

One-touch Fittings

RoHS

The New "KQ2"

KQ, KQ2, and KJ consolidated into the "KQ2"

- Enhanced variation
- Lightweight
- Compact



New KQ2 Series



New Oval type release button added!

Applicable tubing O.D.

Metric	ø3.2, ø4, ø6
Inch	ø1/8", ø5/32", ø3/16"





Body type: total of **51** models

Seal method: **3** types

Thread material/Surface treatment (Treated or Non-treated): **2** types^{*1}

*1 Brass, Brass + Electroless nickel plating

Applicable tubing	Connection thread	Seal method/Release button shape					
		Sealant		Gasket seal		Face seal	
		Oval Type	Round Type	Oval Type	Round Type	Oval Type	Round Type
Metric size 	M						
	R	P.5	P.101	P.5	P.101	P.65	P.173
	G					P.57	P.165
Inch size 	Uni			P.87	P.201		
	UNF			P.29	P.133		
	NPT	P.29	P.133			P.73	P.185
	M	P.49	P.157	P.49	P.157	P.81	P.195
	R						
	Uni			P.95	P.209		

KQ2 Series



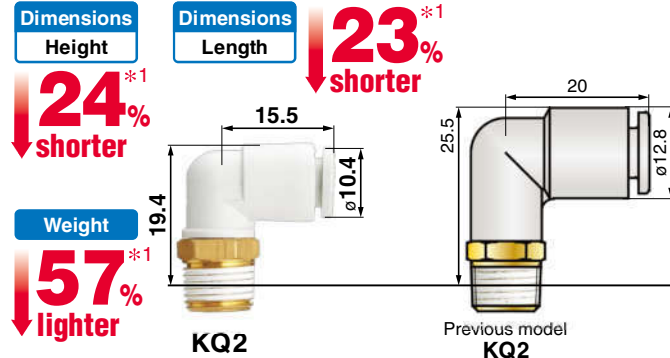
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One-touch Fittings KQ2 Series

Improved tube insertion/removal



Compact and lightweight



*1 Tube removal strength is ensured to be equivalent to previous model. *1 Previous KQ2 series model: Male elbow, applicable tubing O.D. $\phi 6$, connection thread R1/8

Selectable seal method*1

*1 Connection thread: R, NPT



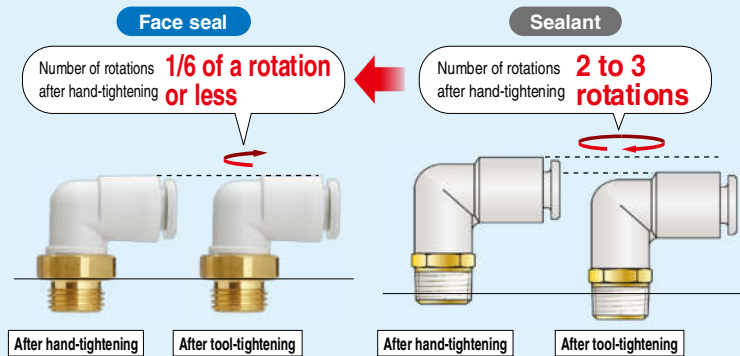
Selectable surface treatment

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

Face seal adopted for threading.

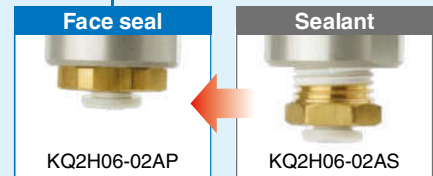
Original thread construction which allows for the use of piping taper female threads (Rc, NPT)

Improved installability (Reduction in amount of tool-tightening required after hand-tightening)

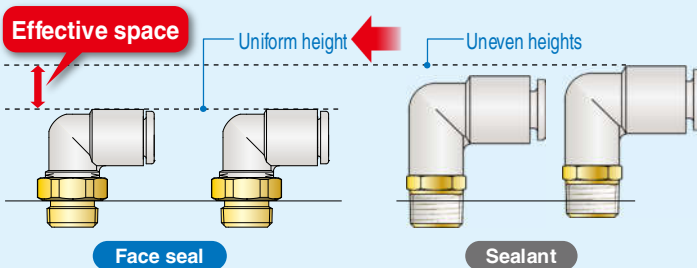


■ Allows for neat and compact piping without protruding threads

<Application example>
Mounted to a blow gun (VMG11W-02-01)



A uniform height when using multiple fittings, contributes to space saving



Prevention of sealant residue/protrusion

The current 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.

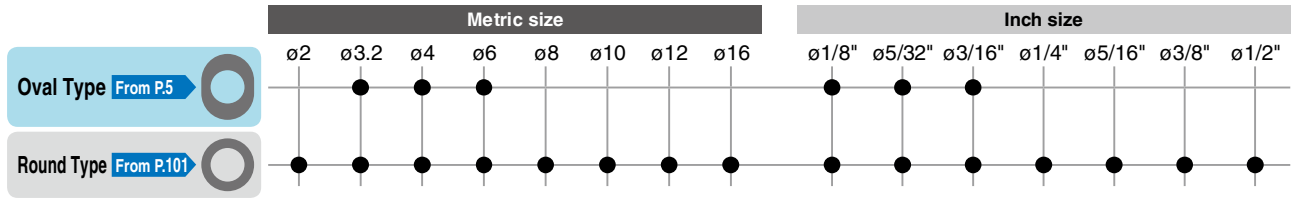
Re-piping is possible.

Face seal

Repeated re-piping of up to 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.






Refer to the next page for details on the applicable tubing sizes of each shape.

Oval Type/Round Type Variations





Hexagon Socket Head Male Connector KQ2S   	45° Male Elbow KQ2K   	Bulkhead Union KQ2E   	Universal Female Elbow KQ2VF   
Universal Male Elbow KQ2V   	Extended Male Elbow KQ2W   	Bulkhead Connector KQ2E   	Branch Universal Female Elbow KQ2ZF  
Male Connector KQ2H   	Female Connector KQ2F   	Straight Union KQ2H   	Different Diameter Straight KQ2H   
Cross KQ2TW   	Male Elbow KQ2L   	Union Elbow KQ2L   	Plug-in Elbow KQ2L   
Reducer Elbow KQ2L   	Different Diameter Cross KQ2TX   	Male Branch Tee KQ2T   	Union Tee KQ2T   
Different Diameter Tee KQ2T   	Different Diameter Tee KQ2T   	Different Diameter Cross KQ2TY   	Hexagon Socket Head Universal Male Elbow KQ2VS   
Branch Male Elbow KQ2LU  	Female Elbow KQ2LF   	Double Universal Male Elbow KQ2VD   	Triple Universal Male Elbow KQ2VT   
Branch Universal Male Elbow KQ2Z  	Double Branch Universal Male Elbow KQ2ZD  	Male Run Tee KQ2Y   	Triple Branch Universal Male Elbow KQ2ZT  
Branch Union Elbow KQ2LU  	Extended Plug-in Elbow KQ2W   	Male Delta Union KQ2D   	Delta Union KQ2D   
Double Branch "Y" KQ2UD  	Different Diameter Double Union "Y" KQ2UD  	Different Diameter Plug-in "Y" KQ2X  	Double Plug-in "Y" KQ2XD  
Union "Y" KQ2U  	Different Diameter Union "Y" KQ2U  	Plug-in "Y" KQ2U  	Branch "Y" KQ2U  
Plug-in Reducer KQ2R   	Bulkhead Male Elbow KQ2LE   	Tube Cap KQ2C   	<p>* The supported release button type (oval type/round type) is shown next to each product.</p>

Oval Type Release Button



Sealant/Gasket Seal

Applicable tubing	Connection thread					
	M	R	Rc	UNF	NPT	
 <p>Metric</p> <p>ø2 ø3.2 ø4 ø6 ø8 ø10 ø12 ø16</p>	●	●	●			<p>P.5</p> <p>How to Order P.6 Variations P.7 Dimensions P.9 Made to Order/Clean Series/ Spare Parts P.27</p>
 <p>Inch</p> <p>ø1/8" ø5/32" ø3/16" ø1/4" ø5/16" ø3/8" ø1/2"</p>				●	●	<p>P.29</p> <p>How to Order P.30 Variations P.31 Dimensions P.33 Made to Order/Clean Series/ Spare Parts P.48</p>
 <p>Inch</p> <p>ø1/8" ø5/32" ø3/16" ø1/4" ø5/16" ø3/8" ø1/2"</p>	●	●	●			<p>P.49</p> <p>How to Order P.50 Variations P.51 Dimensions P.52 Made to Order/Clean Series/ Spare Parts P.55</p>

