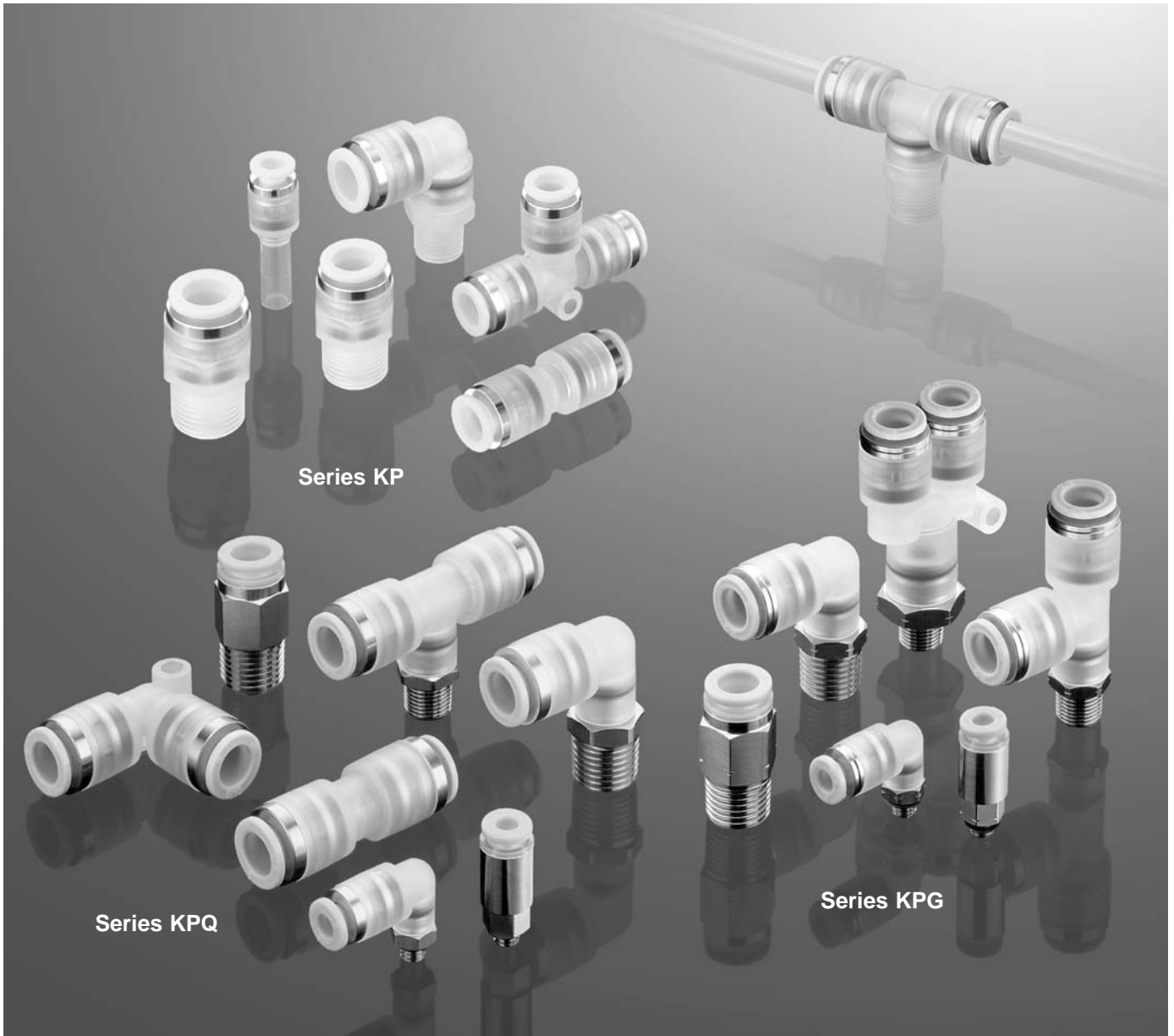


Clean One-touch Fittings and Tubing

Series **KP/KPQ/KPG**

Series **TPH/TPS**



Series KPQ/KPG for drive system air piping added to clean One-touch fitting series KP

