

# Antistatic One-touch Fittings

Applicable Tubing: Metric Size/Connection Thread: M, Rc, G, NPT, NPTF

# KA Series

RoHS

**One-touch fitting with antistatic prevention.**

**One-touch IN/OUT connection.**

**Possible to use from vacuum (-100 kPa).**

**Can be used in copper-free application.**

**Flame resistance (Equivalent to UL-94 standard, material V-0)**

**Surface resistance 10<sup>4</sup> to 10<sup>7</sup> Ω**

**Conductive resin is used for body and seals in fittings and tubing.**



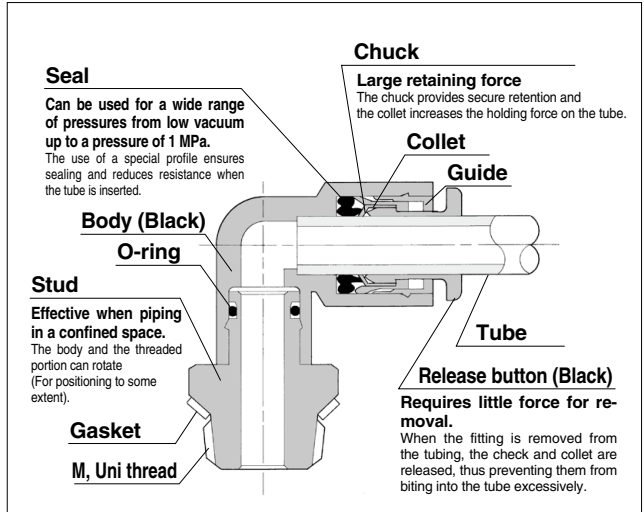
## Principal Parts Material

Body	C3604, PBT
Stud	C3604
Chuck	Stainless steel 304
Guide	Stainless steel 304, C3604, PBT
Collet, Release button	PBT
Seal, O-ring	NBR
Gasket	Stainless steel 304, NBR

- C3604 is all electroless nickel plated.
- PBT parts have conductive (10<sup>4</sup> to 10<sup>7</sup> Ω) and flame resistant applications. (UL-94 standard, V-0)
- Conductive NBR (10<sup>4</sup> to 10<sup>7</sup> Ω) is used for seals.

## Gasket (Thread portion)

Model M-5G2 (For M5 thread)  
M-6G (For M6 thread)  
KQG-U□□ (For Uni thread)



## Applicable Tubing

Tubing material	Antistatic soft nylon, Antistatic polyurethane
Tubing O.D.	ø3.2, ø4, ø6, ø8, ø10, ø12

## Specifications

Fluid	Air
Operating pressure range	-100 kPa to 1 MPa
Proof pressure	3 MPa
Ambient and fluid temperature	0 to 40°C
Thread	Uni thread JIS B 0209 (Metric coarse thread)
Seal (Thread portion)	Gasket
Copper-free	Brass parts are all electroless nickel plated.
Surface resistance	10 <sup>4</sup> to 10 <sup>7</sup> Ω

