

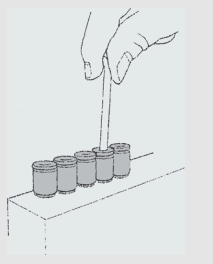
Model

Hexagon socket head male connector

KGS P. 122



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

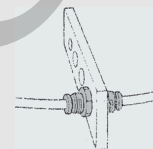


Bulkhead union

KGE P. 130



Used to connect two tubes through a panel.

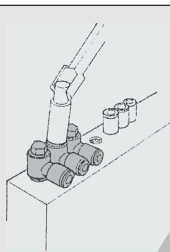


Universal male elbow

KGV P. 124



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

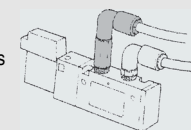


Extended male elbow

KGW P. 126



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

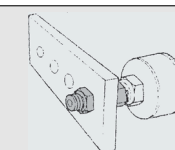


Bulkhead connector

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

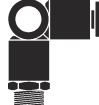
KGH P. 123



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.

Series KG

Stainless Steel One-touch Fittings

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



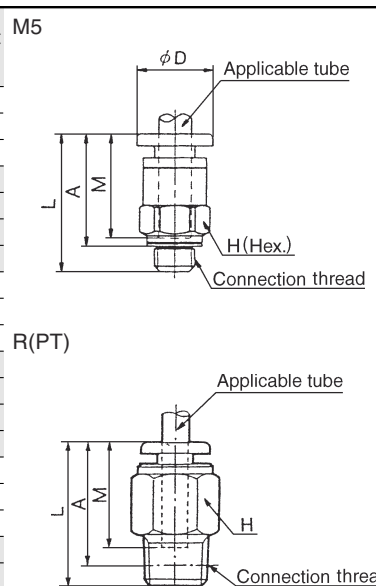
Use to branch tubing in the same direction from one-touch fittings.

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	5.6	5.6	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	17	13.1	13.1	14
8	3/8	KGH06-03	17	—	22	15.5	17	13.1	13.1	27
	1/8	KGH08-01	14	—	28	24	18.5	26.1	18.0	21
	1/4	KGH08-02	14	—	26.5	20.5	18.5	26.1	18.0	19
10	3/8	KGH08-03	17	—	22	15.5	17	26.1	18.0	26
	1/8	KGH10-01	17	—	30	26	21	41.5	29.5	19
	1/4	KGH10-02	17	—	33.5	27.5	21	41.5	29.5	30
12	3/8	KGH10-03	17	—	29	22.5	21	41.5	29.5	30
	1/2	KGH10-04	22	—	27	19	21	41.5	29.5	53
	1/4	KGH12-02	19	—	34.5	28.5	22	58.3	46.1	42
16	3/8	KGH12-03	19	—	30	23.5	22	58.3	46.1	34
	1/2	KGH12-04	22	—	30	22	22	58.3	46.1	51
	3/8	KGH16-03	24	—	38.5	32	24	81	(81)	61
	1/2	KGH16-04	24	—	34.5	26.5	24	113	(96)	47

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

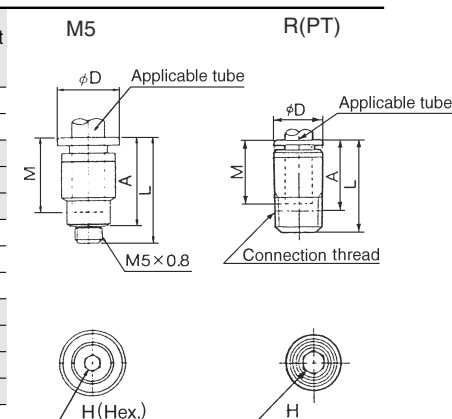


Hexagon socket head male connector: KGS



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	4	13.8	24	20	17	10.7	10.0	15
8	1/8	KGS08-01	5	14	28	24	18.5	17.2	16.2	12
	1/4	KGS08-02	5	14	25.5	19.5	18.5	17.2	16.2	11
	3/8	KGS08-03	6	17	27.5	21	18.5	23.3	16.2	24
10	1/8	KGS10-01	5	17	30	26	21	17.2	10.0	18
	1/4	KGS10-02	8	17	27.5	21.5	21	39.0	26.6	12
	3/8	KGS10-03	8	17	27.5	21	21	39.0	26.6	19
12	1/2	KGS10-04	8	22	28	20	21	39.0	26.6	35
	1/4	KGS12-02	8	19	33.5	27.5	22	46.0	44.5	23
	3/8	KGS12-03	10	19	29	22.5	22	60.0	44.5	18
	1/2	KGS12-04	10	22	28	20	22	60.0	44.5	30

* Reference dimensions after R(PT) thread installation.



