

For Food Industry

EHEDG Compliant/Clean Design/ FDA Compliant Fittings

New

RoHS

- Hygienic design prevents liquid from accumulating after cleaning
- FDA compliant materials

EHEDG Compliant Fittings

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EHEDG Compliant

IP69K

Hygienic Design

FDA Compliant

Stainless Steel 316 Insert Fittings
KFG2H□-E Series



Clean Design Fittings

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Hygienic Design

FDA Compliant

Stainless Steel 316 Insert Fittings
KFG2H□-C Series



FDA Compliant Fittings

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FDA Compliant



Stainless Steel 316 One-touch Fittings
KQG2-F Series



Metal One-touch Fittings
KQB2-F Series



Stainless Steel 316 Insert Fittings
KFG2-F Series

KFG2H-E/KFG2H-C/KQ_B2-F KFG2-F Series



CAT.ES50-41A

EHEDG Compliant Fittings

EHEDG Compliant

IP69K

Hygienic Design

FDA Compliant

KFG2H□-E Series

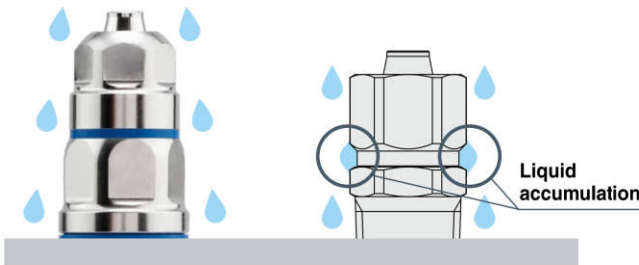
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EHEDG Certification

This series satisfies EHEDG guidelines (hygienic design standards), preventing liquid and foreign matter from entering, and is easy to wash.

Design for less residual liquid accumulation



EHEDG compliant fitting

Design for better liquid flow and less residual liquid accumulation

Existing KFG2 model

Design for poor liquid flow and more residual liquid accumulation

Achieved IP69K rating

Rubber parts

The material used is a special FKM that is compliant with the Food and Drug Administration (FDA) §177.2600. They are colored in blue for superior visibility.

Body type: Male connector

Connection thread: M, G^{*1}

*1 ISO 16030 compliant

Fluid temperature

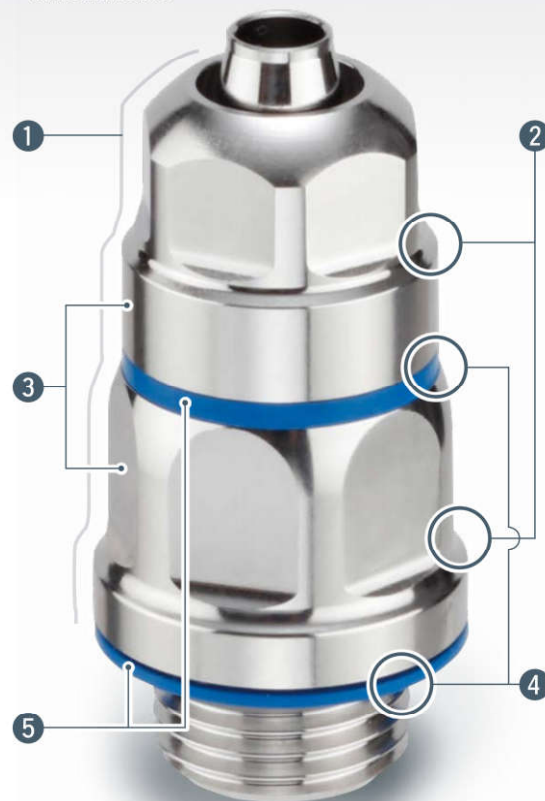
-5 to 150°C

EHEDG design standards

- 1 External surface roughness:
Ra 0.8 µm or less
- 2 Corners of radius 3 mm or more or with an internal angle of 135°
- 3 Stainless material with high anti-corrosion performance: Stainless steel 316
- 4 No direct contact of external metal parts
- 5 Gasket seals made of FDA-compliant rubber materials



EHEDG Certificate of Compliance



Clean Design Fittings

Hygienic
Design

FDA
Compliant

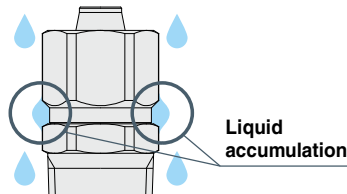
KFG2H□-C Series

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Design for less residual liquid accumulation



Clean design fitting
Rounded design for less residual liquid accumulation



Existing KFG2 model
Design for poor liquid flow and more residual liquid accumulation

Metal parts: Stainless steel 316

Rubber parts

The material used is a special FKM that is compliant with the Food and Drug Administration (FDA) §177.2600. They are colored in blue for superior visibility.

Body type: Male connector

Connection thread: M, G^{*1}

*1 ISO 16030 compliant

Fluid temperature

-5 to 150°C



FDA Compliant Fittings

FDA
Compliant

KQG2-F/KQB2-F/KFG2-F Series

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Rubber parts

The material used is a special FKM that is compliant with the Food and Drug Administration (FDA) §177.2600.

Grease

NSF H1-compliant paraffin grease is used.

Stainless Steel 316 One-touch Fittings KQG2-F Series

Applicable tubing: Metric size

Connection thread: M, R, Rc, UNF, NPT, G*¹

*1 ISO 16030 compliant



Metal One-touch Fittings KQB2-F Series

Applicable tubing: Metric size

Connection thread: M, R, Rc, UNF, NPT, G*¹

*1 ISO 16030 compliant



Stainless Steel 316 Insert Fittings KFG2-F Series

Applicable tubing: Metric size

Connection thread: R, Rc, NPT, G*^{1,2}

*1 Swivel elbow only

*2 ISO 16030 compliant



FDA (U.S. Food and Drug Administration) Compliant Tubing

Polyurethane Tubing

TU-X214



- Complies with the FDA (U.S. Food and Drug Administration) § 177.2600 dissolution test
- Complies with the EU No 10/2011 dissolution test
- Max. operating pressure: 0.8 MPa (at 20°C)

| Tubing O.D. | | Color | Fluid |
|----------------------|-----------|---|------------|
| Metric size | Inch size | | |
| ø4, ø6, ø8, ø10, ø12 | | Black, White, Red, Blue, Yellow, Green, Clear, Orange | Air, Water |

Fluoropolymer Tubing

TL/TIL



- Complies with the FDA (U.S. Food and Drug Administration) § 177.1550 dissolution test
- Food Sanitation Law compliant*1
- Max. operating pressure: 1.0 MPa (at 20°C)
- Operating temperature (Fixed usage): -65 to 260°C

| Tubing O.D. | | Color |
|---------------------------|--|-------------|
| Metric size | Inch size | |
| ø4, ø6, ø8, ø10, ø12, ø19 | ø1/8", ø3/16", ø1/4", ø3/8", ø1/2", ø3/4", ø1" | Translucent |

Fluoropolymer Tubing (PFA)

TLM/TILM



- Complies with the FDA (U.S. Food and Drug Administration) § 177.1550 dissolution test
- Food Sanitation Law compliant*1
- Operating temperature (Fixed usage):
Air, Inert gas: -65 to 260°C
Water: 0 to 100°C (No freezing)

| Tubing O.D. | | Color |
|---|---|-------------------------------|
| Metric size | Inch size | |
| ø2, ø3, ø4, ø6, ø8, ø10, ø12, ø16, ø19, ø25 | ø1/8", ø3/16", ø1/4", ø3/8", ø1/2", ø3/4", ø1", ø1 1/4" | Translucent, Black, Red, Blue |

FEP Tubing (Fluoropolymer)