Face Seal

Applicable tubing	Connection thread					
	G	R	Rc	NPT	R	
 <p>Metric</p> <p>ø2 ø3.2 ø4 ø6 ø8 ø10 ø12 ø16</p>	●					<p>P.57</p> <p>How to Order P.58 Variations P.59 Dimensions P.60 Spare Parts P.63</p>
 <p>Metric</p> <p>ø2 ø3.2 ø4 ø6 ø8 ø10 ø12 ø16</p>		●				<p>P.65</p> <p>How to Order P.66 Variations P.67 Dimensions P.68</p>
 <p>Inch</p> <p>ø1/8" ø5/32" ø3/16" ø1/4" ø5/16" ø3/8" ø1/2"</p>				●		<p>P.73</p> <p>How to Order P.74 Variations P.75 Dimensions P.76</p>
 <p>Inch</p> <p>ø1/8" ø5/32" ø3/16" ø1/4" ø5/16" ø3/8" ø1/2"</p>					●	<p>P.81</p> <p>How to Order P.82 Variations P.83 Dimensions P.84</p>

Gasket Seal (Uni Thread)

Applicable tubing	Connection thread				
	Rc	G	NPT	NPTF	
 <p>Metric</p> <p>ø2 ø3.2 ø4 ø6 ø8 ø10 ø12 ø16</p>	●	●	●	●	<p>P.87</p> <p>How to Order P.88 Variations P.89 Dimensions P.90 Made to Order/Clean Series/ Spare Parts P.93</p>
 <p>Inch</p> <p>ø1/8" ø5/32" ø3/16" ø1/4" ø5/16" ø3/8" ø1/2"</p>	●	●	●	●	<p>P.95</p> <p>How to Order P.96 Variations P.97 Dimensions P.98 Made to Order/Clean Series/ Spare Parts P.100</p>

Round Type Release Button

Sealant/Gasket Seal

Applicable tubing	Connection thread					
	M	R	Rc	UNF	NPT	
Metric ø2 ø3.2 ø4 ø6 ø8 ø10 ø12 ø16	●	●	●			P.101 How to Order P.102 Variations P.103 Dimensions P.105 Made to Order/Clean Series/ Spare Parts P.131
Inch ø1/8" ø5/32" ø3/16" ø1/4" ø5/16" ø3/8" ø1/2"				●	●	P.133 How to Order P.134 Variations P.135 Dimensions P.137 Made to Order/Clean Series/ Spare Parts P.156
Inch ø1/8" ø5/32" ø3/16" ø1/4" ø5/16" ø3/8" ø1/2"	●	●	●			P.157 How to Order P.158 Variations P.159 Dimensions P.160 Made to Order/Clean Series/ Spare Parts P.163

Face Seal

Applicable tubing	Connection thread					
	G	R	Rc	NPT	R	
Metric ø2 ø3.2 ø4 ø6 ø8 ø10 ø12 ø16	●					P.165 How to Order P.166 Variations P.167 Dimensions P.168 Spare Parts P.172
Metric ø2 ø3.2 ø4 ø6 ø8 ø10 ø12 ø16		●				P.173 How to Order P.174 Variations P.175 Dimensions P.176
Inch ø1/8" ø5/32" ø3/16" ø1/4" ø5/16" ø3/8" ø1/2"				●		P.185 How to Order P.186 Variations P.187 Dimensions P.188
Inch ø1/8" ø5/32" ø3/16" ø1/4" ø5/16" ø3/8" ø1/2"					●	P.195 How to Order P.196 Variations P.197 Dimensions P.198

Gasket Seal (Uni Thread)

Applicable tubing	Connection thread				
	Rc	G	NPT	NPTF	
Metric ø2 ø3.2 ø4 ø6 ø8 ø10 ø12 ø16	●	●	●	●	P.201 How to Order P.202 Variations P.203 Dimensions P.204 Made to Order/Clean Series/ Spare Parts P.207
Inch ø1/8" ø5/32" ø3/16" ø1/4" ø5/16" ø3/8" ø1/2"	●	●	●	●	P.209 How to Order P.210 Variations P.211 Dimensions P.212 Made to Order/Clean Series/ Spare Parts P.214

Prior to Use	P.215
Precautions	P.216
Safety Instructions	Back cover

Sealant/Gasket Seal	Metric Size M, R, Rc
	Inch Size UNF, NPT
Face Seal	Metric Size G
	Metric Size R, Rc
Gasket Seal	Inch Size NPT
	Metric Size Uni
	Inch Size Uni

Metric Size One-touch Fittings

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

KQ2 Series

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.

Release button (Light gray)
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
M, R, Rc

Guide
Chuck

Body

Release button (Light gray)

Seal

* Fittings without thread portion, and with all resin body material are copper free specification.

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



Made to Order
(Refer to page 131 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*1 *2
Operating pressure range*3		-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

*1 The surge pressure must be under the maximum operating pressure.

*2 Deionized water is not recommended for use as it may affect the material used in the fittings. In addition, it is known to degrade the water quality.

*3 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

Metric Size One-touch Fittings **KQ2 Series**

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

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	Branch 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
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 plating
G	Stainless steel 303 (Connection thread: Only male thread and M3)
Bulkhead union	<input type="checkbox"/> J Interchangeable with KJE

* : A, N

Port size/Applicable tubing O.D.

Symbol	Size
Tubing connection	00*1 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	

*1 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

For details on applicable tubing O.D. and port size combinations for each model, refer to the charts on the Dimensions page.

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
LU	Reducer elbow
	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
	Union "Y"
U	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 (Rod) 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	

Applicable tubing O.D.

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

Accessories

Symbol	Name
KQ2N	Nipple
KQ2C	Reducer nipple
KQ2P	Tube cap
KQ2P	Plug

Round Type



Metric Size M, R, Rc

Inch Size UNF, NPT

Inch Size M, R, Rc

Metric Size G

Metric Size R, Rc

Inch Size NPT

Inch Size R

Metric Size Uni

Inch Size Uni

Metric Size One-touch Fittings

Round Type Variations

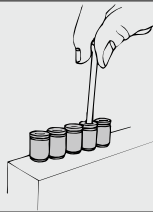
Hexagon socket head male connector

KQ2S

P.107



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



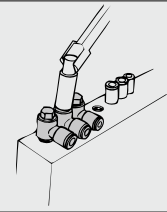
Universal male elbow

KQ2V

P.112



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



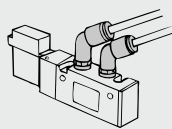
45° male elbow

KQ2K

P.111



Use to pipe a female thread at a 45° angle. Its direction is in-between that of the male connector and male elbow.



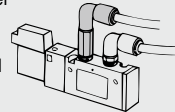
Extended male elbow

KQ2W

P.118



Basically, it is used together with a male elbow. Its extended height allows for multi-leveled piping and prevents interference among fittings.



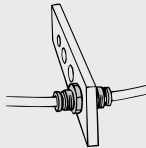
Bulkhead union

KQ2E

P.128



Use to connect tubing through a panel, etc.



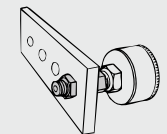
Bulkhead connector

KQ2E

P.128



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



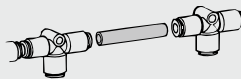
Nipple

KQ2N

P.130



Use to connect One-touch fittings.



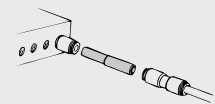
Reducer nipple

KQ2N

P.130



Use to connect One-touch fittings of different sizes.



Universal female elbow

KQ2VF

P.113



Use to branch a male or female thread in the same direction and at a 90° angle. Multiple connections possible.

Branch universal female elbow

KQ2ZF

P.115



Use to two-branch a male or female thread in the same direction and at a 90° angle. Multiple connections possible.

Male connector

KQ2H

P.105



Use to pipe a female thread in the same direction. Most general model.

Cross

KQ2TW

P.121



Use to four-branch a line.

Reducer elbow

KQ2L

P.109



Use to change the tube direction of One-touch fittings by 90° and connect tubing of reduced size.

Female connector

KQ2F

P.106



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

Male elbow

KQ2L

P.108



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

Different diameter cross

KQ2TX

P.121



Use to four-branch a line and connect tubing of reduced size at both 90° angles.

Straight union

KQ2H

P.105



Use to connect tubing in the same direction.

Union elbow

KQ2L

P.109



Use to connect tubing at right angles.

Male branch tee

KQ2T

P.119



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

Different diameter straight

KQ2H

P.106



Use to connect tubing of different sizes.

Plug-in elbow

KQ2L

P.109



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

Union tee

KQ2T

P.120



Use to branch tubing at both 90° angles.

Different diameter tee

KQ2T P.120



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

Different diameter tee

KQ2T P.120



Use to connect tubing of reduced size for branching at a 90° angle from two pipes running in the same direction.

Different diameter cross

KQ2TY P.121



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

Hexagon socket head universal male elbow

KQ2VS P.112



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

Branch male elbow

KQ2LU P.110



Use to two-branch a female thread at right angles.