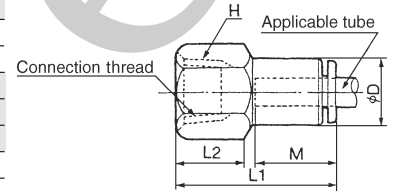
Stainless Steel One-touch Fittings

Series KG

Female union: KGF



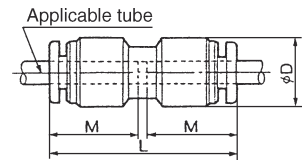
Applicable tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D	L1	L2	M	Effective orifice(mm ²)		Weight (g)
								Nylon	Urethane	
4	1/8	KGF04-01	14	10	27	11	16	5.6	5.6	15
	1/4	KGF04-02	17		31	14				23
6	1/8	KGF06-01	14	12	27.5	11	17	13.1	13.1	15
	1/4	KGF06-02	17		31	13				22
	3/8	KGF06-03	19		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



Straight union: KGH



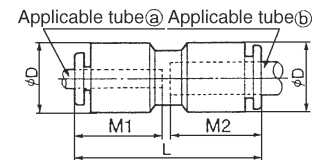
Applicable tube O.D.(mm)	Part No.	D	L	M	Effective orifice(mm ²)		Weight (g)
					Nylon	Urethane	
4	KGH04-00	10.4	32.5	16	5.6	5.6	3
6	KGH06-00	12.8	34.5	17	13.1	13.1	5
8	KGH08-00	15.2	38.5	18.5	26.1	18.0	7
10	KGH10-00	18.5	42.5	21	41.5	29.5	11
12	KGH12-00	20.9	44.5	22	58.3	46.1	14



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

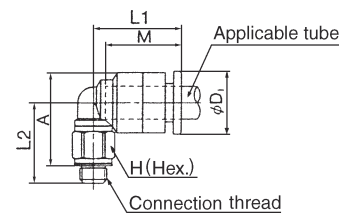


Male elbow: KGL

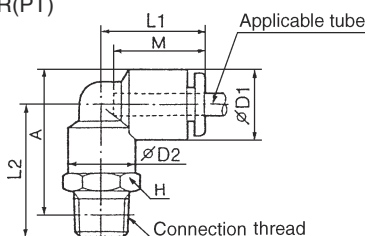


Applicable tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L1	L2	A*	M	Effective orifice(mm ²)		Weight (g)
										Nylon	Urethane	
4	M5 × 0.8	KGL04-M5	7	9.5	—	16	13.5	15	13	3.5	3.5	2.7
	1/8	KGL04-01	10	10.4	10	18	22	23	16	4.2	4.2	10
	1/4	KGL04-02	14				26	25				19
6	M5 × 0.8	KGL06-M5	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.

Series KG

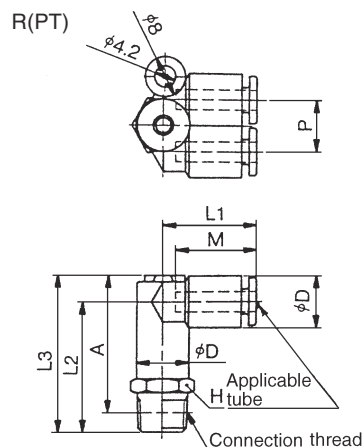
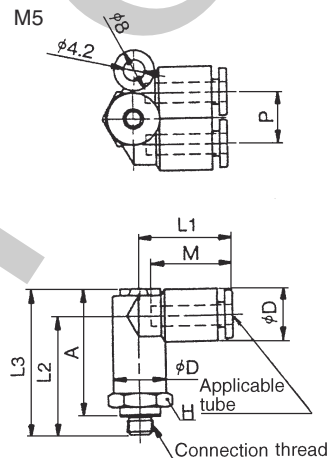
Stainless Steel One-touch Fittings

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	14			26.5	32	27.5						6.0	6.0	12
	1/4	KGLU04-02	14			30.5	36	30						6.0	6.0	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	13			29.5	36	32						13.9	13.9	16
	1/4	KGLU06-02	14			33	39.5	33.5						13.9	13.9	23
	3/8	KGLU06-03	17			35	41.5	35						13.9	13.9	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						26.3	18.2	36
	3/8	KGLU08-03				38	45.5	39						26.3	18.2	36
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						40.8	29.0	42
	1/2	KGLU10-04				22	44.5	54						45.5	40.8	29.0
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						57.2	45.2	58
	1/2	KGLU12-04				46.5	57	49						57.2	45.2	65

* Reference dimensions after R(PT) thread installation.

