. (mm)	Connection thread G	Model	H (Width across flats)	(Note) øD1	øD2	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø4	1/8	KQ2L04-G01	12	8.2	10	14.8	16.8	15.4	13.3	4.2	4.2	3	6.3
	1/4	KQ2L04-G02	17	8.2	10	14.8	20.3	17.9	13.3	4.2	4.2	3	16.7
ø6	1/8	KQ2L06-G01	12	10.4	10	15.5	17.9	17.6	13.3	11.4	9	4.5	6.7
	1/4	KQ2L06-G02	17	10.4	10	15.5	21.4	20.1	13.3	11.4	9	4.5	17.2
ø8	3/8	KQ2L06-G03	21	10.4	10	15.5	22.4	20.1	13.3	11.4	9	4.5	28.9
	1/4	KQ2L08-G01	12	13.2	10	16.4	19.3	20.4	14.2	11.4	11.4	4.5	7.6
ø10	1/8	KQ2L08-G02	17	13.2	12	17.2	22.8	22.9	14.2	21.6	14.9	6	15.9
	3/8	KQ2L08-G03	21	13.2	12	17.2	23.8	22.9	14.2	21.6	14.9	6	27.9
ø12	1/8	KQ2L10-G01	12	15.9	12	18.6	22.5	24.9	15.6	21.6	14.9	6	10.3
	1/4	KQ2L10-G02	17	15.9	17	19.3	24.6	26.0	15.6	35.2	25	7.5	17.5
ø16	3/8	KQ2L10-G03	21	15.9	17	19.3	27.7	28.1	15.6	35.2	25	7.5	22.6
	1/2	KQ2L10-G04	27	15.9	17	19.3	29.2	28.1	15.6	35.2	25	7.5	42.5
ø12	1/4	KQ2L12-G02	17	18.5	17	21.5	25.9	28.6	17	50.2	39.7	9	19.3
	3/8	KQ2L12-G03	21	18.5	17	21.5	29.0	30.7	17	50.2	39.7	9	24.5
ø16	1/2	KQ2L12-G04	27	18.5	17	21.5	30.5	30.7	17	50.2	39.7	9	44.4
	3/8	KQ2L16-G03	21	23.8	21	27.1	33.1	37.5	20.6	71	58.9	11	35.2
	1/2	KQ2L16-G04	27	23.8	21	27.1	33.8	36.7	20.6	100	58.9	13	58.7

□/A: Brass, N: Brass + Electroless nickel plated

(Note) øD1 is maximum diameter.



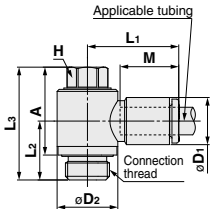
Universal Male Elbow: KQ2V (Face seal)



Applicable tubing O.D. (mm)	Connection thread G	Model	H (Width across flats)	(Note) øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
											Nylon	Urethane		
ø4	1/8	KQ2V04-G01	8	8.2	13.4	19.3	13	24.9	19.4	13.3	2.9	2.9	3	12.9
	1/8	KQ2V06-G01	8	10.4	13.4	20.5	13	24.9	19.4	13.3	7.5	5.9	4.5	13.2
ø6	1/4	KQ2V06-G02	10	10.4	15.3	19.9	15	27.6	21.1	13.3	7.5	5.9	4.5	22.7
	1/8	KQ2V08-G01	12	13.2	17.6	23.5	15	27.5	22	14.2	16	11.2	5	24.5
ø8	1/4	KQ2V08-G02	12	13.2	17.6	23.5	15.6	28.1	21.6	14.2	16	11.2	6	26.8
	3/8	KQ2V08-G03	14	13.2	20.6	23.1	17.3	33.1	25.6	14.2	16	11.2	7.5	42.1
ø10	1/4	KQ2V10-G02	14	15.9	20.6	25.9	17.9	32.9	26.4	15.6	27	20.3	7.5	37.5
	3/8	KQ2V10-G03	14	15.9	20.6	25.9	18.1	33.1	25.6	15.6	27	20.3	7.5	43.4
ø12	3/8	KQ2V12-G03	17	18.5	25.2	28.5	20.5	36.7	29.2	17	39	30.8	9	60.5
	1/2	KQ2V12-G04	17	18.5	25.2	28.5	21.1	37.3	28.3	17	39	30.8	9	71
ø16	3/8	KQ2V16-G03	21	23.8	32.3	34.2	24.2	44.5	37	20.6	55	46	11	101.7
	1/2	KQ2V16-G04	21	23.8	32.3	34.2	26.2	46.5	37.5	20.6	78	46	13	106.6

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of G thread
(Note) øD1 is maximum diameter.



Metric Size One-touch Fittings *Series KQ2*

Applicable Tubing: Metric Size, Connection Thread: G

Dimensions

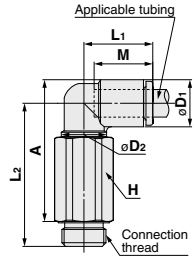
Extended Male Elbow: KQ2W (Face seal)



Applicable tubing O.D. (mm)	Connection thread G	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
$\phi 4$	1/8	KQ2W04-G01	12	8.2	10	14.8	30.5	29.1	13.3	4	4	3	16.5
	1/4	KQ2W04-G02	17	8.2	10	14.8	31.2	28.8	13.3	4	4	3	35.8
$\phi 6$	1/8	KQ2W06-G01	12	10.4	10	15.5	31.6	31.3	13.3	10.9	8.6	4.5	17
	1/4	KQ2W06-G02	17	10.4	10	15.5	32.3	31	13.3	10.9	8.6	4.5	36.2
	3/8	KQ2W06-G03	21	10.4	10	15.5	33.3	31	13.3	10.9	8.6	4.5	59.4
$\phi 8$	1/8	KQ2W08-G01	12	13.2	10	16.4	33	34.1	14.2	10.9	10.9	4.5	17.8
	1/4	KQ2W08-G02	17	13.2	12	17.2	36.5	36.6	14.2	20.5	14.2	6	37.5
	3/8	KQ2W08-G03	21	13.2	12	17.2	37.5	36.6	14.2	20.5	14.2	6	63.9
$\phi 10$	1/4	KQ2W10-G02	17	15.9	17	19.3	48.8	50.3	15.6	33.5	23.8	7.5	45.1
	3/8	KQ2W10-G03	21	15.9	17	19.3	46.6	47.1	15.6	33.5	23.8	7.5	62.6
	1/2	KQ2W10-G04	27	15.9	17	19.3	48.1	47.1	15.6	33.5	23.8	7.5	120.2
$\phi 12$	1/4	KQ2W12-G02	17	18.5	17	21.5	50.1	52.9	17	47.7	37.7	9	46.9
	3/8	KQ2W12-G03	21	18.5	17	21.5	47.9	49.7	17	47.7	37.7	9	64.5
	1/2	KQ2W12-G04	27	18.5	17	21.5	49.4	49.7	17	47.7	37.7	9	122.1
$\phi 16$	3/8	KQ2W16-G03	21	23.8	21	27.1	57.4	61.8	20.6	71	58.9	11	71.7
	1/2	KQ2W16-G04	27	23.8	21	27.1	58.1	61	20.6	100	58.9	13	144.1

□A: Brass, N: Brass + Electroless nickel plated

Note) $\phi D1$ is maximum diameter.



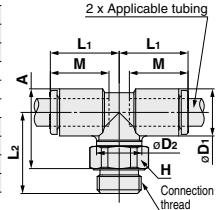
Male Branch Tee: KQ2T (Face seal)



Applicable tubing O.D. (mm)	Connection thread G	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Effective area (mm ²)	Min. port size	Weight (g)	
										Nylon Urethane			
$\phi 4$	1/8	KQ2T04-G01	12	8.2	10	14.8	16.8	15.4	13.3	6	4.1	3	7
	1/4	KQ2T04-G02	17	8.2	10	14.8	20.3	17.9	13.3	6	4.1	3	17.4
$\phi 6$	1/8	KQ2T06-G01	12	10.4	10	15.5	17.9	17.6	13.3	13.9	11	4.5	7.6
	1/4	KQ2T06-G02	17	10.4	10	15.5	21.4	20.1	13.3	13.9	11	4.5	18.1
	3/8	KQ2T06-G03	21	10.4	10	15.5	22.4	20.1	13.3	13.9	11	4.5	29.8
$\phi 8$	1/8	KQ2T08-G01	12	13.2	10	16.4	19.3	20.4	14.2	14	14	4.5	9.4
	1/4	KQ2T08-G02	17	13.2	12	17.2	22.8	22.9	14.2	26.3	18.2	6	17.6
	3/8	KQ2T08-G03	21	13.2	12	17.2	23.8	22.9	14.2	26.3	18.2	6	29.6
$\phi 10$	1/8	KQ2T10-G01	12	15.9	12	18.6	22.4	24.9	15.6	21.6	14.9	6	13.1
	1/4	KQ2T10-G02	17	15.9	17	19.3	24.5	26	15.6	35.2	25	7.5	20.1
	3/8	KQ2T10-G03	21	15.9	17	19.3	27.6	28.1	15.6	35.2	25	7.5	25.3
	1/2	KQ2T10-G04	27	15.9	17	19.3	29.1	28.1	15.6	35.2	25	7.5	45.2
$\phi 12$	1/4	KQ2T12-G02	17	18.5	17	21.5	25.8	28.6	17	57.2	45.2	9	23.1
	3/8	KQ2T12-G03	21	18.5	17	21.5	28.9	30.7	17	57.2	45.2	9	28.4
	1/2	KQ2T12-G04	27	18.5	17	21.5	30.4	30.7	17	57.2	45.2	9	48.3
$\phi 16$	3/8	KQ2T16-G03	21	23.8	21	27.1	33.1	37.5	20.6	71	58.9	11	42.1
	1/2	KQ2T16-G04	27	23.8	21	27.1	33.8	36.7	20.6	100	58.9	13	65.7

□A: Brass, N: Brass + Electroless nickel plated

Note) $\phi D1$ is maximum diameter.



Fittings

KQ2

KDM6

KDM

INDEX

Series KQ2

Applicable Tubing: Metric Size, Connection Thread: G

Dimensions

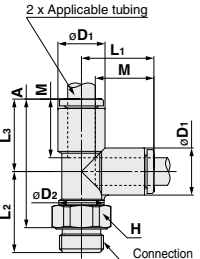
Male Run Tee: KQ2Y (Face seal)



Applicable tubing O.D. (mm)	Connection thread G	Model	H (Width across flats)		Note	øD1	øD2	L1	L2	L3	A	M	Effective area (mm ²)		Min. port size	Weight (g)
													Nylon	Urethane		
ø4	1/8	KQ2Y04-G01	12	8.2	10	15.3	16.8	15.3	26.6	13.3	6.4	4.4	3	7		
	1/4	KQ2Y04-G02	17	8.2	10	15.3	20.3	15.3	29.1	13.3	6.4	4.4	3	17.5		
ø6	1/8	KQ2Y06-G01	12	10.4	10	16.3	17.9	16.3	28.7	13.3	13.4	10.6	4.5	7.7		
	1/4	KQ2Y06-G02	17	10.4	10	16.3	21.4	16.3	31.2	13.3	13.4	10.6	4.5	18.2		
ø8	3/8	KQ2Y06-G03	21	10.4	10	16.3	22.4	16.3	31.2	13.3	13.4	10.6	4.5	29.9		
	1/8	KQ2Y08-G01	12	13.2	10	18.2	19.3	18.2	32	14.2	13.4	13.4	4.5	9.5		
ø10	1/4	KQ2Y08-G02	17	13.2	12	18.2	22.8	18.2	34.5	14.2	25.6	17.7	6	17.7		
	3/8	KQ2Y08-G03	21	13.2	12	18.2	23.8	18.2	34.5	14.2	25.6	17.7	6	29.7		
ø12	1/8	KQ2Y10-G01	12	15.9	12	20.6	22.5	20.6	37.5	15.6	40	28.4	6	13.2		
	1/4	KQ2Y10-G02	17	15.9	17	20.6	24.6	20.6	38.6	15.6	40	28.4	7.5	20.3		
ø16	3/8	KQ2Y10-G03	21	15.9	17	20.6	27.7	20.6	40.7	15.6	40	28.4	7.5	25.4		
	1/2	KQ2Y10-G04	27	15.9	17	20.6	29.2	20.6	40.7	15.6	40	28.4	7.5	45.3		
ø12	1/4	KQ2Y12-G02	17	18.5	17	23	25.9	23	42.3	17	57.4	45.4	9	23.4		
	3/8	KQ2Y12-G03	21	18.5	17	23	29	23	44.4	17	57.4	45.4	9	28.6		
ø16	1/2	KQ2Y12-G04	27	18.5	17	23	30.4	23	44.4	17	57.4	45.4	9	48.5		
	3/8	KQ2Y16-G03	21	23.8	21	28.6	33.1	28.6	54.2	20.6	81	60	11	42.7		
	1/2	KQ2Y16-G04	27	23.8	21	28.6	33.8	28.6	53.4	20.6	113	60	13	66.2		

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.

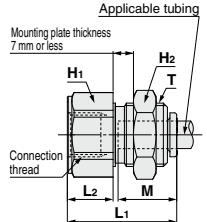


Bulkhead Connector: KQ2E



Applicable tubing O.D. (mm)	Connection thread G	Model	T (M)	H1 (Width across flats)	H2 (Width across flats)	L1	L2	Mounting hole	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø4	1/8	KQ2E04-G01	M12 x 1	14	14	25.1	10.7	13	13.3	5.6	4	3	21.3
	1/4	KQ2E04-G02	M12 x 1	17	14	30.7	16.3	13	13.3	5.6	4	3	31.5
ø6	1/8	KQ2E06-G01	M14 x 1	17	17	24.5	10.1	15	13.3	13.1	10.4	4.5	29.8
	1/4	KQ2E06-G02	M14 x 1	17	17	30	15.6	15	13.3	13.1	10.4	4.5	32.8
ø8	3/8	KQ2E06-G03	M14 x 1	21	17	32	17.6	15	13.3	13.1	10.4	4.5	45.5
	1/8	KQ2E08-G01	M16 x 1	17	19	24.7	7.3	17	14.2	26.1	18	6	30.9
ø10	1/4	KQ2E08-G02	M16 x 1	17	19	30	12.6	17	14.2	26.1	18	6	33.5
	3/8	KQ2E08-G03	M16 x 1	21	19	33.1	15.7	17	14.2	26.1	18	6	46.1
ø12	1/4	KQ2E10-G02	M20 x 1	22	24	31	11.6	21	15.6	41.5	29.5	7.5	66.7
	3/8	KQ2E10-G03	M20 x 1	22	24	32.5	13.1	21	15.6	41.5	29.5	7.5	61.6
ø16	1/2	KQ2E12-G04	M22 x 1	24	27	33.5	13.1	23	17	58.3	46.1	9	70.4
	3/8	KQ2E16-G03	M28 x 1.5	30	32	35.9	13	29	20.6	96	67	13	127.6
	1/2	KQ2E16-G04	M28 x 1.5	30	32	41	18.1	29	20.6	113	67	13	137.2

□/A: Brass, N: Brass + Electroless nickel plated



Series KQ2

Spare Parts

Please contact SMC for detailed dimensions, specifications, and lead times.

1 Spare Parts

Brass

Description	Part no.	Applicable model
Pipe nut	KQ04-P01A	KQ2E04-G01A, KQ2E04-G02A
	KQ06-P01A	KQ2E06-G01A, KQ2E06-G02A, KQ2E06-G03A
	KQ08-P01A	KQ2E08-G01A, KQ2E08-G02A, KQ2E08-G03A
	KQ10-P01A	KQ2E10-G02A, KQ2E10-G03A
	KQ12-P01A	KQ2E12-G03A, KQ2E12-G04A
	KQ16-P01A	KQ2E16-G03A, KQ2E16-G04A

Brass + Electroless nickel plated

Description	Part no.	Applicable model
Pipe nut	KQ04-P01N	KQ2E04-G01N, KQ2E04-G02N
	KQ06-P01N	KQ2E06-G01N, KQ2E06-G02N, KQ2E06-G03N
	KQ08-P01N	KQ2E08-G01N, KQ2E08-G02N, KQ2E08-G03N
	KQ10-P01N	KQ2E10-G02N, KQ2E10-G03N
	KQ12-P01N	KQ2E12-G03N, KQ2E12-G04N
	KQ16-P01N	KQ2E16-G03N, KQ2E16-G04N

Fittings

KQ2

KDM6

KDM

Metric Size One-touch Fittings

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

Series KQ2

Guide

Chuck

Suitable for use with nylon and urethane. Large retaining force.

The chuck provides secure retention and the collet increases the holding force on the tube.

Seal

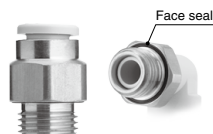
Can be used for a wide range of pressures from a low vacuum up to a pressure of 1 MPa.

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

Face seal method

Seal ring

Piping installability is improved by changing to the face seal structure.



Release button

Requires little force for removal.

Releases the chuck collet to remove the tube as well as to prevent the chuck from biting too deeply into the tubing.

Body

O-ring

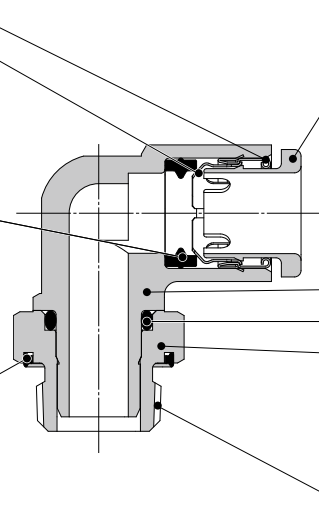
Stud

Effective when piping in a confined space.

Body part rotates allowing for positioning.

Connection thread

R, Rc



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

New thread for piping that drastically reduced the screw-in time thanks to the face seal method.



Applicable Tubing

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

Specifications

Fluid		Air/Water ^{Note 1)}
Operating pressure range ^{Note 2)}		-100 kPa to 1 MPa
Proof pressure (at 23°C)		3 MPa
Ambient and fluid temperature		-5 to 60°C, Water: 0 to 40°C (No freezing)
Thread	Mounting section	JIS B0203 (Taper thread for piping) JIS B0205 (Metric coarse thread)
	Nut section	JIS B0205 (Metric fine thread)
Sealant on the threads		Seal ring

Note 1) The surge pressure must be under the maximum operating pressure.

Note 2) Do not use the fittings with a leak tester or for vacuum retention because they are not guaranteed for zero leakage.

Principal Parts Material

Body	C3604, PBT, PP, Stainless steel 303
Stud	C3604 (Thread portion), Stainless steel 303 (Thread portion)
Chuck	Stainless steel 304
Guide	Stainless steel 304
Release button	POM
Seal, O-ring, Seal ring	NBR

How to Order

Threaded Type **KQ2** **H** **06** - **01** **A** **P**

One-touch fittings •

• Face seal

Model •

Symbol	Model
H	Male connector
S	Hexagon socket head male connector
L	Male elbow
LU	Male branch connector
K	45° male elbow
V	Universal male elbow
VS	Hexagon socket head universal male elbow
VF	Universal female elbow
VD	Double universal male elbow
VT	Triple universal male elbow
Z	Branch universal male elbow
ZF	Branch universal female elbow
ZD	Double branch universal male elbow
ZT	Triple branch universal male elbow
W	Extended male elbow
T	Male branch tee
Y	Male run tee
D	Male delta union
U	Branch "Y"
UD	Double branch "Y"
N	Adapter

• Thread material/Surface treatment

Symbol	Thread material/Surface treatment
A	Brass
N	Brass + Electroless nickel plated

• Port size/Applicable tubing O.D.

Symbol	Size
01	R1/8, Rc1/8
02	R1/4, Rc1/4
03	R3/8, Rc3/8
04	R1/2, Rc1/2

• Applicable tubing O.D.

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

Fittings

KQ2

KDM6

KDM

Metric Size One-touch Fittings

Variations

Hexagon socket head male connector

KQ2S

P.394



Internal hexagon socket allows tightening with a hexagon wrench in confined spaces.



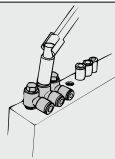
Universal male elbow

KQ2V

P.396



Hexagon head of the body allows tightening with a box wrench in confined spaces.



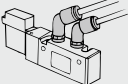
45° male elbow

KQ2K

P.396



Use to pipe a female thread at a 45° angle. The model between the male connector and male elbow.



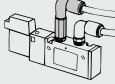
Extended male elbow

KQ2W

P.399



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



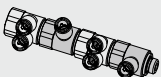
Universal female elbow

KQ2VF

P.397



Use to branch a male or female thread at a 90° angle. Multiple connections possible.



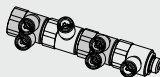
Branch universal female elbow

KQ2ZF

P.398



Use to two-branch a male or female thread at a 90° angle. Multiple connections possible.



Male connector

KQ2H

P.394



Use to pipe a female thread. Most general model.

Double universal male elbow

KQ2VD

P.397



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

Male elbow

KQ2L

P.395



Use to pipe a female thread at right angles. Most general model.

Triple universal male elbow

KQ2VT

P.397



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

Male branch tee

KQ2T

P.400



Use to branch a female thread at both 90° angles.

Branch universal male elbow

KQ2Z

P.398



Hexagon socket on the top allows tightening with a hexagon wrench in confined spaces.

Hexagon socket head universal male elbow

KQ2VS

P.396



Hexagon socket on the top allows tightening with a hexagon wrench in confined spaces.

Male branch connector

KQ2LU

P.395



Use to branch a female thread at right angles.

Male run tee

KQ2Y

P.400



Use to branch a female thread at a 90° angle.

Triple branch universal male elbow

KQ2ZT

P.399



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

Male delta union

KQ2D

P.401



Use to branch a female thread at two right angles.

Double branch "Y"

KQ2UD

P.402



Use to four-branch a female thread.

Branch "Y"

KQ2U

P.401



Use to branch a female thread.

Adapter

KQ2N

P.402



Use to connect One-touch fittings and R female thread.

Metric Size One-touch Fittings *Series KQ2*

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

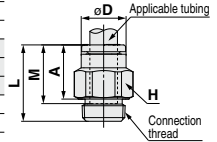
Dimensions

Male Connector: KQ2H (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	øD	L	A	M	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø3.2	1/8	KQ2H23-01□P	12	6.7	14.1	8.9	13.3	3	2.9	2.5	6.3
	1/4	KQ2H23-02□P	17	6.7	15	7.4	13.3	3.4	2.9	2.5	15.1
ø4	1/8	KQ2H04-01□P	12	7.7	16.4	11.2	13.3	5.6	4	3	6.9
	1/4	KQ2H04-02□P	17	7.7	15	7.4	13.3	5.6	4	3	14.5
ø6	1/8	KQ2H06-01□P	12	9.7	17.2	12	13.3	13.1	10.4	4.5	6.5
	1/4	KQ2H06-02□P	17	9.7	14	6.4	13.3	13.1	10.4	4.5	10.6
ø8	3/8	KQ2H06-03□P	21	9.7	15.2	7.6	13.3	13.1	10.4	4.5	22.8
	1/8	KQ2H08-01□P	14	13	21.1	15.9	14.2	26.1	18	6	11.8
ø10	1/4	KQ2H08-02□P	17	13	19.9	12.3	14.2	26.1	18	6	13.9
	3/8	KQ2H08-03□P	21	13	15.2	7.6	14.2	26.1	18	6	19.6
ø12	1/8	KQ2H10-01□P	17	15.6	22.9	17.7	15.6	26.1	26.1	6	16.3
	3/8	KQ2H10-03□P	21	15.6	21.2	13.6	15.6	41.5	29.5	7.5	23.7
ø16	1/2	KQ2H10-04□P	27	15.6	18.8	8.4	15.6	41.5	29.5	7.5	40.9
	1/4	KQ2H12-02□P	19	18.2	26.6	19	17	58.3	46.1	9	22
ø12	3/8	KQ2H12-03□P	21	18.2	25.1	17.5	17	58.3	46.1	9	28.6
	1/2	KQ2H12-04□P	27	18.2	25.1	14.7	17	58.3	46.1	9	45
ø16	1/4	KQ2H16-02□P	24	23.6	30.6	23	20.6	58.3	46.1	9	42.5
	3/8	KQ2H16-03□P	24	23.6	30.6	23	20.6	81	67	11	39.2
	1/2	KQ2H16-04□P	27	23.6	32.1	21.7	20.6	113	67	13	55

□/A: Brass, N: Brass + Electroless nickel plated



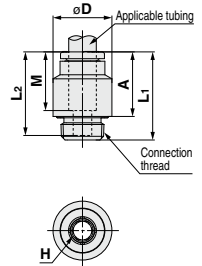
Hexagon Socket Head Male Connector: KQ2S (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD	L ₁	L ₂	A	M	Effective area (mm ²)		Min. port size	Weight (g)
									Nylon	Urethane		
ø4	1/8	KQ2S04-01□P	3	13	20.6	19.6	15.4	13.3	4.1	3.6	3.1	11.6
	1/8	KQ2S06-01□P	4	13	19.8	18.8	14.6	13.3	10	10	4	9.6
ø6	1/4	KQ2S06-02□P	4	18	19.8	18.8	12.2	13.3	10.7	10	4.1	16.3
	1/8	KQ2S08-01□P	5	13	21.2	19.7	16	14.2	17.2	16.2	5.1	9
ø8	1/4	KQ2S08-02□P	6	18	20.4	19.5	12.8	14.2	23.3	16.2	6.1	15.5
	3/8	KQ2S08-03□P	6	22	20.7	19.7	13.1	14.2	23.3	16.2	6.1	26.3
ø10	1/8	KQ2S10-01□P	5	18	23	21.1	17.8	15.6	17.2	16.2	5.1	17.8
	1/4	KQ2S10-02□P	8	18	28.8	20.1	21.2	15.6	39	26.6	8.1	19.2
ø12	3/8	KQ2S10-03□P	8	22	21.1	20.1	13.5	15.6	39	26.6	8.1	23.4
	1/2	KQ2S10-04□P	8	26	21.1	20.1	10.7	15.6	39	26.6	8.1	40.6
ø16	1/4	KQ2S12-02□P	8	18.2	30.2	21.5	22.6	17	46	44.5	8.1	24.3
	3/8	KQ2S12-03□P	10	22	25.1	21.8	17.5	17	60	44.5	10.1	28.2
ø16	1/2	KQ2S12-04□P	10	26	25.2	21.8	14.8	17	60	44.5	10.1	40.7
	1/4	KQ2S16-02□P	8	23.6	30.6	25.1	23	20.6	44	44	8.1	35.1
ø16	3/8	KQ2S16-03□P	10	23.6	30.6	25.4	23	20.6	81	67	10.1	27.9
	1/2	KQ2S16-04□P	12	26	32.1	26.1	21.7	20.6	113	67	12.1	48.2

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD is maximum diameter.