Female elbow

KQ2LF P.117



Use to pipe a male thread at right angles.

Double universal male elbow

KQ2VD P.114



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

Triple universal male elbow

KQ2VT P.114



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

Branch universal male elbow

KQ2Z P.115



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

Double branch universal male elbow

KQ2ZD P.116



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

Male run tee

KQ2Y P.122



Use to branch a female thread in the same direction and at a 90° angle.

Triple branch universal male elbow

KQ2ZT P.116



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

Branch union elbow

KQ2LU P.109



Use to branch tubing at right angles.

Extended plug-in elbow

KQ2W P.117



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

Male delta union

KQ2D P.123



Use to branch a female thread at two right angles.

Delta union

KQ2D P.124



Use to branch tubing at three right angles.

Double branch "Y"

KQ2UD P.126



Use to four-branch a female thread.

Different diameter double union "Y"

KQ2UD P.126



Use to connect tubing of reduced size for four-branching in the same direction.

Different diameter plug-in "Y"

KQ2X P.127



Use to branch One-touch fittings and connect tubing of reduced size in the same direction.

Double plug-in "Y"

KQ2XD P.127



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

Union "Y"

KQ2U P.125



Use to branch tubing in the same direction.

Different diameter union "Y"

KQ2U P.125



Use to connect tubing of reduced size for branching in the same direction.

Plug-in "Y"

KQ2U P.125



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

Branch "Y"

KQ2U P.124



Use to branch a female thread in the same direction.

Plug-in reducer

KQ2R P.128



Use to change size of One-touch fittings.

Bulkhead male elbow

KQ2LE P.129



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

Adapter

KQ2N P.129



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

Tube cap

KQ2C P.130



Use to plug unused tubing.

Color cap

KQ2C P.130



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

Plug

KQ2P P.129



Use to plug unused One-touch fittings.

Round Type



Metric Size M, R, Rc

Inch Size UNF, NPT

Inch Size M, R, Rc

Metric Size G

Metric Size R, Rc

Inch Size NPT

Inch Size R

Metric Size Uni

Inch Size Uni

KQ2 Series

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

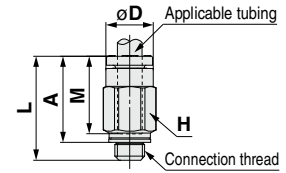
Dimensions

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	5.5	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
ø4	M3 x 0.5	KQ2H04-M3G	8	7.7	17.1	14.5	13.3	0.9	0.9	1.2	2.9
	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	5.6	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	5.6	5.6	3	4.4

□: A (Brass), N (Brass + Electroless nickel plating)



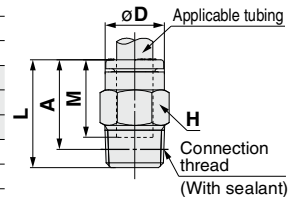
Male Connector: KQ2H (Sealant)



Applicable tubing O.D. [mm]	Connection thread R	Model	H (Width across flats)	øD	L	A*1	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	4.8	3.4	3	5.6
	1/4	KQ2H04-02□S	14	7.7	16.7	12	13.3	4.8	3.4	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	58.3	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 plating)

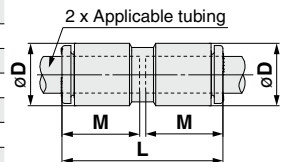
*1 Reference dimensions after installation of R thread



Straight Union: KQ2H



Applicable tubing O.D. [mm]	Model	øD	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



Metric Size One-touch Fittings **KQ2 Series**

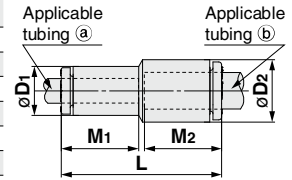
Applicable Tubing: Metric Size, Connection Thread: M, R, Rc

Dimensions

Different Diameter Straight: KQ2H



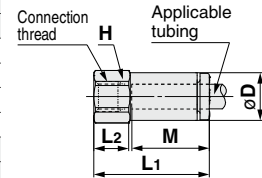
Applicable tubing O.D. [mm]		Model	øD1	øD2	L	M1	M2	Effective area [mm ²]		Min. port size	Weight [g]
(a)	(b)							Nylon	Urethane		
ø2	ø3.2	KQ2H02-23A	5.8	7.1	26.2	11.9	13.3	—	0.9	1.4	1.1
ø2	ø4	KQ2H02-04A	5.8	8.2	26.2	11.9	13.3	—	0.9	1.4	1.2
ø3.2	ø4	KQ2H23-04A	7.1	8.2	27.6	13.3	13.3	3.4	2.9	2.5	1.5
ø3.2	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



Female Connector: KQ2F



Applicable tubing O.D. [mm]	Connection thread Rc	Model	H (Width across flats)	øD	L1	L2	M	Effective area [mm ²]		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
ø4	M3 x 0.5	KQ2F04-M3□	8	7.9	16.5	5.7	13.3	4	4	2.5	4.1
	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
ø6	1/4	KQ2F04-02□	17	7.9	29	12.9	13.3	5.6	4	3	21.5
	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
ø8	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	13.4	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
ø10	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
ø12	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
	3/8	KQ2F12-03□	19	18.2	32.3	13.3	17	58.3	46.1	9	27.6
ø16	1/2	KQ2F12-04□	24	18.2	36.3	15.9	17	58.3	46.1	9	46.3
	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 plating)

Round Type

Metric Size M, R, Rc

Sealant/Gasket Seal
Inch Size UNF, NPT

Inch Size M, R, Rc

Metric Size G

Metric Size R, Rc

Face Seal

Inch Size NPT

Inch Size R

Metric Size Uni

Gasket Seal
Inch Size Uni

KQ2 Series

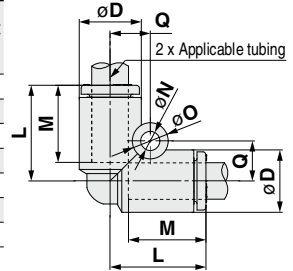
Applicable Tubing: Metric Size, Connection Thread: M, R, Rc

Dimensions

Union Elbow: KQ2L



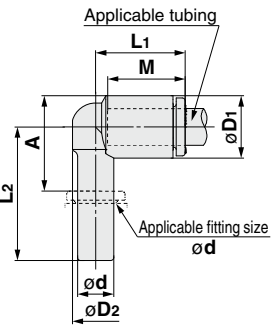
Applicable tubing O.D. [mm]	Model	øD	L	Q	M	Mounting hole			Effective area [mm ²]		Min. port size	Weight [g]
						øO	øN	Thickness	Nylon	Urethane		
ø3.2	KQ2L23-00A	7.1	14.9	5.4	13.3	6	3.2	7.1	3	2.5	2.5	1.6
ø4	KQ2L04-00A	8.2	15.3	5.7	13.3	6	3.2	8.2	4.2	4.2	3	1.9
ø6	KQ2L06-00A	10.4	16.3	6.8	13.3	6	3.2	10.4	11.4	9	4.5	2.7
ø8	KQ2L08-00A	13.2	18.2	8.4	14.2	8	4.2	13.2	21.6	14.9	6	4.7
ø10	KQ2L10-00A	15.9	20.6	9.6	15.6	8	4.2	15.9	35.2	25	7.5	7.1
ø12	KQ2L12-00A	18.5	23	10.7	17	8	4.2	18.5	50.2	39.7	9	10.3
ø16	KQ2L16-00A	23.8	28.6	13.4	20.6	8	4.2	23.8	100	58.9	13	19.7



Plug-in Elbow: KQ2L



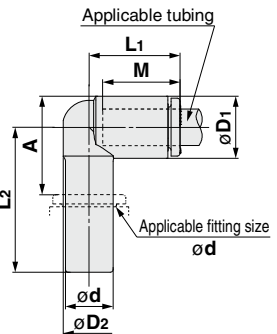
Applicable tubing O.D. [mm]	Applicable fitting size ød	Model	øD1	øD2	L1	L2	A	M	Effective area [mm ²]		Min. port size	Weight [g]
									Nylon	Urethane		
ø3.2	ø3.2	KQ2L23-99A	7.1	6.4	14.4	20.9	11.1	13.3	3	2.5	2.2	0.9
ø4	ø4	KQ2L04-99A	8.2	7.2	14.5	21.1	11.9	13.3	4.2	4.2	2.5	1.2
ø6	ø6	KQ2L06-99A	10.4	8	15.3	22.3	14.2	13.3	9	9	4	1.8
ø8	ø8	KQ2L08-99A	13.2	10	17.2	26.2	18.6	14.2	21.6	14.9	6	3
ø10	ø10	KQ2L10-99A	15.9	12	19.3	28.2	20.5	15.6	35.2	25	7.5	4.7
ø12	ø12	KQ2L12-99A	18.5	14	21.5	31	23.2	17	50.2	39.7	9	7
ø16	ø16	KQ2L16-99A	23.8	20	27.1	36.8	28.1	20.6	100	58.9	13	13.7