## How to Order Gasket for Uni Thread

**KQG-U01**

Gasket for Uni thread

Applicable port size

U01	Uni 1/8
U02	Uni 1/4
U03	Uni 3/8
U04	Uni 1/2

KQ2

KQB2

KS  
KX

KM

KF

M

H/DL  
L/LL

KC

KK

KK130

DM

KDM

KB

KR

KA

KQG2

KG

KFG2

MS

KKA

KP

LQ

MQR

T

IDK

# KA Series

## Male Connector: KAH

<M5, M6>



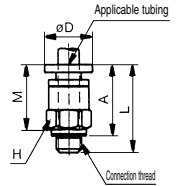
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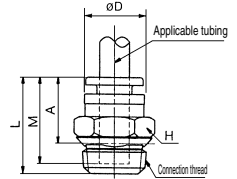
Applicable tubing O.D. (mm)	Connection thread M thread Uni thread	Model	H (width across flats)	øD	L	A*	M	Effective area (mm <sup>2</sup> )		Weight (g)
								Soft nylon	Urethane	
3.2	M5 x 0.8	KAH23-M5	7	8.5	17	14	13	3.4	2.9	2.1
	M6 x 1	KAH23-M6	8							
	1/8	KAH23-U01	10							
4	M5 x 0.8	KAH04-M5	8	9.5	17	14	13	4	4	2
	M6 x 1	KAH04-M6	8							
	1/8	KAH04-U01	10							
6	M5 x 0.8	KAH06-M5	10	11.5	18.5	15	14	4	4	3
	M6 x 1	KAH06-M6	10							
	1/8	KAH06-U01	12							
8	1/4	KAH08-U02	14	14	25	20.5	18.5	18.0	18.0	27
	3/8	KAH08-U03	17							
	1/2	KAH08-U04	22							
10	1/8	KAH10-U01	17	17	28	23	21	29.5	29.5	17
	1/4	KAH10-U02	17							
	3/8	KAH10-U03	17							
12	1/4	KAH12-U02	19	19	30.5	24.5	22	46.1	46.1	16
	3/8	KAH12-U03	19							
	1/2	KAH12-U04	22							

\* Reference dimensions after Uni thread installation.

<M5, M6>



<Uni thread>



## Male Elbow: KAL

<M5, M6>



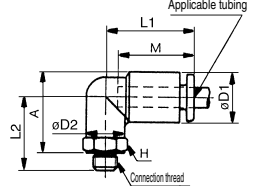
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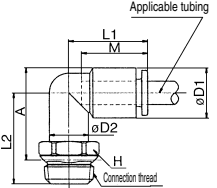
Applicable tubing O.D. (mm)	Connection thread M thread Uni thread	Model	H (width across flats)	øD1	øD2	L1	L2	A*	M	Effective area (mm <sup>2</sup> )		Weight (g)
										Soft nylon	Urethane	
3.2	M5 x 0.8	KAL23-M5	8	9.6	8	15	16	15.5	15.5	3.4	2.9	6
	M6 x 1	KAL23-M6	8									
	1/8	KAL23-U01	10									
4	M5 x 0.8	KAL04-M5	8	10.4	8	15.5	16	20	20.5	4.2	4.2	4
	M6 x 1	KAL04-M6	8									
	1/8	KAL04-U01	10									
6	M5 x 0.8	KAL06-M5	10	12.8	8	16	18	21.5	18	11.4	11.4	6
	M6 x 1	KAL06-M6	10									
	1/8	KAL06-U01	12									
8	1/4	KAL08-U02	14	15.2	10	23	23	24.5	26	14.9	14.9	11
	3/8	KAL08-U03	17									
	1/2	KAL08-U04	22									
10	1/8	KAL10-U01	17	18.5	17	25	26.5	30	30.5	25.0	25.0	23
	1/4	KAL10-U02	17									
	3/8	KAL10-U03	17									
12	1/4	KAL12-U02	19	20.9	17	28	31	31.5	32.5	39.7	39.7	27
	3/8	KAL12-U03	19									
	1/2	KAL12-U04	22									

\* Reference dimensions after Uni thread installation.

<M5, M6>



<Uni thread>

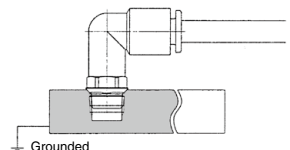


## ⚠ Precautions







Be sure to read this before handling the products.  
Refer to back page 50 for Safety Instructions and pages 13 to 17 for Fittings and Tubing Precautions.

### ⚠ Caution

- Female thread portion connected with fitting must be grounded, otherwise static electricity will remain in the fittings and tubes.