Fittings

KQ2

KDM6

KDM

INDEX

Series KQ2

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

Dimensions

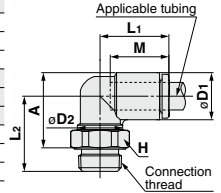
Male Elbow: KQ2L (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A	M	Effective area (mm²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø3.2	1/8	KQ2L23-01□P	12	7.1	10	14.5	16	14.3	13.3	3	2.5	2.5	5.1
	1/4	KQ2L23-02□P	17	7.1	10	14.5	19.4	15.3	13.3	3	2.5	2.5	14.3
ø4	1/8	KQ2L04-01□P	12	8.2	10	14.8	15.5	14.4	13.3	4.2	4.2	3	5.2
	1/4	KQ2L04-02□P	17	8.2	10	14.8	19.9	16.4	13.3	4.2	4.2	3	14.5
ø6	1/8	KQ2L06-01□P	12	10.4	10	15.5	16.6	16.6	13.3	11.4	9	4.5	5.7
	1/4	KQ2L06-02□P	17	10.4	10	15.5	21	18.6	13.3	11.4	9	4.5	15
ø8	3/8	KQ2L06-03□P	21	10.4	10	15.5	23	20.6	13.3	11.4	9	4.5	30.2
	1/8	KQ2L08-01□P	12	13.2	10	16.4	18	19.4	14.2	11.4	11.4	4.5	6.5
ø8	1/4	KQ2L08-02□P	17	13.2	12	17.2	22.4	21.4	14.2	21.6	14.9	6	13.7
	3/8	KQ2L08-03□P	21	13.2	12	17.2	24.4	23.4	14.2	21.6	14.9	6	28.7
ø10	1/8	KQ2L10-01□P	12	15.9	12	18.6	22.2	24.9	15.6	21.6	14.9	6	10.1
	1/4	KQ2L10-02□P	17	15.9	17	19.3	25.7	26.0	15.6	35.2	25	7.5	17.9
ø10	3/8	KQ2L10-03□P	21	15.9	17	19.3	25.8	26.1	15.6	35.2	25	7.5	17.8
	1/2	KQ2L10-04□P	27	15.9	17	19.3	30.6	28.1	15.6	35.2	25	7.5	45.1
ø12	1/4	KQ2L12-02□P	17	18.5	17	21.5	27	28.6	17	50.2	39.7	9	19.6
	3/8	KQ2L12-03□P	21	18.5	17	21.5	27.1	28.7	17	50.2	39.7	9	19.7
ø12	1/2	KQ2L12-04□P	27	18.5	17	21.5	31.9	30.7	17	50.2	39.7	9	47
ø16	Now 1/4	KQ2L16-02□P	17	23.8	17	25.1	29.6	33.9	20.6	50.2	50.2	9	24
	3/8	KQ2L16-03□P	21	23.8	21	27.1	32.7	37.0	20.6	71	58.9	11	33.8
ø16	1/2	KQ2L16-04□P	27	23.8	21	27.1	34.7	36.2	20.6	100	58.9	13	59.9

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



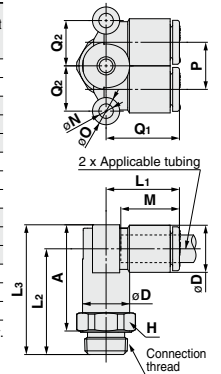
Male Branch Connector: KQ2LU (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD	L1	L2	L3	A	M	P	O	N	Q1	Q2	Effective area	Min. port size	Weight (g)	
															(mm ²) Nylon(Urethane)			
ø4	1/8	KQ2LU04-01□P	12	8.2	15.8	22.6	26.7	21.5	13.3	8.2	6	3.2	15.8	7.9	6	4.1	3	9.5
	1/4	KQ2LU04-02□P	17	8.2	15.8	26	30.1	22.5	13.3	8.2	6	3.2	15.8	7.9	6	4.1	3	19.4
ø6	1/8	KQ2LU06-01□P	12	10.4	16.5	23.3	28.5	23.3	13.3	10.4	6	3.2	16.5	10	13.9	11	4.5	10.2
	1/4	KQ2LU06-02□P	17	10.4	16.5	26.7	31.9	24.3	13.3	10.4	6	3.2	16.5	10	13.9	11	4.5	19.8
ø6	3/8	KQ2LU06-03□P	21	10.4	16.5	26.2	31.4	23.8	13.3	10.4	6	3.2	16.5	10	13.9	11	4.5	28.1
	1/2	KQ2LU08-01□P	14	13.2	18.2	25	31.6	26.4	14.2	13.2	8	4.2	18.2	13.1	26.3	18.2	6	16.4
ø8	1/4	KQ2LU08-02□P	17	13.2	18.2	28.4	35	27.4	14.2	13.2	8	4.2	18.2	13.1	26.3	18.2	6	22
	3/8	KQ2LU08-03□P	21	13.2	18.2	27.9	34.5	26.9	14.2	13.2	8	4.2	18.2	13.1	26.3	18.2	6	30.4
ø10	1/4	KQ2LU10-02□P	17	15.9	20.3	30.5	38.5	30.9	15.6	15.9	8	4.2	20.3	15.9	40.8	29	7.5	24.9
	3/8	KQ2LU10-03□P	21	15.9	20.3	30	38	30.4	15.6	15.9	8	4.2	20.3	15.9	40.8	29	7.5	32.4
ø10	1/2	KQ2LU10-04□P	27	15.9	20.3	32.3	40.3	29.9	15.6	15.9	8	4.2	20.3	15.9	40.8	29	7.5	50.5
ø12	1/4	KQ2LU12-02□P	21	18.5	22.5	32.7	41.9	34.3	17	18.5	8	4.2	22.5	17.9	57.2	45.2	9	39.3
	3/8	KQ2LU12-03□P	21	18.5	22.5	32.2	41.4	33.8	17	18.5	8	4.2	22.5	17.9	57.2	45.2	9	37
ø12	1/2	KQ2LU12-04□P	27	18.5	22.5	34.5	43.7	33.3	17	18.5	8	4.2	22.5	17.9	57.2	45.2	9	52.5

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD is maximum diameter.



Metric Size One-touch Fittings *Series KQ2*

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

Dimensions

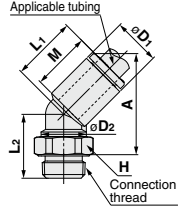
45° Male Elbow: KQ2K (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	(Note) øD1	øD2	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø4	1/8	KQ2K04-01□P	12	8.2	10	14.4	12	19.5	13.3	3.4	3.4	3	5.1
	1/4	KQ2K04-02□P	17	8.2	10	14.4	15.4	20.5	13.3	3.4	3.4	3	14.3
ø6	1/8	KQ2K06-01□P	12	10.4	10	14.7	14.1	22.5	13.3	8.7	6.9	4.5	5.5
	1/4	KQ2K06-02□P	17	10.4	10	14.7	17.5	23.5	13.3	8.7	6.9	4.5	14.7
ø8	3/8	KQ2K08-03□P	21	10.4	10	14.7	19.5	25.5	13.3	8.7	6.9	4.5	29.9
	1/8	KQ2K08-01□P	12	13.2	10	16	15	25.2	14.2	8.7	8.7	4.5	6.4
ø10	1/4	KQ2K08-02□P	17	13.2	12	16	19.4	27.2	14.2	19.7	19.7	6	13.5
	3/8	KQ2K08-03□P	21	13.2	12	16	21.4	29.2	14.2	19.7	19.7	6	28.5
ø12	1/8	KQ2K10-01□P	12	15.9	12	18.2	20.1	32.7	15.6	30.9	23.2	6	10.1
	1/4	KQ2K10-02□P	17	15.9	17	17.6	26.1	35.9	15.6	30.9	23.2	7.5	18
ø16	3/8	KQ2K10-03□P	21	15.9	17	17.6	20.5	30.3	15.6	30.9	23.2	7.5	17.3
	1/2	KQ2K10-04□P	27	15.9	17	17.6	25.3	32.3	15.6	30.9	23.2	7.5	44.6
ø12	1/4	KQ2K12-02□P	17	18.5	17	19.4	26	37.9	17	44.5	35.1	9	19.5
	3/8	KQ2K12-03□P	21	18.5	17	19.4	20.4	32.3	17	44.5	35.1	9	18.8
ø16	1/2	KQ2K12-04□P	27	18.5	17	19.4	25.2	34.3	17	44.5	35.1	9	46.1
	Now 1/4	KQ2K16-02□P	17	23.8	17	24.3	26.6	43.3	20.6	44.5	44.5	9	23.9
ø16	3/8	KQ2K16-03□P	21	23.8	21	23.8	28.7	45	20.6	65.8	58	11	32.2
	1/2	KQ2K16-04□P	27	23.8	21	23.8	30.7	44.2	20.6	91.9	58	13	58.3

□A: Brass, N: Brass + Electroless nickel plated

(Note) øD1 is maximum diameter.



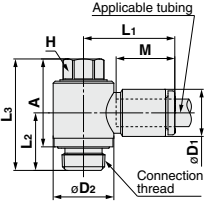
Universal Male Elbow: KQ2V (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	(Note) øD1	øD2	L1	L2	L3	A	M	Effective area (mm ²)		Min. port size	Weight (g)
											Nylon	Urethane		
ø4	1/8	KQ2V04-01□P	8	8.2	13.4	19.3	12.7	24.6	19.4	13.3	2.9	2.9	3	12.6
ø6	1/8	KQ2V06-01□P	8	10.4	13.4	20.5	12.7	24.6	19.4	13.3	7.5	5.9	4.5	12.9
	1/4	KQ2V06-02□P	10	10.4	15.3	19.9	16.1	28.7	21.1	13.3	7.5	5.9	4.5	23.2
ø8	1/8	KQ2V08-01□P	12	13.2	17.6	23.5	14.1	26.6	21.4	14.2	16	11.2	6	22.7
	1/4	KQ2V08-02□P	12	13.2	17.6	23.5	16.7	29.2	21.6	14.2	16	11.2	6	27.2
ø8	3/8	KQ2V08-03□P	14	13.2	20.6	23.1	17.4	33.2	25.6	14.2	16	11.2	6	42.1
ø10	1/4	KQ2V10-02□P	14	15.9	20.6	25.9	18.1	33.1	25.5	15.6	27	20.3	7.5	36.5
	3/8	KQ2V10-03□P	14	15.9	20.6	25.9	18.2	33.2	25.6	15.6	27	20.3	7.5	43.4
ø12	3/8	KQ2V12-03□P	17	18.5	25.2	28.5	19.3	35.5	27.9	17	39	30.8	9	56.7
	1/2	KQ2V12-04□P	17	18.5	25.2	28.5	22.6	38.8	28.4	17	39	30.8	9	72.2
ø16	3/8	KQ2V16-03□P	21	23.8	32.3	34.2	23	43.3	35.7	20.6	55	46	11	99.9
	1/2	KQ2V16-04□P	21	23.8	32.3	34.2	26.3	46.6	36.2	20.6	78	46	13	113

□A: Brass, N: Brass + Electroless nickel plated

(Note) øD1 is maximum diameter.



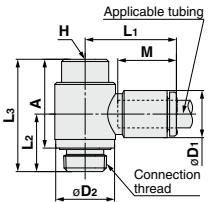
Hexagon Socket Head Universal Male Elbow: KQ2VS (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	(Note) øD1	øD2	L1	L2	L3	A	M	Effective area (mm ²)		Min. port size	Weight (g)
											Nylon	Urethane		
ø4	1/8	KQ2VS04-01□P	6	8.2	13.4	19.3	12.7	24.8	19.6	13.3	2.9	2.9	3	12.6
ø6	1/8	KQ2VS06-01□P	6	10.4	13.4	20.5	12.7	24.8	19.6	13.3	7.5	5.9	4.5	12.9
	1/4	KQ2VS06-02□P	6	10.4	15.3	19.9	16.1	24.7	17.1	13.3	7.5	5.9	4.5	19.2
ø8	1/8	KQ2VS08-01□P	8	13.2	17.6	23.5	14.1	25	19.8	14.2	16	11.2	6	19.3
	1/4	KQ2VS08-02□P	8	13.2	17.6	23.5	16.7	27.7	20.1	14.2	16	11.2	6	23.8
ø8	3/8	KQ2VS08-03□P	8	13.2	20.6	23.1	17.4	29.3	21.7	14.2	16	11.2	6	34.4
ø10	1/4	KQ2VS10-02□P	8	15.9	20.6	25.9	18.1	29.2	21.6	15.6	27	20.3	7.5	29.2
	3/8	KQ2VS10-03□P	8	15.9	20.6	25.9	18.2	29.3	21.7	15.6	27	20.3	7.5	35.6
ø12	3/8	KQ2VS12-03□P	10	18.5	25.2	28.5	19.3	33	25.4	17	39	30.8	9	48.6
	1/2	KQ2VS12-04□P	10	18.5	25.2	28.5	22.6	36.3	25.9	17	39	30.8	9	64.1

□A: Brass, N: Brass + Electroless nickel plated

(Note) øD1 is maximum diameter.



Fittings

KQ2

KDM6

KDM

Series KQ2

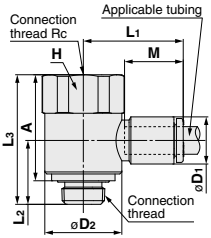
Applicable Tubing: Metric Size, Connection Thread: R, Rc

Dimensions

Universal Female Elbow: KQ2VF (Face seal)



Applicable tubing O.D. (mm)	Connection thread R, Rc	Model	H (Width across flats)	Note)							Effective area (mm ²)		Min. port size	Weight (g)
				φD ₁	φD ₂	L ₁	L ₂	L ₃	A	M	Nylon	Urethane		
φ4	1/8	KQ2VF04-01□P	17	8.2	17	21.2	14.1	28.6	23.4	13.3	2.9	2.9	3	28.5
	1/4	KQ2VF06-01□P	17	10.4	17	22.4	14.1	28.6	23.4	13.3	7.5	5.9	4.5	28.9
φ6	1/4	KQ2VF08-02□P	22	10.4	21.7	23.2	17.6	36.4	28.8	13.3	7.5	5.9	4.5	60.3
	3/8	KQ2VF08-01□P	17	13.2	17.6	23.5	14.8	29.3	24.1	14.2	16	11.2	6	27.2
φ8	1/4	KQ2VF08-02□P	22	13.2	21.6	25.1	17.8	36.4	28.8	14.2	16	11.2	6	61.2
	3/8	KQ2VF08-03□P	27	13.2	27.7	26.2	22.2	42.2	34.6	14.2	16	11.2	6	90.2
φ10	1/4	KQ2VF10-02□P	22	15.9	22.6	26.9	18.8	38.7	31.1	15.6	27	20.3	7.5	61
	3/8	KQ2VF10-03□P	27	15.9	26.6	27.6	21.4	42.2	34.6	15.6	27	20.3	7.5	90
φ12	3/8	KQ2VF12-03□P	27	18.5	26.6	29.9	20.9	42.2	34.6	17	39	30.8	9	91.6
	1/2	KQ2VF12-04□P	30	18.5	31.6	32.1	22.3	47.2	36.8	17	39	30.8	9	144.1



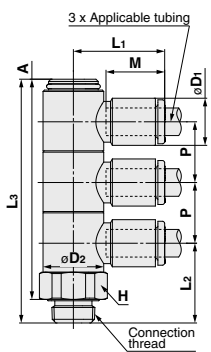
□/A: Brass, N: Brass + Electroless nickel plated

Note) ϕD_1 is maximum diameter.

Triple Universal Male Elbow: KQ2VT (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) ϕD_1	ϕD_2	L ₁	L ₂	L ₃	A	M	P	Effective area (mm ²)	Min. port size	Weight (g)	
												Nylon/Jethane			
$\phi 4$	1/8	KQ2VT04-01□P	14	8.2	13.4	19.3	17.6	53.8	48.6	13.3	13.4	2.9	2.9	3	27.5
	1/4	KQ2VT04-02□P	17	8.2	13.4	19.3	21	57.2	49.6	13.3	13.4	2.9	2.9	3	36.8
	3/8	KQ2VT04-03□P	21	8.2	13.4	19.3	23	59.2	51.6	13.3	13.4	2.9	2.9	3	54.4
$\phi 6$	1/8	KQ2VT06-01□P	14	10.4	13.4	20.5	17.6	53.8	48.6	13.3	13.4	7.5	5.9	4.5	28.5
	1/4	KQ2VT06-02□P	17	10.4	13.4	20.5	21	57.2	49.6	13.3	13.4	7.5	5.9	4.5	37.8
	3/8	KQ2VT06-03□P	21	10.4	13.4	20.5	23	59.2	51.6	13.3	13.4	7.5	5.9	4.5	55.4
$\phi 8$	1/8	KQ2VT08-01□P	19	13.2	17.6	23.7	21	63.8	58.6	14.2	15.9	16	11.2	6	67
	1/4	KQ2VT08-02□P	19	13.2	17.6	23.7	23.4	66.2	58.6	14.2	15.9	16	11.2	6	60.8
	3/8	KQ2VT08-03□P	21	13.2	17.6	23.7	24.4	67.2	59.6	14.2	15.9	16	11.2	6	72.7
$\phi 10$	1/2	KQ2VT08-04□P	27	13.2	17.6	23.7	29.2	72	61.6	14.2	15.9	16	11.2	6	112.8
	1/4	KQ2VT10-02□P	21	15.9	20.6	25.7	25.8	77	69.4	15.6	19.2	27	20.3	7.5	89.7
	3/8	KQ2VT10-03□P	21	15.9	20.6	25.7	25.8	77	69.4	15.6	19.2	27	20.3	7.5	86.5
$\phi 12$	1/2	KQ2VT10-04□P	27	15.9	20.6	25.7	30.6	81.8	71.4	15.6	19.2	27	20.3	7.5	125.5
	1/4	KQ2VT12-02□P	26	18.5	25.2	28.9	29.1	86.7	79.1	17	21.6	39	30.8	9	158.6
	3/8	KQ2VT12-03□P	26	18.5	25.2	28.9	29.1	86.7	79.1	17	21.6	39	30.8	9	145.4
$\phi 12$	1/2	KQ2VT12-04□P	27	18.5	25.2	28.9	31.9	89.5	79.1	17	21.6	39	30.8	9	155.4



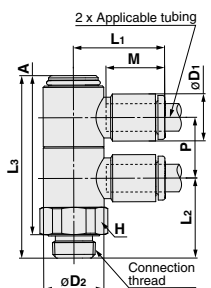
□/A: Brass, N: Brass + Electroless nickel plated

Note) ϕD_1 is maximum diameter.

Double Universal Male Elbow: KQ2VD (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) ϕD_1	ϕD_2	L ₁	L ₂	L ₃	A	M	P	Effective area (mm ²) Nylon/Jethane	Min. port size	Weight (g)	
$\phi 4$	1/8	KQ2VD04-01□P	14	8.2	13.4	19.3	17.6	40.3	35.1	13.3	13.4	2.9	2.9	3	22
	1/4	KQ2VD04-02□P	17	8.2	13.4	19.3	21	43.7	36.1	13.3	13.4	2.9	2.9	3	31.2
	3/8	KQ2VD04-03□P	21	8.2	13.4	19.3	23	45.7	38.1	13.3	13.4	2.9	2.9	3	48.7
$\phi 6$	1/8	KQ2VD06-01□P	14	10.4	13.4	20.5	17.6	40.3	35.1	13.3	13.4	7.5	5.9	4.5	22.6
	1/4	KQ2VD06-02□P	17	10.4	13.4	20.5	21	43.7	36.1	13.3	13.4	7.5	5.9	4.5	31.8
	3/8	KQ2VD06-03□P	21	10.4	13.4	20.5	23	45.7	38.1	13.3	13.4	7.5	5.9	4.5	49.3
$\phi 8$	1/8	KQ2VD08-01□P	19	13.2	17.6	23.7	21	47.8	42.6	14.2	15.9	16	11.2	6	52.4
	1/4	KQ2VD08-02□P	19	13.2	17.6	23.7	23.4	50.2	42.6	14.2	15.9	16	11.2	6	48.6
	3/8	KQ2VD08-03□P	21	13.2	17.6	23.7	24.4	51.2	43.6	14.2	15.9	16	11.2	6	60.4
$\phi 10$	1/2	KQ2VD08-04□P	27	13.2	17.6	23.7	29.2	56	45.6	14.2	15.9	16	11.2	6	100.4
	1/4	KQ2VD10-02□P	21	15.9	20.6	25.7	25.8	57.7	50.1	15.6	19.2	27	20.3	7.5	70.6
	3/8	KQ2VD10-03□P	21	15.9	20.6	25.7	25.8	57.7	50.1	15.6	19.2	27	20.3	7.5	69.5
$\phi 12$	1/2	KQ2VD10-04□P	27	15.9	20.6	25.7	30.6	62.5	52.1	15.6	19.2	27	20.3	7.5	108.2
	1/4	KQ2VD12-02□P	26	18.5	25.2	28.9	29.1	65	57.4	17	21.6	39	30.8	9	125.8
	3/8	KQ2VD12-03□P	26	18.5	25.2	28.9	29.1	65	57.4	17	21.6	39	30.8	9	117.4
	1/2	KQ2VD12-04□P	27	18.5	25.2	28.9	31.9	67.8	57.4	17	21.6	39	30.8	9	128.8



□/A: Brass, N: Brass + Electroless nickel plated

Note) ϕD_1 is maximum diameter.

Metric Size One-touch Fittings *Series KQ2*

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

Dimensions

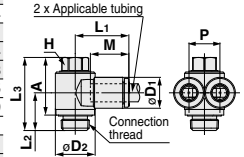
Branch Universal Male Elbow: KQ2Z (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note	øD1	øD2	L1	L2	L3	A	M	P	Effective area (mm²)	Min. port size	Weight (g)
ø4	1/8	KQ2Z04-01□P	8	8.2	13.4	18.5	12.7	24.6	19.4	13.3	8.2	4.7	4.7	3	13.4
	1/8	KQ2Z06-01□P	8	10.4	13.4	18.4	12.7	24.6	19.4	13.3	10.4	10.8	8.6	4.5	14
	1/4	KQ2Z06-02□P	14	10.4	20.6	21.5	17.3	33.1	25.5	13.3	10.4	10.8	8.6	4.5	35.4
ø6	3/8	KQ2Z06-03□P	14	10.4	20.6	21.5	17.4	33.2	25.6	13.3	10.4	10.8	8.6	4.5	42.3
	1/8	KQ2Z08-01□P	12	13.2	17.6	21.2	14.1	26.6	21.4	14.2	13.2	20.5	14.2	6	24.5
	1/4	KQ2Z08-02□P	12	13.2	17.6	21.2	16.7	29.2	21.6	14.2	13.2	20.5	14.2	6	28.9
ø8	3/8	KQ2Z08-03□P	14	13.2	20.6	22.3	17.4	33.2	25.6	14.2	13.2	20.5	14.2	6	44.4
	1/4	KQ2Z10-02□P	14	15.9	21.6	23.6	18.1	33.1	25.5	15.6	15.9	31.8	22.6	7.5	40
	3/8	KQ2Z10-03□P	14	15.9	21.6	23.6	18.2	33.2	25.6	15.6	15.9	31.8	22.6	7.5	46.9
ø10	3/8	KQ2Z12-03□P	17	18.5	24.1	26.9	19.1	35.5	27.9	17	18.5	44.6	35.3	9	60.5
	1/2	KQ2Z12-04□P	17	18.5	24.1	26.9	22.4	38.8	28.4	17	18.5	44.6	35.3	9	76

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



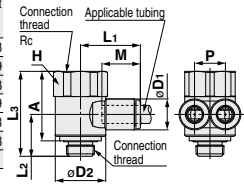
Branch Universal Female Elbow: KQ2ZF (Face seal)



Applicable tubing O.D. (mm)	Connection thread R, Rc	Model	H (Width across flats)	Note	øD1	øD2	L1	L2	L3	A	M	P	Effective area (mm²)	Min. port size	Weight (g)
ø4	1/8	KQ2ZF04-01□P	17	8.2	17	20.5	14.1	28.6	23.4	13.3	8.2	4.7	4.7	3	29.3
	1/8	KQ2ZF06-01□P	17	10.4	17	20.5	14.1	28.6	23.4	13.3	10.4	10.8	8.6	4.5	29.9
	1/4	KQ2ZF06-02□P	22	10.4	21.7	22.5	17.6	36.4	28.8	13.3	10.4	10.8	8.6	4.5	61.3
ø6	1/8	KQ2ZF08-01□P	17	13.2	17.6	21.2	14.8	29.3	24.1	14.2	13.2	20.5	14.2	6	28.9
	1/4	KQ2ZF08-02□P	22	13.2	21.4	23.3	17.8	36.4	28.8	14.2	13.2	20.5	14.2	6	62.8
	1/4	KQ2ZF10-02□P	22	15.9	22.6	24.6	18.8	38.7	31.1	15.6	15.9	31.8	22.6	7.5	63.8
ø8	3/8	KQ2ZF10-03□P	27	15.9	26.6	26.9	21.4	42.2	34.6	15.6	15.9	31.8	22.6	7.5	93
	3/8	KQ2ZF12-03□P	27	18.5	26.6	28.1	20.9	42.2	34.6	17	18.5	44.6	35.3	9	96
	1/2	KQ2ZF12-04□P	30	18.5	31.6	32	22.3	47.2	36.8	17	18.5	44.6	35.3	9	148.8

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



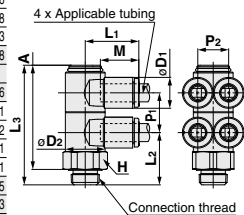
Double Branch Universal Male Elbow: KQ2ZD (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note	øD1	øD2	L1	L2	L3	A	M	P1	P2	Effective area (mm²)	Min. port size	Weight (g)
ø4	1/8	KQ2ZD04-01□P	14	8.2	13.4	18.5	17.6	40.3	35.1	13.3	13.4	8.2	4.7	4.7	3	23.6
	1/4	KQ2ZD04-02□P	17	8.2	13.4	18.5	21	43.7	36.1	13.3	13.4	8.2	4.7	4.7	3	32.8
	3/8	KQ2ZD04-03□P	21	8.2	13.4	18.5	23	45.7	38.1	13.3	13.4	8.2	4.7	4.7	3	50.3
ø6	1/8	KQ2ZD06-01□P	14	10.4	13.4	18.4	17.6	40.3	35.1	13.3	13.4	10.4	10.8	8.6	4.5	24.8
	1/4	KQ2ZD06-02□P	17	10.4	13.4	18.4	21	43.7	36.1	13.3	13.4	10.4	10.8	8.6	4.5	34
	3/8	KQ2ZD06-03□P	21	10.4	13.4	18.4	23	45.7	38.1	13.3	13.4	10.4	10.8	8.6	4.5	51.6
ø8	1/8	KQ2ZD08-01□P	19	13.2	17.6	21.2	21	47.8	42.6	14.2	15.9	13.2	20.5	14.2	6	56.1
	1/4	KQ2ZD08-02□P	19	13.2	17.6	21.2	23.4	50.2	42.6	14.2	15.9	13.2	20.5	14.2	6	52.2
	3/8	KQ2ZD08-03□P	21	13.2	17.6	21.2	24.4	51.2	43.6	14.2	15.9	13.2	20.5	14.2	6	64.1
ø10	1/2	KQ2ZD08-04□P	27	13.2	17.6	21.2	29.2	56	45.6	14.2	15.9	13.2	20.5	14.2	6	104.1
	1/4	KQ2ZD10-02□P	21	15.9	20.6	23.6	25.8	57.7	50.1	15.6	19.2	15.9	31.8	21.6	7.5	76.5
	3/8	KQ2ZD10-03□P	21	15.9	20.6	23.6	25.8	57.7	50.1	15.6	19.2	15.9	31.8	21.6	7.5	75.3
ø12	1/2	KQ2ZD10-04□P	27	15.9	20.6	23.6	30.6	62.5	52.1	15.6	19.2	15.9	31.8	21.6	7.5	114
	1/4	KQ2ZD12-02□P	26	18.5	25.2	26.8	29.1	65	57.4	17	21.6	18.5	44.6	35.3	9	134.4
	3/8	KQ2ZD12-03□P	26	18.5	25.2	26.8	29.1	65	57.4	17	21.6	18.5	44.6	35.3	9	126
	1/2	KQ2ZD12-04□P	27	18.5	25.2	26.8	31.9	67.8	57.4	17	21.6	18.5	44.6	35.3	9	137.4

