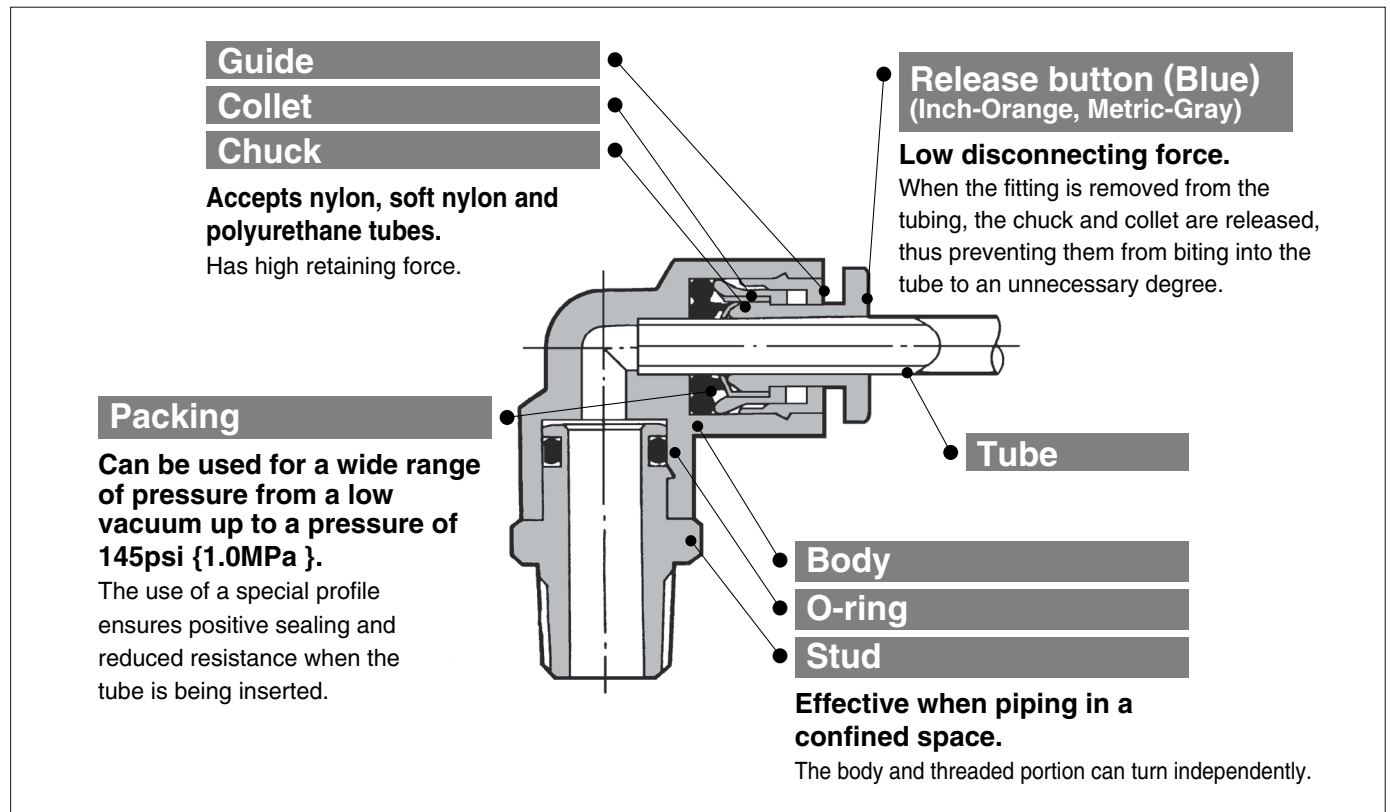




One-touch “in”—One-touch “out” tube connection.

Vacuum to 1.3KPa (10 Torr).

- **Application to inch or metric size tube.**
- **Applicable tube material — Nylon, soft nylon, polyurethane**



Applicable Tube

Tube material		Nylon, Soft nylon, Polyurethane
Tube O.D.	Inch	ø1/8, ø5/32, ø3/16, ø1/4, ø5/16, ø3/8, ø1/2
	Metric	ø3.2, ø4, ø6, ø8, ø10, ø12, ø16

Specifications

Operating fluid			Air, Water ^{NOTE 1)}
Max. operating pressure			145psi (1.0MPa)
Max. operating vacuum pressure			1.3KPa (10 Torr)
Proof pressure			435psi (3.0MPa)
Ambient and fluid temperature			32 to 140°F (0 to 60°C),
			Water: 40 to 105°F (50 to 40°C)
Thread	Inch	Thread Portion	ANSIB2-1
		Nut	JIS B 0208
	Metric	Thread Portion	JIS B 0203 (Taper pipe thread)
		Nut	JIS B 02112 Class 2 (Metric fine thread)
Sealant (Thread portion)		Inch	With sealant
		Metric	With sealant or none

Note1) Applicable for general industry water. Consult SMC if using for other kinds of fluid.
Surge pressure must be under the max. operating pressure.

Principal Element Material

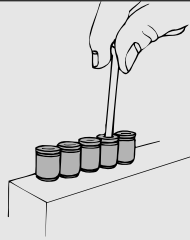
Body	C3604, PBT, PP
Stud	C3604BD (Thread portion)
Chuck	Stainless Steel (SUS304)
Guide	Stainless Steel (SUS304), C3604BD, POM
Collet	POM
Release button	POM
Packing, O-ring	NBR

Hexagon socket head male connector

KQ2S P. 25-26



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

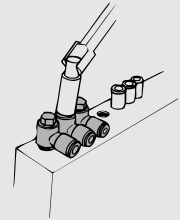


Universal male elbow

KQ2V P. 42



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

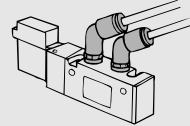


45° male elbow

KQ2K P. 41



used in applications where a 45° elbow or male connector stresses the tubing.

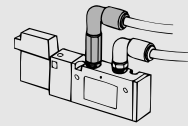


Extended male elbow

KQ2W P. 30-31



The most appropriate use is when the elbow extends over a standard elbow for ease of connection/disconnection of tubing.

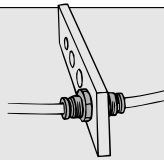


Bulkhead union

KQ2E P. 38



Used to connect two tubes through a panel.

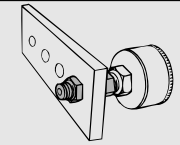


Bulkhead connector

KQ2E P. 39



The best use is for connection of a gauge through a panel.

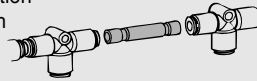


Nipple

KQ2N P. 50



Used for connection of two One-touch fittings.

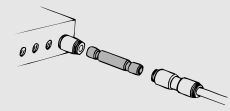


Reducer nipple

KQ2N P. 50



Used for connection of two One-touch fitting that are different tube O.D.s.



Male connector

KQ2H P. 24-25



Use to pipe in the same direction from female threaded portion. Most general type.

Male elbow

KQ2L P. 27-28



Use to pipe in right angle to female threaded portion. Most general type.

Branch tee

KQ2T P. 31-32



Use to branch line from female thread of both side 90° direction.

Female union

KQ2F P. 40



Use to pipe from male thread portion such as pressure gauge.

Union elbow

KQ2L P. 28



Use to connect tubes in right angle.

Union tee

KQ2T P. 33



Use to branch connection of tubes of both side 90° direction.

Straight union

KQ2H P. 26



Use to connect tubes in the same direction.

Plug-in elbow

KQ2L P. 29



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

Different dia.tee

KQ2T P. 48



Use to branch connection of tubes with size down in both side 90° direction.

Different dia. straight

KQ2H P. 40



Use to connect different size tubes.

Reducer elbow

KQ2L P. 29



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

Male run tee

KQ2Y P. 33-34



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

Hexagon socket head universal male elbow

KQ2VS P. 42-43



Hex on the top allows thread connection by using an allen wrench, for confined space.

Branch union

KQ2LU P. 51



Used for branch connection in right angle from the female thread.

Universal female elbow

KQ2VF P. 43



Used for branch line in the same direction or in right angle from the male or female thread. Multiplex connection possible.

Female elbow

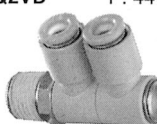
KQ2LF P. 44



Used to pipe the tube in the right angle from the male elbow.

Double universal male elbow

KQ2VD P. 44-45



Used for branch piping in the right angle from the female thread. Two individual parts rotate 360°.

Triple universal male elbow

KQ2VT P. 45



Used for branch piping in the right angle from the female thread. Three individual parts rotate 360°.

Branch universal male elbow

KQ2Z P. 46



Hexagonal head allows thread connection by using a box wrench. Used for branch connection.

Branch universal female elbow

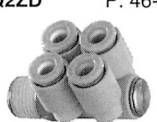
KQ2ZF P. 51



Used for branch line in the same direction or in right angle from the male or female thread. Multiplex connection possible.

Double branch universal male elbow

KQ2ZD P. 46-47



Used for four branch connection in the right angle from the female thread. Two individual parts rotate 360°.

Triple branch universal male elbow

KQ2ZT P. 47



Used for six branch piping in right angle from the female thread. Three individual parts rotate 360°.

Branch union elbow

KQ2LU P. 52



Used for branch connection of tubes in right angle.

Extended plug-in elbow

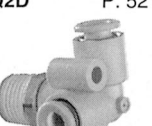
KQ2W P. 52



The most appropriate use is when the elbow extends over a standard elbow for ease of connection/disconnection of tubing.

Delta union

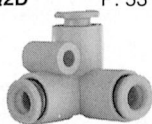
KQ2D P. 52



Used for two branch piping in the right angle from the female thread.

Delta

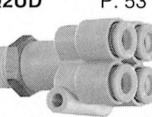
KQ2D P. 53



Used for three branch connection of tubes in the right angle.

Delta branch

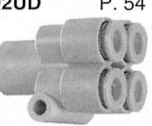
KQ2UD P. 53



Used for four branch piping in the same direction from the female thread.

Different dia. double union "Y"

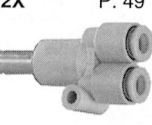
KQ2UD P. 54



Used for four branch connection of tubes in the same direction reducing the size of tubes.

Different dia. plug-in "Y"

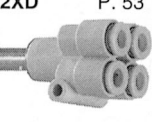
KQ2X P. 49



Used for branch connection from the fitting reducing the size of tubes.

Double plug-in "Y"

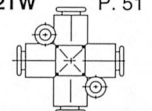
KQ2XD P. 53



Used for four branch connection from the fitting.

Cross union

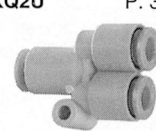
KQ2TW P. 51



Used for four branch connections 90° apart.

Union "Y"

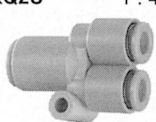
KQ2U P. 35



Use to branch connection of tubes in the same direction.

Different dia. union "Y"

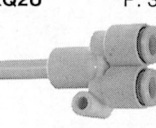
KQ2U P. 48



Use to branch connection of tubes with size down in the same direction.

Plug-in "Y"

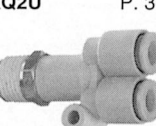
KQ2U P. 36



Use to branch tubing in the same direction from one-touch fittings.

Branch "Y"

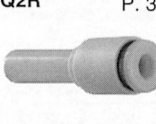
KQ2U P. 36-37



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

Plug-in reducer

KQ2R P. 35



Use to change size of One-touch fittings.

Bulkhead union elbow

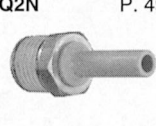
KQ2LE P. 49



Used to connect two tubes through a panel changing by 90° in a tube fetching direction.

Adaptor

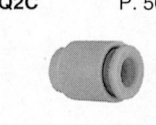
KQ2N P. 49



Used to connect the fitting and R (PT) female thread.

Tube cap

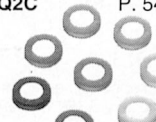
KQ2C P. 50



Used to plug the unused tube.

Color cap

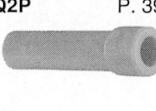
KQ2C P. 54



Mounted on the release button corresponding to its applications. Distinguished by color.

Plug

KQ2P P. 39



Use to shut unused One-touch fittings.

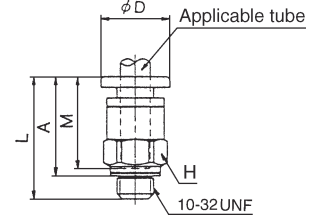
Male connector: KQ2H Inch



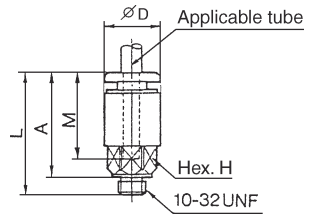
Applicable tube O.D. (inch)	Thread UNF NPT	Part No.	H (Hex.)	øD	L	A	M	Min. hole dia.	Weight (g)
1/8	10-32UNF	KQ2H01-32	7	7	16.7	13.7	12.7	2.3	2
	1/16	KQ2H01-33S	11.11	—	22	18 *	15.5	2.5	7
	1/8	KQ2H01-34S	—	—	—	—		—	9
	1/4	KQ2H01-35S	14.29	—	19.5	13.5 *		—	16
5/32	10-32UNF	KQ2H03-32	8	8	17	14	12.7	2.3	2.4
	1/16	KQ2H03-33S	11.11	—	22	18 *	16	3	7
	1/8	KQ2H03-34S	—	—	—	—		—	9
	1/4	KQ2H03-35S	14.29	—	19.5	13.5 *		—	16
3/16	10-32UNF	KQ2H05-32	8	11	24	20.4	16.5	2.3	6
	1/8	KQ2H05-34S	12.7	—	22	18 *		3.5	11
	1/4	KQ2H05-35S	14.29	—	21	15 *		—	12
1/4	10-32UNF	KQ2H07-32	11.11	10.3	18.4	15.4	13.6	2.3	3.3
	1/8	KQ2H07-34S	14.29	—	22.5	18.5 *	17	4.6	10
	1/4	KQ2H07-35S	—	—	—	17 *		—	15
	3/8	KQ2H07-36S	17.46	—	23	16.5 *		—	27
5/16	1/8	KQ2H09-34S	14.29	—	28.5	24.5 *	18.5	6	15
	1/4	KQ2H09-35S	—	—	26.5	20.5 *		—	16
	3/8	KQ2H09-36S	17.46	—	22	15.5 *		—	24
3/8	1/8	KQ2H11-34S	17.46	—	30.5	26.5 *	21	6	29
	1/4	KQ2H11-35S	—	—	33.5	27.5 *		7	31
	3/8	KQ2H11-36S	—	—	29	22.5 *		—	29
	1/2	KQ2H11-37S	22.23	—	26.5	18.5 *	22	9	46
1/2	1/4	KQ2H13-35S	—	—	34.5	28.5 *		9.6	44
	3/8	KQ2H13-36S	22.23	—	33	26.5 *		—	44
	1/2	KQ2H13-37S	—	—	30	22 *		—	44

* Reference dimensions after NPT thread installation. Note) øD: max. diameter

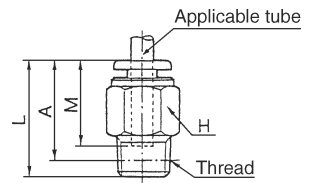
KQH (01-32, 03-32, 07-32)



KQH05-32



NPT



KQ2H Metric

Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD	L	A*	M	Effective orifice(mm²)		Weigh (g)
								Nylon	Urethane	
3.2	M5×0.8	KQ2H23-M5	7	7	16.7	13.6	12.7	3.4	2.9	2
	1/8	KQ2H23-01S	10	—	22	18	9			
	1/4	KQ2H23-02S	14	—	19.5	13.5	16			
4	M5×0.8	KQ2H04-M5	8	8	17	13.9	12.7	4	4	2.4
	M6×1.0	KQ2H04-M6	8		18	16	2.5			
	1/8	KQ2H04-01S	10	—	22	18	16	5.6	5.6	9
	1/4	KQ2H04-02S	14	—	19.5	13.5	16			16
6	M5×0.8	KQ2H06-M5	10	10	17.8	14.7	13.5	4	4	3.3
	M6×1.0	KQ2H06-M6	10		19	14.9	3.4			
	1/8	KQ2H06-01S	12	—	22.5	18.5	17	13.1	13.1	16
	1/4	KQ2H06-02S	14	—	23	17				14
	3/8	KQ2H06-03S	17	—	22	15.5				27
8	1/8	KQ2H08-01S	14	—	28	24	18.5	26.1	18.0	21
	1/4	KQ2H08-02S			26.5	20.5				19
	3/8	KQ2H08-03S			17	22				15.5
10	1/8	KQ2H10-01S	17	—	30	26	21	26.1	26.1	19
	1/4	KQ2H10-02S			33.5	27.5				30
	3/8	KQ2H10-03S			29	22.5				30
	1/2	KQ2H10-04S	22	27	19	53				
12	1/4	KQ2H12-02S	19	—	34.5	28.5	22	58.3	46.1	42
	3/8	KQ2H12-03S			30	23.5				34
	1/2	KQ2H12-04S			22	22				51
16	3/8	KQ2H16-03S	24	25.7	39.5	33	25	81	(81)	61
	1/2	KQ2H16-04S			35.5	27.5		113	(96)	47

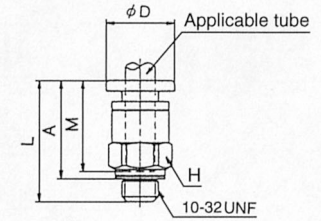
* Reference dimensions after R(PT) thread installation.
Note) (): Values for soft nylon, øD: max. diameter

Male connector KQ2H Inch-size tube/metric thread (formerly IQ)

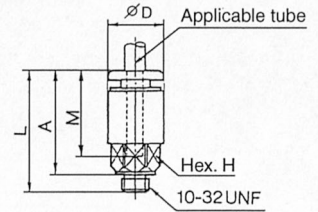


Applicable tube O.D. (inch)	Thread M R(PT)	Part No.	H (Hex.)	øD	L	A*	M	Min. hole dia.	Weight (g)
1/8	M5X0.8	KQ2H01-M5	7	7	16.7	13.6	12.7	2.5	2
	1/8	KQ2H01-01S	10	—	22	18	15.5		9
	1/4	KQ2H01-02S	14	—	19.5	13.5			16
3/16	M5X0.8	KQ2H05-M5	10.7	—	24	20.5	16.5	2.5	6
	1/8	KQ2H05-01S	11	—	22	18		3.5	11
	1/4	KQ2H05-02S	14	—	21	15			12
1/4	M5X0.8	KQ2H07-M5	11	10.3	18.4	15.3	17	2.5	3.3
	1/8	KQ2H07-01S	14	—	22.5	18.5		4.6	10
	1/4	KQ2H07-02S		23	17	15			
	3/8	KQ2H07-03S		23	16.5	27			
5/16	1/8	KQ2H09-01S	14	—	28	24	18.5	6	15
	1/4	KQ2H09-02S	—	26.5	20.5	16			
	3/8	KQ2H09-03S	17	—	22.5	15.5			24
3/8	1/4	KQ2H11-02S	17	—	33.5	27.5	21	7	31
	3/8	KQ2H11-03S		—	29	22.5			29
	1/2	KQ2H11-04S	22	—	27	19			46
1/2	1/4	KQ2H13-02S	22	—	34.5	28.5	22	9	44
	3/8	KQ2H13-03S		—	33.5	27		9.6	
	1/2	KQ2H13-04S		—	30	22			

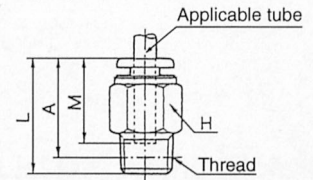
KQ2H (01-M5, 07-M5)



KQ2H05-M5



R(PT)



