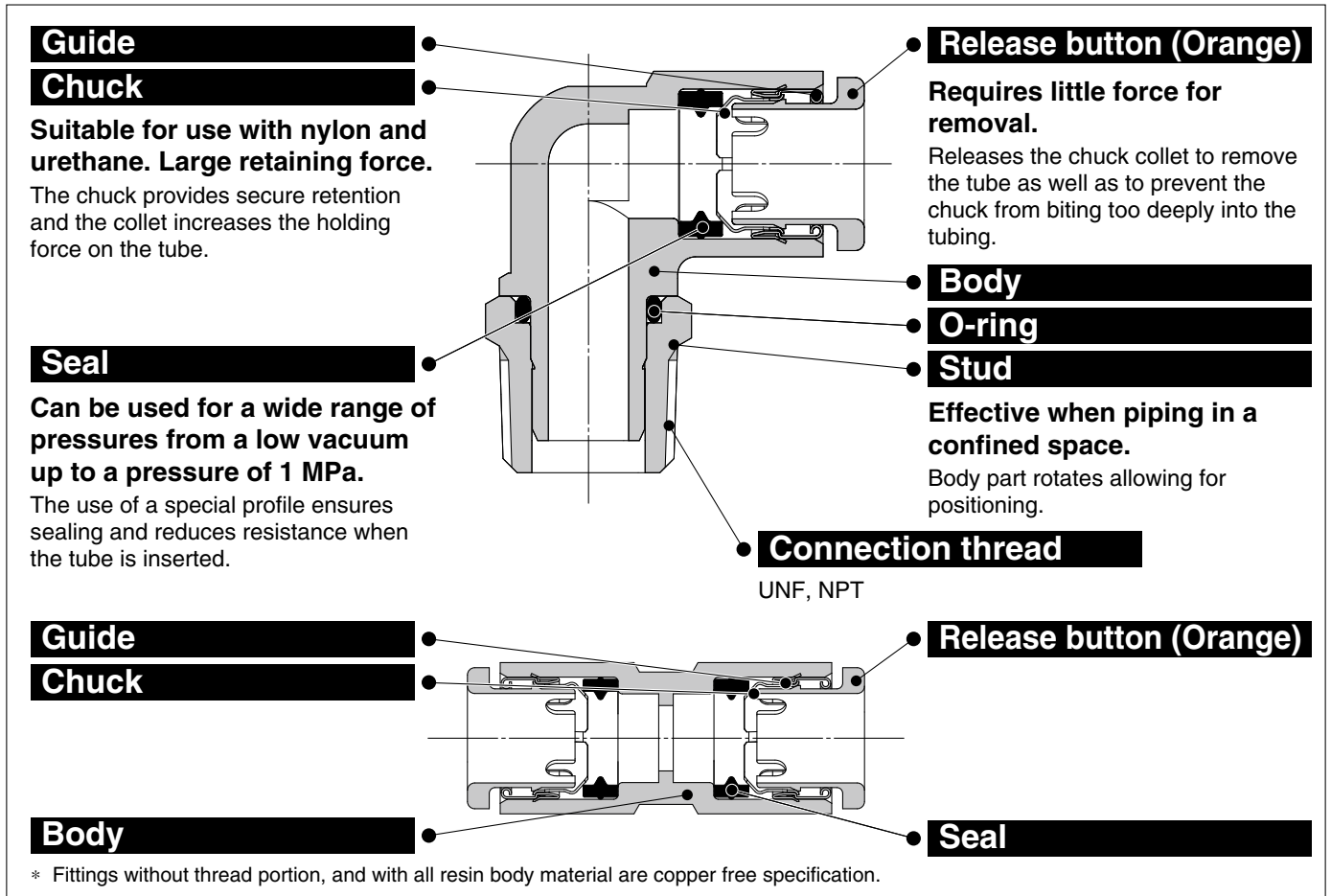


Inch Size One-touch Fittings

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

KQ2 Series



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", ø5/32", ø3/16", ø1/4", ø5/16", ø3/8", ø1/2"

Specifications

Fluid		Air, Water*1
Operating pressure range*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

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

*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



Made to Order
(Refer to page 156 for details.)

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 plating
Bulkhead union	<input type="checkbox"/> J Interchangeable with KJE

* : A, N

Port size/Applicable tubing O.D.

Symbol	Size	
Thread connection	32	10-32UNF
	33	NPT1/16
	34	NPT1/8
	35	NPT1/4
	36	NPT3/8
37	NPT1/2	
Tubing connection	00*1	Same diameter tubing

*1 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

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 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
U	Union "Y"
	Plug-in "Y"
	Different diameter union "Y"
X	Different diameter 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
	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	Plug

Round Type



Metric Size M, R, Rc

Sealant/Gasket Seal

Inch Size UNF, NPT

Inch Size M, R, Rc

Metric Size G

Face Seal

Metric Size R, Rc

Inch Size NPT

Inch Size R

Gasket Seal

Metric Size Uni

Inch Size Uni

Inch Size One-touch Fittings

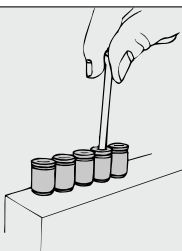
Round Type Variations

Hexagon socket head male connector

KQ2S P.139



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

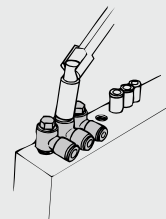


Universal male elbow

KQ2V P.142



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

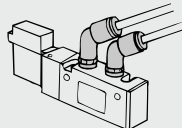


45° male elbow

KQ2K P.142



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

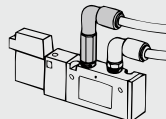


Extended male elbow

KQ2W P.147



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

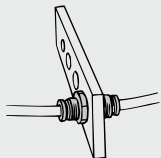


Bulkhead union

KQ2E P.153



Use to connect tubing through a panel, etc.

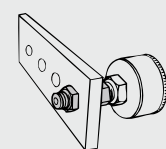


Bulkhead connector

KQ2E P.154



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

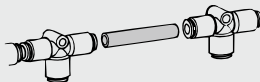


Nipple

KQ2N P.155



Use to connect One-touch fittings.

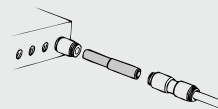


Reducer nipple

KQ2N P.155



Use to connect One-touch fittings of different sizes.



Male connector

KQ2H P.137



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

Hexagon socket head universal male elbow

KQ2VS P.143



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

Branch universal male elbow

KQ2Z P.146



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

Female connector

KQ2F P.138



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

Universal female elbow

KQ2VF P.143



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

Double branch universal male elbow

KQ2ZD P.146



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

Straight union

KQ2H P.138



Use to connect tubing in the same direction.

Female elbow

KQ2LF P.141



Use to pipe a male thread at right angles.

Triple branch universal male elbow

KQ2ZT P.147



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

Different diameter straight

KQ2H P.138



Use to connect tubing of different sizes.

Double universal male elbow

KQ2VD P.144



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

Union elbow

KQ2L P.141



Use to connect tubing at right angles.

Male elbow

KQ2L P.140



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

Triple universal male elbow

KQ2VT P.145



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

Plug-in elbow

KQ2L P.141



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

Reducer elbow

KQ2L

P.141



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

Male branch tee

KQ2T

P.148



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

Union tee

KQ2T

P.149



Use to branch tubing at both 90° angles.

Different diameter tee

KQ2T

P.149



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

Cross

KQ2TW

P.149



Use to four-branch a line.

Male run tee

KQ2Y

P.150



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

Branch "Y"

KQ2U

P.151



Use to branch a female thread in the same direction.

Union "Y"

KQ2U

P.152



Use to branch tubing in the same direction.

Different diameter union "Y"

KQ2U

P.152



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

Plug-in "Y"

KQ2U

P.152



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

Different diameter plug-in "Y"

KQ2X

P.153



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

Plug-in reducer

KQ2R

P.153



Use to change size of One-touch fittings.

Bulkhead male elbow

KQ2LE

P.154



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

Tube cap

KQ2C

P.155



Use to plug unused tubing.

Plug

KQ2P

P.154



Use to plug unused One-touch fittings.

Color cap

KQ2C

P.155



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

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

Sealant/Gasket Seal

Face Seal

Gasket Seal

KQ2 Series

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

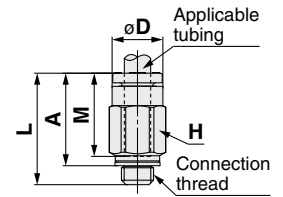
Dimensions

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	14.4	13.3	3	2.5	2.3	2.7
ø5/32	10-32UNF	KQ2H03-32□	8	7.7	17.6	14.6	13.3	3.3	3.3	2.3	3.3
ø3/16	10-32UNF	KQ2H05-32□	8	8.3	17.7	14.7	13.3	3.4	3.4	2.3	3.4
ø1/4	10-32UNF	KQ2H07-32□	11.11	10.9	18	15	13.3	3.4	3.4	2.3	5.2

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



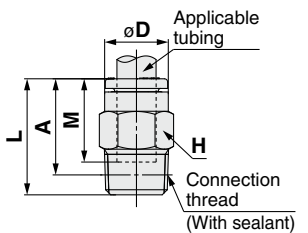
Male Connector: KQ2H (Sealant)



Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	øD	L	A*1	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	4.8	3.4	3	6.1
	1/8	KQ2H03-34□S	11.11	7.7	14	10.8	13.3	4.8	3.4	3	6.5
	1/4	KQ2H03-35□S	14.29	7.7	16.7	12.3	13.3	4.8	3.4	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
	3/8	KQ2H07-36□S	17.46	10.9	18.1	13.4	13.3	13.5	11.5	4.6	25.7
ø5/16	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
	3/8	KQ2H09-36□S	17.46	13	18.1	13.4	14.2	26.1	18	6	22.5
ø3/8	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
	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
ø1/2	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 plating)

*1 Reference dimensions after installation of NPT thread



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

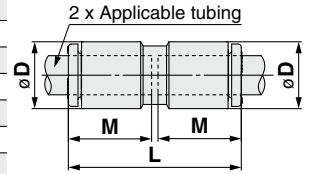
Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

Dimensions

Straight Union: KQ2H



Applicable tubing O.D. [inch]	Model	øD*1	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

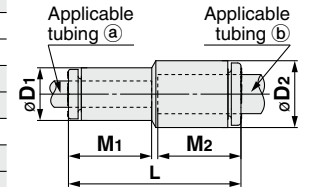


*1 øD is maximum diameter.