TH/THH



- Complies with the FDA (U.S. Food and Drug Administration) § 177.1550 dissolution test
- Food Sanitation Law compliant*1
- Max. operating pressure: 2.3 MPa (at 20°C)*2
*2 This may vary according to size.
- Operating temperature (Fixed usage):
Air, Inert gas: -65 to 200°C
Water: 0 to 100°C (No freezing)
- Longer length reel (500 m): -X64

| Tubing O.D. | | Color |
|----------------------|---|-------------------------------|
| Metric size | Inch size | |
| ø4, ø6, ø8, ø10, ø12 | ø1/8", ø3/16", ø1/4", ø3/8", ø1/2", ø3/4" | Translucent, Black, Red, Blue |

Soft Fluoropolymer Tubing

TD/TID



- Complies with the FDA (U.S. Food and Drug Administration) § 177.1550 dissolution test
- Food Sanitation Law compliant*1
- Max. operating pressure: 1.6 MPa (at 20°C)*2
*2 This may vary according to size.
- Operating temperature (Fixed usage):
Air, Inert gas: -65 to 260°C
Water: 0 to 100°C (No freezing)

| Tubing O.D. | | Color |
|----------------------|------------------------------------|-------------|
| Metric size | Inch size | |
| ø4, ø6, ø8, ø10, ø12 | ø1/8", ø3/16", ø1/4", ø3/8", ø1/2" | Translucent |

Polyolefin Tubing

TPH



- Complies with the FDA (U.S. Food and Drug Administration) § 175.300 dissolution test
- Max. operating pressure (at 20°C): 1.0 MPa (ø4, ø6), 0.7 MPa (ø8, ø10, ø12)
- Longer length reel (500 m): -X40

| Applicable tubing O.D. | Color | Fluid |
|------------------------|---------------------|------------------|
| ø4, ø6, ø8, ø10, ø12 | White, Blue, Yellow | Air, Water, etc. |

Soft Polyolefin Tubing

TPS



- Complies with the FDA (U.S. Food and Drug Administration) § 175.300 dissolution test
- Max. operating pressure (at 20°C): 0.7 MPa (ø4 to ø12)

| Applicable tubing O.D. | Color | Fluid |
|------------------------|---------------------|------------------|
| ø4, ø6, ø8, ø10, ø12 | White, Blue, Yellow | Air, Water, etc. |

*1 Testing in compliance with Japan's Food Sanitation Law based on the 370th notice given by the Ministry of Health and Welfare in 1959

Variations

Male Connector **KQG2H**

| | | |
|--------|----------|-------|
| Metric | R thread | p. 18 |
| | G thread | p. 32 |
| Inch | | p. 25 |



Bulkhead Union **KQG2E**

| | |
|--------|-------|
| Metric | p. 20 |
| Inch | p. 27 |



Different Diameter Union "Y" **KQG2U**

| | |
|--------|-------|
| Metric | p. 21 |
| Inch | p. 28 |



Hexagon Socket Head Male Connector **KQG2S**

| | | |
|--------|----------|-------|
| Metric | R thread | p. 18 |
| | G thread | p. 32 |
| Inch | | p. 25 |



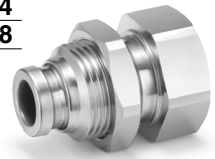
Union Tee **KQG2T**

| | |
|--------|-------|
| Metric | p. 20 |
| Inch | p. 27 |



Bulkhead Connector **KQG2E**

| | | |
|--------|-----------|-------|
| Metric | Rc thread | p. 21 |
| | G thread | p. 34 |
| Inch | | p. 28 |



Straight Union **KQG2H**

| | |
|--------|-------|
| Metric | p. 18 |
| Inch | p. 25 |



Union "Y" **KQG2U**

| | |
|--------|-------|
| Metric | p. 20 |
| Inch | p. 27 |



Extended Male Elbow **KQG2W**

| | | |
|--------|----------|-------|
| Metric | R thread | p. 22 |
| | G thread | p. 34 |
| Inch | | p. 28 |



Male Elbow **KQG2L**

| | | |
|--------|----------|-------|
| Metric | R thread | p. 19 |
| | G thread | p. 33 |
| Inch | | p. 26 |



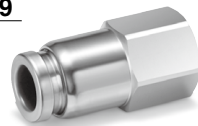
Different Diameter Tee **KQG2T**

| | |
|--------|-------|
| Metric | p. 20 |
| Inch | p. 27 |



Female Connector **KQG2F**

| | | |
|--------|-----------|-------|
| Metric | Rc thread | p. 22 |
| | G thread | p. 34 |
| Inch | | p. 29 |



Male Branch Tee **KQG2T**

| | | |
|--------|----------|-------|
| Metric | R thread | p. 19 |
| | G thread | p. 33 |
| Inch | | p. 26 |



Plug-in Reducer **KQG2R**

| | |
|--------|-------|
| Metric | p. 20 |
| Inch | p. 27 |



Plug **KQG2P**

| | |
|--------|-------|
| Metric | p. 22 |
| Inch | p. 29 |



Union Elbow **KQG2L**

| | |
|--------|-------|
| Metric | p. 19 |
| Inch | p. 26 |



Different Diameter Straight **KQG2H**

| | |
|--------|-------|
| Metric | p. 21 |
| Inch | p. 28 |



FDA Compliant Fittings

Stainless Steel 316 One-touch Fittings

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

KQG2-F Series

RoHS



Applicable Tubing

| | |
|-------------------|---|
| Tubing material*1 | FEP, PFA, Nylon, Soft nylon, Polyurethane, Polyolefin |
| Tubing O.D. | ø3.2, ø4, ø6, ø8, ø10, ø12, ø16 |

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

Specifications

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

*1 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.

*2 Please contact SMC for applicable tubing separately.

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

*4 Check the operating pressure range and operating temperature range of the tubing.

*5 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 |
|--------------|-------------|-------------------|---------------------|
| O-ring | — | M-5-F | FDA compliant FKM |
| Bulkhead nut | ø3.2, ø4 | KQG223-P01 | Stainless steel 316 |
| | ø6 | KQG206-P01 | |
| | ø8 | KQG208-P01 | |
| | ø10 | KQG210-P01 | |
| | ø12 | KQG212-P01 | |
| | ø16 | KQG216-P01 | |

Cross Reference Table of the Inner Sleeve

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

* Stainless steel 316 is used for the TJG series.

EHDG Compliant

Metric M, G KFG2H□-E

Clean Design

Metric M, G KFG2H□-C

FDA Compliant

Metric M, R, Rc KQG2-F

Inch UNF, NPT KQG2-F

Metric G KQG2-F

Metric M, R, Rc KQB2-F

Inch UNF, NPT KQB2-F

Metric G KQB2-F

Metric R, Rc KFG2-F

Inch NPT KFG2-F

Metric G KFG2-F

Precautions

KQG2-F Series

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

How to Order

KQG2 H 04 - 02 - F

Body type

| Symbol | Model |
|----------|---|
| H | Male connector, Straight union, Different diameter straight |
| S | Hexagon socket head male connector |
| L | Male elbow, Union elbow |
| T | Male branch tee, Union tee, Different diameter tee |
| E | Bulkhead union, Bulkhead connector |
| U | Union "Y", Different diameter union "Y" |
| R | Plug-in reducer |
| W | Extended male elbow |
| F | Female connector |

* Plugs are excluded as the standard plug is FDA-compliant.

