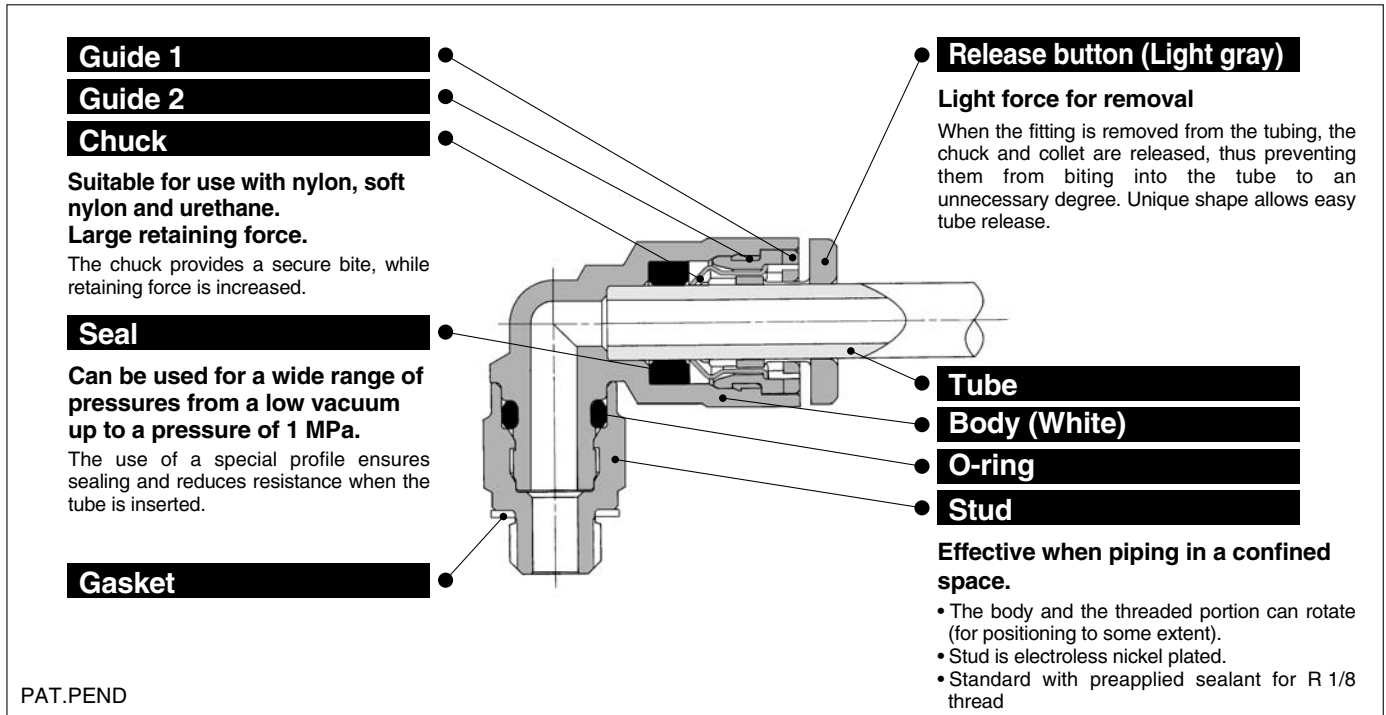


Miniature One-touch Fittings

One-touch Mini

Series KJ

Applicable Tubing: $\varnothing 2$, $\varnothing 3.2$, $\varnothing 4$, $\varnothing 6$
 Connection Thread: M3, M5, R 1/8



Optimum piping in less space with 20% reduction of the outside diameter.

Thread with sealant is standard.

Copper-free specifications (With electroless nickel plated.)

Possible to use in vacuum to -100 kPa.



Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon ⁽¹⁾ , Polyurethane
Tubing O.D.	$\varnothing 2$, $\varnothing 3.2$, $\varnothing 4$, $\varnothing 6$

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)
Thread	Mounting section	JIS B0203 (Taper thread for piping), JIS B0205 (Metric coarse thread)
	Nut section	JIS B0205 (Metric fine thread)
Seal on the threads (Standard)		With sealant
Copper-free (Standard)		Brass parts are all electroless nickel plated.



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	Stainless steel 303, C3604, PBT
Stud	C3604 (Thread portion)
Chuck, Guide 2	Stainless steel 304
Release button	POM
Seal, O-ring	NBR
Gasket	PVC, Stainless steel 304, NBR
Guide, Guide 1	PBT
Guide for $\varnothing 2$	C3604



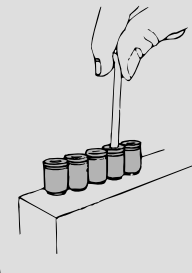
Made to Order
 (Refer to page 26 for details.)

