

Metal One-touch Fittings

Applicable Tube: Metric Size, Connection Thread: M, R, Rc

Series *KQB2*

RoHS



Applicable Tube

Tube material	FEP, PFA, Nylon, Soft nylon ^{Note 1)} , Polyurethane, Polyolefin
Tube O.D.	ø3.2, ø4, ø6, ø8, ø10, ø12, ø16

Specifications

Fluid	Air, Water
Operating pressure range ^{Note 2)}	−100 kPa to 1 MPa ^{Note 3)}
Proof pressure	3.0 MPa
Ambient and fluid temperature ^{Note 4)}	−5 to 150°C (No freezing) ^{Note 3)}
Lubricant	Grease-free specification
Seal on the threads	With sealant

Note 1) For soft nylon tube, water cannot be used.

Note 2) Avoid using in a vacuum holding application such as a leak tester, since there is leakage.

Note 3) Check the operating pressure range and operating temperature range of the tube.

Note 4) It is recommended that you use the inner sleeve in the following conditions (Except ø3.2):

- When using in an environment where the fluid temperature changes drastically.
- When using at a high temperature.

* Temperature Condition of Mounting the Inner Sleeve

Tube	Temperature
FEP tube/TH series	80°C or more
PFA tube/TL series	120°C or more

Spare Parts

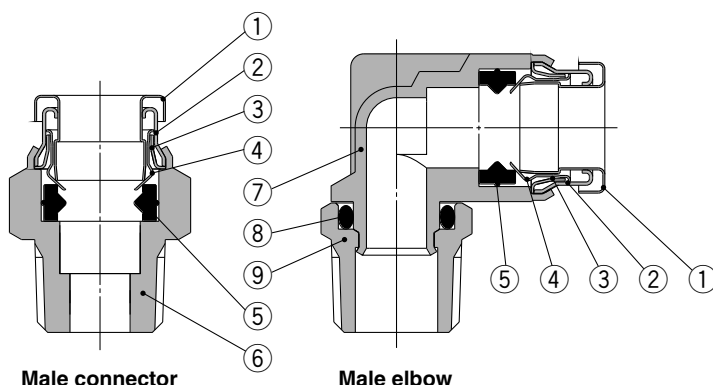
Description	Tube O.D.	Part no.	Material
Gasket	—	M-5G3	Stainless steel 316, Special FKM
Bulkhead nut	ø3.2 ø4	KQB223-P01	C3604 (Electroless nickel plated)
	ø6	KQB206-P01	
	ø8	KQB208-P01	
	ø10	KQB210-P01	
	ø12	KQB212-P01	
	ø16	KQB216-P01	

Cross Reference Table of the Inner Sleeve

Tube O.D.	Tube material			Applicable inner sleeve	
	TUS (Soft polyurethane)	TH/TH (FEP)	TL/TIL (PFA)	Part no.	Length
ø4	—	TH0402	—	TJ-0402	18
	TUS0425	TH0425	—	TJ-0425	18
	—	—	TL0403	TJ-0403	18
ø6	TUS0604	TH0604	TL0604	TJ-0604	19
	TUS0805	—	—	TJ-0805	20.5
	—	TH0806	TL0806	TJ-0806	20.5
ø10	TUS1065	—	—	TJ-1065	23
	—	TH1075	—	TJ-1075	23
	—	TH1008	TL1008	TJ-1008	23
ø12	TUS1208	—	—	TJ-1208	24
	—	TH1209	—	TJ-1209	24
	—	TH1210	TL1210	TJ-1210	24

* C2700 + Electroless nickel plated is used for the TJ series.

Construction



Component Parts

No.	Description	Material
1	Release button	Stainless steel 304
2	Guide 1	Stainless steel 304
3	Guide 2	Stainless steel 304
4	Chuck	Stainless steel 304
5	Seal	Special FKM (Fluoro coated)
6	Male connector body	C3604 (Electroless nickel plated)
7	Male elbow body	Stainless steel 316
8	O-ring	Special FKM (Fluoro coated)
9	Stud	C3604 (Electroless nickel plated)

Metal One-touch Fittings **Series KQB2**

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Dimensions

Union Elbow: KQB2L

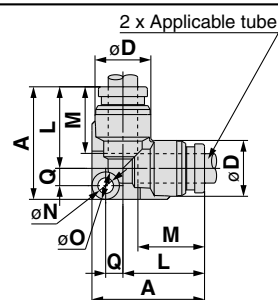


Applicable tube O.D. (mm)	Model	Note 1) ϕD	L	A	Q	M	ϕN	ϕO	Note 2) Effective area (mm ²)	Weight (g)
$\phi 3.2$	KQB2L23-00	8.3	13.6	19.3	2.9	12	3.2	5.6	3	6.3
$\phi 4$	KQB2L04-00	9.1	14.6	20.5	3.1	12.6	3.2	5.6	4.2	7.4
$\phi 6$	KQB2L06-00	11.4	16.6	23	3.6	13.6	3.2	5.6	11.4	11
$\phi 8$	KQB2L08-00	13.7	20.1	29.1	5	16.1	4.2	8	21.6	20.2
$\phi 10$	KQB2L10-00	16.6	22	31.7	5.7	17	4.2	8	35.2	29.6
$\phi 12$	KQB2L12-00	18.7	24.6	35	6.4	18.6	4.2	8	50.2	37.1
$\phi 16$	KQB2L16-00	24.6	28.8	40.5	7.7	20.8	4.2	8	100	59.7

Note 1) ϕD is maximum diameter.