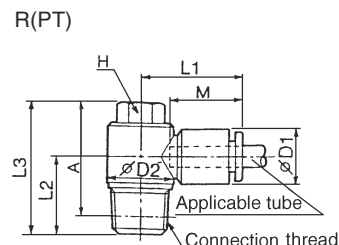
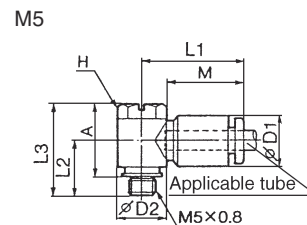


Universal male elbow: KGV



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
6	1/4	KGV06-02	10	12.8	15.3	23.5	18.5	31	25	17	7.5	7.5	26	
	1/8	KGV06-01			15.3	23.5	18.5	31	25					15
8	1/8	KGV08-01	12	15.2	17.6	28.5	15.5	28.5	24.5	18.5	16	11.2	24	
	1/4	KGV08-02			18.5	31.5	25.5	16	11.2					30
	3/8	KGV08-03			20.6	27.5	20.5	36.5	30					20.5
10	1/4	KGV10-02	14	18.5	20.6	31	19.5	35.5	29.5	21	27	20.3	40	
	3/8	KGV10-03					20.5	36.5	30					27
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					39

*Reference dimensions after R(PT) thread installation.

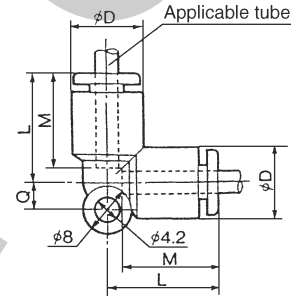


Union elbow: KGL



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

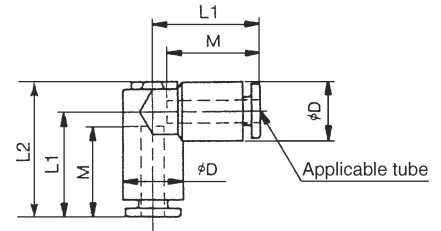
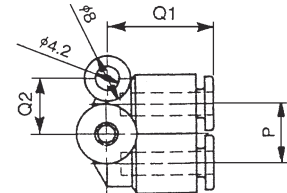
Note) (): Values for soft nylon.



Branch elbow: KGLU



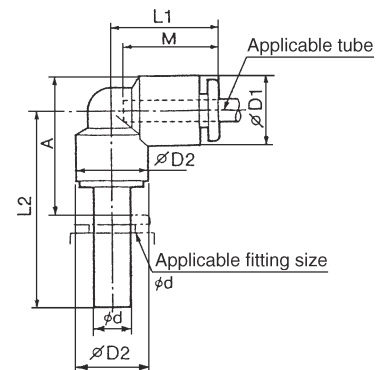
Applicable tube O.D. (mm)	Part No.	D	L1	L2	Q1	Q2	M	P	Effective orifice(mm ²)		Weight (g)
									Nylon	Urethane	
4	KGLU04-00	10.4	18.5	24	18.5	10	16	10.4	6.0	6.0	7
6	KGLU06-00	12.8	21	27.5	20.5	12	17	12.8	13.9	13.9	9
8	KGLU08-00	15.2	24	32	24.5	14	18.5	15.2	26.3	18.2	16
10	KGLU10-00	18.5	27	36.5	28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



Series KG

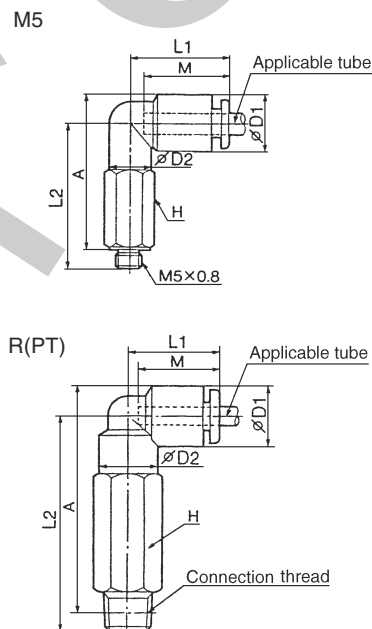
Stainless Steel One-touch Fittings

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.

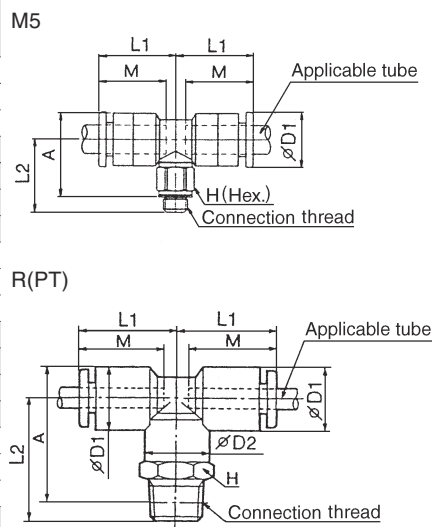


Branch tee: KGT



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
1/8	KGT08-01	12	24.5				28	15				
8	1/4	KGT08-02	14	15.2	12	23	28.5	30	18.5	26.3	18.2	23
	3/8	KGT08-03	17				30.5	31.5				37
	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.