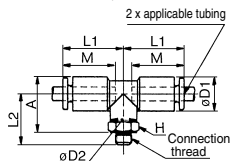


**Male Branch Tee: KAT**

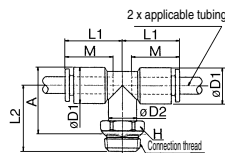
<M5, M6>	Applicable tubing O.D. (mm)	Connection thread M thread Uni thread	Model	H (width across flats)	øD1	øD2	L1	L2	A*	M	Effective area (mm <sup>2</sup> )		Weight (g)
											Soft nylon	Urethane	
	3.2	M5 x 0.8 M6 x 1 1/8	KAT23-M5	8	9.6	8	17.5	15	16	15.5	3.4	2.9	8
			KAT23-M6	8				15.5					
			KAT23-U01	10				19.5					
	4	M5 x 0.8 M6 x 1 1/8 1/4	KAT04-M5	8	10.4	8	18	15.5	16	16	4.3	4.3	6
			KAT04-M6	8				16					
			KAT04-U01	10				20					
			KAT04-U02	14				22					
	6	M5 x 0.8 M6 x 1 1/8 1/4	KAT06-M5	8	12.8	8	20	16	18	16.5	4.3	4.3	7
			KAT06-M6	8				16.5					
			KAT06-U01	10				21.5					
			KAT06-U02	14				23					
	8	M5 x 0.8 M6 x 1 1/8 1/4	KAT08-M5	8	15.2	12	23	22.5	26	24.5	18.2	18.2	14
			KAT08-M6	8				22.5					
			KAT08-U01	12				25.5					
			KAT08-U02	14				27					
	10	M5 x 0.8 M6 x 1 1/8 1/4	KAT10-U01	12	18.5	17	26.5	25	29	26.5	29.0	29.0	27
			KAT10-U02	14				27					
			KAT10-U03	17				27					
			KAT10-U04	22				30					
	12	M5 x 0.8 M6 x 1 1/8 1/4	KAT12-U01	12	20.9	17	28.5	27	31.5	28	45.2	45.2	31
			KAT12-U02	14				28					
			KAT12-U03	17				32.5					
			KAT12-U04	22				31					

\* Reference dimensions after Uni thread installation.

<M5, M6>



<Uni thread>



KQ2

KQB2

KS

KX

KM

KF

M

H/DL

L/LL

KC

KK

KK130

DM

KDM

KB

KR

KA

KQG2

KG

KFG2

MS

KKA

KP







LQ

MQR

T

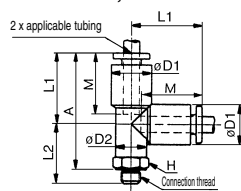
IDK

**Male Run Tee: KAY**

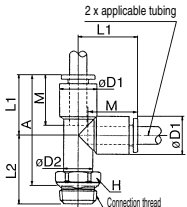
<M5, M6>	Applicable tubing O.D. (mm)	Connection thread M thread Uni thread	Model	H (width across flats)	øD1	øD2	L1	L2	A*	M	Effective area (mm <sup>2</sup> )		Weight (g)
											Soft nylon	Urethane	
	3.2	M5 x 0.8 M6 x 1 1/8	KAY23-M5	8	9.6	8	17.5	15	28.5	15.5	3.4	2.9	8
			KAY23-M6	8				15.5					
			KAY23-U01	10				19.5					
	4	M5 x 0.8 M6 x 1 1/8 1/4	KAY04-M5	8	10.4	8	18	15.5	29.5	16	4.6	4.6	6
			KAY04-M6	8				16					
			KAY04-U01	10				20					
			KAY04-U02	14				22					
	6	M5 x 0.8 M6 x 1 1/8 1/4	KAY06-M5	8	12.8	8	20	16	32	16.5	4.6	4.6	7
			KAY06-M6	8				16.5					
			KAY06-U01	10				21.5					
			KAY06-U02	14				23					
	8	M5 x 0.8 M6 x 1 1/8 1/4	KAY08-U01	12	15.2	12	23	22.5	41.5	24.5	17.7	17.7	14
			KAY08-U02	14				25.5					
			KAY08-U03	17				25.5					
			KAY08-U04	22				27					
	10	M5 x 0.8 M6 x 1 1/8 1/4	KAY10-U01	12	18.5	17	26.5	25	46.5	26.5	28.4	28.4	27
			KAY10-U02	14				27					
			KAY10-U03	17				27					
			KAY10-U04	22				30					
	12	M5 x 0.8 M6 x 1 1/8 1/4	KAY12-U01	12	20.9	17	28.5	27	49.5	28	45.4	45.4	31
			KAY12-U02	14				28					
			KAY12-U03	17				30					
			KAY12-U04	22				31					

\* Reference dimensions after Uni thread installation.

