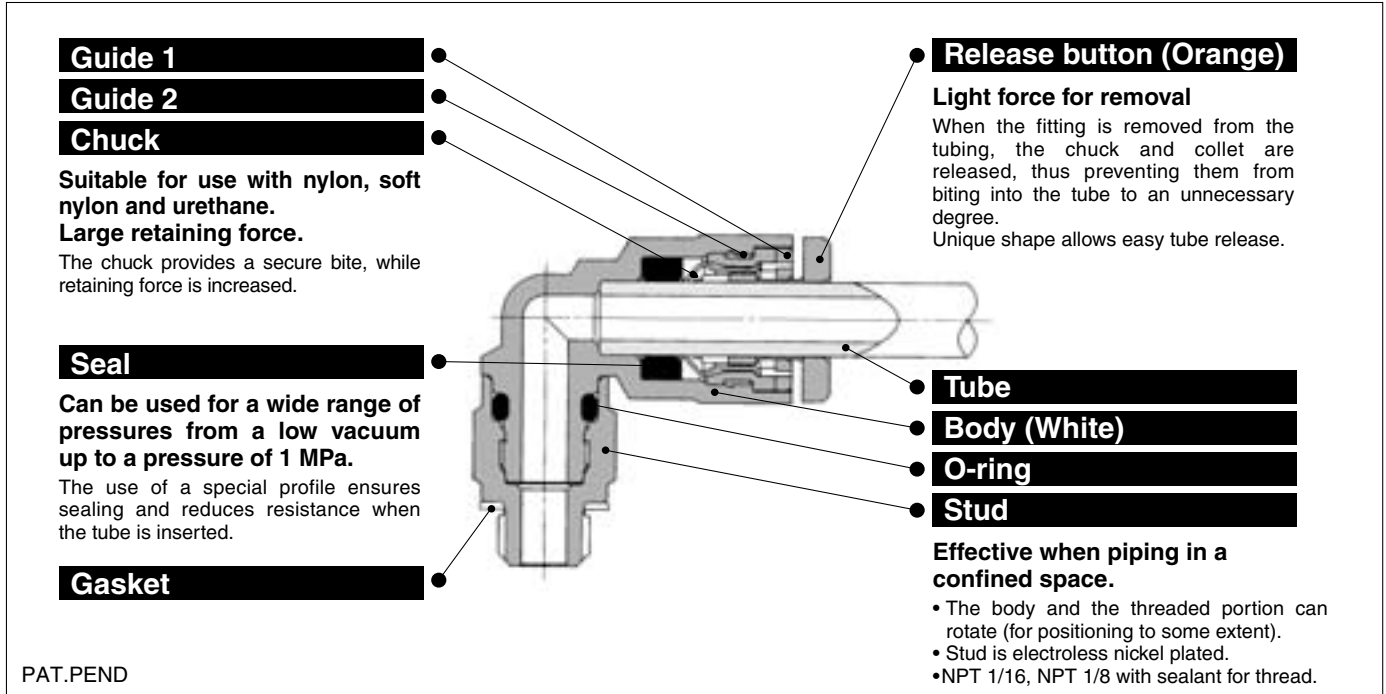


Inch-size Miniature One-touch Fittings

Series KJ

Applicable Tubing : $\varnothing 1/8''$, $\varnothing 5/32''$, $\varnothing 1/4''$

Connection Thread : 10-32 UNF, NPT 1/16, NPT 1/8



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

Thread with sealant is standard.

Copper-free specifications (Electroless nickel plated)

Possible to use from vacuum -100 kPa



Made to Order
(Refer to page 36 for details.)

Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon ⁽¹⁾ , Polyurethane
Tubing O.D.	$\varnothing 1/8$, $\varnothing 5/32$, $\varnothing 1/4$



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	ANSI/ASME B1.20.1 (NTP thread), JIS B0208 (UNF thread)
	Nut section	JIS B0208 (UNF 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	Stainless steel 304, NBR
Guide, Guide 1	PBT

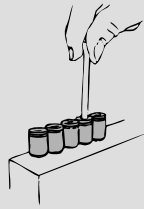
Model

Hex. socket head male connector

KJS P.30



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

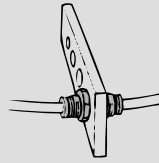


Bulkhead union

KJE P.35



Use to connect tubes through a panel.