Model

Hex. socket head male connector



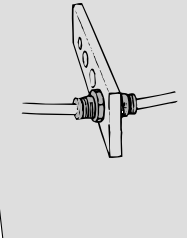
Internal hex. allows thread connection by using an allen wrench for confined spaces.



Bulkhead union



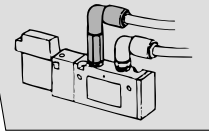
Use to connect tubes through a panel.



Extended male elbow



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



Male connector



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

Plug-in elbow



Use to change by 90° in a tube fetching direction from One-touch fittings.

Union "Y"



Use to branch line in the same direction.

Female connector



Use to pipe from male thread such as pressure gauge.

Reducer elbow



Use to change by 90° in a tube fetching direction from One-touch fittings and to size down.

Different dia. union "Y"



Use to branch line with size down in the same direction.

Straight union



Use to connect tubes in the same direction.

Male branch tee



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

Plug-in "Y"



Use to branch line in the same direction from One-touch fittings.

Different diameter straight



Use to connect different sized tubes.

Union tee



Use to connect tubes in both 90° directions.

Different diameter plug-in "Y"



Use to branch line with size down in the same direction from One-touch fittings.

Male elbow



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

Different diameter tee



Use to connect tubes with size down in both 90° directions.

Branch "Y"



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

Union elbow



Use to connect tubes at right angles.

Male run tee



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

Plug-in reducer



Use to change size of One-touch fittings.

Plug



Use to plug unused One-touch fittings.

⚠ 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.

⚠ Caution

- Please do not attach metal rods or metal pipes. Metal rods or pipes cannot be secured and the fittings will shoot out. Also, if tubes are attached after metal rods or pipes have been attached, the tubes will not hold and may come loose.

Tightening of KJ□02-M3 screw parts

⚠ Caution

- After tightening by hand, tighten further about 1/6 of a turn with a tightening tool.

Installation and Removal of One-touch Mini Fittings

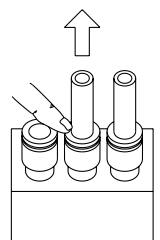
⚠ Caution

Installation of tubing

- Cut the tube perpendicularly, using caution not to damage its surface. (Use tube cutter TK-1, 2 or 3. Do not cut the tube with cutting pliers, nippers, scissors, etc.)
- Grasp the tube, then slowly push it until it comes to a stop.
- Then, pull it back gently to make sure that it does not come out.

Removal of tubing

- While pushing down on the rim of the release button, pull out the tube in the direction of the arrow (see illustration.)
 The release button can also be pushed down with a flat-head screwdriver. However, be careful not to break or damage the release button.
- To reuse the released tube, cut off the damaged portion of the tube.



Series KJ

Male Connector: KJH

<M3, M5>

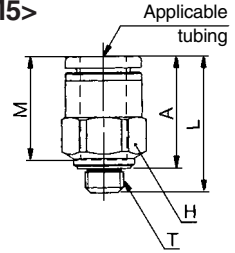


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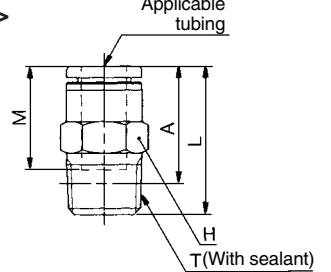
Applicable tubing O.D. (mm)	Connection thread T	Model	H (width across flats)	L	A*	M	Effective area (mm ²)		Mass (g)
							Nylon	Urethane	
2	M3 x 0.5	KJH02-M3	5.5	12.5	10	8.8	—	0.9	1.1
	M5 x 0.8	KJH02-M5	7	11.7	8.7		—	0.9	1.9
3.2	M3 x 0.5	KJH23-M3	7	16.3	13.7	12.7	0.9	0.9	1.6
	M5 x 0.8	KJH23-M5		16.7	13.6		3	2.5	2
4	R 1/8	KJH23-01S	10	12.9	9.8	12.4	—	—	4.7
	M3 x 0.5	KJH04-M3	8	16.3	13.7	12.7	0.9	0.9	1.9
	M5 x 0.8	KJH04-M5		17	13.9		4	4	2.4
R 1/8	KJH04-01S	10	13.9	10.8	12.7	—	—	4.6	
6	M5 x 0.8	KJH06-M5	10	17.8	14.7	13.5	4	4	3.3
	R 1/8	KJH06-01S		18.5	15.4		10	10	5.2

* Reference dimensions after R thread installation.

