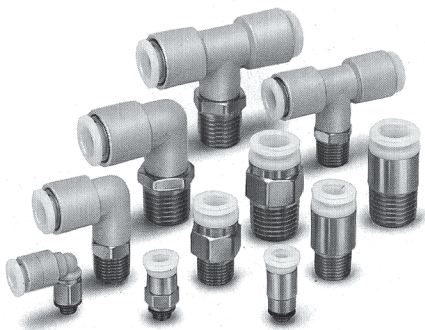


Stainless steel specification applicable to corrosive environments.

SUS 303 stainless steel adopted for metal elements.

Suitable for use in CRT production lines where contact with copper must be avoided, food processing machines where water or salt water wash downs occur and clean room where discoloration of copper material and corrosion must be avoided.



Applicable Tube

Tube material	Nylon, Soft nylon, Polyurethane
Tube O.D.	ø4, ø6, ø8, ø10, ø12, ø16

Specifications

Operating fluid	Air, Water ^{Note1)}	
Max. operating pressure	145psi {1.0MPa}	
Max. operating vacuum pressure	1.3kPa {10Torr}	
Proof pressure	435psi {3.0MPa}	
Ambient and fluid temperature	32 to 140°F {0 to 60°C}, Water: 41 to 104°F {5 to 40°C}	
Thread	Thread portion	JISB0203 (Taper pipe thread)
	Nut	JISB02112 (Metric fine thread)
Sealant (Thread portion)	With /without sealant ^{Note2)}	

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

Note2) Suffix "S" to part number if sealant is desired.

Principal Element Material

Body	Stainless steel (SUS303), PBT
Stud (Thread)	Stainless steel (SUS303)
Chuck	Stainless steel (SUS304)
Guide	Stainless steel (SUS303), POM
Collet, Release button	POM
Packing, O-ring	NBR

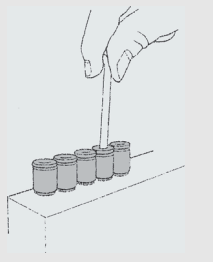
Model

Hexagon socket head male connector

KGS P. 122



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

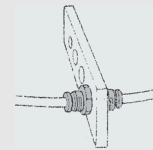


Bulkhead union

KGE P. 130



Used to connect two tubes through a panel.

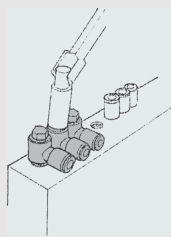


Universal male elbow

KGV P. 124



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

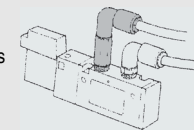


Extended male elbow

KGW P. 126



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

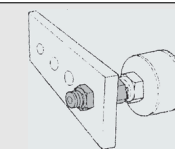


Bulkhead connector

KGE P. 130



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



Male connector

KGH P. 122



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

Male elbow

KGL P. 123



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

Branch tee

KGT P. 126



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

Female union

KGF P. 123



Use to pipe from male threaded portion such as pressure gage.

Union elbow

KGL P. 125



Use to connect tubes at right angle.

Union tee

KGT P. 126



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

Straight union

KGH P. 123



Use to connect same size tubes in the same direction.

Plug-in elbow

KGL P. 125



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

Different dia. tee

KGT P. 127



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

Different dia. straight

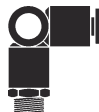
KGH P. 123



Use to connect different size tubes.

Male delta

KGD P. 127



Use to branch piping in 90° direction from female thread.

Male run tee

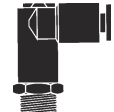
KGY P. 127



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

Branch male elbow

KGLU P. 124



Use to branch tubing at right angle to female thread portion.

Delta

KGD P. 128



Use to branch connection of tubes in triple 90° direction.

Different dia. double union "Y"

KGUD P. 129



Use to 4 branch connection of tubes in the same direction.

Branch elbow

KGLU P. 125



Use to branch connection of tubes at right angle.

Double branch "Y"

KGUD P. 128



Use to 4 branch piping in the same direction from female thread.

Union "Y"

KGU P. 129



Use to branch connection of tubes in the same direction.

Model

Different dia. union "Y"

KGU P. 129



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

Plug-in reducer

KGR P. 129



Use to change size of one-touch fittings.

Tube cap

KGC P. 130



Use to plug up the useless tube connection.

Plug-in "Y"

KGU P. 128



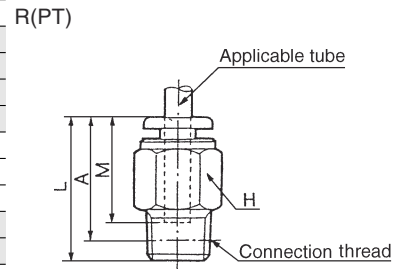
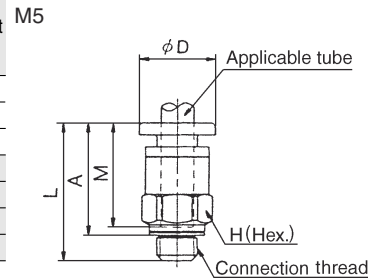
Use to branch tubing in the same direction from one-touch fittings.