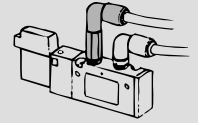


Extended male elbow

KJW P.32



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.



Male connector

KJH P.30



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

Plug-in elbow

KJL P.31



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

Union "Y"

KJU P.34



Use to branch line in the same direction.

Female connector

KJF P.30



Use to pipe from male thread such as pressure gauge.

Reducer elbow

KJL P.32



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

Different dia. union "Y"

KJU P.34



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

Straight union

KJH P.30



Use to connect tubes in the same direction.

Male branch tee

KJT P.32



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

Plug-in "Y"

KJU P.34



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

Different diameter straight

KJH P.31



Use to connect different sized tubes.

Union tee

KJT P.33



Use to connect tubes in both 90° directions.

Different diameter plug-in "Y"

KJX P.34



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

Male elbow

KJL P.31



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

Different diameter tee

KJT P.33



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

Branch "Y"

KJU P.35



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

Union elbow

KJL P.31



Use to connect tubes at right angles.

Male run tee

KJY P.33



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

Plug-in reducer

KJR P.35



Use to size down 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

1. 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.

Installation and Removal of One-touch Mini Fittings

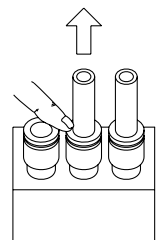
⚠ Caution

Installing of tube

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

Removing of tube

1. 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.
2. To reuse the released tube, cut off the damaged portion of the tube.



Series KJ

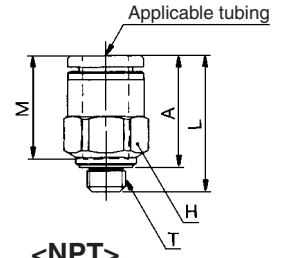
Male Connector: KJH

<10-32 UNF>



Applicable tubing O.D. (inch)	Connection thread (T) UNF NPT	Model	H (Width across flats)	L	A*	M	Max. port size	Mass (g)
1/8	10-32UNF	KJH01-32	7	16.7	13.6	12.7	2.3	2
	1/16	KJH01-33S	9.5	18.8	14.8		2.5	5
	1/8	KJH01-34S	11.11	12.9	9.8			4.7
5/32	10-32UNF	KJH03-32	8	17	13.9	12.7	2.3	2.4
	1/16	KJH03-33S	9.5	19.5	15.5		3	4.7
	1/8	KJH03-34S	11.11	13.9	10.8			4.6
1/4	10-32UNF	KJH07-32	11.11	18.4	15.3	13.6	2.3	3.3
	1/16	KJH07-33S		22	18		3.5	6.2
	1/8	KJH07-34S		17.5	14.4		4.6	5.2

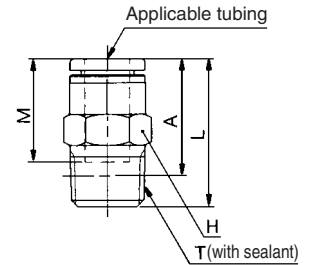
<10-32 UNF>



<NPT>



<NPT>



* Reference dimensions after NPT thread installation.

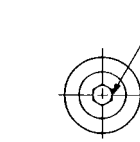
Hexagon Socket Head Male Connector: KJS

<10-32 UNF>

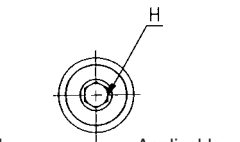


Applicable tubing O.D. (inch)	Connection thread (T) UNF NPT	Model	H (Width across flats)	Note) ϕD	L	A*	M	Min. port size	Mass (g)
1/8	10-32UNF	KJS01-32	2	7	19.7	16.6	12.7	2	2.8
5/32	10-32UNF	KJS03-32	2.5	8	18.7	15.6	12.7	2.5	2.7
	1/16	KJS03-33S	2.78		19.6	15.6		2.8	4
	1/8	KJS03-34S			10.3	5.4			
1/4	10-32UNF	KJS07-32	2.5	10.3	19.6	16.5	13.6	2.5	3.3
	1/16	KJS07-33S	3.57		21.1	17.1		3.6	5.8
	1/8	KJS07-34S	4.76		20.1	16.1		4.8	5.2

<10-32 UNF>



<NPT>



<NPT>



* Reference dimensions after NPT thread installation.

