

One-touch Fittings Manifold Series **KM**



Compact piping possible.
Manifold piping possible.
Many varieties (40 types)
are available.
One-touch fittings give the
most efficient operation.



Model

Model	Porting		No. of Port A	Port B size	Port A size		
	Port A	Port B			ø4	ø6	ø8
KM11	One-touch fitting	One-touch fitting	6, 10	ø8	●	●	
				ø10		●	
				ø12			●
KM12	One-touch fitting	Rc female thread	6, 10	Rc 1/4	●	●	
				Rc 3/8			●
KM13	One-touch fitting	One-touch fitting	3	ø6	●		
				ø8	●		
				ø10		●	●
KM14	One-touch fitting	One-touch fitting R male thread	3	ø6, R 1/8	●		
				ø6, R 1/4	●		
				ø6, R 3/8	●		
				ø8, R 1/8	●	●	
				ø8, R 1/4	●	●	
				ø8, R 3/8	●	●	
				ø10, R 1/4		●	●
				ø10, R 3/8		●	●
KM15	One-touch fitting	One-touch fitting Rod	3	ø6	●		
				ø8	●	●	
				ø10		●	●
KM16	One-touch fitting	One-touch fitting	3	ø4	●		
				ø6	●	●	

Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon (1), Polyurethane
Tubing O.D.	ø4, ø6, ø8, ø10, ø12

Note 1) Soft nylon tubing is not compatible with water.

Made to Order
(Refer to page 125 for details.)

Specifications

Model	KM11	KM12	KM13	KM14	KM15	KM16
Fluid	Air/Water (2)					
Operating pressure range	-100 kPa to 1 MPa					
Proof pressure	3 MPa					
Ambient and fluid temperature	-5 to 60°C, Water: 0 to 40°C (No freezing)					
Thread	—	JIS B 0203 (Taper thread for piping)	—	JIS B 0203 (Taper thread for piping)	—	—
Accessory	None	Hexagon socket head blank plug with seal: 1 pc.	None	None	None	None

Note 2) The surge pressure must be under the maximum operating pressure.

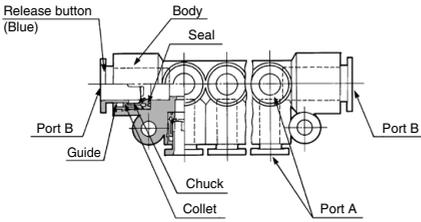
Principal Parts Material

Model	KM11	KM12	KM13	KM14	KM15	KM16
Body	PBT					
Stud	—	C3604	—	C3604	C3604-PBT	—
Chuck	Stainless steel 304					
Guide	Stainless steel 304					
Collet, Release button	POM					
Seal, O-ring	NBR					

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

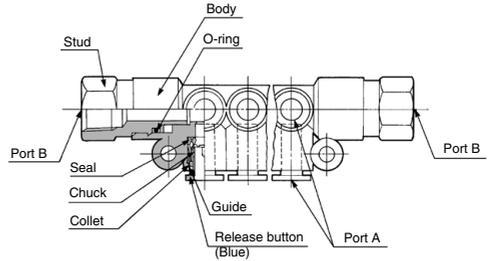
Construction

KM11



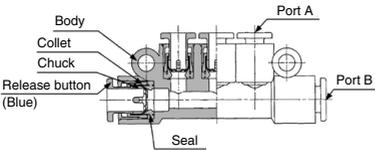
Port A: One-touch fitting
Port B: One-touch fitting

KM12



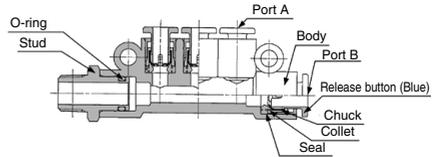
Port A: One-touch fitting
Port B: Rc female thread

