

Metal One-touch Fittings

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

KQB2 Series

RoHS



Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon, Polyurethane, Polyolefin
Tubing O.D.	ø3.2, ø4, ø6, ø8, ø10, ø12, ø16

Specifications

Fluid	Air, N ₂ , Water ^{Note 2)}
Operating pressure range ^{Note 1)}	–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) Avoid using in a vacuum holding application such as a leak tester, since there is leakage.

Note 2) Deionized water is not recommended for use as it may affect the material used in the fittings.

In addition, it is known to degrade the water quality.

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

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

Tubing	Temperature
FEP tubing/TH Series	80°C or more
Super PFA tubing/TL Series	120°C or more

Spare Parts

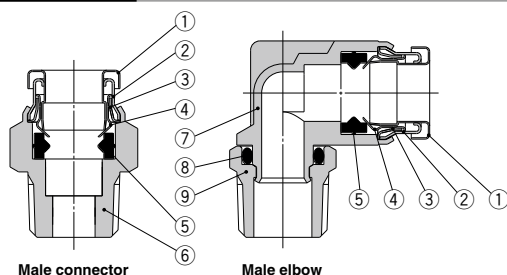
Description	Tubing O.D.	Part no.	Material
Gasket	—	M-5G3	Stainless steel 316, Special FKM
Bulkhead nut	ø3.2 ø4	KQB223-P01	C3604 (Electroless nickel plated)
	ø6	KQB206-P01	
	ø8	KQB208-P01	
	ø10	KQB210-P01	
	ø12	KQB212-P01	
	ø16	KQB216-P01	

Cross Reference Table of the Inner Sleeve

Tubing O.D.	Tubing material			Applicable inner sleeve	
	TUS (Soft polyurethane)	TH/TIH (FEP)	TL/TIL (Super 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
ø8	—	TH0806	TL0806	TJ-0806	20.5
	TUS1065	—	—	TJ-1065	23
ø10	—	TH1075	—	TJ-1075	23
	—	TH1008	TL1008	TJ-1008	24
	TUS1208	—	—	TJ-1208	24
ø12	—	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)

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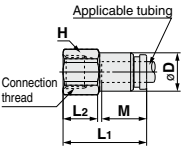
Dimensions

Female Connector: KQB2F



Applicable tubing O.D. (mm)	Connection thread Rc	Model	H (Width across flat)	Note 1) ϕD	L1	L2	M	Note 2) Effective area (mm ²)	Weight (g)
$\phi 3.2$	1/8	KQB2F23-01	12	8	23.3	9.8	12	3.4	9.3
	1/8	KQB2F04-01	12	8.7	23.7	9.8	12.6	5.6	9.7
$\phi 4$	1/4	KQB2F04-02	17		28.7	13.2			22.7
	1/8	KQB2F06-01	12	11.1	24.2	10	13.6	13.1	11.1
$\phi 6$	1/4	KQB2F06-02	17		29.2	13.4			24.3
	3/8	KQB2F06-03	19		30.6	14.2			25.8
$\phi 8$	1/8	KQB2F08-01	14	13.4	26.3	9.6	16.1	26.1	17.1
	1/4	KQB2F08-02	17		31.3	13.7			26.8
	3/8	KQB2F08-03	19		32.7	14.4			28.4
$\phi 10$	1/4	KQB2F10-02	17	16.4	31.6	13.9	17	41.5	30.3
	3/8	KQB2F10-03	19		33	14.7			32
$\phi 12$	1/4	KQB2F12-02	19	18.5	32.6	13.3	18.6	58.3	39.4
	3/8	KQB2F12-03			34	14.7			33.9
	1/2	KQB2F12-04	24		39.3	18.4			52.9
$\phi 16$	3/8	KQB2F16-03	24	24.6	35.3	13.5	20.8	81	62.8
	1/2	KQB2F16-04			40.6	18.8		113	59.9

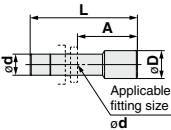
Note 1) For the $\phi 10$, $\phi 12$, and $\phi 16$, this dimension refers to the O.D. of the release button.
Note 2) Value of FEP tubing.
Value of nylon tubing for $\phi 16$ only.



Plug: KQB2P



Applicable fitting size ϕd	Model	ϕD	L	A	Weight (g)
$\phi 3.2$	KQB2P-23	5	28.9	16.9	2.8
$\phi 4$	KQB2P-04	6	29.6	17	4.3
$\phi 6$	KQB2P-06	8	30.8	17.2	9
$\phi 8$	KQB2P-08	10	33.7	17.6	16.3
$\phi 10$	KQB2P-10	12	34.6	17.6	25.4
$\phi 12$	KQB2P-12	14	36.5	17.9	37.8
$\phi 16$	KQB2P-16	18	38.6	17.8	69.2



Related Equipment

Spatter cover

(Applicable tubing: FR soft nylon, FR double layer, FR three-layer)



Applicable tubing O.D. (mm)	Model
$\phi 6$	KQB2-06C-X1124
$\phi 8$	KQB2-08C-X1124
$\phi 10$	KQB2-10C-X1124

- * Since the spatter cover is designed for multi-layer (double layer, three-layer) tubing, sufficient effects cannot be obtained in foreign matter flow-in or followability for single-layer tubing.
- * The cover can be attached regardless of the single-layer/multi-layer tubing.
- * Cannot be used for union "Y" (KQB2U) 2-port side.