Different Diameter Straight: KQ2H



Applicable tubing O.D. [inch]	Model	øD1*1	øD2*1	L	M1	M2	Effective area [mm ²]		Min. port size	Weight [g]
							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
ø1/4	ø5/16 KQ2H07-09A	11.1	13.2	28.5	13.3	14.2	13.5	11.5	4.6	3.2
	ø3/8 KQ2H07-11A	11.1	15.4	29.9	13.3	15.6	13.5	11.5	4.6	4.1
ø5/16	ø3/8 KQ2H09-11A	13.2	15.4	30.8	14.2	15.6	26.1	18	6	4.7
	ø1/2 KQ2H09-13A	13.2	19.3	32.2	14.2	17	26.1	18	6	6.6
ø3/8	ø1/2 KQ2H11-13A	15.4	19.3	33.6	15.6	17	35.3	29.1	7	7.3

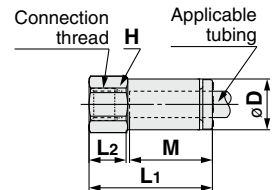


*1 øD1, øD2 are maximum diameters.

Female Connector: KQ2F



Applicable tubing O.D. [inch]	Connection thread UNF, NPT	Model	H (Width across flats)	øD*1	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
	3/8	KQ2F07-36 □	22.23	10.9	30.5	13.2	13.3	13	11.5	4.6	38.7
ø5/16	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
	3/8	KQ2F09-36 □	22.23	13	31	12.4	14.2	26.1	18	6	39.8
ø3/8	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
	1/2	KQ2F11-37 □	23.81	15.1	34.9	15.8	15.6	35.3	29.1	8	45.6
ø1/2	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 plating)

*1 øD is maximum diameter.

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: Inch Size, Connection Thread: UNF, NPT

Dimensions

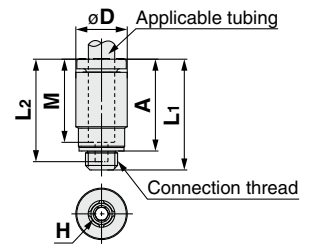
Hexagon Socket Head Male Connector: KQ2S (Gasket seal)



Applicable tubing O.D. [inch]	Connection thread UNF	Model	H (Width across flats)	øD*1	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□	2.5	8	18.6	17.8	15.6	13.3	4	4	2.5	3
ø1/4	10-32UNF	KQ2S07-32□	2.5	10.3	19	17.8	16	13.3	4	4	2.5	3.7

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

*1 øD is maximum diameter.



Hexagon Socket Head Male Connector: KQ2S (Sealant)

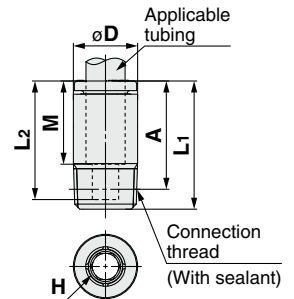


Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	øD*1	L1	L2	A*2	M	Effective area [mm ²]		Min. port size	Weight [g]
									Nylon	Urethane		
ø5/32	1/16	KQ2S03-33□S	2.78	8	19.8	18.8	15.7	13.3	4.1	3.6	2.8	4.5
	1/8	KQ2S03-34□S	2.78	10.3	17.3	16.3	14.1	13.3	4.1	3.6	2.8	6
ø3/16	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	10.3	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	10.3	19.8	18.8	16.6	13.3	13.5	11.5	4.8	7.4
	1/4	KQ2S07-35□S	4.76	13.8	19.8	18.8	15.4	13.3	13.5	11.5	4.8	13.2
	3/8	KQ2S07-36□S	4.76	17	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	17.5	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
	1/2	KQ2S11-37□S	6.35	21.3	22.1	21.1	15.7	15.6	29.6	29.1	6.4	40.6
ø1/2	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 plating)

*1 øD is maximum diameter.

*2 Reference dimensions after installation of NPT thread



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

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

Dimensions

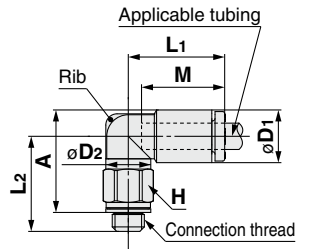
Male Elbow: KQ2L (Gasket seal)



Applicable tubing O.D. [inch]	Connection thread UNF	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L ₁	L ₂	A	M	Effective area [mm ²]		Min. port size	Weight [g]	With a rib
										Nylon	Urethane			
$\phi 1/8$	10-32UNF	KQ2L01-32□	7	7.1	7	15.3	14.2	14.8	13.3	2.6	2.2	2.5	3	●
$\phi 5/32$	10-32UNF	KQ2L03-32□	7	8.2	7	15.4	14.7	15.8	13.3	3.5	3.5	2.5	3.1	●
$\phi 3/16$	10-32UNF	KQ2L05-32□	7	9.1	7	14.5	15.8	17.4	13.3	3.5	3.5	2.5	3.2	●
$\phi 1/4$	10-32UNF	KQ2L07-32□	7	11.1	7	15.4	16	18.6	13.3	3.5	3.5	2.5	3.5	●

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

*1 ϕD_1 is maximum diameter.



Male Elbow: KQ2L (Sealant)



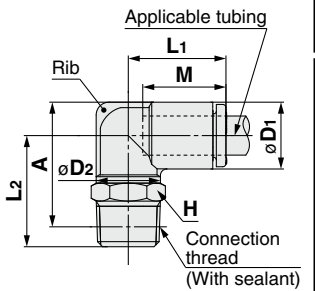
Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L ₁	L ₂	A*2	M	Effective area [mm ²]		Min. port size	Weight [g]	With a rib
										Nylon	Urethane			
$\phi 1/8$	1/16	KQ2L01-33□S	11.11	7.1	10	14.5	24.3	23.8	13.3	3	2.5	2.5	9.1	—
	1/8	KQ2L01-34□S	11.11	7.1	10	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	—
$\phi 5/32$	1/16	KQ2L03-33□S	11.11	8.2	10	14.8	23.8	23.8	13.3	4.6	3.3	3	9.3	●
	1/8	KQ2L03-34□S	11.11	8.2	10	14.8	16.2	17.1	13.3	4.6	3.3	3	5.6	●
	1/4	KQ2L03-35□S	14.29	8.2	10	14.8	21.6	21.3	13.3	4.6	3.3	3	15.2	●
$\phi 3/16$	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	—
$\phi 1/4$	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	●
	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	●
$\phi 5/16$	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	●
		KQ2L09-34□QS*3	12.7	13.2	12	17.2	23.5	26.9	14.2	21.6	14.9	6	9.9	●
	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	●
$\phi 3/8$	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	●
	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	●
$\phi 1/2$	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 plating)

*1 ϕD_1 is maximum diameter.

*2 Reference dimensions after installation of NPT thread

*3 For details, refer to page 156.



Round Type

Metric Size M, R, Rc

Inch Size UNF, NPT

Sealant/Gasket Seal

Inch Size M, R, Rc

Metric Size G

Face Seal

Metric Size R, Rc

Inch Size NPT

Inch Size R

Metric Size Uni

Inch Size Uni

Gasket Seal

Metric Size Uni

Inch Size Uni

KQ2 Series

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

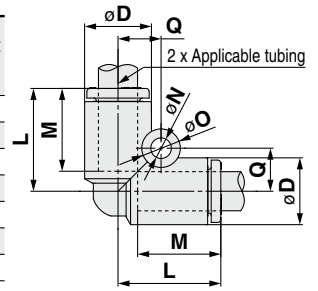
Dimensions

Union Elbow: KQ2L



Applicable tubing O.D. [inch]	Model	øD*1	L	Q	M	øO	øN	Effective area [mm ²]		Min. port size	Weight [g]
								Nylon	Urethane		
ø1/8	KQ2L01-00A	7.1	14.9	5.4	13.3	6	3.2	3	2.5	2.5	1.6
ø5/32	KQ2L03-00A	8.2	15.3	5.7	13.3	6	3.2	4.2	4.2	3	1.9
ø3/16	KQ2L05-00A	9.1	15.7	6.2	13.3	6	3.2	6.8	5.6	3.5	2.2
ø1/4	KQ2L07-00A	11.1	16.5	7.2	13.3	6	3.2	11.6	10	4.6	2.9
ø5/16	KQ2L09-00A	13.2	18.2	8.4	14.2	8	4.2	21.6	14.9	6	4.7
ø3/8	KQ2L11-00A	15.4	20.4	9.9	15.6	8	4.2	28.8	23.8	7	6.7
ø1/2	KQ2L13-00A	19.3	23.4	11.8	17	8	4.2	56.7	44.4	9.6	10.8

*1 øD is maximum diameter.

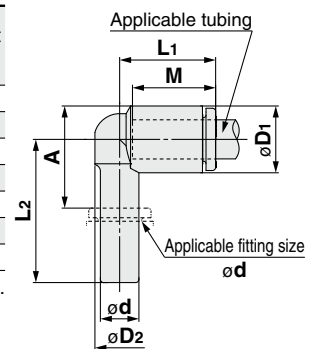


Plug-in Elbow: KQ2L



Applicable tubing O.D. [inch]	Applicable fitting size ød [inch]	Model	øD*1	øD2	L1	L2	A	M	Effective area [mm ²]		Min. port size	Weight [g]
									Nylon	Urethane		
ø1/8	ø1/8	KQ2L01-99A	7.1	6.4	14.5	20.9	11.1	13.3	3	2.5	2.2	0.9
ø5/32	ø5/32	KQ2L03-99A	8.2	7.2	14.5	21.1	11.9	13.3	4.2	4.2	2.5	1.2
ø3/16	ø3/16	KQ2L05-99A	9.1	8	15	22.2	13.4	13.3	6.8	5.6	3.5	1.4
ø1/4	ø1/4	KQ2L07-99A	11.1	8	15.6	22.8	15	13.3	11.6	10	4.6	1.9
ø5/16	ø5/16	KQ2L09-99A	13.2	10	17.2	26.2	18.6	14.2	21.6	14.9	6	3
ø3/8	ø3/8	KQ2L11-99A	15.4	12	19.1	28	20.1	15.6	28.8	23.8	7	4.5
ø1/2	ø1/2	KQ2L13-99A	19.3	14	21.8	38.7	31.3	17	56.7	44.4	9.6	7.8

*1 øD1 is maximum diameter.