K□

M□

H□

D□

MS

T□

LQ

Clean Room

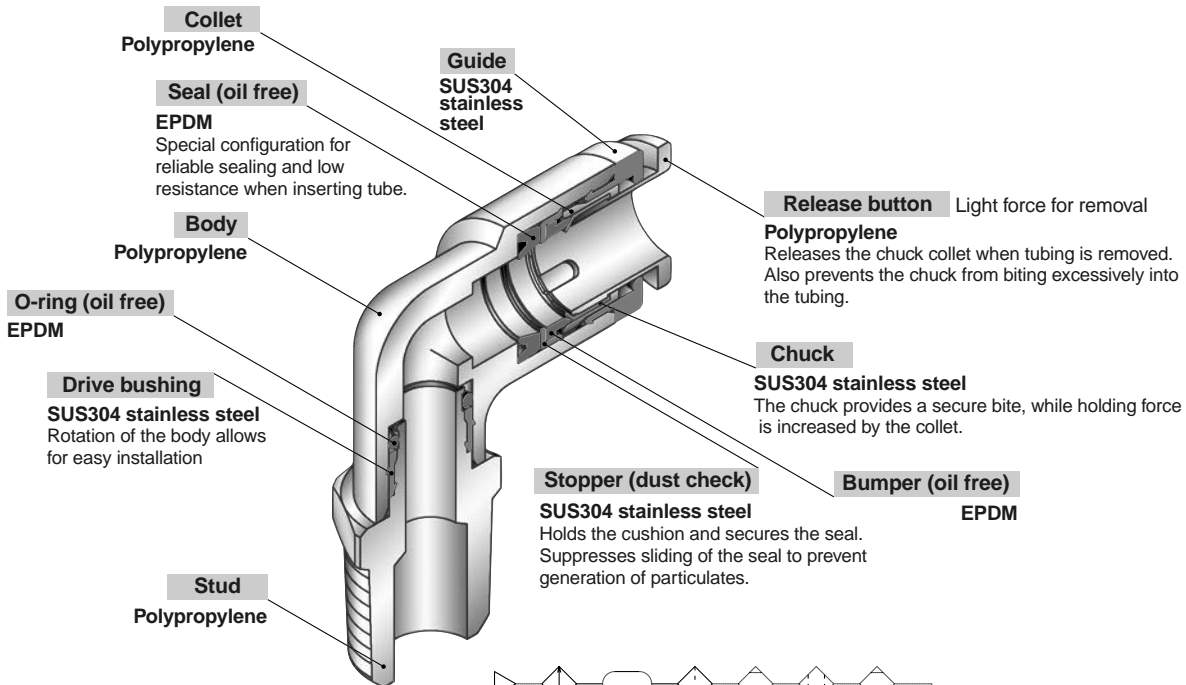
One-touch fittings and tubing for clean room blowing systems



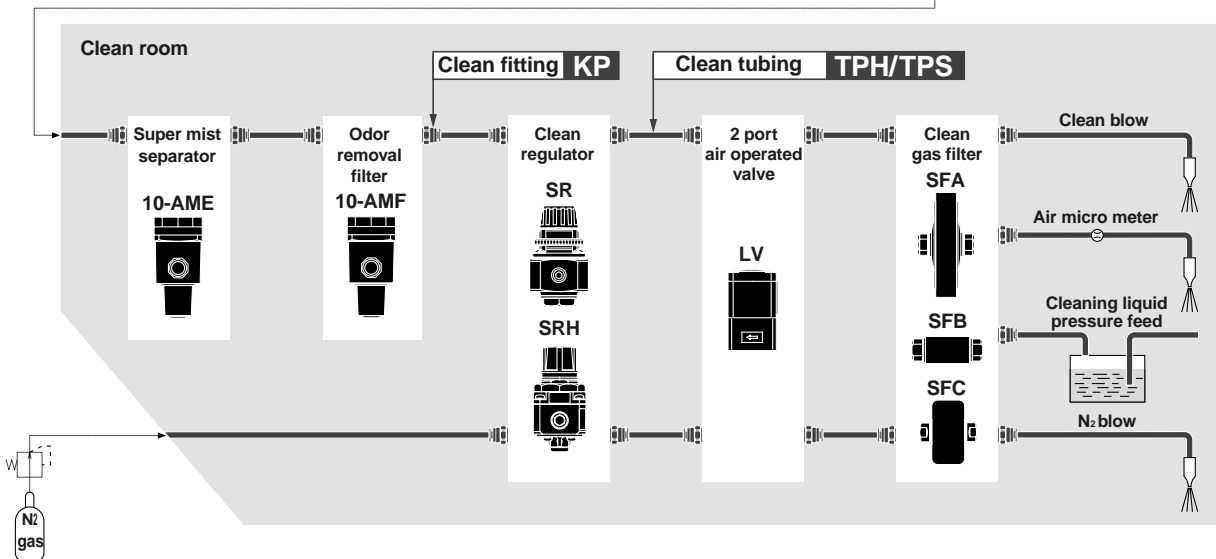
One-touch fittings (for blowing)