Reducer Elbow: KQ2L



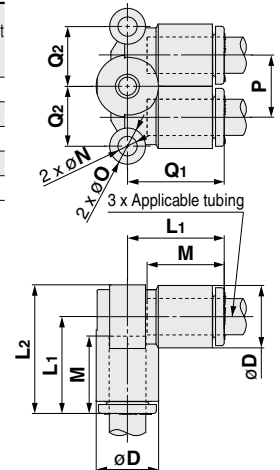
Applicable tubing O.D. [mm]	Applicable fitting size ød	Model	øD1	øD2	L1	L2	A	M	Effective area [mm ²]		Min. port size	Weight [g]
									Nylon	Urethane		
ø3.2	ø4	KQ2L23-04A	7.1	6.4	14.5	23.9	14.1	13.3	3	2.5	2.5	1.1
	ø6	KQ2L23-06A	7.1	6.4	14.5	24.1	14.3	13.3	3	2.5	2.5	1.3
ø4	ø6	KQ2L04-06A	8.2	7.2	14.8	24.6	15.4	13.3	4.2	4.2	3	1.5
	ø8	KQ2L04-08A	8.2	7.2	14.8	29.5	19.4	13.3	4.2	4.2	3	1.8
ø6	ø8	KQ2L06-08A	10.4	9	15.5	24.2	15.2	13.3	11.4	9	4.5	2.1
	ø10	KQ2L06-10A	10.4	9	15.5	31.6	21.2	13.3	11.4	9	4.5	2.7
ø8	ø10	KQ2L08-10A	13.2	10	18.8	27.1	18.1	14.2	21.6	14.9	6	3.5
	ø12	KQ2L08-12A	13.2	10	18.8	34	23.6	14.2	21.6	14.9	6	4.9
ø10	ø12	KQ2L10-12A	15.9	12	19.3	35.6	26.5	15.6	35.2	25	7.5	5.6
ø12	ø16	KQ2L12-16A	18.5	14	21.5	42.6	31.2	17	50.2	39.7	9	8.7



Branch Union Elbow: KQ2LU



Applicable tubing O.D. [mm]	Model	øD	L1	L2	Q1	Q2	M	P	Mounting hole			Effective area [mm ²]		Min. port size	Weight [g]
									øO	øN	Thickness	Nylon	Urethane		
ø4	KQ2LU04-00A	8.2	15.8	19.9	15.8	7.9	13.3	8.2	6	3.2	8.2	6	4.1	3	3.1
ø6	KQ2LU06-00A	10.4	16.5	21.7	16.5	10	13.3	10.4	6	3.2	10.4	13.9	11	4.5	4.4
ø8	KQ2LU08-00A	13.2	18.2	24.8	18.2	13.1	14.2	13.2	8	4.2	13.2	26.3	18.2	6	8
ø10	KQ2LU10-00A	15.9	20.3	28.3	20.3	15.9	15.6	15.9	8	4.2	15.9	40.8	29	7.5	12.2
ø12	KQ2LU12-00A	18.5	22.5	31.7	22.5	17.9	17	18.5	8	4.2	18.5	57.2	45.2	9	18.1



KQ2 Series

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

Dimensions

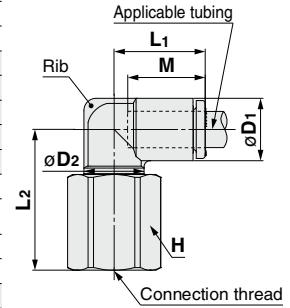
Female Elbow: KQ2LF



Applicable tubing O.D. [mm]	Connection thread M, Rc	Model	H (Width across flats)	øD1	øD2	L1	L2	M	Effective area [mm ²]		Min. port size	Weight [g]	With a rib
									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	●
ø6	1/4	KQ2LF04-02□	17	8.2	10	14.8	26.9	13.3	4.2	4.2	3	29.6	●
	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	●
		KQ2LF08-01□ ^{*1}	14	13.2	12	17.2	23	14.2	21.6	14.9	6	14.6	●
	1/4	KQ2LF08-02□	17	13.2	12	17.2	28.8	14.2	21.6	14.9	6	28.7	●
ø10	3/8	KQ2LF08-03□	19	13.2	12	17.2	29.3	14.2	21.6	14.9	6	32.3	●
	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	●
ø12	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	●
	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 plating)

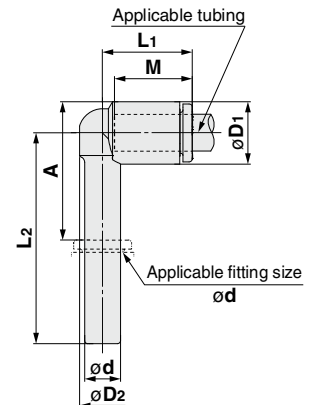
*1 For details, refer to page 131.



Extended Plug-in Elbow: KQ2W



Applicable tubing O.D. [mm]	Applicable fitting size ød	Model	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



Metric Size One-touch Fittings **KQ2 Series**

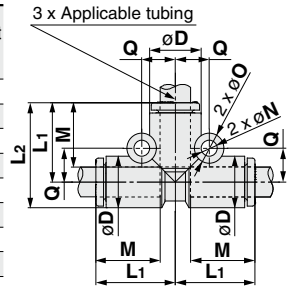
Applicable Tubing: Metric Size, Connection Thread: M, R, Rc

Dimensions

Union Tee: KQ2T



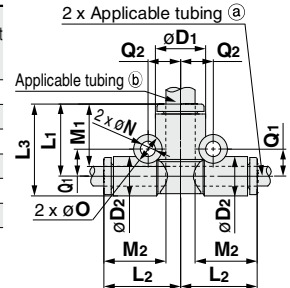
Applicable tubing O.D. [mm]	Model	øD	L1	L2	M	Q	Mounting hole			Effective area [mm ²]		Min. port size	Weight [g]
							øO	øN	Thickness	Nylon	Urethane		
ø2	KQ2T02-00A	5.8	12.9	15.8	11.9	4.5	6	3.2	5.8	—	0.9	1.4	1.4
ø3.2	KQ2T23-00A	7.1	14.9	18.5	13.3	5.4	6	3.2	7.1	3.4	2.9	2.5	2.3
ø4	KQ2T04-00A	8.2	15.3	19.4	13.3	5.7	6	3.2	8.2	6.4	4.4	3	2.8
ø6	KQ2T06-00A	10.4	16.3	21.5	13.3	6.8	6	3.2	10.4	13.4	10.6	4.5	3.8
ø8	KQ2T08-00A	13.2	18.2	24.8	14.2	8.4	8	4.2	13.2	25.6	17.7	6	7
ø10	KQ2T10-00A	15.9	20.6	28.6	15.6	9.6	8	4.2	15.9	40	28.4	7.5	11
ø12	KQ2T12-00A	18.5	23	32.3	17	10.7	8	4.2	18.5	57.4	45.4	9	15.7
ø16	KQ2T16-00A	23.8	28.6	40.5	20.6	13.4	8	4.2	23.8	100	58.9	13	29.8



Different Diameter Tee: KQ2T



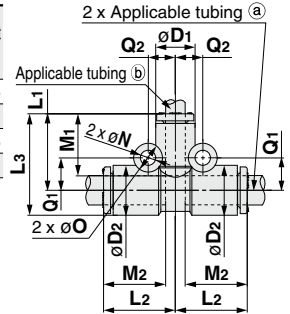
Applicable tubing O.D. [mm]		Model	øD1	øD2	L1	L2	L3	M1	M2	Q1	Q2	Mounting hole			Effective area [mm ²]		Min. port size	Weight [g]
(a)	(b)											øO	øN	Thickness	Nylon	Urethane		
ø3.2	ø4	KQ2T23-04A	8.2	7.1	14.9	15.3	18.5	13.3	13.3	5.4	5.8	6	3.2	8.2	3.8	3.5	2.5	2.6
ø4	ø6	KQ2T04-06A	10.4	8.2	15.3	16.3	19.4	13.3	13.3	5.7	6.8	6	3.2	10.4	7.1	6.6	3	3.3
ø6	ø8	KQ2T06-08A	13.2	10.4	17.2	17.3	22.4	14.2	13.3	7.3	8.4	8	4.2	13.2	16.4	16.4	4.5	5.3
ø8	ø10	KQ2T08-10A	15.9	13.2	19.6	19.2	26.2	15.6	14.2	8.4	9.6	8	4.2	15.9	36	27.2	6	8.3
ø10	ø12	KQ2T10-12A	18.5	15.9	22	21.6	30	17	15.6	9.6	10.7	8	4.2	18.5	56	44.5	7.5	12.2
ø12	ø16	KQ2T12-16A	23.8	18.5	26.6	25	35.9	20.6	17	10.7	13.4	8	4.2	23.8	108.5	74	9	20.1



