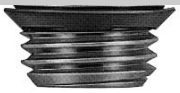
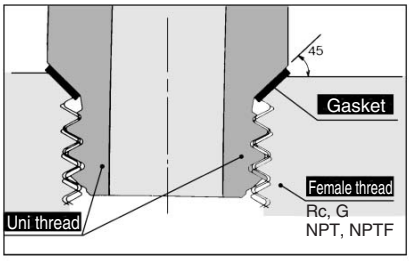
Uni One-touch Fittings

Series KQ2

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

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



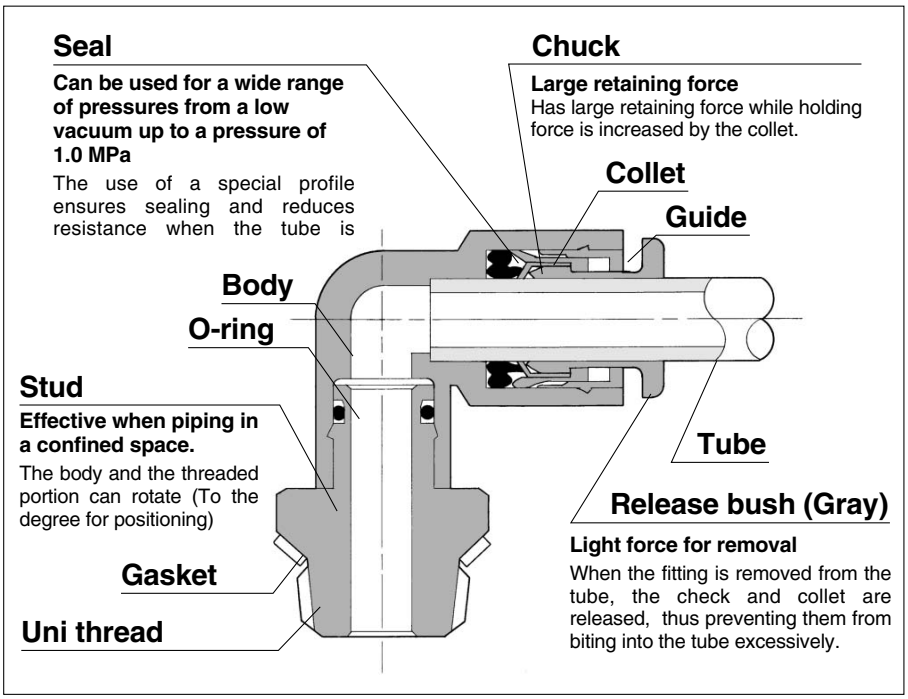


Uni thread ridge shape

A gasket made of a stainless 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.



Applicable Tubing

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

Product's Color

Series	Body	Release button
Series KQ2	White	Light gray
Series KQ	Black	Blue

Specifications

Fluid	Air/Water Note)
Maximum operating pressure	1.0 MPa
Operating vacuum pressure	–100 kPa
Proof pressure	3.0 MPa
Ambient and fluid temperature	–5 to 60°C, Water: 0 to 40°C (No freezing)

Note) Applicable for general industrial water. Please consult with SMC if using for other kinds of fluid. Also, the surge pressure must be under the maximum operating pressure.

Principal Parts Material

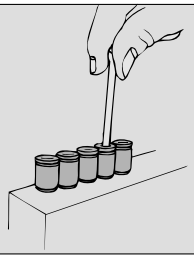
Body	C3604BD, PBT
Stud	C3604BD (Thread portion)
Chuck	Stainless steel 304
Guide	Stainless steel 304, C3604BD, POM
Collet, Release button	POM
Seal, O-ring	NBR
Gasket	Stainless steel 304, NBR

Model

Hex. socket head male connector

KQ2S P. 36

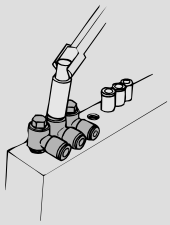
Internal hex. allows thread connection by using an allen wrench for confined spaces.



Universal male elbow

KQ2V P. 36

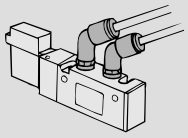
Universal male elbow allows thread connection by using a socket wrench for confined spaces.



45° male elbow

KQ2K P. 36

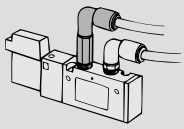
Use to pipe in 45° direction from female thread. Model in-between of male connector and male elbow.



Extended male elbow

KQ2W P. 36

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



Male connector

KQ2H P. 34

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

Male elbow

KQ2L P. 34

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

Male branch tee

KQ2T P. 34

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

Branch "Y"

KQ2U P. 35

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

Male run tee

KQ2Y P. 35

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

Gasket

KQG P. 36

Thread seal

How to Order

KQ 2 H 06 — U01

KQ — One-touch fittings

Product's color

Symbol	Body	Release button
2	White	Light gray
Nil	Black	Blue

Applicable tubing O.D.