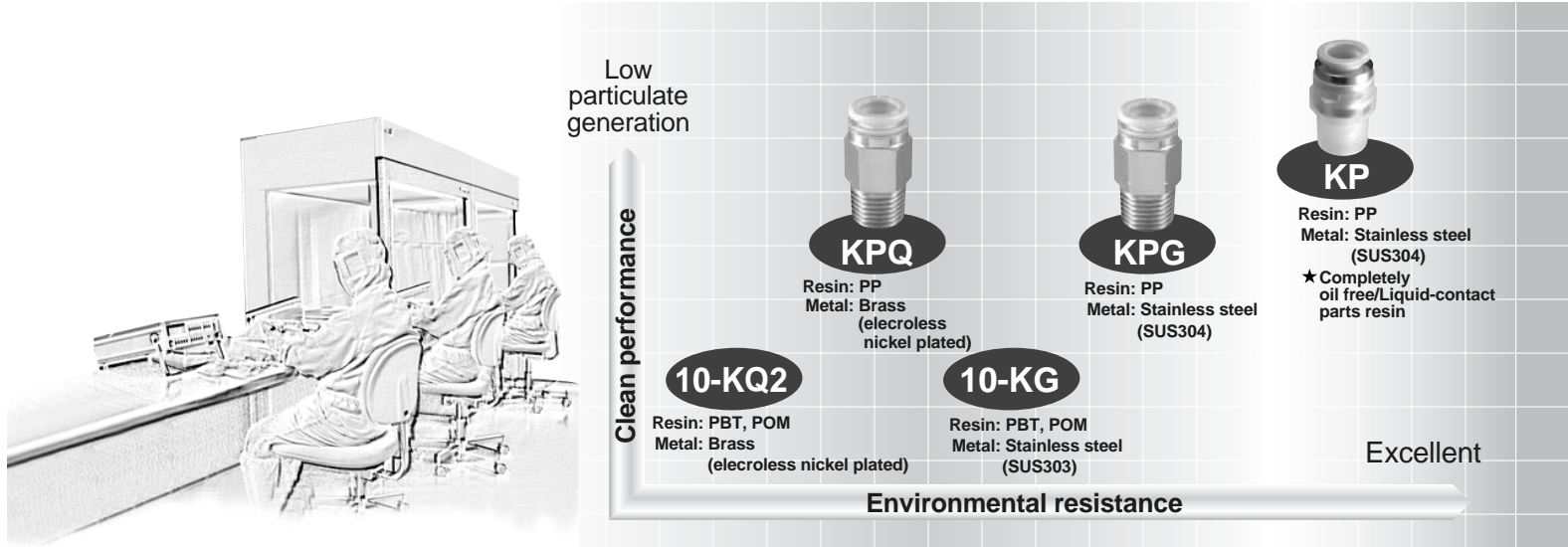
Series KP

- Completely oil free
- Liquid-contact areas are non-metallic
- Parts cleaning, assembly and double packaging in a clean room
- Can be used for vacuum (-100kPa)



■ Clean blowing system





One-touch fittings (for drive system air piping)

Series KPQ/KPG

Brass
(electroless nickel plated)

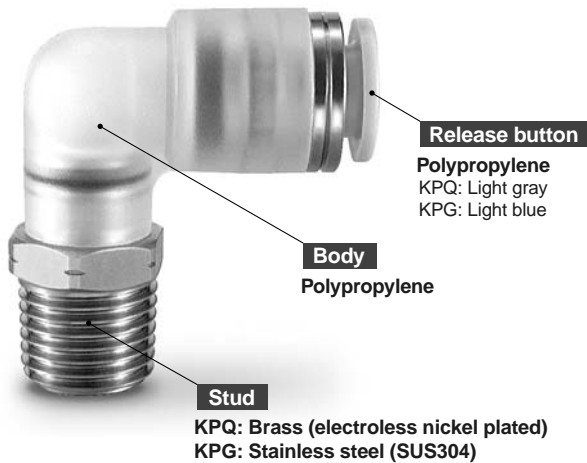
Stainless steel
(SUS304)

- M5 size standardized
- Resin parts are P.P. (polypropylene)

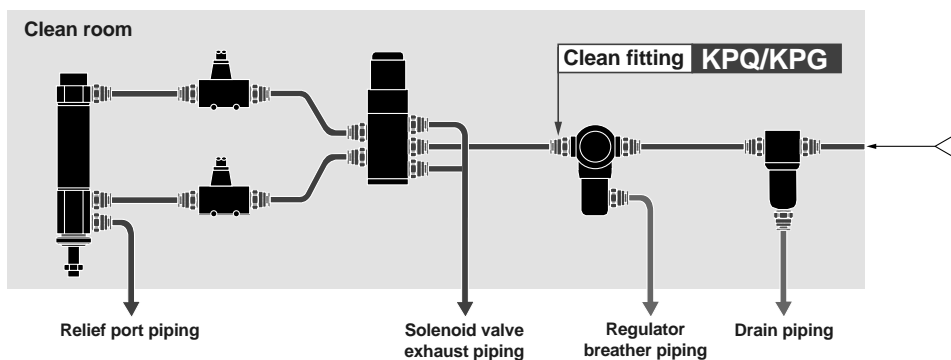


Series KPQ

Series KPG



Drive air piping system



Polyolefin Tubing Series TPH/TPS



| Series | Material | Tubing O.D. mm | | | | | Colour | Tubing length m |
|--------|-----------------|----------------|---|---|----|----|---------------------------|-----------------|
| | | 4 | 6 | 8 | 10 | 12 | | |
| TPH | Polyolefin | ● | ● | ● | ● | ● | White, Black Red, Blue | 20 |
| TPS | Soft Polyolefin | ● | ● | ● | ● | ● | Yellow, Green | 100 |

K□

M□

H□

D□

MS

T□

LQ

Clean Room

For Blowing Series *KP*



⚠ Caution

Series KP is a line of special One-touch fittings for use in clean room blowing and washing lines. Consult SMC regarding other types of applications.