Male connector: KGH



Applicable tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D	L	A*	M	Effective orifice(mm ²)		Weight (g)
								Nylon	Urethane	
4	M5×0.8	KGH04-M5	8	9.5	17	14	13	4	4	2.4
	1/8	KGH04-01	10	—	22	18	16	5.6	5.6	9
	1/4	KGH04-02	14	—	19.5	13.5				16
6	M5×0.8	KGH06-M5	10	11.5	18.5	15	14	4	4	3.4
	1/8	KGH06-01	12	—	22.5	18.5	17	13.1	13.1	16
	1/4	KGH06-02	14	—	23	17				14
	3/8	KGH06-03	17	—	22	15.5				27
8	1/8	KGH08-01	14	—	28	24	18.5	26.1	18.0	21
	1/4	KGH08-02			26.5	20.5				19
	3/8	KGH08-03	17	—	22	15.5				26
10	1/8	KGH10-01	17	—	30	26	21	41.5	29.5	19
	1/4	KGH10-02			33.5	27.5				30
	3/8	KGH10-03			29	22.5				30
	1/2	KGH10-04	22	—	27	19				53
12	1/4	KGH12-02	19	—	34.5	28.5	22	58.3	46.1	42
	3/8	KGH12-03			30	23.5				34
	1/2	KGH12-04	22	—	30	22				51
16	3/8	KGH16-03	24	—	38.5	32	24	81	(81)	61
	1/2	KGH16-04			34.5	26.5				47

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

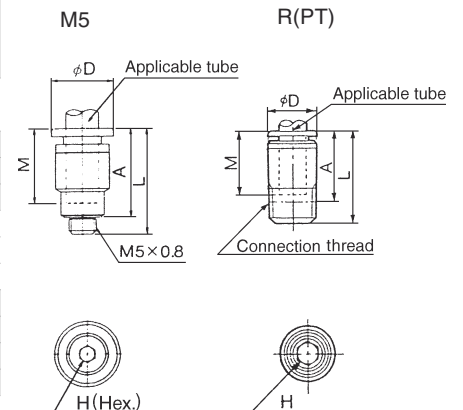


Hexagon socket head male connector: KGS



Applicable tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D	L	A*	M	Effective orifice(mm ²)		Weight (g)
								Nylon	Urethane	
4	M5×0.8	KGS04-M5	2.5	9.5	19	15.5	13	2.7	2.7	2.6
	1/8	KGS04-01	3	9.8	23	19	16	4.1	3.6	8
6	M5×0.8	KGS06-M5	2.5	11.5	20	16.5	14	2.7	2.7	3.2
	1/8	KGS06-01	4	11.8	24	20	17	10.0	9.9	9
	1/4	KGS06-02		13.8						15
8	1/8	KGS08-01	5	14	28	24				18.5
	1/4	KGS08-02			25.5	19.5	11			
	3/8	KGS08-03	6	17	27.5	21	24			
10	1/8	KGS10-01	5	17	30	26	21	39.0	26.6	18
	1/4	KGS10-02			27.5	21.5				12
	3/8	KGS10-03			21	19				
	1/2	KGS10-04	22	28	20	35				
12	1/4	KGS12-02	8	19	33.5	27.5	22	46.0	44.5	23
	3/8	KGS12-03			29	22.5				18
	1/2	KGS12-04	10	22	28	20				30

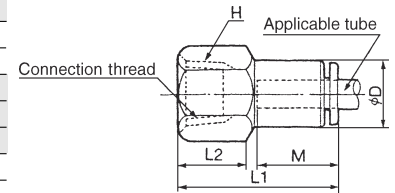
* Reference dimensions after R(PT) thread installation.



Female union: KGF



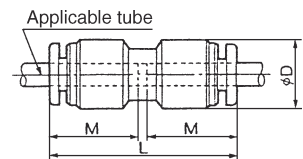
Applicable tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D	L1	L2	M	Effective orifice(mm ²)		Weight (g)
								Nylon	Urethane	
4	1/8	KGF04-01	14	10	27	11	16	5.6	5.6	15
	1/4	KGF04-02	17		31	14				23
6	1/8	KGF06-01	14	12	27.5	11	17	13.1	13.1	15
	1/4	KGF06-02	17		31	13				22
	3/8	KGF06-03	19		33.5	15				25
8	1/8	KGF08-01	14	14	29	11	18.5	26.1	18.0	17
	1/4	KGF08-02	17		32.5	13				24
	3/8	KGF08-03	19		33.5	14				24
10	1/4	KGF10-02	17	17	34.5	14	21	41.5	18.0	27
	3/8	KGF10-03	19		36.5	15				30
12	1/4	KGF12-02	19	19	35	14	22	58.3	46.1	36
	3/8	KGF12-03			37					31
	1/2	KGF12-04	24		41	18				52



Straight union: KGH



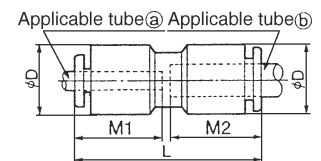
Applicable tube O.D.(mm)	Part No.	D	L	M	Effective orifice(mm ²)		Weight (g)
					Nylon	Urethane	
4	KGH04-00	10.4	32.5	16	5.6	5.6	3
6	KGH06-00	12.8	34.5	17	13.1	13.1	5
8	KGH08-00	15.2	38.5	18.5	26.1	18.0	7
10	KGH10-00	18.5	42.5	21	41.5	29.5	11
12	KGH12-00	20.9	44.5	22	58.3	46.1	14



Different dia. straight: KGH



Applicable tube O.D.(mm)		Part No.	D	L	M1	M2	Effective orifice(mm ²)		Weight (g)
①	②						Nylon	Urethane	
4	6	KGH04-06	12.8	34.5	16	17	4.2	4.2	5
6	8	KGH06-08	15.2	38.5	17	18.5	10.7	10.7	7
8	10	KGH08-10	18.5	42	18.5	21	24.1	16.7	11
10	12	KGH10-12	20.9	44.5	21	22	37.6	28.2	14