<M3, M5>



<R 1/8>



Hexagon Socket Head Male Connector: KJS

<M3, M5>



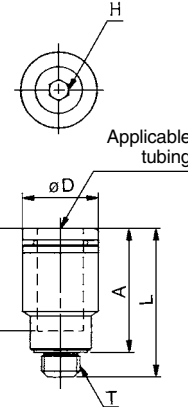
<R 1/8>

Applicable tubing O.D. (mm)	Connection thread T	Model	H (width across flats)	Note) øD	L	A*	M	Effective area (mm ²)		Mass (g)
								Nylon	Urethane	
2	M3 x 0.5	KJS02-M3	1.5	5.5	12.5	10	8.8	—	0.9	1.1
3.2	M3 x 0.5	KJS23-M3	1.5	7	16.3	13.7	12.7	1.4	1.4	1.3
	M5 x 0.8	KJS23-M5	2		19.7	16.6		2.5	2.5	2.8
4	M3 x 0.5	KJS04-M3	1.5	8	16.3	13.7	12.7	1.4	1.4	1.6
	M5 x 0.8	KJS04-M5	2.5		18.7	15.6		4	4	2.7
	R 1/8	KJS04-01S	3		9.8	19.7		15.7	—	—
6	M5 x 0.8	KJS06-M5	2.5	10	19.5	16.4	13.5	4	4	3.3
	R 1/8	KJS06-01S	4		20	16		10	10	5.2

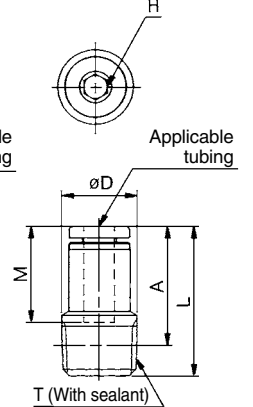
* Reference dimensions after R thread installation.
Note) øD: Max. diameter



<M3, M5>



<R 1/8>



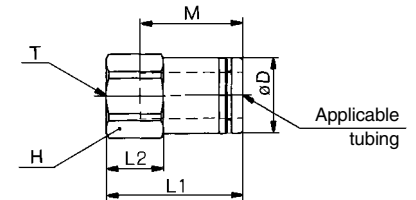
Female Connector: KJF



Applicable tubing O.D. (mm)	Connection thread T	Model	H (width across flats)	Note) øD	L1	L2	M	Effective area (mm ²)		Mass (g)
								Nylon	Urethane	
3.2	M3 x 0.5	KJF23-M3	7	7	16.5	6.8	12.7	3	2.5	2.6
	M5 x 0.8	KJF23-M5			18.8	7.9				2.8
4	M3 x 0.5	KJF04-M3	8	8	16.1	6.4	12.7	4	4	3.2
	M5 x 0.8	KJF04-M5			18.7	7.8				3.8
6	M5 x 0.8	KJF06-M5	10	10	18	7.5	13.5	10	10	5.3



Note) øD: Max. diameter



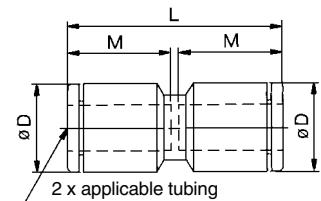
Straight Union: KJH




Applicable tubing O.D. (mm)	Model	Note) øD	L	M	Effective area (mm ²)		Mass (g)
					Nylon	Urethane	
2	KJH02-00	6	17.8	8.8	—	0.8	1.0
3.2	KJH23-00	8.4	26.3	12.7	3	2.5	1.4
4	KJH04-00	9.3	26.3	12.7	4	4	1.7
6	KJH06-00	11.6	28	13.5	10	10	2.5



Note) øD: Max. diameter

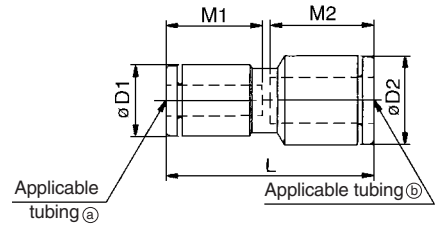


Different Diameter Straight: KJH



Applicable tubing O.D. (mm)	Model	Note) $\phi D1$	Note) $\phi D2$	L	M1	M2	Effective area (mm ²)		Mass (g)
							Nylon	Urethane	
2	3.2 KJH02-23	8.4	8.4	26.6	8.8	12.7	—	0.9	2.4
	4 KJH02-04	9.3	9.3						3.2
3.2	4 KJH23-04	8.4	9.3	26.3	12.7	12.7	3	2.5	1.6
	6 KJH23-06		11.6						27.2
4	6 KJH04-06	9.3	11.6	27.2	12.7	13.5	4	4	2.2