Tubing size (Metric)

| Symbol | Size |
|-----------|------|
| 23 | ø3.2 |
| 04 | ø4 |
| 06 | ø6 |
| 08 | ø8 |
| 10 | ø10 |
| 12 | ø12 |
| 16 | ø16 |

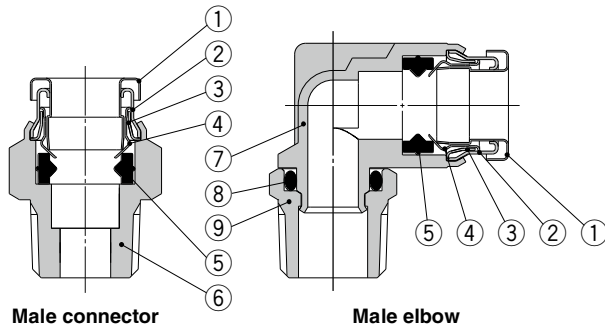
FDA compliant

Thread size, Tubing size

| Symbol | Size | |
|-----------|------------------|-------------|
| M5 | M5 x 0.8 | Thread size |
| 01 | R1/8, Rc1/8 | |
| 02 | R1/4, Rc1/4 | |
| 03 | R3/8, Rc3/8 | |
| 04 | R1/2, Rc1/2 | |
| 00 | Same tubing O.D. | Tubing size |
| 04 | ø4 | |
| 06 | ø6 | |
| 08 | ø8 | |
| 10 | ø10 | |
| 12 | ø12 | |
| 16 | ø16 | |

* Sealant is unavailable for this product as no FDA-compliant material is available.

Construction



Component Parts

| No. | Description | Material |
|-----|---------------------|-------------------------------------|
| 1 | Release button | Stainless steel 316 |
| 2 | Guide 1 | Stainless steel 316 |
| 3 | Guide 2 | Stainless steel 316 |
| 4 | Chuck | Stainless steel 316 |
| 5 | Seal | FDA compliant FKM (NSF H1 grease) |
| 6 | Male connector body | Stainless steel 316 |
| 7 | Male elbow body | Stainless steel 316 (NSF H1 grease) |
| 8 | O-ring | FDA compliant FKM (NSF H1 grease) |
| 9 | Stud | Stainless steel 316 |

Stainless Steel 316 One-touch Fittings **KQG2-F Series**

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

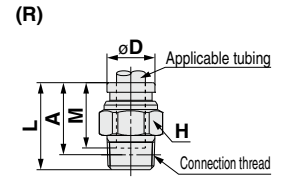
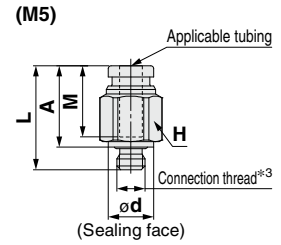
Dimensions

Male Connector: KQG2H



| Applicable tubing O.D. [mm] | Connection thread R, M | Model | H (Width across flats) | øD | ød | L | A*1 | M | Effective area [mm ²]*2 | Weight [g] | | | |
|-----------------------------|------------------------|--------------|------------------------|------|----|------|------|------|-------------------------------------|------------|------|------|------|
| ø3.2 | M5 x 0.8 | KQG2H23-M5-F | 8 | — | 8 | 17.8 | 13.8 | 12 | 3 | 3.6 | | | |
| | 1/8 | KQG2H23-01-F | 10 | | | | | | | | 15.4 | 12.3 | 5.7 |
| | 1/4 | KQG2H23-02-F | 14 | | | | | | | | 21 | 16.3 | 16.9 |
| ø4 | M5 x 0.8 | KQG2H04-M5-F | 10 | — | 8 | 18.4 | 14.4 | 12.6 | 4 | 5.5 | | | |
| | 1/8 | KQG2H04-01-F | 10 | | | | | | | | 15.3 | 12.2 | 4.7 |
| | 1/4 | KQG2H04-02-F | 14 | | | | | | | | 20.9 | 16.2 | 15.8 |
| ø6 | M5 x 0.8 | KQG2H06-M5-F | 12 | — | 8 | 19.6 | 15.6 | 13.6 | 4 | 7.7 | | | |
| | 1/8 | KQG2H06-01-F | 12 | | | | | | | | 18.1 | 15 | 7 |
| | 1/4 | KQG2H06-02-F | 14 | | | | | | | | 20.8 | 16.1 | 14.5 |
| ø8 | M5 x 0.8 | KQG2H08-M5-F | 17 | — | 8 | 23 | 17.9 | 16.1 | 13.1 | 27.3 | | | |
| | 1/8 | KQG2H08-01-F | 14 | | | | | | | | 24.5 | 21.4 | 12.8 |
| | 1/4 | KQG2H08-02-F | 14 | | | | | | | | 22.3 | 17.6 | 12.9 |
| ø10 | M5 x 0.8 | KQG2H10-M5-F | 17 | — | 8 | 25.5 | 22.4 | 17 | 26.1 | 18.9 | | | |
| | 1/8 | KQG2H10-01-F | 17 | | | | | | | | 27.9 | 23.2 | 21.6 |
| | 3/8 | KQG2H10-03-F | 17 | | | | | | | | 23 | 17.9 | 20.6 |
| ø12 | M5 x 0.8 | KQG2H12-M5-F | 22 | — | 8 | 28.6 | 22.2 | 17 | 41.5 | 51.1 | | | |
| | 1/4 | KQG2H12-02-F | 19 | | | | | | | | 30.5 | 25.8 | 27.4 |
| | 3/8 | KQG2H12-03-F | 19 | | | | | | | | 24.7 | 19.6 | 20.5 |
| ø16 | M5 x 0.8 | KQG2H16-M5-F | 24 | 24.6 | 8 | 33.6 | 28.5 | 20.8 | 81 | 46 | | | |
| | 3/8 | KQG2H16-03-F | 22 | | | | | | | | 28.7 | 22.3 | 44.6 |
| | 1/2 | KQG2H16-04-F | 22 | | | | | | | | 29.5 | 23.1 | 37.4 |

*1 Reference dimensions after installation for R thread
 *2 Value of FEP tubing
 Value of nylon tubing for ø16 only
 *3 In the case of M5, the screw length (L - A) is longer than that of the KQG2 series.

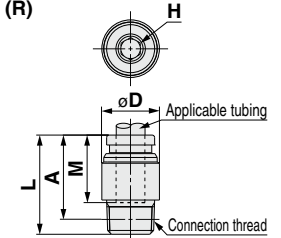
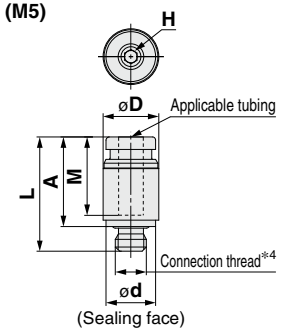