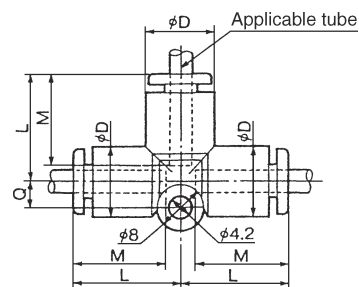


Union tee: KGT



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

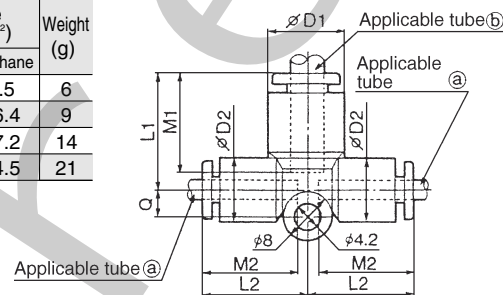
Note) (): Values for soft nylon.



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

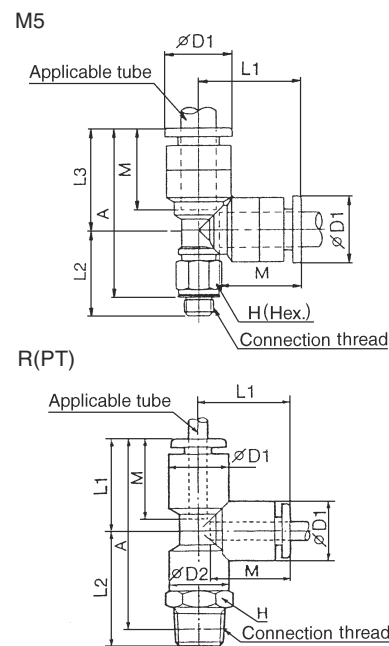


Male run tee: KGY



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	16	6.4	6.4	19
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	—	—	—	13
	1/4	KGY06-02	14				27	—	41	17	13.4	13.4	21
	3/8	KGY06-03	17				29	—	42.5	—	—	—	35
8	1/8	KGY08-01	12	15.2	12	23	24.5	—	43.5	17	13.4	13.4	15
	1/4	KGY08-02	14				28.5	—	45.5	18.5	25.6	17.7	23
	3/8	KGY08-03	17				30.5	—	47	—	—	—	37
10	1/8	KGY10-01	—	18.5	17	26.5	27	—	49.5	—	—	—	31
	1/4	KGY10-02	17				30	—	50.5	21	40.0	28.4	29
	3/8	KGY10-03	—				32	—	52	—	—	—	39
	1/2	KGY10-04	22				36	—	54.5	—	—	—	66
12	1/4	KGY12-02	—	20.9	17	28.5	31	—	53.5	—	—	—	31
	3/8	KGY12-03	17				33	—	55	22	57.4	45.4	41
	1/2	KGY12-04	22				37	—	57.5	—	—	—	68
16	3/8	KGY16-03	—	26.5	20.9	34	38	—	65.5	25	81	(81)	112
	1/2	KGY16-04	22				41	—	67	—	—	—	113

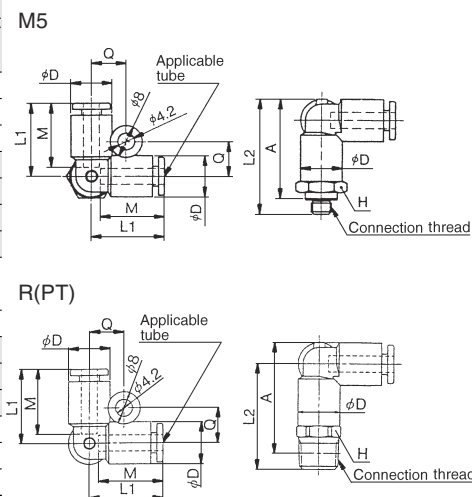
*Reference dimensions after R(PT) thread installation.
Note) (): Values for soft nylon.



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	21
	1/4	KGD04-02				30.5	30								
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						13.9	13.9	22
	1/4	KGD06-02				32.5	33								
	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								
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						62		
	1/2	KGD10-04				44	45								
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								



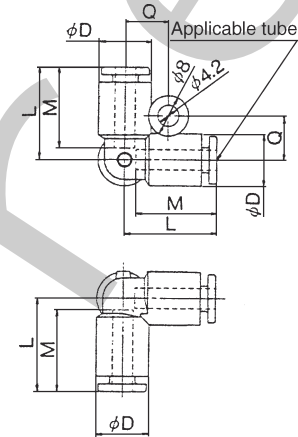
Series KG

Stainless Steel One-touch Fittings

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

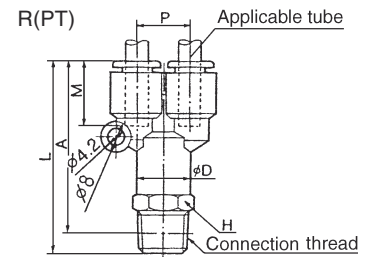
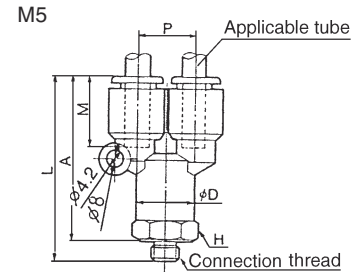