Different Diameter Tee: KQ2T



Applicable tubing O.D. [mm]		Model	øD1	øD2	L1	L2	L3	M1	M2	Q1	Q2	Mounting hole			Effective area [mm ²]		Min. port size	Weight [g]
(a)	(b)											øO	øN	Thickness	Nylon	Urethane		
ø6	ø4	KQ2T06-04A	8.2	10.4	16.3	15.3	21.5	13.3	13.3	6.8	5.7	6	3.2	10.4	6.4	4.4	3	3.5
ø8	ø6	KQ2T08-06A	10.4	13.2	17.3	17.2	23.9	13.3	14.2	8.4	7.3	8	4.2	13.2	13.4	10.6	4.5	6
ø10	ø8	KQ2T10-08A	13.2	15.9	19.2	19.6	27.2	14.2	15.6	9.6	8.4	8	4.2	15.9	25.6	17.7	6	9.5
ø12	ø10	KQ2T12-10A	15.9	18.5	21.6	22	30.9	15.6	17	10.7	9.6	8	4.2	18.5	40	28.4	7.5	13.4



Round Type

Metric Size M, R, Rc

Sealant/Gasket Seal
Inch Size UNF, NPT

Inch Size M, R, Rc

Metric Size G

Metric Size R, Rc

Face Seal
Inch Size NPT

Inch Size R

Gasket Seal
Metric Size Uni

Inch Size Uni

KQ2 Series

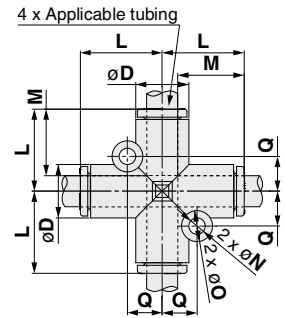
Applicable Tubing: Metric Size, Connection Thread: M, R, Rc

Dimensions

Cross: KQ2TW



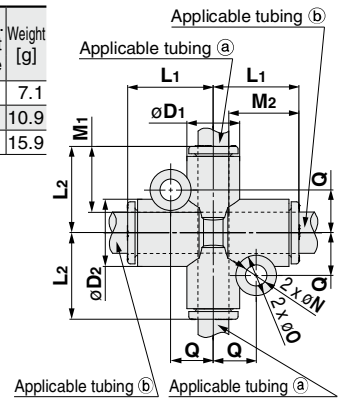
Applicable tubing O.D. [mm]	Model	øD	L	Q	M	Mounting hole			Effective area [mm ²]		Min. port size	Weight [g]
						øO	øN	Thickness	Nylon	Urethane		
ø4	KQ2TW04-00A	8.2	15.3	5.7	13.3	6	3.2	8.2	6.4	4.4	3	3.5
ø6	KQ2TW06-00A	10.4	16.3	6.8	13.3	6	3.2	10.4	13.4	10.6	4.5	4.9
ø8	KQ2TW08-00A	13.2	18.2	8.4	14.2	8	4.2	13.2	25.6	17.7	6	8.5
ø10	KQ2TW10-00A	15.9	20.6	9.6	15.6	8	4.2	15.9	40	28.4	7.5	12.7
ø12	KQ2TW12-00A	18.5	23	10.7	17	8	4.2	18.5	57.4	45.4	9	18.4



Different Diameter Cross: KQ2TX



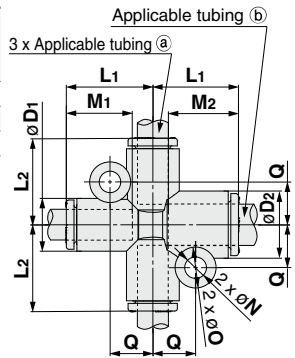
Applicable tubing O.D. [mm]		Model	øD1	øD2	L1	L2	Q	M1	M2	Mounting hole			Effective area [mm ²]		Min. port size	Weight [g]
a	b									øO	øN	Thickness	Nylon	Urethane		
ø6	ø8	KQ2TX06-08A	10.4	13.2	17.2	17.3	8.4	13.3	14.2	8	4.2	13.2	13.4	10.6	4.5	7.1
ø8	ø10	KQ2TX08-10A	13.2	15.9	19.6	19.2	9.6	14.2	15.6	8	4.2	15.9	25.6	17.7	6	10.9
ø10	ø12	KQ2TX10-12A	15.9	18.5	22	21.6	10.7	15.6	17	8	4.2	18.5	40	28.4	7.5	15.9



Different Diameter Cross: KQ2TY



Applicable tubing O.D. [mm]		Model	øD1	øD2	L1	L2	Q	M1	M2	Mounting hole			Effective area [mm ²]		Min. port size	Weight [g]
a	b									øO	øN	Thickness	Nylon	Urethane		
ø6	ø8	KQ2TY06-08A	10.4	13.2	17.3	17.2	8.4	13.3	14.2	8	4.2	13.2	13.4	10.6	4.5	6.5
ø8	ø10	KQ2TY08-10A	13.2	15.9	19.2	19.6	9.6	14.2	15.6	8	4.2	15.9	25.6	17.7	6	10.2
ø10	ø12	KQ2TY10-12A	15.9	18.5	21.6	22	10.7	15.6	17	8	4.2	18.5	40	28.4	7.5	14.9



Metric Size One-touch Fittings **KQ2 Series**

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

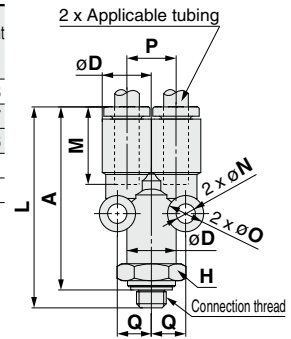
Dimensions

Branch "Y": KQ2U (Gasket seal)



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

□: A (Brass), N (Brass + Electroless nickel plating)

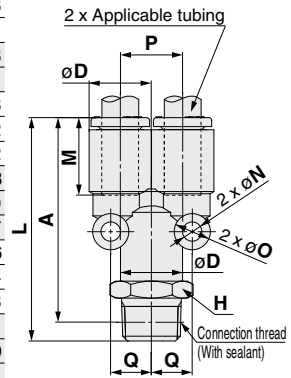


Branch "Y": KQ2U (Sealant)



Applicable tubing O.D. [mm]	Connection thread R	Model	H (Width across flats)	øD	L	A*1	M	P	Q	Mounting hole			Effective area [mm ²]		Min. port size	Weight [g]
										øO	øN	Thickness	Nylon	Urethane		
ø3.2	1/8	KQ2U23-01□S	10	7.1	36.4	33.3	13.3	7.1	5.2	6	3.2	7.1	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	7.1	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	8.2	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	8.2	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	10.4	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	10.4	13.4	10.6	5.4	19.2
	3/8	KQ2U06-03□S	17	10.4	43.4	38.3	13.3	10.4	6.8	6	3.2	10.4	13.4	10.6	5.4	31.2
ø8	1/8	KQ2U08-01□S	14	13.2	40.7	37.6	14.2	13.2	8.7	8	4.2	13.2	25.6	17.7	6	15.8
	1/4	KQ2U08-02□S	14	13.2	45.1	40.4	14.2	13.2	8.7	8	4.2	13.2	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	13.2	25.6	17.7	7.3	32.7
ø10	1/4	KQ2U10-02□S	17	15.9	49	44.3	15.6	15.9	10.1	8	4.2	15.9	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	15.9	40	28.4	9.4	33.4
ø12	1/2	KQ2U10-04□S	22	15.9	54.6	48.2	15.6	15.9	10.1	8	4.2	15.9	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	18.5	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	18.5	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	18.5	57.4	45.4	11.6	61
ø16	1/4	KQ2U16-02□S	24	23.8	62.4	57.7	20.6	23.8	14	8	4.2	23.8	81	60	11	67.6
	3/8	KQ2U16-03□S	24	23.8	63.8	58.7	20.6	23.8	14	8	4.2	23.8	81	60	11	71.5
	1/2	KQ2U16-04□S	24	23.8	68	61.6	20.6	23.8	14	8	4.2	23.8	113	60	13	82.6

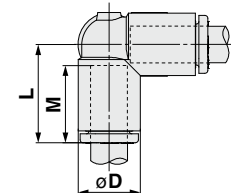
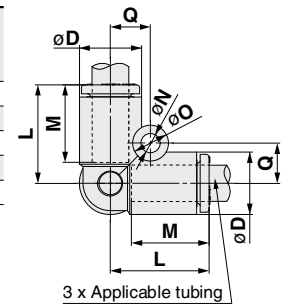
□: A (Brass), N (Brass + Electroless nickel plating) *1 Reference dimensions after installation of R thread