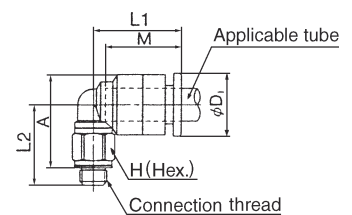


Male elbow: KGL

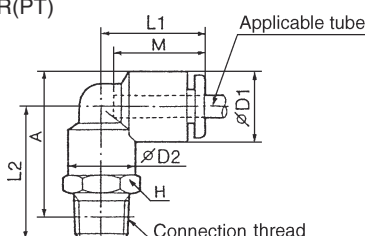


Applicable tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L1	L2	A*	M	Effective orifice(mm ²)		Weight (g)
										Nylon	Urethane	
4	M5 × 0.8	KGL04-M5	7	9.5	—	16	13.5	15	13	3.5	3.5	2.7
	1/8	KGL04-01	10	10.4	10	18	22	23	16	4.2	4.2	10
	1/4	KGL04-02	14				26	25				19
6	M5 × 0.8	KGL06-M5	7	11.5	—	16	14.5	17	14	3.5	3.5	3.1
	1/8	KGL06-01	10	12.8	10	20	23	25.5	17	11.4	11.4	12
	1/4	KGL06-02	14				27	27.5				10
	3/8	KGL06-03	17				29	29				33
8	1/8	KGL08-01	12	15.2	12	23	24.5	28	18.5	21.6	14.9	13
	1/4	KGL08-02	14				28.5	30				21
	3/8	KGL08-03	17				30.5	31.5				35
10	1/8	KGL10-01	17	18.5	17	26.5	27	32	21	21.6	14.9	25
	1/4	KGL10-02					30	33				26
	3/8	KGL10-03					32	34.5				36
	1/2	KGL10-04	22				36	37				63
12	1/4	KGL12-02	17	20.9	17	28.5	31	35.5	22	50.2	39.7	28
	3/8	KGL12-03					33	37				38
	1/2	KGL12-04					22	37				39.5
16	3/8	KGL16-03	22	26.5	21	33	38	44.5	24	71	(71)	101
	1/2	KGL16-04					41	46		100	(84)	105

M5



R(PT)



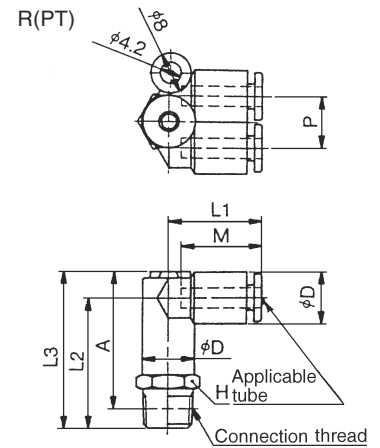
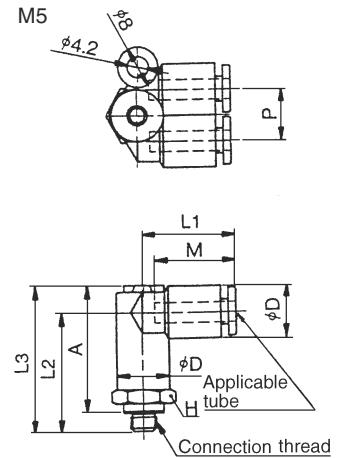
*Reference dimensions after R(PT) thread installation.
Note) (): Values for soft nylon.

Branch male elbow: KGLU



Applicable tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D	L1	L2	L3	A*	M	P	Effective orifice(mm ²)		Weight (g)		
											Nylon	Urethane			
4	M5×0.8	KGLU04-M5	11	10.4	18.5	24	29.5	25.5	16	10.4	4.3	4.3	10		
	1/8	KGLU04-01				26.5	32	27.5						6.0	6.0
	1/4	KGLU04-02	30.5			36	30	21							
6	M5×0.8	KGLU06-M5	13	12.8	21	26.5	33	29.5	17	12.8	4.3	4.3	14		
	1/8	KGLU06-01				29.5	36	32						16	
	1/4	KGLU06-02	33			39.5	33.5	23							
	3/8	KGLU06-03	35			41.5	35	36							
8	1/8	KGLU08-01	17	15.2	24	34	41.5	38	18.5	15.2	26.3	18.2	28		
	1/4	KGLU08-02				37	44.5	38.5						36	
	3/8	KGLU08-03				38	45.5	39							
10	1/4	KGLU10-02	19	18.5	27	40	49.5	43.5	21	18.5	40.8	29.0	41		
	3/8	KGLU10-03				41	50.5	44						42	
	1/2	KGLU10-04				44.5	54	45.5						64	
12	1/4	KGLU12-02	22	20.9	29	42.5	53	47	22	20.9	57.2	45.2	57		
	3/8	KGLU12-03				43.5	54	47.5						58	
	1/2	KGLU12-04				46.5	57	49						65	

* Reference dimensions after R(PT) thread installation.

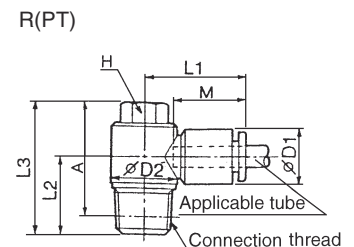
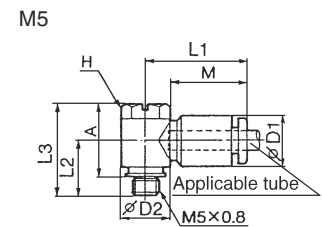