Plug-in "Y": KGU



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

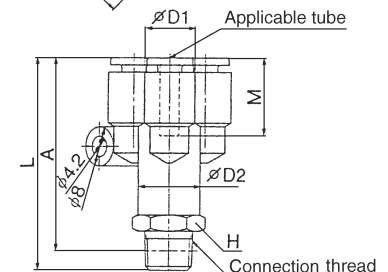
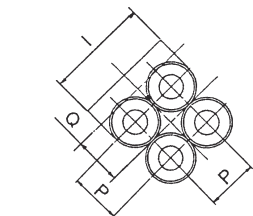
*Reference dimensions after R(PT) thread installation.



Double branch "Y": KGUD



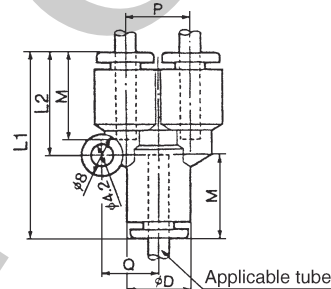
Applicable tube O.D. (mm)	Connection thread R(PT)	Part No.	H (Hex.)	D1	D2	L	I	A	Q	M	P	Effective orifice(mm ²)		Weight (g)
												Nylon	Urethane	
4	1/8	KGUD04-01	13	10.4	12.8	43.5	21	39.5	9.7	16	10.4	4.2	4.2	18
	1/4	KGUD04-02	14	10.4	12.8	47	21	41	9.7	16	10.4	4.2	4.2	26
6	1/8	KGUD06-01	17	12.8	15.2	50.5	26	46.5	11.7	17	12.8	13.4	13.4	31
	1/4	KGUD06-02				53.5		47.5						



Union "Y": KGU



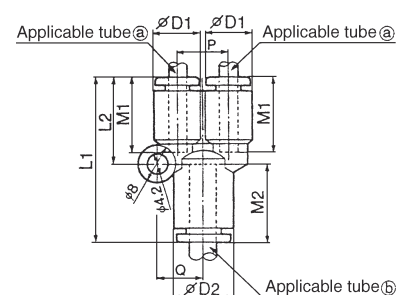
Applicable tube O.D. (mm)	Part No.	D	L1	L2	P	Q	M	Effective orifice(mm ²)		Weight (g)
								Nylon	Urethane	
4	KGU04-00	10.4	34	18	10.4	9.7	16	4.2	4.2	8
6	KGU06-00	12.8	37	20	12.8	11.7	17	13.4	13.4	10
8	KGU08-00	15.2	42.5	24.5	15.2	13.7	18.5	25.6	17.7	12
10	KGU10-00	18.5	48	27.5	18.5	16.1	21	40	28.4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



Different dia. union "Y": KGU



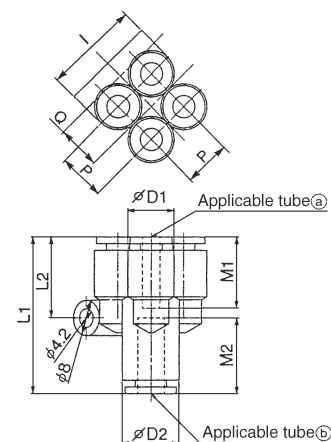
Applicable tube O.D. (mm)		Part No.	D1	D2	L1	L2	P	Q	M1	M2	Effective orifice(mm ²)		Weight (g)
Ⓐ	Ⓑ										Nylon	Urethane	
4	6	KGU04-06	10.4	12.8	35	18	10.4	9.7	16	17	4.2	4.2	7
6	8	KGU06-08	12.8	15.2	39.5	20	12.8	11.7	17	18.5	13.4	13.4	12
8	10	KGU08-10	15.2	18.5	45	24.5	15.2	13.7	18.5	21	25.6	17.7	19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



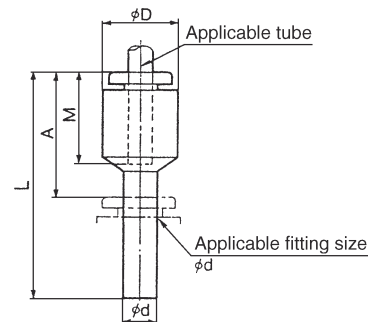
Applicable tube O.D. (mm)		Part No.	D1	D2	L1	L2	P	I	Q	M1	M2	Effective orifice(mm ²)		Weight (g)
Ⓐ	Ⓑ											Nylon	Urethane	
4	6	KGUD04-06	10.4	12.8	35.5	18.2	10.4	21	9.7	16	17	4.2	4.2	11
6	8	KGUD06-08	12.8	15.2	40.5	20.3	12.8	26	11.7	17	18.5	13.4	13.4	19



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				42
12	16	KGR12-16	20.9	50.5	25.5	22	58.3	(46.1)	37



Note) (): Values for soft nylon.

