

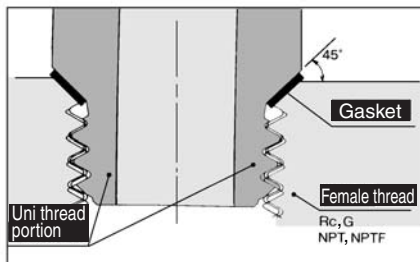
Inch-size Uni One-touch Fittings

Series KQ2

Applicable Tubing: Inch Size

Connection Thread: Rc, G, NPT, NPTF

New-stand male thread for piping that reduces the screw-in time by 1/3.



Uni thread ridge shape

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

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

The male thread for piping drastically cuts piping man-hours.



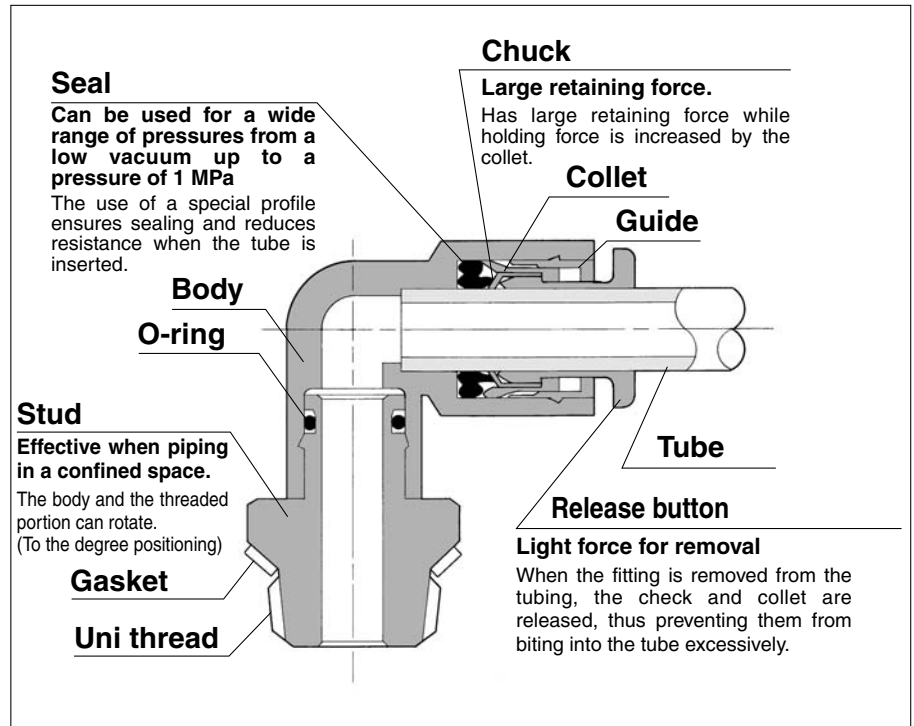
Product's Color

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



Made to Order

Refer to page 97 for details.



Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon ⁽¹⁾ , Polyurethane
Tubing O.D.	ø1/8", ø5/32", ø3/16", ø1/4", ø5/16", ø3/8", ø1/2"

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

Specifications

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



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

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

Principal Parts Material

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

Model

Male connector

KQ2H

P. 94



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

Male elbow

KQ2L

P. 94



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

Male branch tee

KQ2T

P. 95



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

Male run tee

KQ2Y

P. 95



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

Branch "Y"

KQ2U

P. 96



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

Extended male elbow

KQ2W

P. 96



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

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

How to Order

KQ 2 H 05 - U01 -

One-touch fittings

Product's color

Symbol	Body	Release button
2	White	Orange
Nii	Black	Red

Model

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

Applicable tubing O.D.

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

Port size

U01	Uni 1/8
U02	Uni 1/4
U03	Uni 3/8
U04	Uni 1/2

• Made to Order
Refer to page 97 for details.