Note) ϕD : Max. diameter

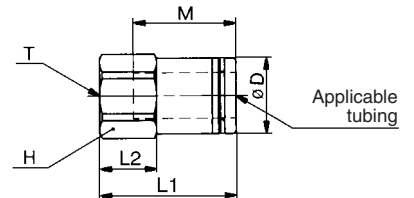


Female Connector: KJF



Applicable tubing O.D. (inch)	Connection thread (T) UNF	Model	H (Width across flats)	Note) ϕD	L1	L2	M	Min. port size	Mass (g)
1/8	10-32UNF	KJF01-32	7	6.9	18.8	7.9	12.7	2.5	2.8
5/32	10-32UNF	KJF03-32	8	7.9	18.7	7.8	12.7	3	3.8
1/4	10-32UNF	KJF07-32	11.11	10.3	18	7.5	13.6	4	5.3

Note) ϕD : Max. diameter

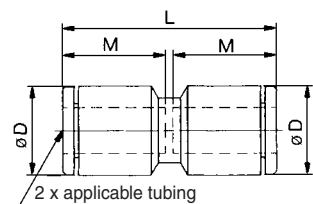


Straight Union: KJH



Applicable tubing O.D. (inch)	Model	Note) ϕD	L	M	Min. port size	Mass (g)
1/8	KJH01-00	8.4	26.3	12.7	2.5	1.4
5/32	KJH03-00	9.3	26.3	12.7	3	1.7
1/4	KJH07-00	12	28.1	13.6	4.6	2.6

Note) ϕD : Max. diameter

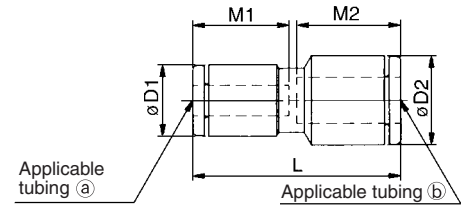


Different Diameter Straight: KJH



Applicable tubing O.D. (inch)		Model	Note) $\phi D1$	Note) $\phi D2$	L	M1	M2	Max. port size	Mass (g)
(a)	(b)								
1/8	5/32	KJH01-03	8.4	9.3	26.3	12.7	12.7	2.5	1.6
	1/4	KJH01-07							12
5/32	1/4	KJH03-07	9.3	12	27.2	12.7	13.6	3	2.3

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



Male Elbow: KJL

<10-32 UNF>

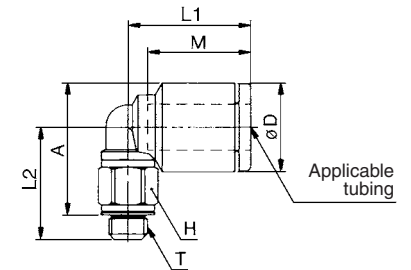


Applicable tubing O.D. (inch)	Connection thread (T) UNF NPT	Model	H (Width across flats)	Note) ϕD	L1	L2	A*	M	Min. port size	Mass (g)
1/8	10-32UNF	KJL01-32	7	8.4	15.3	13.2	14.3	12.7	2.3	2.5
	1/16	KJL01-33S	9.5			16.4	16.6			5.9
	1/8	KJL01-34S	11.11			14.5	15.6			6.7
5/32	10-32UNF	KJL03-32	7	9.3	15.6	13.7	15.3	12.7	2.3	2.7
	1/16	KJL03-33S	9.5			16.9	17.6			4.5
	1/8	KJL03-34S	11.11			15	16.6			6.8
1/4	10-32UNF	KJL07-32	7	12	16.1	15.1	18	13.6	2.3	3.2
	1/16	KJL07-33S	9.5			18.3	20.3			5.3
	1/8	KJL07-34S	11.11			17.8	19.3			6.4

* Reference dimensions after NPT thread installation.