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



Male Elbow: KJL

<M3, M5>



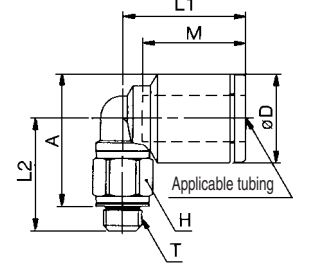
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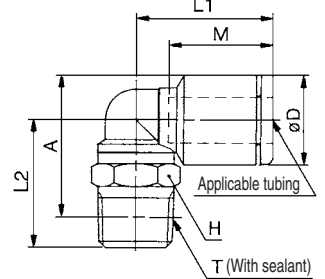
Applicable tubing O.D. (mm)	Connection threads T	Model	H (width across flats)	Note) ϕD	L1	L2	A*	M	Effective area (mm ²)		Mass (g)
									Nylon	Urethane	
2	M3 x 0.5	KJL02-M3	5.5	6	9.5	11.6	12.1	8.8	—	0.8	1.4
	M5 x 0.8	KJL02-M5	7								2.4
3.2	M3 x 0.5	KJL23-M3	7	8.4	15.3	12.5	14.1	12.7	0.8	0.8	2.1
	M5 x 0.8	KJL23-M5				13.2	14.3				2.5
	R 1/8	KJL23-01S	10			14.3	15.4		2.6	2.2	6.7
	M3 x 0.5	KJL04-M3	7			9.3	15.6		13	15.1	12.7
M5 x 0.8	KJL04-M5	13.7		15.3	3.5			3.5	2.7		
R 1/8	KJL04-01S	10	14.8	16.4	9			9	6.8		
M5 x 0.8	KJL06-M5	7	11.6	16.1	14.7			17.4	13.5	3.5	
R 1/8	KJL06-01S	10				17.8	15.8				18.5

* Reference dimensions after R thread installation.
Note) ϕD : Max. diameter


<M3, M5>



<R 1/8>

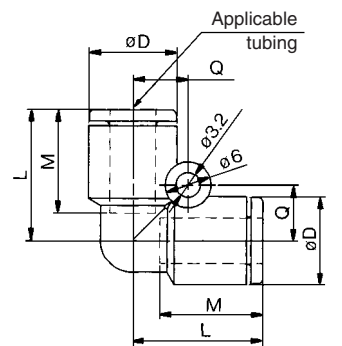


Union Elbow: KJL




Applicable tubing O.D. (mm)	Model	Note) ϕD	L	Q	M	Effective area (mm ²)		Mass (g)
						Nylon	Urethane	
3.2	KJL23-00	8.4	15	5.8	12.7	2.6	2.2	1.6
4	KJL04-00	9.3	15.8	6.3	12.7	3.5	3.5	2
6	KJL06-00	11.6	17.1	7.3	13.5	9	9	3.1

Note) ϕD : Max. diameter

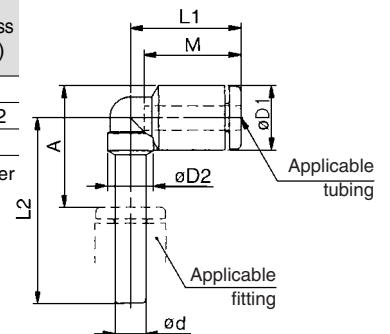


Plug-in Elbow: KJL



Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Effective area (mm ²)		Mass (g)
									Nylon	Urethane	
3.2	3.2	KJL23-99	8.4	6	14.5	23.8	15.3	12.7	2.6	2.2	1
4	4	KJL04-99	9.3	6	15.6	24.7	16.7	12.7	3.5	3.5	1.2
6	6	KJL06-99	11.6	7	16.3	26.8	19.1	13.5	9	9	2

Note) $\phi D1$: Max. diameter



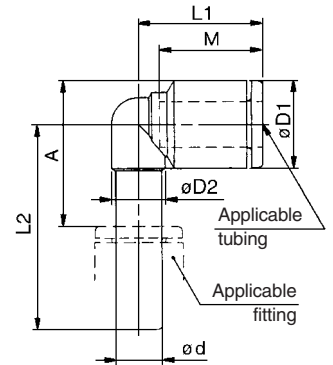
Series KJ

Reducer Elbow: KJL



Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Effective area (mm ²)		Mass (g)
									Nylon	Urethane	
3.2	4	KJL23-04	8.4	6	14.5	24.3	15.8	12.7	2.6	2.2	1.1
	6	KJL23-06				25.3	16		1.2		
4	6	KJL04-06	9.3	6	15.6	25.7	16.9	12.7	3.5	3.5	1.4