Delta Union: KQ2D



Applicable tubing O.D. [mm]	Model	øD	L	M	Q	Mounting hole			Effective area [mm ²]		Min. port size	Weight [g]
						øO	øN	Thickness	Nylon	Urethane		
ø4	KQ2D04-00A	8.2	15.8	13.3	5.7	6	3.2	8.2	6	4.1	3	2.7
ø6	KQ2D06-00A	10.4	16.8	13.3	6.7	6	3.2	10.4	13.9	11	4.5	3.8
ø8	KQ2D08-00A	13.2	18.8	14.2	8.4	8	4.2	13.2	26.3	18.2	6	6.8
ø10	KQ2D10-00A	15.9	21.2	15.6	9.6	8	4.2	15.9	40.8	29	7.5	10.3
ø12	KQ2D12-00A	18.5	23.6	17	10.7	8	4.2	18.5	57.2	45.2	9	15.2



Round Type

Metric Size M, R, Rc

Sealant/Gasket Seal
Inch Size UNF, NPT

Inch Size M, R, Rc

Metric Size G

Metric Size R, Rc

Face Seal
Inch Size NPT

Inch Size R

Gasket Seal
Metric Size Uni

Inch Size Uni

KQ2 Series

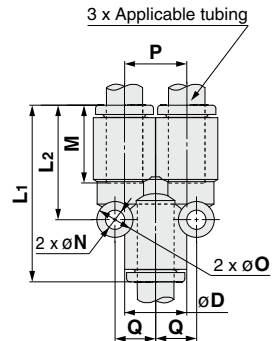
Applicable Tubing: Metric Size, Connection Thread: M, R, Rc

Dimensions

Union "Y": KQ2U



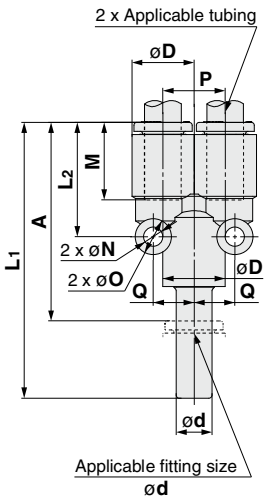
Applicable tubing O.D. [mm]	Model	øD	L1	L2	P	M	Q	Mounting hole			Effective area [mm ²]		Min. port size	Weight [g]
								øO	øN	Thickness	Nylon	Urethane		
ø2	KQ2U02-00A	5.8	25.8	16.1	5.8	11.9	4.5	6	3.2	5.8	—	0.9	1.2	1.6
ø3.2	KQ2U23-00A	7.1	28.9	18	7.1	13.3	5.2	6	3.2	7.1	3.4	2.9	2.5	2.4
ø4	KQ2U04-00A	8.2	29	18.2	8.2	13.3	5.7	6	3.2	8.2	4.2	4.2	3	2.9
ø6	KQ2U06-00A	10.4	30.1	19.4	10.4	13.3	6.8	6	3.2	10.4	13.4	10.6	4.5	4.1
ø8	KQ2U08-00A	13.2	33.2	22.3	13.2	14.2	8.7	8	4.2	13.2	25.6	17.7	6	7.4
ø10	KQ2U10-00A	15.9	37.1	25	15.9	15.6	10.1	8	4.2	15.9	40	28.4	7.5	11.2
ø12	KQ2U12-00A	18.5	41.1	27.8	18.5	17	11.4	8	4.2	18.5	57.4	45.4	9	16.4
ø16	KQ2U16-00A	23.8	51.5	35	23.8	20.6	14	8	4.2	23.8	113	60	13	30.6



Plug-in "Y": KQ2U



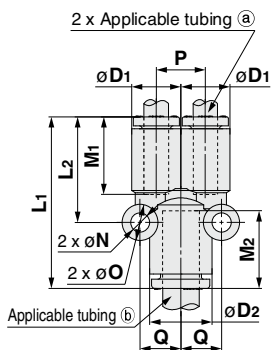
Applicable tubing O.D. [mm]	Applicable fitting size ød	Model	øD	L1	L2	P	A	M	Q	Mounting hole			Effective area [mm ²]		Min. port size	Weight [g]
										øO	øN	Thickness	Nylon	Urethane		
ø3.2	ø3.2	KQ2U23-99A	7.1	45.1	18	7.1	31.8	13.3	5.2	6	3.2	7.1	3.4	2.9	2	2.5
ø4	ø4	KQ2U04-99A	8.2	44.8	18.2	8.2	31.5	13.3	5.7	6	3.2	8.2	4.2	4.2	2.5	3.1
ø6	ø6	KQ2U06-99A	10.4	46.3	19.4	10.4	33	13.3	6.8	6	3.2	10.4	13.4	10.6	4	4.5
ø8	ø8	KQ2U08-99A	13.2	52.1	22.3	13.2	37.9	14.2	8.7	8	4.2	13.2	25.6	17.7	6	8
ø10	ø10	KQ2U10-99A	15.9	57.3	25	15.9	41.7	15.6	10.1	8	4.2	15.9	40	28.4	7.5	12.3
ø12	ø12	KQ2U12-99A	18.5	63	27.8	18.5	46	17	11.4	8	4.2	18.5	57.4	45.4	9	18.3
ø16	ø16	KQ2U16-99A	23.8	75.9	35	23.8	55.3	20.6	14	8	4.2	23.8	113	60	13	33.5



Different Diameter Union "Y": KQ2U



Applicable tubing O.D. [mm]		Model	øD1	øD2	L1	L2	P	M1	M2	Q	Mounting hole			Effective area [mm ²]		Min. port size	Weight [g]
(a)	(b)										øO	øN	Thickness	Nylon	Urethane		
ø2	ø3.2	KQ2U02-23A	5.8	7.1	28.2	16.6	5.8	11.9	13.3	5.2	6	3.2	7.1	—	0.9	1.2	1.9
ø2	ø4	KQ2U02-04A	5.8	8.2	27.6	15.7	5.8	11.9	13.3	5.7	6	3.2	8.2	—	0.9	1.2	2.1
ø3.2	ø4	KQ2U23-04A	7.1	8.2	28.9	18	7.1	13.3	13.3	5.7	6	3.2	8.2	3.2	2.7	2.5	2.7
ø4	ø6	KQ2U04-06A	8.2	10.4	29	18	8.2	13.3	13.3	6.8	6	3.2	10.4	4.2	4.2	3	3.3
ø6	ø8	KQ2U06-08A	10.4	13.2	31	19.3	10.4	13.3	14.2	8.2	6	3.2	13.2	13.4	10.6	4.5	5
ø8	ø10	KQ2U08-10A	13.2	15.9	34.6	22.3	13.2	14.2	15.6	10.1	8	4.2	15.9	25.6	17.7	6	8.6
ø10	ø12	KQ2U10-12A	15.9	18.5	38.5	25	15.9	15.6	17	11.4	8	4.2	18.5	40	28.4	7.5	12.7
ø12	ø16	KQ2U12-16A	18.5	23.8	47.9	31	18.5	17	20.6	14	8	4.2	23.8	57.4	45.4	9	21.2



Metric Size One-touch Fittings **KQ2 Series**

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

Dimensions

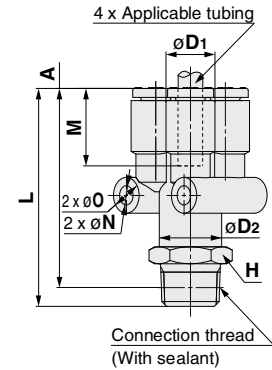
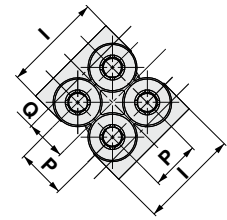
Double Branch "Y": KQ2UD (Sealant)



Applicable tubing O.D. [mm]	Connection thread R	Model	H (Width across flats)	øD1	øD2	L	I	A*1	M	P	Q	øO	øN	Effective area [mm ²]		Min. port size	Weight [g]
														Nylon	Urethane		
ø4	1/8	KQ2UD04-01□S	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	KQ2UD04-02□S	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
ø6	1/8	KQ2UD06-01□S	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	KQ2UD06-02□S	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 plating)

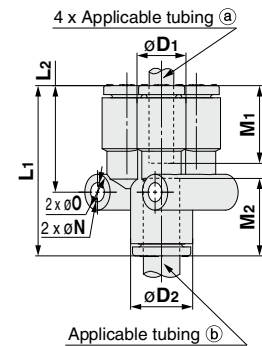
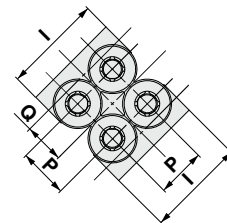
*1 Reference dimensions after installation of R thread