How to Order Gasket

KQG - U01

Gasket for Uni One-touch fittings

Applicable port size

U01	Uni 1/8
U02	Uni 1/4
U03	Uni 3/8
U04	Uni 1/2

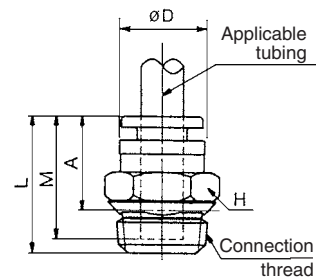
Series KQ2

Male Connector: KQ2H



Applicable tubing O.D. (inch)	Connection thread Uni thread	Model	H (Width across flats)	L	A *	M	Min. port size	Mass (g)
1/8	1/8	KQ2H01-U01	11.11	18.5	13.5	15.5	2.5	7
	1/4	KQ2H01-U02	14.29	16	10			6
5/32	1/8	KQ2H03-U01	11.11	18.5	13.5	16	3	6
	1/4	KQ2H03-U02	14.29	16.5	10.5			10
3/16	1/8	KQ2H05-U01	12.7	18.5	13.5	16	3.5	7
	1/4	KQ2H05-U02	14.29	17	11			9
1/4	1/8	KQ2H07-U01	12.7	22.5	17.5	17	4.6	9
	1/4	KQ2H07-U02	14.29	20.5	14.5			11
	3/8	KQ2H07-U03	17.46	17.5	11.5			16
5/16	1/8	KQ2H09-U01	14.29	25	20.5	18.5	6	12
	1/4	KQ2H09-U02		21.5	15.5			9
	3/8	KQ2H09-U03	17.46	19.5	13.5			16
3/8	1/4	KQ2H11-U02	17.46	28	22	21	7	19
	3/8	KQ2H11-U03						16
	1/2	KQ2H11-U04	22.23	22	14			30
1/2	1/4	KQ2H13-U02	22.23	30	24	22	9.6	33
	3/8	KQ2H13-U03		28.5	22.5			30
	1/2	KQ2H13-U04		25	17			28

* Reference dimensions after Uni thread installation.

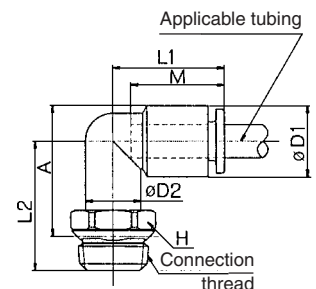


Male Elbow: KQ2L



Applicable tubing O.D. (inch)	Connection thread Uni thread	Model	H (Width across flats)	øD1	øD2	L1	L2	A *	M	Min. port size	Mass (g)
1/8	1/8	KQ2L01-U01	11.11	9.6	10	17.5	20	20.5	15.5	2.5	6
	1/4	KQ2L01-U02	14.29				22	21			13
5/32	1/8	KQ2L03-U01	11.11	10.4	10	18	20	21.5	16	3	7
	1/4	KQ2L03-U02	14.29				22.5	22.5			13
3/16	1/8	KQ2L05-U01	11.11	11.4	10	19.5	20.5	22.5	16	3.5	8
	1/4	KQ2L05-U02	14.29				23	23			14
1/4	1/8	KQ2L07-U01	11.11	13.2	10	20.5	21.5	24	17	4.6	8
	1/4	KQ2L07-U02	14.29				23.5	24.5			15
	3/8	KQ2L07-U03	17.46				24.5	25			21
5/16	1/8	KQ2L09-U01	12.7	15.2	12	23.5	22.5	25.5	18.5	6	10
	1/4	KQ2L09-U02	14.29				24.5	26.5			15
	3/8	KQ2L09-U03	17.46				25.5	27			17
3/8	1/4	KQ2L11-U02	17.46	17.9	17	25.5	26.5	29.5	21	7	18
	3/8	KQ2L11-U03					27	30			22
	1/2	KQ2L11-U04	30				31	41			
1/2	1/4	KQ2L13-U02	17.46	21.7	17	28	28.5	33	22	9.6	23
	3/8	KQ2L13-U03					28.5	33.5			31
	1/2	KQ2L13-U04					22.23	32			35

* Reference dimensions after Uni thread installation.