Seal material: The durability of EPDM with respect to mineral oils is inferior, which makes it unsuitable for piping in general pneumatic equipment.

Recommended Applicable Tubing

| | |
|------------------------|---|
| Tubing material | Polyolefin: Series TPH Soft polyolefin: Series TPS |
| Tubing O.D. | ø4, ø6, ø8, ø10, ø12 |

Note 1) Polyurethane tubing: Series TU, Nylon tubing: Series T, and Soft nylon tubing: Series TS can also be used. However, the degree of clean performance will be reduced.

Note 2) Due to the softness of polyurethane tubing, it may fold when being inserted. Hold the end of the tubing and insert it all the way in.

Specifications

| | |
|--|--|
| Particulate generation grade | Grade 1 ^{Note 1)} |
| Fluid | Air, Nitrogen gas, Water (pure water) ^{Note 2)} |
| Maximum operating pressure (20°C) | 1MPa ^{Note 3)} |
| Operating vacuum pressure | -100kPa |
| Proof pressure (20°C) | 3MPa |
| Ambient and fluid temperature | -20°C to 80°C |
| Threads | JIS B0203 (taper threads for piping) |

Note 1) Refer to particulate generation grade classifications.

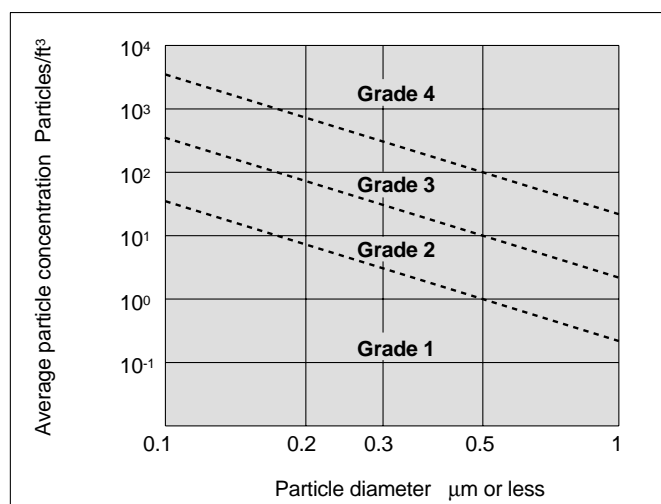
Note 2) Consult SMC regarding other fluids.

Note 3) The maximum operating pressure is the value at 20°C. Refer to the operating pressure curve for other temperatures.

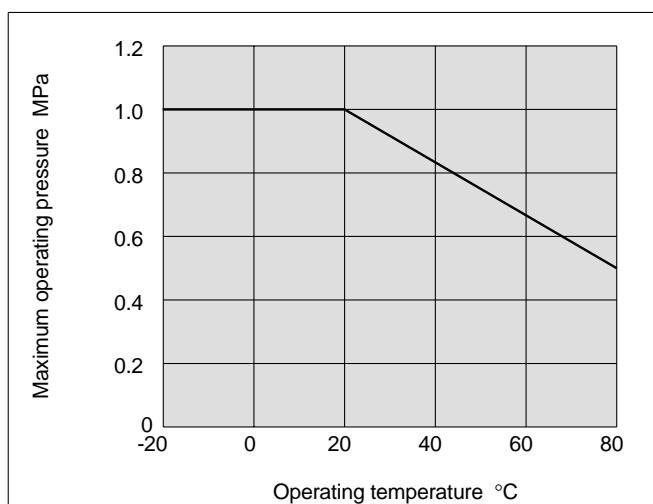
Principal Part Materials

| | |
|--------------------------------------|------------------------|
| Body | Polypropylene resin |
| Stud | Polypropylene resin |
| Chuck | SUS304 stainless steel |
| Guide, Stopper, Drive bushing | SUS304 stainless steel |
| Collet, Release button | Polypropylene resin |
| Seal, O-ring, Bumper | EPDM |

Particulate Generation Grade Classifications



Relationship of Operating Temperature and Maximum Operating Pressure



How to Order

KP H 06 01

Clean One-touch fitting (for blowing)

Model

| | |
|---|--------------------------------|
| H | Male connector, Straight union |
| L | Union elbow, Male elbow |
| T | Male branch tee, Union tee |
| Y | Male run tee |
| U | Male branch, Union "Y" |
| R | Plug-in reducer |

Port size/Applicable tubing O.D.

| | | |
|-------------------------|----|------------------|
| Thread connection | 01 | R 1/8 |
| | 02 | R 1/4 |
| | 03 | R 3/8 |
| | 04 | R 1/2 |
| Tubing (rod) connection | 00 | Same dia. tubing |
| | 04 | ø4 |
| | 06 | ø6 |
| | 08 | ø8 |
| | 10 | ø10 |
| | 12 | ø12 |

Different dia. tubing (plug-in reducer)

Applicable tubing O.D.