Note) ϕD : Max. diameter

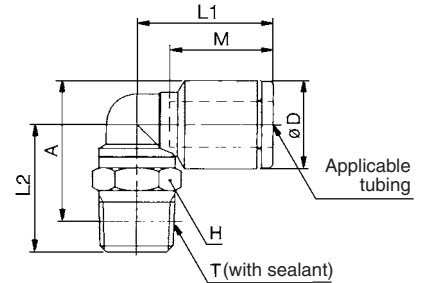
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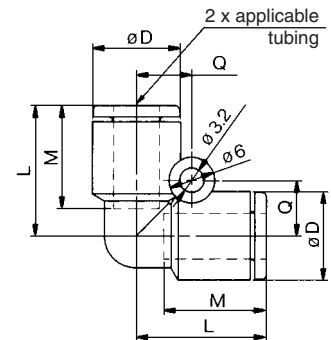


Union Elbow: KJL



Applicable tubing O.D. (inch)	Model	Note) ϕD	L	Q	M	Min. port size	Mass (g)
1/8	KJL01-00	8.4	15	5.8	12.7	2.5	1.6
5/32	KJL03-00	9.3	15.8	6.3	12.7	3	2
1/4	KJL07-00	12	17.4	7.6	13.6	4.6	3.3

Note) ϕD : Max. diameter

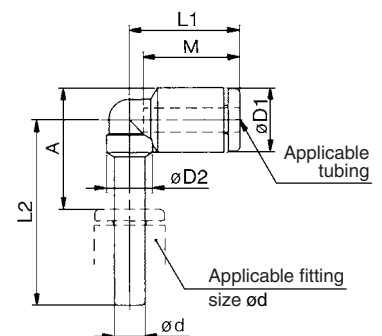


Plug-in Elbow: KJL



Applicable tubing O.D. (inch)	Applicable fitting size ϕd (inch)	Model	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Min. port size	Mass (g)
1/8	1/8	KJL01-99	8.4	6	14.5	23.8	15.3	12.7	2.2	1
5/32	5/32	KJL03-99	9.3	6	15.6	24.7	16.7	12.7	2.5	1.2
1/4	1/4	KJL07-99	12	7.6	16.7	27	19.4	13.6	4.6	2.1

Note) $\phi D1$: Max. diameter



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

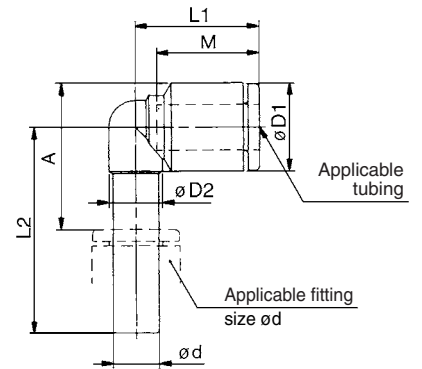
Series KJ

Reducer Elbow: KJL



Applicable tubing O.D. (inch)	Applicable fitting size ϕd (inch)	Model	Note) $\phi D1$	$\phi D2$	L1	L2	A	M	Min. port size	Mass (g)
1/8	5/32	KJL01-03	8.4	6	14.5	24.3	15.8	12.7	2.2	1.1
	1/4	KJL01-07		6.35	14.7	25.8	16.4		2.2	1.3
5/32	1/4	KJL03-07	9.3	6.35	14.9	26.2	17.3	12.7	2.5	1.5

Note) $\phi D1$: Max. diameter



Extended Male Elbow: KJW

<10-32 UNF>

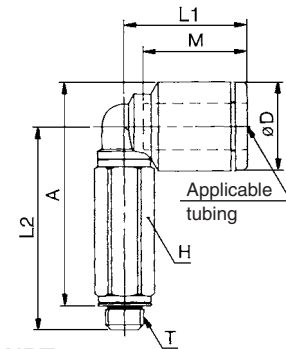


Applicable tubing O.D. (inch)	Connection thread (T) UNF NPT	Model	H (Width across flats)	Note) ϕD	L1	L2	A*	M	Min. port size	Mass (g)
1/8	10-32UNF	KJW01-32	7	8.4	15.3	26.2	27.3	12.7	2.3	6.2
	1/16	KJW01-33S	9.5			29.4	29.6		2.5	11.5
	1/8	KJW01-34S	11.11			24.8	25.9		2.5	13.4
5/32	10-32UNF	KJW03-32	7	9.3	15.6	26.7	28.3	12.7	2.3	6.4
	1/16	KJW03-33S	9.5			29.9	30.6		2.5	11.7
	1/8	KJW03-34S	11.11			25.3	26.9		2.5	13.6
1/4	10-32UNF	KJW07-32	7	12	16.1	28.1	31	13.6	2.3	6.9
	1/16	KJW07-33S	9.5			31.3	33.3		2.5	10.7
	1/8	KJW07-34S	11.11			17.8	29.4		32.3	4.6

* Reference dimensions after NPT thread installation.