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Fittings

KQ2

KDM6

KDM

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Series KQ2

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

Dimensions

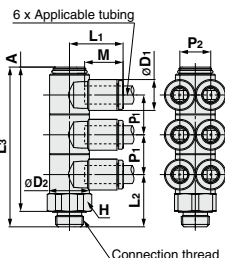
Triple Branch Universal Male Elbow: KQ2ZT (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A	M	P1	P2	Effective area (mm ²) Nylon Urethane	Min. port size	Weight (g)	
ø4	1/8	KQ2ZT04-01□P	14	8.2	13.4	18.5	17.6	53.8	48.6	13.3	13.4	8.2	4.7	4.7	3	29.9
	1/4	KQ2ZT04-02□P	17	8.2	13.4	18.5	21	57.2	49.6	13.3	13.4	8.2	4.7	4.7	3	39.2
	3/8	KQ2ZT04-03□P	21	8.2	13.4	18.5	23	59.2	51.6	13.3	13.4	8.2	4.7	4.7	3	56.8
ø6	1/8	KQ2ZT06-01□P	14	10.4	13.4	18.4	17.6	53.8	48.6	13.3	13.4	10.4	10.8	8.6	4.5	31.8
	1/4	KQ2ZT06-02□P	17	10.4	13.4	18.4	21	57.2	49.6	13.3	13.4	10.4	10.8	8.6	4.5	41.1
	3/8	KQ2ZT06-03□P	21	10.4	13.4	18.4	23	59.2	51.6	13.3	13.4	10.4	10.8	8.6	4.5	58.7
ø8	1/8	KQ2ZT08-01□P	19	13.2	17.6	21.2	21	63.8	58.6	14.2	15.9	13.2	20.5	14.2	6	72.5
	1/4	KQ2ZT08-02□P	19	13.2	17.6	21.2	23.4	66.2	58.6	14.2	15.9	13.2	20.5	14.2	6	66.3
	3/8	KQ2ZT08-03□P	21	13.2	17.6	21.2	24.4	67.2	59.6	14.2	15.9	13.2	20.5	14.2	6	78.2
ø10	1/2	KQ2ZT10-01□P	27	13.2	17.6	21.2	29.2	72	61.6	14.2	15.9	13.2	20.5	14.2	6	118.3
	3/4	KQ2ZT10-02□P	21	15.9	20.6	23.6	25.8	77	69.4	15.6	19.2	15.9	31.8	21.6	7.5	98.5
	1/2	KQ2ZT10-04□P	27	15.9	20.6	23.6	30.6	81.8	71.4	15.6	19.2	15.9	31.8	21.6	7.5	134.3
ø12	1/4	KQ2ZT12-02□P	26	18.5	25.2	26.8	29.1	86.7	79.1	17	21.6	18.5	44.6	35.3	9	171.5
	3/8	KQ2ZT12-03□P	26	18.5	25.2	26.8	29.1	86.7	79.1	17	21.6	18.5	44.6	35.3	9	158.3
	1/2	KQ2ZT12-04□P	27	18.5	25.2	26.8	31.9	89.5	79.1	17	21.6	18.5	44.6	35.3	9	168.3

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



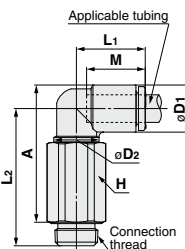
Extended Male Elbow: KQ2W (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note)		L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
				øD1	øD2					Nylon	Urethane		
ø3.2	1/8	KQ2W23-01□P	12	7.1	10	14.5	29.6	28	13.3	2.8	2.4	2.5	15.3
	1/4	KQ2W23-02□P	17	7.1	10	14.5	31	27	13.3	2.8	2.4	2.5	34.6
ø4	1/8	KQ2W04-01□P	12	8.2	10	14.8	29.2	28.1	13.3	4	4	3	15.5
	1/4	KQ2W04-02□P	17	8.2	10	14.8	31.5	28	13.3	4	4	3	34.9
ø6	1/8	KQ2W06-01□P	12	10.4	10	15.5	30.3	30.3	13.3	10.9	8.6	4.5	15.9
	1/4	KQ2W06-02□P	17	10.4	10	15.5	32.6	30.2	13.3	10.9	8.6	4.5	35.3
	3/8	KQ2W06-03□P	21	10.4	10	15.5	34.6	32.2	13.3	10.9	8.6	4.5	62.8
ø8	1/8	KQ2W08-01□P	12	13.2	10	16.4	31.7	33.1	14.2	10.9	10.9	4.5	16.7
	1/4	KQ2W08-02□P	17	13.2	12	17.2	36.1	35.1	14.2	20.5	14.2	6	35.4
	3/8	KQ2W08-03□P	21	13.2	12	17.2	38.1	37.1	14.2	20.5	14.2	6	64.7
ø10	1/4	KQ2W10-02□P	17	15.9	17	19.3	50.1	50.5	15.6	33.5	23.8	7.5	54.3
	3/8	KQ2W10-03□P	21	15.9	17	19.3	44.7	45.1	15.6	33.5	23.8	7.5	57.8
	1/2	KQ2W10-04□P	27	15.9	17	19.3	49.5	47.1	15.6	33.5	23.8	7.5	122.8
ø12	1/4	KQ2W12-02□P	17	18.5	17	21.5	51.4	53.1	17	47.7	37.7	9	56
	3/8	KQ2W12-03□P	21	18.5	17	21.5	46	47.7	17	47.7	37.7	9	59.7
	1/2	KQ2W12-04□P	27	18.5	17	21.5	50.8	49.7	17	47.7	37.7	9	124.6
ø16 (New)	1/4	KQ2W16-02□P	17	23.8	17	25.1	54.1	58.4	20.6	47.7	47.7	9	60.4
	3/8	KQ2W16-03□P	22	23.8	21	27.1	57	61.3	20.6	71	58.9	11	89.1
	1/2	KQ2W16-04□P	27	23.8	21	27.1	59	60.5	20.6	100	58.9	13	155.9

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Metric Size One-touch Fittings *Series KQ2*

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

Dimensions

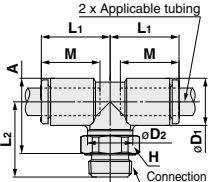
Male Branch Tee: KQ2T (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø3.2	1/8	KQ2T23-01□P	12	7.1	10	14.5	15.9	14.3	13.3	3.4	2.9	2.5	5.7
	1/4	KQ2T23-02□P	17	7.1	10	14.5	19.3	15.3	13.3	3.4	2.9	2.5	14.9
ø4	1/8	KQ2T04-01□P	12	8.2	10	14.8	15.5	14.4	13.3	6	4.1	3	5.9
	1/4	KQ2T04-02□P	17	8.2	10	14.8	19.9	16.4	13.3	6	4.1	3	15.2
ø6	1/8	KQ2T06-01□P	12	10.4	10	15.5	16.6	16.6	13.3	13.9	11	4.5	6.6
	1/4	KQ2T06-02□P	17	10.4	10	15.5	21	18.6	13.3	13.9	11	4.5	15.9
ø8	3/8	KQ2T06-03□P	21	10.4	10	15.5	23	20.6	13.3	13.9	11	4.5	31.1
	1/8	KQ2T08-01□P	12	13.2	10	16.4	18	19.4	14.2	14	14	4.5	8.3
ø10	1/4	KQ2T08-02□P	17	13.2	12	17.2	22.4	21.4	14.2	26.3	18.2	6	15.5
	3/8	KQ2T08-03□P	21	13.2	12	17.2	24.4	23.4	14.2	26.3	18.2	6	30.4
ø12	1/8	KQ2T10-01□P	12	15.9	12	18.6	22.1	24.9	15.6	21.6	14.9	6	12.9
	1/4	KQ2T10-02□P	17	15.9	17	19.3	25.6	26	15.6	35.2	25	7.5	20.5
ø16	3/8	KQ2T10-03□P	21	15.9	17	19.3	25.7	26.1	15.6	35.2	25	7.5	20.4
	1/2	KQ2T10-04□P	27	15.9	17	19.3	30.5	28.1	15.6	35.2	25	7.5	47.7
ø12	1/4	KQ2T12-02□P	17	18.5	17	21.5	26.9	28.6	17	57.2	45.2	9	23.5
	3/8	KQ2T12-03□P	21	18.5	17	21.5	27	28.7	17	57.2	45.2	9	23.6
ø16	1/2	KQ2T12-04□P	27	18.5	17	21.5	31.8	30.7	17	57.2	45.2	9	50.8
	New 1/4	KQ2T16-02□P	17	23.8	17	25.1	29.6	33.9	20.6	57.2	57.2	9	31.7
ø16	3/8	KQ2T16-03□P	21	23.8	21	27.1	32.7	37	20.6	71	58.9	11	40.8
	1/2	KQ2T16-04□P	27	23.8	21	27.1	34.7	36.2	20.6	100	58.9	13	66.8

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



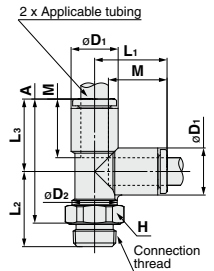
Male Run Tee: KQ2Y (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A	M	Effective area (mm ²)		Min. port size	Weight (g)
											Nylon	Urethane		
ø3.2	1/8	KQ2Y23-01□P	12	7.1	10	14.9	15.9	14.9	25.6	13.3	3.4	2.9	2.5	5.7
	1/4	KQ2Y23-02□P	17	7.1	10	14.9	19.3	14.9	26.6	13.3	3.4	2.9	2.5	14.9
ø4	1/8	KQ2Y04-01□P	12	8.2	10	15.3	15.5	15.3	25.6	13.3	6.4	4.4	3	6
	1/4	KQ2Y04-02□P	17	8.2	10	15.3	19.9	15.3	27.6	13.3	6.4	4.4	3	15.2
ø6	1/8	KQ2Y06-01□P	12	10.4	10	16.3	16.6	16.3	27.7	13.3	13.4	10.6	4.5	6.7
	1/4	KQ2Y06-02□P	17	10.4	10	16.3	21	16.3	29.7	13.3	13.4	10.6	4.5	16
ø8	3/8	KQ2Y06-03□P	21	10.4	10	16.3	23	16.3	31.7	13.3	13.4	10.6	4.5	31.2
	1/8	KQ2Y08-01□P	12	13.2	10	18.2	18	18.2	31	14.2	13.4	13.4	4.5	8.4
ø10	1/4	KQ2Y08-02□P	17	13.2	12	18.2	22.4	18.2	33	14.2	25.6	17.7	6	15.6
	3/8	KQ2Y08-03□P	21	13.2	12	18.2	24.4	18.2	35	14.2	25.6	17.7	6	30.5
ø12	1/8	KQ2Y10-01□P	12	15.9	12	20.6	22.1	20.6	37.5	15.6	40	28.4	6	13
	1/4	KQ2Y10-02□P	17	15.9	17	20.6	25.6	20.6	38.6	15.6	40	28.4	7.5	20.7
ø16	3/8	KQ2Y10-03□P	21	15.9	17	20.6	25.7	20.6	38.7	15.6	40	28.4	7.5	20.6
	1/2	KQ2Y10-04□P	27	15.9	17	20.6	30.5	20.6	40.7	15.6	40	28.4	7.5	47.9
ø12	1/4	KQ2Y12-02□P	17	18.5	17	23	26.9	23	42.3	17	57.4	45.4	9	23.8
	3/8	KQ2Y12-03□P	21	18.5	17	23	27	23	42.4	17	57.4	45.4	9	23.8
ø16	1/2	KQ2Y12-04□P	27	18.5	17	23	31.8	23	44.4	17	57.4	45.4	9	51.1
	New 1/4	KQ2Y16-02□P	17	23.8	17	28.6	29.6	28.6	50.6	20.6	57.4	45.4	9	32.2
ø16	3/8	KQ2Y16-03□P	21	23.8	21	28.6	32.7	28.6	53.7	20.6	81	60	11	41.3
	1/2	KQ2Y16-04□P	27	23.8	21	28.6	34.7	28.6	52.9	20.6	113	60	13	67.3

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Fittings

KQ2

KDM6

KDM

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Series KQ2

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

Dimensions

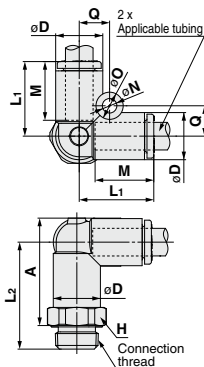
Male Delta Union: KQ2D (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note øD	L1	L2	A	M	Q	øO	øN	Effective area (mm ²)	Min. port size	Weight (g)	
												Nylon Urethane			
ø4	1/8	KQ2D04-01□P	12	8.2	15.8	22.6	21.5	13.3	5.7	6	3.2	6	6	3.6	9.1
	1/4	KQ2D04-02□P	17	8.2	15.8	26	22.5	13.3	5.7	6	3.2	6	6	3.6	19
ø6	1/8	KQ2D06-01□P	12	10.4	16.8	23.6	23.6	13.3	6.7	6	3.2	13.9	11	5.4	9.7
	1/4	KQ2D06-02□P	17	10.4	16.8	27	24.6	13.3	6.7	6	3.2	13.9	11	5.4	19.3
ø8	3/8	KQ2D06-03□P	21	10.4	16.8	26.5	24.1	13.3	6.7	6	3.2	13.9	11	5.4	27.6
	1/8	KQ2D08-01□P	14	13.2	18.8	25.6	27	14.2	8.4	8	4.2	26.3	18.2	6	15.2
ø10	1/4	KQ2D08-02□P	17	13.2	18.8	29	28	14.2	8.4	8	4.2	26.3	18.2	7.3	20.9
	3/8	KQ2D08-03□P	21	13.2	18.8	28.5	27.5	14.2	8.4	8	4.2	26.3	18.2	7.3	29.3
ø12	1/4	KQ2D10-02□P	17	15.9	21.2	31.4	31.7	15.6	9.6	8	4.2	40.8	29	9	23.2
	3/8	KQ2D10-03□P	21	15.9	21.2	30.9	31.2	15.6	9.6	8	4.2	40.8	29	9.4	30.7
ø16	1/2	KQ2D10-04□P	27	15.9	21.2	33.2	30.7	15.6	9.6	8	4.2	40.8	29	9.4	48.8
	1/4	KQ2D12-02□P	21	18.5	23.6	33.8	35.4	17	10.7	8	4.2	57.2	45.2	9	36.6
ø20	3/8	KQ2D12-03□P	21	18.5	23.6	33.3	34.9	17	10.7	8	4.2	57.2	45.2	11	34.3
	1/2	KQ2D12-04□P	27	18.5	23.6	35.6	34.4	17	10.7	8	4.2	57.2	45.2	11.6	49.8

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD is maximum diameter.



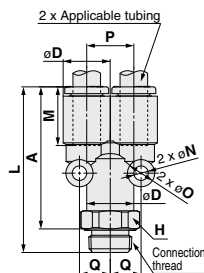
Branch "Y": KQ2U (Face seal)



Applicable tubing O.D. (mm)	Connection thread R	Model	H (Width across flats)	Note øD	L	A	M	P	Q	øO	øN	Effective area (mm ²)	Min. port size	Weight (g)	
												Nylon			Urethane
ø3.2	1/8	KQ2U23-01□P	12	7.1	35.7	30.5	13.3	7.1	5.2	6	3.2	3.4	2.9	2.7	9
	1/4	KQ2U23-02□P	17	7.1	39.1	31.5	13.3	7.1	5.2	6	3.2	3.4	2.9	2.7	19
ø4	1/8	KQ2U04-01□P	12	8.2	35.8	30.6	13.3	8.2	5.7	6	3.2	4.2	4.2	3.6	9.3
	1/4	KQ2U04-02□P	17	8.2	39.2	31.6	13.3	8.2	5.7	6	3.2	4.2	4.2	3.6	19.2
ø6	1/8	KQ2U06-01□P	12	10.4	36.9	31.7	13.3	10.4	6.8	6	3.2	13.4	10.6	5.4	9.9
	1/4	KQ2U06-02□P	17	10.4	40.3	32.7	13.3	10.4	6.8	6	3.2	13.4	10.6	5.4	19.5
ø8	3/8	KQ2U06-03□P	21	10.4	39.8	32.2	13.3	10.4	6.8	6	3.2	13.4	10.6	5.4	27.8
	1/8	KQ2U08-01□P	14	13.2	40	34.8	14.2	13.2	8.7	8	4.2	25.6	17.7	6	15.8
ø10	1/4	KQ2U08-02□P	17	13.2	43.4	35.8	14.2	13.2	8.7	8	4.2	25.6	17.7	7.3	21.4
	3/8	KQ2U08-03□P	21	13.2	42.9	35.3	14.2	13.2	8.7	8	4.2	25.6	17.7	7.3	29.8
ø12	1/4	KQ2U10-02□P	17	15.9	47.3	39.7	15.6	15.9	10.1	8	4.2	40	28.4	9	23.9
	3/8	KQ2U10-03□P	21	15.9	46.8	39.2	15.6	15.9	10.1	8	4.2	40	28.4	9.4	31.4
ø16	1/2	KQ2U10-04□P	27	15.9	49.1	38.7	15.6	15.9	10.1	8	4.2	40	28.4	9.4	49.5
	1/4	KQ2U12-02□P	21	18.5	51.3	43.7	17	18.5	11.4	8	4.2	57.4	45.4	9	37.6
ø20	3/8	KQ2U12-03□P	21	18.5	50.8	43.2	17	18.5	11.4	8	4.2	57.4	45.4	11	35.2
	1/2	KQ2U12-04□P	27	18.5	53.1	42.7	17	18.5	11.4	8	4.2	57.4	45.4	11.6	50.8
ø25	^{New} 1/4	KQ2U16-02□P	24	23.8	60.7	53.1	20.6	23.8	14	8	4.2	57.4	45.4	9	68.2
	3/8	KQ2U16-03□P	24	23.8	60.2	52.6	20.6	23.8	14	8	4.2	81	60	11	64.7
ø32	1/2	KQ2U16-04□P	27	23.8	62.5	52.1	20.6	23.8	14	8	4.2	113	60	13	70

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD is maximum diameter.



Metric Size One-touch Fittings *Series KQ2*

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

Dimensions

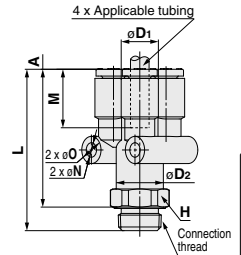
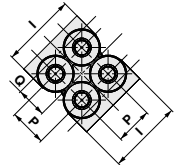
Double Branch "Y": KQ2UD (Face seal)



Applicable tubing O.D (mm)	Connection thread	Model	H (Width across flats)	(Note) ϕD_1	ϕD_2	L	I	A	M	P	Q	ϕO	ϕN	Effective area (mm ²) Nylon (Jethane)	Min. port size	Weight (g)	
$\phi 4$	1/8	KQ2UD04-01□P	12	8.2	10.4	36	16.6	30.8	13.3	8.2	6.8	6	3.2	4.2	4.2	5.4	11.3
	1/4	KQ2UD04-02□P	17	8.2	10.4	39.4	16.6	31.8	13.3	8.2	6.8	6	3.2	4.2	4.2	5.4	20.8
$\phi 6$	1/8	KQ2UD06-01□P	14	10.4	13.2	38.8	21	33.6	13.3	10.4	8.2	6	3.2	13.4	10.6	6	16.4
	1/4	KQ2UD06-02□P	17	10.4	13.2	42.2	21	34.6	13.3	10.4	8.2	6	3.2	13.4	10.6	7.3	22.1

□/A: Brass, N: Brass + Electroless nickel plated

Note) ϕD_1 is maximum diameter.

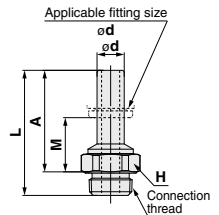


Adapter: KQ2N (Face seal)



Applicable fitting size ϕd	Connection thread R	Model	H (Width across flats)	L	A	M	Min. port size	Weight (g)
$\phi 4$	1/8	KQ2N04-01□P	12	27.6	22.4	9.1	2.5	4.4
$\phi 6$	1/8	KQ2N06-01□P	12	27.6	22.4	9.1	4	4.6
	1/4	KQ2N06-02□P	17	31	23.4	10.1	4	13.8
$\phi 8$	1/4	KQ2N08-02□P	17	32.9	25.3	11.1	6	11.8
	3/8	KQ2N08-03□P	21	34.9	27.3	13.1	6	26.7
$\phi 10$	3/8	KQ2N10-03□P	21	36.8	29.2	13.6	7.5	14.7

□/A: Brass, N: Brass + Electroless nickel plated



Fittings

KQ2

KDM6

KDM

Inch Size One-touch Fittings

Applicable Tubing: Inch Size, Connection Thread: NPT

Series KQ2

Guide

Chuck

Suitable for use with nylon and urethane. Large retaining force.

The chuck provides secure retention and the collet increases the holding force on the tube.

Seal

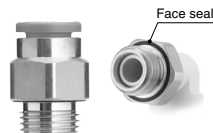
Can be used for a wide range of pressures from a low vacuum up to a pressure of 1 MPa.

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

Face seal method

Seal ring

Piping installability is improved by changing to the face seal structure.



Release button

Requires little force for removal.

Releases the chuck collet to remove the tube as well as to prevent the chuck from biting too deeply into the tubing.

Body

O-ring

Stud

Effective when piping in a confined space.

Body part rotates allowing for positioning.

Connection thread

NPT

Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon, Polyurethane
Tubing O.D.	ø1/8", ø5/32", ø3/16", ø1/4", ø5/16", ø3/8", ø1/2"

Specifications

Fluid		Air/Water Note 1)
Operating pressure range Note 2)		-100 kPa to 1 MPa
Proof pressure (at 23°C)		3 MPa
Ambient and fluid temperature		-5 to 60°C, Water: 0 to 40°C (No freezing)
Thread	Mounting section	ANSI/ASME1.20.1 (NPT thread) JIS B0208 (UNF thread)
	Nut section	JIS B0208 (UNF thread)
Sealant on the threads		Seal ring

Note 1) The surge pressure must be under the maximum operating pressure.

Note 2) Do not use the fittings with a leak tester or for vacuum retention because they are not guaranteed for zero leakage.

Principal Parts Material

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

One-touch IN/OUT connection.

Possible to use in vacuum to -100 kPa

New thread for piping that drastically reduced the screw-in time thanks to the face seal method.



How to Order

Threaded Type **KQ2** **H** **05** - **34** **A** **P**

One-touch fittings •

• Face seal

Model •

Symbol	Model
H	Male connector
S	Hexagon socket head male connector
L	Male elbow
K	45° male elbow
V	Universal male elbow
VS	Hexagon socket head universal male elbow
VF	Universal 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
T	Male branch tee
Y	Male run tee
U	Branch "Y"

• Thread material/Surface treatment

Symbol	Thread material/Surface treatment
A	Brass
N	Brass + Electroless nickel plated

• Port size/Applicable tubing O.D.

Symbol	Size
33	NPT1/16
34	NPT1/8
35	NPT1/4
36	NPT3/8
37	NPT1/2

• Applicable tubing O.D.

Symbol	Size
01	ø1/8"
03	ø5/32"
05	ø3/16"
07	ø1/4"
09	ø5/16"
11	ø3/8"
13	ø1/2"

Fittings

KQ2

KDM6

KDM

Inch Size One-touch Fittings

Variations

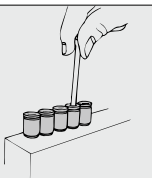
Hexagon socket head male connector

KQ2S

P.406



Internal hexagon socket allows tightening with a hexagon wrench in confined spaces.



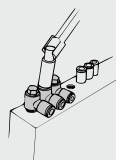
Universal male elbow

KQ2V

P.408



Hexagon head of the body allows tightening with a box wrench in confined spaces.



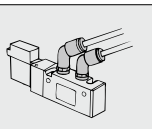
45° male elbow

KQ2K

P.407



Use to pipe a female thread at a 45° angle. The model between the male connector and male elbow.



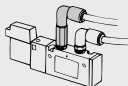
Extended male elbow

KQ2W

P.411



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



Male connector

KQ2H

P.406



Use to pipe a female thread. Most general model.

Double universal male elbow

KQ2VD

P.409



Hexagon head of the body allows tightening with a box wrench. Use for branch connections.

Triple branch universal male elbow

KQ2ZT

P.410



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

Male elbow

KQ2L

P.407



Use to pipe a female thread at right angles. Most general model.

Triple universal male elbow

KQ2VT

P.409



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

Male branch tee

KQ2T

P.411



Use to branch a female thread at both 90° angles.

Hexagon socket head universal male elbow

KQ2VS

P.408



Hexagon socket on the top allows tightening with a hexagon wrench in confined spaces.

Branch universal male elbow

KQ2Z

P.409



Hexagon head of the body allows tightening with a box wrench. Use for branch connections.

Male run tee

KQ2Y

P.412



Use to branch a female thread at a 90° angle.

Universal female elbow

KQ2VF

P.408



Use to branch a male or female thread at a 90° angle. Multiple connections possible.

Double branch universal male elbow

KQ2ZD

P.410



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

Branch "Y"

KQ2U

P.412



Use to branch a female thread.