| | |
|----|-----|
| 04 | ø4 |
| 06 | ø6 |
| 08 | ø8 |
| 10 | ø10 |
| 12 | ø12 |

KP P 08

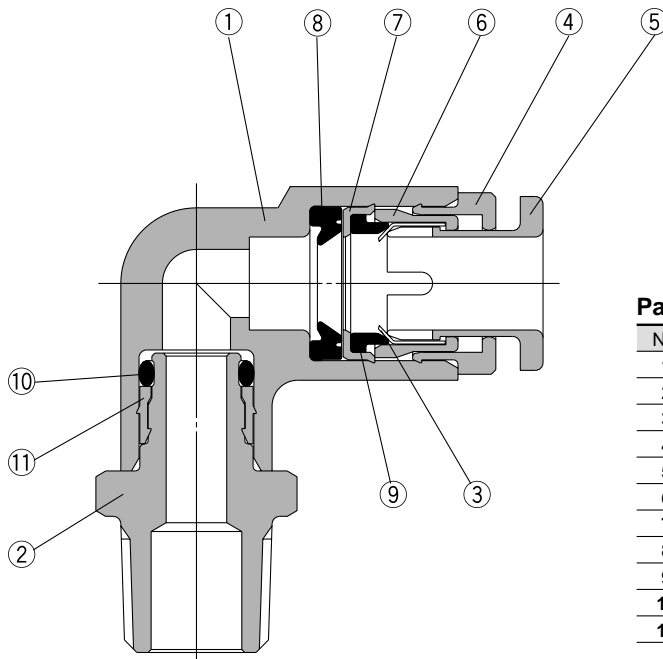
Applicable fitting size

| | |
|----|-----|
| 04 | ø4 |
| 06 | ø6 |
| 08 | ø8 |
| 10 | ø10 |
| 12 | ø12 |

Plug

Clean One-touch fitting

Construction



Parts list

| No. | Description | Material |
|-----|----------------|--|
| 1 | Body | Polypropylene resin |
| 2 | Stud | Polypropylene resin |
| 3 | Chuck | SUS304 stainless steel |
| 4 | Guide | SUS304 stainless steel |
| 5 | Release button | Polypropylene resin (color: light green) |
| 6 | Collet | Polypropylene resin |
| 7 | Stopper | SUS304 stainless steel |
| 8 | Seal | EPDM |
| 9 | Bumper | EPDM |
| 10 | O-ring | EPDM |
| 11 | Drive bushing | SUS304 stainless steel |

K

M

H

D

MS

T

LQ

Clean Room

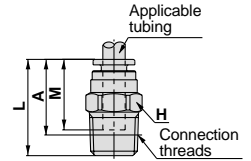
Series KP

Dimensions

Male Connector: KPH



| Applicable tubing O.D. mm | Connection threads R | Model | H (width across flats) | L | A* | M | Effective area mm ² | | Weight g |
|---------------------------|----------------------|----------|------------------------|------|------|------|--------------------------------|-----|----------|
| | | | | | | | TPH | TPS | |
| 4 | 1/8 | KPH04-01 | 12 | 25.4 | 21.5 | 18 | 4 | 4 | 3 |
| | 1/4 | KPH04-02 | 14 | 25.4 | 19.5 | | | | 4 |
| 6 | 1/8 | KPH06-01 | 14 | 25.9 | 22 | 19.5 | 10 | 10 | 4 |
| | 1/4 | KPH06-02 | | 26.4 | 20.5 | | | | 5 |
| 8 | 1/8 | KPH08-01 | 17 | 32.3 | 28.5 | 21.5 | 26 | 18 | 6 |
| | 1/4 | KPH08-02 | | 30.3 | 24.5 | | | | 7 |
| 10 | 1/4 | KPH10-02 | 19 | 37.5 | 32 | 24 | 41 | 29 | 10 |
| | 3/8 | KPH10-03 | | 33 | 27 | | | | 11 |
| 12 | 3/8 | KPH12-03 | 22 | 34 | 28 | 25 | 58 | 46 | 12 |
| | 1/2 | KPH12-04 | | 34.5 | 27 | | | | 13 |

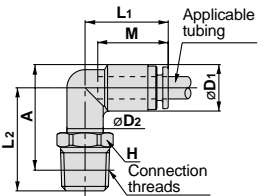


* Reference dimension for R threads after installation

Male Elbow: KPL



| Applicable tubing O.D. mm | Connection threads R | Model | H (width across flats) | Note 1) ϕD_1 | ϕD_2 | L ₁ | L ₂ | A* | M | Effective area mm ² | | Weight g |
|---------------------------|----------------------|----------|------------------------|--------------------|------------|----------------|----------------|------|------|--------------------------------|-----|----------|
| | | | | | | | | | | TPH | TPS | |
| 4 | 1/8 | KPL04-01 | 12 | 10.4 | 10 | 20.7 | 23.2 | 24.5 | 18 | 3.5 | 3.5 | 4 |
| | 1/4 | KPL04-02 | 14 | | | | | | | | | 27.2 |
| 6 | 1/8 | KPL06-01 | 12 | 12.8 | 10 | 22.8 | 24.4 | 27 | 19.5 | 9 | 9 | 5 |
| | 1/4 | KPL06-02 | 14 | | | | | | | | | 28.4 |
| 8 | 1/8 | KPL08-01 | 14 | 15.2 | 12 | 26.3 | 26.6 | 30 | 21.5 | 22 | 15 | 8 |
| | 1/4 | KPL08-02 | 14 | | | | | | | | | 29.4 |
| 10 | 1/4 | KPL10-02 | 17 | 18.5 | 17 | 29.4 | 32.1 | 35.5 | 24 | 35 | 25 | 13 |
| | 3/8 | KPL10-03 | | | | | | | | | | 33.1 |
| 12 | 3/8 | KPL12-03 | 17 | 20.9 | 17 | 31.4 | 34.3 | 38.5 | 25 | 50 | 40 | 15 |
| | 1/2 | KPL12-04 | | | | | | | | | | 22 |