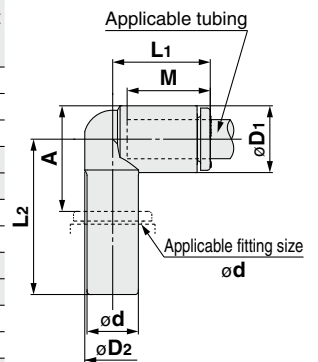


Reducer Elbow: KQ2L



Applicable tubing O.D. [inch]	Applicable fitting size ød [inch]	Model	øD*1	øD2	L1	L2	A	M	Effective area [mm ²]		Min. port size	Weight [g]
									Nylon	Urethane		
ø1/8	ø5/32	KQ2L01-03A	7.1	6.4	14.5	23.9	14.1	13.3	3	2.5	2.5	1.1
	ø3/16	KQ2L01-05A	7.1	6.4	14.5	28.4	18.6	13.3	3	2.5	2.5	1.1
	ø1/4	KQ2L01-07A	7.1	6.4	14.5	24.5	14.7	13.3	3	2.5	2.5	1.3
ø5/32	ø3/16	KQ2L03-05A	8.2	7.2	14.8	29.1	19.9	13.3	4.2	4.2	3	1.3
	ø1/4	KQ2L03-07A	8.2	7.2	14.8	21.1	11.9	13.3	4.2	4.2	3	1.4
ø3/16	ø1/4	KQ2L05-07A	9.1	8	15	21.6	12.8	13.3	6.8	5.6	3.5	1.5
	ø5/16	KQ2L05-09A	9.1	8	15	30	20.3	13.3	6.8	5.6	3.5	1.9
ø1/4	ø5/16	KQ2L07-09A	11.1	8	15.6	30.7	22	13.3	11.6	10	4.6	2.3
	ø3/8	KQ2L07-11A	11.1	8	15.6	31.1	21	13.3	11.6	10	4.6	3
ø5/16	ø3/8	KQ2L09-11A	13.2	10	18.8	34.1	25.1	14.2	21.6	14.9	6	3.7
	ø1/2	KQ2L09-13A	13.2	10	18.8	35.6	25.2	14.2	21.6	14.9	6	4.6
ø3/8	ø1/2	KQ2L11-13A	15.4	12	19.1	36.5	27.2	15.6	28.8	23.8	7	5.6

*1 øD1 is maximum diameter.



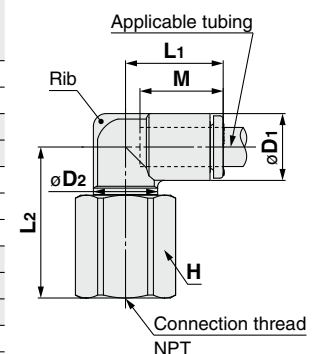
Female Elbow: KQ2LF



Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	øD*1	øD2	L1	L2	M	Effective area [mm ²]		Min. port size	Weight [g]	With a rib
									Nylon	Urethane			
ø1/8	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	—
ø5/32	1/8	KQ2LF03-34□	14.29	8.2	10	14.8	22.4	13.3	4.2	4.2	3	18.3	●
	1/4	KQ2LF03-35□	17.46	8.2	10	14.8	26.9	13.3	4.2	4.2	3	31.9	●
ø1/4	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	●
	3/8	KQ2LF07-36□	22.23	11.1	10	15.6	28.9	13.3	11.3	10	4.5	53.1	●
ø3/8	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	●
ø1/2	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	—
1/2	KQ2LF13-37□	23.81	19.3	17	21.8	33.4	17	56	44.4	9.5	58	—	

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

*1 øD1 is maximum diameter.



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

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

Dimensions

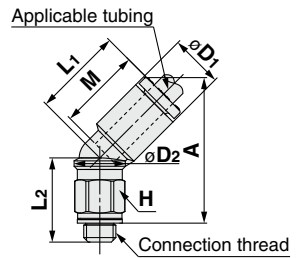
45° Male Elbow: KQ2K (Gasket seal)



Applicable tubing O.D. [inch]	Connection thread UNF	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L ₁	L ₂	A	M	Effective area [mm ²]		Min. port size	Weight [g]
										Nylon	Urethane		
$\phi 1/8$	10-32UNF	KQ2K01-32□	7	7.1	8	14.4	13	21.9	13.3	3	2.5	2.5	2.8
$\phi 5/32$	10-32UNF	KQ2K03-32□	7	8.2	8	14.4	13	22.2	13.3	3.4	3.4	2.5	3
$\phi 1/4$	10-32UNF	KQ2K07-32□	7	11.1	8	14.9	16.5	26.8	13.3	3.5	3.5	2.5	3.6

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

*1 ϕD_1 is maximum diameter.



45° Male Elbow: KQ2K (Sealant)



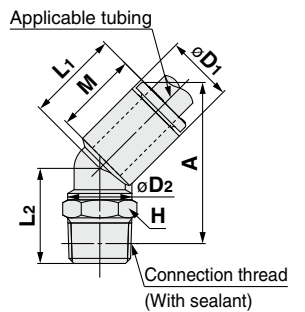
Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L ₁	L ₂	A*2	M	Effective area [mm ²]		Min. port size	Weight [g]
										Nylon	Urethane		
$\phi 1/8$	1/8	KQ2K01-34□S	11.11	7.1	10	14.3	12.7	21.8	13.3	3	2.5	2.5	5.3
$\phi 5/32$	1/8	KQ2K03-34□S	11.11	8.2	10	14.4	12.7	22.2	13.3	4.8	3.4	3	5.5
$\phi 3/16$	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
	1/8	KQ2K07-34□S	11.11	11.1	10	14.8	15.2	25.8	13.3	11.3	10	4.5	6
	1/4	KQ2K07-35□S	14.29	11.1	10	14.8	19.6	29	13.3	11.3	10	4.5	15.6
$\phi 1/4$	3/8	KQ2K07-36□S	17.46	11.1	10	14.8	21	30.1	13.3	11.3	10	4.5	27.8
	1/2	KQ2K09-34□S	11.11	13.2	10	16	15.7	27.9	14.2	11.3	11.3	4.5	6.8
	3/8	KQ2K09-34□S*	12.7	13.2	12	16	20.5	32.7	14.2	19.7	19.7	6	9.7
$\phi 5/16$	1/2	KQ2K09-35□S	14.29	13.2	12	16	21.1	32.1	14.2	19.7	19.7	6	13.9
	3/4	KQ2K09-36□S	17.46	13.2	12	16	22.5	33.2	14.2	19.7	19.7	6	26
	1/2	KQ2K11-34□S	12.7	15.4	12	18.1	21.1	35.5	15.6	21.2	21.2	6	11.7
$\phi 3/8$	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
	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
$\phi 1/2$	1/4	KQ2K13-35□S	17.46	19.3	17	19.4	28.7	44.1	17	50.3	44.4	9	23.8
	3/8	KQ2K13-36□S	17.46	19.3	17	19.4	23.6	38.7	17	56	44.4	9.5	19.9
	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 plating)

*1 ϕD_1 is maximum diameter.

*2 Reference dimensions after installation of NPT thread

*3 For details, refer to page 156.



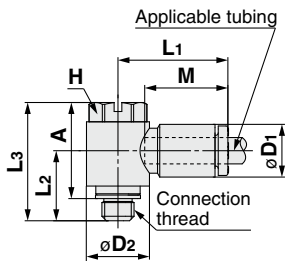
Universal Male Elbow: KQ2V (Gasket seal)



Applicable tubing O.D. [inch]	Connection thread UNF	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L ₁	L ₂	L ₃	A	M	Effective area [mm ²]		Min. port size	Weight [g]
											Nylon	Urethane		
$\phi 1/8$	10-32UNF	KQ2V01-32□	8	7.1	9.8	17.5	10.4	17.9	14.9	13.3	2.2	1.9	2.5	5.2
$\phi 5/32$	10-32UNF	KQ2V03-32□	8	8.2	9.8	17.5	10.4	17.9	14.9	13.3	2.9	2.9	2.5	5.3
$\phi 1/4$	10-32UNF	KQ2V07-32□	8	11.1	13.4	20.6	12.1	24	20.5	13.3	2.9	2.9	2.5	12.2

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

*1 ϕD_1 is maximum diameter.



Universal Male Elbow: KQ2V (Sealant)

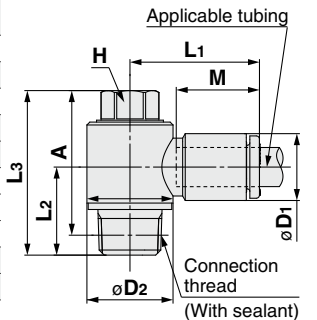


Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L ₁	L ₂	L ₃	A*2	M	Effective area [mm ²]		Min. port size	Weight [g]
											Nylon	Urethane		
$\phi 1/8$	1/8	KQ2V01-34□S	8	7.1	13.4	19.3	13.7	25.6	22.4	13.3	2.2	1.9	2.5	13.5
$\phi 5/32$	1/8	KQ2V03-34□S	8	8.2	13.4	19.3	13.7	25.6	22.4	13.3	2.9	2.9	3	13.6
$\phi 3/16$	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
	1/4	KQ2V07-34□S	8	11.1	13.4	20.6	13.7	25.6	22.4	13.3	7.5	6.6	4.5	14.1
$\phi 1/4$	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	25.6
	1/2	KQ2V09-34□S	11.11	13.2	17.6	23.5	15.1	27.6	24.4	14.2	16	11.2	6	22.3
	3/8	KQ2V09-35□S	11.11	13.2	17.6	23.5	18.5	31	26.6	14.2	16	11.2	6	29.2
$\phi 5/16$	1/2	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
	3/4	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
$\phi 3/8$	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
	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
$\phi 1/2$	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
	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 plating)

*1 ϕD_1 is maximum diameter.