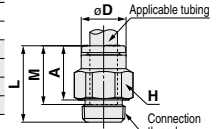
Dimensions

Male Connector: KQ2H (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	øD	L	A	M	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø1/8	1/16	KQ2H01-33□P	11.11	6.7	16.8	11.4	13.3	3	2.5	2.5	14.9
	1/8	KQ2H01-34□P	12.7	6.7	14.3	8.9	13.3	3	2.5	2.5	8.7
	1/4	KQ2H01-35□P	17.46	6.7	15.6	7.5	13.3	3.4	2.9	2.5	16.6
ø5/32	1/16	KQ2H03-33□P	11.11	7.7	19	13.6	13.3	5.6	4	3	13.9
	1/8	KQ2H03-34□P	12.7	7.7	16.4	11	13.3	5.6	4	3	7.6
	1/4	KQ2H03-35□P	17.46	7.7	15.6	7.5	13.3	5.6	4	3	16
ø3/16	1/8	KQ2H05-34□P	12.7	8.3	16.9	11.5	13.3	7.8	6.5	3.6	7.8
	1/4	KQ2H05-35□P	17.46	8.3	15.6	7.5	13.3	7.8	6.5	3.5	15.3
	1/16	KQ2H07-33□P	11.11	10.9	19.9	14.5	13.3	13.5	11.5	3.5	6.4
ø1/4	1/8	KQ2H07-34□P	12.7	10.9	19.5	14.1	13.3	13.5	11.5	4.6	9.4
	1/4	KQ2H07-35□P	17.46	10.9	15.6	7.5	13.3	13.5	11.5	4.6	13.6
	3/8	KQ2H07-36□P	22	10.9	15.1	7	13.3	13.5	11.5	4.6	22.5
ø5/16	1/8	KQ2H09-34□P	17.46	13	21.3	15.9	14.2	26.1	18	6	17.8
	1/4	KQ2H09-35□P	17.46	13	20.5	12.4	14.2	26.1	18	6	15.7
	3/8	KQ2H09-36□P	22	13	15.2	7.1	14.2	26.1	18	6	20
ø3/8	1/8	KQ2H11-34□P	17.46	15.1	23.1	17.7	15.6	26	26	6	18.4
	1/4	KQ2H11-35□P	17.46	15.1	24.5	16.4	15.6	35.3	29.1	7	19.8
	3/8	KQ2H11-36□P	22	15.1	21.7	13.6	15.6	35.3	29.1	7	26.3
ø1/2	1/2	KQ2H11-37□P	28.57	15.1	16.9	6.5	15.6	35.3	29.1	7	36.5
	1/4	KQ2H13-35□P	22	19	27.1	19	17	58.5	51.7	9	29.7
	3/8	KQ2H13-36□P	22	19	26.2	18.1	17	66	51.7	9.6	31.8
	1/2	KQ2H13-37□P	28.57	19	25.8	15.4	17	66	51.7	9.6	52.5

□/A: Brass, N: Brass + Electroless nickel plated



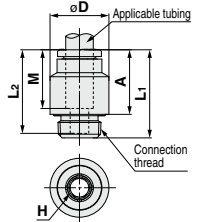
Hexagon Socket Head Male Connector: KQ2S (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD	L ₁	L ₂	A	M	Effective area (mm ²)		Min. port size	Weight (g)
									Nylon	Urethane		
ø5/32	1/16	KQ2S03-33□P	2.78	12	19	16.3	13.6	13.3	4.1	3.6	2.8	7.5
	1/8	KQ2S03-34□P	2.78	14	17.3	16.3	11.9	13.3	4.1	3.6	2.8	9.2
	1/4	KQ2S03-35□P	2.78	12	19.9	16.3	14.5	13.3	8.4	8.4	2.8	7.1
ø3/16	1/8	KQ2S05-34□P	3.57	14	19.8	18.8	14.4	13.3	7.8	6.5	2	11.7
	1/16	KQ2S07-33□P	2.78	12	19.9	16.3	14.5	13.3	8.4	8.4	2.8	7.1
	1/8	KQ2S07-34□P	4.76	14	19.8	18.8	14.4	13.3	13.5	11.5	4.8	10.6
ø1/4	1/4	KQ2S07-35□P	4.76	18	19.8	18.8	11.7	13.3	13.5	11.5	4.8	15.6
	3/8	KQ2S07-36□P	4.76	22	19.8	18.8	11.7	13.3	13.5	11.5	4.8	26.4
ø5/16	1/8	KQ2S09-34□P	5.56	13	20.9	19.7	15.5	14.2	17.2	16.2	5.6	8.6
	1/4	KQ2S09-35□P	6.35	18	20.7	19.7	12.6	14.2	23.3	16.2	6.4	15.3
	3/8	KQ2S09-36□P	6.35	22	20.7	19.7	12.6	14.2	23.3	16.2	6.4	25
ø3/8	1/8	KQ2S11-34□P	5.56	15.1	23.1	21.1	17.7	15.6	22.7	22.7	5.6	12.1
	1/4	KQ2S11-35□P	6.35	18	24.5	21.1	16.4	15.6	29.6	29.1	6.4	19.9
	3/8	KQ2S11-36□P	6.35	22	22.1	21.1	14	15.6	29.6	29.1	6.4	26.8
ø1/2	1/2	KQ2S11-37□P	6.35	26	22.1	21.1	11.7	15.6	29.6	29.1	6.4	42.8
	1/4	KQ2S13-35□P	8	19	31.2	22.5	23.1	17	48	48	8.1	23.9
	3/8	KQ2S13-36□P	9.53	22	26.2	22.5	18.1	17	66	51.7	9.6	30.2
	1/2	KQ2S13-37□P	9.53	26	25.6	22.5	15.2	17	66	51.7	9.6	43.6

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD is maximum diameter.



Series KQ2

Applicable Tubing: Inch Size, Connection Thread: NPT

Dimensions

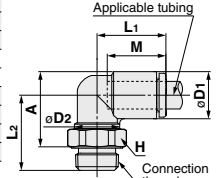
Male Elbow: KQ2L (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø1/8	1/16	KQ2L01-33□P	11.11	7.1	10	14.5	21.6	19.8	13.3	3	2.5	2.5	14.6
	1/8	KQ2L01-34□P	12.7	7.1	10	14.5	16.7	14.9	13.3	3	2.5	2.5	6.1
	1/4	KQ2L01-35□P	17.46	7.1	10	14.5	21.4	16.9	13.3	3	2.5	2.5	18.3
ø5/32	1/16	KQ2L03-33□P	11.11	8.2	10	14.8	21.1	19.8	13.3	4.2	4.2	3	14.9
	1/8	KQ2L03-34□P	12.7	8.2	10	14.8	16.2	14.9	13.3	4.2	4.2	3	6.3
	1/4	KQ2L03-35□P	17.46	8.2	10	14.8	21.9	17.9	13.3	4.2	4.2	3	18.5
ø3/16	1/8	KQ2L05-34□P	12.7	9.1	10	15	16.7	15.8	13.3	6.8	5.6	3.5	6.5
	1/4	KQ2L05-35□P	17.46	9.1	10	15	22.4	18.8	13.3	6.8	5.6	3.5	18.7
	1/2	KQ2L05-36□P	22	11.1	10	15.6	22.6	22.7	13.3	6.8	6.8	3.5	8
ø1/4	1/8	KQ2L07-34□P	12.7	11.1	10	15.6	17.7	17.8	13.3	11.3	10	4.5	6.8
	1/4	KQ2L07-35□P	17.46	11.1	10	15.6	23.4	20.8	13.3	11.3	10	4.5	19
	3/8	KQ2L07-36□P	22	11.1	10	15.6	23.9	21.3	13.3	11.3	10	4.5	32.5
ø5/16	1/8	KQ2L09-34□P	12.7	13.2	10	16.4	18.7	19.9	14.2	11.4	11.4	4.5	7.5
	1/4	KQ2L09-35□P	17.46	13.2	12	17.2	23.4	21.9	14.2	21.6	14.9	6	15.7
	3/8	KQ2L09-36□P	22	13.2	12	17.2	24.9	23.4	14.2	21.6	14.9	6	30.8
ø3/8	1/8	KQ2L11-34□P	12.7	15.4	12	18.6	22.2	24.5	15.6	21.2	21.2	6	10.7
	1/4	KQ2L11-35□P	17.46	15.4	17	19.3	25.4	24.9	15.6	28.8	23.8	7.5	18.1
	3/8	KQ2L11-36□P	22	15.4	17	19.3	26.1	25.6	15.6	28.8	23.8	7.5	19
ø1/2	1/2	KQ2L11-37□P	28.57	15.4	17	19.3	31.4	28.6	15.6	28.8	23.8	7.5	53.9
	3/4	KQ2L13-35□P	17.46	19.3	17	21.5	27.3	28.8	17	50.3	44.4	9	20.4
	3/8	KQ2L13-36□P	22	19.3	17	21.8	28.2	29.7	17	56	44.4	9.5	34.7
	1/2	KQ2L13-37□P	28.57	19.3	17	21.8	33.3	32.5	17	56	44.4	9.5	76.4

□A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



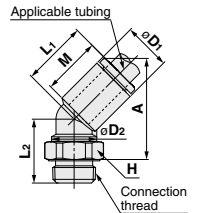
45° Male Elbow: KQ2K (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø1/8	1/8	KQ2K01-34□P	12.7	7.1	10	14.3	12.7	19.6	13.3	3	2.5	2.5	5.9
ø5/32	1/8	KQ2K03-34□P	12.7	8.2	10	14.4	12.7	20	13.3	4.2	4.2	3	6.1
ø3/16	1/8	KQ2K05-34□P	12.7	9.1	10	14.5	13.2	20.9	13.3	6.8	5.6	3.5	6.3
ø1/4	1/8	KQ2K07-34□P	12.7	11.1	10	14.8	15.2	23.6	13.3	11.3	10	4.5	6.7
	1/4	KQ2K07-35□P	17.46	11.1	10	14.8	19.9	25.6	13.3	11.3	10	4.5	18.9
	3/8	KQ2K07-36□P	22	11.1	10	14.8	20.4	26.1	13.3	11.3	10	4.5	32.4
ø5/16	1/8	KQ2K09-34□P	12.7	13.2	10	16	15.7	25.7	14.2	11.3	11.3	4.5	7.4
	1/4	KQ2K09-35□P	17.46	13.2	12	16	20.4	27.7	14.2	19.7	19.7	6	15.5
	3/8	KQ2K09-36□P	22	13.2	12	16	21.9	29.2	14.2	19.7	19.7	6	30.6
ø3/8	1/8	KQ2K11-34□P	12.7	15.4	12	18.1	20.1	32.3	15.6	21.2	21.2	6	10.6
	1/4	KQ2K11-35□P	17.46	15.4	17	17.7	25.4	34.6	15.6	28.8	23.8	7	18.2
	3/8	KQ2K11-36□P	22	15.4	17	17.7	20.4	29.6	15.6	28.8	23.8	7	18.4
ø1/2	1/2	KQ2K11-37□P	28.57	15.4	17	17.7	25.7	32.6	15.6	28.8	23.8	7	53.4
	3/4	KQ2K13-35□P	17.46	19.3	17	19.4	25.5	37.2	17	50.3	44.4	9	20.2
	3/8	KQ2K13-36□P	22	19.3	17	19.4	25.5	37.2	17	56	44.4	9.5	34.4
	1/2	KQ2K13-37□P	28.57	19.3	17	19.4	30.6	40	17	56	44.4	9.5	76.1

□A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



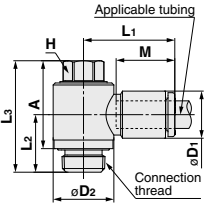
Dimensions

Universal Male Elbow: KQ2V (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
											Nylon	Urethane		
ø1/8	1/8	KQ2V01-34□P	8	7.1	13.4	19.3	12.9	24.8	19.4	13.3	2.2	1.9	2.5	13.1
ø5/32	1/8	KQ2V03-34□P	8	8.2	13.4	19.3	12.9	24.8	19.4	13.3	2.9	2.9	3	13.2
ø3/16	1/8	KQ2V05-34□P	8	9.1	13.4	19.6	12.9	24.8	19.4	13.3	4.5	3.7	3.5	13.4
ø1/4	1/8	KQ2V07-34□P	8	11.1	13.4	20.6	12.9	24.8	19.4	13.3	7.5	6.6	4.5	13.7
	1/4	KQ2V07-35□P	8	11.1	15.3	19.9	17.4	30.8	22.7	13.3	7.5	6.6	4.5	23.9
ø5/16	1/8	KQ2V09-34□P	11.11	13.2	17.6	23.5	14.3	26.8	21.4	14.2	16	11.2	6	22.4
	1/4	KQ2V09-35□P	11.11	13.2	17.6	23.5	17.2	29.7	21.6	14.2	16	11.2	6	27.2
ø3/8	3/8	KQ2V09-36□P	12.7	13.2	20.6	23.1	17.9	33.7	25.6	14.2	16	11.2	6	41.3
	1/4	KQ2V11-35□P	12.7	15.4	20.6	25.8	18.3	33.6	25.5	15.6	23.4	19.3	7	35.7
ø1/2	3/8	KQ2V11-36□P	12.7	15.4	20.6	25.8	18.4	33.7	25.6	15.6	23.4	19.3	7	42.4
	3/8	KQ2V13-36□P	17.46	19.3	27	30.5	18.6	33.5	25.4	17	38.8	34.3	7.5	65.1
	1/2	KQ2V13-37□P	17.46	19.3	27	30.5	21.3	36.2	25.8	17	38.8	34.3	9	75.2

□/A: Brass, N: Brass + Electroless nickel plated * Reference dimensions after installation of NPT thread
Note) øD1 is maximum diameter.

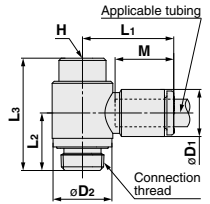


Hexagon Socket Head Universal Male Elbow: KQ2VS (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
											Nylon	Urethane		
ø1/8	1/8	KQ2VS01-34□P	6.35	7.1	13.4	19.3	12.9	25	19.6	13.3	2.2	1.9	2.5	12.7
ø5/32	1/8	KQ2VS03-34□P	6.35	8.2	13.4	19.3	12.9	25	19.6	13.3	2.9	2.9	3	12.8
ø3/16	1/8	KQ2VS05-34□P	6.35	9.1	13.4	19.6	12.9	25	19.6	13.3	4.5	3.7	3.5	13.1
ø1/4	1/8	KQ2VS07-34□P	6.35	11.1	13.4	20.6	12.9	25	19.6	13.3	7.7	6.6	4.6	13.4
	1/4	KQ2VS07-35□P	6.35	11.1	15.3	19.9	17.4	26.8	18.7	13.3	7.7	6.6	4.6	20.9
ø5/16	1/8	KQ2VS09-34□P	8	13.2	17.6	23.5	14.3	25.2	19.8	14.2	16	11.2	6	19.6
	1/4	KQ2VS09-35□P	8	13.2	17.6	23.5	17.2	28.2	20.1	14.2	16	11.2	6	24.5
ø3/8	3/8	KQ2VS09-36□P	8	13.2	20.6	23.1	17.9	29.8	21.7	14.2	16	11.2	6	35.1
	1/4	KQ2VS11-35□P	8	15.4	20.6	25.8	18.3	29.5	21.4	15.6	23.4	19.3	7	29.3
ø1/2	3/8	KQ2VS11-36□P	8	15.4	20.6	25.8	18.4	29.8	21.7	15.6	23.4	19.3	7	36.3
	3/8	KQ2VS13-36□P	9.53	19.3	27	30.5	18.6	32	23.9	17	38.8	34.3	9	57.6
	1/2	KQ2VS13-37□P	9.53	19.3	27	30.5	21.3	34.7	24.3	17	38.8	34.3	9	70.9

□/A: Brass, N: Brass + Electroless nickel plated * Reference dimensions after installation of NPT thread
Note) øD1 is maximum diameter.

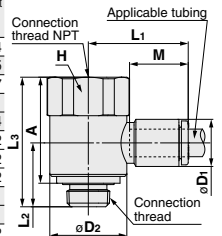


Universal Female Elbow: KQ2VF (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
											Nylon	Urethane		
ø1/8	1/8	KQ2VF01-34□P	17.46	7.1	17	21.2	14.3	28.8	23.4	13.3	2.2	1.9	2.5	28.4
ø5/32	1/8	KQ2VF03-34□P	17.46	8.2	17	21.2	14.3	28.8	23.4	13.3	2.9	2.9	3	28.5
ø3/16	1/8	KQ2VF05-34□P	17.46	9.1	17	21.5	14.3	28.8	23.4	13.3	4.5	3.7	3.5	28.7
ø1/4	1/8	KQ2VF07-34□P	17.46	11.1	17	22.5	14.3	28.8	23.4	13.3	7.7	6.6	4.6	29
	1/4	KQ2VF07-35□P	22.23	11.1	21.7	23.2	18.1	36.9	28.8	13.3	7.7	6.6	4.6	62.4
ø5/16	1/8	KQ2VF09-34□P	17.46	13.2	17.6	23.5	15	30.5	25.1	14.2	16	11.2	6	30.2
	1/4	KQ2VF09-35□P	22.23	13.2	21.6	25.1	18.3	36.9	28.8	14.2	16	11.2	6	63.2
ø3/8	3/8	KQ2VF09-36□P	25.4	13.2	27.7	26.2	22.7	42.7	34.6	14.2	16	11.2	6	87.2
	1/4	KQ2VF11-35□P	22.23	15.4	22.6	26.4	19.7	39.2	31.1	15.6	23.4	19.3	7	62.1
ø1/2	3/8	KQ2VF11-36□P	25.4	15.4	27.7	27.6	22.2	42.7	34.6	15.6	23.4	19.3	7	88
	3/8	KQ2VF13-36□P	25.4	19.3	27.7	30.7	20.9	42.7	34.6	17	38.8	34.3	9	90.2
	1/2	KQ2VF13-37□P	28.57	19.3	31.6	32.8	22.6	47.1	36.7	17	38.8	34.3	9	136

□/A: Brass, N: Brass + Electroless nickel plated * Reference dimensions after installation of NPT thread
Note) øD1 is maximum diameter.



Series KQ2

Applicable Tubing: Inch Size, Connection Thread: NPT

Dimensions

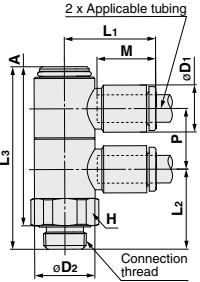
Double Universal Male Elbow: KQ2VD (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note	øD1	øD2	L1	L2	L3	A	M	P	Effective area (mm ²) Nylon/urethane	Min. port size	Weight (g)
ø1/8	1/8	KQ2VD01-34□P	14.29	7.1	13.4	19.3	18.2	40.9	35.5	13.3	13.4	2.2	1.9	2.5	22.8
ø5/32	1/8	KQ2VD03-34□P	14.29	8.2	13.4	19.3	18.2	40.9	35.5	13.3	13.4	2.9	2.9	3	23.1
ø3/16	1/8	KQ2VD05-34□P	14.29	9.1	13.4	19.6	18.2	40.9	35.5	13.3	13.4	4.5	3.7	3.5	23.3
ø1/4	1/8	KQ2VD07-34□P	14.29	11.1	13.4	20.6	19.2	42.3	36.9	13.3	13.8	7.7	6.6	4.6	25.6
	3/8	KQ2VD07-36□P	17.46	11.1	13.4	20.6	22.4	45.5	37.4	13.3	13.8	7.7	6.6	4.6	35.4
ø5/16	1/4	KQ2VD09-35□P	19	13.2	17.6	23.7	23.9	50.7	42.6	14.2	15.9	16	11.2	6	49.3
	3/8	KQ2VD09-36□P	22	13.2	17.6	23.7	24.9	51.7	43.6	14.2	15.9	16	11.2	6	63.4
ø3/8	1/2	KQ2VD09-37□P	28.57	13.2	17.6	23.7	30.2	57	46.6	14.2	15.9	16	11.2	6	113.5
	3/4	KQ2VD11-35□P	22	15.4	20.6	25.3	26.1	58	49.9	15.6	19.2	23.4	19.3	7	72.2
ø1/2	3/8	KQ2VD11-36□P	22	15.4	20.6	25.3	26.1	58	49.9	15.6	19.2	23.4	19.3	7	71.2
	1/2	KQ2VD11-37□P	28.57	15.4	20.6	25.3	31.4	63.3	52.9	15.6	19.2	23.4	19.3	7	119.3
ø1/2	3/8	KQ2VD13-36□P	28.57	19.3	27	30.5	31	65.8	57.7	17	22.3	43.8	34.3	9.6	150.7
	1/2	KQ2VD13-37□P	28.57	19.3	27	30.5	33.3	68.1	57.7	17	22.3	43.8	34.3	9.6	161.2

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



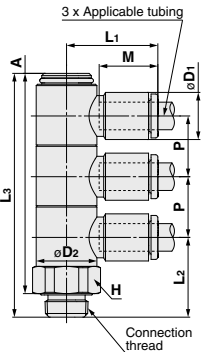
Triple Universal Male Elbow: KQ2VT (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note	øD1	øD2	L1	L2	L3	A	M	P	Effective area (mm ²) Nylon/urethane	Min. port size	Weight (g)
ø1/8	1/8	KQ2VT01-34□P	14.29	7.1	13.4	19.3	18.2	54.4	49	13.3	13.4	2.2	1.9	2.5	28.3
ø5/32	1/8	KQ2VT03-34□P	14.29	8.2	13.4	19.3	18.2	54.4	49	13.3	13.4	2.9	2.9	3	28.7
ø3/16	1/8	KQ2VT05-34□P	14.29	9.1	13.4	19.6	18.2	54.4	49	13.3	13.4	4.5	3.7	3.5	29
ø1/4	1/8	KQ2VT07-34□P	14.29	11.1	13.4	20.6	19.2	56.1	50.7	13.3	13.8	7.7	6.6	4.6	32.1
	3/8	KQ2VT07-36□P	17.46	11.1	13.4	20.6	22.4	59.3	51.2	13.3	13.8	7.7	6.6	4.6	41.9
ø5/16	1/4	KQ2VT09-35□P	19	13.2	17.6	23.7	23.9	66.7	58.6	14.2	15.9	16	11.2	6	61.4
	3/8	KQ2VT09-36□P	22	13.2	17.6	23.7	24.9	67.7	59.6	14.2	15.9	16	11.2	6	75.5
ø3/8	1/2	KQ2VT09-37□P	28.57	13.2	17.6	23.7	30.2	73	62.6	14.2	15.9	16	11.2	6	125.4
	3/4	KQ2VT11-35□P	22	15.4	20.6	25.3	26.1	77.3	69.2	15.6	19.2	23.4	19.3	7	90.8
ø1/2	3/8	KQ2VT11-36□P	22	15.4	20.6	25.3	26.1	77.3	69.2	15.6	19.2	23.4	19.3	7	87.8
	1/2	KQ2VT11-37□P	28.57	15.4	20.6	25.3	31.4	82.6	72.2	15.6	19.2	23.4	19.3	7	136
ø1/2	3/8	KQ2VT13-36□P	28.57	19.3	27	30.5	31	88.2	80.1	17	22.3	43.8	34.3	9.6	191.4
	1/2	KQ2VT13-37□P	28.57	19.3	27	30.5	33.3	90.5	80.1	17	22.3	43.8	34.3	9.6	191.5

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



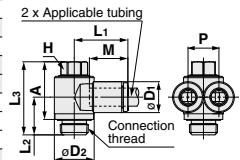
Branch Universal Male Elbow: KQ2Z (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note	øD1	øD2	L1	L2	L3	A	M	P	Effective area (mm ²) Nylon/urethane	Min. port size	Weight (g)
ø1/8	1/8	KQ2Z01-34□P	8	7.1	13.4	18.5	12.9	24.8	19.4	13.3	7.1	2.2	1.9	2.5	13.8
ø5/32	1/8	KQ2Z03-34□P	8	8.2	13.4	18.5	12.9	24.8	19.4	13.3	8.2	2.9	2.9	3	14
ø3/16	1/8	KQ2Z05-34□P	8	9.1	13.4	18.4	12.9	24.8	19.4	13.3	9.1	4.5	3.7	3.5	14.3
ø1/4	1/8	KQ2Z07-34□P	8	11.1	13.4	18.4	12.9	24.8	19.4	13.3	11.1	7.5	6.6	4.5	14.8
	3/8	KQ2Z07-36□P	11.11	11.1	17.6	20.4	16.7	29.7	21.6	13.3	11.1	7.7	6.6	4.6	27.6
ø5/16	1/8	KQ2Z09-34□P	11.11	13.2	17.6	21.2	14.3	26.8	21.4	14.2	13.2	20.5	14.2	6	24.1
	1/4	KQ2Z09-35□P	11.11	13.2	17.6	21.2	17.2	29.7	21.6	14.2	13.2	20.5	14.2	6	29
ø3/8	3/8	KQ2Z09-36□P	12.7	13.2	20.6	22.3	17.9	33.7	25.6	14.2	13.2	20.5	14.2	6	43.2
	1/4	KQ2Z11-35□P	12.7	15.4	20.6	25.9	17.8	33.6	25.5	15.6	15.4	23.4	19.3	7	38.9
ø1/2	3/8	KQ2Z11-36□P	12.7	15.4	20.6	25.9	17.9	33.7	25.6	15.6	15.4	23.4	19.3	7	45.6
	1/2	KQ2Z13-36□P	17.46	19.3	27	30.1	18.6	33.5	25.4	17	19.3	26.9	26.9	7.5	70.6
	3/4	KQ2Z13-37□P	17.46	19.3	27	30.1	21.3	36.2	25.8	17	19.3	38.8	34.3	9	80.6

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Dimensions

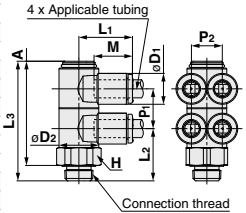
Double Branch Universal Male Elbow: KQ2ZD (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note	øD1	øD2	L1	L2	L3	A	M	P1	P2	Effective area (mm ²) Nylon/Jethane	Min. port size	Weight (g)
ø1/8	1/8	KQ2ZD01-34-P	14.29	7.1	13.4	18.5	18.2	40.9	35.5	13.3	13.4	7.1	2.2	1.9	2.5	24.1
ø5/32	1/8	KQ2ZD03-34-P	14.29	8.2	13.4	18.5	18.2	40.9	35.5	13.3	13.4	8.2	2.9	2.9	3	24.7
ø3/16	1/8	KQ2ZD05-34-P	14.29	9.1	13.4	18.4	18.2	40.9	35.5	13.3	13.4	9.1	4.5	3.7	3.5	25.2
ø1/4	1/8	KQ2ZD07-34-P	14.29	11.1	13.4	18.3	19.2	42.3	36.9	13.3	13.8	11.1	7.7	6.6	4.6	27.9
	1/4	KQ2ZD07-36-P	17.46	11.1	13.4	18.3	22.4	45.5	37.4	13.3	13.8	11.1	7.7	6.6	4.6	37.7
	3/8	KQ2ZD07-36-P	22	11.1	13.4	18.3	23.9	47	38.9	13.3	13.8	11.1	7.7	6.6	4.6	55.7
ø5/16	1/4	KQ2ZD09-36-P	19	13.2	17.6	21.2	23.9	50.7	42.6	14.2	15.9	13.2	20.5	14.2	6	52.9
	3/8	KQ2ZD09-36-P	22	13.2	17.6	21.2	24.9	51.7	43.6	14.2	15.9	13.2	20.5	14.2	6	67
	1/2	KQ2ZD09-37-P	28.57	13.2	17.6	21.2	30.2	57	46.6	14.2	15.9	13.2	20.5	14.2	6	117.1
ø3/8	1/4	KQ2ZD11-36-P	22	15.4	20.6	23.6	26.1	58	49.9	15.6	19.2	15.4	23.4	19.3	7	77.8
	3/8	KQ2ZD11-36-P	22	15.4	20.6	23.6	26.1	58	49.9	15.6	19.2	15.4	23.4	19.3	7	76.8
	1/2	KQ2ZD11-37-P	28.57	15.4	20.6	23.6	31.4	63.3	52.9	15.6	19.2	15.4	23.4	19.3	7	124.9
ø1/2	3/8	KQ2ZD13-36-P	28.57	19.3	27	27.9	31	65.8	57.7	17	22.3	19.3	43.8	34.3	9.6	159.4
	1/2	KQ2ZD13-37-P	28.57	19.3	27	27.9	33.3	68.1	57.7	17	22.3	19.3	43.8	34.3	9.6	169.9

