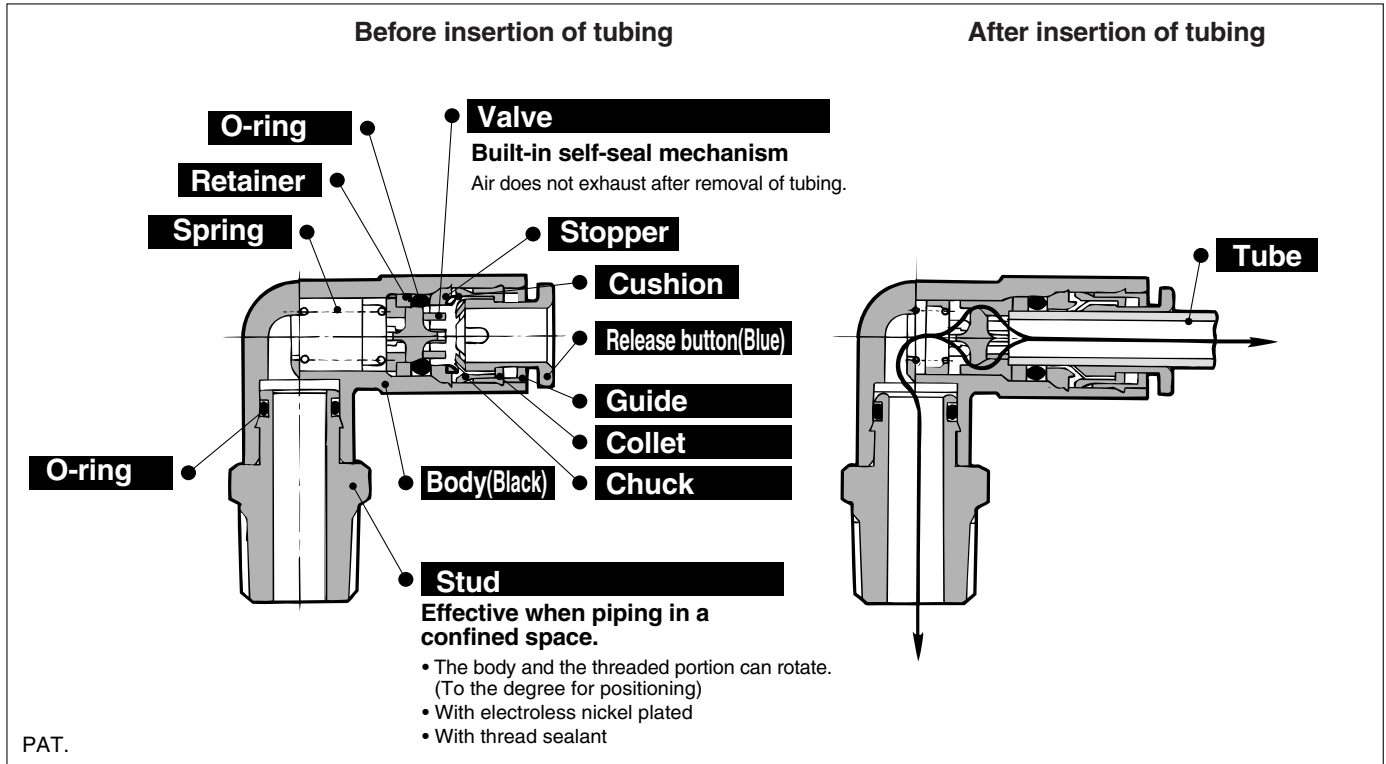


Self-seal Fittings Series KC

RoHS



One-touch fitting (built-in self-seal mechanism) to prevent air exhaust when removing tube.

Best for multiple use areas when pressure cannot be shut down.

10 styles are available.

Electroless nickel plated for copper-free applications.

Sealant is standard.



Applicable Tubing

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

Specifications

Fluid	Air	
Maximum operating pressure	1 MPa	
Proof pressure	3 MPa	
Ambient and fluid temperature	-5 to 60°C (No freezing)	
Thread	Mounting section	JIS B 0203 (Taper thread for piping) JIS B 0205 (Metric fine thread)
	Nut section	JIS B 0205 (Metric fine thread)
Seal on the threads (Standard)	With thread seal	
Copper-free (Standard)	Brass parts are all electroless nickel plated	

Principal Parts Material

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

Model

Male connector

KCH P. 158



Use to pipe in the same direction from female thread.

