

# Inch Size One-touch Fittings

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

## 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.

### Guide

### Chuck

### Body

### Release button (Orange)

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

UNF, NPT

### Release button (Orange)

### 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 156 for details.)

### Applicable Tubing

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

### Specifications

Fluid		Air, Water*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	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 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
Stud	C3604 (Thread portion)
Chuck	Stainless steel 304
Guide	Stainless steel 304
Release button	POM
Seal, O-ring	NBR
Gasket	Stainless steel 304, NBR

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

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

## 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
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
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  
O

Metric Size M, R, Rc  
Inch Size UNF, NPT

Sealant/Gasket Seal

Inch Size M, R, Rc

Metric Size G

Metric Size R, Rc

Inch Size NPT

Inch Size R

Metric Size Uni

Inch Size Uni

Gasket Seal

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

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

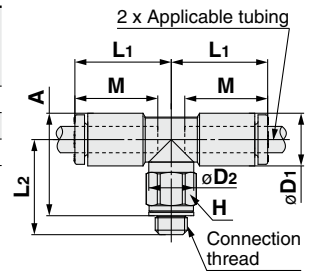
## Dimensions

### Male Branch Tee: KQ2T (Gasket seal)



Applicable tubing O.D. [inch]	Connection thread UNF	Model	H (Width across flats)	øD1	øD2	L1	L2	A	M	Effective area [mm <sup>2</sup> ]		Min. port size	Weight [g]
										Nylon	Urethane		
ø1/8	10-32UNF	KQ2T01-32□	7	7.1	7	15.3	14.2	14.8	13.3	3.2	2.7	2.5	3.5
ø5/32	10-32UNF	KQ2T03-32□	7	8.2	7	15.4	14.7	15.8	13.3	4.5	4.5	2.5	3.8
ø1/4	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)



### Male Branch Tee: KQ2T (Sealant)

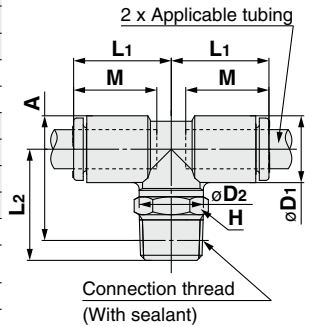


Applicable tubing O.D. [inch]	Connection thread NPT	Model	H (Width across flats)	øD1	øD2	L1	L2	A*1	M	Effective area [mm <sup>2</sup> ]		Min. port size	Weight [g]
										Nylon	Urethane		
ø1/8	1/16	KQ2T01-33□S	11.11	7.1	10	14.5	24.2	23.7	13.3	3.4	2.9	2.5	9.7
	1/8	KQ2T01-34□S	11.11	7.1	10	14.5	16.6	17	13.3	3.4	2.9	2.5	6
	1/4	KQ2T01-35□S	14.29	7.1	10	14.5	21	20.2	13.3	3.4	2.9	2.5	15.6
ø5/32	1/16	KQ2T03-33□S	11.11	8.2	10	14.8	23.8	23.8	13.3	6	4.1	3	10
	1/8	KQ2T03-34□S	11.11	8.2	10	14.8	16.2	17.1	13.3	6	4.1	3	6.3
	1/4	KQ2T03-35□S	14.29	8.2	10	14.8	21.6	21.3	13.3	6	4.1	3	15.9
ø3/16	1/8	KQ2T05-34□S	11.11	9.1	10	15	16.7	18	13.3	8.4	7	3.5	6.6
	1/4	KQ2T05-35□S	14.29	9.1	10	15	22.1	22.2	13.3	8.4	7	3.5	16.2
ø1/4	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
	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
ø5/16	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	KQ2T09-35□S	12.7	13.2	12	17.2	23.5	26.9	14.2	26.3	18.2	6	11.7
	3/8	KQ2T09-36□S	14.29	13.2	12	17.2	24.1	26.3	14.2	26.3	18.2	6	15.9
	1/2	KQ2T09-37□S	17.46	13.2	12	17.2	25.5	27.4	14.2	26.3	18.2	6	27.9
ø3/8	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
	3/8	KQ2T11-36□S	17.46	15.4	17	19.3	29.1	32.1	15.6	28.8	23.8	7.5	22.2
	1/2	KQ2T11-37□S	22.23	15.4	17	19.3	33.3	34.6	15.6	28.8	23.8	7.5	48.7
ø1/2	1/4	KQ2T13-35□S	17.46	19.3	17	21.5	30.4	35.7	17	57.3	50.6	9	28.1
	3/8	KQ2T13-36□S	17.46	19.3	17	21.8	26.2	31.2	17	63.8	50.6	9.5	24.4
	1/2	KQ2T13-37□S	22.23	19.3	17	21.8	30.4	33.7	17	63.8	50.6	9.5	50.5

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

\*1 Reference dimensions after installation of NPT thread

\*2 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

Face Seal

Inch Size NPT

Inch Size R

Metric Size Uni

Inch Size Uni

Gasket Seal