Note) ϕD : Max. diameter

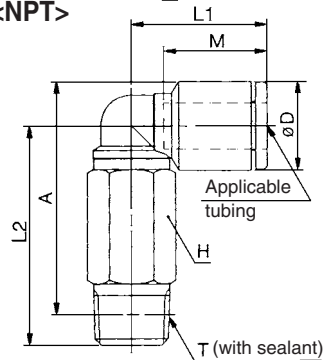
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Male Branch Tee: KJT

<10-32 UNF>

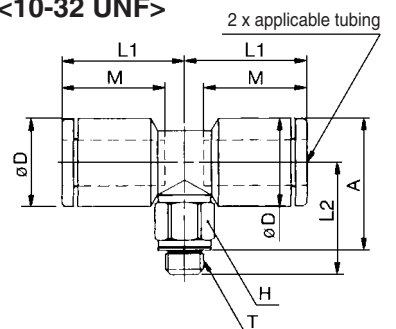


Applicable tubing O.D. (inch)	Connection thread (T) UNF NPT	Model	H (Width across flats)	Note) ϕD	L1	L2	A*	M	Min. port size	Mass (g)
1/8	10-32UNF	KJT01-32	7	8.4	15.3	13.2	14.3	12.7	2.3	3.2
	1/16	KJT01-33S	9.5			16.4	16.6		2.5	6.6
	1/8	KJT01-34S	11.11			14.5	15.6		2.5	7.4
5/32	10-32UNF	KJT03-32	7	9.3	15.6	13.7	15.3	12.7	2.3	3.5
	1/16	KJT03-33S	9.5			16.9	17.6		2.5	6.9
	1/8	KJT03-34S	11.11			15	16.6		2.5	7.7
1/4	10-32UNF	KJT07-32	7	12	16.1	15.1	18	13.6	2.3	4.4
	1/16	KJT07-33S	9.5			18.3	20.3		2.5	6.8
	1/8	KJT07-34S	11.11			17.8	16.4		19.3	4.6

* Reference dimensions after NPT thread installation.

Note) ϕD : Max. diameter

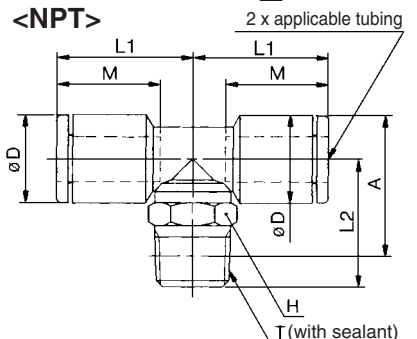
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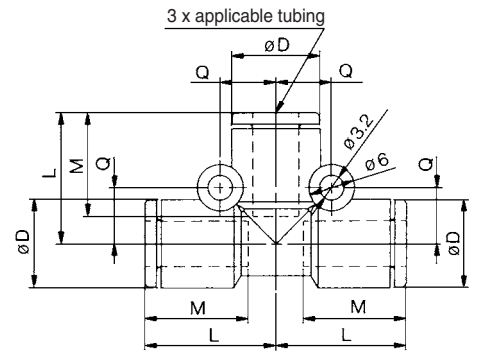


Union Tee: KJT



Applicable tubing O.D. (inch)	Model	Note) ϕD	L	Q	M	Min. port size	Mass (g)
1/8	KJT01-00	8.4	15	5.8	12.7	2.5	2.5
5/32	KJT03-00	9.3	15.8	6.3	12.7	3	3
1/4	KJT07-00	12	17.4	7.6	13.6	4.6	4.8