Universal male elbow: KGV



Applicable tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L1	L2	L3	A*	M	Effective orifice(mm ²)		Weight (g)	
											Nylon	Urethane		
4	M5×0.8	KGV04-M5	8	10.4	9.8	20.5	11	18.5	15	16	2.9	2.9	6	
	1/8	KGV04-01			13.4	22	14.5	26.5	22.5					14
6	M5×0.8	KGV06-M5	8	12.8	9.8	23.5	12	18.5	15	17	3.8	3.8	7	
	1/8	KGV06-01			13.4	24	14.5	26.5	22.5					15
8	1/4	KGV06-02	10	15.3	15.3	23.5	18.5	31	25	18.5	7.5	7.5	26	
	1/8	KGV08-01			17.6	28.5	15.5	28.5	24.5					24
	1/4	KGV08-02			18.5	31.5	25.5	30	16					11.2
10	3/8	KGV08-03	14	20.6	20.6	27.5	20.5	36.5	30	21	20.5	14.3	47	
	1/4	KGV10-02			19.5	35.5	29.5	40						
	3/8	KGV10-03			20.5	36.5	30	49						
12	3/8	KGV12-03	17	20.9	25.2	34	22	38.5	32	22	39	30.8	63	
	1/2	KGV12-04					25	41.5	33.5					80

*Reference dimensions after R(PT) thread installation.

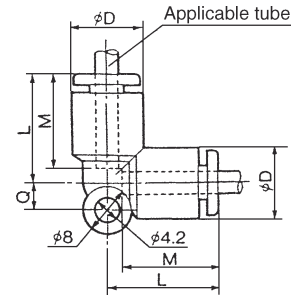


Union elbow: KGL



Applicable tube O.D. (mm)	Part No.	D	L	Q	M	Effective orifice(mm ²)		Weight (g)
						Nylon	Urethane	
4	KGL04-00	10.4	18	4.5	16	4.2	4.2	6
6	KGL06-00	12.8	20	5.3	17	11.4	11.4	7
8	KGL08-00	15.2	23	6	18.5	21.6	14.9	11
10	KGL10-00	18.5	26.5	6.8	21	35.2	25.0	17
12	KGL12-00	20.9	28.5	7.5	22	50.2	39.7	21
16	KGL16-00	26.5	34	10	25	100	(84)	29

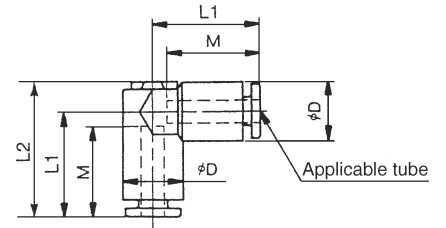
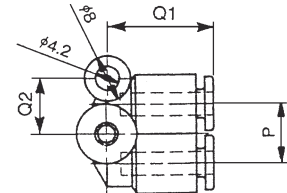
Note) (): Values for soft nylon.



Branch elbow: KGLU



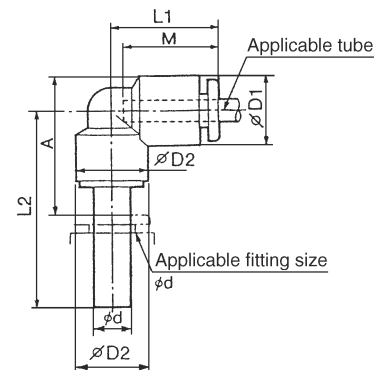
Applicable tube O.D. (mm)	Part No.	D	L1	L2	Q1	Q2	M	P	Effective orifice(mm ²)		Weight (g)
									Nylon	Urethane	
4	KGLU04-00	10.4	18.5	24	18.5	10	16	10.4	6.0	6.0	7
6	KGLU06-00	12.8	21	27.5	20.5	12	17	12.8	13.9	13.9	9
8	KGLU08-00	15.2	24	32	24.5	14	18.5	15.2	26.3	18.2	16
10	KGLU10-00	18.5	27	36.5	28	16	21	18.5	40.8	29.0	25
12	KGLU12-00	20.9	29	40	30	18	22	20.9	57.2	45.2	32



Plug-in elbow: KGL



Applicable tube O.D. (mm)	Applicable fitting size ød	Part No.	D1	D2	L1	L2	A	M	Effective orifice(mm ²)		Weight (g)
									Nylon	Urethane	
4	4	KGL04-99	10.4	8	18	25	14.5	16	4.2	4.2	8
6	6	KGL06-99	12.8	10	20	27.5	17	17	11.4	11.4	10
8	8	KGL08-99	15.2	12	22.5	31.5	21	18.5	21.6	14.9	14
10	10	KGL10-99	18.5	14	25.5	35.5	23.5	21	35.2	25.0	25
12	12	KGL12-99	20.9	16	27	37.5	26	22	50.2	39.7	28

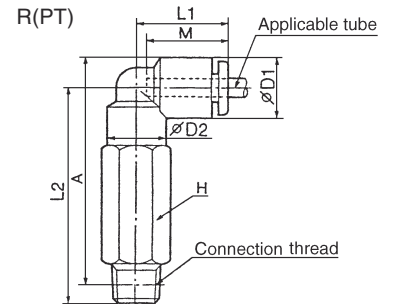
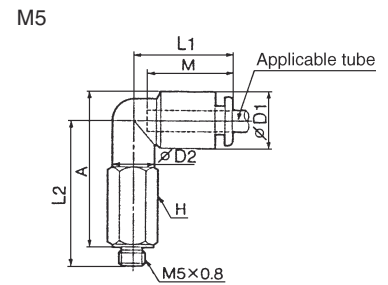