Note 2) Value of FEP tube.

Value of nylon tube for $\phi 16$ only.



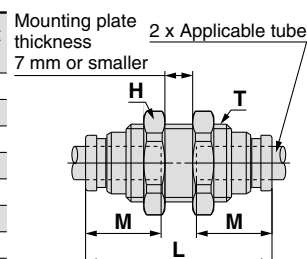
Bulkhead Union: KQB2E



Applicable tube O.D. (mm)	Model	T (M)	H (Width across flat)	L	Mounting hole	M	Note 2) Effective area (mm ²)	Weight (g)
$\phi 3.2$	KQB2E23-00	M10 x 1	12	32.2	11	12	3.4	14.8
$\phi 4$	KQB2E04-00	M10 x 1	12	32.4	11	12.6	5.6	14.7
$\phi 6$	KQB2E06-00	M14 x 1	17	35.4	15	13.6	13.1	29.2
$\phi 8$	KQB2E08-00	M15 x 1	19	38.8	16	16.1	26.1	34.9
$\phi 10$	KQB2E10-00	M18 x 1	21	40	19	17	41.5	47.1
$\phi 12$	KQB2E12-00	M20 x 1	24	42.4	21	18.6	58.3	58.7
$\phi 16$	KQB2E16-00	M27 x 1	30	46.8	28	20.8	113	107.2

Note) Value of FEP tube.

Value of nylon tube for $\phi 16$ only.



Union Tee: KQB2T

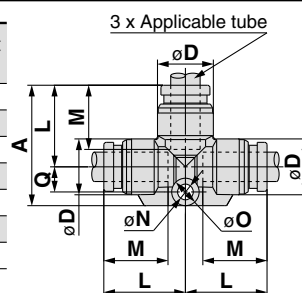


Applicable tube O.D. (mm)	Model	Note 1) ϕD	L	A	Q	M	ϕN	ϕO	Note 2) Effective area (mm ²)	Weight (g)
$\phi 3.2$	KQB2T23-00	8.3	13.6	20.5	4.1	12	3.2	5.6	3.4	7.9
$\phi 4$	KQB2T04-00	9.1	14.6	21.8	4.4	12.6	3.2	5.6	6.4	9.5
$\phi 6$	KQB2T06-00	11.4	16.6	24.6	5.2	13.6	3.2	5.6	13.4	14.2
$\phi 8$	KQB2T08-00	13.7	20.1	31.1	7	16.1	4.2	8	25.6	24.4
$\phi 10$	KQB2T10-00	16.6	22	34	8	17	4.2	8	40	36.8
$\phi 12$	KQB2T12-00	18.7	24.6	37.7	9.1	18.6	4.2	8	57.4	47
$\phi 16$	KQB2T16-00	24.6	28.8	43.4	10.6	20.8	4.2	8	100	75.5

Note 1) ϕD is maximum diameter.

Note 2) Value of FEP tube.

Value of nylon tube for $\phi 16$ only.



Union "Y": KQB2U



Applicable tube O.D. (mm)	Model	Note 1) ϕD	W	L1	L2	P	M	ϕN	ϕO	Note 2) Effective area (mm ²)	Weight (g)
$\phi 3.2$	KQB2U23-00	8.3	16.4	29	11	8.1	12	3.2	5.6	3.4	9.2
$\phi 4$	KQB2U04-00	9.1	18.2	30.4	11.3	9.1	12.6	3.2	5.6	4.2	11.1
$\phi 6$	KQB2U06-00	11.4	22.9	34.9	12.2	11.5	13.6	3.2	5.6	13.4	18.8
$\phi 8$	KQB2U08-00	13.7	28.3	40.1	14.1	14.6	16.1	4.2	8	25.6	29.7
$\phi 10$	KQB2U10-00	16.6	34.2	44	14.4	17.6	17	4.2	8	40	47.4
$\phi 12$	KQB2U12-00	18.7	38.5	48.4	15.8	19.8	18.6	4.2	8	57.4	62.1
$\phi 16$	KQB2U16-00	24.6	49.3	56.6	17.3	26	20.8	4.2	8	113	110.2

Note 1) ϕD is maximum diameter.

Note 2) Value of FEP tube.

Value of nylon tube for $\phi 16$ only.