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



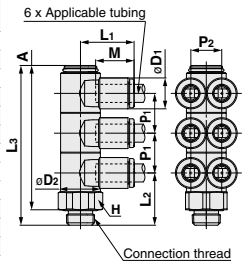
Triple Branch Universal Male Elbow: KQ2ZT (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note	øD1	øD2	L1	L2	L3	A	M	P1	P2	Effective area (mm ²) Nylon/Jethane	Min. port size	Weight (g)
ø1/8	1/8	KQ2ZT01-34-P	14.29	7.1	13.4	18.5	18.2	54.4	49	13.3	13.4	7.1	2.2	1.9	2.5	30.2
ø5/32	1/8	KQ2ZT03-34-P	14.29	8.2	13.4	18.5	18.2	54.4	49	13.3	13.4	8.2	2.9	2.9	3	31.1
ø3/16	1/8	KQ2ZT05-34-P	14.29	9.1	13.4	18.4	18.2	54.4	49	13.3	13.4	9.1	4.5	3.7	3.5	31.9
ø1/4	1/8	KQ2ZT07-34-P	14.29	11.1	13.4	18.3	19.2	56.1	50.7	13.3	13.8	11.1	7.7	6.6	4.6	35.5
	1/4	KQ2ZT07-36-P	17.46	11.1	13.4	18.3	22.4	59.3	51.2	13.3	13.8	11.1	7.7	6.6	4.6	45.3
	3/8	KQ2ZT07-36-P	22	11.1	13.4	18.3	23.9	60.8	52.7	13.3	13.8	11.1	7.7	6.6	4.6	63.3
ø5/16	1/4	KQ2ZT09-36-P	19	13.2	17.6	21.2	23.9	66.7	58.6	14.2	15.9	13.2	20.5	14.2	6	66.9
	3/8	KQ2ZT09-36-P	22	13.2	17.6	21.2	24.9	67.7	59.6	14.2	15.9	13.2	20.5	14.2	6	81
	1/2	KQ2ZT09-37-P	28.57	13.2	17.6	21.2	30.2	73	62.6	14.2	15.9	13.2	20.5	14.2	6	130.9
ø3/8	1/4	KQ2ZT11-36-P	22	15.4	20.6	23.6	26.1	77.3	69.2	15.6	19.2	15.4	23.4	19.3	7	96.2
	3/8	KQ2ZT11-36-P	22	15.4	20.6	23.6	26.1	77.3	69.2	15.6	19.2	15.4	23.4	19.3	7	96.2
	1/2	KQ2ZT11-37-P	28.57	15.4	20.6	23.6	31.4	82.6	72.2	15.6	19.2	15.4	23.4	19.3	7	96.3
ø1/2	3/8	KQ2ZT13-36-P	28.57	19.3	27	27.9	31	88.2	80.1	17	22.3	19.3	43.8	34.3	9.6	204.4
	1/2	KQ2ZT13-37-P	28.57	19.3	27	27.9	33.3	90.5	80.1	17	22.3	19.3	43.8	34.3	9.6	204.4

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Series KQ2

Applicable Tubing: Inch Size, Connection Thread: NPT

Dimensions

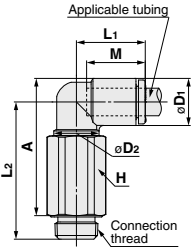
Extended Male Elbow: KQ2W (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø1/8	1/16	KQ2W01-33-P	11.11	7.1	10	14.5	33.2	31.4	13.3	2.8	2.4	2.5	14.3
	1/8	KQ2W01-34-P	12.7	7.1	10	14.5	30.3	28.5	13.3	2.8	2.4	2.5	18
	1/4	KQ2W01-35-P	17.46	7.1	10	14.5	33	28.5	13.3	2.8	2.4	2.5	39.9
ø5/32	1/16	KQ2W03-33-P	11.11	8.2	10	14.8	32.7	31.4	13.3	4	4	3	14.4
	1/8	KQ2W03-34-P	12.7	8.2	10	14.8	29.9	28.6	13.3	4	4	3	18.2
	1/4	KQ2W03-35-P	17.46	8.2	10	14.8	33.5	29.5	13.3	4	4	3	40.1
ø3/16	1/8	KQ2W05-34-P	12.7	9.1	10	15	30.4	29.5	13.3	6.8	5.6	3.5	18.4
	1/4	KQ2W05-35-P	17.46	9.1	10	15	34	30.5	13.3	6.8	5.6	3.5	40.3
	1/16	KQ2W07-33-P	11.11	11.1	10	15.6	34.2	34.4	13.3	6.8	6.8	3.5	15
ø1/4	1/8	KQ2W07-34-P	12.7	11.1	10	15.6	31.4	31.5	13.3	11.3	10	4.5	18.7
	1/4	KQ2W07-35-P	17.46	11.1	10	15.6	35	32.5	13.3	11.3	10	4.5	40.7
	3/8	KQ2W07-36-P	22	11.1	10	15.6	35.5	33	13.3	11.3	10	4.5	67.5
ø5/16	1/8	KQ2W09-34-P	12.7	13.2	10	16.4	32.4	33.6	14.2	11.3	11.3	4.5	19.5
	1/4	KQ2W09-35-P	17.46	13.2	12	17.2	37.1	35.6	14.2	20.5	14.2	6	38.9
	3/8	KQ2W09-36-P	22	13.2	12	17.2	38.6	37.1	14.2	20.5	14.2	6	69.6
ø3/8	1/4	KQ2W11-35-P	17.46	15.4	17	19.3	45.1	44.7	15.6	28.8	23.8	7.5	49.7
	3/8	KQ2W11-36-P	22	15.4	17	19.3	42	41.6	15.6	28.8	23.8	7.5	55.8
	1/2	KQ2W11-37-P	28.57	15.4	17	19.3	47.3	44.6	15.6	28.8	23.8	7.5	128.9
ø1/2	1/4	KQ2W13-35-P	17.46	19.3	17	21.5	47	48.6	17	50.3	44.4	9	52
	3/8	KQ2W13-36-P	22	19.3	17	21.8	47.9	49.5	17	56	44.4	9.5	86.7
	1/2	KQ2W13-37-P	28.57	19.3	17	21.8	53	52.3	17	56	44.4	9.5	168

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



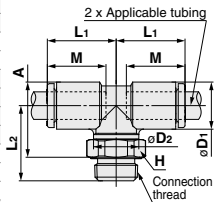
Male Branch Tee: KQ2T (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø1/8	1/16	KQ2T01-33-P	11.11	7.1	10	14.5	21.5	19.7	13.3	3.4	2.9	2.5	7.7
	1/8	KQ2T01-34-P	12.7	7.1	10	14.5	16.6	14.8	13.3	3.4	2.9	2.5	6.7
	1/4	KQ2T01-35-P	17.46	7.1	10	14.5	21.3	16.8	13.3	3.4	2.9	2.5	18.9
ø5/32	1/16	KQ2T03-33-P	11.11	8.2	10	14.8	21.1	19.8	13.3	6	4.1	3	16.3
	1/8	KQ2T03-34-P	12.7	8.2	10	14.8	16.2	14.9	13.3	6	4.1	3	7
	1/4	KQ2T03-35-P	17.46	8.2	10	14.8	21.9	17.9	13.3	6	4.1	3	19.2
ø3/16	1/8	KQ2T05-34-P	12.7	9.1	10	15	16.7	15.8	13.3	8.4	7	3.5	7.3
	1/4	KQ2T05-35-P	17.46	9.1	10	15	22.4	18.8	13.3	8.4	7	3.5	19.5
	1/16	KQ2T07-33-P	11.11	11.1	10	15.6	22.6	22.7	13.3	8.5	8.5	3.5	9.1
ø1/4	1/8	KQ2T07-34-P	12.7	11.1	10	15.6	17.7	17.8	13.3	14	12.4	4.5	7.9
	1/4	KQ2T07-35-P	17.46	11.1	10	15.6	23.4	20.8	13.3	14	12.4	4.5	20.2
	3/8	KQ2T07-36-P	22	11.1	10	15.6	23.9	21.3	13.3	14	12.4	4.5	33.7
ø5/16	1/8	KQ2T09-34-P	12.7	13.2	10	16.4	18.7	19.9	14.2	14	14	4.5	9.4
	1/4	KQ2T09-35-P	17.46	13.2	12	17.2	23.4	21.9	14.2	26.3	18.2	6	17.4
	3/8	KQ2T09-36-P	22	13.2	12	17.2	24.9	23.4	14.2	26.3	18.2	6	32.5
ø3/8	1/8	KQ2T11-34-P	12.7	15.4	12	18.6	22.1	24.4	15.6	21.2	21.2	6	13.3
	1/4	KQ2T11-35-P	17.46	15.4	17	19.3	25.3	24.9	15.6	28.8	23.8	7.5	20.5
	3/8	KQ2T11-36-P	22	15.4	17	19.3	26	25.6	15.6	28.8	23.8	7.5	21.4
ø1/2	1/2	KQ2T11-37-P	28.57	15.4	17	19.3	31.3	28.6	15.6	28.8	23.8	7.5	56.4
	1/4	KQ2T13-35-P	17.46	19.3	17	21.5	27.2	28.8	17	57.3	50.6	9	24.5
	3/8	KQ2T13-36-P	22	19.3	17	21.8	28.1	29.7	17	63.8	50.6	9.5	38.9
	1/2	KQ2T13-37-P	28.57	19.3	17	21.8	33.2	32.5	17	63.8	50.6	9.5	80.6

□/A: Brass, N: Brass + Electroless nickel plated

Note) øD1 is maximum diameter.



Inch Size One-touch Fittings *Series KQ2*

Applicable Tubing: Inch Size, Connection Thread: NPT

Dimensions

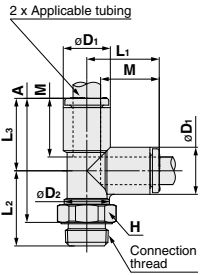
Male Run Tee: KQ2Y (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
											Nylon	Urethane		
ø1/8	1/16	KQ2Y01-33-□P	11.11	7.1	10	14.9	21.5	14.9	31.1	13.3	3.4	2.9	2.5	15.8
	1/8	KQ2Y01-34-□P	12.7	7.1	10	14.9	16.6	14.9	26.2	13.3	3.4	2.9	2.5	6.7
	1/4	KQ2Y01-35-□P	17.46	7.1	10	14.9	21.3	14.9	28.2	13.3	3.4	2.9	2.5	18.9
ø5/32	1/16	KQ2Y03-33-□P	11.11	8.2	10	15.3	21.1	15.3	31	13.3	6.4	4.4	3	16.4
	1/8	KQ2Y03-34-□P	12.7	8.2	10	15.3	16.2	15.3	26.1	13.3	6.4	4.4	3	7
	1/4	KQ2Y03-35-□P	17.46	8.2	10	15.3	21.9	15.3	29.1	13.3	6.4	4.4	3	19.2
ø3/16	1/8	KQ2Y05-34-□P	12.7	9.1	10	15.7	16.7	15.7	27	13.3	8.4	7	3.5	7.3
	1/4	KQ2Y05-35-□P	17.46	9.1	10	15.7	22.4	15.7	30	13.3	8.4	7	3.5	19.6
	1/16	KQ2Y07-33-□P	11.11	11.1	10	16.5	22.6	16.5	33.7	13.3	8.5	8.5	3.5	9.2
ø1/4	1/8	KQ2Y07-34-□P	12.7	11.1	10	16.5	17.7	16.5	28.8	13.3	14	12.4	4.5	8
	1/4	KQ2Y07-35-□P	17.46	11.1	10	16.5	23.4	16.5	31.8	13.3	14	12.4	4.5	20.2
	3/8	KQ2Y07-36-□P	22	11.1	10	16.5	23.9	16.5	32.3	13.3	14	12.4	4.5	33.7
ø5/16	1/8	KQ2Y09-34-□P	12.7	13.2	10	18.2	18.7	18.2	31.5	14.2	14	14	4.5	9.4
	1/4	KQ2Y09-35-□P	17.46	13.2	12	18.2	23.4	18.2	33.5	14.2	25.6	17.7	6	17.5
	3/8	KQ2Y09-36-□P	22	13.2	12	18.2	24.9	18.2	35	14.2	25.6	17.7	6	32.6
ø3/8	1/4	KQ2Y11-35-□P	17.46	15.4	17	20.4	25.3	20.4	37.6	15.6	28.8	23.8	7.5	20.7
	3/8	KQ2Y11-36-□P	22	15.4	17	20.4	26	20.4	38.3	15.6	28.8	23.8	7.5	21.5
	1/2	KQ2Y11-37-□P	28.57	15.4	17	20.4	31.3	20.4	41.3	15.6	28.8	23.8	7.5	56.5
ø1/2	1/4	KQ2Y13-35-□P	17.46	19.3	17	23.4	27.2	23.4	42.5	17	57.3	50.6	9	24.9
	3/8	KQ2Y13-36-□P	22	19.3	17	23.4	28.1	23.4	43.4	17	63.8	50.6	9.5	39.1
	1/2	KQ2Y13-37-□P	28.57	19.3	17	23.4	33.2	23.4	46.2	17	63.8	50.6	9.5	80.8

□A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread
Note) øD1 is maximum diameter.



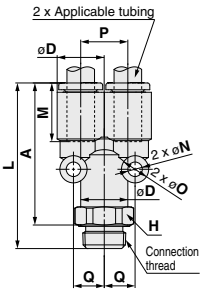
Branch "Y": KQ2U (Face seal)



Applicable tubing O.D. (inch)	Connection thread NPT	Model	H (Width across flats)	Note) øD	L	P	A	M	Q	øO	øN	Effective area (mm ²) NylonUrethane	Min. port size	Weight (g)	
ø1/8	1/16	KQ2U01-33-□P	11.11	7.1	35.9	7.1	30.5	13.3	5.2	6	3.2	3.4	2.9	2.5	7.2
	1/8	KQ2U01-34-□P	12.7	7.1	35.9	7.1	30.5	13.3	5.2	6	3.2	3.4	2.9	2.7	9.8
	1/4	KQ2U01-35-□P	17.46	7.1	39.6	7.1	31.5	13.3	5.2	6	3.2	3.4	2.9	2.7	20.3
ø5/32	1/16	KQ2U03-33-□P	11.11	8.2	36	8.2	30.6	13.3	5.7	6	3.2	4.2	4.2	3.6	7.5
	1/8	KQ2U03-34-□P	12.7	8.2	36	8.2	30.6	13.3	5.7	6	3.2	4.2	4.2	3.6	10.1
	1/4	KQ2U03-35-□P	17.46	8.2	39.7	8.2	31.6	13.3	5.7	6	3.2	4.2	4.2	3.6	20.5
ø3/16	1/8	KQ2U05-34-□P	12.7	9.1	36.6	9.1	31.2	13.3	6.2	6	3.2	8.4	7	4.1	10.6
	1/4	KQ2U05-35-□P	17.46	9.1	40.3	9.1	32.2	13.3	6.2	6	3.2	8.4	7	4.1	20.9
	1/16	KQ2U07-33-□P	12.7	11.1	37.3	11.1	31.9	13.3	7.6	8	4	8.5	8.5	3.5	12.2
ø1/4	1/8	KQ2U07-34-□P	12.7	11.1	37.3	11.1	31.9	13.3	7.6	8	4	14.4	12.4	5.6	11.7
	1/4	KQ2U07-35-□P	17.46	11.1	41	11.1	32.9	13.3	7.6	8	4	14.4	12.4	5.6	21.6
	3/8	KQ2U07-36-□P	22	11.1	40.5	11.1	32.4	13.3	7.6	8	4	14.4	12.4	5.6	30.6
ø5/16	1/8	KQ2U09-34-□P	14.29	13.2	40.2	13.2	34.8	14.2	8.7	8	4.2	25.6	17.7	6	16.3
	1/4	KQ2U09-35-□P	17.46	13.2	43.9	13.2	35.8	14.2	8.7	8	4.2	25.6	17.7	7.3	22.6
	3/8	KQ2U09-36-□P	22	13.2	43.4	13.2	35.3	14.2	8.7	8	4.2	25.6	17.7	7.3	31.5
ø3/8	1/4	KQ2U11-35-□P	17.46	15.4	47.4	15.4	39.3	15.6	9.9	8	4.2	28.8	23.8	8.9	23.8
	3/8	KQ2U11-36-□P	22	15.4	46.9	15.4	38.8	15.6	9.9	8	4.2	28.8	23.8	8.9	32.9
	1/2	KQ2U11-37-□P	28.57	15.4	48.7	15.4	38.3	15.6	9.9	8	4.2	28.8	23.8	8.9	53.2
ø1/2	1/4	KQ2U13-35-□P	22	19.3	52.2	19.3	44.1	17	11.8	8	4.2	57.3	50.6	9	41.4
	3/8	KQ2U13-36-□P	22	19.3	51.7	19.3	43.6	17	11.8	8	4.2	64.6	50.6	11	39
	1/2	KQ2U13-37-□P	28.57	19.3	53.5	19.3	43.1	17	11.8	8	4.2	64.6	50.6	12.1	54.8

□A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of NPT thread
Note) øD is maximum diameter.



Fittings

KQ2

KDM6

KDM

INDEX

Inch Size One-touch Fittings

Applicable Tubing: Inch Size, Connection Thread: R

Series KQ2

Guide

Chuck

Suitable for use with nylon and urethane. Large retaining force.

The chuck provides secure retention and the collet increases the holding force on the tube.

Seal

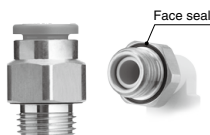
Can be used for a wide range of pressures from a low vacuum up to a pressure of 1 MPa.

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

Face seal method

Seal ring

Piping installability is improved by changing to the face seal structure.



Face seal

Release button

Requires little force for removal.

Releases the chuck collet to remove the tube as well as to prevent the chuck from biting too deeply into the tubing.

Body

O-ring

Stud

Effective when piping in a confined space.

Body part rotates allowing for positioning.

Connection thread

R

One-touch IN/OUT connection.

Possible to use in vacuum to -100 kPa

New thread for piping that drastically reduced the screw-in time thanks to the face seal method.



Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon, Polyurethane
Tubing O.D.	ø1/8", ø3/16", ø1/4", ø5/16", ø3/8", ø1/2"

Specifications

Fluid		Air/Water ^{Note 1)}
Operating pressure range ^{Note 2)}		-100 kPa to 1 MPa
Proof pressure (at 23°C)		3 MPa
Ambient and fluid temperature		-5 to 60°C, Water: 0 to 40°C (No freezing)
Thread	Mounting section	JIS B0203 (Taper thread for piping) JIS B0205 (Metric coarse thread)
	Nut section	JIS B0205 (Metric fine thread)
Sealant on the threads		Seal ring

Note 1) The surge pressure must be under the maximum operating pressure.

Note 2) Do not use the fittings with a leak tester or for vacuum retention because they are not guaranteed for zero leakage.

Principal Parts Material

Body	C3604, PBT, PP, Stainless steel 303
Stud	C3604 (Thread portion), Stainless steel 303 (Thread portion)
Chuck	Stainless steel 304
Guide	Stainless steel 304
Release button	POM
Seal, O-ring, Seal ring	NBR

How to Order

Threaded Type

KQ2 H 05 - 01 A P

One-touch fittings

Model

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

Face seal

Thread material/Surface treatment

Symbol	Thread material/Surface treatment
A	Brass
N	Brass + Electroless nickel plated

Port size

Symbol	Size
01	R1/8
02	R1/4
03	R3/8
04	R1/2

Applicable tubing O.D.

Symbol	Size
01	ø1/8"
05	ø3/16"
07	ø1/4"
09	ø5/16"
11	ø3/8"
13	ø1/2"

Fittings

KQ2

KDM6

KDM

Inch Size One-touch Fittings

Variations

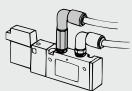
Extended male elbow

KQ2W

P.416



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



Male connector

KQ2H

P.416



Use to pipe a female thread. Most general model.

Male branch tee

KQ2T

P.417



Use to branch a female thread at both 90° angles.

Branch "Y"

KQ2U

P.417



Use to branch a female thread.

Male elbow

KQ2L

P.416



Use to pipe a female thread at right angles. Most general model.

Male run tee

KQ2Y

P.417



Use to branch a female thread at a 90° angle.

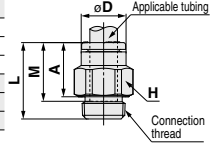
Dimensions

Male Connector: KQ2H (Face seal)



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	øD	L	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø1/8	1/8	KQ2H01-01□P	12	6.7	14.1	8.9	13.3	3.4	2.9	2.5	6.3
	1/4	KQ2H01-02□P	17	6.7	15	7.4	13.3	3.4	2.9	2.5	15.1
ø3/16	1/8	KQ2H05-01□P	12	8.3	16.7	11.5	13.3	7.8	6.5	3.5	6.8
	1/4	KQ2H05-02□P	17	8.3	15	7.4	13.3	7.8	6.5	3.5	13.9
ø1/4	1/8	KQ2H07-01□P	12	10.9	19.4	14.2	13.3	13.5	11.5	4.6	8.2
	1/4	KQ2H07-02□P	17	10.9	15	7.4	13.3	13.5	11.5	4.6	12.2
ø5/16	3/8	KQ2H07-03□P	21	10.9	14.5	6.9	13.3	13.5	11.5	4.6	20.4
	1/8	KQ2H09-01□P	14	13	21.1	15.9	14.2	26.1	18	6	11.8
ø3/8	1/4	KQ2H09-02□P	17	13	19.9	12.3	14.2	26.1	18	6	13.9
	3/8	KQ2H09-03□P	21	13	15.2	7.6	14.2	26.1	18	6	19.6
ø1/2	1/4	KQ2H11-02□P	17	15.1	23.9	16.3	15.6	35.3	29.1	7	18
	3/8	KQ2H11-03□P	21	15.1	21.2	13.6	15.6	35.3	29.1	7	24.3
ø1/2	1/2	KQ2H11-04□P	27	15.1	18.8	8.4	15.6	35.3	29.1	7	42
	1/4	KQ2H13-02□P	19	19	26.8	19.2	17	58.5	51.7	9	21.3
ø1/2	3/8	KQ2H13-03□P	21	19	25.6	18	17	66.0	51.7	9.6	28.9
	1/2	KQ2H13-04□P	27	19	26.5	16.1	17	66.0	51.7	9.6	50.9

□A: Brass, N: Brass + Electroless nickel plated * Reference dimensions after installation of R thread

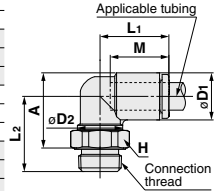


Male Elbow: KQ2L (Face seal)



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø3/16	1/8	KQ2L05-01□P	12	9.1	10	15	16.0	15.3	13.3	6.8	5.6	3.5	5.4
	1/4	KQ2L05-02□P	17	9.1	10	15	20.4	17.3	13.3	6.8	5.6	3.5	14.7
ø1/4	1/8	KQ2L07-01□P	12	11.1	10	15.6	17.0	17.3	13.3	11.3	10	4.5	5.8
	1/4	KQ2L07-02□P	17	11.1	10	15.6	21.4	19.3	13.3	11.3	10	4.5	15
ø5/16	3/8	KQ2L07-03□P	21	11.1	10	15.6	23.4	21.3	13.3	11.3	10	4.5	30.3
	1/8	KQ2L09-01□P	12	13.2	10	16.4	18.0	19.4	14.2	11.4	11.4	4.5	6.5
ø3/8	1/4	KQ2L09-02□P	17	13.2	12	17.2	22.4	21.4	14.2	21.6	14.9	6	13.7
	3/8	KQ2L09-03□P	21	13.2	12	17.2	24.4	23.4	14.2	21.6	14.9	6	28.7
ø1/2	1/4	KQ2L11-02□P	17	15.4	17	19.3	25.5	25.5	15.6	28.8	23.8	7.5	17.7
	3/8	KQ2L11-03□P	21	15.4	17	19.3	25.6	25.6	15.6	28.8	23.8	7.5	17.6
ø1/2	1/2	KQ2L11-04□P	27	15.4	17	19.3	30.4	27.6	15.6	28.8	23.8	7.5	44.8
	1/4	KQ2L13-02□P	17	19.3	17	21.5	27.4	29.4	17	50.3	44.4	9	20
ø1/2	3/8	KQ2L13-03□P	21	19.3	17	21.8	27.7	29.7	17	56.7	44.4	9.5	32.6
	1/2	KQ2L13-04□P	27	19.3	17	21.8	32.3	31.5	17	56.7	44.4	9.5	64.5

□A: Brass, N: Brass + Electroless nickel plated * Reference dimensions after installation of R thread
Note) øD1 is maximum diameter.

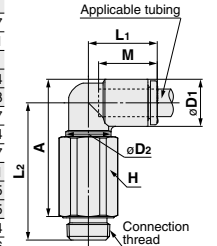


Extended Male Elbow: KQ2W (Face seal)



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø3/16	1/8	KQ2W05-01□P	12	9.1	10	15	29.7	29	13.3	6.8	5.6	3.5	15.7
	1/4	KQ2W05-02□P	17	9.1	10	15	32	29	13.3	6.8	5.6	3.5	35.1
ø1/4	1/8	KQ2W07-01□P	12	11.1	10	15.6	30.7	31	13.3	11.6	10.0	4.5	16
	1/4	KQ2W07-02□P	17	11.1	10	15.6	33	31	13.3	11.6	10.0	4.5	35.4
ø5/16	3/8	KQ2W07-03□P	21	11.1	10	15.6	35	33	13.3	11.6	10.0	4.5	62.8
	1/8	KQ2W09-01□P	12	13.2	10	16.4	31.7	33.1	14.2	11.6	11.6	4.5	16.7
ø3/8	1/4	KQ2W09-02□P	17	13.2	12	17.2	36.1	35.1	14.2	21.5	14.9	6	35.4
	3/8	KQ2W09-03□P	21	13.2	12	17.2	38.1	37.1	14.2	21.5	14.9	6	64.7
ø1/2	1/4	KQ2W11-02□P	17	15.4	17	19.3	49.9	50	15.6	28.8	23.8	7	54.1
	3/8	KQ2W11-03□P	21	15.4	17	19.3	44.5	44.6	15.6	28.8	23.8	7	57.5
ø1/2	1/2	KQ2W11-04□P	27	15.4	17	19.3	49.3	46.6	15.6	28.8	23.8	7	122.5
	1/4	KQ2W13-02□P	17	19.3	17	21.5	51.8	53.9	17	56.7	44.4	9	56.4
ø1/2	3/8	KQ2W13-03□P	21	19.3	17	21.8	47.4	49.5	17	56.7	44.4	9.5	81.6
	1/2	KQ2W13-04□P	27	19.3	17	21.8	52	51.3	17	56.7	44.4	9.5	143.9

□A: Brass, N: Brass + Electroless nickel plated * Reference dimensions after installation of R thread
Note) øD1 is maximum diameter.



Series KQ2

Applicable Tubing: Inch Size, Connection Thread: R

Dimensions

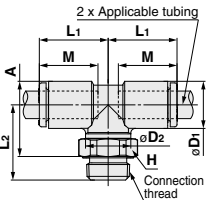
Male Branch Tee: KQ2T (Face seal)



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø3/16	1/8	KQ2T05-01□P	12	9.1	10	15	16	15.3	13.3	8.4	7.0	3.5	6.2
	1/4	KQ2T05-02□P	17	9.1	10	15	20.4	17.3	13.3	8.4	7.0	3.5	15.5
ø1/4	1/8	KQ2T07-01□P	12	11.1	10	15.6	17	17.3	13.3	14.4	12.4	4.5	6.9
	1/4	KQ2T07-02□P	17	11.1	10	15.6	21.4	19.3	13.3	14.4	12.4	4.5	16.2
ø3/8	3/8	KQ2T07-03□P	21	11.1	10	15.6	23.4	21.3	13.3	14.4	12.4	4.5	31.5
	1/8	KQ2T09-01□P	12	13.2	10	16.4	18	19.4	14.2	14.4	14.4	4.5	8.3
ø5/16	1/4	KQ2T09-02□P	17	13.2	12	17.2	22.4	21.4	14.2	26.3	18.2	6	15.5
	3/8	KQ2T09-03□P	21	13.2	12	17.2	24.4	23.4	14.2	26.3	18.2	6	30.4
ø3/8	1/4	KQ2T11-02□P	17	15.4	17	19.3	25.4	25.5	15.6	28.8	23.8	7.5	20.1
	3/8	KQ2T11-03□P	21	15.4	17	19.3	25.5	25.6	15.6	28.8	23.8	7.5	20
ø1/2	1/2	KQ2T11-04□P	27	15.4	17	19.3	30.3	27.6	15.6	28.8	23.8	7.5	47.3
	1/4	KQ2T13-02□P	17	19.3	17	21.5	27.3	29.4	17	57.3	50.6	9	24.1
ø1/2	3/8	KQ2T13-03□P	21	19.3	17	21.8	27.6	29.7	17	63.8	50.6	9.5	36.7
	1/2	KQ2T13-04□P	27	19.3	17	21.8	32.2	31.5	17	63.8	50.6	9.5	68.7

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread
Note) øD1 is maximum diameter.