Hexagon Socket Head Male Connector: KQG2S



| Applicable tubing O.D. [mm] | Connection thread R, M | Model | H (Width across flats) | øD*1 | ød | L | A*2 | M | Effective area [mm ²]*3 | Weight [g] | | | | |
|-----------------------------|------------------------|--------------|------------------------|------|----|------|------|------|-------------------------------------|------------|------|------|------|------|
| ø3.2 | M5 x 0.8 | KQG2S23-M5-F | 2 | 9 | 8 | 17.8 | 13.8 | 12 | 3 | 4.2 | | | | |
| ø4 | M5 x 0.8 | KQG2S04-M5-F | 2 | 9 | 8 | 18.4 | 14.4 | 12.6 | 4 | 4.1 | | | | |
| | 1/8 | KQG2S04-01-F | 3 | 10 | — | 19.6 | 16.5 | 12.6 | 4.1 | 7.6 | | | | |
| ø6 | M5 x 0.8 | KQG2S06-M5-F | 2 | 12 | 8 | 20.1 | 16.1 | 13.6 | 4 | 7.4 | | | | |
| | 1/8 | KQG2S06-01-F | 4 | | | | | | | | 20.6 | 17.5 | 10 | 8.7 |
| | 1/4 | KQG2S06-02-F | 14 | | | | | | | | 20.6 | 15.9 | 10.7 | 14 |
| ø8 | M5 x 0.8 | KQG2S08-M5-F | 5 | 14 | — | 24.7 | 21.6 | 16.1 | 17.2 | 12.3 | | | | |
| | 1/8 | KQG2S08-01-F | 5 | | | | | | | | 24.7 | 21.6 | 12.8 | |
| | 1/4 | KQG2S08-02-F | 6 | | | | | | | | 22.9 | 18.2 | 12.8 | |
| ø10 | M5 x 0.8 | KQG2S10-M5-F | 6 | 17 | — | 23.1 | 18 | 16.1 | 23.3 | 22.8 | | | | |
| | 1/8 | KQG2S10-01-F | 5 | | | | | | | | 25.6 | 22.5 | 17.2 | 17.7 |
| | 1/4 | KQG2S10-02-F | 8 | | | | | | | | 27.5 | 22.8 | 19.1 | |
| ø12 | M5 x 0.8 | KQG2S12-M5-F | 8 | 19 | — | 27.5 | 22.8 | 17 | 39 | 20.9 | | | | |
| | 3/8 | KQG2S12-03-F | 8 | | | | | | | | 18.9 | 17.6 | 37.2 | |
| | 1/2 | KQG2S12-04-F | 22 | | | | | | | | 24 | 17.6 | 37.2 | |
| ø16 | M5 x 0.8 | KQG2S16-M5-F | 8 | 22 | — | 30.6 | 25.9 | 18.6 | 46 | 24.8 | | | | |
| | 1/4 | KQG2S12-02-F | 10 | | | | | | | | 24.9 | 19.8 | 19.3 | |
| | 3/8 | KQG2S12-03-F | 10 | | | | | | | | 24.9 | 18.5 | 33.6 | |
| ø16 | M5 x 0.8 | KQG2S16-03-F | 10 | 24.6 | — | 33.2 | 28.1 | 20.8 | 81 | 41.6 | | | | |
| | 1/2 | KQG2S16-04-F | 12 | | | | | | | | 29.4 | 23 | 38.4 | |

*1 For the ø16, 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 ø16 only
 *4 In the case of M5, the screw length (L - A) is longer than that of the KQG2 series.

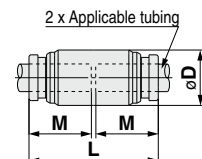


Straight Union: KQG2H



| Applicable tubing O.D. [mm] | Model | øD*1 | L | M | Effective area [mm ²]*2 | Weight [g] |
|-----------------------------|--------------|------|------|------|-------------------------------------|------------|
| ø3.2 | KQG2H23-00-F | 9 | 25 | 12 | 3.4 | 6.5 |
| ø4 | KQG2H04-00-F | 9 | 26.2 | 12.6 | 5.6 | 6.5 |
| ø6 | KQG2H06-00-F | 12 | 28.2 | 13.6 | 13.1 | 11.5 |
| ø8 | KQG2H08-00-F | 14 | 33.2 | 16.1 | 26.1 | 16.6 |
| ø10 | KQG2H10-00-F | 17 | 35 | 17 | 41.5 | 26 |
| ø12 | KQG2H12-00-F | 19 | 38.2 | 18.6 | 58.3 | 32.2 |
| ø16 | KQG2H16-00-F | 24.6 | 42.6 | 20.8 | 113 | 53.7 |

*1 For the ø16, this dimension refers to the O.D. of the release button.
 *2 Value of FEP tubing
 Value of nylon tubing for ø16 only



EHEDG
Metric M, G
KFG2H□-E
Compliant

Clean Design

Metric M, G
KFG2H□-C

FDA Compliant

Metric M, R, Rc
KQG2-F

Inch UNF, NPT
KQG2-F

Metric G
KQG2-F

Metric M, R, Rc
KQB2-F

Inch UNF, NPT
KQB2-F

Metric G
KQB2-F

Metric R, Rc
KFG2-F

Inch NPT
KFG2-F

Metric G
KFG2-F

Precautions

KQG2-F Series

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

Dimensions

Male Elbow: KQG2L



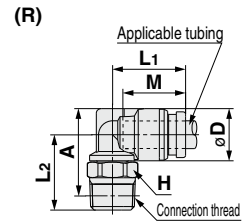
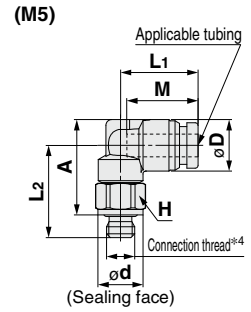
| Applicable tubing O.D. [mm] | Connection thread R, M | Model | H (Width across flats) | øD ^{*1} | ød | L1 | L2 | A ^{*2} | M | Effective area [mm ²] ^{*3} | Weight [g] | |
|-----------------------------|------------------------|--------------|------------------------|------------------|----|------|------|-----------------|------|---|------------|------|
| ø3.2 | M5 x 0.8 | KQG2L23-M5-F | 8 | 8.3 | 8 | 13.1 | 15.9 | 16.1 | 12 | 2.6 | 6.5 | |
| | 1/8 | KQG2L23-01-F | 10 | | | 14.9 | 15.9 | 3 | | | | 7.6 |
| | 1/4 | KQG2L23-02-F | 14 | | | 18.7 | 18.1 | 3 | | | | 16 |
| ø4 | M5 x 0.8 | KQG2L04-M5-F | 8 | 9.1 | 8 | 13.7 | 16.3 | 16.9 | 12.6 | 3.5 | 7.1 | |
| | 1/8 | KQG2L04-01-F | 10 | | | 15.3 | 16.7 | 4.2 | | | | 8.5 |
| | 1/4 | KQG2L04-02-F | 14 | | | 19.1 | 18.9 | 4.2 | | | | 16.8 |
| ø6 | M5 x 0.8 | KQG2L06-M5-F | 8 | 11.4 | 8 | 14.7 | 17.4 | 19.1 | 13.6 | 3.5 | 9 | |
| | 1/8 | KQG2L06-01-F | 10 | | | 16.4 | 19 | 11.4 | | | | 10.1 |
| | 1/4 | KQG2L06-02-F | 14 | | | 20.2 | 21.2 | 11.4 | | | | 18.4 |
| ø8 | 3/8 | KQG2L06-03-F | 17 | 13.7 | — | 15.9 | 21.6 | 22.2 | 16.1 | 21.6 | 20.3 | |
| | 1/8 | KQG2L08-01-F | 12 | | | 18.6 | 18.3 | 22 | | | | 14.6 |
| | 1/4 | KQG2L08-02-F | 14 | | | 19.1 | 21.5 | 23.6 | | | | 20.3 |
| ø10 | 3/8 | KQG2L08-03-F | 17 | 16.6 | — | 19.1 | 22.9 | 24.6 | 17 | 35.2 | 33.6 | |
| | 1/8 | KQG2L10-01-F | 12 | | | 20 | 19.7 | 24.9 | | | | 20.2 |
| | 1/4 | KQG2L10-02-F | 14 | | | 21 | 22.9 | 26.5 | | | | 23.3 |
| ø12 | 3/8 | KQG2L10-03-F | 17 | 18.7 | — | 21 | 24.3 | 27.5 | 18.6 | 50.2 | 33.7 | |
| | 1/2 | KQG2L10-04-F | 22 | | | 28.5 | 30.4 | 60.1 | | | | |
| | 1/4 | KQG2L12-02-F | 14 | | | 22.6 | 24 | 28.6 | | | | 27.1 |
| ø16 | 3/8 | KQG2L12-03-F | 17 | 24.6 | — | 23.6 | 25.3 | 29.5 | 20.8 | 71 | 46.3 | |
| | 1/2 | KQG2L12-04-F | 22 | | | 29.5 | 32.4 | 58.7 | | | | |
| | 3/8 | KQG2L16-03-F | 19 | | | 26.3 | 28 | 34.5 | | | | 20.8 |
| | 1/2 | KQG2L16-04-F | 22 | | | 27.3 | 31.8 | 37 | | 100 | 61.3 | |

*1 For the ø16, 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 ø16 only

*4 In the case of M5, the screw length (øD/2 + L2 - A) is longer than that of the KQG2 series.