*2 Reference dimensions after installation of NPT thread



KQ2 Series

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

Dimensions

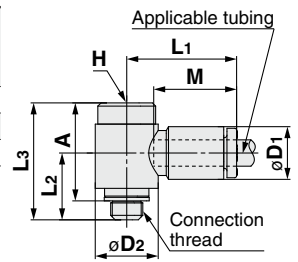
Hexagon Socket Head Universal Male Elbow: KQ2VS (Gasket seal)



Applicable tubing O.D. [inch]	Connection thread UNF	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L1	L2	L3	A	M	Effective area [mm ²]		Min. port size	Weight [g]
											Nylon	Urethane		
$\phi 1/8$	10-32UNF	KQ2VS01-32□	4	7.1	9.8	17.5	10.4	18.2	15.2	13.3	2.2	1.9	2.3	5.3
$\phi 5/32$	10-32UNF	KQ2VS03-32□	4	8.2	9.8	17.5	10.4	18.2	15.2	13.3	2.9	2.9	2.3	5.4
$\phi 1/4$	10-32UNF	KQ2VS07-32□	6.35	11.1	13.4	20.6	11.1	23.2	20.2	13.3	2.9	2.9	2.5	11.3

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

*1 ϕD_1 is maximum diameter.



Hexagon Socket Head Universal Male Elbow: KQ2VS (Sealant)

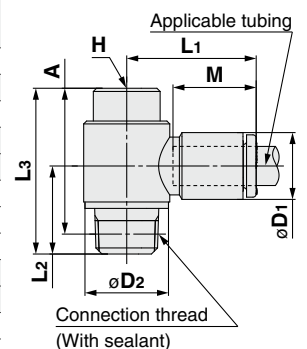


Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L1	L2	L3	A*2	M	Effective area [mm ²]		Min. port size	Weight [g]
											Nylon	Urethane		
$\phi 1/8$	1/8	KQ2VS01-34□S	6.35	7.1	13.4	19.3	13.7	25.8	22.6	13.3	2.2	1.9	2.5	13.1
$\phi 5/32$	1/8	KQ2VS03-34□S	6.35	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
$\phi 3/8$	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
	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
$\phi 3/8$	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
	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
$\phi 1/2$	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 plating)

*1 ϕD_1 is maximum diameter.

*2 Reference dimensions after installation of NPT thread



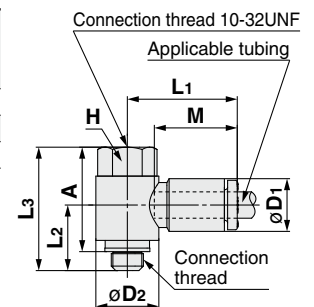
Universal Female Elbow: KQ2VF (Gasket seal)



Applicable tubing O.D. [inch]	Connection thread UNF	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L1	L2	L3	A	M	Effective area [mm ²]		Min. port size	Weight [g]
											Nylon	Urethane		
$\phi 1/8$	10-32UNF	KQ2VF01-32□	8	7.1	9.8	17.5	10.4	19.4	16.4	13.3	2.2	1.9	2.5	5.4
$\phi 5/32$	10-32UNF	KQ2VF03-32□	8	8.2	9.8	17.5	10.4	19.4	16.4	13.3	2.9	2.9	2.5	5.5
$\phi 1/4$	10-32UNF	KQ2VF07-32□	14.29	11.1	13.4	20.6	12.8	22.4	19.4	13.3	2.9	2.9	2.5	14.2

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

*1 ϕD_1 is maximum diameter.



Universal Female Elbow: KQ2VF (Sealant)

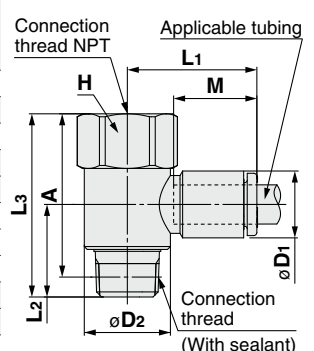


Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L1	L2	L3	A*2	M	Effective area [mm ²]		Min. port size	Weight [g]
											Nylon	Urethane		
$\phi 1/8$	1/8	KQ2VF01-34□S	14.29	7.1	13.4	19.3	14.4	28.5	25.3	13.3	2.2	1.9	2.5	18
$\phi 5/32$	1/8	KQ2VF03-34□S	14.29	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
$\phi 3/8$	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
	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
$\phi 3/8$	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
	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
$\phi 1/2$	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 plating)

*1 ϕD_1 is maximum diameter.

*2 Reference dimensions after installation of NPT thread



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

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

Dimensions

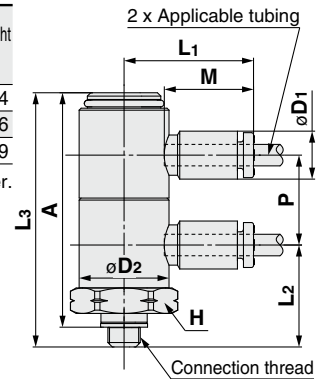
Double Universal Male Elbow: KQ2VD (Gasket seal)



Applicable tubing O.D. [inch]	Connection thread UNF	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L1	L2	L3	A	M	P	Effective area [mm ²]		Min. port size	Weight [g]
												Nylon	Urethane		
$\phi 1/8$	10-32UNF	KQ2VD01-32□	14.29	7.1	13.4	19.3	15.2	37.9	34.9	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	34.9	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	35.7	13.3	13.8	2.5	2.5	2.3	26.9

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

*1 ϕD_1 is maximum diameter.



Double Universal Male Elbow: KQ2VD (Sealant)

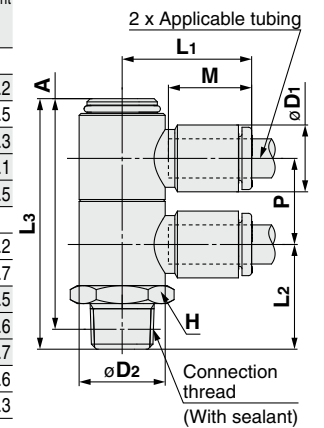


Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L1	L2	L3	A*2	M	P	Effective area [mm ²]		Min. port size	Weight [g]
												Nylon	Urethane		
$\phi 1/8$	1/8	KQ2VD01-34□S	14.29	7.1	13.4	19.3	16.3	39	35.8	13.3	13.4	2.2	1.9	2.5	20
$\phi 5/32$	1/8	KQ2VD03-34□S	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
$\phi 3/8$	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
	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
$\phi 1/2$	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 plating)

*1 ϕD_1 is maximum diameter.

*2 Reference dimensions after installation of NPT thread



Round Type

Metric Size M, R, Rc

Inch Size UNF, NPT

Sealant/Gasket Seal

Inch Size M, R, Rc

Metric Size G

Metric Size R, Rc

Face Seal

Inch Size NPT

Inch Size R

Metric Size Uni

Inch Size Uni

Gasket Seal

KQ2 Series

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

Dimensions

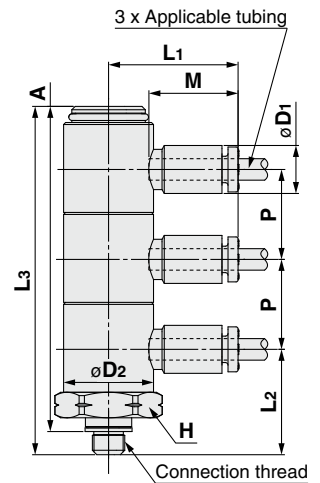
Triple Universal Male Elbow: KQ2VT (Gasket seal)



Applicable tubing O.D. [inch]	Connection thread UNF	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L1	L2	L3	A	M	P	Effective area [mm ²]		Min. port size	Weight [g]
												Nylon	Urethane		
$\phi 1/8$	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
$\phi 5/32$	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
$\phi 1/4$	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 plating)

*1 ϕD_1 is maximum diameter.



Triple Universal Male Elbow: KQ2VT (Sealant)

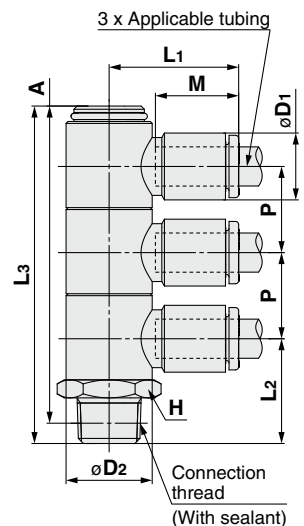


Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L1	L2	L3	A*2	M	P	Effective area [mm ²]		Min. port size	Weight [g]
												Nylon	Urethane		
$\phi 1/8$	1/8	KQ2VT01-34□S	14.29	7.1	13.4	19.3	16.3	52.5	49.3	13.3	13.4	2.2	1.9	2.5	25.5
$\phi 5/32$	1/8	KQ2VT03-34□S	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
$\phi 3/16$	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
$\phi 1/4$	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
	1/4	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
$\phi 5/16$	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
	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
$\phi 3/8$	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
$\phi 1/2$	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
$\phi 3/8$	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
$\phi 1/2$	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 plating)

*1 ϕD_1 is maximum diameter.