Hexagon socket head male connector: KQ2S Inch



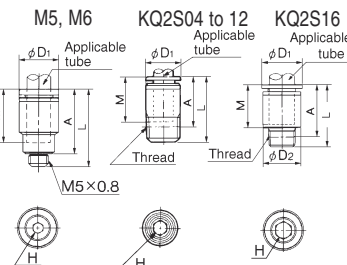
Applicable tube O.D. (Inch)	UNF NPT	Part No.	H (Hex.)	øD	L	A*	M	Weight (g)
1/8	10-32UNF	KQ2S01-32	2	7	19.7	16.6	12.7	2
5/32	10-32UNF	KQ2S03-32	2.5	8	18.7	15.6	12.7	2.3
	1/8	KQ2S03-34S	2.78	10.5	23.5	19.5	16	2.8
3/16	1/8	KQS05-34S	3.57	10.7	23.5	19.5	16.5	3.6
1/4	10-32UNF	KQ2S07-32	2.5	10.3	19.6	16.5	13.6	2.3
	1/8	KQ2S07-34S	4.76	12.5	22	18	17	4.9
	1/4	KQ2S07-35S		13.8	23	17		
	3/8	KQ2S07-36S		17	27	21		
5/16	1/8	KQ2S09-34S	5.56	14	28	24	18.5	5.7
	1/4	KQ2S09-35S	6.35		25.5	19.5		6.5
	3/8	KQ2S09-36S			17.5	27.5		21
3/8	1/8	KQ2S11-34S	5.56	16.5	30	26	21	5.7
	1/4	KQ2S11-35S	6.35	16.5	32	26	21	6.5
	3/8	KQ2S11-36S		17.2	29	23		
	1/2	KQ2S11-37S		21.3	30	22		
1/2	1/4	KQ2S13-35S	7.94	20	34.5	28.5	22	8
	3/8	KQ2S13-36S	9.53		33	26.5	22	9.6
	1/2	KQ2S13-37S			21.3	31		

Hexagon socket head male connector: KQ2S Metric



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L	A*	M	Effective orifice(mm²)		Weight (g)
									Nylon	Urethane	
4	M5×0.8	KQ2S04-M5	2.5	8	—	18.7	15.6	12.7	2.7	2.7	2.7
	M6×1.0	KQ2S04-M6	3			18.2	14.1		2.7	2.7	2.8
	1/8	KQ2S04-01S	3	9.8	—	23	19	16	4.1	3.6	8
6	M5×0.8	KQ2S06-M5	2.5	10	—	19.5	16.4	13.5	2.7	2.7	3.3
	M6×1.0	KQ2S06-M6	3			19.1	15		2.7	2.7	3.4
	1/8	KQ2S06-01S	4	11.8	14	24	20	17	10.0	9.9	9
	1/4	KQ2S06-02S	4	13.8		24	20		10.7	10.0	15
	3/8	KQ2S06-03S	6	17		27.5	21		23.3	16.2	24
8	1/8	KQ2S08-01S	5	14	—	28	24	18.5	17.2	16.2	12
	1/4	KQ2S08-02S	6			25.5	19.5		23.3	16.2	11
	3/8	KQ2S08-03S	6	17		27.5	21		23.3	16.2	24
10	1/8	KQ2S10-01S	5	17	—	30	26	21	17.2	10.0	18
	1/4	KQ2S10-02S	8			27.5	21.5		39.0	26.6	19
	3/8	KQ2S10-03S	8	22	—	28	20	25	60.0	44.5	30
	1/2	KQ2S10-04S	10			28	20		60.0	44.5	30
12	1/4	KQ2S12-02S	8	19	—	33.5	27.5	22	46.0	44.5	23
	3/8	KQ2S12-03S	10			29	22.5		60.0	44.5	18
	1/2	KQ2S12-04S	10	22		28	20		60.0	44.5	30
16	3/8	KQ2S16-03S	10	25.7	24	39	32.5	25	81	(81)	42
	1/2	KQ2S16-04S	12			35	27		113	(96)	34

*Reference dimensions after R(PT) thread installation.
Note) (): Values for soft nylon, øD1: max. diameter

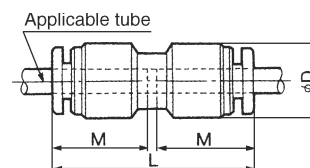


Straight union: KQ2H Inch



Applicable tube O.D. (inch)	Part No.	øD	L	M	Min. hole dia.	Weight (g)
1/8	KQ2H01-00	9.6	31.5	15.5	2.5	3
5/32	KQ2H03-00	10.4	32.5	16	3	3
3/16	KQ2H05-00	11.4	34	16.5	3.5	4
1/4	KQ2H07-00	13.2	34.5	17	4.6	5
5/16	KQ2H09-00	15.2	38.5	18.5	6	7
3/8	KQ2H11-00	17.9	42.5	21	7	11
1/2	KQ2H13-00	21.7	44.5	22	9.6	16

Note) øD: max. diameter



KQ2H Metric

Applicable tube O.D. (mm)	Part No.	øD	L	M	Effective orifice(mm²)		Weight (g)
					Nylon	Urethane	
3.2	KQ2H23-00	9.6	31.5	15.5	3.4	2.9	3
4	KQ2H04-00	10.4	32.5	16	5.6	5.6	3
6	KQ2H06-00	12.8	34.5	17	13.1	13.1	5
8	KQ2H08-00	15.2	38.5	18.5	26.1	18.0	7
10	KQ2H10-00	18.5	42.5	21	41.5	29.5	11
12	KQ2H12-00	20.9	44.5	22	58.3	46.1	14
16	KQ2H16-00	26.5	51	25	113	(96)	24

Note) (): Values for soft nylon.
øD: max. diameter

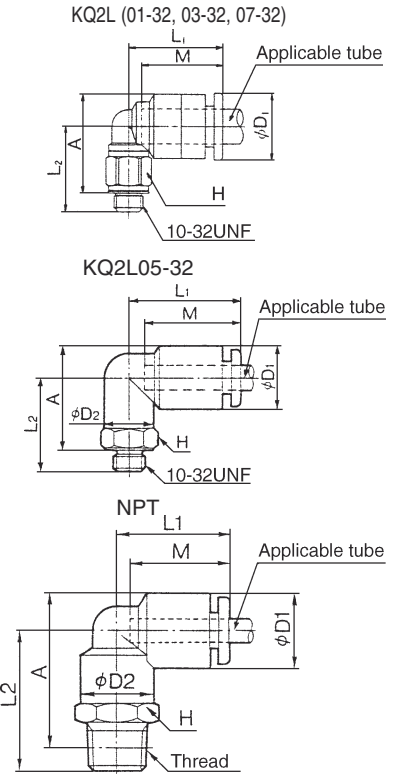
Male elbow: KQ2L Inch



Applicable tube O.D. (inch)	Thread UNF NPT	Part No.	H (Hex.)	øD1	øD2	L1	L2	A	M	Min. hole dia.	Weight (g)
1/8	10-32UNF	KQ2L01-32	7	8.4	—	15.3	13.2	14.4	12.7	2.3	2.5
	1/16	KQ2L01-33S	11.11	9.6	10	17.5	21.5	22.5 *	15.5	2.5	8
	1/8	KQ2L01-34S	14.29				25.5	24.5*			18
	1/4	KQ2L01-35S	14.29				26	25 *			18
5/32	10-32UNF	KQ2L03-32	7	9.3	—	15.6	13.7	15.4	12.7	2.3	2.7
	1/16	KQ2L03-33S	11.11	10.4	10	18	22	23 *	16	3	8
	1/8	KQ2L03-34S	14.29				26	25 *			9
	1/4	KQ2L03-35S	14.29				26	25 *			18
3/16	10-32UNF	KQ2L05-32	11.11	11.4	10	19.5	20	22	16.5	2.3	5
	1/8	KQ2L05-34S	14.29				22.5	24 *		3.5	10
	1/4	KQ2L05-35S	14.29				26.5	26 *			19
	10-32UNF	KQ2L07-32	7	12	—	16.1	15.1	18.1	13.6	2.3	3.2
1/4	1/8	KQ2L07-34S	11.11	13.2	10	20.5	23.5	26 *	17	4.6	10
	1/4	KQ2L07-35S	14.29				27.5	28 *			20
	3/8	KQ2L07-36S	17.46				29.5	30 *			32
	1/8	KQ2L09-34S	12.7	15.2	12	23.5	24.5	28 *	18.5	6	12
5/16	1/4	KQ2L09-35S	14.29				28.5	30 *			20
	3/8	KQ2L09-36S	17.46				30.5	31.5 *			28
	1/8	KQ2L11-34S		17.9	17	25.5	26.5	31.5 *		6	16
	1/4	KQ2L11-35S	17.46				29.5	32.5 *			23
3/8	3/8	KQ2L11-36S					31.5	34 *	21	7	33
	1/2	KQ2L11-37S					35.5	36.5 *			59
	1/4	KQ2L13-35S	17.46	21.7	17	28	31.5	36.5 *		9	28
	3/8	KQ2L13-36S					33.5	38.5 *	22	9.6	36
1/2	1/2	KQ2L13-37S	22.23				37.5	40 *			62

* Reference dimensions after NPT thread installation.

Note) øD1: max. diameter



KQ2L Metric

Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	A *	M	Effective orifice(mm ²)		Weight (g)
										Nylon	Urethane	
3.2	M5×0.8	KQ2L23-M5	7	8.4	—	15.3	13.2	14.3	12.7			2.5
	1/8	KQ2L23-01S	10	9.6	10	17.5	21.5	22.5	15.5	3	2.5	8
	1/4	KQ2L23-02S	14				25.5	24.5				18
4	M5×0.8	KQ2L04-M5	7	9.3	—	15.6	13.7	15.3	12.7	3.5	3.5	2.7
	M6×1.0	KQ2L04-M6	8	12.7	—	15.6	14.7	15.3	12.7			
	1/8	KQ2L04-01S	10	10.4	10	18	22	23	16	4.2	4.2	10
	1/4	KQ2L04-02S	14				26	25				19
6	M5×0.8	KQ2L06-M5	7	11.6	—	16.1	14.7	17.4	13.5	3.5	3.5	3.2
	M6×1.0	KQ2L06-M6	8	13.5	—	16.1	15.7	17.4	13.5	—	—	—
	1/8	KQ2L06-01S	10	12.8	10	20	23	25.5	17	11.4	11.4	12
	1/4	KQ2L06-02S	14				27	27.5				22
	3/8	KQ2L06-03S	17				29	29				33
8	1/8	KQ2L08-01S	12	15.2	12	23	24.5	28	18.5	21.6	14.9	13
	1/4	KQ2L08-02S	14				28.5	30				21
	3/8	KQ2L08-03S	17				30.5	31.5				35
10	1/8	KQ2L10-01S		18.5	17	26.5	27	32	21	21.6	14.9	25
	1/4	KQ2L10-02S	17				30	33		35.2	25.0	26
	3/8	KQ2L10-03S					32	34.5				36
	1/2	KQ2L10-04S	22				36	37				63
12	1/4	KQ2L12-02S	17	20.9	17	28.5	31	35.5	22	50.2	39.7	28
	3/8	KQ2L12-03S					33	37				38
	1/2	KQ2L12-04S	22				37	39.5				65
16	3/8	KQ2L16-03S		26.5	20.9	34	38	44.5	25	71	(71)	101
	1/2	KQ2L16-04S	22				41	46		100	(84)	105

*Reference dimensions after R(PT) thread installation.

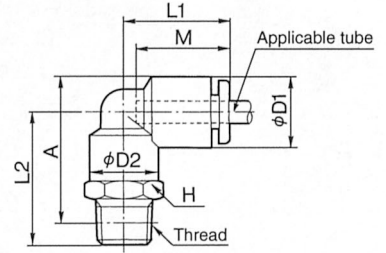
Note) (): Values for soft nylon.

øD1: max. diameter

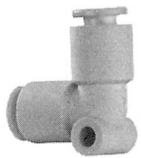
Male elbow: KQ2L Inch size tube/metric thread (formerly IQ)



Applicable tube O.D. (inch)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	A*	M	Min. hole dia.	Weight (g)
3/16	1/8	KQ2L05-01S	10	11.4	10	19.5	22.5	24	16.5	3.5	10
	1/4	KQ2L05-02S	14				26.5	26			19
1/4	1/8	KQ2L07-01S	10	13.2	10	20.5	23.5	26	17	4.6	10
	1/4	KQ2L07-02S	14				27.5	28			20
	3/8	KQ2L07-03S	17				29.5	29.5			32
5/16	1/8	KQ2L09-01S	12	15.2	12	23.5	24.5	28	18.5	6	12
	1/4	KQ2L09-02S	14				28.5	30			20
	3/8	KQ2L09-03S	17				30.5	31.5			28
3/8	1/4	KQ2L11-02S	17	17.9	17	25.5	29.5	32.5	21	7	23
	3/8	KQ2L11-03S	17				31.5	34			33
	1/2	KQ2L11-04S	22				35.5	36.5			59
1/2	1/4	KQ2L13-02S	17	21.7	17	28	31.5	36.5	22	9.6	28
	3/8	KQ2L13-03S	17				33.5	38.5			36
	1/2	KQ2L13-04S	22				37.5	40			62

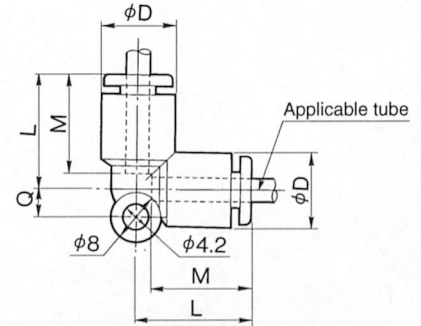


Union elbow: KQ2L Inch



Applicable tube O.D. (inch)	Part No.	øD	L	Q	M	Min. hole dia.	Weight (g)
1/8	KQ2L01-00	9.6	17.5	4.3	15.5	2.5	3
5/32	KQ2L03-00	10.4	18	4.5	16	3	4
3/16	KQ2L05-00	11.4	19.5	4.8	16.5	3.5	5
1/4	KQ2L07-00	13.2	20.5	5.3	17	4.6	6
5/16	KQ2L09-00	15.2	23	6	18.5	6	8
3/8	KQ2L11-00	17.9	26	6.6	21	7	13
1/2	KQ2L13-00	21.7	29	7.8	22	9.6	18

Note) øD: max. diameter



KQ2L Metric

Applicable tube O.D. (mm)	Part No.	øD	L	Q	M	Effective orifice(mm²)		Weight (g)
						Nylon	Urethane	
3.2	KQ2L23-00	9.6	17.5	4.3	15.5	3	2.5	3
4	KQ2L04-00	10.4	18	4.5	16	4.2	4.2	6
6	KQ2L06-00	12.8	20	5.3	17	11.4	11.4	7
8	KQ2L08-00	15.2	23	6	18.5	21.6	14.9	11
10	KQ2L10-00	18.5	26.5	6.8	21	35.2	25.0	17
12	KQ2L12-00	20.9	28.5	7.5	22	50.2	39.7	21
16	KQ2L16-00	26.5	34	10	25	100	(84)	29

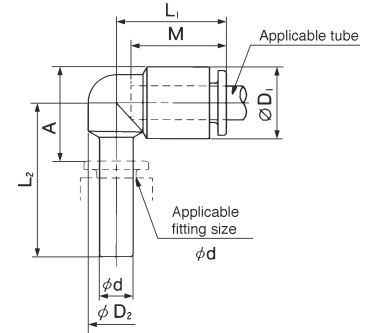
Note) (): Values for soft nylon. øD: max. diameter

Plug-in elbow: KQ2L Inch



Applicable tube O.D. (inch)	Applicable fitting size ϕd (inch)	Part No.	ϕD_1	ϕD_2	L1	L2	A	M	Min. hole dia.	Weight (g)
1/8	1/8	KQ2L01-99	9.6	7	17	24.5	14	15	2.2	3
5/32	5/32	KQ2L03-99	10.4	8	18	25	14.5	16	2.5	3
3/16	3/16	KQ2L05-99	11.4	10	19.5	34	23.5	16.5	3.5	7
1/4	1/4	KQ2L07-99	13.2	10	20	27.5	17.5	17	4.6	8
5/16	5/16	KQ2L09-99	15.2	12	22.5	31.5	21	18.5	6	6
3/8	3/8	KQ2L11-99	17.9	17	25.5	42	30	21	7	19
1/2	1/2	KQ2L13-99	21.7	17	28	44.5	34	22	9.6	27

Note) ϕD_1 : max. diameter



KQ2L Metric

Applicable tube O.D. (mm)	Applicable fitting size ϕd (mm)	Part No.	ϕD_1	ϕD_2	L1	L2	A	M	Effective orifice (mm ²)		Weight (g)
									Nylon	Urethane	
3.2	3.2	KQ2L23-99	9.6	7	17	24.5	14	15.5	3	2.5	2
4	4	KQ2L04-99	10.4	8	18	25	14.5	16	4.2	4.2	3
6	6	KQ2L06-99	12.8	10	20	27.5	17	17	11.4	11.4	3
8	8	KQ2L08-99	15.2	12	22.5	31.5	21	18.5	21.6	14.9	5
10	10	KQ2L10-99	18.5	14	25.5	35.5	23.5	21	35.2	25.0	9
12	12	KQ2L12-99	20.9	16	27	37.5	26	22	50.2	39.7	10
16	16	KQ2L16-99	26.5	20.9	34	53	41	25	100	(84)	42

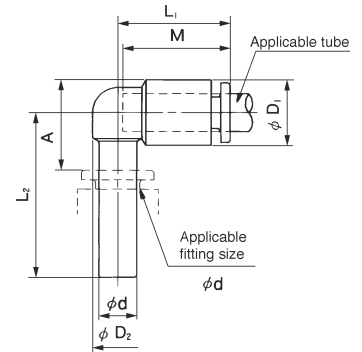
Note) (): Values for soft nylon.
 ϕD_1 : max. diameter

Reducer elbow: KQ2L Inch



Applicable tube O.D. (inch)	Applicable fitting size ϕd (inch)	Part No.	ϕD_1	ϕD_2	L1	L2	A	M	Min. hole dia.	Weight (g)
1/8	5/32	KQ2L01-03	9.6	7	17	25	13.5	15.5	2.2	3
	3/16	KQ2L01-05		10	17.5	33	21.5		2.5	7
5/32	3/16	KQ2L03-05	10.4	10	18	33.5	22.5	16	3	6
	1/4	KQ2L03-07		8	26	14.5	16		2.5	3
3/16	1/4	KQ2L05-07	11.4	10	19.5	34.5	23.5	16.5	3.5	8
	5/16	KQ2L05-09		10	35.5	23	17		4.6	11
1/4	5/16	KQ2L07-09	13.2	10	20.5	36.5	24.5	17	4.6	12
	3/8	KQ2L07-11		12	37.5	23.5	18.5		6	17
5/16	3/8	KQ2L09-11	15.2	12	23.5	40.5	27.5	18.5	6	17
	1/2	KQ2L09-13		17	41.5	27.5	21		7	30
3/8	1/2	KQ2L11-13	17.9	17	25.5	43	30	21	7	25

Note) ϕD_1 : max. diameter



KQ2L Metric

Applicable tube O.D. (mm)	Applicable fitting size ϕd (mm)	Part No.	ϕD_1	ϕD_2	L1	L2	A	M	Effective orifice (mm ²)		Weight (g)
									Nylon	Urethane	
3.2	4	KQ2L23-04	9.6	7	17	25	13.5	15.5	3	2.5	2
4	6	KQ2L04-06	10.4	8	18	26	14.5	16	4.2	4.2	3
	8	KQ2L04-08		10	35	22	17		11.4	11.4	11
6	8	KQ2L06-08	12.8	10	20	36.5	24.5	17	11.4	11.4	12
	10	KQ2L06-10		12	38.5	24	18.5		21.6	14.9	19
8	10	KQ2L08-10	15.2	12	23	39.5	26	18.5	21.6	14.9	20
	12	KQ2L08-12		17	40.5	26	21		35.2	25.0	27
10	12	KQ2L10-12	18.5	17	26.5	42	30	21	35.2	25.0	29
12	16	KQ2L12-16	20.9	17	28.5	49.5	34.5	22	50.2	39.7	53