Extended male elbow: KGW

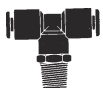


Applicable tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L1	L2	A*	M	Effective orifice(mm ²)		Weight (g)		
										Nylon	Urethane			
4	M5×0.8	KGW04-M5	8	10.4	8	18	30	32	16	3.0	3.0	11		
	1/8	KGW04-01	10							37.5	38.5	4.0	4.0	23
	1/4	KGW04-02	14							43.5	42.5			38
6	M5×0.8	KGW06-M5	8	12.8	8	20	30.5	33.5	17	3.0	3.0	11		
	1/8	KGW06-01	10							40	42.5	10.9	10.9	26
	1/4	KGW06-02	14							46	46.5			41
	3/8	KGW06-03	17							48	48			67
8	1/8	KGW08-01	12	15.2	12	23	43.5	47	18.5	20.5	14.2	30		
	1/4	KGW08-02	14									49.5	51	47
	3/8	KGW08-03	17									51.5	52.5	74
10	1/4	KGW10-02	17	18.5	17	26.5	56.5	59.5	21	33.5	23.8	66		
	3/8	KGW10-03	17									58.5	61	76
	1/2	KGW10-04	22									65	66	145
12	1/4	KGW12-02	17	20.9	17	28.5	57.5	62	22	47.7	37.7	68		
	3/8	KGW12-03	17									59.5	63.5	78
	1/2	KGW12-04	22									66	68.5	147

*Reference dimensions after R(PT) thread installation.

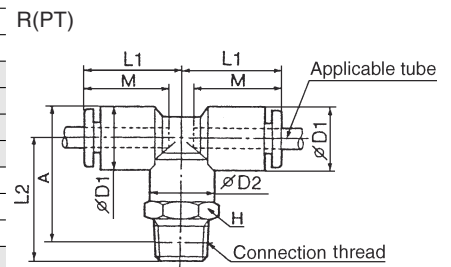
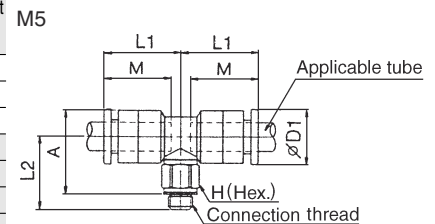


Branch tee: KGT



Applicable tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L1	L2	A*	M	Effective orifice(mm ²)		Weight (g)
										Nylon	Urethane	
4	M5×0.8	KGT04-M5	7	9.5		15.5	14	15.5	13	4.3	4.3	3.5
	1/8	KGT04-01	10	10.4	10	18	22	23	16	6.0	6.0	13
	1/4	KGT04-02	14				26	25				19
6	M5×0.8	KGT06-M5	7	11.5		16	15	17.5	14	4.3	4.3	4.2
	1/8	KGT06-01	10	12.8	10	20	23	25.5	17	13.9	13.9	13
	1/4	KGT06-02	14				27	27.5				21
	3/8	KGT06-03	17				29	29				35
8	1/8	KGT08-01	12	15.2	12	23	24.5	28	18.5	26.3	18.2	15
	1/4	KGT08-02	14				28.5	30				23
	3/8	KGT08-03	17				30.5	31.5				37
10	1/8	KGT10-01	17	18.5	17	26.5	27	32	21	40.8	29.0	31
	1/4	KGT10-02	17				30	33				29
	3/8	KGT10-03	17				32	34.5				39
	1/2	KGT10-04	22				36	37				66
12	1/4	KGT12-02	17	20.9	17	28.5	31	35.5	22	57.2	45.2	31
	3/8	KGT12-03	17				33	37				41
	1/2	KGT12-04	22				37	39.5				68
16	3/8	KGT16-03	22	26.5	20.9	34	38	44.5	25	71	(71)	112
	1/2	KGT16-04	22				40.5	46		100	(100)	116

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

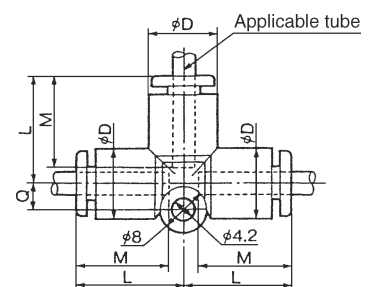


Union tee: KGT



Applicable tube O.D. (mm)	Part No.	D	L	Q	M	Effective orifice(mm ²)		Weight (g)
						Nylon	Urethane	
4	KGT04-00	10.4	18	4.5	16	6.4	6.4	8
6	KGT06-00	12.8	20	5.3	17	13.4	13.4	11
8	KGT08-00	15.2	23	6	18.5	25.6	17.7	16
10	KGT10-00	18.5	26.5	6.8	21	40	28.4	25
12	KGT12-00	20.9	28.5	7.5	22	57.4	45.4	29
16	KGT16-00	26.5	34	10	25	100	(84)	40

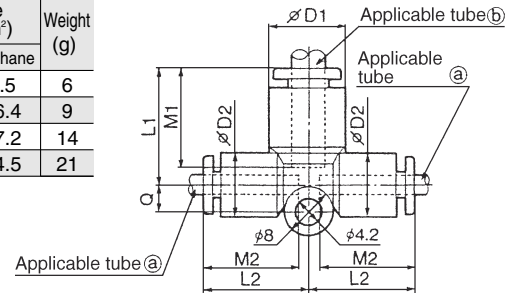
Note) (): Values for soft nylon.