Note) $\phi D1$: Max. diameter



Extended Male Elbow: KJW

<M3, M5>



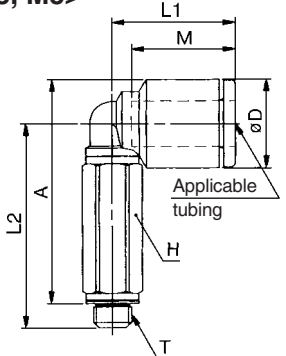
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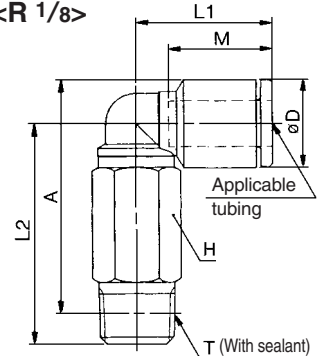
Applicable tubing O.D. (mm)	Connection thread T	Model	H (width across flats)	Note) ϕD	L1	L2	A*	M	Effective area (mm ²)		Mass (g)
									Nylon	Urethane	
2	M3 x 0.5	KJW02-M3	5.5	6	9.5	18.6	19.1	8.8	—	0.8	2.6
	M5 x 0.8	KJW02-M5	7			19.1			4.5		
3.2	M3 x 0.5	KJW23-M3	7	8.4	15.3	22.5	24.1	12.7	0.8	0.8	5
	M5 x 0.8	KJW23-M5	7			25.2	26.3		2.6	2.2	6.2
	R 1/8	KJW23-01S	10			24.3	25.4		13.4		
4	M3 x 0.5	KJW04-M3	7	9.3	15.6	23	25.1	12.7	0.8	0.8	5.1
	M5 x 0.8	KJW04-M5	7			25.7	27.3		3.5	3.5	6.4
	R 1/8	KJW04-01S	10			24.8	26.4		13.6		
6	M5 x 0.8	KJW06-M5	7	11.6	17.8	16.1	26.7	13.5	3.5	3.5	6.9
	R 1/8	KJW06-01S	10			17.8	27.8		30.5	9	9

* Reference dimensions after R thread installation.
Note) ϕD : Max. diameter

<M3, M5>



<R 1/8>



Male Branch Tee: KJT

<M3, M5>



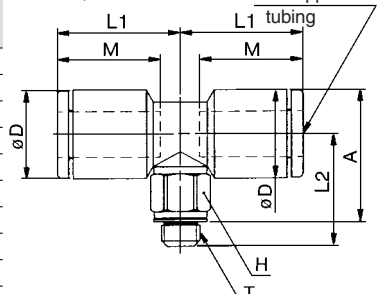
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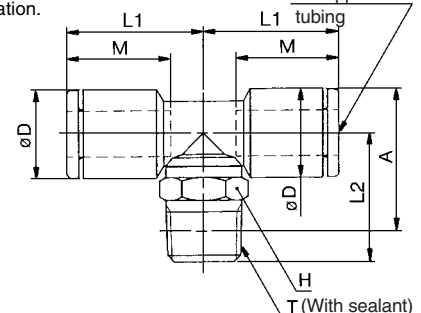
Applicable tubing O.D. (mm)	Connection thread T	Model	H (width across flats)	Note) ϕD	L1	L2	A*	M	Effective area (mm ²)		Mass (g)
									Nylon	Urethane	
2	M3 x 0.5	KJT02-M3	5.5	6	9.5	11.6	12.1	8.8	—	1.1	1.8
	M5 x 0.8	KJT02-M5	7			12.1			2.8		
3.2	M3 x 0.5	KJT23-M3	7	8.4	15.3	12.5	14.1	12.7	0.9	0.9	2.8
	M5 x 0.8	KJT23-M5	7			13.2	14.3		3.2	2.7	3.2
	R 1/8	KJT23-01S	10			14.3	15.4		7.4		
4	M3 x 0.5	KJT04-M3	7	9.3	15.6	13	15.1	12.7	0.9	0.9	3.1
	M5 x 0.8	KJT04-M5	7			13.7	15.3		4.5	4.5	3.5
	R 1/8	KJT04-01S	10			14.8	16.4		7.7		
6	M5 x 0.8	KJT06-M5	7	11.6	17.8	14.7	17.4	13.5	4.5	4.5	4.4
	R 1/8	KJT06-01S	10			17.8	15.8		18.5	11	11

* Reference dimensions after R thread installation.
Note) ϕD : Max. diameter

<M3, M5>



<R 1/8>

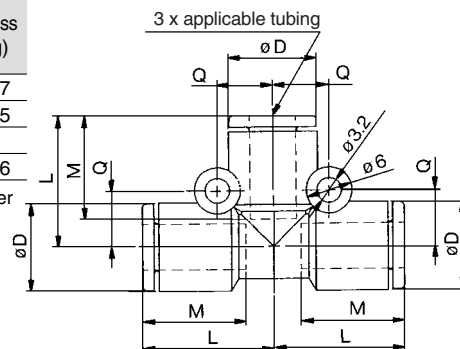


Union Tee: KJT



Applicable tubing O.D. (mm)	Model	Note) ϕD	L	Q	M	Effective area (mm ²)		Mass (g)
						Nylon	Urethane	
2	KJT02-00	6	10	4.9	8.8	—	0.9	1.7
3.2	KJT23-00	8.4	15	5.8	12.7	3.2	2.7	2.5
4	KJT04-00	9.3	15.8	6.3	12.7	4.5	4.5	3
6	KJT06-00	11.6	17.1	7.3	13.5	11	11	4.6