Series KG

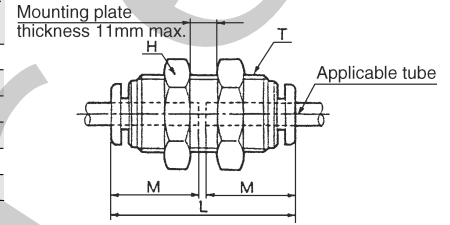
Stainless Steel One-touch Fittings

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.

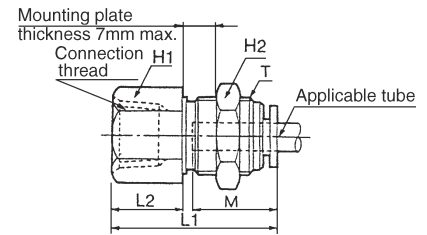


Bulkhead connector: KGE



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	15	31	15					35				
6	1/8	KGE06-01	M14×1	17	17	31.5	15	15	17	13.1	13.1	25				
	1/4	KGE06-02										19	17	33.5	17	40
	3/8	KGE06-03										19	17	33.5	17	29
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										19	13	33	13	27
	3/8	KGE08-03										19	15	35	15	48
10	1/4	KGE10-02	M20×1	22	24	34.5	12.5	21	21	41.5	29.5	53				
	3/8	KGE10-03										21	14	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										23	18	41	18	59
16	3/8	KGE16-03	M28×1.5	30	32	40	14	29	25	96	(96)	127				
	1/2	KGE16-04										29	18	44	18	113

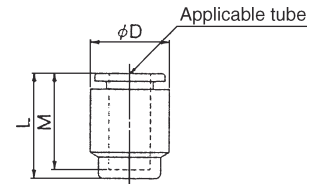
Note) (): Values for soft nylon.



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



Miniature Fittings

Possible to use in corrosive application.

Stainless Steel Material (SUS316)
Compact piping space.

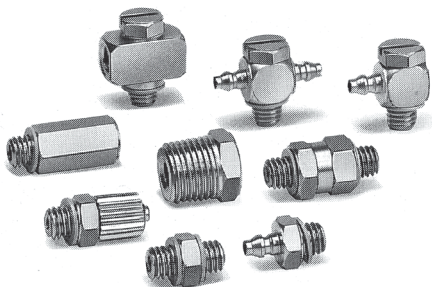
Tube has a large retaining force. Hose nipple assures easy installation and removal.

Line up various types.

Possible for special tubing in a same direction.

Accepts Many Types of Plastic Tubing

Hose nipple and hose elbow accepts nylon, soft nylon, and polyurethane tubing.



Hose nipple

Barb

Configuration easy inserting tube.
Hold certainly tube.

Body

Stainless steel: SUS316

Gasket

Light clamping torque.
Sure seal.

Tube

Possible for combination use of nylon tube and polyurethane tube.

Cap nut

Certainly hold the tube by manual clamping.
Easily unloading the tube by loosening
Stainless steel: SUS316

Barb fitting

Barb

Configuration easy inserting tube.
Hold certainly tube.

Body

Stainless steel: SUS316

Tube

Gasket






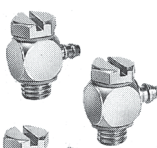











Light clamping torque. Sure seal.

Specifications

Applicable tube material	Nylon	Soft nylon		Polyurethane
Applicable tube dia.	ø4/ø2.5 ø6/ø4	ø3.18/ø2.18	ø4/ø2.5 ø6/ø4	ø3.18/ø2 ø4/ø2.5, ø6/ø4
Max. operating pressure	220psi {1.5MPa}	145psi {1.0MPa}		115psi {0.8MPa}
Port size	M5 (JIS B0209 class 2)			
Material	Stainless steel (SUS316)			