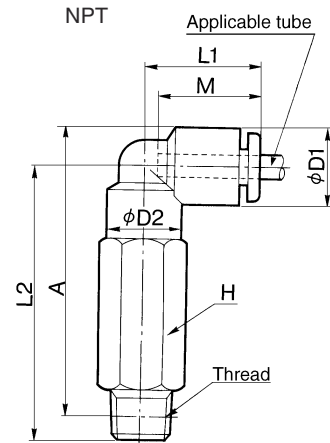
Note) ϕD_1 : max. diameter

Extended male elbow: KQ2W Inch



Applicable tube O.D. (inch)	Thread NPT	Part No.	H (Hex.)	øD1	øD2	L1	L2	A*	M	Min. hole dia.	Weight (g)
1/8	1/8	KQ2W01-34S	11.11	9.6	10	17.5	37	38	15.5	2.5	19
	1/4	KQ2W01-35S	14.29				43	42			41
5/32	1/8	KQ2W03-34S	11.11	10.4	10	18	37.5	38.5	16	3	19
	1/4	KQ2W03-35S	14.29				43.5	42.5			41
3/16	1/8	KQ2W05-34S	11.11	11.4	10	19.5	38	40	16.5	3.5	41
	1/4	KQ2W05-35S	14.29				44	43.5			19
1/4	1/8	KQ2W07-34S	11.11	13.2	10	20.5	40.5	43	17	4.6	20
	1/4	KQ2W07-35S	14.29				46.5	47			42
	3/8	KQ2W07-36S	17.46				48.5	49			69
	1/8	KQ2W09-34S	12.7				43.5	47			30
5/16	1/4	KQ2W09-35S	14.29	15.2	12	23.5	49.5	51	18.5	6	47
	3/8	KQ2W09-36S	17.46				51.5	53			74
	1/4	KQ2W11-35S	17.46				56	59			69
3/8	3/8	KQ2W11-36S	17.46	17.9	17	25.5	58	61	21	7	76
	1/2	KQ2W11-37S	22.23				64.5	65.5			147
	1/4	KQ2W13-35S	17.46				58	63			9
1/2	3/8	KQ2W13-36S	17.46	21.7	17	28	60	64.5	22	9.6	78
	1/2	KQ2W13-37S	22.23				66.5	69			149

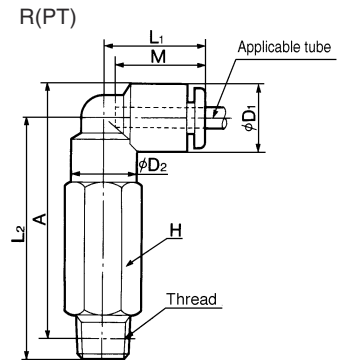
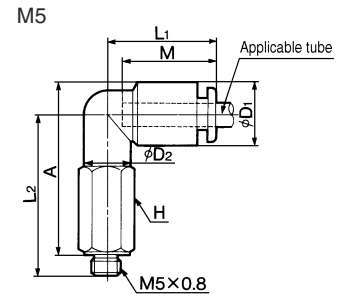
* Reference dimensions after NPT thread installation. Note) øD1: max. diameter



KQ2W Metric

Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	A*	M	Effective orifice(mm ²)		Weight (g)
										Nylon	Urethane	
3.2	M5×0.8	KQ2W23-M5	8	9.6	8	17.5	30	31	15.5	2.8	2.4	10
	1/8	KQ2W23-01S	10		10		37	38				19
	1/4	KQ2W23-02S	14		10		43	42				41
4	M5×0.8	KQ2W04-M5	8	10.4	8	18	30	32	16	3.0	3.0	11
	1/8	KQ2W04-01S	10		10		37.5	38.5				23
	1/4	KQ2W04-02S	14		10		43.5	42.5				38
6	M5×0.8	KQ2W06-M5	8	12.8	8	20	30.5	33.5	17	3	3	11
	1/8	KQ2W06-01S	10		10		40	42.5				26
	1/4	KQ2W06-02S	14		10		46	46.5		10.9	10.9	41
	3/8	KQ2W06-03S	17		10		48	48				67
8	1/8	KQ2W08-01S	12	15.2	12	23	43.5	47	18.5	20.5	14.2	30
	1/4	KQ2W08-02S	14				49.5	51				47
	3/8	KQ2W08-03S	17				51.5	52.5				74
10	1/4	KQ2W10-02S	17	18.5	17	26.5	56.5	59.5	21	33.5	23.8	66
	3/8	KQ2W10-03S	17				58.5	61				76
	1/2	KQ2W10-04S	22				65	66				145
12	1/4	KQ2W12-02S	17	20.9	17	28.5	57.5	62	22	47.7	37.7	68
	3/8	KQ2W12-03S	17				59.5	63.5				78
	1/2	KQ2W12-04S	22				66	68.5				147
16	3/8	KQ2W16-03S	22	26.5	20.9	34	69.5	76	25	71	(71)	101
	1/2	KQ2W16-04S	22				75	80				105

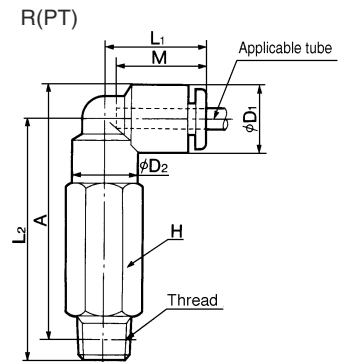
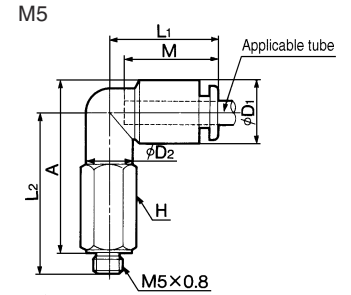
* Reference dimensions after R(PT) thread installation. Note) (): Values for soft nylon. øD1: max. diameter



Extended male elbow: KQ2W Inch size tube/metric thread (formerly IQ)



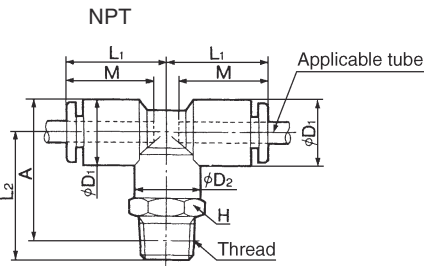
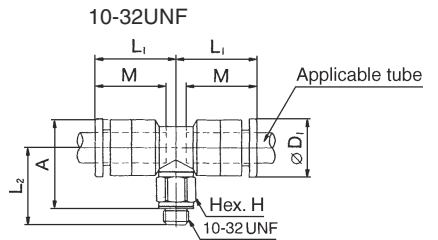
Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	A*	M	Min. hole dia.	Weight (g)
3/16	1/8	KQ2L05-01S	10	11.4	10	19.5	38	40	16.5	3.5	19
	1/4	KQ2L05-02S	14				44	43.5			41
1/4	1/8	KQ2L07-01S	10	13.2	10	20.5	40.5	43	17	4.6	20
	1/4	KQ2L07-02S	14				46.5	47			45
	3/8	KQ2L07-03S	17				48.5	49			69
5/16	1/8	KQ2L09-01S	12	15.2	12	23.5	43.5	47	18.5	6	30
	1/4	KQ2L09-02S	14				49.5	51			47
	3/8	KQ2L09-03S	17				51.5	53			74
3/8	1/4	KQ2L11-02S	17	17.9	17	25.5	56	59	21	7	69
	3/8	KQ2L11-03S	17				58	61			76
	1/2	KQ2L11-04S	22				64.5	65.5			147
1/2	1/4	KQ2L13-02S	17	21.7	17	28	58	63	22	9.6	72
	3/8	KQ2L13-03S	17				60	64.5			78
	1/2	KQ2L13-04S	22				66.5	69			149



Branch tee: KQ2T Inch



Applicable tube O.D. (inch)	Thread UNF NPT	Part No.	H (Hex.)	øD1	øD2	L1	L2	A	M	Min. hole dia.	Weight (g)	
1/8	10-32UNF	KQ2T01-32	7	8.4	—	15.3	13.2	14.4	12.7	2.3	3.2	
	1/16	KQ2T01-33S	11.11	9.6	10	17.5	21.5	22.5*	15.5	2.5	10	
	1/8	KQ2T01-34S					25.5	24.5*			20	
	1/4	KQ2T01-35S					14.29					
5/32	10-32UNF	KQ2T03-32	7	9.3	—	15.6	13.7	15.4	12.7	2.3	3.5	
	1/16	KQ2T03-33S	11.11	10.4	10	18	22	23*	16	3	10	
	1/8	KQ2T03-34S					14.29	26			25*	11
	1/4	KQ2T03-35S					14.29	26			25*	20
3/16	1/8	KQ2T05-34S	11.11	11.4	10	19.5	22.5	24*	16.5	3.5	12	
	1/4	KQ2T05-35S	14.29				26.5	26*			21	
1/4	10-32UNF	KQ2T07-32	7	12	—	16.1	15.1	18.1	13.6	2.3	4.4	
	1/8	KQ2T07-34S	11.11	13.2	10	20.5	23.5	26*	17	4.6	12	
	1/4	KQ2T07-35S	14.29				27.5	28*			22	
	3/8	KQ2T07-36S	17.46				29.5	30*			35	
5/16	1/8	KQ2T09-34S	12.7	15.2	12	23	24.5	28*	18.5	6	16	
	1/4	KQ2T09-35S	14.29				28.5	30*			24	
	3/8	KQ2T09-36S	17.46				30.5	31.5*			36	
3/8	1/8	KQ2T11-34S	17.46	17.9	17	25.5	26.5	31.5*	21	7	31	
	1/4	KQ2T11-35S					17.46	29.5			32.5*	29
	3/8	KQ2T11-36S					17.46	31.5			34.5*	38
	1/2	KQ2T11-37S					22.23	35.5			36.5*	64
1/2	1/4	KQ2T13-35S	17.46	21.7	17	28	31.5	36.5*	22	9.6	34	
	3/8	KQ2T13-36S					17.46	33.5			38.5*	43
	1/2	KQ2T13-37S					22.23	37.5			40*	69



* Reference dimensions after NPT thread installation.
Note) øD1: max. diameter

Branch tee: KQ2T Metric

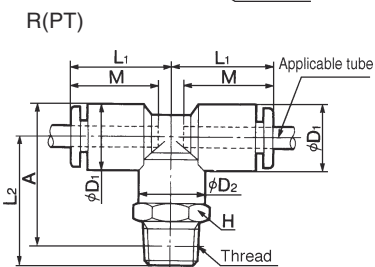
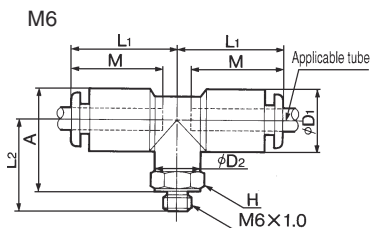
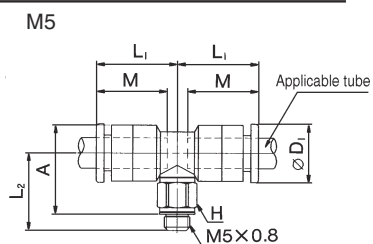


Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	A*	M	Effective orifice(mm²)		Weigh (g)	
										Nylon	Urethane		
3.2	M5×0.8	KQ2T23-M5	7	8.4	—	15.3	13.2	14.3	12.7	15.5	3.4	2.9	3.2
	1/8	KQ2T23-01S	10	9.6	10	17.5	21.5	22.5	10				
	1/4	KQ2T23-02S	14						20				
4	M5×0.8	KQ2T04-M5	7	9.3	—	15.6	13.7	15.3	12.7	16	4.3	4.3	3.5
	M6×1.0	KQ2T04-M6	8	10.4	10	18	22	23	6				
	1/8	KQ2T04-01S	10						13				
	1/4	KQ2T04-02S	14						19				
6	M5×0.8	KQ2T06-M5	7	11.6	—	16.1	14.7	17.4	13.5	17	13.9	13.9	4.4
	M6×1.0	KQ2T06-M6	8	12.8	8	16.1	15.7	17.4	13.5				8
	1/8	KQ2T06-01S	10	12.8	10	20	23	25.5	13				
	1/4	KQ2T06-02S	14						21				
	3/8	KQ2T06-03S	17						35				
8	1/8	KQ2T08-01S	12	15.2	12	23	24.5	28	18.5	26.3	18.2	15	
	1/4	KQ2T08-02S	14									23	
	3/8	KQ2T08-03S	17									37	
10	1/8	KQ2T10-01S	12	18.5	17	26.5	27	32	21	40.8	29.0	31	
	1/4	KQ2T10-02S	17									29	
	3/8	KQ2T10-03S	22									39	
	1/2	KQ2T10-04S	22									66	
12	1/4	KQ2T12-02S	17	20.9	17	28.5	31	35.5	22	57.2	45.2	31	
	3/8	KQ2T12-03S	22									41	
	1/2	KQ2T12-04S	22									68	
16	3/8	KQ2T16-03S	22	26.5	20.9	34	38	44.5	25	71	(71)	112	
	1/2	KQ2T16-04S	22									116	

*Reference dimensions after R(PT) thread installation.

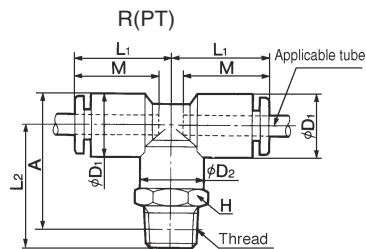
Note) (): Values for soft nylon.

øD1: max. diameter



KQ2T Inch size tube/metric thread (formerly IQ)

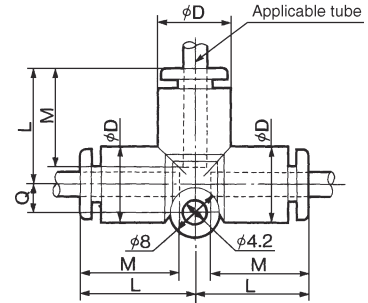
Applicable tube O.D. (inch)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	A*	M	Min. hole dia.	Weight (g)
3/16	1/8	KQ2T05-01S	10	11.4	10	19.5	22.5	24	16.5	6	12
	1/4	KQ2T05-02S	14				26.5	26			21
1/4	1/8	KQ2T07-01S	10	13.2	10	20.5	23.5	26	17	4.6	12
	1/4	KQ2T07-02S	14				27.5	28			22
	3/8	KQ2T07-03S	17				29.5	30			35
5/16	1/8	KQ2T09-01S	12	15.2	12	23	24.5	28	18.5	6	16
	1/4	KQ2T09-02S	14				28.5	30			24
	3/8	KQ2T09-03S	17				30.5	31.5			36
3/8	1/4	KQ2T11-02S	17	17.9	17	25.5	29.5	32.5	21	7	29
	3/8	KQ2T11-03S	22				31.5	34.5			38
	1/2	KQ2T11-04S	22				35.5	36.5			64
1/2	1/4	KQ2T13-02S	17	21.7	17	28	31.5	36.5	22	9	34
	3/8	KQ2T13-03S	22				33.5	38.5			43
	1/2	KQ2T13-04S	22				37.5	40			69



Union tee: KQ2T Inch



Applicable tube O.D. (inch)	Part No.	øD	L	Q	M	Min. hole dia.	Weight (g)
1/8	KQ2T01-00	9.6	17.5	4.3	15.5	2.5	5
5/32	KQ2T03-00	10.4	18	4.5	16	3	5
3/16	KQ2T05-00	11.4	19.5	4.8	16.5	3.5	7
1/4	KQ2T07-00	13.2	20.5	5.3	17	4.6	9
5/16	KQ2T09-00	15.2	23	6	18.5	6	12
3/8	KQ2T11-00	17.9	26	6.6	21	7	18
1/2	KQ2T13-00	21.7	29	7.8	22	9.6	26



KQ2T Metric

Applicable tube O.D. (mm)	Part No.	ØD	L	Q	M	Effective orifice(mm ²)		Weight (g)
						Nylon	Urethane	
3.2	KQ2T23-00	9.6	17.5	4.3	15.5	3.4	2.9	5
4	KQ2T04-00	10.4	18	4.5	16	6.4	6.4	8
6	KQ2T06-00	12.8	20	5.3	17	13.4	13.4	11
8	KQ2T08-00	15.2	23	6	18.5	25.6	17.7	16
10	KQ2T10-00	18.5	26.5	6.8	21	40	28.4	25
12	KQ2T12-00	20.9	28.5	7.5	22	57.4	45.4	29
16	KQ2T16-00	26.5	34	10	25	100	(84)	40

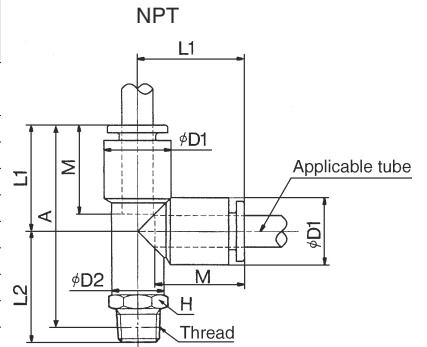
Note) (): Values for soft nylon.
øD: max. diameter

Male run tee: KQ2Y Inch



Applicable tube O.D. (inch)	Thread NPT	Part No.	H (Hex.)	øD1	øD2	L1	L2	A*	M	Min. hole dia.	Weight (g)
1/8	1/16	KQ2Y01-33S	11.11	9.6	10	17.5	21.5	35	15.5	2.5	10
	1/8	KQ2Y01-34S	14.29				25.5	37			
	1/4	KQ2Y01-35S	14.29				25.5	37			
5/32	1/16	KQ2Y03-33S	11.11	10.4	10	18	22	36	16	3	10
	1/8	KQ2Y03-34S	14.29				26	38			11
	1/4	KQ2Y03-35S	14.29				26.5	40			20
3/16	1/8	KQ2Y05-34S	11.11	11.4	10	19.5	22.5	38	16.5	3.5	12
	1/4	KQ2Y05-35S	14.29				26.5	40			21
	1/8	KQ2Y07-34S	11.11	13.2	10	20.5	23.5	40	17	4.6	12
1/4	1/4	KQ2Y07-35S	14.29				27.5	42			22
	3/8	KQ2Y07-36S	17.46				29.5	44			35
5/16	1/8	KQ2Y09-34S	12.7	15.2	12	23.5	24.5	40	18.5	6	16
	1/4	KQ2Y09-35S	14.29				28.5	46			24
	3/8	KQ2Y09-36S	17.46				30.5	48			36
3/8	1/4	KQ2Y11-35S	17.46	17.9	17	25.5	29.5	49	21	7	29
	3/8	KQ2Y11-36S	22.23				31.5	51			38
	1/2	KQ2Y11-37S	22.23				35.5	53			64
1/2	1/4	KQ2Y13-35S	17.46	21.7	17	28	31.5	53.5	22	9.6	34
	3/8	KQ2Y13-36S	22.23				33.5	55.5			43
	1/2	KQ2Y13-37S	22.23				37.5	57			69

* Reference dimensions after NPT thread installation.
Note) øD1: max. diameter

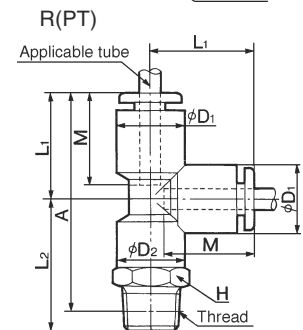
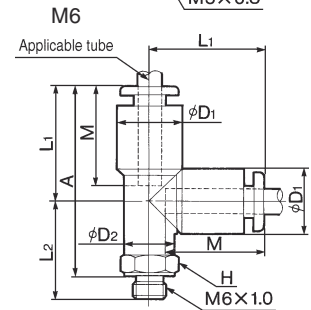
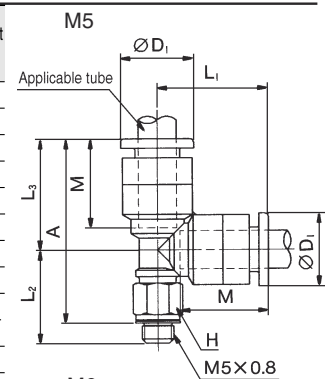