Note) ϕD : Max. diameter

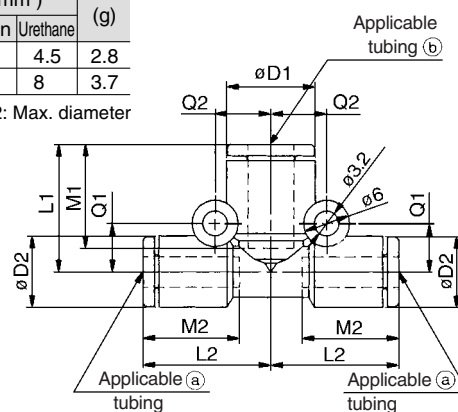


Different Diameter Tee: KJT



Applicable tubing O.D. (mm)		Model	Note) $\phi D1$	Note) $\phi D2$	L1	L2	Q1	Q2	M1	M2	Effective area (mm ²)		Mass (g)
(a)	(b)										Nylon	Urethane	
3.2	4	KJT23-04	9.3	8.4	15.3	15.8	5.8	6.3	12.7	12.7	4.5	4.5	2.8
4	6	KJT04-06	11.6	9.3	16.6	16.8	6.3	7.3	13.5	12.7	8	8	3.7

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



Male Run Tee: KJY

<M3, M5>



<R 1/8>

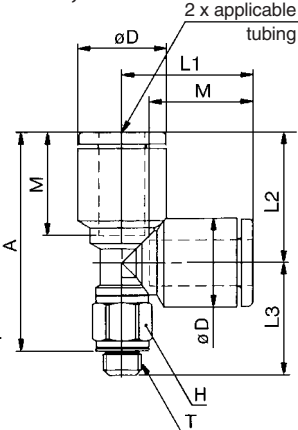


Applicable tubing O.D. (mm)	Connection thread T	Model	H (width across flats)	Note) ϕD	L1	L2	L3	A*	M	Effective area (mm ²)		Mass (g)
										Nylon	Urethane	
2	M3 x 0.5	KJY02-M3	5.5	6	10	10	11.6	19.1	8.8	—	1.1	1.9
	M5 x 0.8	KJY02-M5	7							—	1.3	2.9
3.2	M3 x 0.5	KJY23-M3	7	8.4	15.4	14.8	12.5	24.7	12.7	0.9	0.9	2.8
	M5 x 0.8	KJY23-M5					13.2	24.9		3.2	2.7	3.2
4	R 1/8	KJY23-01S	10	9.3	15.6	14.8	14.3	26	12.7	3.2	2.7	7.4
	M3 x 0.5	KJY04-M3	7				13	25.2		0.9	0.9	3.1
6	M5 x 0.8	KJY04-M5	7	11.6	17.1	17.1	13.7	25.4	13.5	4.5	4.5	3.5
	R 1/8	KJY04-01S	10				14.8	26.5		4.5	4.5	7.7
6	M5 x 0.8	KJY06-M5	7	11.6	17.1	17.1	14.7	28.7	13.5	4.5	4.5	4.5
	R 1/8	KJY06-01S	10				17.5	16.6		15.8	29.3	11

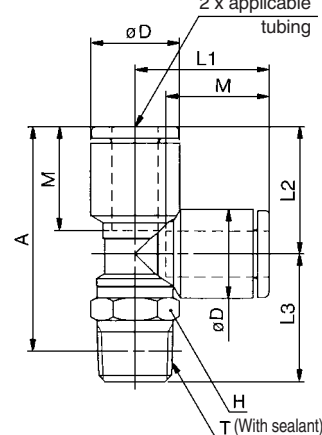
* Reference dimensions after R thread installation.
Note) ϕD : Max. diameter



<M3, M5>



<R 1/8>



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

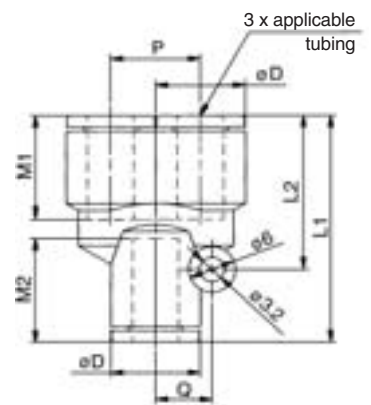
Series KJ

Union "Y": KJU



Applicable tubing O.D. (mm)	Model	Note) ϕD	L1	L2	P	Q	M1	M2	Effective area (mm ²)		Mass (g)
									Nylon	Urethane	
2	KJU02-00	6	20.1	13.4	6.5	4.6	1.8	1.8	—	0.9	1.8
3.2	KJU23-00	8.4	28.5	19	8.4	5.8	12.7	12.9	3.2	2.7	2.6
4	KJU04-00	9.3	27.9	18.3	9.3	6.3	12.7	12.9	4.5	4.5	3
6	KJU06-00	11.6	31.2	21.6	11.6	7.3	13.5	13.7	11	11	4.7