Series MS

Miniature Fittings

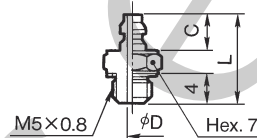
Model				Model			
Model	Type	Application	Tube O.D./I.D.	Model	Type	Application	Tube O.D./I.D.
MS-5AU-3		For soft nylon tube.	ø3.18/ø2.18 -M5	MS-5UL	Universal elbow  P. 133	Body rotates at 360° around the stud axis.	M5 female -M5 male
		For polyurethane tube.	ø3.18/ø2-M5				
MS-5AU-4		For soft nylon and polyurethane tube.	ø4/ø2.5-M5	MS-5UT	Universal tee  P. 133	Body rotates at 360° around the stud axis.	M5 female -M5 female -M5 male
MS-5AU-6			ø6/ø4-M5	MS-5B	Bushing  P. 134	For reducing Rc(PT)1/8 female to M5 female	Rc(PT)1/8 male -M5 female
MS-5ALHU-3		For soft nylon tube.	ø3.18/ø2.18 -M5	MS-5P	Plug  P. 134	To plug unused M5 port.	
		For polyurethane tube.	ø3.18/ø2-M5	MS-5J	Extension fitting  P. 134	Solid piece-moves fitting up from work piece.	M5 male -M5 female
MS-5ALHU-4		<ul style="list-style-type: none"> For soft nylon and polyurethane tube. Body rotates at 360° around the stud axis. 	ø4/ø2.5-M5	MS-5N	Nipple  P. 134	Fitting to work peice and fitting to fitting connection.	M5 male -M5 male
MS-5ALHU-6			ø6/ø4-M5	MS-5UN	Unilversal nipple  P. 134	Body rotates at 360° around the stud axis.	M5 male -M5 male PAT
MS-5H-4		For nylon, soft nylon, and polyurethane tube.	ø4/ø2.5-M5	MS-5ATHU-3	Barb elbow for nylon tube 	For soft nylon tube.	ø3.18/ø2.18 -M5
MS-5H-6			ø6/ø4-M5			For polyurethane tube.	ø3.18/ø2-M5
MS-5HLH-4		<ul style="list-style-type: none"> For nylon, soft nylon, and polyurethane tube. Body rotates at 360° around the stud axis. 	ø4/ø2.5-M5	MS-5ATHU-4		<ul style="list-style-type: none"> For soft nylon and polyurethane tube. Body rotates at 360° around the stud axis. 	ø4/ø2.5-M5
MS-5HLH-6			ø6/ø4-M5	MS-5ATHU-6			ø6/ø4-M5
M-5G1	Gasket  P. 134	To seal M5 thread	—	M-5GH	Gasket(H)  P. 134	To seal M5 thread.	Applicable MS-5ALHU-6 MS-5HLH-4 MS-5HLH-6 MS-5ATHU-6 only

Miniature Fittings

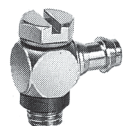
Barb fitting for soft nylon: MS-5AU-3, -4, -6



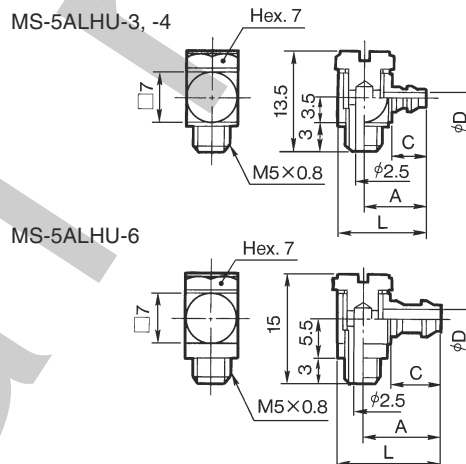
Part No.	C	øD	L	Effective orifice(mm ²)	Weight (g)
MS-5AU-3	4.5	1.6	11.5	1.7	1.4
MS-5AU-4	5	1.8	12	2.1	1.5
MS-5AU-6	7	2.5	14	4.0	1.7



Barb elbow for soft nylon: MS-5ALHU-3, -4, -6



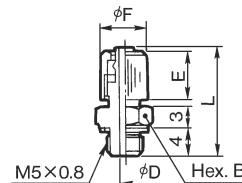
Part No.	A	C	øD	L	Effective orifice(mm ²)	Weight (g)
MS-5ALHU-3	8	4.5	1.6	11.8	1.1	3.0
MS-5ALHU-4	8.8	5.0	1.8	12.6	1.4	3.1
MS-5ALHU-6	10.8	7.0	2.5	14.6	2.4	3.7



Hose nipple: MS-5H-4, -6



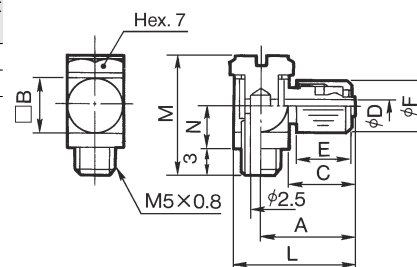
Part No.	B	øD	L	E	øF	Effective orifice(mm ²)	Weight (g)
MS-5H-4	7	1.8	15.5	7	6.5	2.1	2.5
MS-5H-6	8	2.5	16.5	8	8.5	4.0	3.7