Male run tee: KQ2Y Metric



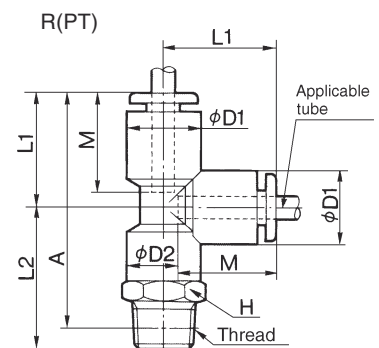
Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	Effective orifice(mm²)		Weight (g)
											Nylon	Urethane	
3.2	M5×0.8	KQ2Y23-M5	7	8.4	—	15.4	13.2	14.8	24.9	12.7	3.4	2.9	3.2
	1/8	KQ2Y23-01S	10	9.6	10	17.5	21.5	—	35	15.5			10
	1/4	KQ2Y23-02S	14										20
4	M5×0.8	KQ2Y04-M5	7	9.3	—	15.6	13.7	14.8	25.4	12.7	4.6	4.6	3.5
	M6×1.0	KQ2Y04-M6	8	9.3	8	15.6	14.7	—	25.4	12.7			6
	1/8	KQ2Y04-01S	10	10.4	10	18	22	—	36	16	6.4	6.4	13
	1/4	KQ2Y04-02S	14										19
6	M5×0.8	KQ2Y06-M5	7	11.6	—	17.1	14.7	17.1	28.7	13.5	4.6	4.6	4.5
	M6×1.0	KQ2Y06-M6	8	11.6	8	17.1	15.7	—	28.7	13.5			8
	1/8	KQ2Y06-01S	10	12.8	10	20	23	—	39	17	13.4	13.4	13
	1/4	KQ2Y06-02S	14										21
	3/8	KQ2Y06-03S	17										35
8	1/8	KQ2Y08-01S	12	15.2	12	23	24.5	—	43.5	18.5	25.6	17.7	15
	1/4	KQ2Y08-02S	14				28.5		45.5				23
	3/8	KQ2Y08-03S	17				30.5		47				37
10	1/8	KQ2Y10-01S	12	18.5	17	26.5	27	—	49.5	21	40.0	28.4	31
	1/4	KQ2Y10-02S	17				30		50.5				29
	3/8	KQ2Y10-03S	17				32		52				39
	1/2	KQ2Y10-04S	22				36		54.5				66
12	1/4	KQ2Y12-02S	17	20.9	17	28.5	31	—	53.5	22	57.4	45.4	31
	3/8	KQ2Y12-03S	17				33		55				41
	1/2	KQ2Y12-04S	22				37		57.5				68
16	3/8	KQ2Y16-03S	22	26.5	20.9	34	38	—	65.5	25	81	(81)	112
	1/2	KQ2Y16-04S	22				41		67		113	(113)	116

* Reference dimensions after R(PT) thread installation.
 Note) (): Values for soft nylon.
 øD1: max. diameter



KQ2Y Inch size tube/metric thread (formerly IQ)

Applicable tube O.D. (Inch)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	A*	M	Min. hole dia.	Weight (g)
3/16	1/8	KQ2Y05-01S	10	11.4	10	19.5	22.5	24	16.5	3.5	12
	1/4	KQ2Y05-02S	14				26.5	26			21
1/4	1/8	KQ2Y07-01S	10	13.2	10	20.5	23.5	26	17	4.5	12
	1/4	KQ2Y07-02S	14				27.5	28			22
	3/8	KQ2Y07-03S	17				29.5	29.5			35
5/16	1/8	KQ2Y09-01S	12	15.2	12	23.5	24.5	28	18.5	6	16
	1/4	KQ2Y09-02S	14				28.5	30			24
	3/8	KQ2Y09-03S	17				30.5	31.5			36
3/8	1/4	KQ2Y11-02S	17	17.9	17	25.5	29.5	32.5	21	7	29
	3/8	KQ2Y11-03S	17				31.5	34			38
	1/2	KQ2Y11-04S	22				35.5	36.5			64
1/2	1/4	KQ2Y13-02S	17	21.7	17	28	31.5	36.5	22	9.5	34
	3/8	KQ2Y13-03S	17				33.5	38.5			43
	1/2	KQ2Y13-04S	22				37.5	40			69

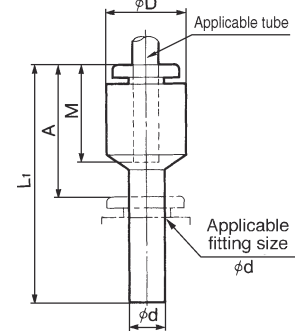


Plug-in reducer: KQ2R Inch



Applicable tube O.D. (inch)	Applicable fitting size ød (inch)	Part No.	øD	L	A	M	Min. hole dia.	Weight (g)
1/8	5/32	KQ2R01-03	9.6	34.5	18.5	15.5	2.5	2
	3/16	KQ2R01-05	9.2	34	17.5			7
	1/4	KQ2R01-07			17			9
5/32	3/16	KQ2R03-05	10	34	17.5	16	3	8
	1/4	KQ2R03-07	10.4	34.5				9
3/16	1/4	KQ2R05-07	11.4	34.5	18.5	16.5	3.5	4
	5/16	KQ2R05-09	10.7	36.5	18			14
1/4	5/16	KQ2R07-09	12.5	37	18.5	17	4.6	17
	3/8	KQ2R07-11		39	18			19
5/16	3/8	KQ2R09-11	14	40	19	18.5	6	24
	1/2	KQ2R09-13		41				32
3/8	1/2	KQ2R11-13	16.5	42.5	20.5	21	7	32

Note) øD: max. diameter



KQ2R Metric

Applicable tube O.D. (mm)	Applicable fitting size ød	Part No.	øD	L	A	M	Effective orifice(mm²)		Weight (g)
							Nylon	Urethane	
3.2	4	KQ2R23-04	9.6	33.5	18.5	15.5	3.4	2.9	2
4	6	KQ2R04-06	10.4	34.5	17.5	16	5.6	5.6	2.1
	8	KQ2R04-08		36.5	18				2.3
	10	KQ2R04-10	12.8	39.5	18.5				3.6
6	4	KQ2R06-04	12.8	37	21	17	4	4	3
	8	KQ2R06-08	12.8	37	18.5				3
	10	KQ2R06-10		39.5	18.5		13.1	13.1	3.5
	12	KQ2R06-12	15.2	42	20				5.2
8	10	KQ2R08-10	15.2	41	20	18.5	26.1	18.0	4.5
	12	KQ2R08-12		42					5.1
10	12	KQ2R10-12	17	42	20	21	41.5	32.8	33
	16	KQ2R10-16	20.9	50.5	25.5				(29.5) 42
12	16	KQ2R12-16	20.9	50.5	25.5	22	58.3	(46.1)	37

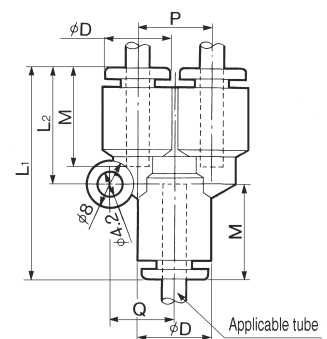
Note) (): Values for soft nylon.
øD: max. diameter

Union "Y": KQ2U Inch



Applicable tube O.D. (inch)	Part No.	øD	L1	L2	P	Q	M	Min. hole dia.	Weight (g)
1/8	KQ2U01-00	9.6	33	17.5	9.6	9	15.5	2.5	6
5/32	KQ2U03-00	10.4	34	18	10.4	9.7	16	3	8
3/16	KQ2U05-00	11.4	36.5	20.5	11.4	10.6	16.5	3.5	9
1/4	KQ2U07-00	13.2	38	21.5	13.2	12	17	4.6	10
5/16	KQ2U09-00	15.2	42.5	24.5	15.2	13.7	18.5	6	12
3/8	KQ2U11-00	17.9	48	27.5	17.9	15.6	21	7	16

Note) øD: max. diameter

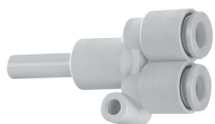


KQ2U Metric

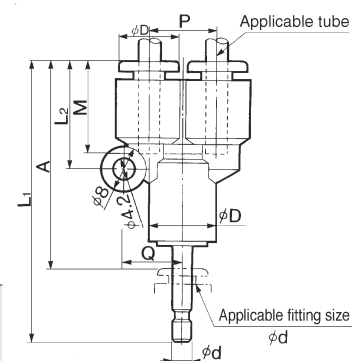
Applicable tube O.D. (mm)	Part No.	øD	L1	L2	P	Q	M	Effective orifice(mm²)		Weight (g)
								Nylon	Urethane	
3.2	KQ2U23-00	9.6	33	17.5	9.6	9	15.5	3.4	2.9	5
4	KQ2U04-00	10.4	34	18	10.4	9.7	16	4.2	4.2	8
6	KQ2U06-00	12.8	37	20	12.8	11.7	17	13.4	13.4	10
8	KQ2U08-00	15.2	42.5	24.5	15.2	13.7	18.5	25.6	17.7	12
10	KQ2U10-00	18.5	48	27.5	18.5	16.1	21	40	28.4	16
12	KQ2U12-00	20.9	51	30	20.9	18.1	22	57.4	45.4	23
16	KQ2U16-00	26.5	61.5	36.5	26.5	23	25	113	(113)	54

Note) (): Values for soft nylon.
øD: max. diameter

Plug-in “Y”: KQ2U Inch



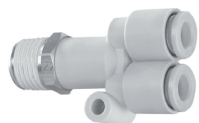
Applicable tube O.D. (inch)	Applicable fitting size ød (inch)	Part No.	øD	L1	L2	P	Q	A	M	Min. hole dia.	Weight (g)
1/8	1/8	KQ2U01-99	9.6	50	17.5	9.6	9	35	15.5	2	10
5/32	5/32	KQ2U03-99	10.4	51.5	18	10.4	9.7	35.5	16	2.5	12
3/16	3/16	KQ2U05-99	11.4	56	20.5	11.4	10.6	39.5	16.5	3.5	17
1/4	1/4	KQ2U07-99	13.2	56.5	21.5	13.2	12	39.5	17	4.6	19
5/16	5/16	KQ2U09-99	15.2	64.5	24.5	15.2	13.7	46	18.5	6	22



KQ2U Metric

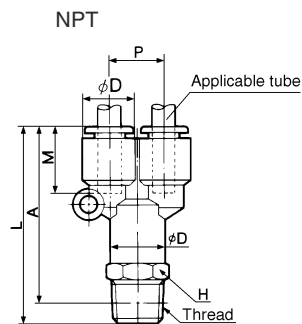
Applicable tube O.D. (mm)	Applicable fitting size ød	Part No.	øD	L1	L2	P	Q	A	M	Effective orifice (mm²)		Wt. (g)
										Nylon	Urethane	
3.2	3.2	KQ2U23-99	9.6	50	17.5	9.6	9	35	15.5	3.4	2.9	6
4	4	KQ2U04-99	10.4	51.5	18	10.4	9.7	35.5	16	4.2	4.2	12
6	6	KQ2U06-99	12.8	55.5	20	12.8	11.7	38.5	17	13.4	13.4	19
8	8	KQ2U08-99	15.2	64.5	24.5	15.2	13.7	46	18.5	25.6	17.7	22
10	10	KQ2U10-99	18.5	71.5	27.5	18.5	16.1	50.5	21	40	28.4	26
12	12	KQ2U12-99	20.9	75.5	30	20.9	18.1	53.5	22	57.4	45.4	32
16	16	KQ2U16-99	26.5	90	36.5	26.5	23	65	25	113	(113)	78

Branch “Y”: KQ2U Inch

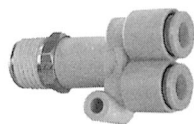


Applicable tube O.D. (inch)	Thread NPT	Part No.	H (Hex.)	øD	L	P	Q	A*	M	Min. hole dia.	Weight (g)
1/8	1/8	KQ2U01-34S	12.7	9.6	40.5	9.6	9	36.5	15.5	2.5	14
	1/4	KQ2U01-35S	14.29		44.5			38.5			
5/32	1/8	KQ2U03-34S	12.7	10.4	42	10.4	9.7	38	16	3	16
	1/4	KQ2U03-35S	14.29		46			40			
3/16	1/8	KQ2U05-34S	12.7	11.4	44	11.4	10.6	40	16.5	3.5	18
	1/4	KQ2U05-35S	14.9		48.5			42.5			
1/4	1/8	KQ2U07-34S	14.29	13.2	46.5	13.2	12	42.5	17	4.6	20
	1/4	KQ2U07-35S			49.5			43.5			
	3/8	KQ2U07-36S	17.46		51.5			45			
5/16	1/8	KQ2U09-34S	17.46	15.2	52.5	15.2	13.7	48.5	18.5	6	22
	1/4	KQ2U09-35S			55.5			49.5			23
	3/8	KQ2U09-36S			56.5			50			36
3/8	1/4	KQ2U11-35S	19.05	17.9	60	17.9	15.6	54	21	7	42
	3/8	KQ2U11-36S			61			54.5			43
	1/2	KQ2U11-37S	22.23		64.5			56.5			56
1/2	1/4	KQ2U13-35S	22.23	21.7	64.5	21.7	18.8	58.5	22	9.6	31
	3/8	KQ2U13-36S			65.5			59			41
	1/2	KQ2U13-37S			68.5			60.5			68

* Reference dimensions after NPT thread installation.



Branch "Y": KQ2U Metric

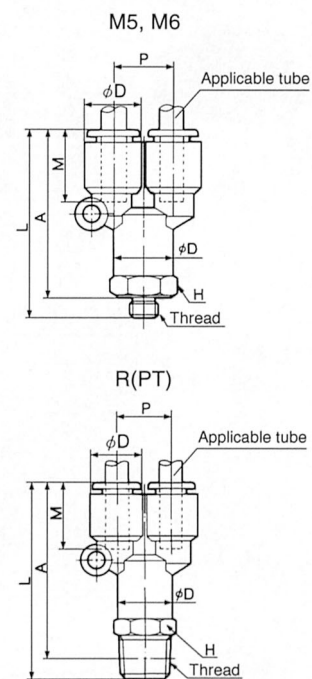


Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD	L	P	A*	M	Effective orifice(mm ²)		Weight (g)
									Nylon	Urethane	
3.2	M5×0.8	KQ2U23-M5	10	9.6	38	9.6	34.5	15.5	2.2	2.2	9
	1/8	KQ2U23-01S	11		41		37		3.4	2.9	14
	1/4	KQ2U23-02S	14		44		38				
4	M5×0.8	KQ2U04-M5	11	10.4	39.5	10.4	36	16	2.2	2.2	4
	M6×1.0	KQ2U04-M6			40						10
	1/8	KQ2U04-01S			42		38		4.2	4.2	11
	1/4	KQ2U04-02S	14		46		40				20
6	M5×0.8	KQ2U06-M5	13	12.8	42.5	12.8	39	17	2.2	2.2	13
	M6×1.0	KQ2U06-M6			43						
	1/8	KQ2U06-01S			45.5		41.5				12
	1/4	KQ2U06-02S	14		49		43		13.4	13.4	22
	3/8	KQ2U06-03S	17		51		44.5				35
8	1/8	KQ2U08-01S	17	15.2	52.5	15.2	48.5	18.5	25.6	17.7	16
	1/4	KQ2U08-02S			55.5		49.5				24
	3/8	KQ2U08-03S			56.5		50				36
10	1/4	KQ2U10-02S	19	18.5	61	18.5	55	21	40	28.4	30
	3/8	KQ2U10-03S			62		55.5				40
	1/2	KQ2U10-04S	22		65		57				65
12	1/4	KQ2U12-02S	22	20.9	64.5	20.9	58.5	22	57.4	45.4	32
	3/8	KQ2U12-03S			65.5		59				40
	1/2	KQ2U12-04S			68.5		60.5				65
16	3/8	KQ2U16-03S	27	26.5	76	26.5	69.5	25	81	(81)	106
	1/2	KQ2U16-04S			79		71		113	(113)	111

* Reference dimensions after R(PT) thread installation.

Note) (): Values for soft nylon.

øD: max. diameter



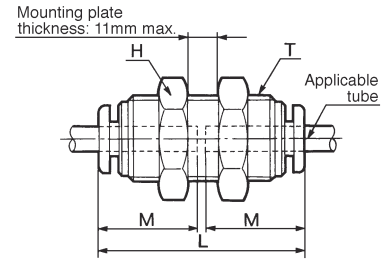
KQ2U Inch size tube/metric thread (formerly IQ)

Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD	L	P	A*	M	Min. hole dia.	Weight (g)
3/16	1/8	KQ2U05-01S	12	11.4	44	11.4	40	16.5	3.5	18
	1/4	KQ2U05-02S	14		48.5		42.5			18
1/4	1/8	KQ2U07-01S	14	13.2	46.5	13.2	42.5	17	4.6	20
	1/4	KQ2U07-02S			49.5					20
	3/8	KQ2U07-03S	17		51.5		45			20
5/16	1/8	KQ2U09-01S	17	15.2	52.5	15.2	48.5	18.5	6	22
	1/4	KQ2U09-02S			55.5		49.5			23
	3/8	KQ2U09-03S			56.5		50			36
3/8	1/4	KQ2U11-02S	19	17.9	60	17.9	54	21	7	42
	3/8	KQ2U11-03S			61		54.5			43
	1/2	KQ2U11-04S	22		64.5		56.5			56
1/2	1/4	KQ2U13-02S	22	21.7	64.5	21.7	58.5	22	9.5	31
	3/8	KQ2U13-03S			65.5		59			41
	1/2	KQ2U13-04S			68.5		60.5			68

Bulkhead union: KQ2E Inch



Applicable tube O.D. (inch)	Part No.	Thread UNF	H (Hex.)	L	Mounting hole	M	Min. hole dia.	Weight (g)
1/8	KQ2E01-00	1/2-20	17.46	31.5	13.5	15.5	2.5	26
5/32	KQ2E03-00	1/2-20	17.46	32.5	13.5	16	3	26
3/16	KQ2E05-00	9/16-18	17.46	34	15	16.5	3.5	33
1/4	KQ2E07-00	9/16-18	17.46	34.5	15	17	4.6	33
5/16	KQ2E09-00	3/4-16	22.23	38	20	18.5	6	52
3/8	KQ2E11-00	7/8-14	25.4	42.5	23	21	7	70
1/2	KQ2E13-00	1-12	28.6	44.5	26	22	9.6	97



KQ2E Metric

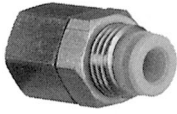
Applicable tube O.D. (mm)	Part No.	T (M)	H (Hex.)	L	Mounting hole	M	Effective orifice (mm ²)		Weight (g)
							Nylon	Urethane	
3.2	KQ2E23-00	M12 × 1	14	31.5	13	15.5	3.4	2.9	26
4	KQ2E04-00	M12 × 1	14	32.5	13	16	5.6	5.6	26
6	KQ2E06-00	M14 × 1	17	34.5	15	17	13.1	13.1	33
8	KQ2E08-00	M16 × 1	19	38	17	18.5	26.1	18.0	52
10	KQ2E10-00	M20 × 1	24	42.5	21	21	41.5	29.5	70
12	KQ2E12-00	M22 × 1	27	44	23	22	58.3	46.1	90
16	KQ2E16-00	M28 × 1.5	32	51	29	25	113	(96)	115

Note) (): Values for soft nylon.