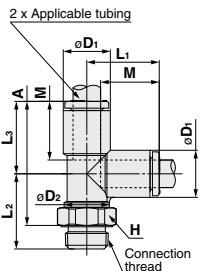
Male Run Tee: KQ2Y (Face seal)



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
											Nylon	Urethane		
ø3/16	1/8	KQ2Y05-01□P	12	9.1	10	15.7	16	15.7	26.5	13.3	8.4	7.0	3.5	6.3
	1/4	KQ2Y05-02□P	17	9.1	10	15.7	20.4	15.7	28.5	13.3	8.4	7.0	3.5	15.6
ø1/4	1/8	KQ2Y07-01□P	12	11.1	10	16.5	17	16.5	28.3	13.3	14.0	12.4	4.5	6.9
	1/4	KQ2Y07-02□P	17	11.1	10	16.5	21.4	16.5	30.3	13.3	14.0	12.4	4.5	16.2
ø3/8	3/8	KQ2Y07-03□P	21	11.1	10	16.5	23.4	16.5	32.3	13.3	14.0	12.4	4.5	31.5
	1/8	KQ2Y09-01□P	12	13.2	10	18.2	18	18.2	31	14.2	14.0	14.0	4.5	8.4
ø5/16	1/4	KQ2Y09-02□P	17	13.2	12	18.2	22.4	18.2	33	14.2	26.3	18.3	6	15.6
	3/8	KQ2Y09-03□P	21	13.2	12	18.2	24.4	18.2	35	14.2	26.3	18.3	6	30.5
ø3/8	1/4	KQ2Y11-02□P	17	15.4	17	20.4	25.4	20.4	38.2	15.6	28.8	23.8	7.5	20.2
	3/8	KQ2Y11-03□P	21	15.4	17	20.4	25.5	20.4	38.3	15.6	28.8	23.8	7.5	20.1
ø1/2	1/2	KQ2Y11-04□P	27	15.4	17	20.4	30.3	20.4	40.3	15.6	28.8	23.8	7.5	47.4
	1/4	KQ2Y13-02□P	17	19.3	17	23.4	27.3	23.4	43.1	17	57.3	50.6	9	24.7
ø1/2	3/8	KQ2Y13-03□P	21	19.3	17	23.4	27.6	23.4	43.4	17	64.6	50.6	9.5	37
	1/2	KQ2Y13-04□P	27	19.3	17	23.4	32.2	23.4	45.2	17	64.6	50.6	9.5	68.9

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of R thread
Note) øD1 is maximum diameter.



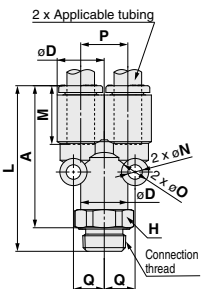
Branch "Y": KQ2U (Face seal)



Applicable tubing O.D. (inch)	Connection thread R	Model	H (Width across flats)	Note) øD1	L	P	A*	M	Q	øO	øN	Effective area (mm ²)		Min. port size	Weight (g)
												Nylon	Urethane		
ø3/16	1/8	KQ2U05-01□P	12	9.1	36.4	9.1	31.2	13.3	6.2	6	3.2	8.4	7.0	4.1	9.8
	1/4	KQ2U05-02□P	17	9.1	39.8	9.1	32.2	13.3	6.2	6	3.2	8.4	7.0	4.1	19.6
ø1/4	1/8	KQ2U07-01□P	14	11.1	37.1	11.1	31.9	13.3	7.6	8	4	14.4	12.4	5.6	12.3
	1/4	KQ2U07-02□P	17	11.1	40.5	11.1	32.9	13.3	7.6	8	4	14.4	12.4	5.6	20.4
ø3/8	3/8	KQ2U07-03□P	21	11.1	40	11.1	32.4	13.3	7.6	8	4	14.4	12.4	5.6	28.7
	1/8	KQ2U09-01□P	14	13.2	40	13.2	34.8	14.2	8.7	8	4.2	26.3	18.3	6	15.8
ø5/16	1/4	KQ2U09-02□P	17	13.2	43.4	13.2	35.8	14.2	8.7	8	4.2	26.3	18.3	7.3	21.4
	3/8	KQ2U09-03□P	21	13.2	42.9	13.2	35.3	14.2	8.7	8	4.2	26.3	18.3	7.3	29.8
ø3/8	1/4	KQ2U11-02□P	17	15.4	46.9	15.4	39.3	15.6	9.9	8	4.2	28.8	23.8	8.9	22.8
	3/8	KQ2U11-03□P	21	15.4	46.4	15.4	38.8	15.6	9.9	8	4.2	28.8	23.8	8.9	31.3
ø1/2	1/2	KQ2U11-04□P	27	15.4	48.7	15.4	38.3	15.6	9.9	8	4.2	28.8	23.8	8.9	49.6
	1/4	KQ2U13-02□P	17	19.3	51.2	19.3	43.6	17	11.8	8	4.2	57.3	50.6	9	38.8
ø1/2	3/8	KQ2U13-03□P	21	19.3	51.2	19.3	43.6	17	11.8	8	4.2	64.6	50.6	11	37.6
	1/2	KQ2U13-04□P	27	19.3	53.5	19.3	43.1	17	11.8	8	4.2	64.6	50.6	12.1	51.3

□/A: Brass, N: Brass + Electroless nickel plated

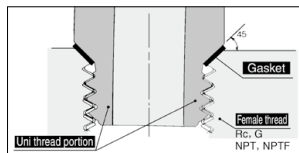
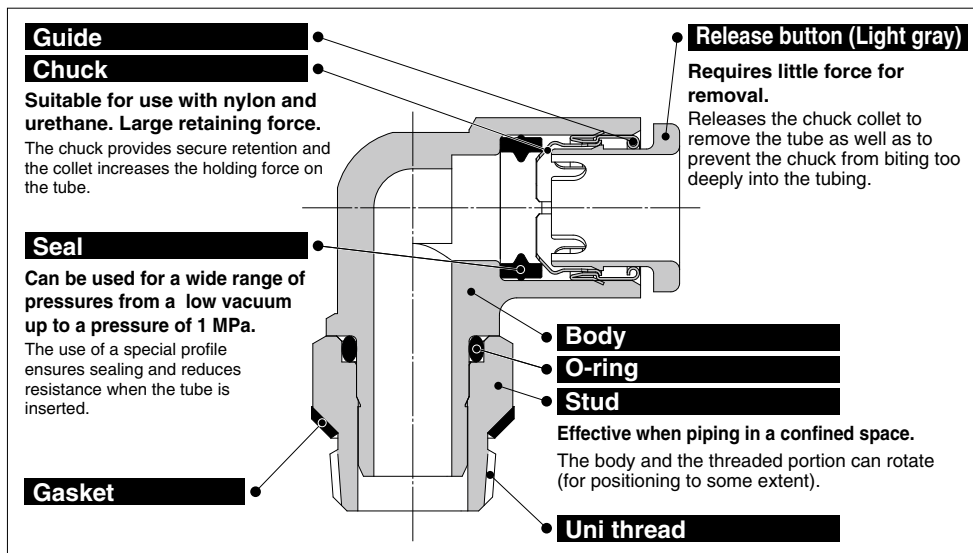
* Reference dimensions after installation of R thread
Note) øD1 is maximum diameter.



Metric Size Uni One-touch Fittings

Applicable Tubing: Metric Size, Connection Thread: Rc, G, NPT, NPTF

Series KQ2



Uni thread ridge shape

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

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

The male thread for piping drastically cuts piping manhours.



Applicable Tubing

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

Specifications

Fluid	Air/Water (Note 1)
Operating pressure range (Note 2)	–100 kPa to 1 MPa
Proof pressure (at 23°C)	3 MPa
Ambient and fluid temperature	–5 to 60°C, Water: 0 to 40°C (No freezing)

Note 1) The surge pressure must be under the maximum operating pressure.

Note 2) Do not use the fittings with a leak tester or for vacuum retention because they are not guaranteed for zero leakage.

Principal Parts Material

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



Made to Order Specifications
(Refer to page 425 for details.)

Metric Size Uni One-touch Fittings *Series KQ2*

Applicable Tubing: Metric Size, Connection Thread: Rc, G, NPT, NPTF

How to Order

Threaded Type

KQ2 H 06 - U01 A

One-touch fittings

Model

Symbol	Model
H	Male connector
S	Hexagon socket head male connector
L	Male elbow
K	45° male elbow
V	Universal male elbow
T	Male branch tee
W	Extended male elbow
Y	Male run tee
U	Branch "Y"

Thread material/Surface treatment

Symbol	Thread material/Surface treatment
A	Brass
N	Brass + Electroless nickel plated

Port size

Symbol	Size
U01	Uni1/8
U02	Uni1/4
U03	Uni3/8
U04	Uni1/2

Applicable tubing O.D.

Symbol	Size
04	ø4
06	ø6
08	ø8
10	ø10
12	ø12
16	ø16

Spare Parts

How to Order Gasket

KQG - U01

Gasket for Uni One-touch fittings

Applicable port size

Symbol	Size
U01	Uni1/8
U02	Uni1/4
U03	Uni3/8
U04	Uni1/2

Fittings

KQ2

KDM6

KDM

Metric Size Uni One-touch Fittings

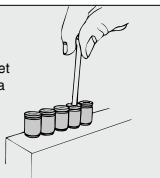
Variations

Hexagon socket head male connector

KQ2S P.422



Internal hexagon socket allows tightening with a hexagon wrench in confined spaces.

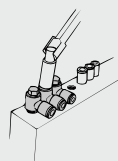


Universal male elbow

KQ2V P.423



Hexagon head of the body allows tightening with a box wrench in confined spaces.

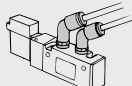


45° male elbow

KQ2K P.423



Use to pipe a female thread at a 45° angle. The model between the male connector and male elbow.

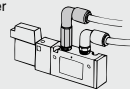


Extended male elbow

KQ2W P.423



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



Male connector

KQ2H P.422



Use to pipe a female thread. Most general model.

Male elbow

KQ2L P.422



Use to pipe a female thread at right angles. Most general model.

Male branch tee

KQ2T P.424



Use to branch a female thread at both 90° angles.

Branch "Y"

KQ2U P.424



Use to branch a female thread.

Male run tee

KQ2Y P.424



Use to branch a female thread at a 90° angle.

Metric Size Uni One-touch Fittings *Series KQ2*

Applicable Tubing: Metric Size, Connection Thread: Rc, G, NPT, NPTF

Dimensions

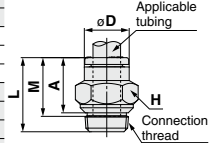
Male Connector: KQ2H (Gasket seal)



Applicable tubing O.D. (mm)	Connection thread Uni	Model	H (Width across flats)	øD	L	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø4	1/8	KQ2H04-U01□	10	7.7	15.9	11.1	13.3	5.6	4	3	6.6
	1/4	KQ2H04-U02□	14	7.7	15.3	8.9	13.3	5.6	4	3	12.7
ø6	1/8	KQ2H06-U01□	12	9.7	16.7	11.9	13.3	13.1	10.4	4.5	6.2
	1/4	KQ2H06-U02□	14	9.7	17	10.6	13.3	13.1	10.4	4.5	12.8
ø8	3/8	KQ2H08-U03□	17	9.7	14.9	8.5	13.3	13.1	10.4	4.5	18.1
	1/8	KQ2H08-U01□	14	13	20.6	15.8	14.2	26.1	18	6	7
ø10	1/4	KQ2H08-U02□	14	13	18.5	12.1	14.2	26.1	18	6	10.1
	3/8	KQ2H08-U03□	17	13	14.9	8.5	14.2	26.1	18	6	15
ø12	1/8	KQ2H10-U01□	17	15.6	22.4	17.6	15.6	26.1	18	6	13.9
	1/4	KQ2H10-U02□	17	15.6	23.7	17.3	15.6	41.5	29.5	7.5	17.6
ø16	3/8	KQ2H10-U03□	17	15.6	19.5	13.1	15.6	41.5	29.5	7.5	15.6
	1/2	KQ2H10-U04□	22	15.6	17	8.4	15.6	41.5	29.5	7.5	29.5
ø12	1/4	KQ2H12-U02□	19	18.2	24.8	18.4	17	58.3	46.1	9	13.8
	3/8	KQ2H12-U03□	19	18.2	21.8	15.4	17	58.3	46.1	9	17.9
ø16	1/2	KQ2H12-U04□	22	18.2	17.7	9.1	17	58.3	46.1	9	25.4
	3/8	KQ2H16-U03□	24	23.6	29.2	22.8	20.6	81	67	11	33.9
	1/2	KQ2H16-U04□	24	23.6	26.8	18.2	20.6	113	67	13	31.5

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of Uni thread



Hexagon Socket Head Male Connector: KQ2S (Gasket seal)

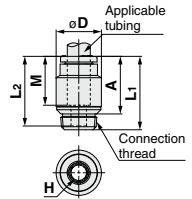


Applicable tubing O.D. (mm)	Connection thread Uni	Model	H (Width across flats)	Note) øD1	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
									Nylon	Urethane		
ø4	1/8	KQ2S04-U01□	3	10	20.6	19.6	15.8	13.3	4.1	3.6	3.1	8
	1/8	KQ2S06-U01□	4	12	19.8	18.8	15	13.3	10	9.9	4.1	8.2
ø6	1/4	KQ2S06-U02□	4	14	19.8	18.8	13.4	13.3	10.7	10	4.1	12.3
	1/8	KQ2S08-U01□	5	14	20.7	19.7	15.9	14.2	17.2	16.2	5.1	9.4
ø8	1/4	KQ2S08-U02□	6	14	20.5	19.5	14.1	14.2	23.3	16.2	6.1	10.9
	3/8	KQ2S08-U03□	6	17	20.7	19.7	14.3	14.2	23.3	16.2	6.1	19.8
ø10	1/8	KQ2S10-U01□	5	15.6	22.4	21.9	16.8	15.6	17.2	16.2	5.1	10.5
	1/4	KQ2S10-U02□	8	17	23.7	20.1	17.3	15.6	39	26.6	8.1	15.4
ø12	3/8	KQ2S10-U03□	8	17	21.1	20.1	14.7	15.6	39	26.6	8.1	16.4
	1/2	KQ2S10-U04□	8	21	21.1	20.1	12.5	15.6	39	26.6	8.1	29.7
ø12	1/4	KQ2S12-U02□	8	18.2	27.8	21.5	21.4	17	46	44.5	8.1	20.7
	3/8	KQ2S12-U03□	10	18.2	22.8	21.8	16.4	17	60	44.5	10.1	16.1
	1/2	KQ2S12-U04□	10	21	22.8	21.8	14.2	17	60	44.5	10.1	28.1

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of Uni thread

Note) øD is maximum diameter.



Male Elbow: KQ2L (Gasket seal)

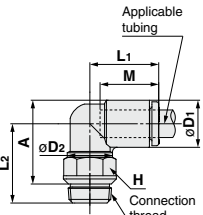


Applicable tubing O.D. (mm)	Connection thread Uni	Model	H (Width across flats)	Note) øD1	Note) øD2	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø4	1/8	KQ2L04-U01□	10	8.2	10	14.8	16.4	15.7	13.3	4.2	4.2	3	4.8
	1/4	KQ2L04-U02□	14	8.2	10	14.8	19.2	16.9	13.3	4.2	4.2	3	11.5
ø6	1/8	KQ2L06-U01□	10	10.4	10	15.5	17.5	17.9	13.3	11.4	9	4.5	5.3
	1/4	KQ2L06-U02□	14	10.4	10	15.5	20.3	19.1	13.3	11.4	9	4.5	12
ø8	3/8	KQ2L06-U03□	17	10.4	10	15.5	21.4	20.2	13.3	11.4	9	4.5	21.4
	1/8	KQ2L08-U01□	10	13.2	10	16.4	18.9	20.7	14.2	11.4	11.4	4.5	6.1
ø10	1/4	KQ2L08-U02□	14	13.2	12	17.2	21.7	21.9	14.2	21.6	14.9	6	10.9
	3/8	KQ2L08-U03□	17	13.2	12	17.2	22.8	23.0	14.2	21.6	14.9	6	20.2
ø12	1/8	KQ2L10-U01□	14	15.9	12	18.6	21.5	24.6	15.6	21.6	14.9	6	12.3
	1/4	KQ2L10-U02□	17	15.9	17	19.3	24.3	25.8	15.6	35.2	25	7.5	16.9
ø16	3/8	KQ2L10-U03□	17	15.9	17	19.3	26.9	28.4	15.6	35.2	25	7.5	17.9
	1/2	KQ2L10-U04□	22	15.9	17	19.3	34.5	33.8	15.6	35.2	25	7.5	48.2
ø12	1/4	KQ2L12-U02□	17	18.5	17	21.5	25.6	28.4	17	50.2	39.7	9	18.7
	3/8	KQ2L12-U03□	17	18.5	17	21.5	28.2	31.0	17	50.2	39.7	9	19.8
ø16	1/2	KQ2L12-U04□	22	18.5	17	21.5	35.8	36.4	17	50.2	39.7	9	50
	3/8	KQ2L16-U03□	22	23.8	21	27.1	32.4	37.9	20.6	71	58.9	11	37.4
	1/2	KQ2L16-U04□	22	23.8	21	27.1	35.0	38.3	20.6	100	58.9	13	47.9

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of Uni thread

Note) øD1, øD2 are maximum diameters.



Fittings

KQ2

KDM6

KDM

INDEX

Series KQ2

Applicable Tubing: Metric Size, Connection Thread: Rc, G, NPT, NPTF

Dimensions

45° Male Elbow: KQ2K (Gasket seal)

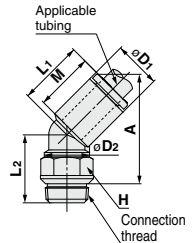


Applicable tubing O.D. (mm)	Connection thread Uni	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø4	1/8	KQ2K04-U01□	10	8.2	10	14.4	12.9	20.8	13.3	3.4	3.4	4.5	4.7
	1/4	KQ2K04-U02□	14	8.2	10	14.4	14.7	21	13.3	3.4	3.4	4.5	11.3
ø6	1/8	KQ2K06-U01□	10	10.4	10	14.7	15	23.8	13.3	8.7	6.9	4.5	5.1
	1/4	KQ2K06-U02□	14	10.4	10	14.7	16.8	24	13.3	8.7	6.9	4.5	11.7
	3/8	KQ2K06-U03□	17	10.4	10	14.7	17.9	25.1	13.3	8.7	6.9	4.5	21.2
ø8	1/8	KQ2K08-U01□	10	13.2	10	16	15.9	26.5	14.2	8.7	8.7	4.5	6
	1/4	KQ2K08-U02□	14	13.2	12	16	18.7	27.7	14.2	19.7	19.7	6	10.7
	3/8	KQ2K08-U03□	17	13.2	12	16	19.8	28.8	14.2	19.7	19.7	6	20
ø10	1/8	KQ2K10-U01□	14	15.9	12	18.2	19.4	32.4	15.6	30.9	23.2	6	12.2
	1/4	KQ2K10-U02□	17	15.9	17	17.6	24.7	35.7	15.6	30.9	23.2	7.5	17
	3/8	KQ2K10-U03□	17	15.9	17	17.6	21.6	32.6	15.6	30.9	23.2	7.5	17.4
	1/2	KQ2K10-U04□	22	15.9	17	17.6	29.2	38	15.6	30.9	23.2	7.5	47.7
ø12	1/4	KQ2K12-U02□	17	18.5	17	19.4	24.6	37.7	17	44.5	35.1	9	18.5
	3/8	KQ2K12-U03□	17	18.5	17	19.4	21.5	34.6	17	44.5	35.1	9	18.9
	1/2	KQ2K12-U04□	22	18.5	17	19.4	29.1	40	17	44.5	35.1	9	49.2

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of Uni thread

Note) øD1 is maximum diameter.



Universal Male Elbow: KQ2V (Gasket seal)

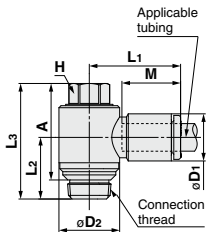


Applicable tubing O.D. (mm)	Connection thread Uni	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
											Nylon	Urethane		
ø4	1/8	KQ2V04-U01□	8	8.2	13.4	19.3	13.6	25.5	20.7	13.3	2.9	2.9	4.5	13.5
	1/8	KQ2V06-U01□	8	10.4	13.4	20.5	13.6	25.5	20.7	13.3	7.5	5.9	4.5	13.9
ø6	1/4	KQ2V06-U02□	10	10.4	15.3	19.9	15.4	28	21.6	13.3	7.5	5.9	4.5	21.8
	1/8	KQ2V08-U01□	12	13.2	17.6	23.5	15	27.5	22.7	14.2	16	11.2	6	23.7
	1/4	KQ2V08-U02□	12	13.2	17.6	23.5	17	29.5	23.1	14.2	16	11.2	6	28
ø8	3/8	KQ2V08-U03□	14	13.2	20.6	23.1	18.2	34	27.6	14.2	20.5	14.3	7.5	43.1
	1/4	KQ2V10-U02□	14	15.9	20.6	25.9	19	34	27.6	15.6	27	20.3	7.5	38.9
	3/8	KQ2V10-U03□	14	15.9	20.6	25.9	19	34	27.6	15.6	27	20.3	7.5	44.4
ø10	3/8	KQ2V12-U03□	17	18.5	25.2	28.5	20.2	36.4	30	17	39	30.8	9	60.5
	1/2	KQ2V12-U04□	17	18.5	25.2	28.5	22.9	39.1	30.5	17	39	30.8	9	74.5

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of Uni thread

Note) øD1 is maximum diameter.



Extended Male Elbow: KQ2W (Gasket seal)

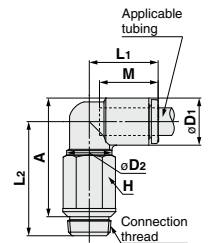


Applicable tubing O.D. (mm)	Connection thread Uni	Model	H (Width across flats)	Note) øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø4	1/8	KQ2W04-U01□	10	8.2	10	14.8	24.1	23.4	13.3	4	4	3	8.3
	1/4	KQ2W04-U02□	14	8.2	10	14.8	30.1	27.8	13.3	4	4	3	23.9
ø6	1/8	KQ2W06-U01□	10	10.4	10	15.5	31.2	31.6	13.3	10.9	8.6	4.5	11.5
	1/4	KQ2W06-U02□	14	10.4	10	15.5	31.2	30	13.3	10.9	8.6	4.5	24.3
	3/8	KQ2W06-U03□	17	10.4	10	15.5	32.3	31.1	13.3	10.9	8.6	4.5	41
ø8	1/8	KQ2W08-U01□	10	13.2	10	16.4	32.6	34.4	14.2	10.9	10.9	4.5	12.3
	1/4	KQ2W08-U02□	14	13.2	12	17.2	35.4	35.6	14.2	20.5	14.2	6	24.1
	3/8	KQ2W08-U03□	17	13.2	12	17.2	36.5	36.7	14.2	20.5	14.2	6	42.5
ø10	1/4	KQ2W10-U02□	17	15.9	17	19.3	48.5	50.1	15.6	33.5	23.8	7.5	54.2
	3/8	KQ2W10-U03□	17	15.9	17	19.3	45.8	47.4	15.6	33.5	23.8	7.5	47
	1/2	KQ2W10-U04□	22	15.9	17	19.3	53.4	52.8	15.6	33.5	23.8	7.5	95.5
ø12	1/4	KQ2W12-U02□	17	18.5	17	21.5	49.8	52.7	17	47.7	37.7	9	55.9
	3/8	KQ2W12-U03□	17	18.5	17	21.5	47.1	50	17	47.7	37.7	9	48.9
	1/2	KQ2W12-U04□	22	18.5	17	21.5	54.7	55.4	17	47.7	37.7	9	97.4

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of Uni thread

Note) øD1 is maximum diameter.



Metric Size Uni One-touch Fittings *Series KQ2*

Applicable Tubing: Metric Size, Connection Thread: Rc, G, NPT, NPTF

Dimensions

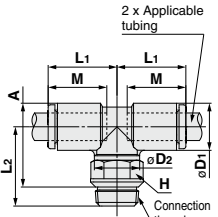
Male Branch Tee: KQ2T (Gasket seal)



Applicable tubing O.D. (mm)	Connection thread Uni	Model	H (Width across flats)	Note øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø4	1/8	KQ2T04-U01□	10	8.2	10	14.8	16.4	15.7	13.3	6	4.1	3	5.5
	1/4	KQ2T04-U02□	14	8.2	10	14.8	19.2	16.9	13.3	6	4.1	3	12.2
ø6	1/8	KQ2T06-U01□	10	10.4	10	15.5	17.5	17.9	13.3	13.9	11	4.5	6.2
	1/4	KQ2T06-U02□	14	10.4	10	15.5	20.3	19.1	13.3	13.9	11	4.5	12.9
ø8	3/8	KQ2T08-U03□	17	10.4	10	15.5	21.4	20.2	13.3	13.9	11	4.5	22.3
	1/8	KQ2T08-U01□	10	13.2	10	16.4	18.9	20.7	14.2	13.9	13.9	4.5	7.9
ø10	1/4	KQ2T08-U02□	14	13.2	12	17.2	21.7	21.9	14.2	26.3	18.2	6	12.6
	3/8	KQ2T08-U03□	17	13.2	12	17.2	22.8	23	14.2	26.3	18.2	6	21.9
ø12	1/8	KQ2T10-U01□	14	15.9	12	18.6	21.4	24.6	15.6	21.6	14.9	6	15.1
	1/4	KQ2T10-U02□	17	15.9	17	19.3	24.2	25.8	15.6	35.2	25	7.5	19.5
ø16	3/8	KQ2T10-U03□	17	15.9	17	19.3	26.8	28.4	15.6	35.2	25	7.5	20.5
	1/2	KQ2T10-U04□	22	15.9	17	19.3	34.4	33.8	15.6	35.2	25	7.5	50.8
ø12	1/4	KQ2T12-U02□	17	18.5	17	21.5	25.5	28.4	17	57.2	45.2	9	22.5
	3/8	KQ2T12-U03□	17	18.5	17	21.5	28.1	31	17	57.2	45.2	9	23.6
ø16	1/2	KQ2T12-U04□	22	18.5	17	21.5	35.7	36.4	17	57.2	45.2	9	53.9
	3/8	KQ2T16-U03□	22	23.8	21	27.1	32.4	37.9	20.6	71	58.9	11	44.3
	1/2	KQ2T16-U04□	22	23.8	21	27.1	35	38.3	20.6	100	58.9	13	54.8

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of Uni thread
Note) øD1 is maximum diameter.