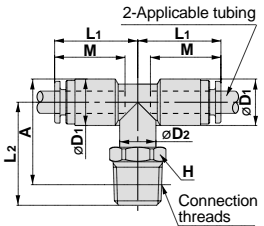


* Reference dimension for R threads after installation Note 1) ϕD_1 indicates the maximum diameter.

Male Branch Tee: KPT



| Applicable tubing O.D. mm | Connection threads R | Model | H (width across flats) | Note 1) ϕD_1 | ϕD_2 | L ₁ | L ₂ | A* | M | Effective area mm ² | | Weight g |
|---------------------------|----------------------|----------|------------------------|--------------------|------------|----------------|----------------|------|------|--------------------------------|------|----------|
| | | | | | | | | | | TPH | TPS | |
| 4 | 1/8 | KPT04-01 | 12 | 10.4 | 10 | 20.7 | 23.2 | 24.5 | 18 | 4.1 | 4.1 | 6 |
| | 1/4 | KPT04-02 | 14 | | | | | | | | | 27.2 |
| 6 | 1/8 | KPT06-01 | 12 | 12.8 | 10 | 22.8 | 24.4 | 27 | 19.5 | 11 | 11 | 8 |
| | 1/4 | KPT06-02 | 14 | | | | | | | | | 28.4 |
| 8 | 1/8 | KPT08-01 | 14 | 15.2 | 12 | 26.3 | 26.6 | 30 | 21.5 | 26.3 | 18.2 | 12 |
| | 1/4 | KPT08-02 | 14 | | | | | | | | | 29.4 |
| 10 | 1/4 | KPT10-02 | 17 | 18.5 | 17 | 29.4 | 32.1 | 35.5 | 24 | 40.8 | 29 | 20 |
| | 3/8 | KPT10-03 | | | | | | | | | | 33.1 |
| 12 | 3/8 | KPT12-03 | 17 | 20.9 | 17 | 31.4 | 34.3 | 38.5 | 25 | 57.2 | 45.2 | 24 |
| | 1/2 | KPT12-04 | | | | | | | | | | 22 |

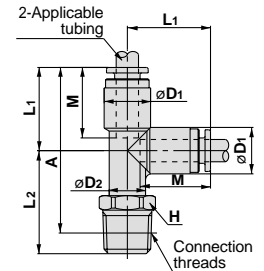


* Reference dimension for R threads after installation Note 1) ϕD_1 indicates the maximum diameter.

Male Run Tee: KPY



| Applicable tubing O.D. mm | Connection threads R | Model | H (width across flats) | Note 1) ϕD_1 | ϕD_2 | L ₁ | L ₂ | A* | M | Effective area mm ² | | Weight g |
|---------------------------|----------------------|----------|------------------------|--------------------|------------|----------------|----------------|------|------|--------------------------------|-----|----------|
| | | | | | | | | | | TPH | TPS | |
| 4 | 1/8 | KPY04-01 | 12 | 10.4 | 10 | 20.7 | 23.2 | 40 | 18 | 7.5 | 7.5 | 6 |
| | 1/4 | KPY04-02 | 14 | | | | | | | | | 27.2 |
| 6 | 1/8 | KPY06-01 | 12 | 12.8 | 10 | 22.8 | 24.4 | 43 | 19.5 | 11 | 11 | 8 |
| | 1/4 | KPY06-02 | 14 | | | | | | | | | 28.4 |
| 8 | 1/8 | KPY08-01 | 14 | 15.2 | 12 | 26.3 | 26.6 | 49 | 21.5 | 21 | 21 | 12 |
| | 1/4 | KPY08-02 | 14 | | | | | | | | | 29.4 |
| 10 | 1/4 | KPY10-02 | 17 | 18.5 | 17 | 29.4 | 32.1 | 56 | 24 | 45 | 45 | 19 |
| | 3/8 | KPY10-03 | | | | | | | | | | 33.1 |
| 12 | 3/8 | KPY12-03 | 17 | 20.9 | 17 | 31.4 | 34.3 | 59.5 | 25 | 57 | 57 | 21 |
| | 1/2 | KPY12-04 | | | | | | | | | | 22 |

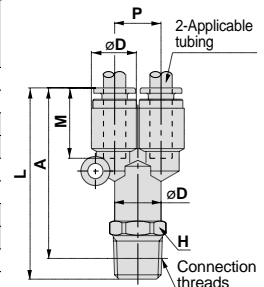


* Reference dimension for R threads after installation Note 1) ϕD_1 indicates the maximum diameter.

