

# Metal One-touch Fittings

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

# KQB2-F Series

RoHS



## Applicable Tubing

Tubing material*1	FEP, PFA, Nylon, Soft nylon, Polyurethane, Polyolefin
Tubing O.D.	Ø 3.2, Ø 4, Ø 6, Ø 8, Ø 10, Ø 12, Ø 16

\*1 Considering the product application, FDA-compliant products are recommended.

## Specifications

Fluid	Air, Water*1
Operating pressure range*2	-100 kPa to 1 MPa*3
Proof pressure	3.0 MPa
Ambient and fluid temperatures*4	-5 to 150°C (No freezing)*3
Lubricant	NSF H1 grease
Seal on the threads	Without sealant

\*1 Deionised 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.

\*2 Do not use the fittings with a leak tester or for vacuum retention because they are not guaranteed for zero leakage.

\*3 Check the operating pressure range and operating temperature range of the tubing.

\*4 It is recommended that you use the inner sleeve in the following conditions. (Except Ø 3.2)

- 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
O-ring	—	<b>M-5-F</b>	FDA compliant FKM
Bulkhead nut	Ø 3.2	<b>KQB223-P01-F</b>	C3604 (Electroless nickel plating)
	Ø 4		
	Ø 6	<b>KQB206-P01-F</b>	
	Ø 8	<b>KQB208-P01-F</b>	
	Ø 10	<b>KQB210-P01-F</b>	
	Ø 12	<b>KQB212-P01-F</b>	
	Ø 16	<b>KQB216-P01-F</b>	

## Cross Reference Table of the Inner Sleeve

Tubing O.D.	Tubing material			Applicable inner sleeve	
	TUS (Soft polyurethane)	TH/THI (FEP)	TL/TIL (Super PFA)	Part no.	Length
Ø 4	—	TH0402	—	<b>TJG-0402</b>	18
	TUS0425	TH0425	—	<b>TJG-0425</b>	18
	—	—	TL0403	<b>TJG-0403</b>	18
Ø 6	TUS0604	TH0604	TL0604	<b>TJG-0604</b>	19
	TUS0805	—	—	<b>TJG-0805</b>	20.5
Ø 8	—	TH0806	TL0806	<b>TJG-0806</b>	20.5
	TUS1065	—	—	<b>TJG-1065</b>	23
Ø 10	—	TH1075	—	<b>TJG-1075</b>	23
	—	TH1008	TL1008	<b>TJG-1008</b>	24
	TUS1208	—	—	<b>TJG-1208</b>	24
Ø 12	—	TH1209	—	<b>TJG-1209</b>	24
	—	TH1210	TL1210	<b>TJG-1210</b>	24

\* Stainless steel 316 is used for the TJG series.

# KQB2-F Series

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

## Dimensions

### Male Connector: KQB2H



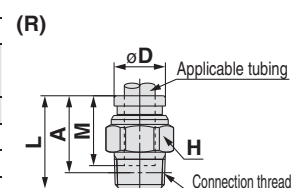
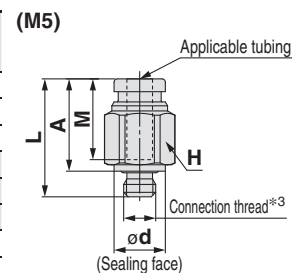
Applicable tubing O.D. [mm]	Connection thread R, M	Model	H (Width across flats)	Ø D	Ø d	L	A*1	M	Effective area [mm²]*2	Weight [g]
Ø 3.2	M5 x 0.8	KQB2H23-M5-F	8	—	8	17.8	13.8	12	3	3.7
	1/8	KQB2H23-01-F	10			15.4	13.6		3.4	6
	1/4	KQB2H23-02-F	14			21	17.6		—	17.8
Ø 4	M5 x 0.8	KQB2H04-M5-F	10	—	8	18.4	14.4	12.6	4	5.7
	1/8	KQB2H04-01-F	—			15.3	13.5		5.6	5.6
	1/4	KQB2H04-02-F	14			20.9	17.5		—	17.2
Ø 6	M5 x 0.8	KQB2H06-M5-F	12	—	8	19.6	15.6	13.6	4	7.8
	1/8	KQB2H06-01-F	—			18.1	16.3		—	7.3
	1/4	KQB2H06-02-F	14			20.8	17.4		13.1	15.2
	3/8	KQB2H06-03-F	17			23	19.2		—	28.8
Ø 8	1/8	KQB2H08-01-F	14	—	—	24.5	22.7	16.1	26.1	13.5
	1/4	KQB2H08-02-F	—			22.3	18.9			26
	3/8	KQB2H08-03-F	17			23.7	19.9			—
Ø 10	1/8	KQB2H10-01-F	17	—	—	25.5	23.7	17	26.1	19.8
	1/4	KQB2H10-02-F	—			27.9	24.5			22.7
	3/8	KQB2H10-03-F	—			23	19.2			21.6
	1/2	KQB2H10-04-F	22			28.6	23.5			53.9
Ø 12	1/4	KQB2H12-02-F	19	—	—	30.5	27.1	18.6	58.3	28.8
	3/8	KQB2H12-03-F	—			24.7	20.9			21.5
	1/2	KQB2H12-04-F	22			28.7	23.6			47
Ø 16	3/8	KQB2H16-03-F	24	24.6	—	33.6	29.8	20.8	81	48.3
	1/2	KQB2H16-04-F	—			29.5	24.4			113