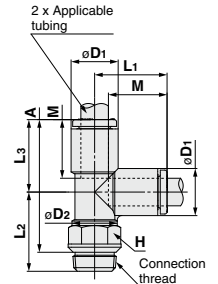
Male Run Tee: KQ2Y (Gasket seal)



Applicable tubing O.D. (mm)	Connection thread Uni	Model	H (Width across flats)	Note øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
											Nylon	Urethane		
ø4	1/8	KQ2Y04-U01□	10	8.2	10	15.3	16.4	15.3	26.9	13.3	6.4	4	3	5.6
	1/4	KQ2Y04-U02□	14	8.2	10	15.3	19.2	15.3	28.1	13.3	6.4	4	3	12.2
ø6	1/8	KQ2Y06-U01□	10	10.4	10	16.3	17.5	16.3	29	13.3	13.4	10.6	4.5	6.3
	1/4	KQ2Y06-U02□	14	10.4	10	16.3	20.3	16.3	30.2	13.3	13.4	10.6	4.5	13
ø8	3/8	KQ2Y06-U03□	17	10.4	10	16.3	21.4	16.3	31.3	13.3	13.4	10.6	4.5	22.5
	1/8	KQ2Y08-U01□	10	13.2	10	18.2	18.9	18.2	32.3	14.2	13.4	13.4	4.5	8
ø10	1/4	KQ2Y08-U02□	14	13.2	12	18.2	21.7	18.2	33.5	14.2	25.6	17.7	6	12.7
	3/8	KQ2Y08-U03□	17	13.2	12	18.2	22.8	18.2	34.6	14.2	25.6	17.7	6	22
ø12	1/8	KQ2Y10-U01□	14	15.9	12	20.6	21.4	20.6	37.3	15.6	40	28.4	6	15.2
	1/4	KQ2Y10-U02□	17	15.9	17	20.6	24.2	20.6	38.5	15.6	40	28.4	7.5	19.7
ø16	3/8	KQ2Y10-U03□	17	15.9	17	20.6	26.8	20.6	41.1	15.6	40	28.4	7.5	20.7
	1/2	KQ2Y10-U04□	22	15.9	17	20.6	34.4	20.6	46.5	15.6	40	28.4	7.5	50.9
ø12	1/4	KQ2Y12-U02□	17	18.5	17	23	25.5	23	42.2	17	57.4	45.4	9	22.8
	3/8	KQ2Y12-U03□	17	18.5	17	23	28.1	23	44.8	17	57.4	45.4	9	23.9
ø16	1/2	KQ2Y12-U04□	22	18.5	17	23	35.7	23	50.2	17	57.4	45.4	9	54.2
	3/8	KQ2Y16-U03□	22	23.8	21	28.6	32.4	28.6	54.6	20.6	81	60	11	44.9
	1/2	KQ2Y16-U04□	22	23.8	21	28.6	35	28.6	55	20.6	113	60	13	55.4

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of Uni thread
Note) øD1 is maximum diameter.



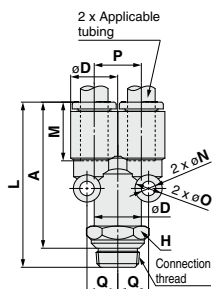
Branch "Y": KQ2U (Gasket seal)



Applicable tubing O.D. (mm)	Connection thread Uni	Model	H (Width across flats)	Note øD	L	P	A*	M	Q	øO	øN	Effective area (mm ²)		Min. port size	Weight (g)
												Nylon	Urethane		
ø4	1/8	KQ2U04-U01□	11	8.2	35.4	8.2	30.6	13.3	5.7	6	3.2	4.2	4.2	3.6	8.6
	1/4	KQ2U04-U02□	14	8.2	37.4	8.2	31	13.3	5.7	6	3.2	4.2	4.2	3.6	14.6
ø6	1/8	KQ2U06-U01□	12	10.4	36.8	10.4	32	13.3	6.8	6	3.2	13.4	10.6	5.4	10
	1/4	KQ2U06-U02□	14	10.4	38.5	10.4	32.1	13.3	6.8	6	3.2	13.4	10.6	5.4	15
ø8	3/8	KQ2U06-U03□	17	10.4	39.3	10.4	32.9	13.3	6.8	6	3.2	13.4	10.6	5.4	23.3
	1/8	KQ2U08-U01□	14	13.2	41.6	13.2	36.8	14.2	8.7	8	4.2	25.6	17.7	6	17.6
ø10	1/4	KQ2U08-U02□	14	13.2	42.6	13.2	36.2	14.2	8.7	8	4.2	25.6	17.7	7.3	18.3
	3/8	KQ2U08-U03□	17	13.2	42.4	13.2	36	14.2	8.7	8	4.2	25.6	17.7	7.3	25.5
ø12	1/4	KQ2U10-U02□	17	15.9	47.6	15.9	41.2	15.6	10.1	8	4.2	40	28.4	9	25.3
	3/8	KQ2U10-U03□	19	15.9	47.5	15.9	41.1	15.6	10.1	8	4.2	40	28.4	9.4	31.6
ø16	1/2	KQ2U10-U04□	22	15.9	49.4	15.9	40.8	15.6	10.1	8	4.2	40	28.4	9.4	47.6
	1/4	KQ2U12-U02□	22	18.5	52.1	18.5	45.7	17	11.4	8	4.2	57.4	45.4	9	42.6
ø12	3/8	KQ2U12-U03□	22	18.5	52	18.5	45.6	17	11.4	8	4.2	57.4	45.4	11	41.2
	1/2	KQ2U12-U04□	22	18.5	53.4	18.5	44.8	17	11.4	8	4.2	57.4	45.4	11.6	48.8

□/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of Uni thread
Note) øD is maximum diameter.



Fittings

KQ2

KDM6

KDM

INDEX

Made to Order/Clean Series/Spare Parts

Please contact SMC for detailed dimensions, specifications, and lead times.

1 Made to Order

Symbol	Specifications
X12	Lubricant: White vaseline Release button color: White
X35 Note)	Body color: Black Release button color: Light gray

Note) The following models are not available as made-to-order: Hexagon socket head male connector/KQ2S, Male connector/KQ2H

2 Clean Series

Please consult with SMC separately for applicable models.

Symbol	Specifications
10-	Brass parts: With electroless nickel plated Lubricant: Fluorine grease Air blow in a clean room Double package Resin body/Release button color: White

Example) **10-KQ2H06-U01N**

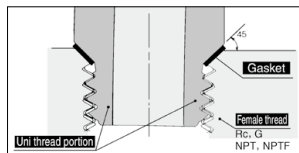
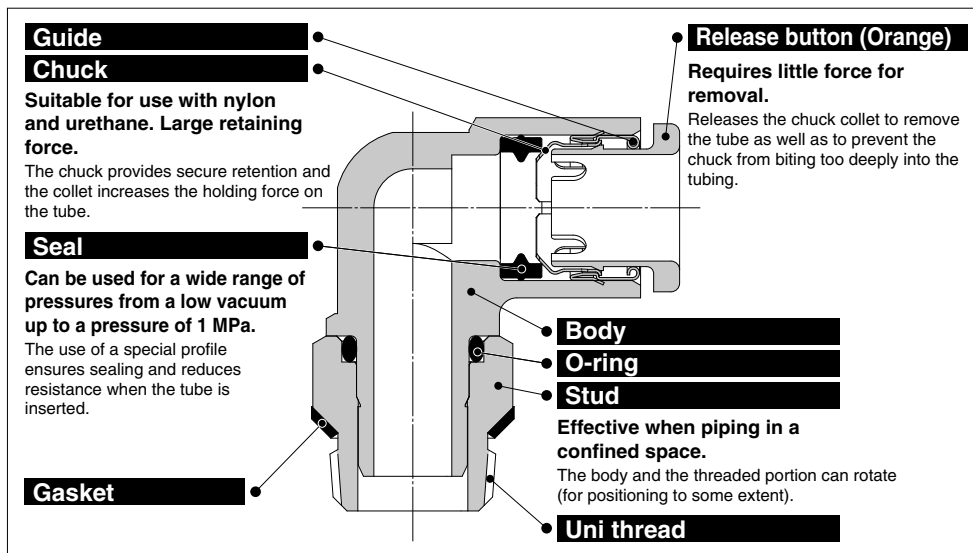
3 Spare Parts

Description	Part no.	Applicable thread
Gasket	KQG-U01	Uni1/8
	KQG-U02	Uni1/4
	KQG-U03	Uni3/8
	KQG-U04	Uni1/2

Inch Size Uni One-touch Fittings

Applicable Tubing: Inch Size, Connection Thread: Rc, G, NPT, NPTF

Series KQ2



Uni thread ridge shape

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

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

The male thread for piping drastically cuts piping manhours.



Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon, Polyurethane
Tubing O.D.	ø1/8", ø5/32", ø3/16", ø1/4", ø5/16", ø3/8", ø1/2"

Specifications

Fluid	Air/Water (Note 1)
Operating pressure range (Note 2)	-100 kPa to 1 MPa
Proof pressure (at 23°C)	3 MPa
Ambient and fluid temperature	-5 to 60°C, Water: 0 to 40°C (No freezing)

Note 1) The surge pressure must be under the maximum operating pressure.

Note 2) Do not use the fittings with a leak tester or for vacuum retention because they are not guaranteed for zero leakage.

Principal Parts Material

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



Made to Order Specifications
(Refer to page 432 for details.)

How to Order

Threaded Type

KQ2 H 05 - U01 A

One-touch fittings

Model

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

Applicable tubing O.D.

Symbol	Size
01	ø1/8"
03	ø5/32"
05	ø3/16"
07	ø1/4"
09	ø5/16"
11	ø3/8"
13	ø1/2"

Thread material/Surface treatment

Symbol	Thread material/Surface treatment
A	Brass
N	Brass + Electroless nickel plated

Port size

Symbol	Size
U01	Uni1/8
U02	Uni1/4
U03	Uni3/8
U04	Uni1/2

Spare Parts

How to Order Gasket

KQG - U01

Gasket for Uni
One-touch fittings

Applicable port size

Symbol	Size
U01	Uni1/8
U02	Uni1/4
U03	Uni3/8
U04	Uni1/2

Fittings

KQ2

KDM6

KDM

Inch Size Uni One-touch Fittings

Variations

Male connector

KQ2H

P.430



Use to pipe a female thread. Most general model.

Male elbow

KQ2L

P.430



Use to pipe a female thread at right angles. Most general model.

Male branch tee

KQ2T

P.431



Use to branch a female thread at both 90° angles.

Male run tee

KQ2Y

P.431



Use to branch a female thread at a 90° angle.

Branch "Y"

KQ2U

P.431



Use to branch a female thread.

Extended male elbow

KQ2W

P.430



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

Inch Size Uni One-touch Fittings *Series KQ2*

Applicable Tubing: Inch Size, Connection Thread: Rc, G, NPT, NPTF

Dimensions

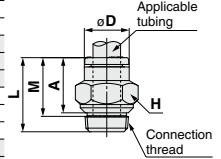
Male Connector: KQ2H (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread Uni	Model	H (Width across flats)	øD	L	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
								Nylon	Urethane		
ø1/8	1/8	KQ2H01-U01□	11.11	6.7	15.2	10.4	13.3	3.4	2.9	2.5	7.9
	1/4	KQ2H01-U02□	14.29	6.7	15.3	8.9	13.3	3.4	2.9	2.5	13.7
ø5/32	1/8	KQ2H03-U01□	11.11	7.7	15.7	10.9	13.3	5.6	4	3	7.7
	1/4	KQ2H03-U02□	14.29	7.7	15.3	8.9	13.3	5.6	4	3	13
ø3/16	1/8	KQ2H05-U01□	12.7	8.3	16	11.2	13.3	6.8	5.6	3.5	7.7
	1/4	KQ2H05-U02□	14.29	8.3	15.3	8.9	13.3	6.8	5.6	3.5	12.4
ø1/4	1/8	KQ2H07-U01□	12.7	10.9	18.9	14.1	13.3	11.6	10	4.6	8.7
	1/4	KQ2H07-U02□	14.29	10.9	15.3	8.9	13.3	11.6	10	4.6	10.7
ø3/8	1/8	KQ2H09-U01□	17.46	10.9	14.9	8.5	13.3	11.6	10	4.6	18.4
	1/4	KQ2H09-U02□	14.29	13	20.6	15.8	14.2	26.1	18	6	10.5
ø5/16	1/4	KQ2H09-U02□	14.29	13	18.5	12.1	14.2	26.1	18	6	10.7
	3/8	KQ2H09-U03□	17.46	13	14.9	8.5	14.2	26.1	18	6	15.5
ø3/8	1/4	KQ2H11-U02□	17.46	15.1	22.2	15.8	15.6	28.8	23.8	7	16.6
	3/8	KQ2H11-U03□	17.46	15.1	18.9	12.5	15.6	28.8	23.8	7	16.2
ø1/2	1/2	KQ2H11-U04□	22.23	15.1	17	8.4	15.6	28.8	23.8	7	30.9
	1/4	KQ2H13-U02□	22.23	19	25.2	18.8	17	50.3	44.4	9	24.9
ø1/2	3/8	KQ2H13-U03□	22.23	19	23.5	17.1	17	56.7	44.4	9.6	27
	1/2	KQ2H13-U04□	22.23	19	21.7	13.1	17	56.7	44.4	9.6	29.8

* □/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of Uni thread



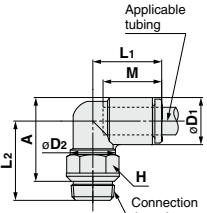
Male Elbow: KQ2L (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread Uni	Model	H (Width across flats)	Note øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø1/8	1/8	KQ2L01-U01□	11.11	7.1	10	14.5	17.9	16.7	13.3	3	2.5	2.5	6
	1/4	KQ2L01-U02□	14.29	7.1	10	14.5	19.2	16.4	13.3	3	2.5	2.5	12.1
ø5/32	1/8	KQ2L03-U01□	11.11	8.2	10	14.8	17.4	16.7	13.3	4.2	4.2	3	6.2
	1/4	KQ2L03-U02□	14.29	8.2	10	14.8	19.7	17.4	13.3	4.2	4.2	3	12.3
ø3/16	1/8	KQ2L05-U01□	11.11	9.1	10	15	17.9	17.7	13.3	6.8	5.6	3.5	6.4
	1/4	KQ2L05-U02□	14.29	9.1	10	15	20.2	18.4	13.3	6.8	5.6	3.5	12.5
ø1/4	1/8	KQ2L07-U01□	11.11	11.1	10	15.6	18.9	19.7	13.3	11.3	10	4.5	6.7
	1/4	KQ2L07-U02□	14.29	11.1	10	15.6	21.2	20.4	13.3	11.3	10	4.5	12.9
ø3/8	3/8	KQ2L07-U03□	17.46	11.1	10	15.6	22.3	21.5	13.3	11.3	10	4.5	23.1
	1/8	KQ2L09-U01□	11.11	13.2	10	16.4	19.9	21.7	14.2	11.4	11.4	4.5	7.4
ø5/16	1/4	KQ2L09-U02□	14.29	13.2	12	17.2	22.2	22.4	14.2	21.6	14.9	6	11.6
	3/8	KQ2L09-U03□	17.46	13.2	12	17.2	23.3	23.5	14.2	21.6	14.9	6	21.7
ø3/8	1/4	KQ2L11-U02□	14.29	15.4	17	19.3	24.4	25.7	15.6	28.8	23.8	7.5	18
	3/8	KQ2L11-U03□	17.46	15.4	17	19.3	27.0	28.3	15.6	28.8	23.8	7.5	18.7
ø1/2	1/2	KQ2L11-U04□	22.23	15.4	17	19.3	34.8	33.9	15.6	28.8	23.8	7.5	50
	1/4	KQ2L13-U02□	17.46	19.3	17	21.5	26.3	29.5	17	50.3	44.4	9	20.3
ø1/2	3/8	KQ2L13-U03□	17.46	19.3	17	21.8	28.9	32.1	17	56	44.4	9.5	25.1
	1/2	KQ2L13-U04□	22.23	19.3	17	21.8	31.9	32.9	17	56	44.4	9.5	56

* □/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of Uni thread
Note) øD1 is maximum diameter.



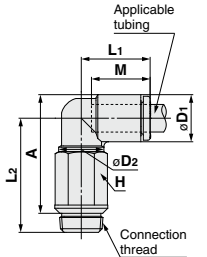
Extended Male Elbow: KQ2W (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread Uni	Model	H (Width across flats)	Note øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø1/8	1/8	KQ2W01-U01□	11.11	7.1	10	14.5	31.5	30.3	13.3	2.8	2.4	2.5	14.5
	1/4	KQ2W01-U02□	14.29	7.1	10	14.5	30.8	28	13.3	2.8	2.4	2.5	26
ø5/32	1/8	KQ2W03-U01□	11.11	8.2	10	14.8	31.1	30.4	13.3	4	4	3	14.6
	1/4	KQ2W03-U02□	14.29	8.2	10	14.8	31.3	29	13.3	4	4	3	26.2
ø3/16	1/8	KQ2W05-U01□	11.11	9.1	10	15	31.6	31.3	13.3	6.8	5.6	3.5	14.8
	1/4	KQ2W05-U02□	14.29	9.1	10	15	31.8	30	13.3	6.8	5.6	3.5	26.4
ø1/4	1/8	KQ2W07-U01□	11.11	11.1	10	15.6	32.6	33.3	13.3	11.3	10	4.5	15.1
	1/4	KQ2W07-U02□	14.29	11.1	10	15.6	32.8	32	13.3	11.3	10	4.5	26.8
ø3/8	3/8	KQ2W07-U03□	17.46	11.1	10	15.6	33.9	33.1	13.3	11.3	10	4.5	45.3
	1/8	KQ2W09-U01□	11.11	13.2	10	16.4	33.6	35.4	14.2	11.3	11.3	4.5	15.9
ø5/16	1/4	KQ2W09-U02□	14.29	13.2	12	17.2	35.9	36.1	14.2	20.5	14.2	6	25.7
	3/8	KQ2W09-U03□	17.46	13.2	12	17.2	37	37.2	14.2	20.5	14.2	6	45.5
ø3/8	1/4	KQ2W11-U02□	17.46	15.4	17	19.3	44.1	45.4	15.6	28.8	23.8	7.5	50.6
	3/8	KQ2W11-U03□	17.46	15.4	17	19.3	42.9	44.2	15.6	28.8	23.8	7.5	45
ø1/2	1/2	KQ2W11-U04□	22.23	15.4	17	19.3	50.7	49.8	15.6	28.8	23.8	7.5	90.9
	1/4	KQ2W13-U02□	17.46	19.3	17	21.5	46	49.3	17	50.3	44.4	9	52.9
ø1/2	3/8	KQ2W13-U03□	17.46	19.3	17	21.8	48.6	51.9	17	56	44.4	9.5	52.6
	1/2	KQ2W13-U04□	22.23	19.3	17	21.8	51.6	52.7	17	56	44.4	9.5	114.1

* □/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of Uni thread
Note) øD1 is maximum diameter.



Fittings

KQ2

KDM6

KDM

INDEX

Series KQ2

Applicable Tubing: Inch Size, Connection Thread: Rc, G, NPT, NPTF

Dimensions

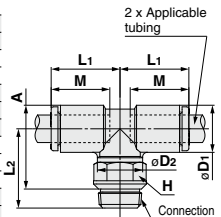
Male Branch Tee: KQ2T (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread Uni	Model	H (Width across flats)	Note øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
										Nylon	Urethane		
ø1/8	1/8	KQ2T01-U01□	11.11	7.1	10	14.5	17.8	16.6	13.3	3.4	2.9	2.5	6.6
	1/4	KQ2T01-U02□	14.29	7.1	10	14.5	19.1	16.3	13.3	3.4	2.9	2.5	12.7
ø5/32	1/8	KQ2T03-U01□	11.11	8.2	10	14.8	17.4	16.7	13.3	6	4.1	3	6.9
	1/4	KQ2T03-U02□	14.29	8.2	10	14.8	19.7	17.4	13.3	6	4.1	3	13.1
ø3/16	1/8	KQ2T05-U01□	11.11	9.1	10	15	17.9	17.6	13.3	6.8	5.6	3.5	7.1
	1/4	KQ2T05-U02□	14.29	9.1	10	15	20.2	18.3	13.3	6.8	5.6	3.5	13.3
ø1/4	1/8	KQ2T07-U01□	11.11	11.1	10	15.6	18.9	19.6	13.3	11.3	10	4.5	7.8
	1/4	KQ2T07-U02□	14.29	11.1	10	15.6	21.2	20.3	13.3	11.3	10	4.5	14.1
ø3/8	1/8	KQ2T07-U03□	17.46	11.1	10	15.6	22.3	21.4	13.3	11.3	10	4.5	24.3
	1/4	KQ2T09-U01□	11.11	13.2	10	16.4	19.9	21.7	14.2	13.9	13.9	4.5	9.3
ø5/16	1/4	KQ2T09-U02□	14.29	13.2	12	17.2	22.2	22.4	14.2	26.3	18.2	6	13.4
	3/8	KQ2T09-U03□	17.46	13.2	12	17.2	23.3	23.5	14.2	26.3	18.2	6	23.4
ø3/8	1/4	KQ2T11-U02□	17.46	15.4	17	19.3	24.3	25.6	15.6	28.8	23.8	7.5	20.4
	3/8	KQ2T11-U03□	17.46	15.4	17	19.3	26.9	28.2	15.6	28.8	23.8	7.5	21.2
ø1/2	1/2	KQ2T11-U04□	22.23	15.4	17	19.3	34.7	33.8	15.6	28.8	23.8	7.5	52.5
	1/4	KQ2T13-U02□	17.46	19.3	17	21.5	26.2	29.5	17	50.3	44.4	9	24.4
ø1/2	3/8	KQ2T13-U03□	17.46	19.3	17	21.8	28.8	32.1	17	56	44.4	9.5	29.3
	1/2	KQ2T13-U04□	22.23	19.3	17	21.8	31.8	32.9	17	56	44.4	9.5	60.2

* □/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of Uni thread Note) øD1 is maximum diameter.



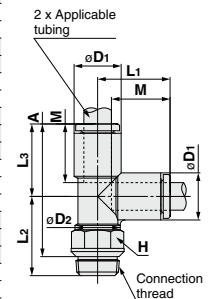
Male Run Tee: KQ2Y (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread Uni	Model	H (Width across flats)	Note øD1	øD2	L1	L2	L3	A*	M	Effective area (mm ²)		Min. port size	Weight (g)
											Nylon	Urethane		
ø1/8	1/8	KQ2Y01-U01□	11.11	7.1	10	14.9	17.8	14.9	28	13.3	3.4	2.9	2.5	6.6
	1/4	KQ2Y01-U02□	14.29	7.1	10	14.9	19.1	14.9	27.7	13.3	3.4	2.9	2.5	12.8
ø5/32	1/8	KQ2Y03-U01□	11.11	8.2	10	15.3	17.4	15.3	27.9	13.3	6.4	4.4	3	6.9
	1/4	KQ2Y03-U02□	14.29	8.2	10	15.3	19.7	15.3	28.6	13.3	6.4	4.4	3	13.1
ø3/16	1/8	KQ2Y05-U01□	11.11	9.1	10	15.7	17.9	15.7	28.8	13.3	6.8	5.6	3.5	7.2
	1/4	KQ2Y05-U02□	14.29	9.1	10	15.7	20.2	15.7	29.5	13.3	6.8	5.6	3.5	13.4
ø1/4	1/8	KQ2Y07-U01□	11.11	11.1	10	16.5	18.9	16.5	30.6	13.3	11.3	10	4.5	7.9
	1/4	KQ2Y07-U02□	14.29	11.1	10	16.5	21.2	16.5	31.3	13.3	11.3	10	4.5	14.1
ø3/8	3/8	KQ2Y07-U03□	17.46	11.1	10	16.5	22.3	16.5	32.4	13.3	11.3	10	4.5	24.3
	1/8	KQ2Y09-U01□	11.11	13.2	10	18.2	19.9	18.2	33.3	14.2	13.4	13.4	4.5	9.3
ø5/16	1/4	KQ2Y09-U02□	14.29	13.2	12	18.2	22.2	18.2	34	14.2	25.6	17.7	6	13.4
	3/8	KQ2Y09-U03□	17.46	13.2	12	18.2	23.3	18.2	35.1	14.2	25.6	17.7	6	23.5
ø1/4	1/4	KQ2Y11-U02□	17.46	15.4	17	20.4	24.3	20.4	38.3	15.6	28.8	23.8	7.5	20.5
	3/8	KQ2Y11-U03□	17.46	15.4	17	20.4	26.9	20.4	40.9	15.6	28.8	23.8	7.5	21.3
ø3/8	1/2	KQ2Y11-U04□	22.23	15.4	17	20.4	34.7	20.4	46.5	15.6	28.8	23.8	7.5	52.6
	1/4	KQ2Y13-U02□	17.46	19.3	17	23.4	26.2	23.4	43.2	17	50.3	44.4	9	24.7
ø1/2	3/8	KQ2Y13-U03□	17.46	19.3	17	23.4	28.8	23.4	45.8	17	56	44.4	9.5	29.5
	1/2	KQ2Y13-U04□	22.23	19.3	17	23.4	31.8	23.4	46.6	17	56	44.4	9.5	60.4

* □/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of Uni thread Note) øD1 is maximum diameter.



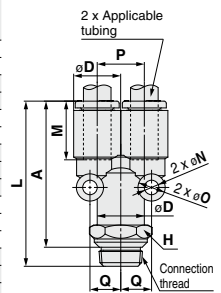
Branch "Y": KQ2U (Gasket seal)



Applicable tubing O.D. (inch)	Connection thread Uni	Model	H (Width across flats)	Note øD	L	P	A*	M	Q	øO	øN	Effective area (mm ²)		Min. port size	Weight (g)
												Nylon	Urethane		
ø1/8	1/8	KQ2U01-U01□	11.11	7.1	35.1	7.1	30.3	13.3	5.2	6	3.2	3.4	2.9	2.7	8.2
	1/4	KQ2U01-U02□	14.29	7.1	37.4	7.1	31	13.3	5.2	6	3.2	3.4	2.9	2.7	14.6
ø5/32	1/8	KQ2U03-U01□	11.11	8.2	35.4	8.2	30.6	13.3	5.7	6	3.2	4.2	4.2	3.6	8.7
	1/4	KQ2U03-U02□	14.29	8.2	37.4	8.2	31	13.3	5.7	6	3.2	4.2	4.2	3.6	14.8
ø3/16	1/8	KQ2U05-U01□	11.11	9.1	35.8	9.1	31	13.3	6.2	6	3.2	6.8	5.6	4.1	9.3
	1/4	KQ2U05-U02□	14.29	9.1	38.1	9.1	31.7	13.3	6.2	6	3.2	6.8	5.6	4.1	15.3
ø1/4	1/8	KQ2U07-U01□	12.7	11.1	37.7	11.1	32.9	13.3	7.6	8	4	11.6	10	5.6	12
	1/4	KQ2U07-U02□	14.29	11.1	38.8	11.1	32.4	13.3	7.6	8	4	11.6	10	5.6	16.3
ø3/8	3/8	KQ2U07-U03□	17.46	11.1	39.7	11.1	33.3	13.3	7.6	8	4	11.6	10	5.6	25.1
	1/8	KQ2U09-U01□	14.29	13.2	41.6	13.2	36.8	14.2	8.7	8	4.2	25.6	17.7	6	17.9
ø5/16	1/4	KQ2U09-U02□	14.29	13.2	42.6	13.2	36.2	14.2	8.7	8	4.2	25.6	17.7	7.3	18.6
	3/8	KQ2U09-U03□	17.46	13.2	42.4	13.2	36	14.2	8.7	8	4.2	25.6	17.7	7.3	26.1
ø3/8	1/4	KQ2U11-U02□	17.46	15.4	47.2	15.4	40.8	15.6	9.9	8	4.2	28.8	23.8	8.9	24.8
	3/8	KQ2U11-U03□	19	15.4	47.1	15.4	40.7	15.6	9.9	8	4.2	28.8	23.8	8.9	31.5
ø1/2	1/2	KQ2U11-U04□	22.23	15.4	49.3	15.4	40.7	15.6	9.9	8	4.2	8	23.8	8.9	48.9
	1/4	KQ2U13-U02□	22.23	19.3	52.5	19.3	46.1	17	11.8	8	4.2	113	50.6	9	44.3
ø1/2	3/8	KQ2U13-U03□	22.23	19.3	52.4	19.3	46	17	11.8	8	4.2	113	50.6	11	43
	1/2	KQ2U13-U04□	22.23	19.3	54	19.3	45.4	17	11.8	8	4.2	113	50.6	12.1	50

* □/A: Brass, N: Brass + Electroless nickel plated

* Reference dimensions after installation of Uni thread Note) øD is maximum diameter.