Male Branch "Y": KPU



| Applicable tubing O.D. mm | Connection threads R | Model | H (width across flats) | Note 1) ϕD | L | P | A* | M | Effective area mm ² | | Weight g |
|---------------------------|----------------------|----------|------------------------|------------------|------|------|------|------|--------------------------------|-----|----------|
| | | | | | | | | | TPH | TPS | |
| 4 | 1/8 | KPU04-01 | 12 | 10.4 | 45.4 | 10.4 | 41.5 | 18 | 7.5 | 7.5 | 7 |
| | 1/4 | KPU04-02 | 14 | | | | | | | | 49.4 |
| 6 | 1/8 | KPU06-01 | 14 | 12.8 | 49.6 | 12.8 | 45.5 | 19.5 | 18 | 18 | 9 |
| | 1/4 | KPU06-02 | 14 | | | | | | | | 52.4 |
| 8 | 1/8 | KPU08-01 | 17 | 15.2 | 56.7 | 15.2 | 52.5 | 21.5 | 26 | 26 | 15 |
| | 1/4 | KPU08-02 | 17 | | | | | | | | 61.3 |
| 10 | 1/4 | KPU10-02 | 19 | 18.5 | 64.5 | 18.5 | 59 | 24 | 45 | 45 | 23 |
| | 3/8 | KPU10-03 | | | | | | | | | 67.5 |
| 12 | 3/8 | KPU12-03 | 22 | 20.9 | 69.7 | 20.9 | 63.5 | 25 | 70 | 70 | 29 |
| | 1/2 | KPU12-04 | | | | | | | | | 72.7 |



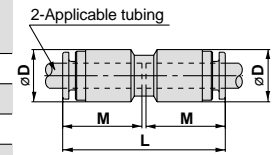
* Reference dimension for R threads after installation Note 1) ϕD indicates the maximum diameter.

Dimensions

Straight Union: KPH



| Applicable tubing O.D. mm | Model | Note 1) ϕD | L | M | Effective area mm ² | | Weight g |
|---------------------------|----------|------------------|------|------|--------------------------------|-----|----------|
| | | | | | TPH | TPS | |
| 4 | KPH04-00 | 10.4 | 37.4 | 18 | 4 | 4 | 4 |
| 6 | KPH06-00 | 12.8 | 39.6 | 19.5 | 10 | 10 | 6 |
| 8 | KPH08-00 | 15.2 | 44.4 | 21.5 | 26 | 18 | 10 |
| 10 | KPH10-00 | 18.5 | 48.6 | 24 | 41 | 29 | 15 |
| 12 | KPH12-00 | 20.9 | 50.6 | 25 | 58 | 46 | 18 |

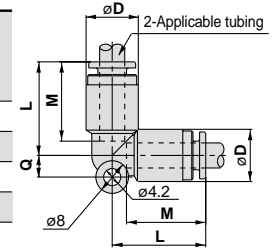


Note 1) ϕD indicates the maximum diameter.

Elbow: KPL



| Applicable tubing O.D. mm | Model | Note 1) ϕD | L | Q | M | Effective area mm ² | | Weight g |
|---------------------------|----------|------------------|------|-----|------|--------------------------------|-----|----------|
| | | | | | | TPH | TPS | |
| 4 | KPL04-00 | 10.4 | 20.7 | 4.5 | 18 | 3.5 | 3.5 | 3 |
| 6 | KPL06-00 | 12.8 | 22.8 | 5.3 | 19.5 | 9 | 9 | 7 |
| 8 | KPL08-00 | 15.2 | 26.3 | 6 | 21.5 | 22 | 15 | 11 |
| 10 | KPL10-00 | 18.5 | 29.4 | 6.8 | 24 | 35 | 25 | 16 |
| 12 | KPL12-00 | 20.9 | 31.4 | 7.5 | 25 | 50 | 40 | 20 |

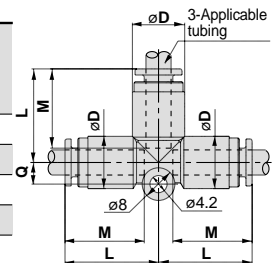


Note 1) ϕD indicates the maximum diameter.

Union Tee: KPT



| Applicable tubing O.D. mm | Model | Note 1) ϕD | L | Q | M | Effective area mm ² | | Weight g |
|---------------------------|----------|------------------|------|-----|------|--------------------------------|-----|----------|
| | | | | | | TPH | TPS | |
| 4 | KPT04-00 | 10.4 | 20.7 | 4.5 | 18 | 4 | 4 | 7 |
| 6 | KPT06-00 | 12.8 | 22.8 | 5.3 | 19.5 | 10 | 10 | 9 |
| 8 | KPT08-00 | 15.2 | 26.3 | 6 | 21.5 | 26 | 18 | 16 |
| 10 | KPT10-00 | 18.5 | 29.4 | 6.8 | 24 | 41 | 29 | 25 |
| 12 | KPT12-00 | 20.9 | 31.4 | 7.5 | 25 | 58 | 46 | 29 |

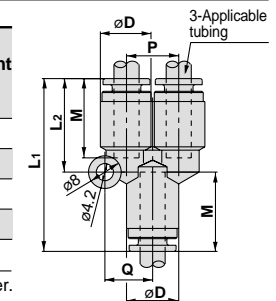


Note 1) ϕD indicates the maximum diameter.