KM13



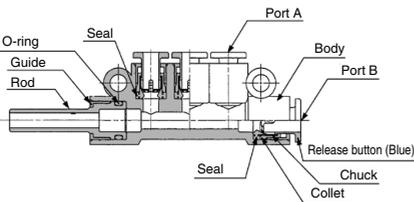
Port A: One-touch fitting
Port B: One-touch fitting

KM14



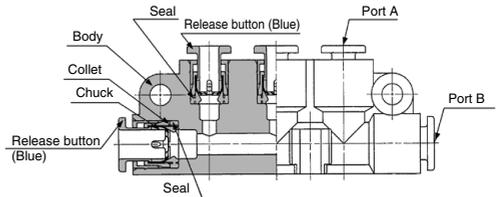
Port A: One-touch fitting
Port B: One-touch fitting, R male thread

KM15



Port A: One-touch fitting
Port B: One-touch fitting
Stud

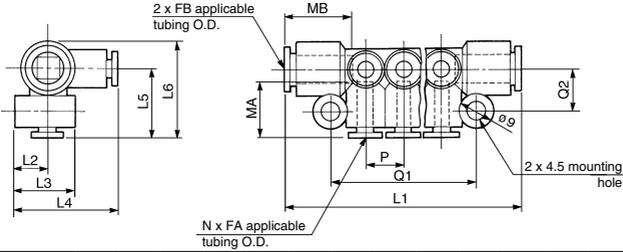
KM16



Port A: One-touch fitting
Port B: One-touch fitting

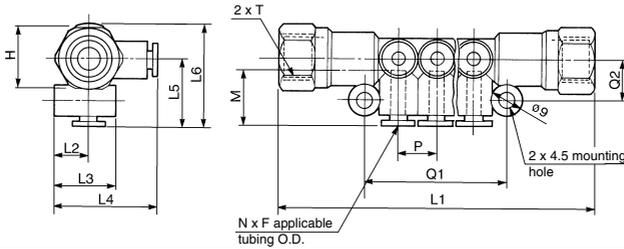
Dimensions

KM11



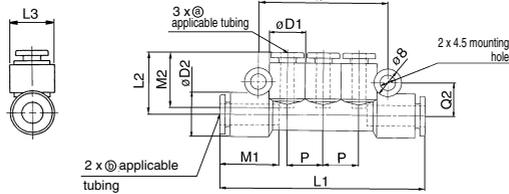
Applicable tubing O.D. (mm)		Model	N	L1	L2	L3	L4	L5	L6	P	Q1	Q2	MA	MB	Port B Min. port size	Weight (g)
FA	FB															
4	8	KM11-04-08-6	6	65	10	18	29.5	19.5	27	10.6	40	12	16	18.5	6	19
		KM11-04-08-10	10	86												26
6	10	KM11-06-10-6	6	76	10	19.5	31.5	21.5	31	13	47	13.5	17	21	7.5	29
		KM11-06-10-10	10	102												39
8	12	KM11-08-12-6	6	85	11.5	22.5	35.5	24	34.5	15.5	55	14.7	18.5	22	9	41
		KM11-08-12-10	10	116												57

KM12



Applicable tubing O.D. F (mm)		Connection thread Rc	Model	N	H (Width across flats)	L1	L2	L3	L4	L5	L6	P	Q1	Q2	M	Port B Min. port size	Weight (g)
4	1/4																
		KM12-04-02-10	10	110	72												
6	1/4	1/4	KM12-06-02-6	6	17	99	10	19.5	31.5	21.5	31	13	47	13.5	17	7.5	81
			KM12-06-02-10	10		125											97
8	3/8	3/8	KM12-08-03-6	6	19	108	11.5	22.5	35.5	24	34.5	15.5	55	14.7	18.5	9	97
			KM12-08-03-10	10		139											112