KQ2E Inch size tube/metric thread (formerly IQ)

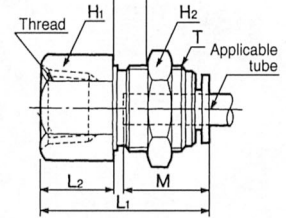
Applicable tube O.D. (mm)	Part No.	T (M)	H (Hex.)	L	Mounting hole	M	Min. hole dia.	Weight (g)
3/16	KQ2E05-00M	M14X1	17	34	15	16.5	3.5	30
1/4	KQ2E07-00M	M14X1	17	34.5	15	17	4.6	30
5/16	KQ2E09-00M	M16X1	19	38	17	18.5	6	48
3/8	KQ2E11-00M	M20X1	24	42.5	21	21	7	62
1/2	KQ2E13-00M	M22X1	27	44.5	23	22	9.6	85

Bulkhead connector: KQ2E Inch



Applicable tube O.D. (inch)	Thread NPT	Part No.	Thread UNF	H1 (Hex.)	H2 (Hex.)	L1	L2	M	Min. hole dia.	Mounting hole	Weight (g)
1/8	1/4	KQ2E01-35	1/2-20	17.46	17.46	31	15	15.5	2.5	13.5	36
5/32	1/4	KQ2E03-35	1/2-20	17.46	17.46	31	15	16	3	13.5	36
3/16	1/8	KQ2E05-34	9/16-18	17.46	17.46	28	10	16.5	3.5	15	34
1/4	1/4	KQ2E07-35	9/16-18	17.46	17.46	32.5	14.5	17	4.6	15	34
5/16	3/8	KQ2E09-36	3/4-16	22.23	22.23	35	15	18.5	6	20	52
3/8	3/8	KQ2E11-36	1/8-14	25.4	25.4	37	14.5	21	7	23	96
1/2	3/8	KQ2E13-36	1-12	28.6	28.6	37	14	22	9.6	26	125
	1/2	KQ2E13-37	1-12			41.5	18				128

Mounting plate thickness: 7mm max.



KQ2E Metric

Applicable tube O.D. (mm)	Thread Rc(PT)	Part No.	T (M)	H1 (Hex.)	H2 (Hex.)	L1	L2	Mounting hole	M	Effective orifice(mm²)		Weight (g)
										Nylon	Urethane	
3.2	1/4	KQ2E23-02	M12×1	17	14	31.5	15	13	15.5	3.4	2.9	13
4	1/8	KQ2E04-01	M12×1	14	14	27.5	11	13	16	5.6	5.6	16
	1/4	KQ2E04-02		17		31	15					35
6	1/8	KQ2E06-01	M14×1	17	17	28	11	15	17	13.1	13.1	25
	1/4	KQ2E06-02				31.5	15					40
	3/8	KQ2E06-03				33.5	17					29
8	1/8	KQ2E08-01	M16×1	17	19	27.5	7.5	17	18.5	26.1	18.0	28
	1/4	KQ2E08-02				33	13					27
	3/8	KQ2E08-03				35	15					48
10	1/4	KQ2E10-02	M20×1	22	24	34.5	12.5	21	21	41.5	29.5	53
	3/8	KQ2E10-03		22		36.5	15					67
12	3/8	KQ2E12-03	M22×1	24	27	37	14	23	22	58.3	46.1	92
	1/2	KQ2E12-04				41	18					59
16	3/8	KQ2E16-03	M28×1.5	30	32	40	14	29	25	96	(96)	127
	1/2	KQ2E16-04				44	18			113		132

Note) (): Values for soft nylon.

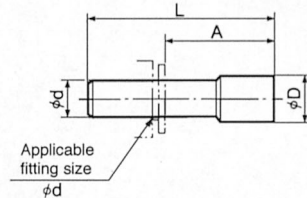
KQ2E Inch size tube/metric thread (formerly IQ)

Applicable tube O.D. (inch)	Applicable fitting size Rc(PT)	Part No.	T (M)	H1 (Hex.)	H2 (Hex.)	L1	L2	M	Min. hole dia.	Mounting hole	Wt. (g)
3/16	1/8	KQ2E05-01	M14X1	17	17	28	11.5	16.5	3.5	15	30
1/4	1/4	KQ2E07-02	M14X1	17	17	32.5	14.5	17	4.6	15	31
5/16	3/8	KQ2E09-03	M16X1	19	19	35	15	18.5	6	17	36
3/8	3/8	KQ2E11-03	M20X1	22	24	35	14.5	21	7	21	64
1/2	3/8	KQ2E13-03	M22X1	24	27	37	14.5	22	9.6	23	78
	1/2	KQ2E13-04				41.5	18.5				74

Plug: KQ2P Inch



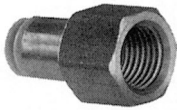
Applicable fitting size ød (inch)	Part No.	øD	L	A	Weight (g)
1/8	KQ2P-01	5	31.5	16	1
5/32	KQ2P-03	6	32	16	1
3/16	KQ2P-05	6.8	34	17.5	1
1/4	KQ2P-07	8.5	35	18	1
5/16	KQ2P-09	10	39	20.5	2
3/8	KQ2P-11	11.5	43	22	3.5
1/2	KQ2P-13	15	46	24	5



KQ2P Metric

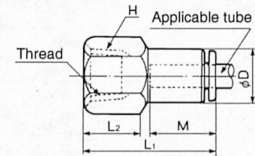
Applicable fitting size ød	Part No.	øD	L	A	Weight (g)
3.2	KQ2P-23	5	31.5	16	1
4	KQ2P-04	6	32	16	1
6	KQ2P-06	8	35	18	1
8	KQ2P-08	10	39	20.5	2
10	KQ2P-10	12	43	22	3.5
12	KQ2P-12	14	45.5	24	5
16	KQ2P-16	20.9	47	22	8

Female union: KQ2F Inch



Applicable tube O.D. (inch)	Thread UNF NPT	Part No.	H (Hex.)	øD	L1	L2	M	Weight (g)
1/8	1/8	KQ2F01-34	14.29	9.2	26.5	11.5	15.5	2.5
	1/4	KQ2F01-35	17.46		30.5	14.5		
5/32	1/8	KQ2F03-34	14.29	10	27	11	16	3
	1/4	KQ2F03-35	17.46		31	13.5		
1/4	1/8	KQ2F07-34	14.29	12.5	27.5	10.5	17	4.6
	1/4	KQ2F07-35	17.46		31	13.5		
	3/8	KQ2F07-36	22.23		33.5	15.5		
5/16	1/8	KQ2F09-34	14.29	14	29	10.5	18.5	6
	1/4	KQ2F09-35	17.46		32.5	13.5		
	3/8	KQ2F09-36	22.23		34.5	13		
3/8	1/4	KQ2F11-35	17.46	16.5	34.5	15	21	7
	3/8	KQ2F11-36	22.23		36.5			
	1/2	KQ2F11-37	23.81		40.5	19		
1/2	3/8	KQ2F13-36	22.23	20	36.5	14.5	22	9.6
	1/2	KQ2F13-37	23.81		41	18.5		

NPT

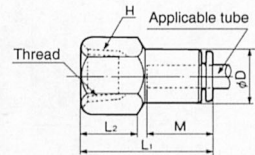


KQ2F Metric

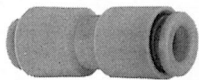
Applicable tube O.D. (mm)	Thread Rc(PT)	Part No.	H (Hex.)	øD	L1	L2	M	Effective orifice(mm²)		Weight (g)
								Nylon	Urethane	
4	1/8	KQ2F04-01	14	10	27	11	16	5.6	5.6	15
	1/4	KQ2F04-02	17		31	14				23
6	1/8	KQ2F06-01	14	12	27.5	11	17	13.1	13.1	15
	1/4	KQ2F06-02	17		31	13				22
	3/8	KQ2F06-03	19		33.5	15				25
8	1/8	KQ2F08-01	14	14	29	11	18.5	26.1	18.0	17
	1/4	KQ2F08-02	17		32.5	13				24
	3/8	KQ2F08-03	19		33.5	14				24
10	1/4	KQ2F10-02	17	17	34.5	14	21	41.5	18.0	27
	3/8	KQ2F10-03	19		36.5	15				30
12	1/4	KQ2F12-02	19	19	35	14	22	58.3	46.1	36
	3/8	KQ2F12-03	19		37	14				31
	1/2	KQ2F12-04	24		41	18				52
16	3/8	KQ2F16-03	24	25.7	38	15	25	81	(81)	59
	1/2	KQ2F16-04	24		43	19				58

Note) (): Values for soft nylon, øD2: max. diameter

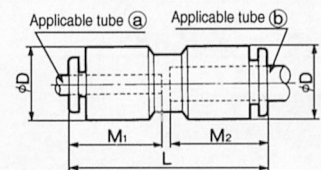
KQ2F 04 to 16



Different dia.straight: KQ2H Inch



Applicable tube O.D. (inch)		Part No.	øD	L	M1	M2	Weight (g)
a	b						
1/8	5/32	KQ2H01-03	10.4	32.5	15.5	16	2.5
	1/4	KQ2H01-07	13.2	34.5		17	
5/32	3/16	KQ2H03-05	11.4	34	16	16.5	3
	1/4	KQ2H03-07	13.2	34.5		17	
3/16	1/4	KQ2H05-07	13.2	34.5	16.5	17	3.5
	5/16	KQ2H07-09	15.2	38.5		18.5	
1/4	3/8	KQ2H07-11	17.9	42	17	21	4.6
	5/16	KQ2H09-11	17.9	42	18.5	21	
5/16	1/2	KQ2H09-13	21.7	44		22	6
	3/8	KQ2H11-13	21.7	44	21	22	7



KQ2H Metric

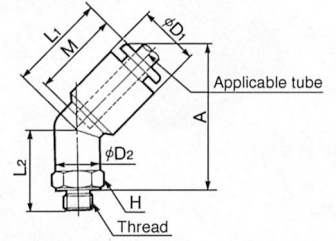
Applicable tube O.D. (mm)		Part No.	øD	L	M1	M2	Effective orifice(mm²)		Weight (g)
(a)	(b)						Nylon	Urethane	
3.2	4	KQ2H23-04	10.4	32.5	15.5	16	3.2	2.7	3
4	6	KQ2H04-06	12.8	34.5	16	17	4.2	4.2	5
6	8	KQ2H06-08	15.2	38.5	17	18.5	10.7	10.7	7
8	10	KQ2H08-10	18.5	42	18.5	21	24.1	16.7	11
10	12	KQ2H10-12	20.9	44.5	21	22	37.6	28.2	14
12	16	KQ2H12-16	26.5	56.5	22	25	58.3	46.1	47

Note) øD: max. diameter

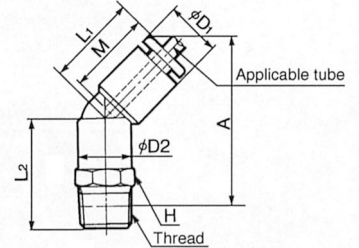
45° male elbow: KQ2K Inch

Applicable tube O.D. (inch)	Thread UNF NPT	Part No.	H (Hex.)	øD1	øD2	L1	L2	A*	M	Weight (g)
1/8	10-32 UNF	KQ2K01-32	8	9.6	8	16.5	15	25.5	15.5	2.3
	1/8	KQ2K01-34S	11.11		10	16.5	22.5	33	15.5	2.5
5/32	10-32 UNF	KQ2K03-32	8	10.4	8	17	14.5	26	16	2.3
	1/8	KQ2K03-34S	11.11		10	17	20.5	32	16	2.8
3/16	10-32 UNF	KQ2K05-34S	11.11	11.4	10	18	20.5	32.5	16.5	3.6
	1/8	KQ2K07-32	11.11		18	32	20.5	34	17	2.3
1/4	1/8	KQ2K07-34S	14.29	13.2	10	19	24.5	36	17	4.6
	1/4	KQ2K07-35S	17.46				26.5	37.5		
	3/8	KQ2K09-34S	12.7				22	37		
	1/4	KQ2K09-35S	14.29				26	39		
5/16	3/8	KQ2K09-36S	17.46	15.2	12	20.5	28	41	18.5	6
	1/8	KQ2K11-34S	17.46				24	42		
	1/4	KQ2K11-35S	17.46				27	43		
3/8	3/8	KQ2K11-36S	17.46	17.9	17	23.5	29	44.5	21	7
	1/2	KQ2K11-37S	17.46				33	46.5		
	1/4	KQ2K13-35S	17.46				27.5	46.5		
1/2	3/8	KQ2K13-36S	22.23	21.7	17	25.5	29.5	48	22	9.6
	1/2	KQ2K13-37S	22.23				33.5	50		

10-32 UNF, M5, M6



NPT, R(PT)



KQ2K Metric

Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	A [*]	M	Effective orifice(mm²)		Weigh (g)
										Nylon	Urethane	
4	M5×0.8	KQ2K04-M5	8	10.4	8	17	14.5	26	16	3.4	3.4	4
	M6×1.0	KQ2K04-M6	10		15		5					
	1/8	KQ2K04-01S	10		20.5		32	10				
	1/4	KQ2K04-02S	14		24.5		34	19				
6	M5×0.8	KQ2K06-M5	8	12.8	8	18	14.5	27.5	17	3.4	3.4	6
	M6×1.0	KQ2K06-M6	10		18.5	15	5					
	1/8	KQ2K06-01S	10		20.5	33	12					
	1/4	KQ2K06-02S	14		24.5	35	10					
	3/8	KQ2K06-03S	17		26.5	36.5	33					
8	1/8	KQ2K08-01S	12	15.2	12	20.5	22	37	18.5	19.7	19.7	13
	1/4	KQ2K08-02S	14				26	39				21
	3/8	KQ2K08-03S	17				28	41				35
10	1/8	KQ2K10-01S	17	18.5	17	24	24	42	21	30.9	23.2	25
	1/4	KQ2K10-02S	17				27	43.5				26
	3/8	KQ2K10-03S	22				29	45				36
	1/2	KQ2K10-04S	22				33	47.5				63
	1/4	KQ2K12-02S	17				27.5	45.5				28
12	3/8	KQ2K12-03S	22	20.9	17	25	29.5	47.5	22	44.5	35.1	38
	1/2	KQ2K12-04S	22				33.5	49.5				65
	3/8	KQ2K16-03S	22				32	55				65.8
16	1/2	KQ2K16-04S	22	26.5	20.9	30	35	56.5	25	91.9	(78.3)	58

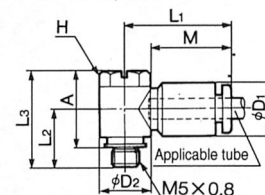
* Reference dimensions after R(PT) thread installation.
 Note) (): Values for soft nylon.
 øD1: max. diameter

Universal male elbow: KQ2V Inch

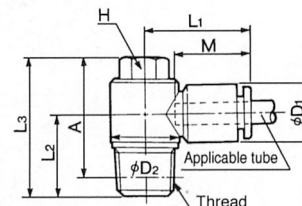


Applicable tube O.D. (inch)	Thread UNF NPT	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	Weight (g)
1/8	10-32 UNF	KQ2V01-32	8	8.4	9.8	17.2	11	18.5	15	12.7	2.3
	1/8	KQ2V01-34S			9.6	13.4	21.5	14.5	26.5	15.5	2.5
5/32	10-32 UNF	KQ2V03-32	8	10.4	9.8	20.5	11	18.5	15	16	2.3
	1/8	KQ2V03-34S			13.4	22	14.5	26.5	22.5		2.8
3/16	1/8	KQ2V05-34S	8	11.4	13.4	23	14.5	26.5	22.5	16.5	3.5
1/4	10-32 UNF	KQ2V07-32	8	13.2	13.4	24	12	24	20.5		2.3
	1/8	KQ2V07-34S					14.5	26.5	22.5	17	4.6
	1/4	KQ2V07-35S					15.3	23.5	19	32.5	26.5
5/16	1/8	KQ2V09-34S	11.11	15.2	17.6	28.5	15.5	28.5	24.5	18.5	6
	1/4	KQ2V09-35S					18.5	31.5	25.5		
	3/8	KQ2V09-36S					20.6	27.5	20.5	36.5	30
3/8	1/4	KQ2V11-35S	12.7	17.9	20.6	30.5	19.5	35.5	29.5	21	7
	3/8	KQ2V11-36S					20.5	36.5	30		
	3/8	KQ2V13-36S					21.5	36	30		
1/2	3/8	KQ2V13-37S	17.46	21.7	27	35.5	24.5	39	31	22	9
	1/2	KQ2V13-37S					24.5	39	31		

10-32 UNF, M5



NPT, R(PT)



KQ2V Metric

Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	Effective orifice (mm²)		Weight (g)
											Nylon	Urethane	
4	M5×0.8	KQ2V04-M5	8	10.4	9.8	20.5	11	18.5	15	16	2.9	2.9	6
	1/8	KQ2V04-01S			13.4	22	14.5	26.5	22.5				14
6	M5×0.8	KQ2V06-M5	8	12.8	9.8	23.5	12	18.5	15	17	3.8	3.8	7
	1/8	KQ2V06-01S			13.4	24	14.5	26.5	22.5		7.5	7.5	15
	1/4	KQ2V06-02S			15.4	23.5	18.5	31	25				26
8	1/8	KQ2V08-01S	12	15.2	17.6	28.5	15.5	28.5	24.5	18.5	16	11.2	24
	1/4	KQ2V08-02S			18.5	31.5	25.5						30
	3/8	KQ2V08-03S			20.6	27.5	20.5	36.5	30		20.5	14.3	47
10	1/4	KQ2V10-02S	14	18.5	20.6	31	19.5	35.5	29.5	21	27	20.3	40
	3/8	KQ2V10-03S					20.5	36.5	30				49
12	3/8	KQ2V12-03S	17	20.9	25.2	34	22	38.5	32	22	39	30.8	63
	1/2	KQ2V12-04S					25	41.5	33.5				80
16	3/8	KQ2V16-03S	21	26.5	32.3	39	26.5	46.5	40.5	25	55	(55)	103
	1/2	KQ2V16-04S					29.5	49.5	41.5		78	(65)	110

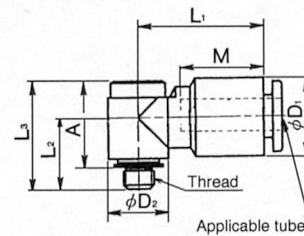
* Reference dimensions after R(PT) thread installation.
 Note) (): Values for soft nylon.
 øD1: max. diameter

Hexagon socket head universal male elbow: KQ2VS Inch

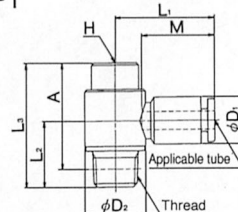


Applicable tube O.D. (inch)	Thread UNF NPT	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	Weight (g)
1/8	10-32 UNF	KQ2VS01-32	4	8.4	9.8	17.2	10.9	18.5	15	12.7	2.3
	1/8	KQ2VS01-34S	6.35	9.6	13.4	21.5	14.5	26.5	22.5	15.5	2.5
5/32	10-32 UNF	KQ2VS03-32	4	10.4	9.8	20.5	11	18.5	15	16	2.3
	1/8	KQ2VS03-34S	6.35	13.4	22	14.5	26.5	22.5			2.8
3/16	1/8	KQ2VS05-34S	8	11.4	13.4	23	14.5	26.5	22.5	16.5	3.5
1/4	10-32 UNF	KQ2VS07-32	6.35	13.2	13.4	24	12	24	19	17	2.3
	1/8	KQ2VS07-34S					14.5	26.5	22.5		4.6
	1/4	KQ2VS07-35S					15.3	23.5	19		
5/16	1/8	KQ2VS09-34S	8	15.2	17.6	28.5	15.5	27	23	18.5	6
	1/4	KQ2VS09-35S					18.5	30	24		
	3/8	KQ2VS09-36S					20.6	27.5	20.5		
3/8	1/4	KQ2VS11-35S	8	17.9	20.6	31	19.5	31.5	25.5	21	7
	3/8	KQ2VS11-36S					20.5	32.5	26		
	3/8	KQ2VS13-36S					21.5	34.5	28.5		
1/2	3/8	KQ2VS13-37S	9.53	21.7	27	34.5	24.5	37.5	29.5	22	9
	1/2	KQ2VS13-37S					24.5	37.5	29.5		