Male Branch Tee: KQG2T



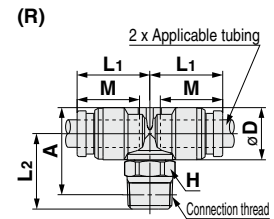
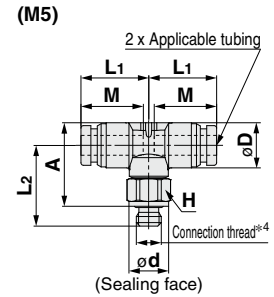
| Applicable tubing O.D. [mm] | Connection thread R, M | Model | H (Width across flats) | øD ^{*1} | ød | L1 | L2 | A ^{*2} | M | Effective area [mm ²] ^{*3} | Weight [g] | |
|-----------------------------|------------------------|--------------|------------------------|------------------|----|------|------|-----------------|------|---|------------|------|
| ø3.2 | M5 x 0.8 | KQG2T23-M5-F | 8 | 8.3 | 8 | 13.1 | 15.9 | 16.1 | 12 | 3.2 | 8.3 | |
| | 1/8 | KQG2T23-01-F | 10 | | | 14.9 | 15.9 | 3.4 | | | | 9.4 |
| | 1/4 | KQG2T23-02-F | 14 | | | 18.7 | 18.1 | 3.4 | | | | 17.7 |
| ø4 | M5 x 0.8 | KQG2T04-M5-F | 8 | 9.1 | 8 | 13.7 | 16.3 | 16.9 | 12.6 | 4.5 | 9.2 | |
| | 1/8 | KQG2T04-01-F | 10 | | | 15.3 | 16.7 | 6 | | | | 10.4 |
| | 1/4 | KQG2T04-02-F | 14 | | | 19.1 | 18.9 | 6 | | | | 18.8 |
| ø6 | M5 x 0.8 | KQG2T06-M5-F | 8 | 11.4 | 8 | 14.7 | 17.4 | 19.1 | 13.6 | 4.5 | 12.1 | |
| | 1/8 | KQG2T06-01-F | 10 | | | 16.4 | 19 | 13.4 | | | | |
| | 1/4 | KQG2T06-02-F | 14 | | | 15.9 | 20.2 | 21.2 | | | | 13.9 |
| ø8 | 3/8 | KQG2T06-03-F | 17 | 13.7 | — | 15.9 | 21.6 | 22.2 | 16.1 | 26.3 | 25.5 | |
| | 1/8 | KQG2T08-01-F | 12 | | | 18.6 | 18.3 | 22 | | | | 20 |
| | 1/4 | KQG2T08-02-F | 14 | | | 19.1 | 21.5 | 23.6 | | | | 26.3 |
| ø10 | 3/8 | KQG2T08-03-F | 17 | 16.6 | — | 19.1 | 22.9 | 24.6 | 17 | 40.8 | 36.8 | |
| | 1/8 | KQG2T10-01-F | 12 | | | 20 | 19.7 | 24.9 | | | | 28.4 |
| | 1/4 | KQG2T10-02-F | 14 | | | 21 | 22.9 | 26.5 | | | | 31.1 |
| ø12 | 3/8 | KQG2T10-03-F | 17 | 18.7 | — | 21 | 24.3 | 27.5 | 18.6 | 57.2 | 41.4 | |
| | 1/2 | KQG2T10-04-F | 22 | | | 28.5 | 30.4 | 68 | | | | |
| | 1/4 | KQG2T12-02-F | 14 | | | 22.6 | 24 | 28.6 | | | | 37.8 |
| ø16 | 3/8 | KQG2T12-03-F | 17 | 24.6 | — | 23.6 | 25.3 | 29.5 | 20.8 | 71 | 63.7 | |
| | 1/2 | KQG2T12-04-F | 22 | | | 29.5 | 32.4 | 68.8 | | | | |
| | 3/8 | KQG2T16-03-F | 19 | | | 26.3 | 28 | 34.5 | | | | 20.8 |
| | 1/2 | KQG2T16-04-F | 22 | | | 27.3 | 31.8 | 37 | | 100 | 77.6 | |

*1 For the ø16, 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 ø16 only

*4 In the case of M5, the screw length (øD/2 + L2 - A) is longer than that of the KQG2 series.



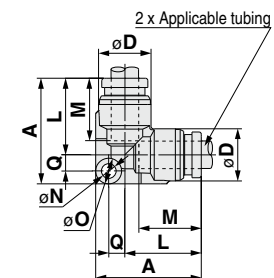
Union Elbow: KQG2L



| Applicable tubing O.D. [mm] | Model | øD ^{*1} | L | A | Q | M | øN | øO | Effective area [mm ²] ^{*2} | Weight [g] |
|-----------------------------|--------------|------------------|------|------|-----|------|-----|-----|---|------------|
| ø3.2 | KQG2L23-00-F | 8.3 | 13.6 | 19.3 | 2.9 | 12 | 3.2 | 5.6 | 3 | 6.3 |
| ø4 | KQG2L04-00-F | 9.1 | 14.6 | 20.5 | 3.1 | 12.6 | 3.2 | 5.6 | 4.2 | 7.4 |
| ø6 | KQG2L06-00-F | 11.4 | 16.6 | 23 | 3.6 | 13.6 | 3.2 | 5.6 | 11.4 | 11 |
| ø8 | KQG2L08-00-F | 13.7 | 20.1 | 29.1 | 5 | 16.1 | 4.2 | 8 | 21.6 | 20.2 |
| ø10 | KQG2L10-00-F | 16.6 | 22 | 31.7 | 5.7 | 17 | 4.2 | 8 | 35.2 | 29.6 |
| ø12 | KQG2L12-00-F | 18.7 | 24.6 | 35 | 6.4 | 18.6 | 4.2 | 8 | 50.2 | 37.1 |
| ø16 | KQG2L16-00-F | 24.6 | 28.8 | 40.5 | 7.7 | 20.8 | 4.2 | 8 | 100 | 59.7 |

*1 For the ø16, this dimension refers to the O.D. of the release button.

*2 Value of FEP tubing
Value of nylon tubing for ø16 only



Stainless Steel 316 One-touch Fittings **KQG2-F Series**

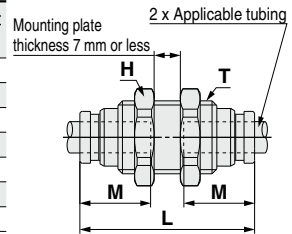
Applicable Tubing: Metric Size, Connection Thread: M, R, Rc

Dimensions

Bulkhead Union: KQG2E



| Applicable tubing O.D. [mm] | Model | T (M) | H (Width across flats) | L | Mounting hole | M | Effective area [mm ²] ^{*1} | Weight [g] |
|-----------------------------|--------------|---------|------------------------|------|---------------|------|---|------------|
| ø3.2 | KQG2E23-00-F | M10 x 1 | 12 | 32.2 | 11 | 12 | 3.4 | 14 |
| ø4 | KQG2E04-00-F | M10 x 1 | 12 | 32.4 | 11 | 12.6 | 5.6 | 14 |
| ø6 | KQG2E06-00-F | M14 x 1 | 17 | 33.6 | 15 | 13.6 | 13.1 | 25.8 |
| ø8 | KQG2E08-00-F | M15 x 1 | 19 | 36.4 | 16 | 16.1 | 26.1 | 30.4 |
| ø10 | KQG2E10-00-F | M18 x 1 | 21 | 37.2 | 19 | 17 | 41.5 | 40.3 |
| ø12 | KQG2E12-00-F | M20 x 1 | 24 | 39.2 | 21 | 18.6 | 58.3 | 49.9 |
| ø16 | KQG2E16-00-F | M27 x 1 | 30 | 42.6 | 28 | 20.8 | 113 | 87.3 |