Different dia. tee: KGT



Applicable tube O. D. (mm)		Part No.	D1	D2	L1	L2	Q	M1	M2	Effective orifice(mm ²)		Weight (g)
a	b									Nylon	Urethane	
4	6	KGT04-06	12.8	10.4	19.5	18	4.5	17	16	7.1	6.5	6
6	8	KGT06-08	15.2	12.8	22.5	20	5.3	18.5	17	16.4	16.4	9
8	10	KGT08-10	18.5	15.2	26.5	23	6	21	18.5	36	27.2	14
10	12	KGT10-12	20.9	18.5	28.5	26.5	6.8	22	21	56	44.5	21

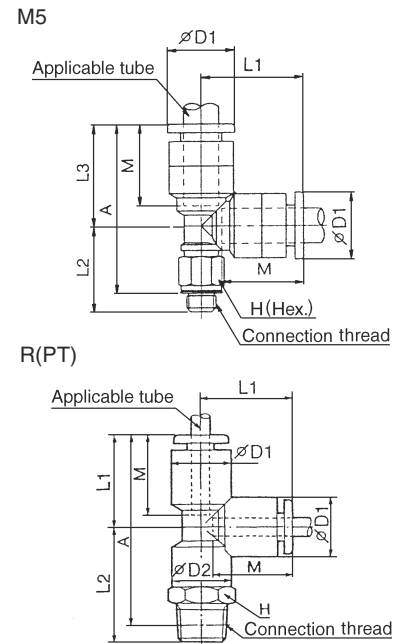


Male run tee: KGY



Applicable tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L1	L2	L3	A*	M	Effective orifice(mm ²)		Weight (g)
											Nylon	Urethane	
4	M5×0.8	KGY04-M5	7	9.5	—	16	13.5	15	25.5	13	4.6	4.6	3.5
	1/8	KGY04-01	10	10.4	10	18	22	—	36	16	6.4	6.4	13
	1/4	KGY04-02	14				26	—	38	—	38	—	38
6	M5×0.8	KGY06-M5	7	11.5	—	17.5	14.5	17.5	29	14	4.6	4.6	4.3
	1/8	KGY06-01	10	12.8	10	20	23	—	39	17	13.4	13.4	13
	1/4	KGY06-02	14				27	—	41	17	13.4	13.4	21
	3/8	KGY06-03	17				29	—	42.5	—	42.5	—	35
1/8	KGY08-01	12	15.2				12	23	24.5	—	43.5	17	13.4
1/4	KGY08-02	14		28.5	—	45.5			18.5	25.6	17.7	23	
3/8	KGY08-03	17		30.5	—	47			—	47	—	37	
10	1/8	KGY10-01	17	18.5	17	26.5	27	—	49.5	21	40.0	28.4	31
	1/4	KGY10-02					30	—	50.5				29
	3/8	KGY10-03					32	—	52				39
	1/2	KGY10-04					36	—	54.5				66
12	1/4	KGY12-02	17	20.9	17	28.5	31	—	53.5	22	57.4	45.4	31
	3/8	KGY12-03					33	—	55				41
	1/2	KGY12-04					37	—	57.5				68
16	3/8	KGY16-03	22	26.5	20.9	34	38	—	65.5	25	81	(81)	112
	1/2	KGY16-04					41	—	67				113

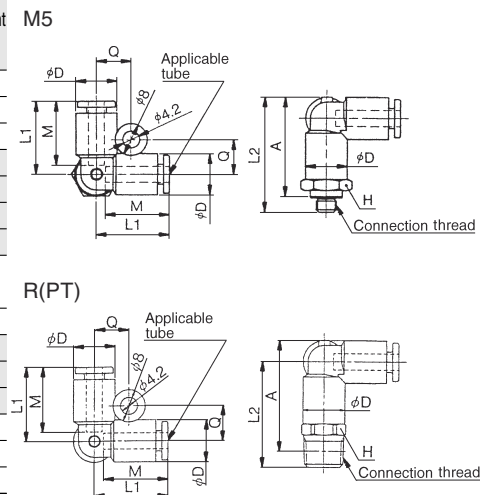
*Reference dimensions after R(PT) thread installation.
Note) (): Values for soft nylon.



Male delta: KGD



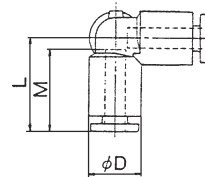
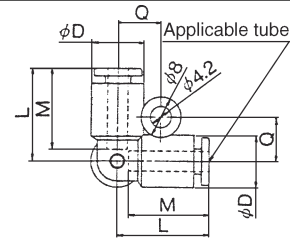
Applicable tube O.D.(mm)	Connection thread R(PT)	Part No.	H (Hex.)	D	L1	L2	A	M	Q	Effective orifice(mm ²)		Weight (g)		
										Nylon	Urethane			
4	M5 × 0.8	KGD04-M5	11	10.4	18.5	24	25.5	16	8.7	4.3	4.3	10		
	1/8	KGD04-01				26.5	27.5					6.0	6.0	12
	1/4	KGD04-02				30.5	30					6.0	6.0	21
6	M5 × 0.8	KGD06-M5	13	12.8	20.5	26	28.5	17	9.9	4.3	4.3	13		
	1/8	KGD06-01				29	31.5					15		
	1/4	KGD06-02				32.5	33					22		
	3/8	KGD06-03				34.5	34.5					35		
8	1/8	KGD08-01	17	15.2	23.5	33.5	37	18.5	11.1	26.3	18.2	27		
	1/4	KGD08-02				36.5	38					36		
	3/8	KGD08-03				37.5	38.5					39		
10	1/4	KGD10-02	19	18.5	26.5	39.5	43	21	12.8	40.8	29.0	39		
	3/8	KGD10-03				40.5	43.5					40		
	1/2	KGD10-04				44	45					62		
12	1/4	KGD12-02	22	20.9	28.5	42	46.5	22	13.9	57.2	45.2	55		
	3/8	KGD12-03				43	47					56		
	1/2	KGD12-04				46	48.5					63		



Delta: KGD



Applicable tube O.D. (mm)	Part No.	D	L	Q	M	Effective orifice(mm ²)		Weight (g)
						Nylon	Urethane	
4	KGD04-00	10.4	18.5	8.7	16	6.0	6.0	6
6	KGD06-00	12.8	20.5	9.9	17	13.9	13.9	8
8	KGD08-00	15.2	23.5	11.1	18.5	26.3	18.2	12
10	KGD10-00	18.5	26.5	12.8	21	40.8	29.0	19
12	KGD12-00	20.9	28.5	13.9	22	57.2	45.2	24