Note) ϕD : Max. diameter

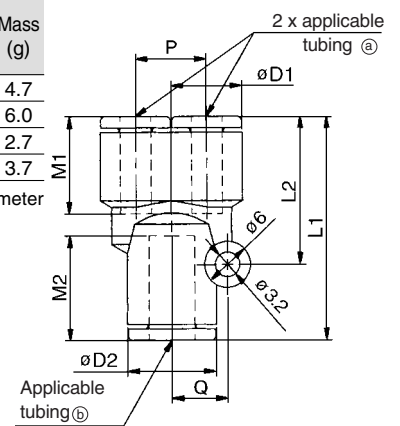


Different Diameter Union "Y": KJU



Applicable tubing O.D. (mm)		Model	Note) $\phi D1$	Note) $\phi D2$	L1	L2	P	Q	M1	M2	Effective area (mm ²)		Mass (g)
a	b										Nylon	Urethane	
2	3.2	KJU02-23	6	6	28.8	19.2	8.4	5.8	8.8	12.7	—	1.5	4.7
	4	KJU02-04		7.8	28.2	18.5	9.3	6.3			—	1.6	6.0
3.2	4	KJU23-04	8.4	9.3	27.5	18.3	8.4	6.3	12.7	12.9	3.2	2.7	2.7
4	6	KJU04-06	9.3	11.6	29.2	19.3	9.3	7.3	12.7	13.7	4.5	4.5	3.7

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

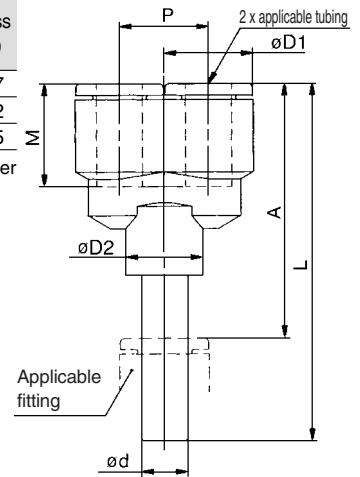


Plug-in "Y": KJU



Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	Note) $\phi D1$	$\phi D2$	L	P	A	M	Effective area (mm ²)		Mass (g)
									Nylon	Urethane	
3.2	3.2	KJU23-99	8.4	10	43.5	8.4	34.1	12.7	3.2	2.7	2.7
4	4	KJU04-99	9.3	10	44.7	9.3	35.3	12.7	4.5	4.5	3.2
6	6	KJU06-99	11.6	10	47.8	11.6	37.6	13.5	11	11	4.5

Note) $\phi D1$: Max. diameter

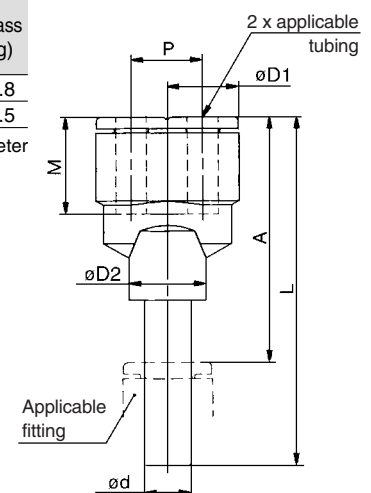


Different Diameter Plug-in "Y": KJX



Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	Note) $\phi D1$	$\phi D2$	L	P	A	M	Effective area (mm ²)		Mass (g)
									Nylon	Urethane	
3.2	4	KJX23-04	8.4	10	44	8.4	34.6	12.7	4.5	4.5	2.8
4	6	KJX04-06	9.3	10	45.7	9.3	35.5	12.7	8	8	3.5

Note) $\phi D1$: Max. diameter



Branch: KJU

<M5>

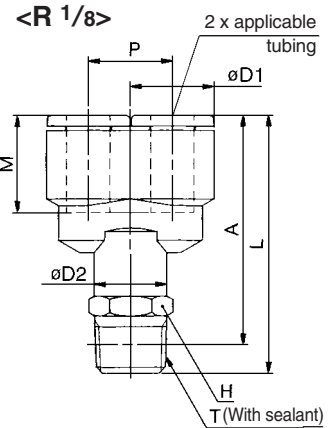
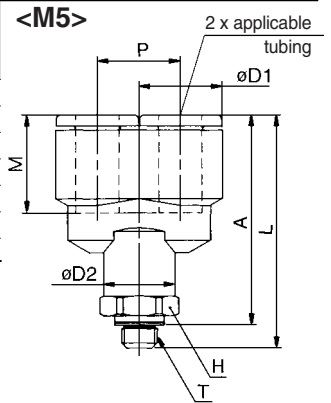