*2 Reference dimensions after installation of NPT thread



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

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

Dimensions

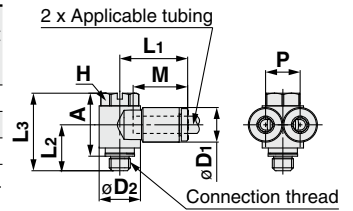
Branch Universal Male Elbow: KQ2Z (Gasket seal)



Applicable tubing O.D. [inch]	Connection thread UNF	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L1	L2	L3	A	M	P	Effective area [mm ²]		Min. port size	Weight [g]
												Nylon	Urethane		
$\phi 1/8$	10-32UNF	KQ2Z01-32□	8	7.1	9.8	16.5	10.4	17.9	14.9	13.3	7.1	2.2	1.9	2.5	5.9
$\phi 5/32$	10-32UNF	KQ2Z03-32□	8	8.2	9.8	16.5	10.4	17.9	14.9	13.3	8.2	2.9	2.9	2.5	6.2
$\phi 1/4$	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 plating)

*1 ϕD_1 is maximum diameter.



Branch Universal Male Elbow: KQ2Z (Sealant)

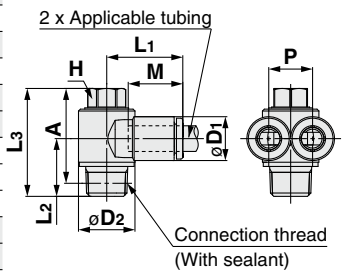


Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L1	L2	L3	A*2	M	P	Effective area [mm ²]		Min. port size	Weight [g]
												Nylon	Urethane		
$\phi 1/8$	1/8	KQ2Z01-34□S	8	7.1	13.4	18.5	13.7	25.6	22.4	13.3	7.1	2.2	1.9	2.5	14.1
$\phi 5/32$	1/8	KQ2Z03-34□S	8	8.2	13.4	18.5	13.7	25.6	22.4	13.3	8.2	2.9	2.9	3	14.4
$\phi 3/16$	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
$\phi 1/4$	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	11.11	11.1	17.6	20.4	18	31	26.6	13.3	11.1	7.7	6.6	4.5	29.5
$\phi 5/16$	1/8	KQ2Z09-34□S	11.11	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	11.11	13.2	17.6	21.2	18.5	31	26.6	14.2	13.2	20.5	14.2	6	31
$\phi 3/8$	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
	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
$\phi 3/8$	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
	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
$\phi 1/2$	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 plating)

*1 ϕD_1 is maximum diameter.

*2 Reference dimensions after installation of NPT thread



Double Branch Universal Male Elbow: KQ2ZD (Sealant)

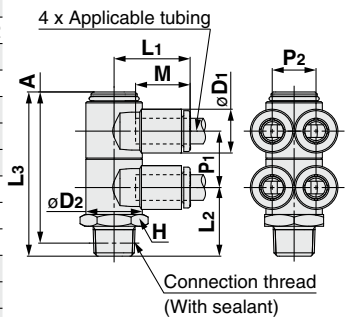


Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L1	L2	L3	A*2	M	P1	P2	Effective area [mm ²]		Min. port size	Weight [g]
													Nylon	Urethane		
$\phi 1/8$	1/8	KQ2ZD01-34□S	14.29	7.1	13.4	18.5	16.3	39	35.8	13.3	13.4	7.1	2.2	1.9	2.5	21.2
$\phi 5/32$	1/8	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	3	21.8
$\phi 3/16$	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	3.5	22.4
$\phi 1/4$	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	4.6	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	4.6	32.4
$\phi 5/16$	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	4.6	44.8
	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	6	48.7
$\phi 5/16$	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	6	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	6	83.3
$\phi 3/8$	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	7	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	7	73.2
$\phi 3/8$	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	7	93.3
	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	9.6	137.2
$\phi 1/2$	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	9.6	155

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

*1 ϕD_1 is maximum diameter.

*2 Reference dimensions after installation of NPT thread



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

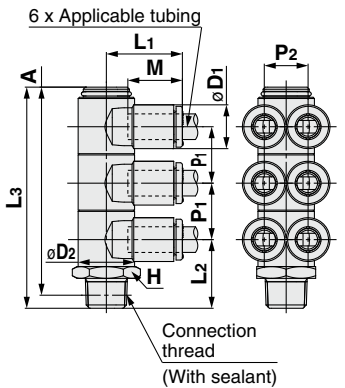
Applicable Tubing: Inch Size, Connection Thread: UNF, NPT

Dimensions

Triple Branch Universal Male Elbow: KQ2ZT (Sealant)



Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L ₁	L ₂	L ₃	A*2	M	P ₁	P ₂	Effective area [mm ²]		Min. port size	Weight [g]
													Nylon	Urethane		
$\phi 1/8$	1/8	KQ2ZT01-34□S	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
$\phi 5/32$	1/8	KQ2ZT03-34□S	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
$\phi 3/16$	1/8	KQ2ZT05-34□S	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
$\phi 1/4$	1/8	KQ2ZT07-34□S	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
	1/4	KQ2ZT07-35□S	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
	3/8	KQ2ZT07-36□S	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
$\phi 5/16$	1/4	KQ2ZT09-35□S	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	KQ2ZT09-36□S	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
	1/2	KQ2ZT09-37□S	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
$\phi 3/8$	1/4	KQ2ZT11-35□S	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
	3/8	KQ2ZT11-36□S	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	KQ2ZT11-37□S	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
$\phi 1/2$	3/8	KQ2ZT13-36□S	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	KQ2ZT13-37□S	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 plating)

*1 ϕD_1 is maximum diameter.

*2 Reference dimensions after installation of NPT thread

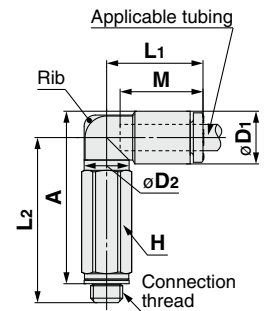
Extended Male Elbow: KQ2W (Gasket seal)



Applicable tubing O.D. [inch]	Connection thread UNF	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L ₁	L ₂	A	M	Effective area [mm ²]		Min. port size	Weight [g]	With a rib
										Nylon	Urethane			
$\phi 1/8$	10-32UNF	KQ2W01-32□	7	7.1	7	15.3	25.8	26.4	13.3	2.8	2.4	2.5	5.9	●
$\phi 5/32$	10-32UNF	KQ2W03-32□	7	8.2	7	15.4	26.3	27.5	13.3	3	3	2.5	6	●
$\phi 1/4$	10-32UNF	KQ2W07-32□	7	11.1	7	15.4	27.6	30.2	13.3	3.5	3.5	2.5	6.4	●

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

*1 ϕD_1 is maximum diameter.



Extended Male Elbow: KQ2W (Sealant)



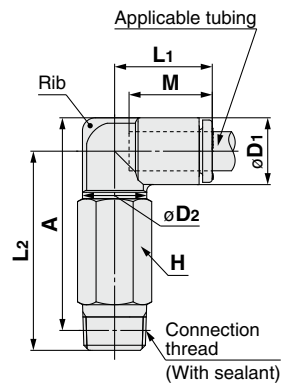
Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L ₁	L ₂	A*2	M	Effective area [mm ²]		Min. port size	Weight [g]	With a rib
										Nylon	Urethane			
$\phi 1/8$	1/16	KQ2W01-33□S	11.11	7.1	10	14.5	35.9	35.4	13.3	2.8	2.4	2.5	16.6	—
	1/8	KQ2W01-34□S	11.11	7.1	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	—
$\phi 1/4$	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	●
	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	●
$\phi 5/16$	3/8	KQ2W07-36□S	17.46	11.1	10	15.6	36.1	37	13.3	11.3	10	4.5	50.2	●
	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	●
	3/8	KQ2W09-34□S*3	12.7	13.2	12	17.2	42.4	45.8	14.2	20.5	14.2	6	26.4	●
$\phi 3/8$	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	●
	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 plating)

*1 ϕD_1 is maximum diameter.

*2 Reference dimensions after installation of NPT thread

*3 For details, refer to page 156.



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

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

Dimensions

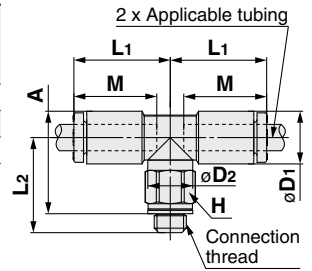
Male Branch Tee: KQ2T (Gasket seal)



Applicable tubing O.D. [inch]	Connection thread UNF	Model	H (Width across flats)	*1 $\phi D1$	$\phi D2$	L1	L2	A	M	Effective area [mm ²]		Min. port size	Weight [g]
										Nylon	Urethane		
$\phi 1/8$	10-32UNF	KQ2T01-32□	7	7.1	7	15.3	14.2	14.8	13.3	3.2	2.7	2.5	3.5
$\phi 5/32$	10-32UNF	KQ2T03-32□	7	8.2	7	15.4	14.7	15.8	13.3	4.5	4.5	2.5	3.8
$\phi 1/4$	10-32UNF	KQ2T07-32□	7	11.1	7	15.4	16	18.6	13.3	4.5	4.5	2.5	4.7

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

*1 $\phi D1$ is maximum diameter.



Male Branch Tee: KQ2T (Sealant)



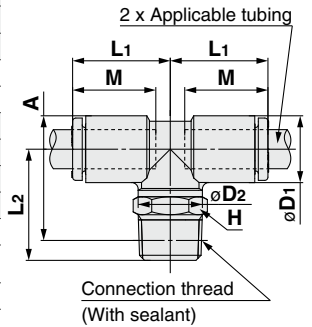
Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	*1 $\phi D1$	$\phi D2$	L1	L2	A*2	M	Effective area [mm ²]		Min. port size	Weight [g]
										Nylon	Urethane		
$\phi 1/8$	1/16	KQ2T01-33□S	11.11	7.1	10	14.5	24.2	23.7	13.3	3.4	2.9	2.5	9.7
	1/8	KQ2T01-34□S	11.11	7.1	10	14.5	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
$\phi 5/32$	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
$\phi 3/16$	1/4	KQ2T03-35□S	14.29	8.2	10	14.8	21.6	21.3	13.3	6	4.1	3	15.9
	1/8	KQ2T05-34□S	11.11	9.1	10	15	16.7	18	13.3	8.4	7	3.5	6.6
$\phi 1/4$	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
	1/8	KQ2T07-34□S	11.11	11.1	10	15.6	17.7	20	13.3	14	12.4	4.5	7.3
$\phi 5/16$	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
	1/4	KQ2T09-34□S*3	12.7	13.2	12	17.2	23.5	26.9	14.2	26.3	18.2	6	11.7
$\phi 3/8$	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
	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
$\phi 1/2$	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
	1/4	KQ2T13-35□S	17.46	19.3	17	21.5	30.4	35.7	17	57.3	50.6	9	28.1
$\phi 1/2$	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 plating)

*1 $\phi D1$ is maximum diameter.