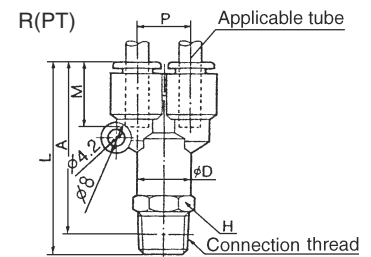
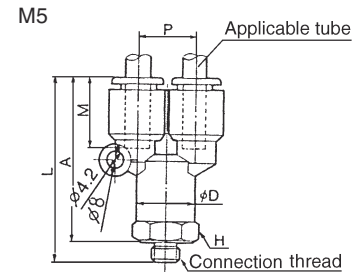


Plug-in "Y": KGU



Applicable tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D	L	P	A*	M	Effective orifice(mm ²)		Weight (g)				
									Nylon	Urethane					
4	M5×0.8	KGU04-M5	11	10.4	39.5	10.4	36	16	2.2	2.2	4				
	1/8	KGU04-01			42							38	4.2	4.2	11
	1/4	KGU04-02			46							40	4.2	4.2	20
6	M5×0.8	KGU06-M5	13	12.8	42.5	12.8	39	17	2.2	2.2	13				
	1/8	KGU06-01			45.5							41.5	13.4	13.4	12
	1/4	KGU06-02			49							43	13.4	13.4	22
	3/8	KGU06-03			51							44.5	13.4	13.4	35
8	1/8	KGU08-01	17	15.2	52.5	15.2	48.5	18.5	25.6	17.7	16				
	1/4	KGU08-02			55.5							49.5	25.6	17.7	24
	3/8	KGU08-03			56.5							50	25.6	17.7	36
10	1/4	KGU10-02	19	18.5	61	18.5	55	21	40	28.4	30				
	3/8	KGU10-03			62							55.5	40	28.4	40
	1/2	KGU10-04			65							57	40	28.4	65
12	1/4	KGU12-02	22	20.9	64.5	20.9	58.5	22	57.4	45.4	32				
	3/8	KGU12-03			65.5							59	57.4	45.4	40
	1/2	KGU12-04			68.5							60.5	57.4	45.4	65

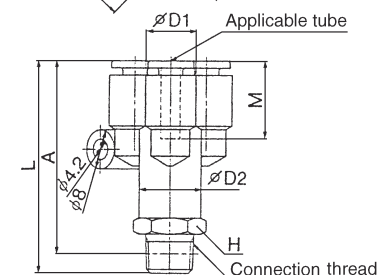
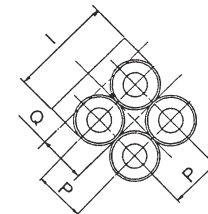
*Reference dimensions after R(PT) thread installation.



Double branch "Y": KGUD



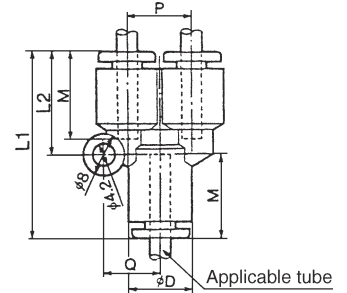
Applicable tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L	I	A	Q	M	P	Effective orifice(mm ²)		Weight (g)
												Nylon	Urethane	
4	1/8	KGUD04-01	13	10.4	12.8	43.5	21	39.5	9.7	16	10.4	4.2	4.2	18
	1/4	KGUD04-02												
6	1/8	KGUD06-01	17	12.8	15.2	50.5	26	46.5	11.7	17	12.8	13.4	13.4	31
	1/4	KGUD06-02												



Union“Y”: KGU



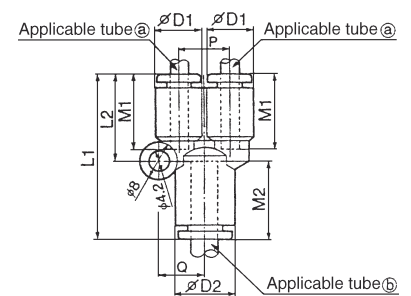
Applicable tube O.D. (mm)	Part No.	D	L1	L2	P	Q	M	Effective orifice(mm ²)		Weight (g)
								Nylon	Urethane	
4	KGU04-00	10.4	34	18	10.4	9.7	16	4.2	4.2	8
6	KGU06-00	12.8	37	20	12.8	11.7	17	13.4	13.4	10
8	KGU08-00	15.2	42.5	24.5	15.2	13.7	18.5	25.6	17.7	12
10	KGU10-00	18.5	48	27.5	18.5	16.1	21	40	28.4	16
12	KGU12-00	20.9	51	30	20.9	18.1	22	57.4	45.4	23



Different dia. union“Y”: KGU



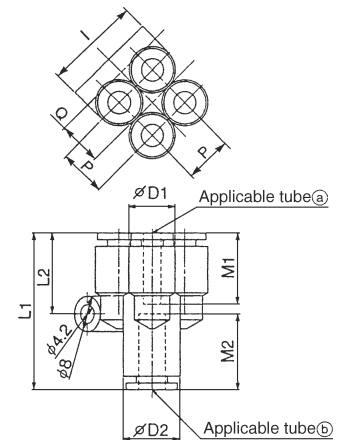
Applicable tube O.D. (mm)		Part No.	D1	D2	L1	L2	P	Q	M1	M2	Effective orifice(mm ²)		Weight (g)
(a)	(b)										Nylon	Urethane	
4	6	KGU04-06	10.4	12.8	35	18	10.4	9.7	16	17	4.2	4.2	7
6	8	KGU06-08	12.8	15.2	39.5	20	12.8	11.7	17	18.5	13.4	13.4	12
8	10	KGU08-10	15.2	18.5	45	24.5	15.2	13.7	18.5	21	25.6	17.7	19
10	12	KGU10-12	18.5	20.9	49	27.5	18.5	16.1	21	22	40	28.4	27