KM13

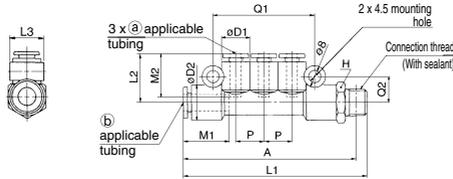


Applicable tubing O.D. (mm)		Model	øD1	øD2	L1	L2	L3	P	Q1	Q2	M1	M2	Port B Min. port size	Weight (g)
(a)	(b)													
4	6	KM13-04-06-3	10.4	12.8	60	18	13	10.4	38.2	9.9	17	16	4.5	11
	8			15.2	63.5	19	15.5			11.1	18.5		6	14
6	8	KM13-06-08-3	12.8	15.2	70.5	20	15.5	12.8	45.4	11.1	18.5	17	6	16
	10			18.5	74.5	21	19			12.8	21		7.5	22
8	10	KM13-08-10-3	15.2	18.5	81.5	22.5	19	15.2	52.6	12.8	21	18.5	7.5	26

- 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

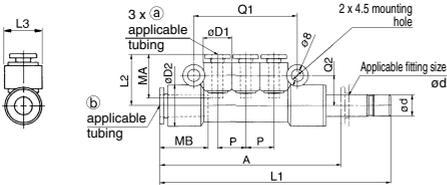
Dimensions

KM14



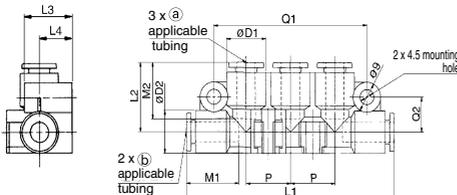
Applicable tubing O.D. (mm)		Connection thread R	Model	H (With across flats)	$\phi D1$	$\phi D2$	L1	L2	L3	P	A	Q1	Q2	M1	M2	Port B Min. port size	Weight (g)
(a)	(b)																
4	6	1/8	KM14-04-06-01S-3	13	10.4	12.8	67.1	18	13	10.4	64	38.2	9.9	17	16	4.5	18
		1/4	KM14-04-06-02S-3	14			71				65.5						25
		3/8	KM14-04-06-03S-3	17			72.4				67.5						38
4	8	1/8	KM14-04-08-01S-3	17	10.4	15.2	72.6	19	15.5	10.4	71	38.2	11.1	18.5	16	6	30
		1/4	KM14-04-08-02S-3				76				70.5						30
		3/8	KM14-04-08-03S-3				76.4				71						38
6	8	1/8	KM14-06-08-01S-3	17	12.8	15.2	79.1	20	15.5	12.8	77	45.4	11.1	18.5	17	6	31
		1/4	KM14-06-08-02S-3				82.5				78						39
		3/8	KM14-06-08-03S-3				82.9				78						39
6	10	1/4	KM14-06-10-02S-3	19	12.8	18.5	87	21	19	12.8	81.5	45.4	12.8	21	17	7.5	43
		3/8	KM14-06-10-03S-3				87.4				82						44
		1/2	KM14-06-10-04S-3				91.1				84						66
8	10	1/4	KM14-08-10-02S-3	19	15.2	18.5	93.5	22.5	19	15.2	88	52.6	12.8	21	18.5	7.5	47
		3/8	KM14-08-10-03S-3				93.9				89						47
		1/2	KM14-08-10-04S-3				97.6				90.5						70

KM15



Applicable tubing O.D. (mm)		Applicable fitting size ϕD	Model	$\phi D1$	$\phi D2$	L1	L2	L3	P	Q1	Q2	A	MA	MB	Port B min. port size	Weight (g)
(a)	(b)															
4	6	6	KM15-04-06-3	10.4	12.8	78.5	18	13	10.4	38.2	9.9	61.5	16	17	4.5	12
	8	8	KM15-04-08-3											15.2	85.5	19
6	8	8	KM15-06-08-3	12.8	15.2	92.5	20	15.5	12.8	45.4	11.1	74	17	18.5	6	25
	10	10	KM15-06-10-3											18.5	98	21
8	10	10	KM15-08-10-3	15.2	18.5	105	22.5	19	15.2	52.6	12.8	85	18.5	21	7.5	41