*2 Reference dimensions after installation of NPT thread

*3 For details, refer to page 156.



Round Type

Metric Size M, R, Rc

Inch Size UNF, NPT

Sealant/Gasket Seal

Inch Size M, R, Rc

Metric Size G

Inch Size R, Rc

Metric Size G

Metric Size R, Rc

Face Seal

Inch Size NPT

Inch Size R

Metric Size Uni

Inch Size Uni

Gasket Seal

Metric Size Uni

Inch Size Uni

KQ2 Series

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

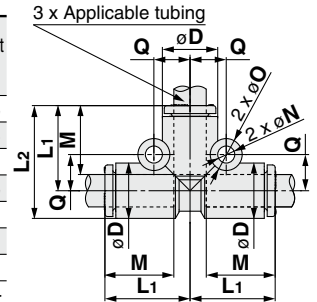
Dimensions

Union Tee: KQ2T



Applicable tubing O.D. [inch]	Model	*1 ϕD	L1	L2	M	Q	ϕO	ϕN	Effective area [mm ²]		Min. port size	Weight [g]
									Nylon	Urethane		
$\phi 1/8$	KQ2T01-00A	7.1	14.9	18.5	13.3	5.4	6	3.2	3.4	2.9	2.5	2.3
$\phi 5/32$	KQ2T03-00A	8.2	15.3	19.4	13.3	5.7	6	3.2	6.4	4.4	3	2.8
$\phi 3/16$	KQ2T05-00A	9.1	15.7	20.3	13.3	6.2	6	3.2	8.4	7	3.5	3.2
$\phi 1/4$	KQ2T07-00A	11.1	16.5	22.1	13.3	7.2	6	3.2	14.4	12.4	4.6	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	7
$\phi 3/8$	KQ2T11-00A	15.4	20.4	28.1	15.6	9.9	8	4.2	28.8	23.8	7	10.2
$\phi 1/2$	KQ2T13-00A	19.3	23.4	33	17	11.8	8	4.2	64.6	50.6	9.6	16.9

*1 ϕD is maximum diameter.

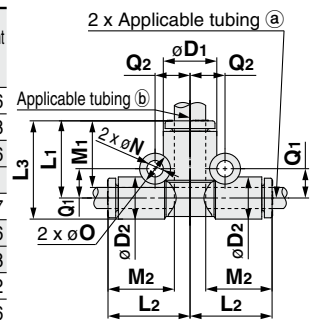


Different Diameter Tee: KQ2T



Applicable tubing O.D. [inch]		Model	*1 ϕD_1	ϕD_2	L1	L2	L3	M1	M2	Q1	Q2	ϕO	ϕN	Effective area [mm ²]		Min. port size	Weight [g]
(a)	(b)													Nylon	Urethane		
$\phi 1/8$	$\phi 5/32$	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	3	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	2.8
$\phi 3/16$	$\phi 3/16$	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	3.5	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	3
$\phi 3/16$	$\phi 1/4$	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	3.7
	$\phi 5/16$	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	5.6
$\phi 1/4$	$\phi 3/8$	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	6.8
	$\phi 3/8$	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	8.2
$\phi 5/16$	$\phi 1/2$	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	10.6
	$\phi 3/8$	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	12.4

*1 ϕD_1 is maximum diameter.

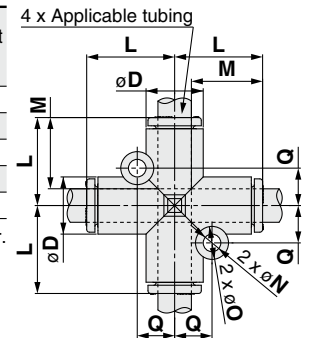


Cross: KQ2TW



Applicable tubing O.D. [inch]	Model	*1 ϕD_1	L	Q	M	ϕO	ϕN	Effective area [mm ²]		Min. port size	Weight [g]
								Nylon	Urethane		
$\phi 5/32$	KQ2TW03-00A	8.2	15.3	5.7	13.3	6	3.2	6.4	4.4	3	3.5
$\phi 1/4$	KQ2TW07-00A	11.1	16.5	7.2	13.3	6	3.2	14.4	12.4	4.6	5.4
$\phi 5/16$	KQ2TW09-00A	13.2	18.2	8.4	14.2	8	4.2	25.6	17.7	6	8.5
$\phi 3/8$	KQ2TW11-00A	15.4	20.4	9.9	15.6	8	4.2	28.8	23.8	7	12
$\phi 1/2$	KQ2TW13-00A	19.3	23.4	11.8	17	8	4.2	64.6	50.6	9.6	19.7

*1 ϕD is maximum diameter.



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

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

Dimensions

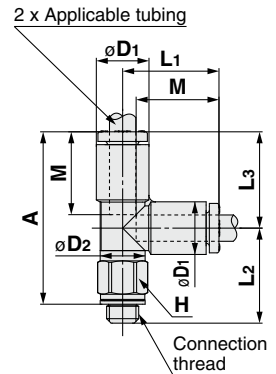
Male Run Tee: KQ2Y (Gasket seal)



Applicable tubing O.D. [inch]	Connection thread UNF	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L1	L2	L3	A	M	Effective area [mm ²]		Min. port size	Weight [g]
											Nylon	Urethane		
$\phi 1/8$	10-32UNF	KQ2Y01-32□	7	7.1	7	15.3	14.2	15.3	26.5	13.3	3.2	2.7	2.5	3.5
$\phi 5/32$	10-32UNF	KQ2Y03-32□	7	8.2	7	15.4	14.7	15.4	27.1	13.3	4.5	4.5	2.5	3.8
$\phi 1/4$	10-32UNF	KQ2Y07-32□	7	11.1	7	16.5	16	16.5	29.5	13.3	4.5	4.5	2.5	4.7

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

*1 ϕD_1 is maximum diameter.



Male Run Tee: KQ2Y (Sealant)



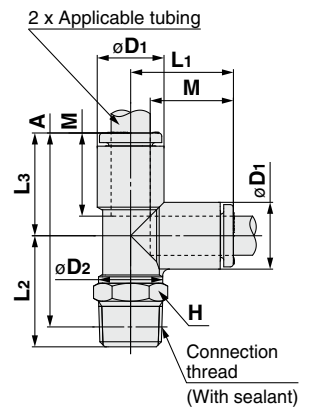
Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	*1 ϕD_1	ϕD_2	L1	L2	L3	A*2	M	Effective area [mm ²]		Min. port size	Weight [g]
											Nylon	Urethane		
$\phi 1/8$	1/16	KQ2Y01-33□S	11.11	7.1	10	14.9	24.2	14.9	35.1	13.3	3.4	2.9	2.5	9.8
	1/8	KQ2Y01-34□S	11.11	7.1	10	14.9	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
$\phi 5/32$	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
$\phi 3/16$	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
$\phi 1/4$	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
	1/8	KQ2Y07-34□S	11.11	11.1	10	16.5	17.7	16.5	31	13.3	14	12.4	4.5	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	4.5	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	4.5	29.2
$\phi 5/16$	1/8	KQ2Y09-34□S	11.11	13.2	10	18.2	18.7	18.2	33.7	14.2	14	14	4.5	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	6	16
	3/8	KQ2Y09-36□S	17.46	13.2	12	18.2	25.5	18.2	39	14.2	25.6	17.7	6	28
$\phi 3/8$	1/4	KQ2Y11-35□S	17.46	15.4	17	20.4	28.5	20.4	44.5	15.6	28.8	23.8	7.5	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
$\phi 1/2$	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
	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
$\phi 1/2$	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 plating)

*1 ϕD_1 is maximum diameter.

*2 Reference dimensions after installation of NPT thread

*3 For details, refer to page 156.



Round Type

Metric Size M, R, Rc

Inch Size UNF, NPT

Sealant/Gasket Seal

Inch Size M, R, Rc

Metric Size G

Metric Size R, Rc

Metric Size R, Rc

Metric Size R, Rc

Metric Size R, Rc

Metric Size R, Rc

Metric Size R, Rc

Metric Size R, Rc

Metric Size R, Rc

Metric Size R, Rc

Metric Size R, Rc

Metric Size R, Rc

Metric Size R, Rc

Metric Size R, Rc

Metric Size R, Rc

Metric Size R, Rc

Metric Size R, Rc

KQ2 Series

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

Dimensions

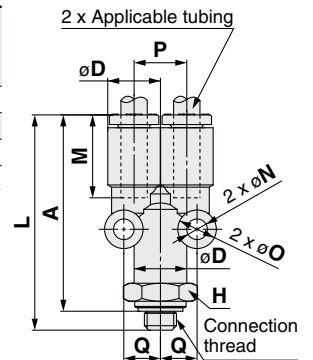
Branch "Y": KQ2U (Gasket seal)



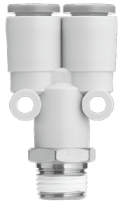
Applicable tubing O.D. [inch]	Connection thread UNF	Model	H (Width across flats)	*1 ϕD	L	P	A	M	Q	ϕO	ϕN	Effective area [mm ²]		Min. port size	Weight [g]
												Nylon	Urethane		
$\phi 1/8$	10-32UNF	KQ2U01-32□	8	7.1	33.8	7.1	30.3	13.3	5.2	6	3.2	2.2	2.2	1.8	5
$\phi 5/32$	10-32UNF	KQ2U03-32□	10	8.2	33.9	8.2	30.4	13.3	5.7	6	3.2	2.2	2.2	1.8	6.6
$\phi 1/4$	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 plating)

*1 ϕD is maximum diameter.