Note) ϕD : Max. diameter

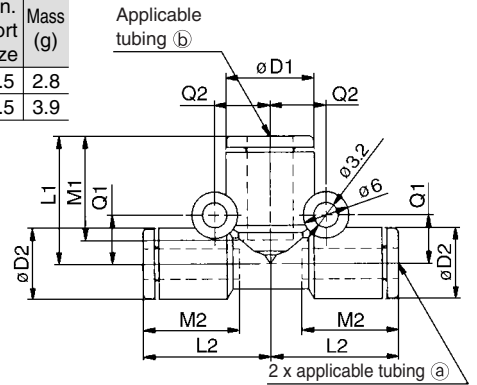


Different Diameter Tee: KJT



Applicable tubing O.D. (inch)		Model	Note) $\phi D1$	Note) $\phi D2$	L1	L2	Q1	Q2	M1	M2	Min. port size	Mass (g)
a	b											
1/8	5/32	KJT01-03	9.3	8.4	15.3	15.8	5.8	6.3	12.7	12.7	2.5	2.8
5/32	1/4	KJT03-07	12	9.3	16.4	16.8	6.3	7.6	13.6	12.7	2.5	3.9

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



Male Run Tee: KJY

<10-32 UNF>

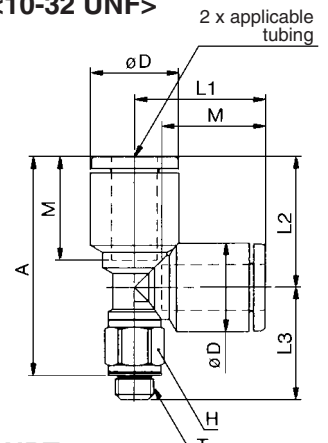


Applicable tubing O.D. (inch)	Connection thread (T) UNF NPT	Model	H (Width across flats)	Note) ϕD	L1	L2	L3	A*	M	Min. port size	Mass (g)				
1/8	10-32UNF	KJY01-32	7	8.4	15.4	14.8	13.2	24.9	12.7	2.3	3.2				
	1/16	KJY01-33S	9.5									16.4	27.2	2.5	5.1
	1/8	KJY01-34S	11.11									14.5	26.2	2.5	7.4
5/32	10-32UNF	KJY03-32	7	9.3	15.6	14.8	13.7	25.4	12.7	2.3	3.5				
	1/16	KJY03-33S	9.5									16.9	27.7	2.5	5.4
	1/8	KJY03-34S	11.11									15	26.7	2.5	7.7
1/4	10-32UNF	KJY07-32	7	12	17.6	17.6	15.1	29.6	13.6	2.3	4.5				
	1/16	KJY07-33S	9.5									18.3	31.9	2.5	6.7
	1/8	KJY07-34S	11.11									17.9	17	16.4	30.3

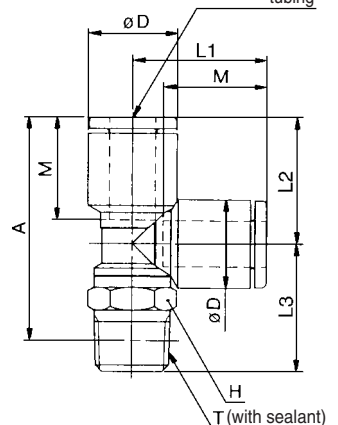
* Reference dimensions after NPT thread installation.

Note) ϕD : Max. diameter

<10-32 UNF>



<NPT>



<NPT>



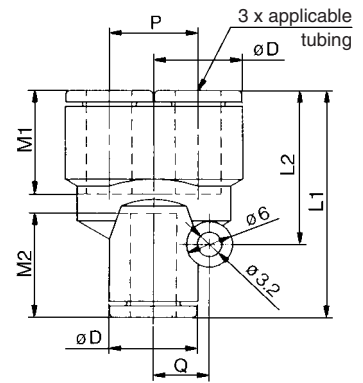
Series KJ

Union "Y": KJU



Applicable tubing O.D. (inch)	Model	Note) ϕD	L1	L2	P	Q	M1	M2	Min. port size	Mass (g)
1/8	KJU01-00	8.4	28.5	19	8.4	5.8	12.7	12.9	2.5	2.6
5/32	KJU03-00	9.3	27.9	18.3	9.3	6.3	12.7	12.9	3	3
1/4	KJU07-00	12	32.3	22.7	12	7.6	13.6	13.8	4.6	5

