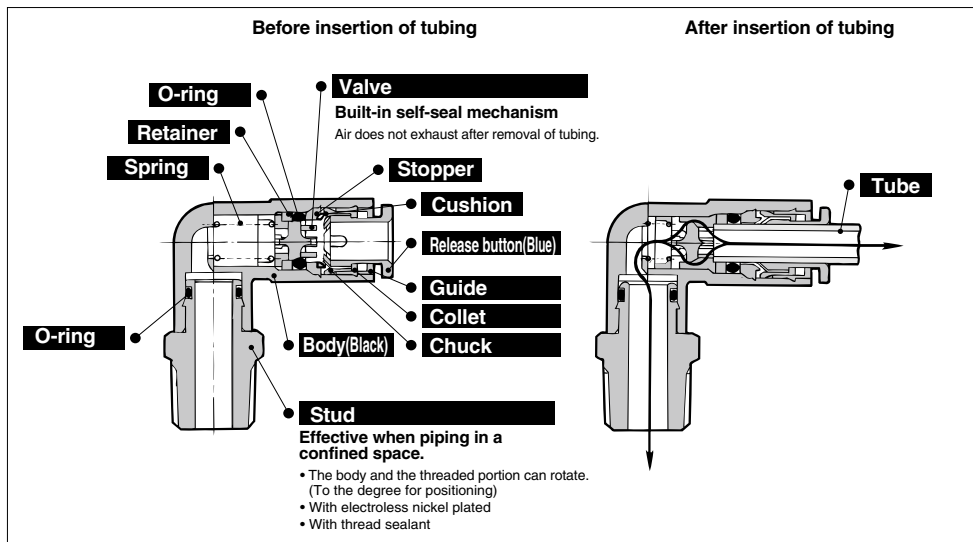


Self-seal Fittings Series KC

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

KQ2

KQB2

KS
KX

KM

KF

M

H/DL
L/LL

KC

KK

KK130

DM

KDM

KB

KR

KA

KQG2

KG

KFG2

MS

KKA

KP

LQ

MQR

T

Series KC

Model

Male connector

KCH P. 163



Use to pipe in the same direction from female thread.

Straight union

KCH P. 165



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

Male elbow

KCL P. 163



Use to pipe at right angles to female thread.

Straight plug for frequent use

KCH P. 165



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. 163



Use to connect tubes in both 90° directions.

Elbow plug for frequent use

KCL P. 165



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. 164



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

Check adaptor

KCJ P. 164



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

Bulkhead union

KCE P. 164



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

Bulkhead connector

KCE P. 164



Use to connect male thread and tube through a panel.

Male Connector: KCH

<M5>



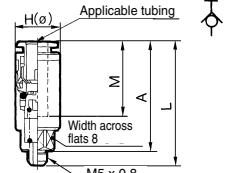
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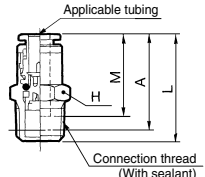
Applicable tubing O.D. (mm)	Connection thread R M	Model	H (width across flats)	L	A*	M	Effective area (mm ²)		Weight (g)
							Nylon	Urethane	
4	M5 x 0.8	KCH04-M5	9.8	30.8	27.3	18	2.1	2.1	8
	1/8	KCH04-01S	10	26.1	22.1	18	2.6	2.6	
6	M5 x 0.8	KCH06-M5	11.8	32.4	28.9	19.5	2.4	2.4	10
	1/8	KCH06-01S	12	37.4	33.4	19	6.8	6.8	
	1/4	KCH06-02S	14	28.9	22.9	19	6.8	6.8	
8	1/8	KCH08-01S	14	42.4	38.4	21.5	16.2	13.1	20
	1/4	KCH08-02S	14	45.7	39.7	21.5	16.2	13.1	
	3/8	KCH08-03S	17	34	27.5	24	25.6	20.4	
10	1/4	KCH10-02S	17	50.5	44.5	24	25.6	20.4	34
	3/8	KCH10-03S	17	51.5	45	24	25.6	20.4	
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	25.5	35.4	30.4	

* Reference dimensions after R thread installation.

<M5>



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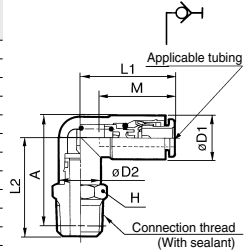


Male Elbow: KCL



Applicable tubing O.D. (mm)	Connection thread R M	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	A*	M	Effective area (mm ²)		Weight (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							2.1	2.1						
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	6.2		
	1/4	KCL06-02S	14							28.6	29.5		19	6.2	6.2		
8	1/8	KCL08-01S	14	15.2	14	34.1	26.2	30.7	21.5	13.0	10.5	24					
	1/4	KCL08-02S	17										30.6	32.7	24	19.5	16.5
	3/8	KCL08-03S	17										30	34.2	24	19.5	16.5
10	1/4	KCL10-02S	17	18.5	17	38	33.4	37.2	24	19.5	16.5	38					
	3/8	KCL10-03S	17										34.8	38.7	24	19.5	16.5
12	3/8	KCL12-03S	22	20.9	20.9	40.7	39.2	44.3	25.5	24.8	21.3	63					
	1/2	KCL12-04S	22										42.3	45.7	25.5	24.8	21.3