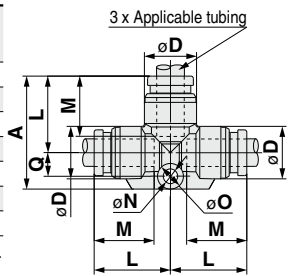


*1 Value of FEP tubing
Value of nylon tubing for ø16 only

Union Tee: KQG2T



| Applicable tubing O.D. [mm] | Model | øD ^{*1} | L | A | Q | M | øN | øO | Effective area [mm ²] ^{*2} | Weight [g] |
|-----------------------------|--------------|------------------|------|------|------|------|-----|-----|---|------------|
| ø3.2 | KQG2T23-00-F | 8.3 | 13.6 | 20.5 | 4.1 | 12 | 3.2 | 5.6 | 3.4 | 7.9 |
| ø4 | KQG2T04-00-F | 9.1 | 14.6 | 21.8 | 4.4 | 12.6 | 3.2 | 5.6 | 6.4 | 9.5 |
| ø6 | KQG2T06-00-F | 11.4 | 16.6 | 24.6 | 5.2 | 13.6 | 3.2 | 5.6 | 13.4 | 14.2 |
| ø8 | KQG2T08-00-F | 13.7 | 20.1 | 31.1 | 7 | 16.1 | 4.2 | 8 | 25.6 | 24.4 |
| ø10 | KQG2T10-00-F | 16.6 | 22 | 34 | 8 | 17 | 4.2 | 8 | 40 | 36.8 |
| ø12 | KQG2T12-00-F | 18.7 | 24.6 | 37.7 | 9.1 | 18.6 | 4.2 | 8 | 57.4 | 46.9 |
| ø16 | KQG2T16-00-F | 24.6 | 28.8 | 43.4 | 10.6 | 20.8 | 4.2 | 8 | 100 | 75.5 |

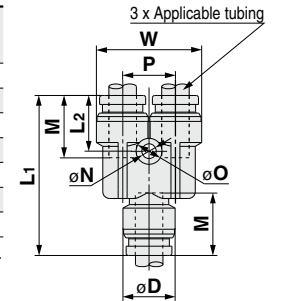


*1 For the ø16, this dimension refers to the O.D. of the release button.
*2 Value of FEP tubing
Value of nylon tubing for ø16 only

Union "Y": KQG2U



| Applicable tubing O.D. [mm] | Model | øD ^{*1} | W | L ₁ | L ₂ | P | M | øN | øO | Effective area [mm ²] ^{*2} | Weight [g] |
|-----------------------------|--------------|------------------|------|----------------|----------------|------|------|-----|-----|---|------------|
| ø3.2 | KQG2U23-00-F | 8.3 | 16.4 | 29 | 11 | 8.1 | 12 | 3.2 | 5.6 | 3.4 | 9.2 |
| ø4 | KQG2U04-00-F | 9.1 | 18.2 | 30.4 | 11.3 | 9.1 | 12.6 | 3.2 | 5.6 | 4.2 | 11.1 |
| ø6 | KQG2U06-00-F | 11.4 | 22.9 | 34.9 | 12.2 | 11.5 | 13.6 | 3.2 | 5.6 | 13.4 | 18.8 |
| ø8 | KQG2U08-00-F | 13.7 | 28.3 | 40.1 | 14.1 | 14.6 | 16.1 | 4.2 | 8 | 25.6 | 29.7 |
| ø10 | KQG2U10-00-F | 16.6 | 34.2 | 44 | 14.4 | 17.6 | 17 | 4.2 | 8 | 40 | 47.4 |
| ø12 | KQG2U12-00-F | 18.7 | 38.5 | 48.4 | 15.8 | 19.8 | 18.6 | 4.2 | 8 | 57.4 | 62.1 |
| ø16 | KQG2U16-00-F | 24.6 | 49.3 | 56.6 | 17.3 | 26 | 20.8 | 4.2 | 8 | 113 | 110.2 |

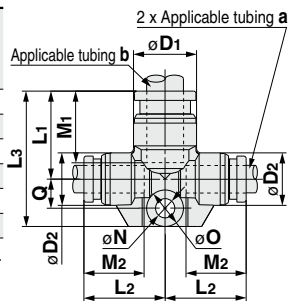


*1 For the ø16, this dimension refers to the O.D. of the release button.
*2 Value of FEP tubing
Value of nylon tubing for ø16 only

Different Diameter Tee: KQG2T



| Applicable tubing O.D. [mm] | | Model | øD ^{*1} | øD ₂ | L ₁ | L ₂ | L ₃ | Q | M ₁ | M ₂ | øN | øO | Effective area [mm ²] ^{*2} | Weight [g] |
|-----------------------------|-----|--------------|------------------|-----------------|----------------|----------------|----------------|-----|----------------|----------------|-----|-----|---|------------|
| ø3.2 | ø4 | KQG2T23-04-F | 9.1 | 8.3 | 14.2 | 14.1 | 21.1 | 4.1 | 12.6 | 12 | 3.2 | 5.6 | 3.8 | 8.5 |
| ø4 | ø6 | KQG2T04-06-F | 11.4 | 9.1 | 15.6 | 15.7 | 22.8 | 4.4 | 13.6 | 12.6 | 3.2 | 5.6 | 7.1 | 11.5 |
| ø6 | ø8 | KQG2T06-08-F | 13.7 | 11.4 | 19.1 | 17.7 | 29.5 | 6.4 | 16.1 | 13.6 | 4.2 | 8 | 16.4 | 20 |
| ø8 | ø10 | KQG2T08-10-F | 16.6 | 13.7 | 21 | 21.2 | 32.1 | 7.1 | 17 | 16.1 | 4.2 | 8 | 36 | 29.8 |
| ø10 | ø12 | KQG2T10-12-F | 18.7 | 16.6 | 23.6 | 23.1 | 35.7 | 8.1 | 18.6 | 17 | 4.2 | 8 | 56 | 41.3 |
| ø12 | ø16 | KQG2T12-16-F | 24.6 | 18.7 | 26.8 | 26.7 | 39.9 | 9.1 | 20.8 | 18.6 | 4.2 | 8 | 108.5 | 58 |

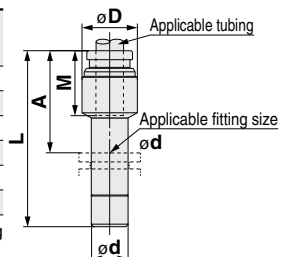


*1 For the ø16, this dimension refers to the O.D. of the release button.
*2 Value of FEP tubing

Plug-in Reducer: KQG2R



| Applicable tubing O.D. [mm] | Applicable fitting size ød | Model | øD | L | A | M | Effective area [mm ²] ^{*1} | Weight [g] |
|-----------------------------|----------------------------|--------------|----|------|------|------|---|------------|
| ø3.2 | ø4 | KQG2R23-04-F | 9 | 32.9 | 20.3 | 12 | 3.4 | 4.7 |
| ø4 | ø6 | KQG2R04-06-F | 9 | 34.4 | 20.8 | 12.6 | 5.6 | 6.7 |
| ø6 | ø8 | KQG2R06-08-F | 12 | 38.4 | 22.3 | 13.6 | 13.1 | 12.1 |
| ø8 | ø10 | KQG2R08-10-F | 14 | 41.9 | 24.9 | 16.1 | 26.1 | 18.3 |
| ø10 | ø12 | KQG2R10-12-F | 17 | 44.8 | 26.2 | 17 | 41.5 | 26.5 |
| ø12 | ø16 | KQG2R12-16-F | 19 | 42.9 | 22.1 | 18.6 | 58.3 | 35.4 |