Straight union

KCH P. 160



Use to connect tubes in the same direction. One of two ports has a self-seal function.

Male elbow

KCL P. 158



Use to pipe at right angles to female thread.

Straight plug for frequent use

KCH P. 160



It can save tube cutting labor in the case of frequent tube installation and removal. Use to connect a self-seal fitting and a tube in the same direction.

Union tee

KCT P. 158



Use to connect tubes in both 90° directions.

Elbow plug for frequent use

KCL P. 160



It can save tube cutting labor in the case of frequent tube installation and removal. Use to connect a self-seal fitting and a tube at the right angles to a self-seal fitting.

Union "Y"

KCU P. 159



Use to branch line in the same direction. 2 branched ports has a self-seal function.

Check adaptor

KCJ P. 159



Use to add the self-seal mechanism to the usual One-touch fittings, Series KQ.

Bulkhead union

KCE P. 159



Use to connect tubes through a panel. One of two ports has a self-seal function.

Bulkhead connector

KCE P. 159



Use to connect male thread and tube through a panel.

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

Series KC

Male Connector: KCH

<M5>



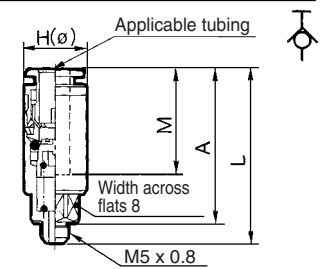
<R>



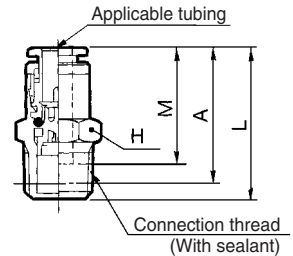
Applicable tubing O.D. (mm)	Connection thread R M	Model	H (width across flats)	L	A*	M	Effective area (mm ²)		Mass (g)
							Nylon	Urethane	
4	M5 x 0.8	KCH04-M5	9.8	30.8	27.3	18	2.1	2.1	8
	1/8	KCH04-01S	10	26.1	22.1		2.6	2.6	
6	M5 x 0.8	KCH06-M5	11.8	32.4	28.9	19.5	2.4	2.4	10
	1/8	KCH06-01S	12	37.4	33.4		19	6.8	
8	1/4	KCH06-02S	14	28.9	22.9	21.5		16.2	13.1
	1/8	KCH08-01S	14	42.4	38.4		20		
10	1/4	KCH08-02S		17	34	27.5	24	25.6	20.4
	3/8	KCH08-03S	34		27.5	25			
12	1/4	KCH10-02S	17	50.5	44.5	25.5	35.4	30.4	34
	3/8	KCH10-03S		51.5	45				43
12	3/8	KCH12-03S	19	54.2	47.7	25.5	35.4	30.4	48
	1/2	KCH12-04S		22	41.6				33.6

* Reference dimensions after R thread installation.

<M5>



<R>



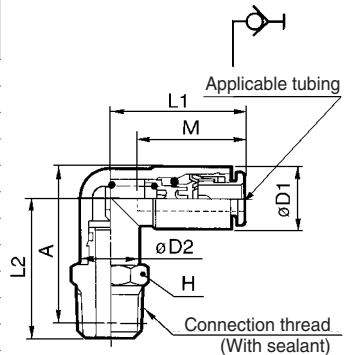
Male Elbow: KCL



Applicable tubing O.D. (mm)	Connection thread R M	Model	H (width across flats)	Note) øD1	øD2	L1	L2	A*	M	Effective area (mm ²)		Mass (g)
										Nylon	Urethane	
4	M5 x 0.8	KCL04-M5	8	10.4	8	25.3	16.7	18.4	18	1.9	1.9	6
	1/8	KCL04-01S	10				22.1	24.2		2.3	2.3	
6	M5 x 0.8	KCL06-M5	8	12.8	8	26.8	17.4	20.3	19.5	2.2	2.2	7
	1/8	KCL06-01S	12				24.2	27.5		19	6.2	
8	1/4	KCL06-02S	14	15.2	14	34.1	28.6	29.5	21.5		13.0	10.5
	1/8	KCL08-01S	14				26.2	30.7		16		
10	1/4	KCL08-02S	17	18.5	17	38	30.6	32.7	24	19.5	16.5	38
	3/8	KCL08-03S	17				30	34.2				
12	3/8	KCL10-02S	22	20.9	20.9	40.7	33.4	37.2	25.5	24.8	21.3	63
	1/2	KCL10-03S	22				34.8	38.7				
12	1/2	KCL12-03S	22	20.9	20.9	40.7	39.2	44.3	25.5	24.8	21.3	81
	1/2	KCL12-04S	22				42.3	45.7				

* Reference dimensions after R thread installation.