KM16



Applicable tubing O.D. (mm)		Model	$\phi D1$	$\phi D2$	L1	L2	L3	L4	P	Q1	Q2	M1	M2	Port B Min. port size	Weight (g)
(a)	(b)														
4	4	KM16-04-04-3	12.8	12.8	68	20.9	16	11	14.5	50	10.5	16	16	3	18
4	6	KM16-04-06-3										17	16	4.5	16
6	6	KM16-06-06-3										17	17	4.5	15

Handling of One-touch Fittings

⚠ Caution

1. Refer to pages 13 to 16 for "Fittings & Tubing Precautions" for the details of installation/removal of One-touch fittings.

2. Connecting products with metal rods

Products with metal rods cannot be connected to Series KQ2 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.

When mounting tubes, resin plugs, reducers etc., do not press the release button.

Also, do not press the release button unnecessarily before mounting them. This may cause those parts to come off.

After attaching products with attached metal rods, to the One-touch fitting, do not use tubes, resin plugs, or reducers, etc. This may cause releasing.

For details about One-touch fittings that can connect KM15 model, contact SMC.



1 Grease-free Specifications

Symbol	Specifications
X17	Grease-free Rubber material: NBR (With fluorine coating) Release button color: Light blue
X94	Grease-free Rubber material: FKM (With fluorine coating) Release button color: Light blue

Suffix "-X17" to the end of part number.

Example) **KM11-04-08-10-X17**

2 Other Specifications

Symbol	Specifications
X2	Copper-free (With electroless nickel plated)
X12	Lubricant: White Vaseline Release button color: White
X34	Rubber material: FKM

Suffix "-X2" to the end of part number.

Example) **KM12-04-02-6-X2**

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

Inch size One-touch Fittings Manifold

Series *KM*

Applicable Tubing: Inch size

Compact piping possible.
Manifold piping possible.
Many varieties (12 types)
are available.
One-touch fittings give the
most efficient operation.



Model

Model	Porting		No. of Port A	Port B size	Port A size		
	Port A	Port B			$\phi 5/32"$	$\phi 1/4"$	$\phi 5/16"$
KM11	One-touch fitting	One-touch fitting	6, 10	$\phi 5/16"$	●		
				$\phi 3/8"$		●	
				$\phi 1/2"$			●
KM12	One-touch fitting	NPT thread	6, 10	NPT 1/4	●	●	
				NPT 3/8			●

Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon ⁽¹⁾ , Polyurethane
Tubing O.D.	$\phi 5/32"$, $\phi 1/4"$, $\phi 5/16"$, $\phi 3/8"$, $\phi 1/2"$

Note 1) Soft nylon tubing is not compatible with water.

Specifications

Model	KM11	KM12
Fluid	Air/Water ⁽²⁾	
Maximum operating pressure	1 MPa	
Proof pressure	3 MPa	
Ambient and fluid temperature	-5 to 60°C, Water: 0 to 40°C (No freezing)	
Thread	—	ANSI/ASME B1.20, 1-1983 (NPT thread)

Note 2) The surge pressure must be under the maximum operating pressure.



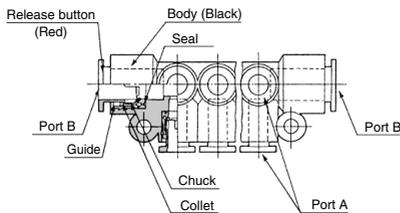
Made to Order
(Refer to page 128 for details.)