Note) ϕD : Max. diameter

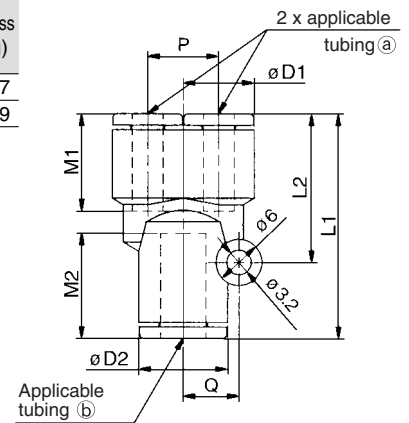


Different Diameter. Union "Y": KJU



Applicable tubing O.D. (inch)		Model	Note) $\phi D1$	Note) $\phi D2$	L1	L2	P	Q	M1	M2	Min. port size	Mass (g)
(a)	(b)											
1/8	5/32	KJU01-03	8.4	9.3	27.5	18.3	8.4	6.3	12.7	12.9	2.5	2.7
5/32	1/4	KJU03-07	9.3	12	30.4	20.6	9.3	7.6	12.7	13.8	3	3.9

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

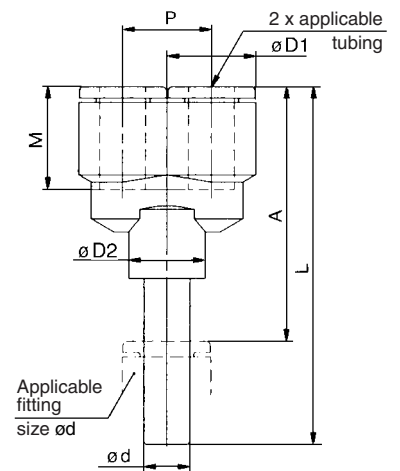


Plug-in "Y": KJU



Applicable tubing O.D. (inch)	Applicable fitting size ϕd (inch)	Model	Note) $\phi D1$	$\phi D2$	L	P	A	M	Min. port size	Mass (g)
1/8	1/8	KJU01-99	8.4	10	43.5	8.4	34.1	12.7	2.5	2.7
5/32	5/32	KJU03-99	9.3	10	44.7	9.3	35.3	12.7	3	3.2
1/4	1/4	KJU07-99	12	10	49.9	12	39.6	13.6	4.6	4.7

Note) $\phi D1$: Max. diameter

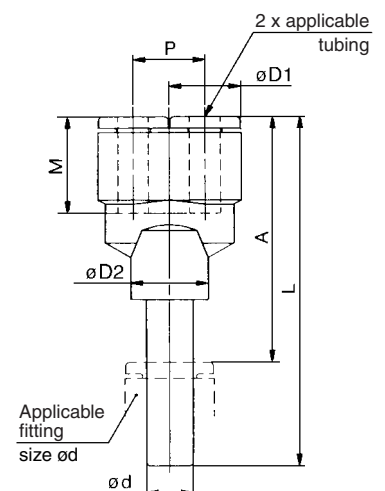


Different Diameter Plug-in "Y": KJX



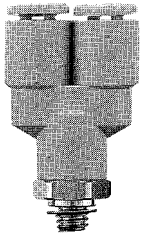
Applicable tubing O.D. (inch)	Applicable fitting size ϕd (inch)	Model	Note) $\phi D1$	$\phi D2$	L	P	A	M	Min. port size	Mass (g)
1/8	5/32	KJX01-03	8.4	10	44	8.4	34.6	12.7	2.5	2.8
5/32	1/4	KJX03-07	9.3	10	45.7	9.3	35.4	12.7	3	3.6