Different dia. double union“Y”: KGUD



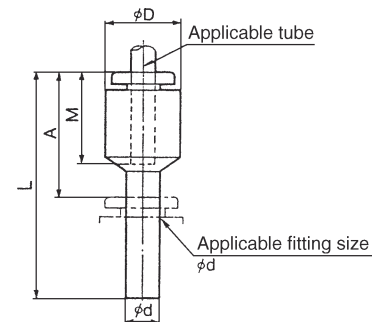
Applicable tube O.D. (mm)		Part No.	D1	D2	L1	L2	P	I	Q	M1	M2	Effective orifice(mm ²)		Weight (g)
(a)	(b)											Nylon	Urethane	
4	6	KGUD04-06	10.4	12.8	35.5	18.2	10.4	21	9.7	16	17	4.2	4.2	11
6	8	KGUD06-08	12.8	15.2	40.5	20.3	12.8	26	11.7	17	18.5	13.4	13.4	19



Plug-in reducer: KGR



Applicable tube O.D. (mm)	Applicable fitting size ød	Part No.	D	L	A	M	Effective orifice(mm ²)		Weight (g)
							Nylon	Urethane	
4	6	KGR04-06	10.4	34.5	17.5	16	5.6	5.6	2.1
	8	KGR04-08		36.5	18				2.3
	10	KGR04-10		39.5	18.5				3.6
6	4	KGR06-04	12.8	37	21	17	13.1	13.1	4
	8	KGR06-08		37	18.5				3
	10	KGR06-10		39.5	20				3.5
	12	KGR06-12		42	20				5.2
8	10	KGR08-10	15.2	41	20	18.5	26.1	18.0	4.5
	12	KGR08-12		42					5.1
10	12	KGR10-12	17	42	20	21	41.5	32.8	33
	16	KGR10-16	20.9	50.5	25.5				(29.5)
12	16	KGR12-16	20.9	50.5	25.5	22	58.3	(46.1)	37



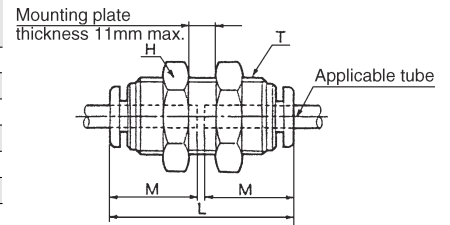
Note) (): Values for soft nylon.

Bulkhead union: KGE



Applicable tube O.D. (mm)	Part No.	T(M)	H (Hex.)	L	Mounting hole	M	Effective orifice(mm ²)		Weight (g)
							Nylon	Urethane	
4	KGE04-00	M12×1	14	32.5	13	16	5.6	5.6	26
6	KGE06-00	M14×1	17	34.5	15	17	13.1	13.1	33
8	KGE08-00	M16×1	19	38	17	18.5	26.1	18.0	52
10	KGE10-00	M20×1	24	42.5	21	21	41.5	29.5	70
12	KGE12-00	M22×1	27	44	23	22	58.3	46.1	90
16	KGE16-00	M28×1.5	32	51	29	25	113	(96)	115

Note) (): Values for soft nylon.

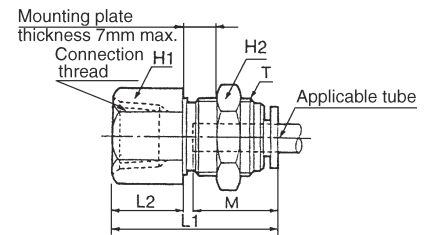


Bulkhead connector: KGE



Applicable tube O.D. (mm)	Connection thread R(PT)	Part No.	T(M)	H1 (Hex.)	H2 (Hex.)	L1	L2	Mounting hole	M	Effective orifice(mm ²)		Weight (g)
										Nylon	Urethane	
4	1/8	KGE04-01	M12×1	14	14	27.5	11	13	16	5.6	5.6	16
	1/4	KGE04-02		17		31	15					35
6	1/8	KGE06-01	M14×1	17	17	28	11	15	17	13.1	13.1	25
	1/4	KGE06-02				31.5	15					40
	3/8	KGE06-03				19	33.5					17
8	1/8	KGE08-01	M16×1	17	19	27.5	7.5	17	18.5	26.1	18.0	28
	1/4	KGE08-02				33	13					27
	3/8	KGE08-03				19	35					15
10	1/4	KGE10-02	M20×1	22	24	34.5	12.5	21	21	41.5	29.5	53
	3/8	KGE10-03				36.5	14					67
12	3/8	KGE12-03	M22×1	24	27	37	14	23	22	58.3	46.1	92
	1/2	KGE12-04				41	18					59
16	3/8	KGE16-03	M28×1.5	30	32	40	14	29	25	96	(96)	127
	1/2	KGE16-04				44	18					113

Note) (): Values for soft nylon.



Tube cap: KGC



Applicable tube O.D. (mm)	Part No.	D	L	M	Weight (g)
4	KGC04-00	10.4	17	16	3
6	KGC06-00	12.8	18.5	17	3
8	KGC08-00	15.2	20.5	18.5	4
10	KGC10-00	18.5	23	21	6
12	KGC12-00	20.9	24	22	8
16	KGC16-00	26.5	28	25	13