Note) øD1: Max. diameter

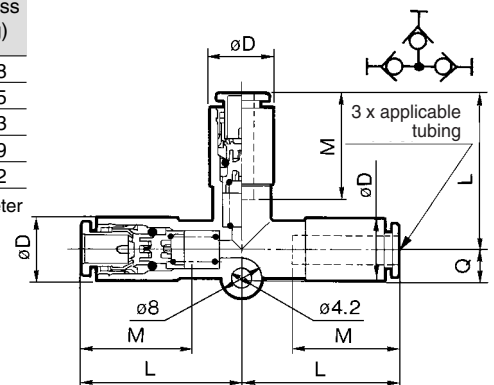


Union Tee: KCT



Applicable tubing O.D. (mm)	Model	Note) øD	L	Q	M	Effective area (mm ²)		Mass (g)
						Nylon	Urethane	
4	KCT04-00	10.4	28.6	5.3	18	2.8	2.8	8
6	KCT06-00	12.8	32.7	6.1	19	7.6	7.6	15
8	KCT08-00	15.2	39.2	7.1	21.5	13.7	11.1	23
10	KCT10-00	18.5	45.5	7.9	24	21.1	19.0	39
12	KCT12-00	20.9	49.2	8.6	25.5	28.3	24.3	52

Note) øD: Max. diameter

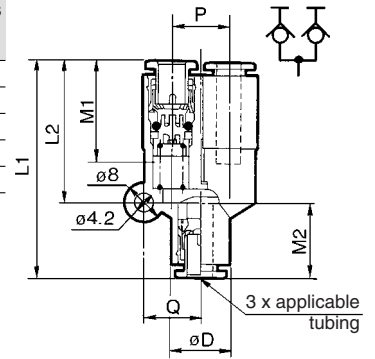


Union "Y": KCU



Applicable tubing O.D. (mm)	Model	Note) ϕD	L1	L2	P	Q	M1	M2	Effective area (mm ²)		Mass (g)
									Nylon	Urethane	
4	KCU04-00	10.4	43.1	27.3	10.4	10.6	18	16	3.7	3.7	8
6	KCU06-00	12.8	48	31.2	12.8	12.5	19	17	10.0	10.0	14
8	KCU08-00	15.2	57.6	38.9	15.2	14.7	21.5	18.5	21.7	15.1	22
10	KCU10-00	18.5	65.2	44.9	18.5	17.1	24	21	33.3	25.6	37
12	KCU12-00	20.9	70.1	48.8	20.9	19.1	25.5	22	48.9	38.7	49

Note) ϕD : Max. diameter



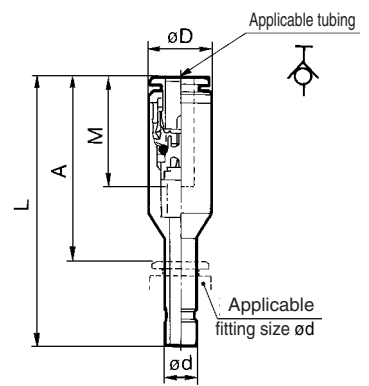
- K
- M
- H
- KK
- D
- MS
- LQ
- MQR
- T

Check Adaptor: KCJ



Applicable tubing O.D. (mm)	Model	Applicable fitting size ϕd	Note) ϕD	L	A	M	Effective area (mm ²)		Mass (g)
							Nylon	Urethane	
4	KCJ04-99	4	9.8	49.5	33.5	18	2.6	2.6	9
6	KCJ06-99	6	11.8	54	37	19	6.8	6.8	13
8	KCJ08-99	8	14	61	42.5	21.5	16.2	13.1	20
10	KCJ10-99	10	17	70.4	49.4	24	25.6	20.4	33
12	KCJ12-99	12	19	74.4	52.4	25.5	35.4	30.4	43