<M5, M6>




<Uni thread>

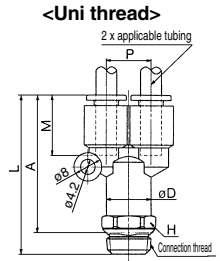
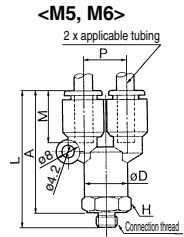


# KA Series

## Branch "Y": KAU

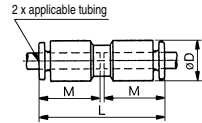
<M5, M6>	Applicable tubing O.D. (mm)	Connection thread M thread Uni thread	Model	H (width across flats)	øD	L	P	A*	M	Effective area (mm <sup>2</sup> )		Weight (g)
										Soft nylon	Urethane	
	3.2	M5 x 0.8	KAU23-M5	10	9.6	38	9.6	34.5	15.5	2.2	2.2	9
		M6 x 1	KAU23-M6							38.5	3.4	2.9
		1/6	KAU23-U01	11	39.5	4						
6	4	M5 x 0.8	KAU04-M5	11	10.4	40	10.4	36	16	2.2	2.2	10
		M6 x 1	KAU04-M6							11	4.2	4.2
		1/6	KAU04-U01	14	42	11						
		1/4	KAU04-U02	14	42	16						
		1/2	KAU04-U03	17	46	25						
6	6	M5 x 0.8	KAU06-M5	13	12.8	52	12.8	39	17	2.2	2.2	12
		M6 x 1	KAU06-M6							43	13	
		1/6	KAU06-U01	14	45	17						
		1/4	KAU06-U02	14	45	25						
		3/8	KAU06-U03	17	46	26						
8	8	1/6	KAU08-U01	17	15.2	50.5	15.2	46	18.5	4.2	4.2	24
		1/4	KAU08-U02							46	27	
		3/8	KAU08-U03	17	51.5	27						
		1/2	KAU08-U04	19	57.5	38						
		3/4	KAU08-U05	22	61	51						
10	10	1/4	KAU10-U02	19	18.5	57.5	18.5	51.5	21	28.4	28.4	36
		3/8	KAU10-U03							51	51	51
		1/2	KAU10-U04	22	61	53						
		3/4	KAU10-U05	22	61	53						
		1	KAU10-U06	22	61	53						
12	12	3/8	KAU12-U03	22	20.9	61	20.9	55	22	45.4	45.4	52
		1/2	KAU12-U04							62.5	54.5	52
		3/4	KAU12-U05	22	61	54.5	54.5	52				

\* Reference dimensions after Uni thread installation.



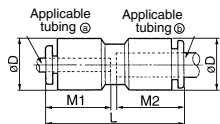
## Straight Union: KAH

Applicable tubing O.D. (mm)	Model	øD	L	M	Effective area (mm <sup>2</sup> )		Weight (g)
					Soft nylon	Urethane	
3.2	KAH23-00	9.6	31.5	15.5	3.4	2.9	3
4	KAH04-00	10.4	32.5	16	5.6	5.6	3
6	KAH06-00	12.8	34.5	17	13.1	13.1	4
8	KAH08-00	15.2	38.5	18.5	18.0	18.0	6
10	KAH10-00	18.5	42.5	21	29.5	29.5	11
12	KAH12-00	20.9	44.5	22	46.1	46.1	14



## Different Diameter Straight: KAH

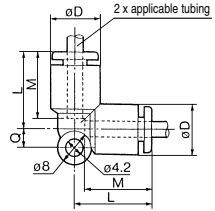
Applicable tubing O.D. (mm)		Model	øD	L	M1	M2	Effective area (mm <sup>2</sup> )		Weight (g)
Ⓐ	Ⓑ						Soft nylon	Urethane	
3.2	4	KAH23-04	10.4	32.5	15.5	16	3.2	2.7	3
4	6	KAH04-06	12.8	34.5	16	17	4.2	4.2	4
6	8	KAH06-08	15.2	38.5	17	18.5	10.7	10.7	6
8	10	KAH08-10	18.5	42	18.5	21	16.7	16.7	11
10	12	KAH10-12	20.9	44.5	21	22	28.2	28.2	14