Branch "Y": KQ2U (Sealant)

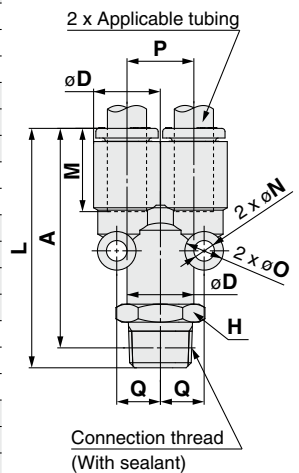


Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	*1 ϕD	L	P	A*2	M	Q	ϕO	ϕN	Effective area [mm ²]		Min. port size	Weight [g]
												Nylon	Urethane		
$\phi 1/8$	1/16	KQ2U01-33□S	9	7.1	37.3	7.1	33.2	13.3	5.2	6	3.2	3.4	2.9	2.5	7.1
	1/8	KQ2U01-34□S	11.11	7.1	36.4	7.1	33.2	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
$\phi 5/32$	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
$\phi 3/16$	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
$\phi 1/4$	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
$\phi 5/16$	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
	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
$\phi 3/8$	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
	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
$\phi 1/2$	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
	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 plating)

*1 ϕD is maximum diameter.

*2 Reference dimensions after installation of NPT thread



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

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

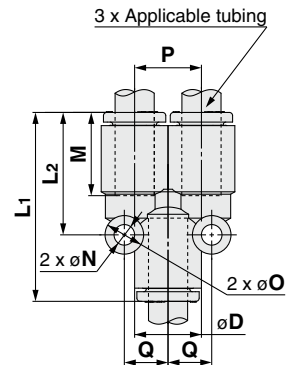
Dimensions

Union "Y": KQ2U

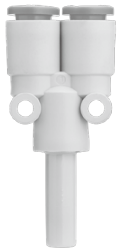


Applicable tubing O.D. [inch]	Model	*1 ϕD	L1	L2	P	M	Q	ϕO	ϕN	Effective area [mm ²]		Min. port size	Weight [g]
										Nylon	Urethane		
$\phi 1/8$	KQ2U01-00A	7.1	28.9	18	7.1	13.3	5.2	6	3.2	3.4	2.9	3.2	2.4
$\phi 5/32$	KQ2U03-00A	8.2	29	18.2	8.2	13.3	5.7	6	3.2	4.2	4.2	4.1	2.9
$\phi 3/16$	KQ2U05-00A	9.1	29.6	18.9	9.1	13.3	6.2	6	3.2	8.4	7	4.8	3.5
$\phi 1/4$	KQ2U07-00A	11.1	30.3	20.2	11.1	13.3	7.6	8	4	14.4	12.4	6.4	5
$\phi 5/16$	KQ2U09-00A	13.2	33.2	22.3	13.2	14.2	8.7	8	4.2	25.6	17.7	8.1	7.4
$\phi 3/8$	KQ2U11-00A	15.4	36.7	24.6	15.4	15.6	9.9	8	4.2	28.8	23.8	9.6	10.4

*1 ϕD is maximum diameter.

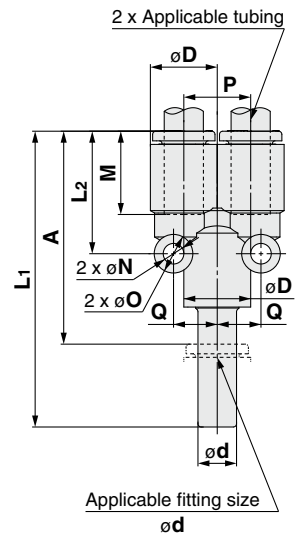


Plug-in "Y": KQ2U



Applicable tubing O.D. [inch]	Applicable fitting size ϕd [inch]	Model	*1 ϕD	L1	L2	P	A	M	Q	ϕO	ϕN	Effective area [mm ²]		Min. port size	Weight [g]
												Nylon	Urethane		
$\phi 1/8$	$\phi 1/8$	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
$\phi 5/32$	$\phi 5/32$	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
$\phi 3/16$	$\phi 3/16$	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
$\phi 1/4$	$\phi 1/4$	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
$\phi 5/16$	$\phi 5/16$	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

*1 ϕD is maximum diameter.

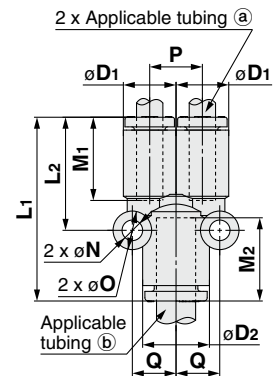


Different Diameter Union "Y": KQ2U



Applicable tubing O.D. [inch]	Model	*1 ϕD_1	*1 ϕD_2	L1	L2	P	M1	M2	Q	ϕO	ϕN	Effective area [mm ²]		Min. port size	Weight [g]	
												Nylon	Urethane			
$\phi 1/8$	$\phi 5/32$	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
	$\phi 1/4$	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
$\phi 5/32$	$\phi 3/16$	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
	$\phi 1/4$	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
$\phi 3/16$	$\phi 1/4$	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
	$\phi 5/16$	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
$\phi 1/4$	$\phi 3/8$	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
	$\phi 5/16$	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
$\phi 5/16$	$\phi 1/2$	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
	$\phi 3/8$	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

*1 $\phi D_1, \phi D_2$ are maximum diameters.



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: Inch Size, Connection Thread: UNF, NPT

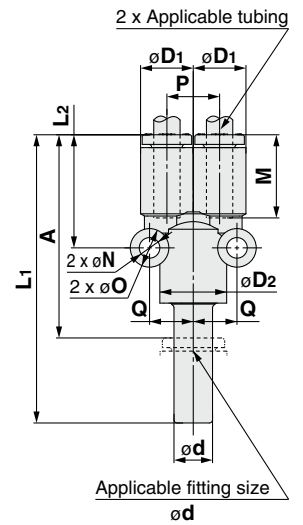
Dimensions

Different Diameter Plug-in "Y": KQ2X



Applicable tubing O.D. [inch]	Applicable fitting size ϕd [inch]	Model	*1 ϕD_1	*1 ϕD_2	L1	L2	A	P	M	Q	ϕO	ϕN	Effective area [mm ²]		Min. port size	Weight [g]
													Nylon	Urethane		
$\phi 1/8$	$\phi 5/32$	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
$\phi 5/32$	$\phi 3/16$	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
	$\phi 1/4$	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
$\phi 3/16$	$\phi 1/4$	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
$\phi 1/4$	$\phi 5/16$	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

*1 ϕD_1 , ϕD_2 are maximum diameters.

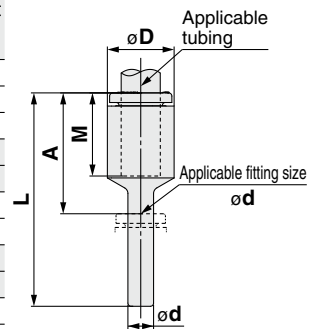


Plug-in Reducer: KQ2R

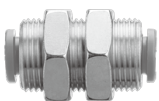


Applicable tubing O.D. [inch]	Applicable fitting size ϕd [inch]	Model	ϕD *1	L	A	M	Effective area [mm ²]		Min. port size	Weight [g]
							Nylon	Urethane		
$\phi 1/8$	$\phi 5/32$	KQ2R01-03A	7.1	28.6	15.3	13.3	3.4	2.9	2.5	0.8
	$\phi 3/16$	KQ2R01-05A	7.1	28.7	15.4	13.3	3.4	2.9	2.5	0.8
	$\phi 1/4$	KQ2R01-07A	7.1	28.4	15.1	13.3	3.4	2.9	2.5	1
$\phi 5/32$	$\phi 3/16$	KQ2R03-05A	8.2	28.7	15.4	13.3	5.6	4	3	1
	$\phi 1/4$	KQ2R03-07A	8.2	31.8	18.5	13.3	5.6	4	3	1.2
$\phi 3/16$	$\phi 1/4$	KQ2R05-07A	9.1	31.4	18.1	13.3	7.8	6.5	3.5	1.3
	$\phi 5/16$	KQ2R05-09A	9.1	33.4	19.2	13.3	7.8	6.5	3.5	1.5
$\phi 1/4$	$\phi 5/16$	KQ2R07-09A	11.1	33.3	19.1	13.3	13.5	11.5	4.6	1.7
	$\phi 3/8$	KQ2R07-11A	11.1	35.9	20.3	13.3	13.5	11.5	4.6	2.2
$\phi 5/16$	$\phi 3/8$	KQ2R09-11A	13.2	36.2	20.6	14.2	26	18.1	6	2.8
	$\phi 1/2$	KQ2R09-13A	13.2	37.2	20.2	14.2	26	18.1	6	3.5
$\phi 3/8$	$\phi 1/2$	KQ2R11-13A	15.4	39.5	22.5	15.6	35.3	29.1	7	4.2

*1 ϕD is maximum diameter.