10-32 UNF



NPT

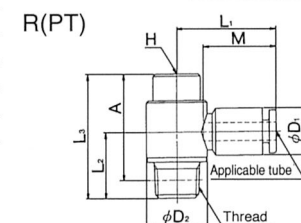
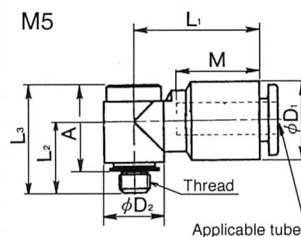


Hexagon socket head universal male elbow: KQ2VS Metric



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	Effective orifice(mm²)		Weight (g)
											Nylon	Urethane	
4	M5	KQ2VS04-M5	4	10.4	9.8	20.5	10.5	18	15	16	2.9	2.9	6
	1/8	KQ2VS04-01S	6		13.4	22	14.5	26.5	22.5		3.8	3.8	14
6	M5	KQ2VS06-M5	4	12.8	9.8	23.5	12	18	15	17	3.8	3.8	7
	1/8	KQ2VS06-01S	6		13.4	24	14.5	26.5	22.5		7.5	7.5	15
8	1/4	KQ2VS06-02S	6	15.2	15.3	23.5	18.5	27	21	18.5	16	11.2	22
	1/8	KQ2VS08-01S	8		17.6	28.5	15.5	27	23		20.5	14.3	24
10	1/4	KQ2VS08-02S	8	18.5	18.5	30	24	26	26	21	27	20.3	30
	3/8	KQ2VS08-03S	8		20.6	27.5	20.5	32.5	26		39	30.8	32
12	1/4	KQ2VS10-02S	8	20.9	19.5	31.5	25	26	26	22	39	30.8	39
	3/8	KQ2VS10-03S	8		22	36	30	31	31		67		48
12	3/8	KQ2VS12-03S	10	25.2	25	39	31						48
	1/2	KQ2VS12-04S	10		25	39	31						67

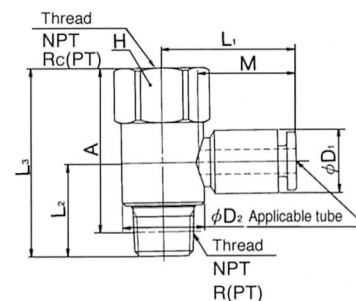
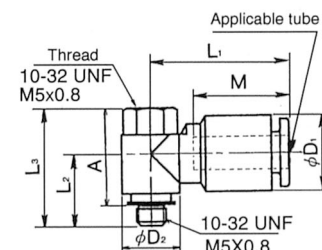
* Reference dimensions after R(PT) thread installation.
Note) øD1: max. diameter



Universal female elbow: KQ2VF Inch



Applicable tube O.D. (inch)	Thread UNF NPT	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	Weight (g)
1/8	10-32 UNF	KQ2VF01-32	8	8.4	9.8	17.2	10	20	16.5	12.7	2.3
	1/8	KQ2VF01-34S	14.29	9.6	13.4	21.5	14	29.5	25.5	15.5	2.5
5/32	10-32 UNF	KQ2VF03-32	8	10.4	9.8	20.5	11	20	16	16	2.5
	1/8	KQ2VF03-34S	14.29		13.4	22	15.5	29.5	25.5		2.8
3/16	10-32 UNF	KQ2VF05-34S	14.29	11.4	13.4	23	14	29.5	25.5	16.5	3.5
	1/8	KQ2VF07-32	14.29	13.2	11.5	27	23.5	23.5	17	4.6	2.3
1/4	1/8	KQ2VF07-34S	17.46		14	29.5	25.5	25.5	17		4.6
	1/4	KQ2VF07-35S	17.46	15.2	17.6	25	17.5	38.5	32.5	18.5	6
5/16	1/8	KQ2VF09-34S	17.46	17.9	17	31	27	27	27		
	1/4	KQ2VF09-35S	22.23		20	38.5	32.5	32.5	21	7	7
3/8	1/4	KQ2VF11-35S	22.23	21.7	20.6	31	17.5	41	35		
	3/8	KQ2VF11-36S	22.23		25.2	31.5	19.5	45	39	22	9
1/2	3/8	KQ2VF13-36S	22.23	25.4	21	42	39	39	41.5		
	1/2	KQ2VF13-37S	25.4		24	50	41.5	41.5			



KQ2VF Metric

Applicable tube O.D. (mm)	Thread Rc(PT) R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	Weight (g)
4	M5 × 0.8	KQ2VF04-M5	8	10.4	9.8	20.5	11	20	16	16	6
	1/8	KQ2VF04-01S	14		13.4	22	15.5	29.5	25.5		19
6	M5 × 0.8	KQ2VF06-M5	8	12.8	9.8	23.5	12.5	20	16	17	7
	1/8	KQ2VF06-01S	14		13.4	24.5	15.5	29.5	25.5		19
8	1/4	KQ2VF06-02S	17	15.2	17.6	25	20	38.5	32.5	18.5	36
	1/8	KQ2VF08-01S	17		17	31	27	27	29		29
10	1/4	KQ2VF08-02S	22	18.5	20	38.5	32.5	32.5	21	21	37
	3/8	KQ2VF08-03S	22		25.2	29.5	25.5	45.5	39		66
12	1/4	KQ2VF10-02S	19	20.9	20.6	31.5	22	41	35	22	48
	3/8	KQ2VF10-03S	22		25.2	34	24.5	45.5	39		68
12	3/8	KQ2VF12-03S	22	24	25.2	34	24.5	45.5	39	22	70
	1/2	KQ2VF12-04S	24		27	35	25.5	50	42		93

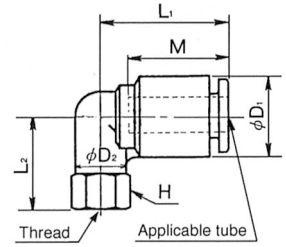
* Reference dimensions after R(PT) thread installation.
Note) øD1: max. diameter

Female elbow: KQ2LF Inch

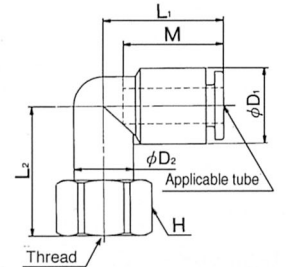


Applicable tube O.D. (inch)	Thread UNF NPT	Part No.	H (Hex.)	øD1	øD2	L1	L2	M	Weight (g)
1/8	1/8	KQ2LF01-34	14.29	9.6	10	17.5	20	15.5	2.5
	1/4	KQ2LF01-35	17.46				23.5		
5/32	1/8	KQ2LF03-34	14.29	10.4	10	18	20.5	16	3
	1/4	KQ2LF03-35	17.46				24		
1/4	1/8	KQ2LF07-34	14.29	13.2	10	20.5	22	17	4.6
	1/4	KQ2LF07-35	17.46				25.5		
	3/8	KQ2LF07-36	22.23				26		
3/8	1/4	KQ2LF11-35	17.46	17.9	17	25.5	27.5	21	7
	3/8	KQ2LF11-36	22.23				28		
	1/2	KQ2LF11-37	23.81				32		
1/2	3/8	KQ2LF13-36	22.23	21.7	17	28	30	22	9.6
	1/2	KQ2LF13-37	23.81				34		

10-32 UNF, M5, M6



NPT, Rc(PT)

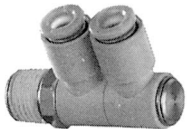


KQ2LF Metric

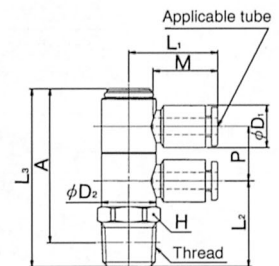
Applicable tube O.D. (mm)	Thread Rc(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	M	Effective orifice(mm²)		Weight (g)
									Nylon	Urethane	
4	M5 × 0.8	KQ2LF04-M5	8	10.4	8	18.5	14.5	16	3.5	3.5	5
	M6 × 1.0	KQ2LF04-M6	14				15.5				
	1/8	KQ2LF04-01	14				21				
	1/4	KQ2LF04-02	17				24.5				
6	M5 × 0.8	KQ2LF06-M5	8	12.8	8	20.5	15	17	3.5	3.5	5
	M6 × 1.0	KQ2LF06-M6	14				16				
	1/8	KQ2LF06-01	14				22				
	1/4	KQ2LF06-02	17				25.5				
	3/8	KQ2LF06-03	19				26				
8	1/8	KQ2LF08-01	14	15.2	12	23.5	23	18.5	21.6	14.9	16
	1/4	KQ2LF08-02	17				26.5				
	3/8	KQ2LF08-03	19				27				
10	1/4	KQ2LF10-02	17	18.5	17	26.5	28	21	35.2	25.0	27
	3/8	KQ2LF10-03	19				28.5				
	1/2	KQ2LF10-04	24				32.5				
12	1/4	KQ2LF12-02	17	20.9	17	28.5	29.5	22	50.2	39.7	29
	3/8	KQ2LF12-03	19				30				
	1/2	KQ2LF12-04	24				34				

Note) øD1: max. diameter

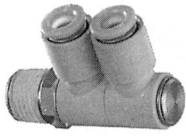
Double universal male elbow: KQ2VD Inch



Applicable tube O.D. (inch)	Thread UNF NPT	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	P	Weight (g)
1/8	10-32 UNF	KQ2VD01-32	14.29	9.6	13.4	22	15.5	38.5	35	15.5	13.4	2.3
	1/8	KQ2VD01-34S	17.46				18	41	37			2.5
5/32	10-32 UNF	KQ2VD03-32	14.29	10.4	13.4	22	15.5	38.5	35	16	13.4	2.3
	1/8	KQ2VD03-34S	17.46				18.5	41	37			3
3/16	1/8	KQ2VD05-34S	14.29	11.4	13.4	23	18	41	37	16.5	13.4	3.5
1/4	10-32 UNF	KQ2VD07-32	14.29	13.2	13.4	24	15.5	39	35.5	17	13.8	4.6
	1/8	KQ2VD07-34S					18.5	41.5	37.5			
	1/4	KQ2VD07-35S					21.5	44.5	38.5			
	3/8	KQ2VD07-36S					23.5	46.5	40.5			
5/16	1/4	KQ2VD09-35S	19	15.2	17.6	28.5	24	51	45	18.5	15.9	6
	3/8	KQ2VD09-36S					25	52	45.5			
	1/2	KQ2VD09-37S					28.5	55.5	47.5			
3/8	1/4	KQ2VD11-35S	22.23	17.9	20.6	31	26	58	52	21	19.2	7
	3/8	KQ2VD11-36S					27	59	52.5			
	1/2	KQ2VD11-37S					30	62	54			
1/2	3/8	KQ2VD13-36S	25.4	21.7	27	35.5	32	66.5	60.5	22	22.3	9.6
	1/2	KQ2VD13-37S					35	69.5	61.5			

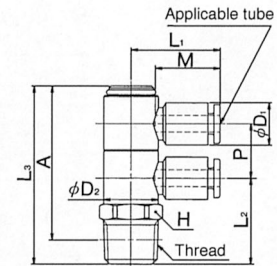


Double universal male elbow: KQ2VD Metric



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	P	Weight (g)
4	1/8	KQ2VD04-01S	14	10.4	13.4	22	18.5	41	37	16	13.4	23
	1/4	KQ2VD04-02S	17				21.5	44	38			29
	3/8	KQ2VD04-03S	17				23.5	46	40			42
6	1/8	KQ2VD06-01S	14	12.8	13.4	24.5	18.5	41	37	17	13.4	25
	1/4	KQ2VD06-02S	17				21.5	44	38			31
	3/8	KQ2VD06-03S	17				23.5	46	40			43
8	1/8	KQ2VD08-01S	19	15.2	17.6	28.5	21	48	44	18.5	15.9	54
	1/4	KQ2VD08-02S	21				24	51	45			52
	3/8	KQ2VD08-03S	21				25	52	45.5			61
	1/2	KQ2VD08-04S	21				28.5	55.5	47.5			83
10	1/4	KQ2VD10-02S	21	18.5	20.6	31.5	26.5	58	52	21	19.2	71
	3/8	KQ2VD10-03S	21				27.5	59	53			74
	1/2	KQ2VD10-04S	21				30.5	62	54			91
12	1/4	KQ2VD12-02S	26	20.9	25.2	34	28.5	64.5	58.5	22	21.6	118
	3/8	KQ2VD12-03S	26				29.5	65.5	59			113
	1/2	KQ2VD12-04S	26				32.5	68.5	60			125

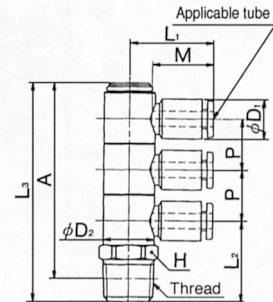
* Reference dimensions after R(PT) thread installation.
Note) øD1: max. diameter



Triple universal male elbow: KQ2VT Inch



Applicable tube O.D. (inch)	Thread UNF NPT	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	P	Weight (g)
1/8	10-32 UNF	KQ2VT01-32	14.29	9.6	13.4	22	15.5	52	48.5	15.5	13.4	2.3
	1/8	KQ2VT01-34S	14.29				18	54.5	50.5			2.5
5/32	10-32 UNF	KQ2VT03-32	14.29	10.4	13.4	22	15.5	52	48.5	16	13.4	2.3
	1/8	KQ2VT03-34S	14.29				18.5	54.5	50.5			3
3/16	1/8	KQ2VT05-34S	14.29	11.4	13.4	23	18	54.5	50.5	16.5	13.4	3.5
1/4	10-32 UNF	KQ2VT07-32	14.29	13.2	13.4	24	15.5	53	49.5	17	13.8	4.6
	1/8	KQ2VT07-34S					18.5	55.5	51.5			
	1/4	KQ2VT07-35S					21.5	58.5	52.5			
	3/8	KQ2VT07-36S					23.5	60.5	54			
5/16	1/4	KQ2VT09-35S	19	15.2	17.6	28.5	24	67	61	18.5	15.9	6
	3/8	KQ2VT09-36S					25	68	61.5			
	1/2	KQ2VT09-37S					28.5	71.5	63.5			
3/8	1/4	KQ2VT11-35S	22.23	17.9	20.6	31	26	77.5	71.5	21	19.2	7
	3/8	KQ2VT11-36S					27	78.5	72			
	1/2	KQ2VT11-37S					30	81.5	73			
1/2	3/8	KQ2VT13-36S	25.4	21.7	27	35.5	32	89	83	22	22.3	9.6
	1/2	KQ2VT13-37S					35	92	84			



KQ2VT Metric

Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	P	Weight (g)
4	1/8	KQ2VT04-01S	14	10.4	13.4	22	18.5	54.5	50.5	16	13.4	30
	1/4	KQ2VT04-02S	17				21.5	57.5	51.5			35
	3/8	KQ2VT04-03S	17				23.5	59.5	53.5			49
6	1/8	KQ2VT06-01S	14	12.8	13.4	24.5	18.5	54.5	50.5	17	13.4	32
	1/4	KQ2VT06-02S	17				21.5	57.5	51.5			38
	3/8	KQ2VT06-03S	17				23.5	59.5	53.5			51
8	1/8	KQ2VT08-01S	19	15.2	17.6	28.5	21	64	60	18.5	15.9	72
	1/4	KQ2VT08-02S	21				24	67	61			67
	3/8	KQ2VT08-03S	21				25	68	61.5			76
	1/2	KQ2VT08-04S	21				28.5	71.5	63.5			97
10	1/4	KQ2VT10-02S	21	18.5	20.6	31.5	26.5	77.5	71.5	21	19.2	94
	3/8	KQ2VT10-03S	21				27.5	78.5	72			111
	1/2	KQ2VT10-04S	21				30.5	81.5	73.5			111
12	1/4	KQ2VT12-02S	26	20.9	25.2	34	28.5	86	80	22	21.6	153
	3/8	KQ2VT12-03S	26				29.5	87	80.5			142
	1/2	KQ2VT12-04S	26				32.5	90	82			154

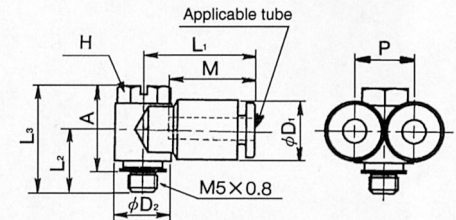
* Reference dimensions after R(PT) thread installation.
Note) øD1: max. diameter

Branch universal male elbow: KQ2Z Inch

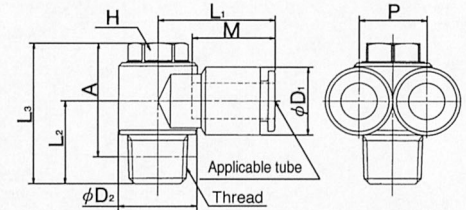


Applicable tube O.D. (inch)	Thread UNF NPT	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	P	Weight (g)
1/8	10-32 UNF	KQ2Z01-32	8	8.4	9.8	16	11.2	18.5	15	12.7	8.4	2.3
	1/8	KQ2Z01-34S		9.6	13.4	20.5	14.5	26.5	22.5	15.5	9.6	2.5
5/32	10-32 UNF	KQ2Z03-32	8	10.4	9.8	19.5	11	18.5	15	16	10.4	2.3
	1/8	KQ2Z03-34S		10.4	13.4	21	14.5	26.5	22.5	16	10.4	2.8
3/16	10-32 UNF	KQ2Z05-34S	8	11.4	13.4	21.5	14.5	26.5	22.5	16.5	11.4	3.5
	1/8	KQ2Z07-32		13.2	13.4	21.5	12	24	20.5	17	13.2	2.3
1/4	1/8	KQ2Z07-34S	11.11	15.2	17.6	26	18.5	31.5	25.5			4.6
	1/4	KQ2Z07-35S		15.2	17.6	26	15.5	28.5	24.5			
	1/8	KQ2Z09-34S		12.7	20.6	27	18.5	31.5	25.5	18.5	15.2	6
5/16	1/4	KQ2Z09-35S	12.7	17.9	20.6	28.5	19.5	35.5	29.5	21	17.9	7
	3/8	KQ2Z09-36S		20.6	27	30	20.5	36.5	30			
	1/4	KQ2Z11-35S		21.5	36	30	21.5	36	30	21.7	21.7	9
3/8	3/8	KQ2Z11-36S	17.46	21.7	27	33	24.5	39	31			
	1/2	KQ2Z13-36S										
1/2	1/2	KQ2Z13-37S										

10 - 32 UNF, M5



NPT, R(PT)

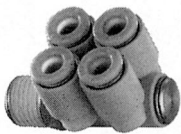


KQ2Z Metric

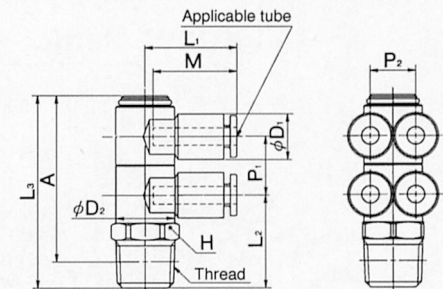
Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	P	Effective orifice(mm²) Nylon Urethane	Weight (g)
4	M5×0.8	KQ2Z04-M5	8	10.4	9.8	19.5	11	18.5	15	16	10.4	3.4	8
	1/8	KQ2Z04-01S		13.4	21	14.5	26.5	22.5				4.7	16
6	1/8	KQ2Z06-01S	8	13.4	22	14.5	26.5	22.5					18
	1/4	KQ2Z06-02S		12.8	20.6	25.5	19.5	35.5	29.5	17	12.8	10.8	40
	3/8	KQ2Z06-03S		20.6	27	30	20.5	36.5	30				48
8	1/8	KQ2Z08-01S	12	17.6	26	15.5	28.5	24.5					28
	1/4	KQ2Z08-02S		15.2	20.6	27	18.5	31.5	25.5	18.5	15.2	20.5	34
	3/8	KQ2Z08-03S		20.6	27	30	20.5	36.5	30				50
10	1/4	KQ2Z10-02S	14	18.5	20.6	29	19.5	35.5	29.5	21	18.5	31.8	46
	3/8	KQ2Z10-03S		20.6	27	30	20.5	36.5	30				54
	1/2	KQ2Z12-04S		20.9	25.2	32.5	22	39	32.5	22	20.9	44.6	71
12	1/2	KQ2Z12-04S	17	20.9	25.2	32.5	25	42	34				88