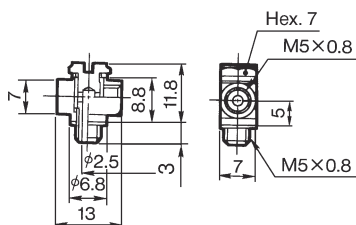
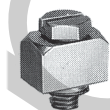
Hose elbow: MS-5HLH-4, -6



Part No.	A	B	C	øD	E	øF	L	M	N	Effective orifice(mm ²)	Weight (g)
MS-5HLH-4	12	7	8.5	1.8	7	6.5	15.8	15	5.5	1.4	4.2
MS-5HLH-6	13.5	8	9.5	2.5	8	8.5	17.8	16	6	2.4	6.2

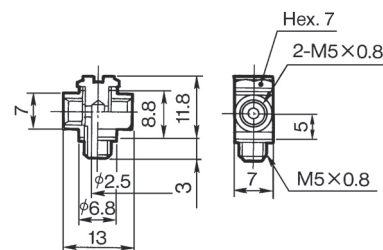


Universal elbow: MS-5UL



Effective orifice: 2.4mm², Weight: 4.5g

Universal tee: MS-5UT

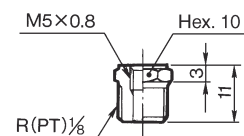


Effective orifice: 2.4mm², Weight: 4.5g

Series MS

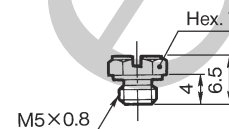
Miniature Fittings

Bushing: MS-5B



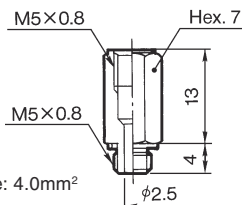
Effective orifice: 12mm²
Weight: 5.5g

Plug: MS-5P



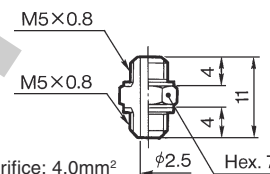
Weight: 1.2g

Extension fitting: MS-5J



Effective orifice: 4.0mm²
Weight: 3.4g

Nipple: MS-5N

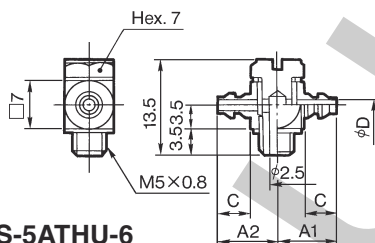


Effective orifice: 4.0mm²
Weight: 1.4g

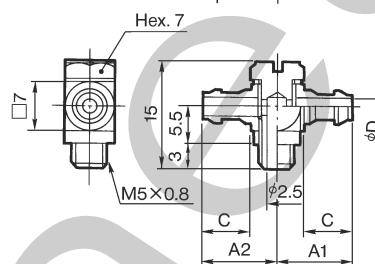
Barb tee for soft tube: MS-5ATHU-3, -4, -6

Part No.	A1	A2	C	øD	Effective orifice(mm ²)	Weight (g)
MS-5ATHU-3	8	8.3	4.5	1.6	1.1	3.4
MS-5ATHU-4	8.8	8.8	5.0	1.8	1.4	3.6
MS-5ATHU-6	10.8	10.8	7.0	2.5	2.4	4.2

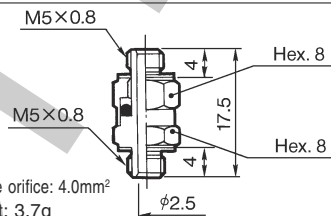
MS-5ATHU-3, -4



MS-5ATHU-6



Universal nipple: MS-5UN



Effective orifice: 4.0mm²
Weight: 3.7g

Gasket: M-5G1, M-5GH



Weight: 0.01g



Weight: 0.04g

⚠ Precautions

Be sure to read before handling.
Refer to "Air Fittings & Tubing Precautions"
for other details.

Tightening of M5 thread

⚠ Caution

① Tighten by hand, and give it an additional 1/4 rotation with wrench. (The additional rotation should be doubled to 1/2 when using the universal elbow, universal tee, etc. which have two gaskets.) If tightened too much, thread portion may be damaged and gasket may be deformed. This will cause air leakage. On the contrary, if tightening is not sufficient, thread may loosen causing air leakage.

Use of tube with hose nipple

⚠ Caution

① Cut the tube perpendicularly to the tube axis to a little longer length than required length. (Use tube cutter "TK-1", "TK-2" or "TK-3".)
② Pass the tube through the cap nut.
③ Push the tube until it comes to the end of the barb portion, or it may cause air leakage or hose releasing.
④ Tighten the cap nut firmly by hand on the fitting.

Use of tube with barb fitting

⚠ Caution

① Cut the tube perpendicularly to the tube axis to a little longer length than required length. (Use tube cutter "TK-1", "TK-2" or "TK-3".)
② Push the tube in until it comes to the end of the barb portion, or it may cause air leakage or hose releasing.