Principal Parts Material

Model	KM11	KM12
Body	PBT	
Stud	—	C3604
Chuck	Stainless steel 304	
Guide	Stainless steel 304, C3604	
Collet, Release button	POM	
Seal, O-ring	NBR	

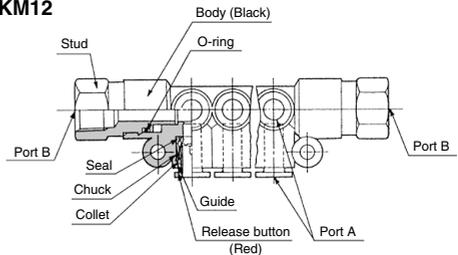
Construction

KM11



Port A: One-touch fitting
Port B: One-touch fitting

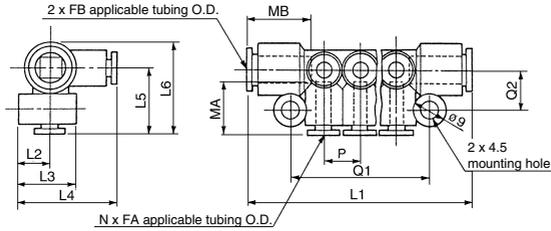
KM12



Port A: One-touch fitting
Port B: NPT female thread

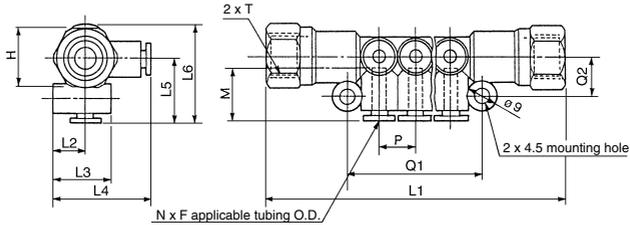
Dimensions

KM11



Applicable tubing O.D. (inch)		Model	N	L1	L2	L3	L4	L5	L6	P	Q1	Q2	MA	MB	Port B Min. port size	Weight (g)
FA	FB															
5/32	5/16	KM11-03-09-6	6	65	10	18	29.5	19.5	27	10.6	40	12	16	18.5	6	19
		KM11-03-09-10	10	86							61.5					26
1/4	3/8	KM11-07-11-6	6	77.8	10	19.5	31.5	21.5	30.5	13.2	48	13	17	21	7	30
		KM11-07-11-10	10	104							73.5					40
5/16	1/2	KM11-09-13-6	6	85	12.7	23.7	37.7	25	35.9	15.2	52.8	15	18.5	22	9.5	41
		KM11-09-13-10	10	115							83					57

KM12



Applicable tubing O.D.		T Connection thread NPT	Model	N	H (Width across flats)	L1	L2	L3	L4	L5	L6	P	Q1	Q2	M	Port B Min. port size	Weight (g)
F (inch)	T (inch)																
5/32	1/4	1/4	KM12-03-35-6	6	17.46	87	10	18	29.5	19.5	29	10.6	40	12	16	6	65
			KM12-03-35-10	10		110							61.5				72
1/4	3/8	1/4	KM12-07-35-6	6	17.46	95	10	19.5	31.5	21.5	31.25	13.2	48	13	17	7	82
			KM12-07-35-10	10		121							73.5				92
5/16	1/2	3/8	KM12-09-36-6	6	22.22	102	12.7	23.7	37.7	25	37.5	15.2	52.8	15	18.5	9.5	97
			KM12-09-36-10	10		132							83				112

Handling of One-touch Fittings

⚠ Caution

Refer to pages 13 to 16 for "Fittings & Tubing Precautions" for the details of installation/removal of One-touch fittings.

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



1 Grease-free Specifications

Symbol	Specifications
X17	Grease-free Rubber material: NBR (With fluorine coating) Release button color: Light blue
X29	Grease-free Rubber material: NBR (With fluorine coating) Release button color: Light blue Copper-free (With electroless nickel plated)
X94	Grease-free Rubber material: FKM (With fluorine coating) Release button color: Light blue

Suffix "-X17" to the end of part number.

Example) **KM11-03-09-10-X17**

2 Other Specifications

Symbol	Specifications
X2	Copper-free (With electroless nickel plated)
X12	Lubricant: White Vaseline Release button color: White
X34	Rubber material: FKM

Suffix "-X2" to the end of part number.

Example) **KM12-03-35-6-X2**