*Reference dimensions after R(PT) thread installation.
Note) øD1: max. diameter

Double branch universal male elbow: KQ2ZD Inch



Applicable tube O.D. (inch)	Thread UNF NPT	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	P1	P2	Weight (g)
1/8	1/8	KQ2ZD01-34S	14.29	9.6	13.4	20.5	18	41	37	15.5	13.4	9.6	2.5
5/32	1/8	KQ2ZD03-34S	14.29	10.4	13.4	21	18.5	41	37	16	13.4	10.4	3
3/16	1/8	KQ2ZD05-34S	14.29	11.4	13.4	21.5	18	41	37	16.5	13.4	11.4	3.5
	1/8	KQ2ZD07-34S	14.29	13.2	13.4	21.5	18.5	41.5	37.5				
1/4	1/4	KQ2ZD07-35S	17.46	15.2	17.6	26	21.5	44.5	38.5	17	13.8	13.2	4.6
	3/8	KQ2ZD07-36S	22.23	20.6	27	30	23.5	46.5	40.5				
5/16	1/4	KQ2ZD09-35S	19	15.2	17.6	26	24	51	45				
	3/8	KQ2ZD09-36S	22.23	17.9	20.6	28.5	25	52	45.5	18.5	15.9	15.2	6
3/8	1/2	KQ2ZD09-37S	22.23	20.6	27	30	26	58	52				
	3/8	KQ2ZD11-35S	22.23	17.9	20.6	28.5	27	59	52.5	21	19.2	17.9	7
1/2	1/2	KQ2ZD11-36S	25.4	21.7	27	33	30	62	54				
	3/8	KQ2ZD13-36S	25.4	21.7	27	33	32	66.5	60.5	22	22.3	21.7	9.6
1/2	1/2	KQ2ZD13-37S					35	69.5	61.5				

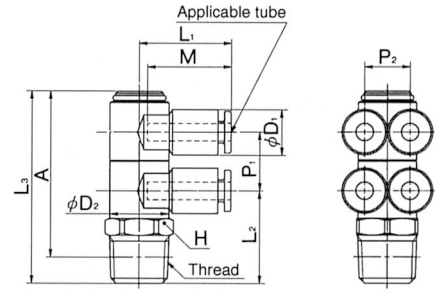


Double branch universal male elbow: KQ2ZD Metric



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	P1	P2	Weight (g)
4	1/8	KQ2ZD04-01S	14	10.4	13.4	21	18.5	41	37	16	13.4	10.4	35
	1/4	KQ2ZD04-02S	14				21.5	44	38				41
	3/8	KQ2ZD04-03S	17				23.5	46	40				54
6	1/8	KQ2ZD06-01S	14	12.8	13.4	22	18.5	41	37	17	13.4	12.8	40
	1/4	KQ2ZD06-02S	14				21.5	44	38				45
	3/8	KQ2ZD06-03S	17				23.5	46	40				59
8	1/8	KQ2ZD08-01S	19	15.2	17.6	26	21	48	44	18.5	15.9	15.2	78
	1/4	KQ2ZD08-02S					24	51	45				74
	3/8	KQ2ZD08-03S					25	52	45.5				83
	1/2	KQ2ZD08-04S	21				28.5	55.5	47.5				104
10	1/4	KQ2ZD10-02S	21	18.5	20.6	29	26.5	58	52	21	19.2	18.5	111
	3/8	KQ2ZD10-03S					27.5	59	53				128
	1/2	KQ2ZD10-04S					30.5	62	54				178
12	1/4	KQ2ZD12-02S	26	20.9	25.2	32	28.5	64.5	58.5	22	21.6	20.9	167
	3/8	KQ2ZD12-03S					29.5	65.5	59				179
	1/2	KQ2ZD12-04S					32.5	68.5	60				

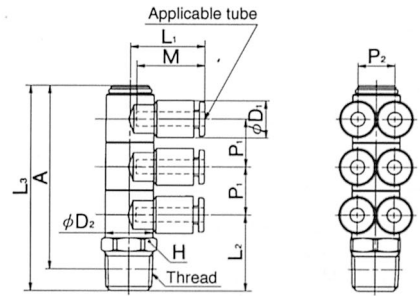
* Reference dimensions after R(PT) thread installation.
Note) øD1: max. diameter



Triple branch universal male elbow: KQ2ZT Inch



Applicable tube O.D. (inch)	Thread UNF NPT	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	P1	P2	Weight (g)
1/8	1/8	KQ2ZT01-34S	14.29	9.6	13.4	20.5	18	54.5	50.5	15.5	13.4	9.6	2.5
5/32	1/8	KQ2ZT03-34S	14.29	10.4	13.4	21	18.5	54.5	50.5	16	13.4	10.4	3
3/16	1/8	KQ2ZT05-34S	14.29	11.4	13.4	21.5	18	54.5	50.5	16.5	13.4	11.4	3.5
1/4	1/8	KQ2ZT07-34S	14.29	13.2	13.4	21.5	18.5	55.5	51.5	17	13.8	13.2	4.6
	1/4	KQ2ZT07-35S	17.46				23.5	60.5	54				
	3/8	KQ2ZT07-36S	17.46				24	67	61				
5/16	1/4	KQ2ZT09-35S	19	15.2	17.6	26	25	68	61.5	18.5	15.9	15.2	6
	3/8	KQ2ZT09-36S					28.5	71.5	63.5				
	1/2	KQ2ZT09-37S					28.5	71.5	63.5				
3/8	1/4	KQ2ZD11-35S	22.23	17.9	20.6	28.5	26	77.5	71.5	21	19.2	17.9	7
	3/8	KQ2ZT11-36S					27	78.5	72				
	1/2	KQ2ZT11-37S					30	81.5	73				
1/2	3/8	KQ2ZT13-36S	25.4	21.7	27	33	32	89	83	22	22.3	21.7	9.6
	1/2	KQ2ZT13-37S					35	92	84				

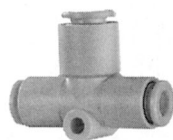


KQ2ZT Metric

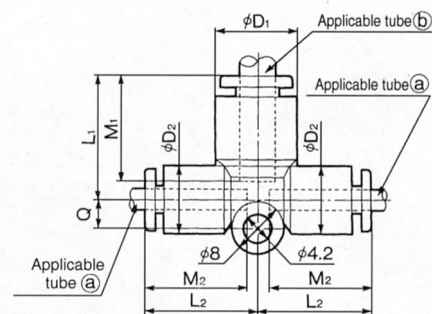
Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	P1	P2	Weight (g)
4	1/8	KQ2ZT04-01S	14	10.4	13.4	21	18.5	54.5	50.5	16	13.4	10.4	27
	1/4	KQ2ZT04-02S	14				21.5	57.5	51.5				33
	3/8	KQ2ZT04-03S	17				23.5	59.5	53.5				46
6	1/8	KQ2ZT06-01S	14	12.8	13.4	22	18.5	54.5	50.5	17	13.4	12.8	30
	1/4	KQ2ZT06-02S	14				21.5	57.5	51.5				36
	3/8	KQ2ZT06-03S	17				23.5	59.5	53.5				49
8	1/8	KQ2ZT08-01S	19	15.2	17.6	26	21	64	60	18.5	15.9	15.2	59
	1/4	KQ2ZT08-02S					24	67	61				57
	3/8	KQ2ZT08-03S					25	68	61.5				65
	1/2	KQ2ZT08-04S	21				28.5	71.5	63.5				88
10	1/4	KQ2ZT10-02S	21	18.5	20.6	29	26.5	77.5	71.5	21	19.2	18.5	83
	3/8	KQ2ZT10-03S					27.5	78.5	72				85
	1/2	KQ2ZT10-04S					30.5	81.5	73.5				102
12	1/4	KQ2ZT12-02S	26	20.9	25.2	32	28.5	86	80	22	21.6	20.9	134
	3/8	KQ2ZT12-03S					29.5	87	80.5				130
	1/2	KQ2ZT12-04S					32.5	90	82				141

* Reference dimensions after R(PT) thread installation.
Note) øD1: max. diameter

Different dia. tee: KQ2T Inch



Applicable tube O.D. (inch)		Part No.	øD	L1	L2	P	Q	M1	M2	Weight (g)
a	b									
1/8	5/32	KQ2T01-03	10.4	18	18	10.4	9.7	16	16	2.5
	1/4	KQ2T01-07	13.2	38	21.5	13.2	12	15.5	17	
5/32	3/16	KQ2T03-05	11.4	36.5	20.5	11.4	10.6	16	16.5	3
	1/4	KQ2T03-07	13.2	38	21.5	13.2	12	16	17	
3/16	1/4	KQ2T05-07	13.2	38	21.5	13.2	12	16.5	17	3.5
1/4	5/16	KQ2T07-09	15.2	42.5	24.5	15.2	13.7	17	18.5	4.6
	3/8	KQ2T07-11	17.9	47	27.5	17.9	15.6	18.5	21	
5/16	3/8	KQ2T09-11	17.9	47	27.5	17.9	15.6	18.5	21	6
	1/2	KQ2T09-13	21.7	51	30	21.7	18.8	21	22	
3/8	1/2	KQ2T11-13	21.7	51.5	30.5	21.7	18.8	21	22	7



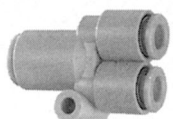
KQ2T Metric

Applicable tube O.D. (mm)		Part No.	øD1	øD2	L1	L2	Q	M1	M2	Effective orifice (mm²)		Weight (g)
(a)	(b)									Nylon	Urethane	
3.2	4	KQ2T23-04	10.4	9.6	18	17.5	4.3	16	15.5	3.8	3.5	5
4	6	KQ2T04-06	12.8	10.4	19.5	18	4.5	17	16	7.1	6.5	6
6	8	KQ2T06-08	15.2	12.8	22.5	20	5.3	18.5	17	16.4	16.4	9
8	10	KQ2T08-10	18.5	15.2	26.5	23	6	21	18.5	36	27.2	14
10	12	KQ2T10-12	20.9	18.5	28.5	26.5	6.8	22	21	56	44.5	21
12	16	KQ2T12-16	26.5	26.5	34	39	10	25	22	108.5	92.2	88

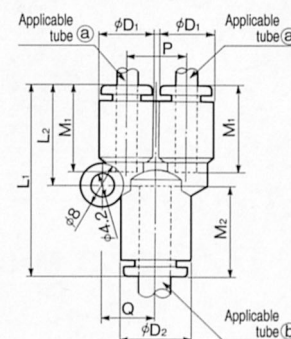
Note) øD1: max. diameter

Different dia. union "Y": KQ2U Inch

KQ2U Metric



Applicable tube O.D. (inch)		Part No.	øD	L	Q	M1	M2	Weight (g)
a	b							
1/8	5/32	KQ2U01-03	10.4	18	4.5	16	16	2.5
	1/4	KQ2U01-07	13.2	20.5	5.3	17	15.5	
5/32	3/16	KQ2U03-05	11.4	19.5	4.8	16.5	16	3
	1/4	KQ2U03-07	13.2	20.5	5.3	17	16.5	
3/16	1/4	KQ2U05-07	13.2	20.5	5.3	17	16.5	3.5
1/4	5/16	KQ2U07-09	15.2	23	6	18.5	17	4.6
	3/8	KQ2U07-11	17.9	26	6.6	21	18.5	
5/16	3/8	KQ2U09-11	17.9	26	6.6	21	18.5	6
	1/2	KQ2U09-13	21.7	29	7.8	22	21	
3/8	1/2	KQ2U11-13	21.7	29	7.8	22	21	7

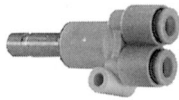


KQ2U Metric

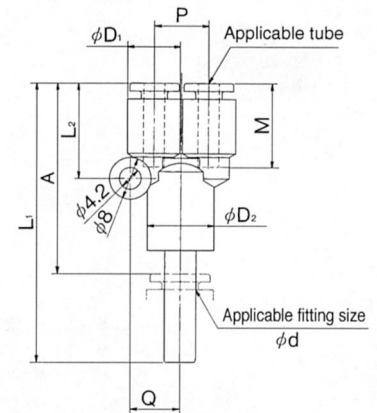
Applicable tube O.D. (mm)		Part No.	øD1	øD2	L1	L2	P	Q	M1	M2	Effective orifice (mm²)		Weight (g)
(a)	(b)										Nylon	Urethane	
3.2	4	KQ2U23-04	9.6	10.4	33.5	17.5	9.6	9	15.5	16	3.2	2.7	5
4	6	KQ2U04-06	10.4	12.8	35	18	10.4	9.7	16	17	4.2	4.2	7
6	8	KQ2U06-08	12.8	15.2	39.5	20	12.8	11.7	17	18.5	13.4	13.4	12
8	10	KQ2U08-10	15.2	18.5	45	24.5	15.2	13.7	18.5	21	25.6	17.7	19
10	12	KQ2U10-12	18.5	20.9	49	27.5	18.5	16.1	21	22	40	28.4	27
12	16	KQ2U12-16	26.5	26.5	66.5	41.5	26.5	23	22	25	57.4	45.4	100

Note) øD1, øD2: max. diameter

Different dia. plug-in "Y": KQ2X Inch



Applicable tube O.D. (inch)	Applicable fitting size ϕd	Part No.	ϕD	L1	L2	A	P	Q	M	Weight (g)
1/8	5/32	KQ2X01-03	10.4	51.5	18	35.5	10.4	9.7	15.5	2.5
5/32	3/16	KQ2X03-05	11.4	56	20.5	39.5	11.4	10.6	16	3.5
3/16	1/4	KQ2X05-07	13.2	56.5	21.5	39.5	13.2	12	16.5	4.6
1/4	5/16	KQ2X07-09	15.2	64.5	24.5	46	15.2	13.7	17	6



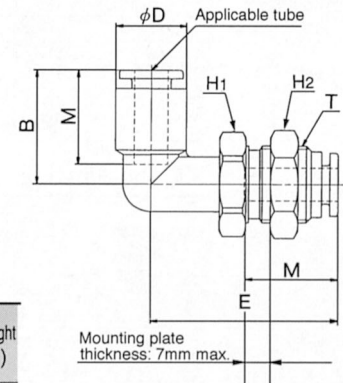
KQ2X Metric

Applicable tube O.D. (mm)	Applicable fitting size ϕd	Part No.	$\phi D1$	$\phi D2$	L1	L2	A	P	Q	M	Effective orifice (mm ²)		Wt. (g)
											Nylon	Urethane	
4	6	KQ2X04-06	10.4	12.8	53.5	18.5	36.5	10.4	9.7	16	4.2	4.2	7
6	8	KQ2X06-08	12.8	15.2	61.5	20.5	43	12.8	11.7	17	13.4	13.4	19
8	10	KQ2X08-10	15.2	18.5	68.5	24.5	47.5	15.2	13.7	18.5	25.6	17.7	29
10	12	KQ2X10-12	18.5	20.9	73.5	27.5	51.5	18.5	16.1	21	40	28.4	42

Bulkhead male elbow: KQ2LE Inch



Applicable tube O.D. (inch)	Part No.	T	H1 (Hex.)	H2 (Hex.)	B	E	ϕD	Mounting Hole	M	Weight (g)
1/8	KQ2LE01-00	1/2-20UNF	17.46	17.46	17.5	31	9.6	13.5	15.5	2.5
5/32	KQ2LE03-00	1/2-20UNF	17.46	17.46	18	31	10.4	13.5	16	3
3/16	KQ2LE05-00	9/16-18UNF	17.46	17.46	19.5	34.5	11.4	15	16.5	3.5
1/4	KQ2LE07-00	9/16-18UNF	17.46	17.46	20.5	35	13.2	15	17	4.6
5/16	KQ2LE09-00	3/4-16UNF	22.23	22.23	23.5	38.5	15.2	20	18.5	6
3/8	KQ2LE11-00	7/8-14UNF	25.4	25.4	25.5	43	17.9	23	21	7
1/2	KQ2LE13-00	1-12UNF	28.6	28.6	28	46	21.7	26	22	9.6

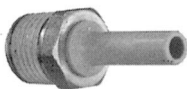


KQ2LE Metric

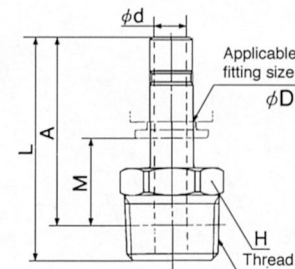
Applicable tube O.D. (mm)	Part No.	T	H1 (Hex.)	H2 (Hex.)	B	E	ϕD	Mounting hole	M	Effective orifice (mm ²)		Weight (g)
										Nylon	Urethane	
4	KQ2LE04-00	M12 x 1	14	14	18.5	31	10.4	13	16	4.2	4.2	18
6	KQ2LE06-00	M14 x 1	17	17	20.5	34	12.8	15	17	11.4	11.4	25
8	KQ2LE08-00	M16 x 1	17	19	23.5	38.5	15.2	17	18.5	21.6	14.9	33
10	KQ2LE10-00	M20 x 1	22	24	26.5	43.5	18.5	21	21	35.2	25.0	63
12	KQ2LE12-00	M22 x 1	24	27	28.5	45.5	20.9	23	22	50.2	39.7	77

Note) ϕD : max. diameter

Adaptor: KQ2N Metric



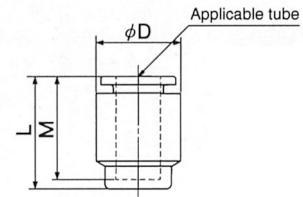
Applicable fitting size ϕd	Thread R(PT)	Part No.	H (Hex.)	L	A	M	ϕd	Weight (g)
4	M5 x 0.8	KQ2N04-M5	7	32	29	13	2.5	2
	1/8	KQ2N04-01S	10	34	30	14		6
6	M5 x 0.8	KQ2N06-M5	7	33	30	13	2.5	2
	1/8	KQ2N06-01S	10	35	31	14		5
	1/4	KQ2N06-02S	14	37.5	31.5	14.5		14
8	1/4	KQ2N08-02S	14	39	33	14.5	6	17
	3/8	KQ2N08-03S	17	41	34.5	16		30
10	3/8	KQ2N10-03S	17	46	39.5	18.5	7.5	31



Tube cap: KQ2C Inch



Applicable tube O.D. (inch)	Part No.	øD1	L	M
5/32	KQ2C03-00	10.4	17	16
1/4	KQ2C07-00	13.2	18	17
5/16	KQ2C09-00	15.2	20.5	18.5
3/8	KQ2C11-00	17.9	22.5	21



KQ2C Metric

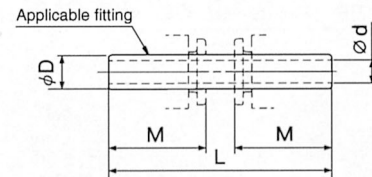
Applicable tube O.D. (mm)	Part No.	øD	L	M	Weight (g)
4	KQ2C04-00	10.4	17	16	3
6	KQ2C06-00	12.8	18.5	17	3
8	KQ2C08-00	15.2	20.5	18.5	4
10	KQ2C10-00	18.5	23	21	6
12	KQ2C12-00	20.9	24	22	8
16	KQ2C16-00	26.5	28	25	13

Note) øD: max. diameter

Nipple: KQ2N Inch



Applicable tube O.D. (Inch)	Part No.	L	M	øD
1/8	KQ2N01-99	36	15.5	2.2
3/16	KQ2N05-99	38	16.5	3.5
1/4	KQ2N07-99	39	17	4.6
3/8	KQ2N11-99	49	21	7.5
1/2	KQ2N13-99	51	22	10