* Reference dimensions after R thread installation.
Note) $\phi D1$: Max. diameter

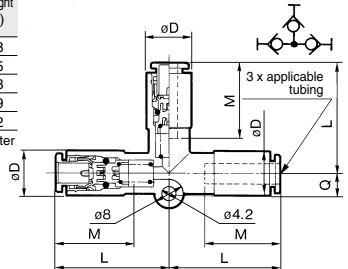


Union Tee: KCT



Applicable tubing O.D. (mm)	Model	Note) ϕD	L	Q	M	Effective area (mm ²)		Weight (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) ϕD : Max. diameter



- KQ2
- KQB2
- KS
- KX
- KM
- KF
- M
- H/DL
- L/L
- KC**
- KK
- KK130
- DM
- KDM
- KB
- KR
- KA
- KQG2
- KG
- KFG2
- MS
- KKA
- KP
- LQ
- MQR
- T

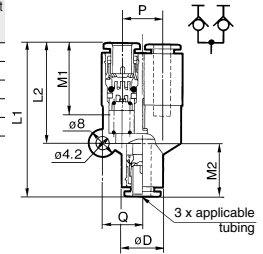
Series KC

Union "Y": KCU



Applicable tubing O.D. (mm)	Model	Note) øD	L1	L2	P	Q	M1	M2	Effective area (mm ²)		Weight (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) øD: Max. diameter

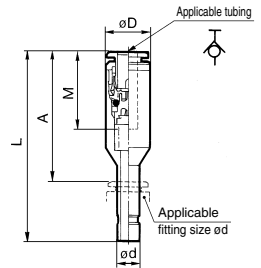


Check Adaptor: KCJ



Applicable tubing O.D. (mm)	Model	Applicable fitting size ød	Note) øD	L	A	M	Effective area (mm ²)		Weight (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

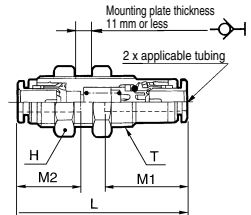
Note) øD: Max. diameter



Bulkhead Union: KCE



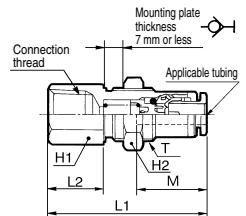
Applicable tubing O.D. (mm)	Model	T (M)	H (width across flats)	L	Mounting hole	M1	M2	Effective area (mm ²)		Weight (g)
								Nylon	Urethane	
4	KCE04-00	M12 x 1	14	42	13	18	16	2.6	2.6	21
6	KCE06-00	M14 x 1	17	45.5	15	19	17	6.8	6.8	30
8	KCE08-00	M16 x 1	19	52.5	17	21.5	18.5	16.2	13.1	39
10	KCE10-00	M20 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)		Weight (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

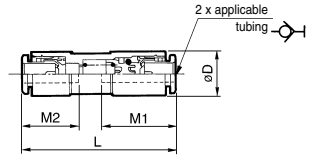


Straight Union: KCH



Applicable tubing O.D. (mm)	Model	Note) ϕD	L	M1	M2	Effective area (mm ²)		Weight (g)
						Nylon	Urethane	
						4	KCH04-00	
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

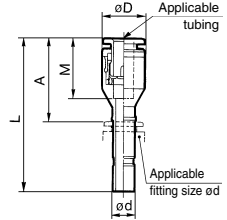


Straight Plug for Frequent Use:KCH



Applicable tubing O.D. (mm)	Model	Applicable fitting size ϕd	Note) ϕD	L	A	M	Effective area (mm ²)		Weight (g)
							Nylon	Urethane	
							4	KCH04-99	
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

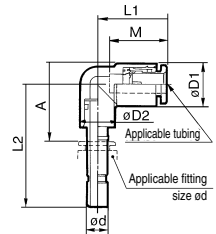


Elbow Plug for Frequent Use: KCL



Applicable tubing O.D. (mm)	Model	Applicable fitting size ϕd	Note) $\phi D1$	Note) $\phi D2$	L1	L2	A	M	Effective area (mm ²)		Weight (g)
									Nylon	Urethane	
									4	KCL04-99	
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



KQ2

KQB2

KS
KX

KM

KF

M

H/DL
L/LL

KC

KK

KK130

DM

KDM

KB

KR

KA

KQG2

KG

KFG2

MS

KKA

KP

LQ

MQR

T



Series KC/Specific Product Precautions

Be sure to read before handling.
Refer to front matter 56 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 lurches.

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

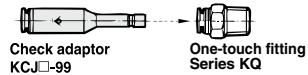
⚠ Caution

- 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**
 1. 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.

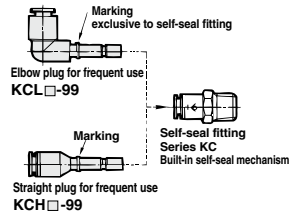


- Do not insert check adaptor into the port thread sizes M5 and M6 of KJ and KQ fittings.
It cannot be secured and the fittings will shoot out.

- **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.