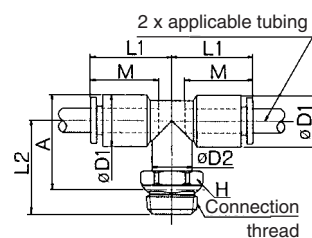


Male Branch Tree: KQ2T



Applicable tubing O.D. (inch)	Connection thread Uni thread	Model	H (Width across flats)	øD1	øD2	L1	L2	A*	M	Min. port size	Mass (g)	
1/8	1/8	KQ2T01-U01	11.11	9.6	10	17.5	20	21	15.5	2.5	8	
	1/4	KQ2T01-U02	14.29				22				15	
5/32	1/8	KQ2T03-U01	11.11	10.4	10	18	20	21.5	16	3	9	
	1/4	KQ2T03-U02	14.29				22.5				15	
3/16	1/8	KQ2T05-U01	11.11	11.4	10	19.5	20.5	22.5	16.5	3.5	10	
	1/4	KQ2T05-U02	14.29				23				16	
1/4	1/8	KQ2T07-U01	11.11	13.2	10	20.5	21.5	24	17	4.6	10	
	1/4	KQ2T07-U02	14.29				23.5				24.5	17
	3/8	KQ2T07-U03	17.46				24.5				25	24
5/16	1/8	KQ2T09-U01	12.7	15.2	12	23.5	22.5	26	18.5	6	14	
	1/4	KQ2T09-U02	14.29				24.5				26.5	19
	3/8	KQ2T09-U03	17.46				25.5				27	25
3/8	1/4	KQ2T11-U02	17.46	17.9	17	25.5	26.5	29.5	21	7	24	
	3/8	KQ2T11-U03					27				30	27
	1/2	KQ2T11-U04					22.23				30	31
1/2	1/4	KQ2T13-U02	17.46	21.7	17	28	33	33	22	9.6	29	
	3/8	KQ2T13-U03					28.5				33.5	32
	1/2	KQ2T13-U04					22.23				32	35

* Reference dimensions after Uni thread installation.



K □

M □

H □

KK

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MS

LQ

MQR

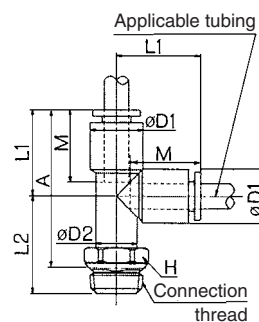
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Male Run Tree: KQ2Y



Applicable tubing O.D. (inch)	Connection thread Uni thread	Model	H (Width across flats)	øD1	øD2	L1	L2	A*	M	Min. port size	Mass (g)	
1/8	1/8	KQ2Y01-U01	11.11	9.6	10	17.5	20	33.5	15.5	2.5	8	
	1/4	KQ2Y01-U02	14.29				22				15	
5/32	1/8	KQ2Y03-U01	11.11	10.4	10	18	20	34	16	3	9	
	1/4	KQ2Y03-U02	14.29				22.5				34.5	15
3/16	1/8	KQ2Y05-U01	11.11	11.4	10	19.5	20.5	36	16.5	3.5	10	
	1/4	KQ2Y05-U02	14.29				23				36.5	16
1/4	1/8	KQ2Y07-U01	11.11	13.2	10	20.5	21.5	38	17	4.6	10	
	1/4	KQ2Y07-U02	14.29				23.5				37.5	17
	3/8	KQ2Y07-U03	17.46				24.5				39	24
5/16	1/8	KQ2Y09-U01	12.7	15.2	12	23.5	22.5	42	18.5	6	14	
	1/4	KQ2Y09-U02	14.29				24.5				43	19
	3/8	KQ2Y09-U03	17.46				25.5				43	25
3/8	1/4	KQ2Y11-U02	17.46	17.9	17	25.5	26.5	46	21	7	24	
	3/8	KQ2Y11-U03					27				46.5	27
	1/2	KQ2Y11-U04					22.23				30	47.5
1/2	1/4	KQ2Y13-U02	17.46	21.7	17	28	28.5	50.5	22	9.6	29	
	3/8	KQ2Y13-U03					32				52	32
	1/2	KQ2Y13-U04					22.23				32	52

* Reference dimensions after Uni thread installation.