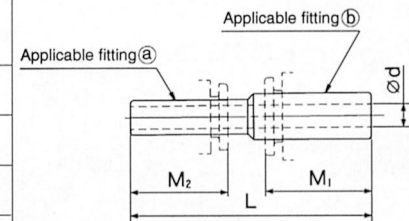
KQ2N Metric

Applicable fitting øD	Part No.	L	M	ød	Weight (g)
4	KQ2N04-99	37	16	2.5	1
6	KQ2N06-99	39	17	4	2
8	KQ2N08-99	43	18.5	6	2
10	KQ2N10-99	49	21	7.5	4
12	KQ2N12-99	52	22	9	20.6
16	KQ2N16-99	57	25	13	31

Reducer nipple: KQ2N Inch



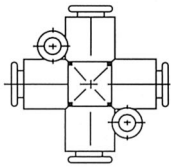
Applicable tube O.D. (inch)	Applicable fitting size ød (inch)	Part No.	L	M ₁	M ₂	ø d
1/8	5/32	KQ2N01-03	36.5	16	15.5	2.2
	3/16	KQ2N01-05	37	16.5		
5/32	3/16	KQ2N03-05	37.5	16.5	16	2.5
	1/4	KQ2N03-07	38	17		
3/16	1/4	KQ2N05-07	38.5	17	16.5	3.5
	5/16	KQ2N05-09	41	18.5		
1/4	5/16	KQ2N07-09	41.5	18.5	17	4.5
	3/8	KQ2N07-11	45	21		
5/16	3/8	KQ2N09-11	46.5	21	18.5	6
	1/2	KQ2N09-13	47.5	22		
3/8	1/2	KQ2N11-13	50	22	21	7



KQ2N Metric

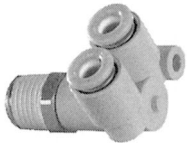
Applicable fitting		Part No.	L	M ₁	M ₂	ød	Weight (g)
(a)	(b)						
4	6	KQ2N04-06	38	17	16	2.5	2
6	8	KQ2N06-08	42	18.5	17	4	2
8	10	KQ2N08-10	47	21	18.5	6	13.2
10	12	KQ2N10-12	51	22	21	8	18.2
12	16	KQ2N12-16	55	25	22	9	29

Cross union:



Applicable tube O.D. (inch)	Part No.	øD	L	Q	M	Weight (g)
1/4	KQ2TW07-00	10.4	18	8.7	16	3
3/8	KQ2TW11-00	13.2	20.5	10.1	17	4.6
1/2	KQ2TW13-00	15.2	23	11.1	18.5	6
1/2	KQ2TW13-00	17.9	26	12.5	21	7
1/2	KQ2TW13-00	21.7	29	14.4	22	9.6

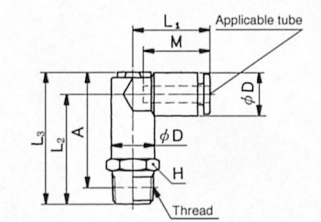
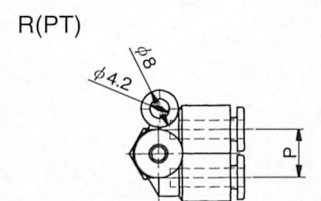
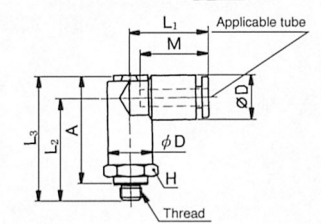
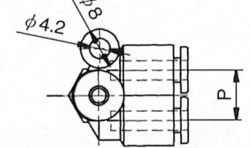
Branch union: KQ2LU Metric



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD	L1	L2	L3	A*	M	P	Effective orifice(mm²)		Weight (g)
											Nylon	Urethane	
4	M5×0.8	KQ2LU04-M5	11	10.4	18.5	24	29.5	25.5	16	10.4	4.3	4.3	10
	M6×1.0	KQ2LU04-M6				24.5	30	25.5			4.3	4.3	10
	1/8	KQ2LU04-01S				26.5	32	27.5			6.0	6.0	12
	1/4	KQ2LU04-02S				30.5	36	30			6.0	6.0	21
6	M5×0.8	KQ2LU06-M5	13	12.8	21	26.5	33	29.5	17	12.8	4.3	4.3	14
	M6×1.0	KQ2LU06-M6				27	33.5	29.5			4.3	4.3	14
	1/8	KQ2LU06-01S				29.5	36	32			13.9	13.9	16
	1/4	KQ2LU06-02S				33	39.5	33.5			13.9	13.9	23
8	3/8	KQ2LU06-03S	17	15.2	24	35	41.5	35	18.5	15.2	26.3	18.2	36
	1/8	KQ2LU08-01S				34	41.5	38			26.3	18.2	28
	1/4	KQ2LU08-02S				37	44.5	38.5			26.3	18.2	36
	3/8	KQ2LU08-03S				38	45.5	39			26.3	18.2	36
10	1/4	KQ2LU10-02S	19	18.5	27	40	49.5	43.5	21	18.5	40.8	29.0	41
	3/8	KQ2LU10-03S				41	50.5	44			40.8	29.0	42
	1/2	KQ2LU10-04S				44.5	54	45.5			40.8	29.0	64
	3/8	KQ2LU12-02S	22	20.9	29	42.5	53	47	22	20.9	57.2	45.2	57
12	1/2	KQ2LU12-03S				43.5	54	47.5			57.2	45.2	58
	3/8	KQ2LU12-04S				46.5	57	49			57.2	45.2	65
	1/2	KQ2LU12-04S				46.5	57	49			57.2	45.2	65

* Reference dimensions after R(PT) thread installation.
Note) øD: max. diameter

M5, M6

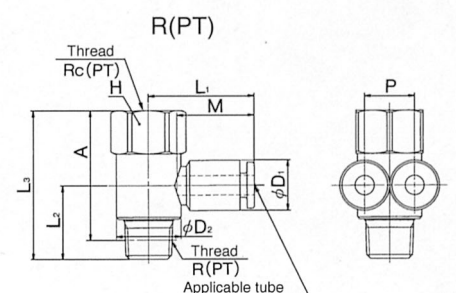
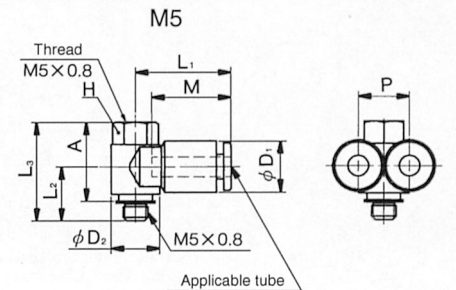


Branch universal female elbow: KQ2ZF Metric

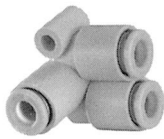


Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	L3	A*	M	P	Weight (g)
4	M5×0.8	KQ2ZF04-M5	8	10.4	9.8	19.5	11	20	16.5	16	10.4	8
	1/8	KQ2ZF04-01S	14		13.4	21	15.5	29.5	25.5			21
6	1/8	KQ2ZF06-01S	14	12.8	13.4	22	15.5	29.5	25.5	17	12.8	22
	1/4	KQ2ZF06-02S	19		20.6	25.5	22	41	35			48
8	1/8	KQ2ZF08-01S	17	15.2	17.6	25.5	17	31	27	18.5	15.2	33
	1/4	KQ2ZF08-02S	19		20.6	27	22	41	35			50
10	1/4	KQ2ZF10-02S	19	18.5	20.6	29	22	41	35	21	18.5	54
	3/8	KQ2ZF10-03S	22		25.2	31.5	24.5	45.5	39			74
12	3/8	KQ2ZF12-03S	22	20.9	25.2	32.5	24.5	45.5	39	22	20.9	77
	1/2	KQ2ZF12-04S	24		27	33	25	50	42			101

* Reference dimensions after R(PT) thread installation.
Note) øD1: max. diameter

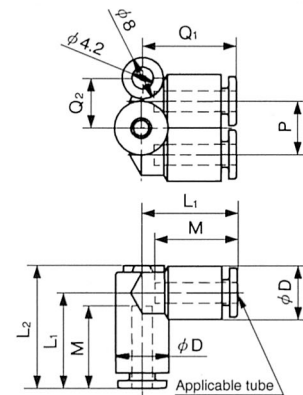


Branch union elbow: KQ2LU Metric



Applicable tube O.D. (mm)	Part No.	øD	L1	L2	Q1	Q2	M	P	Effective orifice(mm²)		Weight (g)
									Nylon	Urethane	
4	KQ2LU04-00	10.4	18.5	24	18.5	10	16	10.4	6.0	6.0	7
6	KQ2LU06-00	12.8	21	27.5	20.5	12	17	12.8	13.9	13.9	9
8	KQ2LU08-00	15.2	24	32	24.5	14	18.5	15.2	26.3	18.2	16
10	KQ2LU10-00	18.5	27	36.5	28	16	21	18.5	40.8	29.0	25
12	KQ2LU12-00	20.9	29	40	30	18	22	20.9	57.2	45.2	32

Note) øD: max. diameter

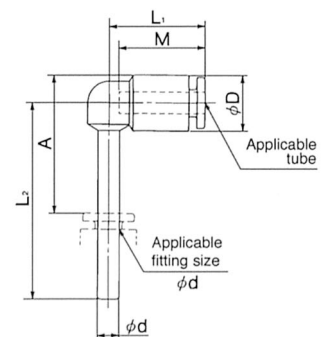


Extended plug-in elbow: KQ2W Metric



Applicable tube O.D. (mm)	Applicable fitting size ød	Part No.	øD	L1	L2	A	M	Effective orifice(mm²)		Weight (g)
								Nylon	Urethane	
3.2	3.2	KQ2W23-99	9.6	17.5	35	24.5	15.5	3	2.5	2
4	4	KQ2W04-99	10.4	18	37	26	16	4.2	4.2	3
6	6	KQ2W06-99	12.8	20	41.5	31	17	11.4	11.4	4
8	8	KQ2W08-99	15.2	22.5	48	37	18.5	21.6	14.9	6
10	10	KQ2W10-99	18.5	25.5	55	43.5	21	35.2	25.0	9
12	12	KQ2W12-99	20.9	27	59.5	48	22	50.2	39.7	13

Note) øD: max. diameter



Delta union: KQ2D Metric

M5, M6

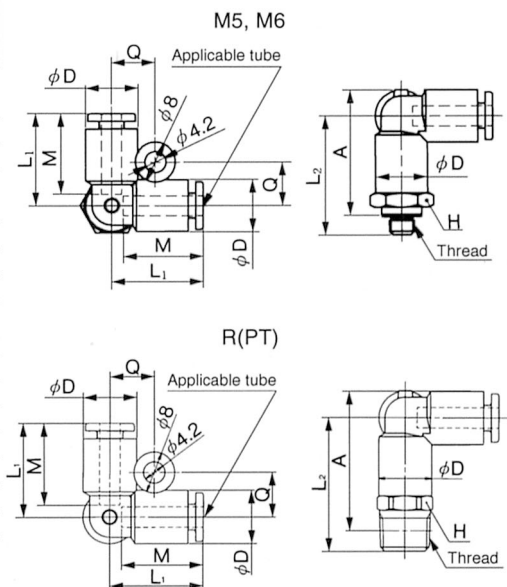


R(PT)

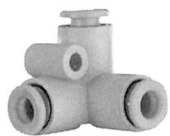
Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD	L1	L2	A*	M	Q	Effective orifice(mm²)		Weight (g)
										Nylon	Urethane	
4	M5×0.8	KQ2D04-M5	11	10.4	18.5	24	25.5	16	8.7	2.2	2.2	10
	M6×1.0	KQ2D04-M6				24.5				4.3	4.3	
	1/8	KQ2D04-01S				26.5				6.0	6.0	
	1/4	KQ2D04-02S				30.5				13.9	13.9	
6	M5×0.8	KQ2D06-M5	13	12.8	20.5	26	28.5	17	9.9	4.3	4.3	13
	M6×1.0	KQ2D06-M6				26.5				13.9	13.9	
	1/8	KQ2D06-01S				29				13.9	13.9	
	1/4	KQ2D06-02S				32.5				26.3	26.3	
8	3/8	KQ2D06-03S	17	15.2	23.5	34.5	34.5	18.5	11.1	40.8	40.8	27
	1/8	KQ2D08-01S				33.5				57.2	57.2	
	1/4	KQ2D08-02S				36.5				57.2	57.2	
	3/8	KQ2D08-03S				37.5				57.2	57.2	
10	1/4	KQ2D10-02S	19	18.5	26.5	39.5	43	21	12.8	40.8	40.8	39
	3/8	KQ2D10-03S				40.5				40.8	40.8	
	1/2	KQ2D10-04S				44				40.8	40.8	
	1/4	KQ2D12-02S	22	20.9	28.5	42	46.5	22	13.9	57.2	57.2	55
12	3/8	KQ2D12-03S				43				57.2	57.2	
	1/2	KQ2D12-04S				46				57.2	57.2	
	3/8	KQ2D12-03S				46				57.2	57.2	

* Reference dimensions after R(PT) thread installation.

Note) øD: max. diameter

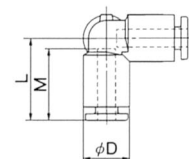
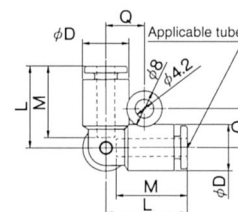


Delta: KQ2D Metric

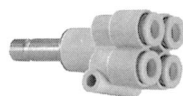


Applicable tube O.D. (mm)	Part No.	øD	L	Q	M	Effective orifice(mm ²)		Weight (g)
						Nylon	Urethane	
4	KQ2D04-00	10.4	18.5	8.7	16	6.0	6.0	6
6	KQ2D06-00	12.8	20.5	9.9	17	13.9	13.9	8
8	KQ2D08-00	15.2	23.5	11.1	18.5	26.3	18.2	12
10	KQ2D10-00	18.5	26.5	12.8	21	40.8	29.0	19
12	KQ2D12-00	20.9	28.5	13.9	22	57.2	45.2	24

Note) øD: max. diameter

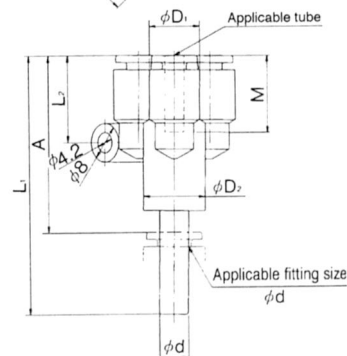
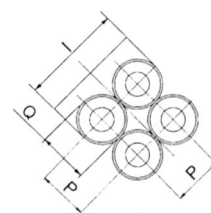


Double plug-in "Y": KQ2XD Metric

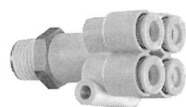


Applicable tube O.D. (mm)	Applicable fitting size ød	Part No.	øD1	øD2	L1	L2	I	Q	A	P	M	Effective orifice(mm ²)		Weight (g)
												Nylon	Urethane	
4	6	KQ2XD04-06	10.4	12.8	54	18.2	21	9.7	37	10.4	16	4.2	4.2	11
6	8	KQ2XD06-08	12.8	15.2	62.5	20.3	26	11.7	44	12.8	17	13.4	13.4	25

Note) øD1: max. diameter



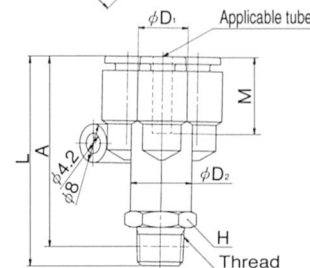
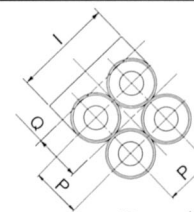
Delta branch: KQ2UD Metric



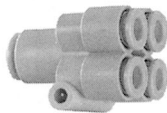
Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L	I	A*	Q	M	P	Effective orifice(mm ²)		Weight (g)
												Nylon	Urethane	
4	1/8	KQ2UD04-01S	13	10.4	12.8	43.5	21	39.5	9.7	16	10.4	4.2	4.2	18
	1/4	KQ2UD04-02S	14			47		41						26
6	1/8	KQ2UD06-01S	17	12.8	15.2	50.5	26	46.5	11.7	17	12.8	13.4	13.4	31
	1/4	KQ2UD06-02S				53.5		47.5						

* Reference dimensions after R(PT) thread installation.

Note) øD1: max. diameter

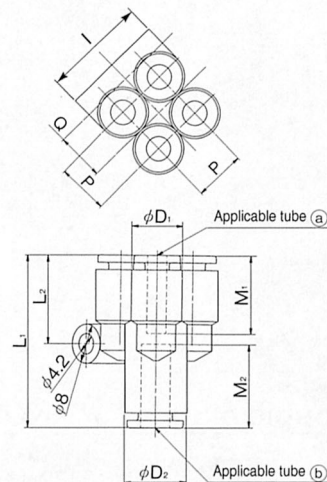


Different dia. double union "Y": KQ2UD Metric



Applicable tube O.D. (mm)		Part No.	øD1	øD2	L1	L2	P	I	Q	M1	M2	Effective orifice(mm ²)		Weight (g)
(a)	(b)											Nylon	Urethane	
4	6	KQ2UD04-06	10.4	12.8	35.5	18.2	10.4	21	9.7	16	17	4.2	4.2	11
6	8	KQ2UD06-08	12.8	15.2	40.5	20.3	12.8	26	11.7	17	18.5	13.4	13.4	19

Note) øD1, øD2: max. diameter

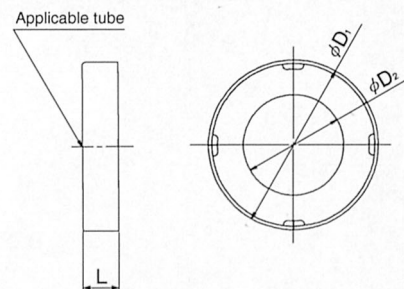


Color cap: KQ2C Metric



Applicable tube O.D. (mm)	Part No.	øD1	øD2	L	Weight (g)	Note
4	KQ2C-04 	10.1	5.2	2.9	0.1	
4	KQ2C-04A- 	8.5	5	2.2	0.1	KQH, KQ2H04-M5, M6 KQS, KQ2S04-M5, M6
4	KQ2C-04B- 	9.7	5	2.2	0.1	KQL, KQ2L04-M5, M6 KQT, KQ2T04-M5, M6 KQY, KQ2Y04-M5, M6
6	KQ2C-06 	12.1	7.2	2.9	0.1	
6	KQ2C-06A- 	10.5	7	2.2	0.1	KQH, KQ2H06-M5, M6 KQS, KQ2S06-M5, M6
6	KQ2C-06B- 	12.0	7	2.2	0.1	KQL, KQ2L06-M5, M6 KQT, KQ2T06-M5, M6 KQY, KQ2Y06-M5, M6
8	KQ2C-08 	14.1	9.2	2.9	0.1	
10	KQ2C-10 	17.1	11.2	2.9	0.2	
12	KQ2C-12 	19.1	13.2	2.9	0.2	
16	KQ2C-16 	26.3	17.2	3.9	0.3	

□ → B(Black), R(Red), YR(Orange), BR(Brown), Y(Yellow)
G(Green), CB(Sky Blue), W(White)



Made to Order

Series KQ2 Consult SMC with regard to detailed specifications, dimensions and delivery.

① Oil-less applications — Vaseline is used as lubricant.

For use in oil-less applications, for example, in paint air lines.

Specification — Same as KQ2 series.

Dimension — Same as KQ2 series.

How to Order — Add “-X12” at the end of the standard part number. (Example, KQ2H 06-02-X12)

② Stainless steel One-touch fittings

For use in highly corrosive atmospheres where brass is not acceptable.

Specification — Same as KQ2 series.

Dimension — Same as KQ2 series.
(Some may be different, consult SMC)

Materials in each part

Body*	SUS□, PBT
Stud *	SUS□ (Thread portion)
Chuck	SUS304
Guide*	SUS□, POM
Collet, release bushing	POM
Packing, O-ring	NBR

* Every one of SUS303, SUS304 and SUS316 is possible to use.

How to Order — Consult SMC.