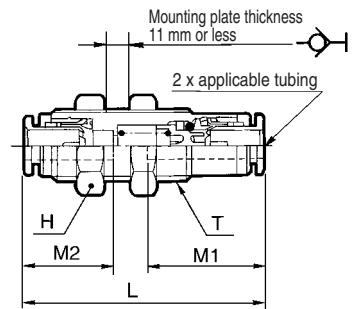
Note) ϕD : Max. diameter



Bulkhead Union: KCE



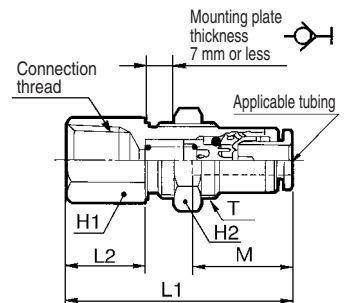
Applicable tubing O.D. (mm)	Model	T (M)	H (width across flats)	L	Mounting hole	M1	M2	Effective area (mm ²)		Mass (g)
								Nylon	Urethane	
4	KCE04-00	M12 x 1	14	42	13	18	16	2.6	2.6	21
6	KCE06-00	M14 x 1	17	45.5	15	19	17	6.8	6.8	30
8	KCE08-00	M16 x 1	19	52.5	17	21.5	18.5	16.2	13.1	39
10	KCE10-00	M20 x 1	24	59.5	21	24	21	25.6	20.4	84
12	KCE12-00	M22 x 1	27	63.2	23	25.5	22	35.4	30.4	115



Bulkhead Connector: KCE



Applicable tubing O.D. (mm)	Connection thread Rc	Model	T (M)	H1 (width across flats)	H2 (width across flats)	L1	L2	Mounting hole	M	Effective area (mm ²)		Mass (g)
										Nylon	Urethane	
4	1/4	KCE04-02	M12 x 1	17	14	40.5	14.7	13	18	2.6	2.6	32
6	1/4	KCE06-02	M14 x 1	17	17	42.7	14.7	15	19	6.8	6.8	36
8	3/8	KCE08-03	M16 x 1	19	19	49.4	15	17	21.5	16.2	13.1	42
10	3/8	KCE10-03	M20 x 1	22	24	53.9	14.2	21	24	25.6	20.4	79
12	3/8	KCE12-03	M22 x 1	24	27	56.1	13.7	23	25.5	35.4	30.4	105



Series KC

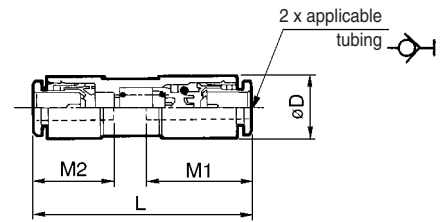
Straight Union: KCH



Applicable tubing O.D. (mm)	Model	Note) ϕD	L	M1	M2	Effective area (mm ²)		Mass (g)
						Nylon	Urethane	
4	KCH04-00	10.4	42.1	18	16	2.6	2.6	5
6	KCH06-00	12.8	45.8	19	17	6.8	6.8	7
8	KCH08-00	15.2	52.8	21.5	18.5	16.2	13.1	10
10	KCH10-00	18.5	59.8	24	21	25.6	20.4	18
12	KCH12-00	20.9	63.5	25.5	22	35.4	30.4	24



Note) ϕD : Max. diameter



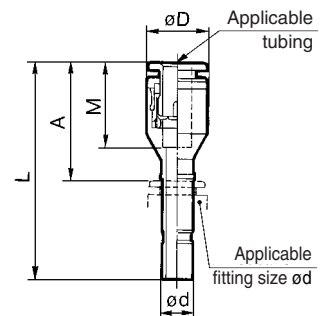
Straight Plug for Frequent Use: KCH



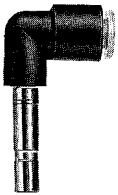
Applicable tubing O.D. (mm)	Model	Applicable fitting size ϕd	Note) ϕD	L	A	M	Effective area (mm ²)		Mass (g)
							Nylon	Urethane	
4	KCH04-99	4	9.8	40.6	22.6	16	5.6	4	5
6	KCH06-99	6	11.8	43.1	24.1	17	13.1	10.4	8
8	KCH08-99	8	14	46.7	25.2	18.5	26.1	18.0	11
10	KCH10-99	10	17	52.6	28.6	21	41.5	29.5	18
12	KCH12-99	12	19	54.9	29.4	22	58.3	46.1	24