Made to Order/Clean Series/Spare Parts

Please contact SMC for detailed dimensions, specifications, and lead times.

1 Made to Order

Symbol	Specifications
X12	Lubricant: White vaseline Release button color: White
X35 Note)	Body color: Black Release button color: Orange

Note) The following model is not available as made-to-order: Male connector/KQ2H

2 Clean Series

Please consult with SMC separately for applicable models.

Symbol	Specifications
10-	Brass parts: With electroless nickel plated Lubricant: Fluorine grease Air blow in a clean room Double package Resin body/Release button color: White

Example) **10-KQ2H07-U01N**

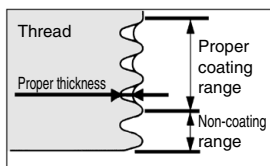
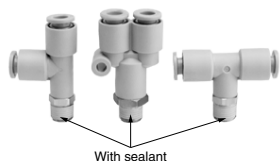
3 Spare Parts

Description	Part no.	Applicable thread
Gasket	KQG-U01	Uni1/8
	KQG-U02	Uni1/4
	KQG-U03	Uni3/8
	KQG-U04	Uni1/2

For Pneumatic Piping/Fittings & Tubing Prior to Use

Fittings with Sealant

Seal material (fluororesin) is coated on the thread part with the proper thickness and range, that reduces the piping work, such as coating the seal on the thread.



Female Thread Conditions Applicable to Face Seal

1. Surface roughness of bearing surface: Rz 25 or less
2. Chamfer dimension: $\phi D1$, Seal bearing surface diameter: $\phi D2$ (Refer to the table below.)
3. Female thread inclination angle: 1° or less
4. Counterbore diameter when the female thread is counterbored.: $\phi D3$
 - Models with width across flats: Body width across flats x 1.1 or more
 - Models other than hexagon (Hexagon socket head male connector etc.): Body dimensions + 0.2 mm or more
- * The width across flats and the body dimensions differ depending on the model even when the same thread size is used. Refer to the dimensions in the catalog.
5. If oil content or sealant is sticking to the female thread, this may cause damage of the product. Remove it before piping.

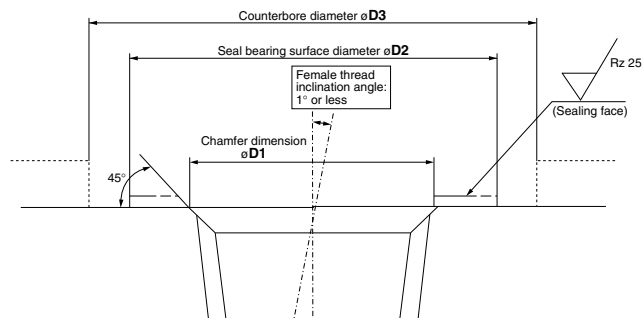


Table 1

Connection thread size	Chamfer dimension $\phi D1$ mm	Seal bearing surface diameter $\phi D2$ mm
R1/8	10.2 to 10.4	12 or more
R1/4	13.6 to 13.8	17 or more
R3/8	17.1 to 17.3	21 or more
R1/2	21.4 to 21.6	27 or more
NPT1/16	8.2 to 8.4	11.11 or more
NPT1/8	10.5 to 10.7	12.7 or more
NPT1/4	14.1 to 14.3	17.46 or more
NPT3/8	17.4 to 17.6	22 or more
NPT1/2	21.7 to 21.9	28.7 or more
G1/8	10.2 to 10.6	12 or more
G1/4	13.6 to 14.0	17 or more
G3/8	17.1 to 17.5	21 or more
G1/2	21.4 to 21.8	27 or more

⚠ Precautions

For products that do not satisfy the female thread conditions shown above and the piping with a piping pitch narrower than the product dimension, use the conventional sealant type.

* The rubber parts of the face seal cannot be replaced.

* The rubber parts of the face seal may fall off by the air blow and they cannot be mounted again. Be careful not to perform the air blow.



Fittings & Tubing Precautions 1

Be sure to read this before handling.

Design/Selection

Warning

1. Check the specifications.

The products in this catalog are designed to be used in compressed air systems (including vacuum) only.

If the products are used in an environment where pressure or temperature is out of the specified range, damage and/or malfunction may result. Do not use under such conditions. (Refer to the specifications.)

Please consult with SMC when using a fluid other than compressed air (including vacuum).

We do not guarantee against any damage if the product is used outside of the specification range.

2. Do not disassemble the product or make any modifications, including additional machining.

It may cause human injury and/or an accident.

3. Check if PTFE can be used in application.

PTFE powder (Polytetrafluoroethylene resin) is included in the sealant. Confirm that the use of it will not cause any adverse affect on the system.

Caution

1. Keep the connection part of fittings and tubing from rotating or oscillating movement. Use Rotary One-touch Fittings (Series KS or KX) in these cases.

The fittings may be damaged if they are used in the above manner.

2. The tubing bending radius in the vicinity of the fitting should be at least the minimum bending radius of the tubing.

If the bending radius is less than the min. value, fittings may damage, or tubing may crack or be crushed. The minimum bending radius, with the exception of TS soft nylon tubing, TU polyurethane tubing, TUH hard polyurethane tubing, TUS soft polyurethane tubing, TRBU FR double layer polyurethane tubing, TH FEP tubing, TL PFA tubing, TD modified PTFE tubing, is measured as following in accordance with JIS B 8381-1995.

Tubing deformation ratio at the minimum bending radius is obtained through the following formula, based on tubing diameter and mandrel diameter by wrapping the same radius mandrel tube.

$$\eta = \left(1 - \frac{L - D}{2d}\right) \times 100$$

Here, η :

Deformation ratio (%)

d : Tubing diameter (mm)

L : Measured length (mm)

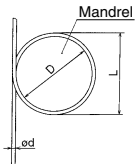
D : Mandrel diameter (mm)

(Twice against the minimum bending radius)

Test temperature: 20 ± 5°C

Relative humidity: 65 ± 5%

Tube deformation ratio at the minimum bending radius



3. Do not use fluids other than listed on the specifications.

Applicable fluids are air and water. Please consult with SMC if using other fluids.

4. When it is used with water, the fittings or tubing may be damaged depending on the surge pressure.

Mounting/Piping

Warning

1. Operation manual

Install the products and operate them only after reading the operation manual carefully and understanding its contents. Also, keep the manual where it can be referred to as necessary.

2. Ensure sufficient space for maintenance activities.

When installing the products, allow access for maintenance.

3. Adhere to the thread tightening method.

When installing the products, refer to "Connection Thread Tightening Method".

4. There may be cases of the tubing detaching from the fitting and thrashing around uncontrollably due to tubing degradation or fitting breakage.

To prevent the situation from becoming uncontrollable, fit the tubing with a protective cover or fix it in place.

Caution

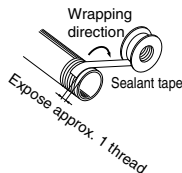
1. Preparation before piping

Before piping is connected, it should be thoroughly blown out with air (flushing) or washed to remove chips, cutting oil and other debris from inside the pipe.

2. Wrapping of sealant tape

When screwing together pipes and fittings, etc., be certain that chips from the pipe threads and sealant does not get inside the pipe.

Also, when the sealant tape is used, leave approx. 1 thread ridges exposed at the end of the threads.



3. Check the model, type and size before installation.

Also, confirm that there is no scratches, gouges or cracks on the product.

4. When connecting the tubing, take pressure or possible changes to the tubing length into account, and allow a sufficient margin.

Failure to do so may result in fitting breakage or detachment of the tubing. Refer to the recommended piping conditions.

5. Do not apply unnecessary forces such as twisting, pulling, moment loads, vibration and impact, etc. on fittings or tubing.

This will cause damage to fittings and will crush, burst or release tubing.

6. Tubing, with the exception of coiled tubing, requires stationary installation. Do not use standard tubing (non-coiled) in applications where tubing is required to travel. Tubing that travels may sustain abrasion, extension, or severance due to tensile force, or may result in removal of tubing from fitting. Use caution prior to use for proper application.

7. To install the fitting, screw the fitting into the hexagonal face of the body, and tighten with an appropriate wrench.

Affix the wrench at the base of the thread. If the size of hexagonal face and wrench do not match, or tightening takes place near the tube side, it may cause collapse or deformation of the hexagonal face, or damage to the equipment. After installing, confirm that there is no damage to the fitting, etc.



Fittings & Tubing Precautions 2

Be sure to read this before handling.

Air Supply

Warning

1. Type of fluids

Please consult with SMC when using the product in applications other than compressed air.

Regarding products for general fluids, please contact SMC concerning applicable fluids.

2. When there is a large amount of drainage.

Compressed air containing a large amount of drainage can cause malfunction of pneumatic equipment. An air dryer or water droplet separator should be installed upstream from filters.

3. Drain flushing

If condensation in the drain bowl is not emptied on a regular basis, the bowl will overflow and allow the condensation to enter the compressed air lines. It causes malfunction of pneumatic equipment.

If the drain bowl is difficult to check and remove, installation of a drain bowl with an auto drain option is recommended.

For details on the above compressed air quality, refer to SMC's Best Pneumatics catalog.

4. Use clean air.

Do not use compressed air that contains chemicals, synthetic oils including organic solvents, salt or corrosive gases, etc., as it can cause damage or malfunction.

Caution

1. Install an air filter.

Install an air filter at the upstream side of valve.

Select an air filter with a filtration degree of 5 μ m or finer.

2. Install an aftercooler, air dryer or water droplet separator, etc.

Compressed air that contains a large amount of drainage can cause malfunction of pneumatic equipment. Therefore, take appropriate measures to ensure air quality, such as by providing an aftercooler, air dryer, or water droplet separator.

3. Ensure that the fluid and ambient temperature are within the specified range.

If the fluid temperature is 5°C or less, the moisture in the circuit could freeze, causing damage to the seals and leading to equipment malfunction. Therefore, take appropriate measures to prevent freezing.

For details on the above compressed air quality, refer to SMC's Best Pneumatics catalog.

Operating Environment

Warning

1. Do not use in an atmosphere having corrosive gases, chemicals, sea water, water, water steam, or where there is direct contact with any of these.

Refer to each construction drawing on the fittings and tubing material.

2. Do not expose the product to direct sunlight for an extended period of time.

3. Do not use in a place subject to heavy vibration and/or shock.

4. Do not mount the product in locations where it is exposed to radiant heat.

Operating Environment

Warning

5. Do not use the ordinary fittings and tubing in locations where static electricity would be problematic.

It may result in the system failure and trouble. In such places, use of antistatic fittings (Series KA) and antistatic tubing (Series TA) are recommended.

6. Do not use the ordinary fittings and tubing in locations where spatter is generated.

Spattering may result in a fire hazard. In such a place, use of flame resistant fittings (Series KR/KRM) and flame resistant tubing (Series TRS/TRB) are recommended.

7. Do not use in an environment where the product is directly exposed to cutting oil, lubricant, coolant oil, etc.

Please contact SMC if using for an environment exposed to cutting oil, lubricant or coolant oil, etc.

8. Take note that if nylon tubing and soft nylon tubing are used in a clean room.

The antioxidant on the surface of the soft nylon tubing may come off, thereby lowering the cleanliness level.

9. Do not use in environments where foreign matter may stick to the product or get mixed in the product's interior.

This may cause leakage or disconnection of the tubing.

Maintenance

Warning

1. Perform maintenance inspection according to the procedures indicated in the operation manual.

If handled improperly, malfunction and damage of machinery or equipment may occur.

2. Maintenance work

If handled improperly, compressed air can be dangerous. Assembly, handling, repair and element replacement of pneumatic systems should be performed by a knowledgeable and experienced person.

3. Drain flushing

Remove drainage from air filters regularly.

4. Removal of equipment, and supply/exhaust of compressed air

When components are removed, first confirm that measures are in place to prevent workpieces from dropping, run-away equipment, etc. Then, cut off the supply pressure and electric power, and exhaust all compressed air from the system using the residual pressure release function.

When machinery is restarted, proceed with caution after confirming that appropriate measures are in place to prevent cylinders from sudden movement.



Fittings & Tubing Precautions 3

Be sure to read this before handling.

Maintenance

Caution

1. Be certain to wear safety glasses at all times during periodical inspections.
2. Replace fittings or tubing having the following problems.
 - 1) Cracks, gouges, wearing, corrosion
 - 2) Air leakage
 - 3) Twists or crushing of tubing
 - 4) Hardening, deterioration, softening of tubing
3. When replacing tubes or fittings, do not try to mend or repair and then reuse them.

One-touch Fittings Mounting/Piping

Caution

1. Installation and removal of tubing for One-touch fittings

1) Installation of tubing

- (1) Cut the tubing perpendicularly, being careful not to damage the outside surface. Use an SMC tube cutter "TK-1", "TK-2" or "TK-3". Do not cut the tubing with pliers, nippers, scissors, etc., otherwise, the tubing will be deformed and trouble may result.
- (2) The outside diameter of the polyurethane tubing swells when internal pressure is applied to it. Therefore, it may be possible that the tubing cannot be re-inserted into the One-touch fitting. Check the tubing outside diameter, and when the accuracy of the outside diameter is $+0.07$ mm or larger for $\phi 2$, $+0.15$ mm or larger for other sizes, insert into the One-touch fitting again, without cutting the tubing to use it. When the tubing is re-inserted into the One-touch fitting, confirm that the tubing goes through the release button smoothly.
- (3) Grasp the tubing, slowly push it straight (0 to 5°) into the One-touch fitting until it comes to a stop.
- (4) Pull the tubing back gently to make sure it has a positive seal. Insufficient installation may cause air to leak or the tubing to release.

2) Removal of tubing

- (1) Push the release button flange evenly and sufficiently to release the tube.
- (2) Pull out the tubing while keeping the release button depressed. If the release button is not held down sufficiently, the tubing cannot be withdrawn.
- (3) To reuse the tubing, remove the previously lodged portion of the tubing. If the lodged portion is left on without being removed, it may result in air leakage and removal of the tubing difficult.

2. Connecting products with metal rods

Products with metal rods (Series KC, old Series KQ, Series KN, and Series KM, etc.) cannot be connected to Series KQ2 One-touch fittings. If connected, the metal rod cannot be retained by the chuck of the One-touch fitting and products with metal rods may project during pressurization, causing serious personal injury or accident.

Even when products with metal rods can be connected to other One-touch fittings, do not use any tube, resin plug, or reducer after connection. This may cause releasing.

For details about One-touch fittings that can connect products with metal rods, contact SMC.

One-touch Fittings Mounting/Piping

Caution

3. When mounting tubes, resin plugs, reducers etc., do not press the release button.

Also, do not press the release button before mounting. This may result in detachment.

In particular, when piping products, such as plug-in elbows or reducers, etc. the release button may be pressed easily due to product handling during piping work.

Connection Thread Tightening Method

1. Connection thread: M3

First, tighten by hand, then use a wrench appropriate for the hexagon flats of the body to tighten an additional 1/4 turn.

A reference value for the tightening torque is 0.4 to 0.5 N·m.

2. Connection thread: M5 and 10-32UNF

First, tighten by hand, then use a wrench appropriate for the hexagon flats of the body to tighten an additional 1/6 to 1/4 turn.

A reference value for the tightening torque is 1 to 1.5 N·m.

3. M6

First, tighten by hand, then use a wrench appropriate for the hexagon flats of the body to tighten an additional 1/6 to 1/4 turn.

Note) Excessive tightening may damage the thread portion or deform the gasket and cause air leakage.

Insufficient tightening may loosen the threads, or cause air leakage.

4. Fittings with sealant: R, NPT

1. First, tighten the fitting by hand, then use a wrench appropriate for the hexagon flats of the body to tighten it a further two or three turns.

For a tightening torque guide, see the table below.

Connection thread size (R, NPT)	Tightening torque (N·m)
1/16, 1/8	3 to 5
1/4	8 to 12
3/8	15 to 20
1/2	20 to 25

2. If the fitting is tightened with excessive torque, a large amount of sealant will seep out. Remove the excess sealant.
3. Insufficient tightening may cause seal failure, or loosen the threads.
4. Reuse
 - 1) Normally, fittings with a sealant can be reused 2 to 3 times.
 - 2) To prevent air leakage through the sealant, remove any loose sealant stuck to the fitting by blowing air over the threaded portion.
 - 3) If the sealant no longer provides effective sealing, wrap sealing tape over the sealant before reusing. Do not use the sealant in any form other than a tape type.
 - 4) Once the fitting has been tightened, backing it out to its original position often causes the sealant to become defective. Air leakage will occur.



Fittings & Tubing Precautions 4

Be sure to read this before handling.

Connection Thread Tightening Method

5. Face seal fittings: R, NPT, G

1. Tighten fittings with sealant using the proper tightening torques in the table below.

Connection thread size (R, NPT, G)	Proper tightening torque (N·m)
1/16, 1/8	3 to 5
1/4	8 to 12
3/8	15 to 20
1/2	20 to 25

2. Insufficient tightening may cause seal failure, or loosen the threads.

3. Reuse

- 1) Normally, fittings with a sealant can be reused 6 to 10 times.
- 2) The seal ring cannot be replaced.

6. Uni thread fittings

- 1) First, tighten the threaded portion by hand, then use a proper wrench, which could be suitable for the width across flats of the hexagon body, to tighten it further at a wrench tightening angle shown below. As a reference value for the tightening torque, refer to the table below.

Connection Female Thread: Rc, NPT, NPTF

Uni thread size	Wrench tightening angle after hand-tightening (deg)	Tightening torque (N·m)
1/8	30 to 60	3 to 5
1/4	30 to 60	8 to 12
3/8	15 to 45	14 to 16
1/2	15 to 30	20 to 22

Connection Female Thread: G

Uni thread size	Wrench tightening angle after hand-tightening (deg)	Tightening torque (N·m)
1/8	30 to 45	3 to 4
1/4	15 to 30	4 to 5
3/8	15 to 30	8 to 9
1/2	15 to 30	14 to 15

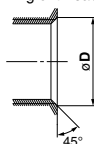
- 2) The gasket can be reused 6 to 10 times. It can be replaced easily when it has sustained damage. A broken gasket can be removed by holding it and then turning it in the same direction as loosening the thread. If gasket is difficult to remove, cut it with nippers, etc. In such a case, use caution not to scratch the seat face because the seat face of 45° gasket of fitting is the sealing face.

Chamfer Dimension for Female Thread



1. Chamfer dimension for female thread of the connection thread M3, M5, 10-32UNF

Confirming to ISO 16030 (air pressure fluid dynamics – connection – ports and stud ends), the chamfer dimensions shown below are recommended. By chamfering as shown in the following table, machining of threads is easier and effective for burr prevention.

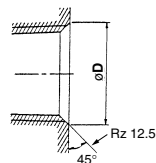


Connection thread size	Chamfer dimension øD (Recommended value) (mm)
M3	3.1 to 3.4
M5	5.1 to 5.4
10-32UNF	5.0 to 5.3

Chamfer Dimension for Female Thread



2. Chamfer dimension of R and NPT thread with sealant, and Uni thread



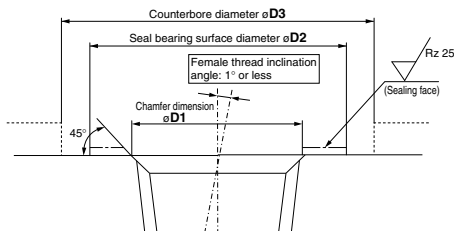
Connection thread size	Chamfer dimension øD (Recommended value)		
	G	Rc	NPT, NPTF
1/16	—	—	8.2 to 8.4
1/8	10.2 to 10.6	10.2 to 10.4	10.5 to 10.7
1/4	13.6 to 14.0	13.6 to 13.8	14.1 to 14.3
3/8	17.1 to 17.5	17.1 to 17.3	17.4 to 17.6
1/2	21.4 to 21.8	21.4 to 21.6	21.7 to 21.9

* For Uni thread, Rz 12.5 is necessary for sealing at the chamfered part.

3. Chamfer dimension for female thread of face seal fitting (R, NPT, G)

- 1) Surface roughness of bearing surface: Rz 25 or less
- 2) Chamfer dimension: øD1, Seal bearing surface diameter: øD2 (Refer to the table below.)
- 3) Female thread inclination angle: 1° or less
- 4) Counterbore diameter when the female thread is counterbored.: øD3
 - Models with width across flats: Body width across flats x 1.1 or more
 - Models other than hexagon (Hexagon socket head male connector etc.): Body dimensions + 0.2 mm or more
- 5) If oil content or sealant is sticking to the female thread, this may cause damage of the product. Remove it before piping.

Connection thread size	Chamfer dimension øD1 mm	Seal bearing surface diameter øD2 mm
R1/8	10.2 to 10.4	12 or more
R1/4	13.6 to 13.8	17 or more
R3/8	17.1 to 17.3	21 or more
R1/2	21.4 to 21.6	27 or more
NPT1/16	8.2 to 8.4	11.11 or more
NPT1/8	10.5 to 10.7	12.7 or more
NPT1/4	14.1 to 14.3	17.46 or more
NPT3/8	17.4 to 17.6	22 or more
NPT1/2	21.7 to 21.9	28.7 or more
G1/8	10.2 to 10.6	12 or more
G1/4	13.6 to 14.0	17 or more
G3/8	17.1 to 17.5	21 or more
G1/2	21.4 to 21.8	27 or more





Fittings & Tubing Precautions 5

Be sure to read this before handling.

Recommended Piping Conditions

1. When connecting piping to the One-touch fitting, use pipe length with sufficient margin, in accordance with the piping conditions shown in Fig. 1.

Also, when using a tying band, etc., to bind the piping together, make sure that external force does not come to bear on the fitting. (See Fig. 2.)

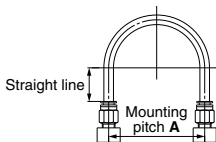


Fig. 1 Recommended piping

Unit: mm

Tubing size	Mounting pitch A			Straight line length
	Nylon tubing	Soft nylon tubing	Polyurethane tubing	
ø2	—	—	13 or more	10 or more
ø3.2, 1/8"	44 or more	35 or more	25 or more	16 or more
ø4, 5/32"	56 or more	44 or more	26 or more	20 or more
ø3/16"	67 or more	52 or more	38 or more	24 or more
ø6	84 or more	66 or more	39 or more	30 or more
ø1/4"	89 or more	70 or more	57 or more	32 or more
ø8, 5/16"	112 or more	88 or more	52 or more	40 or more
ø10	140 or more	110 or more	69 or more	50 or more
ø3/8"	134 or more	105 or more	69 or more	48 or more
ø12	168 or more	132 or more	88 or more	60 or more
ø1/2"	178 or more	140 or more	93 or more	64 or more
ø16	224 or more	176 or more	114 or more	80 or more

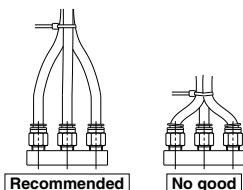


Fig. 2 When using a tying band to bind the piping together

Tubing Design/Selection

⚠ Caution

1. When using a tubing other than from SMC, be careful of the tolerance of the tubing O.D. and tubing material.

- 1) Nylon tubing Within ± 0.1 mm
- 2) Soft nylon tubing Within ± 0.1 mm
- 3) Polyurethane tubing Within $+0.15$ mm, Within -0.2 mm

Do not use the tubing which does not satisfy the specified tubing O.D. accuracy, or if the tubing has a different I.D., material, hardness, or surface roughness from those of SMC's tubing. Please consult SMC if there is anything unclear. It may cause difficulty in connecting the tubing, leakage, disconnection of the tubing, or fitting damage.

When used with tubing other than those from SMC, due to their properties, the products listed below are not subject to warranty.

KQG2, KQB2, KFG2, KF, ø2M

2. When using fittings other than those from SMC, be certain to confirm that operating conditions are such that no problems will arise.



Series KQ2C

Notes when Ordering Color Caps

In order to improve the operability, the outside diameter of the release button has been enlarged for the **New KQ2** series. Along with this change, the usable color caps differ before and after the change. Please contact SMC if anything is unclear.

Applicable Sizes and Models

	Applicable tubing O.D.	Model
Metric size	ø8, ø10, ø12, ø16	All models*
Inch size	ø1/4", ø3/8", ø1/2"	

* Excluding models without release buttons

How to Identify Release Buttons Before and After Change

The release button for both the fitting/**KQ2** and color cap/**KQ2C** after the change can be identified by the protruding mark on the left side of the **SMC** logo, and the release button before the change has no protruding mark. The same identification method is used for metric size and inch size.

- * Along with the change of the release button, the model of the color cap/**KQ2C** is changed from **KQ2C-□A** to **KQ2C-□B**.
- * There is no change of the model for the fitting/**KQ2**.

Before change



No protruding mark

Release button

After change



Protruding mark

Release button

Applicable color cap

Metric Size

Applicable tubing O.D. mm	Model	øD1	øD2	L	Weight g
ø2	KQ2C-02□A	6.1	3.2	2.6	0.1
ø3.2	KQ2C-23□A	7.3	4.3	2.6	0.1
ø4	KQ2C-04□A	8.3	5.2	2.6	0.1
ø6	KQ2C-06□A	10.3	7.2	2.6	0.1
ø8	KQ2C-08□A	12.8	9.2	2.6	0.1
ø10	KQ2C-10□A	15.2	11.2	2.7	0.1
ø12	KQ2C-12□A	17.6	13.2	2.7	0.1
ø16	KQ2C-16□A	22.4	17.2	3.2	0.2

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

Inch Size

Applicable tubing O.D. inch	Model	øD1	øD2	L	Weight g
ø1/8	KQ2C-01□A	7.3	4.3	2.6	0.1
ø3/16	KQ2C-05□A	9	5.9	2.6	0.1
ø1/4	KQ2C-07□A	10.7	7.5	2.6	0.1
ø3/8	KQ2C-11□A	14.8	10.7	2.7	0.1
ø1/2	KQ2C-13□A	18.5	13.9	2.7	0.1

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

Applicable color cap

Metric Size

Applicable tubing O.D. mm	Model	øD1	øD2	L	Weight g
ø2	KQ2C-02□B	6.1	3.2	2.6	0.1
ø3.2	KQ2C-23□B	7.3	4.3	2.6	0.1
ø4	KQ2C-04□B	8.3	5.2	2.6	0.1
ø6	KQ2C-06□B	10.3	7.2	2.6	0.1
ø8	KQ2C-08□B	13.6	9.2	2.6	0.1
ø10	KQ2C-10□B	16.2	11.2	2.7	0.1
ø12	KQ2C-12□B	18.8	13.2	2.7	0.2
ø16	KQ2C-16□B	24.2	17.2	3.2	0.3

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

Inch Size

Applicable tubing O.D. inch	Model	øD1	øD2	L	Weight g
ø1/8	KQ2C-01□B	7.3	4.3	2.6	0.1
ø3/16	KQ2C-05□B	9	5.9	2.6	0.1
ø1/4	KQ2C-07□B	11.5	7.5	2.6	0.1
ø3/8	KQ2C-11□B	15.7	10.7	2.7	0.1
ø1/2	KQ2C-13□B	19.6	13.9	2.7	0.2

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