\*1 Reference dimensions after installation for R thread

\*2 Value of FEP tubing

Value of nylon tubing for Ø 16 only

\*3 In the case of M5, the screw length (L – A) is longer than that of the KQB2 series.



### Hexagon Socket Head Male Connector: KQB2S



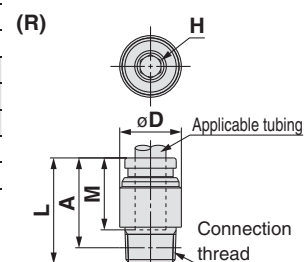
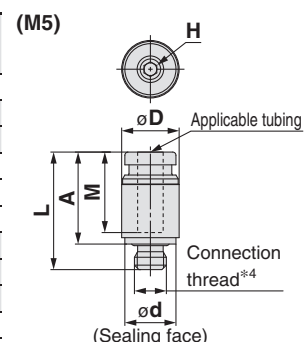
Applicable tubing O.D. [mm]	Connection thread R, M	Model	H (Width across flats)	Ø D*1	Ø d	L	A*2	M	Effective area [mm²]*3	Weight [g]
Ø 3.2	M5 x 0.8	KQB2S23-M5-F	2	9	8	17.8	13.8	12	3	4.3
Ø 4	M5 x 0.8	KQB2S04-M5-F	2	9	8	18.4	14.4	12.6	4	4.2
	1/8	KQB2S04-01-F	3	10	—	20.4	18.6		4.1	7.9
Ø 6	M5 x 0.8	KQB2S06-M5-F	2	12	8	20.1	16.1	13.6	4	7.7
	1/8	KQB2S06-01-F	—	—	—	18.8	—		10	9.1
	1/4	KQB2S06-02-F	4	14	—	20.6	17.2		10.7	14.7
Ø 8	1/8	KQB2S08-01-F	5	14	—	24.7	22.9	16.1	17.2	13
	1/4	KQB2S08-02-F	6	—	—	22.9	19.5		23.3	13.5
	3/8	KQB2S08-03-F	—	17	—	23.1	19.3		24	—
Ø 10	1/8	KQB2S10-01-F	5	17	—	25.6	23.8	17	17.2	18.6
	1/4	KQB2S10-02-F	8			27.5	24.1		—	20
	3/8	KQB2S10-03-F	—			20.2	—		39	22
	1/2	KQB2S10-04-F	22			18.9	—		—	39.2
Ø 12	1/4	KQB2S12-02-F	8	19	—	30.6	27.2	18.6	46	26
	3/8	KQB2S12-03-F	10			24.9	21.1		60	20.2
	1/2	KQB2S12-04-F	—			19.8	—		—	35.3
Ø 16	3/8	KQB2S16-03-F	10	24.6	—	33.2	29.4	20.8	81	43.6
	1/2	KQB2S16-04-F	12			29.4	24.3		113	40.3

\*1 For the Ø 16, this dimension refers to the O.D. of the release button.

\*2 Reference dimensions after installation for R thread

\*3 Value of FEP tubing  
Value of nylon tubing for Ø 16 only

\*4 In the case of M5, the screw length (L – A) is longer than that of the KQB2 series.



### Straight Union: KQB2H



Applicable tubing O.D. [mm]	Model	Ø D*1	L	M	Effective area [mm²]*2	Weight [g]
Ø 3.2	KQB2H23-00-F	9	25	12	3.4	6.8
Ø 4	KQB2H04-00-F	9	26.2	12.6	5.6	6.8
Ø 6	KQB2H06-00-F	12	28.2	13.6	13.1	12
Ø 8	KQB2H08-00-F	14	33.2	16.1	26.1	17.4
Ø 10	KQB2H10-00-F	17	35	17	41.5	27.2
Ø 12	KQB2H12-00-F	19	38.2	18.6	58.3	33.7
Ø 16	KQB2H16-00-F	24.6	42.6	20.8	113	56.1

\*1 For the Ø 16, this dimension refers to the O.D. of the release button.

\*2 Value of FEP tubing

Value of nylon tubing for Ø 16 only