Note) ϕD : Max. diameter

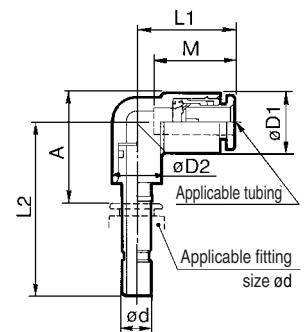


Elbow Plug for Frequent Use: KCL



Applicable tubing O.D. (mm)	Model	Applicable fitting size ϕd	Note) $\phi D1$	Note) $\phi D2$	L1	L2	A	M	Effective area (mm ²)		Mass (g)
									Nylon	Urethane	
4	KCL04-99	4	10.4	10	18	34.3	22.6	16	4.2	4.2	7
6	KCL06-99	6	12.8	10	20	36.5	24.1	17	11.4	9.0	8
8	KCL08-99	8	15.2	12	23	40.3	25.2	18.5	21.6	14.9	12
10	KCL10-99	10	18.5	17	26.5	44.3	28.6	21	35.2	25.0	25
12	KCL12-99	12	20.9	17	28.5	46.8	29.4	22	50.2	39.7	30

Note) $\phi D1, \phi D2$: Max. diameter





Series KC Specific Product Precautions

Be sure to read before handling.

Refer to front matters 58 and 59 for Safety Instructions and pages 13 to 16 for Fittings and Tubing Precautions.

No. of Insertions and Removals from Self-seal Fittings

⚠ Caution

- The number of insertions and removals as a rough guide is as follows.
 - Tube.....300 times
 - Metal stem.....1000 times

Self-seal fittings that have once been attached to connecting plugs cannot be used for tube connection. It cannot be secured and the fittings will be lurchd.

Installation of Self-seal Fittings

⚠ Caution

- The fitting should be installed (installation of R thread portion) by screwing with a spanner at the hexagonal portion of the body. The position of spanner should be a root as close as possible to R thread. Hex. across flats may be deformed, if using an improper wrench for hex. across flats.

Tightening the Thread Portion of an M5 Size Fittings

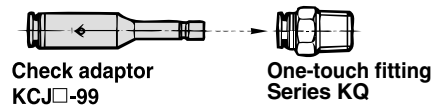
⚠ Caution

- First, tighten it by hand, then give it an additional 1/6 turn with the wrench. Excessive tightening may damage the threaded portion or deform the gasket to cause air leakage. Insufficient tightening may leave the thread loosened or cause air leakage.

Distinction of Plug and Applicable Fittings

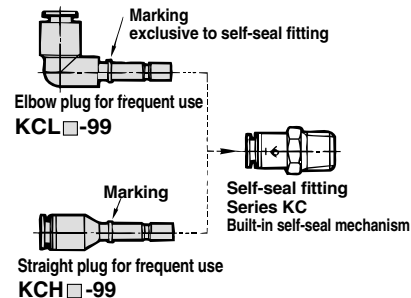
⚠ Caution

- The applicable fitting should be chosen depending on the style of plug.
 - **Check Adaptor**
- How to use: Use it for addition of self-seal mechanism to a standard One-touch fitting series KQ. Self-seal fittings with check adaptor are not available. It causes air leakage.



- Do not insert check adaptor into the port thread sizes M5 and M6 of KJ and KQ fittings. It cannot be secured and the fittings will shoot out.

- **Elbow plug for frequent use, straight plug for frequent use.**
- How to use: For use in the case of frequent tube installation and removal, tube cutting labor can be saved. These plugs are not available for a standard One-touch fittings Series KQ. If trying to install the plug into a KQ, plug will jump out of the fitting. Note the exclusive marking for self-seal fittings before use.



Tube Insertion and Removal under Pressurized Condition

⚠ Caution

- When inserting/removing the tubing is difficult under a pressurized condition, it should be inserted or removed by lowering the pressure or after fully exhausting.

K□
M□
H□
KK
D□
MS
LQ
MQR
T□