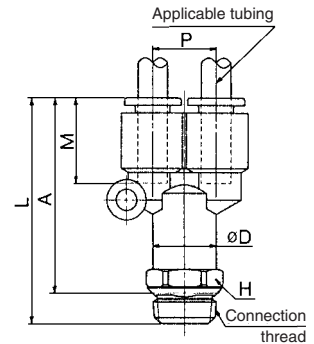
Series KQ2

Branch "Y": KQ2U



Applicable tubing O.D. (inch)	Connection thread Uni thread	Model	H (Width across flats)	øD	L	P	A*	M	Min. port size	Mass (g)
1/8	1/8	KQ2U01-U01	12.7	9.6	38.5	9.6	34.5	15.5	2.5	10
	1/4	KQ2U01-U02	14.29		40.5					
5/32	1/8	KQ2U03-U01	12.7	10.4	40	10.4	36	16	3	12
	1/4	KQ2U03-U02	14.29		42					
3/16	1/8	KQ2U05-U01	12.7	11.4	42	11.4	38	16.5	3.5	14
	1/4	KQ2U05-U02	14.29		44.5					
1/4	1/8	KQ2U07-U01	14.29	13.2	44.5	13.2	40.5	17	4.6	15
	1/4	KQ2U07-U02			46		40			
	3/8	KQ2U07-U03			46.5		40.5			
5/16	1/8	KQ2U09-U01	17.46	15.2	50.5	15.2	46.5	18.5	6	20
	1/4	KQ2U09-U02			52		46			18
	3/8	KQ2U09-U03			51.5		45.5			25
3/8	1/4	KQ2U11-U02	19.05	17.9	56.5	17.9	50.5	21	7	37
	3/8	KQ2U11-U03			59		51			32
	1/2	KQ2U11-U04								38
1/2	1/4	KQ2U13-U02	22.23	21.7	61	21.7	55	22	9.6	26
	3/8	KQ2U13-U03			62.7		54.7			30
	1/2	KQ2U13-U04								50

* Reference dimensions after Uni thread installation.

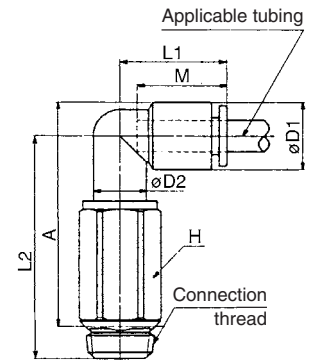


Extended Male Elbow: KQ2W



Applicable tubing O.D. (inch)	Connection thread Uni thread	Model	H (Width across flats)	øD1	øD2	L1	L2	A*	M	Min. port size	Mass (g)	
1/8	1/8	KQ2W01-U01	11.11	9.6	10	17.5	34.5	34	15.5	2.5	17	
	1/4	KQ2W01-U02	14.29				36.5	35.5			26	
5/32	1/8	KQ2W03-U01	11.11	10.4	10	18	34.5	35.5	16	3	18	
	1/4	KQ2W03-U02	14.29				37	36.1			26	
3/16	1/8	KQ2W05-U01	11.11	11.4	10	19.5	35	36	16.5	3.5	19	
	1/4	KQ2W05-U02	14.29				40	39.5			27	
1/4	1/8	KQ2W07-U01	11.11	13.2	10	20.5	36	37.5	17	4.6	21	
	1/4	KQ2W07-U02	14.29				41	41.5			31	
	3/8	KQ2W07-U03	17.46				41.5	42			39	
5/16	1/8	KQ2W09-U01	12.7	15.2	12	23.5	43.5	46.5	18.5	6	26	
	1/4	KQ2W09-U02	14.29				45.5	47			35	
	3/8	KQ2W09-U03	17.46				46	48			39	
3/8	1/4	KQ2W11-U02	17.46	17.9	17	25.5	52.5	55.5	21	7	59	
	3/8	KQ2W11-U03	22.23				54.5	55.5			55	7
	1/2	KQ2W11-U04									97	
1/2	1/4	KQ2W13-U02	17.46	21.7	17	28	54	59	22	9.6	9	
	3/8	KQ2W13-U03	22.23				56	59			64	
	1/2	KQ2W13-U04									100	

* Reference dimensions after Uni thread installation.





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

1 Grease-free Specifications

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

K

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2 Other Specifications

Symbol	Specifications
X2	Copper-free (With electroless nickel plated)
X12	Lubricant: White Vaseline Release button color: White
X41	With fixed throttle ^{Note)}

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

Spare Parts

Description	Part no.	Applicable thread
Gasket	KQG-U01	Uni 1/8
	KQG-U02	Uni 1/4
	KQG-U03	Uni 3/8
	KQG-U04	Uni 1/2