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

Port size

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

Model

H	Male connector	T	Male branch tee
S	Hex. socket head male connector	Y	Male run tee
L	Male elbow	U	Branch
K	45° male elbow		
V	Universal male elbow		
W	Extended male elbow		

How to Order Gasket

KQG — U01

KQG — Gasket for Uni One-touch fittings

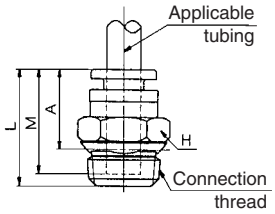
Applicable port size

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

<Metric size> Male Connector: KQ2H

Applicable tubing O.D. (mm)	Connection thread Uni One-touch fittings	Model	H (width across flats)	L	A*	M	Effective area (mm²) Nylon	Effective area (mm²) Urethane	Weight (g)
4	1/8	**KQ2H04-U01**	10	18.5	13.5	16	5.6	5.6	5
	1/4	**KQ2H04-U02**	14	16.5	10.5				10
6	1/8	**KQ2H06-U01**	12	19.5	14.5	17	13.1	13.1	5
	1/4	**KQ2H06-U02**	14		13				10
	3/8	**KQ2H06-U03**	17	17.5	11.5				16
8	1/8	**KQ2H08-U01**	14	25	20.5	18.5	26.1	18.0	11
	1/4	**KQ2H08-U02**		21.5	15.5				27
	3/8	**KQ2H08-U03**	17	19.5	13.5				33
10	1/8	**KQ2H10-U01**	17	28	23	21	41.5	29.5	17
	1/4	**KQ2H10-U02**			22				17
	3/8	**KQ2H10-U03**		24	18				14
	1/2	**KQ2H10-U04**	22	22	14				28
12	1/4	**KQ2H12-U02**	19	30.5	24.5	22	58.3	46.1	22
	3/8	**KQ2H12-U03**		25.5	19.5				16
	1/2	**KQ2H12-U04**	22	24.5	16.5				28
16	3/8	**KQ2H16-U03**	24	33.5	27.5	24	81	(81)	39
	1/2	**KQ2H16-U04**		28.5	20.5		113	(96)	25

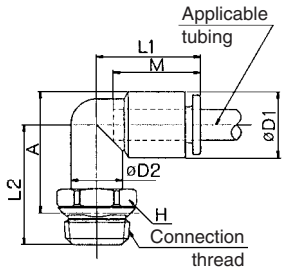
∗ Reference dimensions after Uni thread installation. Note) Dimensions in ( ) are the case of soft nylon tubing.



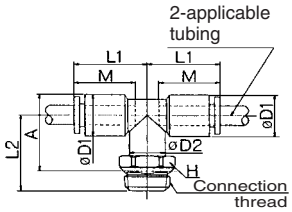
<Metric size> Male Elbow: KQ2L

Applicable tubing O.D. (mm)	Connection thread Uni One-touch fittings	Model	H (width across flats)	øD1	øD2	L1	L2	A*	M	Effective area (mm²) Nylon	Effective area (mm²) Urethane	Weight (g)
4	1/8	**KQ2L04-U01**	10	10.4	10	18	20	20.5	16	4.2	4.2	8
	1/4	**KQ2L04-U02**	14				22	21.5				14
6	1/8	**KQ2L06-U01**	10	12.8	10	20	21.5	23.5	17	11.4	11.4	9
	1/4	**KQ2L06-U02**	14				23					15
	3/8	**KQ2L06-U03**	17				24	24.5				23
8	1/8	**KQ2L08-U01**	12	15.2	12	23	22.5	25.5	18.5	21.6	14.9	11
	1/4	**KQ2L08-U02**	14				24.5	26				16
	3/8	**KQ2L08-U03**	17				25.5	27				24
10	1/8	**KQ2L10-U01**	17	18.5	17	26.5	25	29.5	21	21.6	14.9	24
	1/4	**KQ2L10-U02**					26.5	30		35.2	25.0	21
	3/8	**KQ2L10-U03**					27	30.5				25
	1/2	**KQ2L10-U04**	22				30	31.5				45
12	1/4	**KQ2L12-U02**	17	20.9	17	28.5	27	31.5	22	50.2	39.7	23
	3/8	**KQ2L12-U03**					28	32.5				27
	1/2	**KQ2L12-U04**	22				31	33.5				48
16	3/8	**KQ2L16-U03**	22	26.5	21	33	40.5	33	24	71	(71)	49
	1/2	**KQ2L16-U04**						35		100	(84)	50

∗ Reference dimensions after Uni thread installation. Note) Dimensions in ( ) are the case of soft nylon tubing.



<Metric size> Male Branch Tee: KQ2T

Applicable tubing O.D. (mm)	Connection thread Uni One-touch fittings	Model	H (width across flats)	øD1	øD2	L1	L2	A*	M	Effective area (mm²) Nylon	Effective area (mm²) Urethane	Weight (g)
4	1/8	**KQ2T04-U01**	10	10.4	10	18	20	21.5	16	6.0	6.0	9
	1/4	**KQ2T04-U02**	14				22					15
6	1/8	**KQ2T06-U01**	10	12.8	10	20	21.5	23.5	17	13.9	13.9	11
	1/4	**KQ2T06-U02**	14				23					17
	3/8	**KQ2T06-U03**	17				24	24.5				26
8	1/8	**KQ2T08-U01**	12	15.2	12	23	22.5	26	18.5	26.3	18.2	15
	1/4	**KQ2T08-U02**	14				24.5					20
	3/8	**KQ2T08-U03**	17				25.5	27				28
10	1/8	**KQ2T10-U01**	17	18.5	17	26.5	25	29.5	21	40.8	29.0	30
	1/4	**KQ2T10-U02**					26.5	30				27
	3/8	**KQ2T10-U03**					27	30.5				31
	1/2	**KQ2T10-U04**	22				30	31.5				51
12	1/4	**KQ2T12-U02**	17	20.9	17	28.5	27	31.5	22	57.2	45.2	31
	3/8	**KQ2T12-U03**					28	32.5				34
	1/2	**KQ2T12-U04**	22				31	33.5				54
16	3/8	**KQ2T16-U03**	22	26.9	21	33	40.5	33	24	71	(71)	62
	1/2	**KQ2T16-U04**						35		100	(100)	63

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