Note) $\phi D1$: Max. diameter



Branch "Y": KJU

<10-32 UNF>

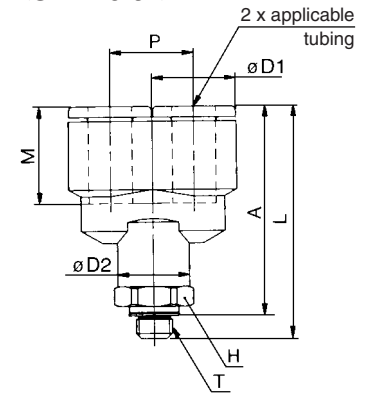


Applicable tubing O.D. (inch)	Connection thread (T) UNF NPT	Model	H (Width across flats)	Note) $\phi D1$	$\phi D2$	L	P	A*	M	Min. port size	Mass (g)
1/8	10-32UNF	KJU01-32	11.11	8.4	10	30.6	8.4	27.5	12.7	1.8	5.9
	1/16	KJU01-33S				34.1		30.1		2.5	8.1
	1/8	KJU01-34S				33.2		30.1		2.5	8.3
5/32	10-32UNF	KJU03-32	11.11	9.3	10	31.3	9.3	28.2	12.7	1.8	6.4
	1/16	KJU03-33S				34.8		30.8		3.5	8.8
	1/8	KJU03-34S				33.9		30.8		3.5	8.8
1/4	10-32UNF	KJU07-32	11.11	12	10	35.5	12	32.4	13.6	2.3	7.4
	1/16	KJU07-33S				39		35		3.5	10
	1/8	KJU07-34S				38.1		35		4.6	10

* Reference dimensions after NPT thread installation.

Note) $\phi D1$: Max. diameter

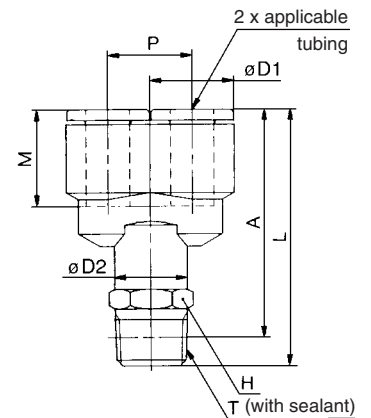
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<NPT>



<NPT>

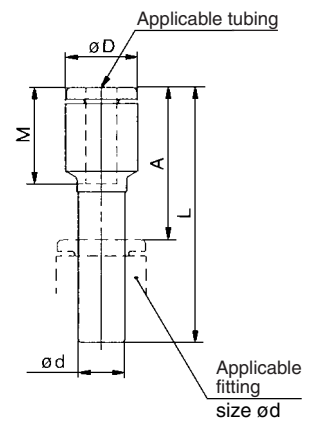


Plug-in Reducer: KJR



Applicable tubing O.D. (inch)	Applicable fitting size ϕd (inch)	Model	Note) ϕD	L	A	M	Min. port size	Mass (g)
1/8	5/32	KJR01-03	8.4	32	19.3	12.7	2.5	0.9
	1/4	KJR01-07		33	19.4		2.5	1.2
5/32	1/4	KJR03-07	9.3	33.5	19.9	12.7	3	1.4

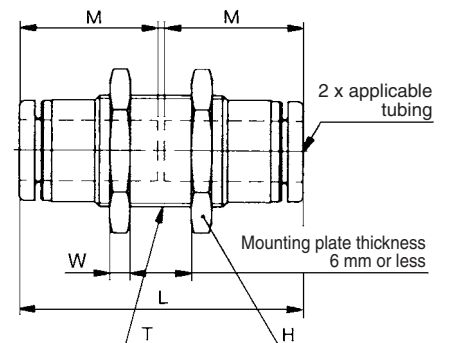
Note) ϕD : Max. diameter



Bulkhead Union: KJE



Applicable tubing O.D. (inch)	Model	Connection thread (T) UNF	H (Width across flats)	L	Mounting hole	M	W	Min. port size	Mass (g)
1/8	KJE01-00	3/8 -24	12.7	26	10.5	12.7	2.8	2.5	8.1
5/32	KJE03-00	3/8 -24	12.7	26	10.5	12.7	2.8	3	8.1
1/4	KJE07-00	1/2 -20	15.88	27.8	14	13.6	3.5	4.6	15.7





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

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	Applicable model
Gasket	M-10/32G	10-32 UNF	Stainless steel 304, NBR	—
Pipe nut	KJ01-P01	—	—	KJE01-00, KJE03-00
	KJ07-P01	—	—	KJE07-00