## Union Elbow: KAL



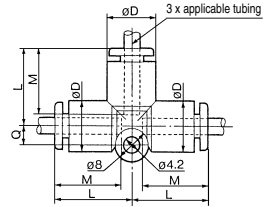
Applicable tubing O.D. (mm)	Model	øD	L	Q	M	Effective area (mm <sup>2</sup> )		Weight (g)
						Soft nylon	Urethane	
3.2	KAL23-00	9.6	17.5	4.3	15.5	3.4	2.9	3
4	KAL04-00	10.4	18	4.5	16	4.2	4.2	6
6	KAL06-00	12.8	20	5.3	17	11.4	11.4	6
8	KAL08-00	15.2	23	6	18.5	14.9	14.9	10
10	KAL10-00	18.5	26.5	6.8	21	25.0	25.0	17
12	KAL12-00	20.9	28.5	7.5	22	39.7	39.7	21



## Union Tee: KAT



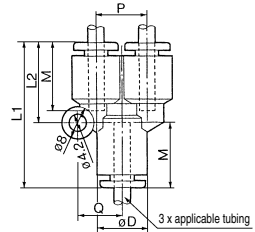
Applicable tubing O.D. (mm)	Model	øD	L	Q	M	Effective area (mm <sup>2</sup> )		Weight (g)
						Soft nylon	Urethane	
3.2	KAT23-00	9.6	17.5	4.3	15.5	3.4	2.9	5
4	KAT04-00	10.4	18	4.5	16	6.4	6.9	7
6	KAT06-00	12.8	20	5.3	17	13.4	13.4	10
8	KAT08-00	15.2	23	6	18.5	17.7	17.7	15
10	KAT10-00	18.5	26.5	6.8	21	28.4	28.4	25
12	KAT12-00	20.9	28.5	7.5	22	45.4	45.4	29



## Union "Y": KAU



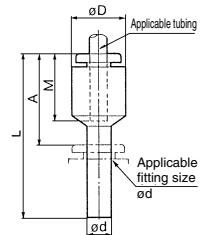
Applicable tubing O.D. (mm)	Model	øD	L1	L2	P	Q	M	Effective area (mm <sup>2</sup> )		Weight (g)
								Soft nylon	Urethane	
3.2	KAU23-00	9.6	33	17.5	9.6	9	15.5	3.4	2.9	5
4	KAU04-00	10.4	34	18	10.4	9.7	16	4.2	4.2	7
6	KAU06-00	12.8	37	20	12.8	11.7	17	13.4	13.4	9
8	KAU08-00	15.2	42.5	24.5	15.2	13.7	18.5	17.7	17.7	11
10	KAU10-00	18.5	48	27.5	18.5	16.1	21	28.4	28.4	16
12	KAU12-00	20.9	51	30	20.9	18.1	22	45.4	45.4	23



## Plug-in Reducer: KAR



Applicable tubing O.D. (mm)	Applicable fitting size ød	Model	øD	L	A	M	Effective area (mm <sup>2</sup> )		Weight (g)
							Soft nylon	Urethane	
3.2	4	KAR23-04	9.6	33.5	18.5	15.5	3.4	2.9	5
4	6	KAR04-06	10.4	34.5	17.5	16	5.6	5.6	1.8
	8	KAR04-08		36.5	18				2.0
	10	KAR04-10		39.5	18.5				3.3
6	8	KAR06-08	12.8	37	18.5	17	13.1	13.1	2.5
	10	KAR06-10		39.5	20				3.0
	12	KAR06-12		42	20				4.7
8	10	KAR08-10	15.2	41	20	18.5	18.0	18.0	4.0
	12	KAR08-12		42	20				4.6
10	12	KAR10-12	18.5	44.5	23	21	32.8	32.8	33



### Connecting products with metal rods

Products with metal rods cannot be connected to KQ2 series One-touch fittings. If connected, the metal rod cannot be retained by the chuck of the One-touch fitting and products with metal rods may project during pressurization, causing serious personal injury or accident.

KQ2

KQB2

KS  
KX

KM

KF

M

H/DL  
L/LL

KC

KK

KK130

DM

KDM

KB

KR

KA

KQ62

KG

KFG2

MS

KKA

KP

LQ

MQR

T

IDK