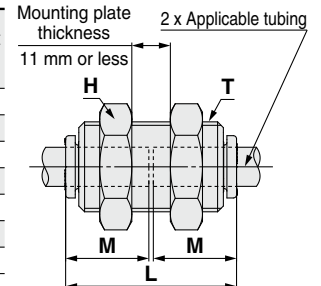


Bulkhead Union: KQ2E (Interchangeable with KQ)

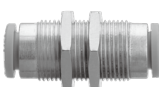


Applicable tubing O.D. [inch]	Model	T (UNF)	H (Width across flats)	L	Mounting hole	M	Effective area [mm ²]		Min. port size	Weight [g]
							Nylon	Urethane		
$\phi 1/8$	KQ2E01-00□	1/2-20UNF	17.46	27.8	13.5	13.3	3.4	2.9	2.5	26.9
$\phi 5/32$	KQ2E03-00□	1/2-20UNF	17.46	27.8	13.5	13.3	5.6	4	3	25.7
$\phi 3/16$	KQ2E05-00□	9/16-18UNF	17.46	29.8	15	13.3	7.8	6.5	3.5	40.3
$\phi 1/4$	KQ2E07-00□	9/16-18UNF	17.46	29.8	15	13.3	13.5	11.5	4.6	36.9
$\phi 5/16$	KQ2E09-00□	3/4-16UNF	22.23	31.8	20	14.2	26.1	18	6	61.2
$\phi 3/8$	KQ2E11-00□	7/8-14UNF	25.4	33.8	23	15.6	35.3	29.1	7	83.4
$\phi 1/2$	KQ2E13-00□	1-12UNF	28.57	37.8	26	17	66	51.7	9.6	109.2

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

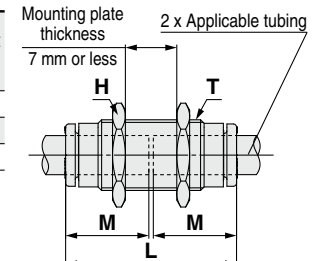


Bulkhead Union: KQ2E (Interchangeable with KJ)



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		
$\phi 1/8$	KQ2E01-00□J	3/8-24UNF	12.7	27.3	10.5	13.3	3	2.5	2.5	12.6
$\phi 5/32$	KQ2E03-00□J	3/8-24UNF	12.7	27.3	10.5	13.3	4	4	3	11.9
$\phi 1/4$	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 plating)

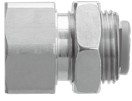


Inch Size One-touch Fittings **KQ2 Series**

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

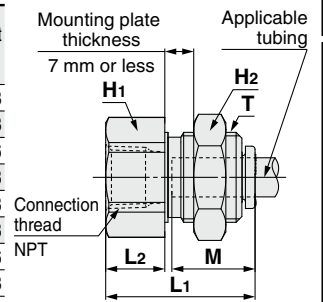
Dimensions

Bulkhead Connector: KQ2E



Applicable tubing O.D. [inch]	Connection thread NPT	Model	T (UNF)	H1 (Width across flats)	H2 (Width across flats)	L1	L2	Mounting hole	M	Effective area [mm ²]		Min. port size	Weight [g]
										Nylon	Urethane		
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 plating)



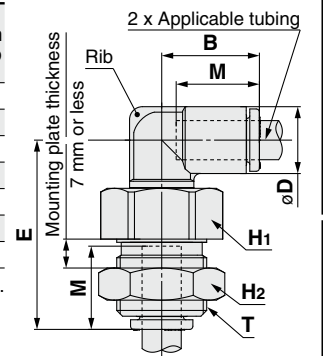
Bulkhead Male Elbow: KQ2LE



Applicable tubing O.D. [inch]	Model	T (UNF)	H1 (Width across flats)	H2 (Width across flats)	B	E	*1 øD	Mounting hole	M	Effective area [mm ²]		Min. port size	Weight [g]	With a rib
										Nylon	Urethane			
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	27.5	—
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	27.1	●
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	34.1	●
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	32.8	●
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	55.6	●
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	67.7	●
ø1/2	KQ2LE13-00□	1-12UNF	28.57	28.57	21.8	43.2	19.3	26	17	56	44.4	9.5	121.5	—

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

*1 øD is maximum diameter.

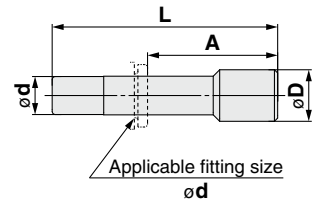


Plug: KQ2P



Applicable fitting size ød [inch]	Model	øD*1	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

*1 øD is maximum diameter.



Round Type



Metric Size M, R, Rc

Sealant/Gasket Seal

Inch Size UNF, NPT

Inch Size M, R, Rc

Metric Size G

Face Seal

Metric Size R, Rc

Inch Size NPT

Inch Size R

Gasket Seal

Metric Size Uni

Inch Size Uni

KQ2 Series

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

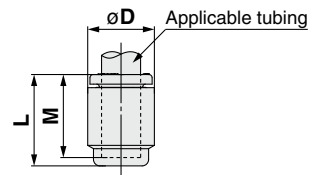
Dimensions

Tube Cap: KQ2C



Applicable tubing O.D. [inch]	Model	øD*1	L	M	Weight [g]
ø5/32	KQ2C03-00A	8.2	14.5	13.3	0.8
ø1/4	KQ2C07-00A	11.1	14.8	13.3	1.3
ø5/16	KQ2C09-00A	13.2	15.7	14.2	2
ø3/8	KQ2C11-00A	15.4	17.3	15.6	2.8

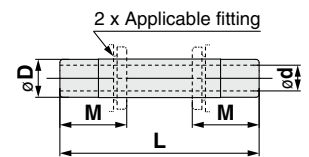
*1 øD is maximum diameter.



Nipple: KQ2N



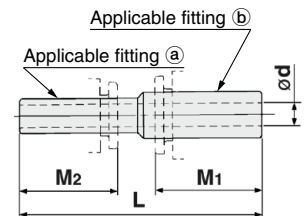
Applicable fitting øD	Model	L	M	ød Min. port size	Weight [g]
ø1/8	KQ2N01-99	36	13.3	2.1	0.2
ø3/16	KQ2N05-99	38	13.3	3.4	0.4
ø1/4	KQ2N07-99	39	13.3	4.6	1
ø3/8	KQ2N11-99	49	15.6	7	2
ø1/2	KQ2N13-99	51	17	9.5	3.5



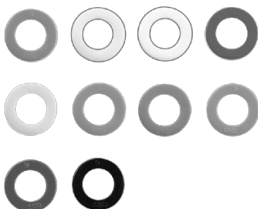
Reducer Nipple: KQ2N



Applicable fitting		Model	L	M1	M2	ød Min. port size	Weight [g]
(a)	(b)						
ø1/8	ø5/32	KQ2N01-03	36.5	13.3	13.3	2.1	0.2
	ø3/16	KQ2N01-05	37	13.3	13.3	2.1	0.4
ø5/32	ø3/16	KQ2N03-05	37.5	13.3	13.3	2.5	0.4
	ø1/4	KQ2N03-07	38	13.3	13.3	2.5	0.6
ø3/16	ø1/4	KQ2N05-07	38.5	13.3	13.3	3.4	0.6
	ø5/16	KQ2N05-09	41	13.3	13.3	3.4	1
ø1/4	ø5/16	KQ2N07-09	41.5	13.3	13.3	4.6	1
	ø3/8	KQ2N07-11	45	15.6	13.3	4.6	1
ø5/16	ø3/8	KQ2N09-11	46.5	15.6	14.2	6	1.8
	ø1/2	KQ2N09-13	47.5	17	14.2	6	2.6
ø3/8	ø1/2	KQ2N11-13	50	17	15.6	7	3.2



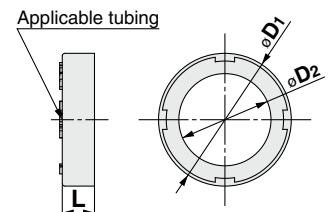
Color Cap: KQ2C



Applicable tubing O.D. [inch]	Model	øD1	øD2	L	Weight [g]	Note
ø1/8	KQ2C-01□A	7.3	4.3	2.6	0.1	Applicable for products with enlarged outside diameter of release button
ø3/16	KQ2C-05□A	9	5.9	2.6	0.1	
ø1/4*1	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)

*1 The KQ2S07-32□, KQ2S07-33□S, and KQ2S07-34□S are not applicable for products with enlarged outside diameter of release button. The applicable color cap is KQ2C-07□A.



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.

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: Orange
X41	With fixed orifice*2
KQ2□09-34□Q□	Effective area is interchangeable with the current product (KQ series). Applicable model: Male elbow 45° male elbow Extended male elbow Male branch tee Male run tee Applicable tubing O.D./Port size: $\phi 5/16$ "/NPT1/8 Thread material/Surface treatment: Brass, Brass + Electroless nickel plating Example) KQ2L09-34AQ5

*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

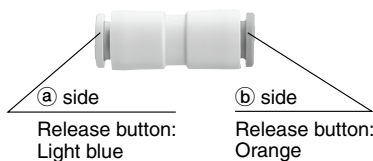
*2 Please contact SMC for availability.

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 \leftrightarrow inch conversion of tubing



Applicable tubing O.D. [mm]		Model
a	b	
$\phi 6$	$\phi 1/4$ "	KQ2H06-07A-X562
$\phi 10$	$\phi 3/8$ "	KQ2H10-11A-X562
$\phi 12$	$\phi 1/2$ "	KQ2H12-13A-X562

Variations

		Inch size						
		$\phi 1/8$ (Metric nominal size: $\phi 3.2$)	$\phi 5/32$ (Metric nominal size: $\phi 4$)	$\phi 3/16$	$\phi 1/4$	$\phi 5/16$ (Metric nominal size: $\phi 8$)	$\phi 3/8$	$\phi 1/2$
Metric size	$\phi 2$	KQ2H02-23A	KQ2H02-04A					
	$\phi 3.2$ (Inch nominal size: $\phi 1/8$)	Straight type (KQ2H23-00A/ KQ2H01-00A)	KQ2H01-03A KQ2H23-04A		KQ2H01-07A			
	$\phi 4$ (Inch nominal size: $\phi 5/32$)	KQ2H01-03A KQ2H23-04A	Straight type (KQ2H04-00A/ KQ2H03-00A)	KQ2H03-05A	KQ2H03-07A			
	$\phi 6$	KQ2H23-06A	KQ2H04-06A		KQ2H06-07A-X562 (Made to Order)	KQ2H06-08A		
	$\phi 8$ (Inch nominal size: $\phi 5/16$)				KQ2H07-09A	Straight type (KQ2H08-00A/ KQ2H09-00A)	KQ2H09-11A	KQ2H09-13A
	$\phi 10$					KQ2H08-10A	KQ2H10-11A-X562 (Made to Order)	
	$\phi 12$							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-KQ2H07-35NS** (With thread)

10-KQ2H07-00A (Without thread)

KQ2 Series

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

4 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 plating

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)