<R 1/8>



Applicable tubing O.D. (mm)	Connection thread T	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L	P	A*	M	Effective area (mm ²)		Mass (g)
										Nylon	Urethane	
3.2	M5 x 0.8	KJU23-M5	10	8.4	10	30.6	8.4	27.5	12.7	2.2	2.2	5.9
	R 1/8	KJU23-01S								3.2	2.7	8.3
4	M5 x 0.8	KJU04-M5	10	9.3	10	31.3	9.3	28.2	12.7	2.2	2.2	6.4
	R 1/8	KJU04-01S								30.8	4.5	8.8
6	M5 x 0.8	KJU06-M5	10	11.6	10	33.4	11.6	30.3	13.5	2.2	2.2	7.4
	R 1/8	KJU06-01S								36	11	9.9

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



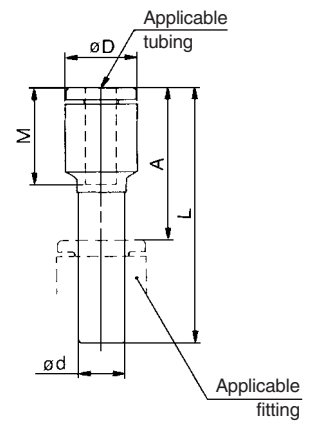
- K
- M
- H
- KK
- D
- MS
- LQ
- MQR
- T

Plug-in Reducer: KJR



Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	Note) ϕD	L	A	M	Effective area (mm ²)		Mass (g)
							Nylon	Urethane	
2	4	KJR02-04	6	28.3	15.6	8.8	—	0.9	0.7
3.2	4	KJR23-04	8.4	32	19.3	12.7	3	2.5	0.9
	6	KJR23-06		33	19.5				
4	6	KJR04-06	9.3	33.5	20	12.7	4	4	1.3

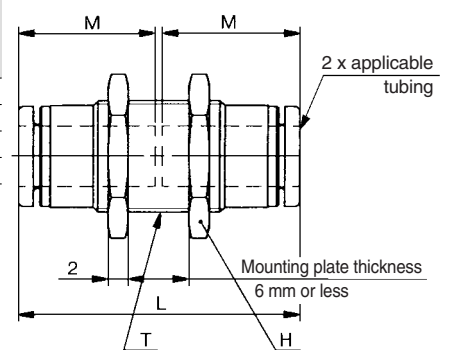
Note) ϕD : Max. diameter



Bulkhead Union: KJE



Applicable tubing O.D. (mm)	Model	T	H (width across flats)	L	Mounting hole	M	Effective area (mm ²)		Mass (g)
							Nylon	Urethane	
2	KJE02-00	M7 x 0.75	9	18.1	8	8.8	—	0.8	3.7
3.2	KJE23-00	M8 x 0.75	10	26	9	12.7	3	2.5	4.6
4	KJE04-00	M9 x 0.75	11	26	10	12.7	4	4	5.6
6	KJE06-00	M11 x 0.75	14	27.7	12	13.5	10	10	8.5

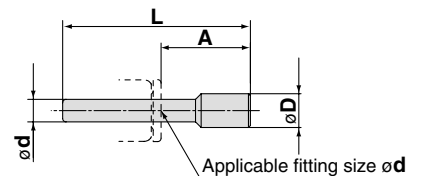


Plug: KJP



Applicable tubing O.D. (mm)	Model	ϕD	L	A	Mass (g)
2	KJP-02	3	17	8.2	0.1

* Use KQ2P for $\phi 3.2$, 4 and 6.





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
X39	Grease-free Rubber material: NBR (With fluorine coating) Release button color: Light blue Clean (Copper-free, air blow, double package)
X94	Grease-free Rubber material: FKM (With fluorine coating) Release button color: Light blue

Suffix “-X17” to the end of part number.
Example) **KJH06-01S-X17**

2 Other Specifications

Symbol	Specifications
X12	Lubricant: White Vaseline Release button color: White
X34	Rubber material: FKM
X41	With fixed throttle <small>Note)</small>

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	Material
Gasket	M-3G	M3	PVC
	IN-233-706	M3	Stainless steel 304, NBR
	M-5G2	M5	Stainless steel 304, NBR

Description	Part no.	Applicable model
Pipe nut	KJ02-P01	KJE02-00
	KJ23-P01	KJE23-00
	KJ04-P01	KJE04-00
	KJ06-P01	KJE06-00