Different Diameter Double Union "Y": KQ2UD



Applicable tubing O.D. [mm]		Model	øD1	øD2	L1	L2	P	I	M1	M2	Q	øO	øN	Effective area [mm ²]		Min. port size	Weight [g]
①	②													Nylon	Urethane		
ø4	ø6	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
ø6	ø8	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



Round Type

Metric Size M, R, Rc

Sealant/Gasket Seal
Inch Size UNF, NPT

Inch Size M, R, Rc

Metric Size G

Metric Size R, Rc

Face Seal
Inch Size NPT

Inch Size R

Metric Size Uni

Gasket Seal
Inch Size Uni

KQ2 Series

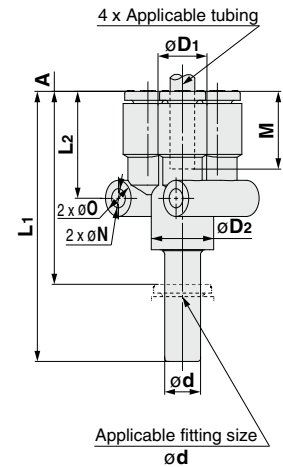
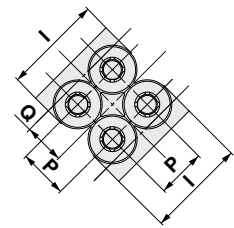
Applicable Tubing: Metric Size, Connection Thread: M, R, Rc

Dimensions

Double Plug-in "Y": KQ2XD



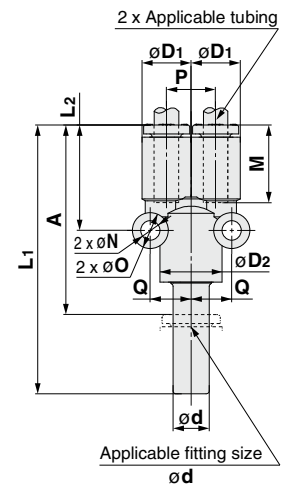
Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	ϕD_1	ϕD_2	L ₁	L ₂	A	I	P	M	Q	ϕO	ϕN	Effective area (mm ²)		Min. port size	Weight [g]
														Nylon	Urethane		
$\phi 4$	$\phi 6$	KQ2XD04-06A	8.2	10.4	45.4	18.2	32.1	16.6	8.2	13.3	6.8	6	3.2	4.2	4.2	3	5.9
$\phi 6$	$\phi 8$	KQ2XD06-08A	10.4	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



Different Diameter Plug-in "Y": KQ2X



Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	ϕD_1	ϕD_2	L ₁	L ₂	A	P	M	Q	Mounting hole			Effective area (mm ²)		Min. port size	Weight [g]
											ϕO	ϕN	Thickness	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	8.2	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	10.4	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	13.2	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	15.9	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	18.5	40	28.4	7.5	14.6



Metric Size One-touch Fittings **KQ2 Series**

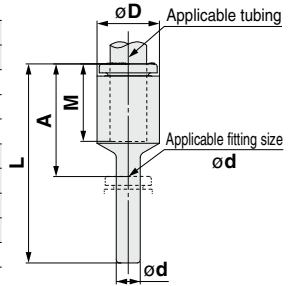
Applicable Tubing: Metric Size, Connection Thread: M, R, Rc

Dimensions

Plug-in Reducer: KQ2R



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

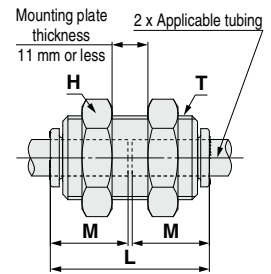


Bulkhead Union: KQ2E (Interchangeable with KQ)



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		
$\phi 3.2$	KQ2E23-00□	M12 x 1	14	27.3	13	13.3	3.4	2.9	2.5	24.1
$\phi 4$	KQ2E04-00□	M12 x 1	14	27.3	13	13.3	5.6	4	3	22.9
$\phi 6$	KQ2E06-00□	M14 x 1	17	27.3	15	13.3	13.1	10.4	4.5	28
$\phi 8$	KQ2E08-00□	M16 x 1	19	29.1	17	14.2	26.1	18	6	34
$\phi 10$	KQ2E10-00□	M20 x 1	24	31.9	21	15.6	41.5	29.5	7.5	64.4
$\phi 12$	KQ2E12-00□	M22 x 1	27	34.7	23	17	58.3	46.1	9	63.8
$\phi 16$	KQ2E16-00□	M28 x 1.5	32	41.9	29	20.6	113	67	13	120.1

□: A (Brass), N (Brass + Electroless nickel plating)

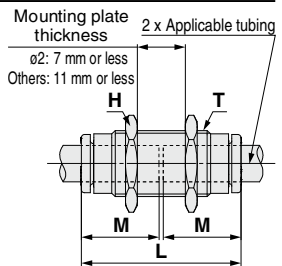


Bulkhead Union: KQ2E (Interchangeable with KJ)



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		
$\phi 2$	KQ2E02-00□J	M7 x 0.75	9	24.5	8	11.9	—	0.9	1.4	5.2
$\phi 3.2$	KQ2E23-00□J	M8 x 0.75	10	27.3	9	13.3	3	2.5	2.5	6.9
$\phi 4$	KQ2E04-00□J	M9 x 0.75	11	27.3	10	13.3	4	4	3	8.3
$\phi 6$	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 plating)

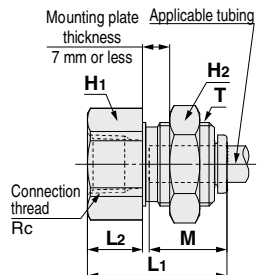


Bulkhead Connector: KQ2E



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		
$\phi 3.2$	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
$\phi 4$	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
$\phi 6$	1/4	KQ2E06-02□	M14 x 1	17	17	28.4	14	15	13.3	13.1	10.4	4.5	32.4
	3/8	KQ2E06-03□	M14 x 1	19	17	30.7	16.3	15	13.3	13.1	10.4	4.5	35.9
$\phi 8$	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
$\phi 8$	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
$\phi 10$	3/8	KQ2E10-03□	M20 x 1	22	24	31.4	12	21	15.6	41.5	29.5	7.5	71.6
	3/8	KQ2E12-03□	M22 x 1	24	27	32.3	11.9	23	17	58.3	46.1	9	69.3
$\phi 12$	1/2	KQ2E12-04□	M22 x 1	24	27	37.7	17.3	23	17	58.3	46.1	9	72.2
	3/8	KQ2E16-03□	M28 x 1.5	30	32	34.4	11.5	29	20.6	96	67	13	122.2
$\phi 16$	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 plating)



Round Type

Metric Size M, R, Rc

Sealant/Gasket Seal
Inch Size UNF, NPT

Inch Size M, R, Rc

Metric Size G

Metric Size R, Rc

Face Seal
Inch Size NPT

Inch Size R

Gasket Seal
Metric Size Uni

Inch Size Uni

KQ2 Series

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

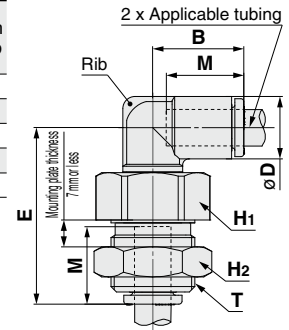
Dimensions

Bulkhead Male Elbow: KQ2LE



Applicable tubing O.D. [mm]	Model	T (M)	H ₁ (Width across flats)	H ₂ (Width across flats)	B	E	øD	Mounting hole	M	Effective area [mm ²]		Min. port size	Weight [g]	With a rib
										Nylon	Urethane			
ø4	KQ2LE04-00□	M12 x 1	14	14	14.8	28.5	8.2	13	13.3	4.2	4.2	3	21.2	●
ø6	KQ2LE06-00□	M14 x 1	17	17	15.5	29.6	10.4	15	13.3	11.4	9	4.5	29.4	—
ø8	KQ2LE08-00□	M16 x 1	17	19	17.2	32.3	13.2	17	14.2	21.6	14.9	6	30.4	●
ø10	KQ2LE10-00□	M20 x 1	22	24	19.3	37.9	15.9	21	15.6	35.2	25	7.5	53.5	●
ø12	KQ2LE12-00□	M22 x 1	24	27	21.5	40.8	18.5	23	17	50.2	39.7	9	61	●

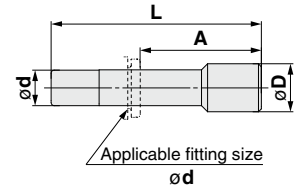
□: A (Brass), N (Brass + Electroless nickel plating)