*1 Value of FEP tubing

EHEDG
Compliant

Metric M, G
KFG2H□-E

Clean
Design

Metric M, G
KFG2H□-C

FDA
Compliant

Metric M, R, Rc
KQG2-F

Inch UNF, NPT
KQG2-F

Metric G
KQG2-F

Metric M, R, Rc
KQB2-F

Inch UNF, NPT
KQB2-F

Metric G
KQB2-F

Metric R, Rc
KFG2-F

Inch NPT
KFG2-F

Metric G
KFG2-F

Precautions

KQG2-F Series

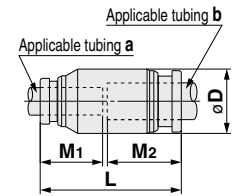
Applicable Tubing: Metric Size, Connection Thread: M, R, Rc

Dimensions

Different Diameter Straight: KQG2H



| Applicable tubing O.D. [mm] | | Model | øD ^{*1} | L | M1 | M2 | Effective area [mm ²] ^{*2} | Weight [g] |
|-----------------------------|-----|--------------|------------------|------|------|------|---|------------|
| a | b | | | | | | | |
| ø3.2 | ø4 | KQG2H23-04-F | 9 | 25.6 | 12 | 12.6 | 3.4 | 6.5 |
| ø4 | ø6 | KQG2H04-06-F | 12 | 27.2 | 12.6 | 13.6 | 5.6 | 11.6 |
| ø6 | ø8 | KQG2H06-08-F | 14 | 30.7 | 13.6 | 16.1 | 13.1 | 16.3 |
| ø8 | ø10 | KQG2H08-10-F | 17 | 34.1 | 16.1 | 17 | 26.1 | 26 |
| ø10 | ø12 | KQG2H10-12-F | 19 | 36.6 | 17 | 18.6 | 41.5 | 33.3 |
| ø12 | ø16 | KQG2H12-16-F | 24.6 | 40.4 | 18.6 | 20.8 | 58.3 | 54.7 |

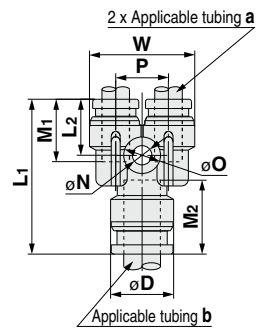


*1 For the ø16, this dimension refers to the O.D. of the release button.
*2 Value of FEP tubing

Different Diameter Union "Y": KQG2U



| Applicable tubing O.D. [mm] | | Model | øD ^{*1} | L1 | L2 | P | W | M1 | M2 | øN | øO | Effective area [mm ²] ^{*2} | Weight [g] |
|-----------------------------|-----|--------------|------------------|------|------|------|------|------|------|-----|-----|---|------------|
| a | b | | | | | | | | | | | | |
| ø3.2 | ø4 | KQG2U23-04-F | 9.1 | 27 | 10.8 | 8.1 | 16.4 | 12 | 12.6 | 3.2 | 5.6 | 3.2 | 8.5 |
| ø4 | ø6 | KQG2U04-06-F | 11.4 | 29.3 | 11.2 | 9.1 | 18.2 | 12.6 | 13.6 | 3.2 | 5.6 | 4.2 | 11.9 |
| ø6 | ø8 | KQG2U06-08-F | 13.7 | 33.7 | 12.2 | 11.5 | 22.9 | 13.6 | 16.1 | 4.2 | 8 | 13.4 | 19.3 |
| ø8 | ø10 | KQG2U08-10-F | 16.6 | 38.3 | 13.8 | 14.6 | 28.3 | 16.1 | 17 | 4.2 | 8 | 25.6 | 31.6 |
| ø10 | ø12 | KQG2U10-12-F | 18.7 | 43 | 14 | 17.6 | 34.2 | 17 | 18.6 | 4.2 | 8 | 40 | 47.6 |
| ø12 | ø16 | KQG2U12-16-F | 24.6 | 47.4 | 15.6 | 19.8 | 38.5 | 18.6 | 20.8 | 4.2 | 8 | 57.4 | 67.6 |

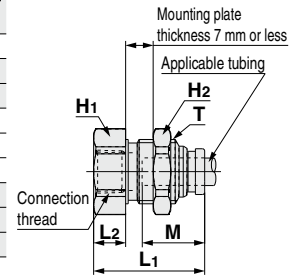


*1 For the ø16, this dimension refers to the O.D. of the release button.
*2 Value of FEP tubing

Bulkhead Connector: KQG2E



| Applicable tubing O.D. [mm] | Connection thread Rc | Model | T (M) | Width across flats | | L1 | L2 | Mounting hole | M | Effective area [mm ²] ^{*1} | Weight [g] |
|-----------------------------|----------------------|--------------|---------|--------------------|------|------|------|---------------|------|---|------------|
| | | | | H1 | H2 | | | | | | |
| ø3.2 | 1/4 | KQG2E23-02-F | M10 x 1 | 17 | 12 | 31 | 14.8 | 11 | 12 | 3.4 | 26.1 |
| | | | | | | | | | | | |
| ø4 | 1/8 | KQG2E04-01-F | M10 x 1 | 14 | 12 | 25.8 | 9.7 | 11 | 12.6 | 5.6 | 16 |
| | | | | | | | | | | | |
| ø6 | 1/4 | KQG2E04-02-F | M14 x 1 | 17 | 17 | 30.9 | 14.8 | 15 | 13.6 | 13.1 | 30.9 |
| | | | | | | | | | | | |
| | 3/8 | KQG2E06-01-F | M14 x 1 | 17 | 17 | 24.2 | 7 | 15 | 13.6 | 13.1 | 24.4 |
| | | | | | | | | | | | |
| ø8 | 1/8 | KQG2E06-02-F | M15 x 1 | 17 | 19 | 30.9 | 13.7 | 16 | 16.1 | 26.1 | 32 |
| | | | | | | | | | | | |
| | 3/8 | KQG2E06-03-F | M15 x 1 | 17 | 19 | 26.3 | 8.1 | 16 | 16.1 | 26.1 | 28 |
| | | | | | | | | | | | |
| ø10 | 1/4 | KQG2E08-01-F | M18 x 1 | 19 | 21 | 31.3 | 13.1 | 19 | 17 | 41.5 | 42.8 |
| | | | | | | | | | | | |
| | 3/8 | KQG2E08-02-F | M18 x 1 | 19 | 21 | 33 | 14.4 | 19 | 17 | 41.5 | 37.5 |
| | | | | | | | | | | | |
| ø12 | 3/8 | KQG2E08-03-F | M20 x 1 | 21 | 24 | 34 | 14.4 | 21 | 18.6 | 58.3 | 50.3 |
| | | | | | | | | | | | |
| | 1/2 | KQG2E10-02-F | M20 x 1 | 24 | 24 | 39.3 | 19.7 | 21 | 18.6 | 58.3 | 60.7 |
| | | | | | | | | | | | |
| 3/8 | KQG2E12-03-F | M27 x 1 | 29 | 30 | 35.3 | 13.3 | 28 | 20.8 | 20.8 | 96 | 107.8 |
| | | | | | | | | | | | |
| 1/2 | KQG2E16-03-F | M27 x 1 | 29 | 30 | 40.6 | 18.6 | 28 | 20.8 | 20.8 | 113 | 114.6 |
| | | | | | | | | | | | |