Plug: KQ2P



Applicable fitting size ød	Model	øD	L	A	Weight [g]
ø2	KJP-02	3	17	5.1	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

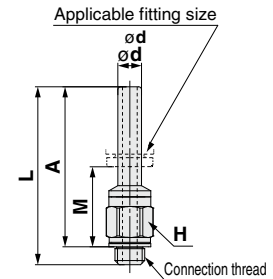


Adapter: KQ2N (Gasket seal)



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 plating)



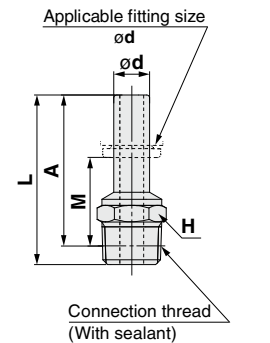
Adapter: KQ2N (Sealant)



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

□: A (Brass), N (Brass + Electroless nickel plating)

*1 Reference dimensions after installation of R thread



Metric Size One-touch Fittings **KQ2 Series**

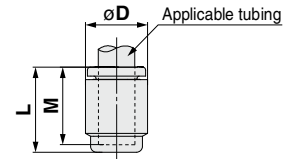
Applicable Tubing: Metric Size, Connection Thread: M, R, Rc

Dimensions

Tube Cap: KQ2C



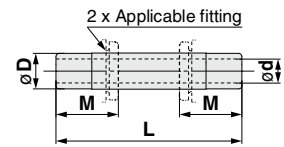
Applicable tubing O.D. [mm]	Model	øD	L	M	Weight [g]
ø4	KQ2C04-00A	8.2	14.5	13.3	0.8
ø6	KQ2C06-00A	10.4	14.6	13.3	1.1
ø8	KQ2C08-00A	13.2	15.7	14.2	2
ø10	KQ2C10-00A	15.9	17.3	15.6	2.9
ø12	KQ2C12-00A	18.5	18.9	17	4.5
ø16	KQ2C16-00A	23.8	23	20.6	8.4



Nipple: KQ2N



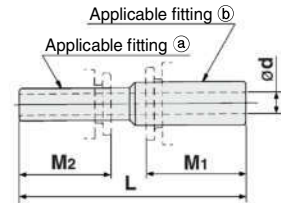
Applicable fitting øD	Model	L	M	ød	Min. port size	Weight [g]
ø4	KQ2N04-99	37	13.3	2.5	2.5	1
ø6	KQ2N06-99	39	13.3	4	4	2
ø8	KQ2N08-99	43	14.2	6	6	2
ø10	KQ2N10-99	49	15.6	7.5	7.5	4
ø12	KQ2N12-99	52	17	9	9	3.3
ø16	KQ2N16-99	57	20.6	13	13	4.8



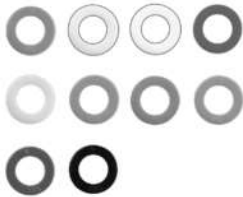
Reducer Nipple: KQ2N



Applicable fitting		Model	L	M1	M2	ød Min. port size	Weight [g]
①	②						
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

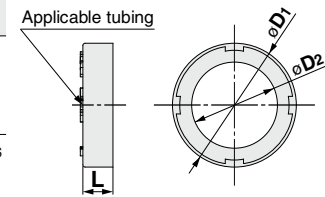


Color Cap: KQ2C



Applicable tubing O.D. [mm]	Model	øD1	øD2	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 operability, the outside diameter of the release button has been enlarged for the new KQ2 series. Therefore, the usable color caps will differ between pre-change and post-change products. Refer to page 221 for details.

Round Type
Metric Size M, R, Rc
Sealant/Gasket Seal
Inch Size UNF, NPT
Inch Size M, R, Rc
Metric Size G
Metric Size R, Rc
Face Seal
Inch Size NPT
Inch Size R
Gasket Seal
Metric Size Uni
Inch Size Uni

KQ2 Series

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 *1	Body color: Black, Release button color: Light gray
X41	With fixed orifice*2
KQ2□08-01□□	Effective area is interchangeable with the current product (KQ series). Applicable model: Male elbow, 45° male elbow, Female elbow, Extended male elbow, Male branch tee, Male run tee Applicable tubing O.D./Port size: ø8/R1/8 Thread material/Surface treatment: Brass, Brass + Electroless nickel plating Example) KQ2L08-01AQS

*1 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

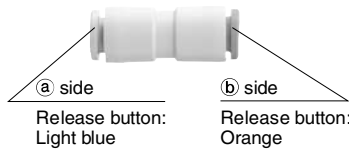
*2 Please contact SMC for availability.

The following made-to-order products will be provided based on previous models (KQ2 series). Please contact SMC separately.

Symbol	Specifications
X17	Grease-free Rubber material: NBR (With fluorine coating) Release button color: Light blue
X29	Grease-free Rubber material: NBR (With fluorine coating) Release button color: Light blue Copper-free (With electroless nickel plating)
X34	Rubber material: FKM
X39	Grease-free Rubber material: NBR (With fluorine coating) Release button color: Light blue Clean (Copper-free, air blow, double packaging, resin body: white)
X94	Grease-free Rubber material: FKM (With fluorine coating) Release button color: Light blue

2 Metric/Inch Conversion Fittings

Allows for the metric ↔ inch conversion of tubing



Applicable tubing O.D. [mm]		Model
(a)	(b)	
ø6	ø1/4"	KQ2H06-07A-X562
ø10	ø3/8"	KQ2H10-11A-X562
ø12	ø1/2"	KQ2H12-13A-X562

Variations

Metric size	Inch size	Inch size						
		ø1/8 (Metric nominal size: ø3.2)	ø5/32 (Metric nominal size: ø4)	ø3/16	ø1/4	ø5/16 (Metric nominal size: ø8)	ø3/8	ø1/2
ø2		KQ2H02-23A	KQ2H02-04A					
ø3.2 (Inch nominal size: ø1/8)		Straight type (KQ2H23-00A/ KQ2H01-00A)	KQ2H01-03A KQ2H23-04A		KQ2H01-07A			
ø4 (Inch nominal size: ø5/32)		KQ2H01-03A KQ2H23-04A	Straight type (KQ2H04-00A/ KQ2H03-00A)	KQ2H03-05A	KQ2H03-07A			
ø6		KQ2H23-06A	KQ2H04-06A		KQ2H06-07A-X562 (Made to Order)	KQ2H06-08A		
ø8 (Inch nominal size: ø5/16)					KQ2H07-09A	Straight type (KQ2H08-00A/ KQ2H09-00A)	KQ2H09-11A	KQ2H09-13A
ø10						KQ2H08-10A	KQ2H10-11A-X562 (Made to Order)	
ø12								KQ2H12-13A-X562 (Made to Order)

3 Clean Series

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

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

10-KQ2H06-00A (Without thread)

Metric Size One-touch Fittings **KQ2 Series**

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

4 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 KQ2E04-01A, KQ2E04-02A, KQ2LE04-00A
	KQ06-P01A	KQ2E06-00A, KQ2E06-01A, KQ2E06-02A KQ2E06-03A, KQ2LE06-00A
	KQ08-P01A	KQ2E08-00A, KQ2E08-01A, KQ2E08-02A KQ2E08-03A, KQ2LE08-00A
	KQ10-P01A	KQ2E10-00A, KQ2E10-02A, KQ2E10-03A KQ2LE10-00A
	KQ12-P01A	KQ2E12-00A, KQ2E12-03A, KQ2E12-04A KQ2LE12-00A
	KQ16-P01A	KQ2E16-00A KQ2E16-03A, KQ2E16-04A

Brass + Electroless nickel plating

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 KQ2E04-01N, KQ2E04-02N, KQ2LE04-00N
	KQ06-P01N	KQ2E06-00N, KQ2E06-01N, KQ2E06-02N KQ2E06-03N, KQ2LE06-00N
	KQ08-P01N	KQ2E08-00N, KQ2E08-01N, KQ2E08-02N KQ2E08-03N, KQ2LE08-00N
	KQ10-P01N	KQ2E10-00N, KQ2E10-02N, KQ2E10-03N KQ2LE10-00N
	KQ12-P01N	KQ2E12-00N, KQ2E12-03N, KQ2E12-04N KQ2LE12-00N
	KQ16-P01N	KQ2E16-00N KQ2E16-03N, KQ2E16-04N

Color Cap

Applicable tubing O.D. [mm]	Model	øD1	øD2	L	Weight [g]	Note
ø8	KQ2C-08□A	12.8	9.2	2.6	0.1	Applicable for products before enlargement of outside diameter of release button
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)

Round Type



Metric Size M, R, Rc

Sealant/Gasket Seal
Inch Size UNF, NPT

Inch Size M, R, Rc

Metric Size G

Metric Size R, Rc

Inch Size NPT

Inch Size R

Metric Size Uni

Inch Size Uni