*1 Value of FEP tubing
Value of nylon tubing for ø16 only

Stainless Steel 316 One-touch Fittings **KQG2-F Series**

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

Dimensions

Extended Male Elbow: KQG2W



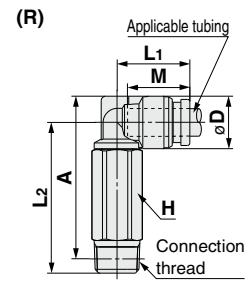
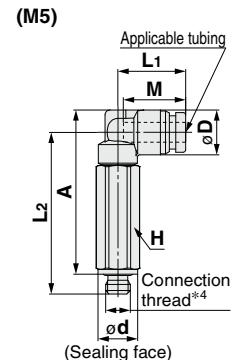
| Applicable tubing O.D. [mm] | Connection thread R, M | Model | H (Width across flats) | øD*1 | ød | L1 | L2 | A*2 | M | Effective area [mm ²]*3 | Weight [g] |
|-----------------------------|------------------------|--------------|------------------------|------|----|------|------|------|------|-------------------------------------|------------|
| ø3.2 | M5 x 0.8 | KQG2W23-M5-F | 8 | 8.3 | 8 | 13.1 | 32.3 | 32.5 | 12 | 2.8 | 13.2 |
| | 1/8 | KQG2W23-01-F | 10 | | | | | | | | 14.7 |
| | 1/4 | KQG2W23-02-F | 14 | | | | | | | | 33.1 |
| ø4 | M5 x 0.8 | KQG2W04-M5-F | 8 | 9.1 | 8 | 13.7 | 32.7 | 33.3 | 12.6 | 3 | 13.8 |
| | 1/8 | KQG2W04-01-F | 10 | | | | | | | | 15.6 |
| | 1/4 | KQG2W04-02-F | 14 | | | | | | | | 33.9 |
| ø6 | M5 x 0.8 | KQG2W06-M5-F | 8 | 11.4 | 8 | 14.7 | 33.8 | 35.5 | 13.6 | 3 | 15.7 |
| | 1/8 | KQG2W06-01-F | 10 | | | | | | | | 17.2 |
| | 1/4 | KQG2W06-02-F | 14 | | | | | | | | 35.5 |
| ø8 | M5 x 0.8 | KQG2W06-M5-F | 8 | 11.4 | 8 | 14.7 | 33.8 | 35.5 | 13.6 | 3 | 15.7 |
| | 1/8 | KQG2W06-01-F | 10 | | | | | | | | 17.2 |
| | 1/4 | KQG2W06-02-F | 14 | | | | | | | | 35.5 |
| ø10 | M5 x 0.8 | KQG2W06-M5-F | 8 | 11.4 | 8 | 14.7 | 33.8 | 35.5 | 13.6 | 3 | 15.7 |
| | 1/8 | KQG2W06-01-F | 10 | | | | | | | | 17.2 |
| | 1/4 | KQG2W06-02-F | 14 | | | | | | | | 35.5 |
| ø12 | M5 x 0.8 | KQG2W06-M5-F | 8 | 11.4 | 8 | 14.7 | 33.8 | 35.5 | 13.6 | 3 | 15.7 |
| | 1/8 | KQG2W06-01-F | 10 | | | | | | | | 17.2 |
| | 1/4 | KQG2W06-02-F | 14 | | | | | | | | 35.5 |
| ø16 | M5 x 0.8 | KQG2W06-M5-F | 8 | 11.4 | 8 | 14.7 | 33.8 | 35.5 | 13.6 | 3 | 15.7 |
| | 1/8 | KQG2W06-01-F | 10 | | | | | | | | 17.2 |
| | 1/4 | KQG2W06-02-F | 14 | | | | | | | | 35.5 |

*1 For the ø16, 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 ø16 only

*4 In the case of M5, the screw length (øD/2 + L2 - A) is longer than that of the KQG2 series.

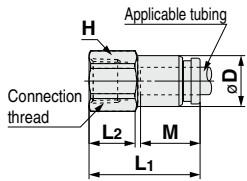


Female Connector: KQG2F



| Applicable tubing O.D. [mm] | Connection thread Rc | Model | H (Width across flats) | øD*1 | L1 | L2 | M | Effective area [mm ²]*2 | Weight [g] |
|-----------------------------|----------------------|--------------|------------------------|------|------|------|------|-------------------------------------|------------|
| ø3.2 | 1/8 | KQG2F23-01-F | 12 | 8 | 23.3 | 9.8 | 12 | 3.4 | 8.9 |
| | 1/4 | KQG2F04-01-F | 12 | | | | | | 9.2 |
| ø4 | 1/8 | KQG2F04-01-F | 12 | 8.7 | 23.7 | 9.8 | 12.6 | 5.6 | 21.6 |
| | 1/4 | KQG2F04-02-F | 17 | | | | | | 10.5 |
| ø6 | 1/8 | KQG2F06-01-F | 12 | 11.1 | 24.2 | 10 | 13.6 | 13.1 | 23.1 |
| | 1/4 | KQG2F06-02-F | 17 | | | | | | 24.5 |
| ø8 | 1/8 | KQG2F06-03-F | 19 | 13.4 | 30.6 | 14.2 | 16.1 | 26.1 | 16.3 |
| | 3/8 | KQG2F08-01-F | 14 | | | | | | 25.5 |
| ø10 | 1/4 | KQG2F08-02-F | 17 | 16.4 | 31.6 | 13.9 | 17 | 41.5 | 27 |
| | 3/8 | KQG2F08-03-F | 19 | | | | | | 28.8 |
| ø12 | 1/4 | KQG2F10-02-F | 17 | 18.5 | 32.6 | 13.3 | 18.6 | 58.3 | 30.4 |
| | 3/8 | KQG2F10-03-F | 19 | | | | | | 37.5 |
| ø16 | 1/2 | KQG2F12-02-F | 19 | 24 | 34 | 14.7 | 20.8 | 81 | 32.3 |
| | 3/8 | KQG2F12-03-F | 24 | | | | | | 50.2 |
| ø16 | 1/2 | KQG2F12-04-F | 24 | 24.6 | 39.3 | 18.4 | 20.8 | 113 | 59.7 |
| | 3/8 | KQG2F16-03-F | 24 | | | | | | 57 |

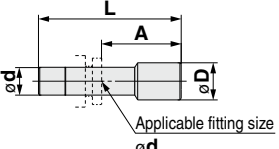
*1 For the ø10, ø12, and ø16, this dimension refers to the O.D. of the release button.
*2 Value of FEP tubing Value of nylon tubing for ø16 only



Plug: KQG2P



| Applicable fitting size øD | Model | øD | L | A | Weight [g] |
|----------------------------|----------|----|------|------|------------|
| ø3.2 | KQG2P-23 | 5 | 28.9 | 16.9 | 2.7 |
| ø4 | KQG2P-04 | 6 | 29.6 | 17 | 4.1 |
| ø6 | KQG2P-06 | 8 | 30.8 | 17.2 | 8.5 |
| ø8 | KQG2P-08 | 10 | 33.7 | 17.6 | 15.5 |
| ø10 | KQG2P-10 | 12 | 34.6 | 17.6 | 24.1 |
| ø12 | KQG2P-12 | 14 | 36.5 | 17.9 | 35.8 |
| ø16 | KQG2P-16 | 18 | 38.6 | 17.8 | 65.5 |



EHEDG Compliant

Metric M, G KFG2H-E

Clean Design

Metric M, G KFG2H-C

FDA Compliant

Metric M, R, Rc KQG2-F

Inch UNF, NPT KQG2-F

Metric G KQG2-F

Metric M, R, Rc KQB2-F

Inch UNF, NPT KQB2-F

Metric G KQB2-F

Metric R, Rc KFG2-F

Inch NPT KFG2-F

Metric G KFG2-F

Precautions