Union "Y": KPU



| Applicable tubing O.D. mm | Model | Note 1) ϕD | L ₁ | L ₂ | P | Q | M | Effective area mm ² | | Weight g |
|---------------------------|----------|------------------|----------------|----------------|------|------|------|--------------------------------|-----|----------|
| | | | | | | | | TPH | TPS | |
| 4 | KPU04-00 | 10.4 | 38.8 | 20.6 | 10.4 | 9.7 | 18 | 4 | 4 | 7 |
| 6 | KPU06-00 | 12.8 | 42.1 | 22.8 | 12.8 | 11.7 | 19.5 | 10 | 10 | 10 |
| 8 | KPU08-00 | 15.2 | 48.7 | 27.5 | 15.2 | 13.7 | 21.5 | 26 | 18 | 17 |
| 10 | KPU10-00 | 18.5 | 54 | 30.7 | 18.5 | 16.1 | 24 | 41 | 29 | 26 |
| 12 | KPU12-00 | 20.9 | 57.2 | 32.9 | 20.9 | 18.1 | 25 | 58 | 46 | 32 |

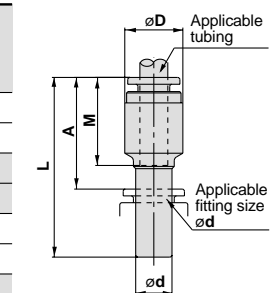


Note 1) ϕD indicates the maximum diameter.

Plug-in Reducer: KPR



| Applicable tubing O.D. mm | Applicable fitting size ϕd | Model | Note 1) ϕD | L | A | M | Effective area mm ² | | Weight g |
|---------------------------|----------------------------------|----------|------------------|------|------|------|--------------------------------|-----|----------|
| | | | | | | | TPH | TPS | |
| 4 | 6 | KPR04-06 | 10.4 | 39.4 | 20.1 | 18 | 4 | 4 | 3 |
| | 8 | KPR04-08 | | 41.9 | 20.2 | | | | 4 |
| 6 | 8 | KPR06-08 | 12.8 | 42.5 | 20.8 | 19.5 | 10 | 10 | 4 |
| | | KPR06-10 | | 45 | 21.2 | | | | 5 |
| 8 | 10 | KPR08-10 | 15.2 | 47 | 23.2 | 21.5 | 26 | 18 | 5 |
| | 12 | KPR08-12 | | 48 | 23.2 | | | | 6 |
| 10 | 12 | KPR10-12 | 18.5 | 50.5 | 25.7 | 24 | 41 | 29 | 9 |

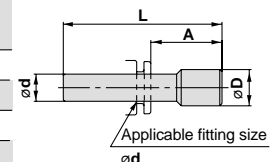


Note 1) ϕD indicates the maximum diameter.

Plug: KPP



| Applicable fitting size ϕd | Model | ϕD | L | A | Weight g |
|----------------------------------|--------|----------|------|------|----------|
| 4 | KPP-04 | 6 | 32 | 13.8 | 0.4 |
| 6 | KPP-06 | 8 | 35 | 15.7 | 0.7 |
| 8 | KPP-08 | 10 | 39 | 17.3 | 1.1 |
| 10 | KPP-10 | 12 | 43 | 19.2 | 1.7 |
| 12 | KPP-12 | 14 | 45.5 | 20.7 | 2.5 |



K

M

H

D

MS

T

LQ

Clean Room

Clean
One-touch
Fittings

For Drive System Air Piping

Series *KPQ/KPG*



Series KPQ
Brass (electroless nickel plated)
Release button: Light gray



Series KPG
Stainless steel (SUS304)
Release button: Light blue

Recommended Applicable Tubing

| | |
|------------------------|-------------------------|
| Tubing material | Polyurethane: 10-series |
| Tubing O.D. | ø4, ø6, ø8, ø10, ø12 |

Polyurethane tubing: Series TU, Nylon tubing: Series T, and Soft nylon tubing: Series TS can also be used. However, the degree of clean performance will be reduced.

Specifications

| | |
|--|--------------------------------------|
| Particulate generation grade | Grade 1 Note 1) |
| Fluid | Air |
| Maximum operating pressure (20°C) | 1MPa Note 2) |
| Operating vacuum pressure | -100kPa |
| Proof pressure (20°C) | 3MPa |
| Ambient and fluid temperature | -5°C to 60°C |
| Threads | JIS B0203 (taper threads for piping) |

Note 1) Refer to particulate generation grade classifications

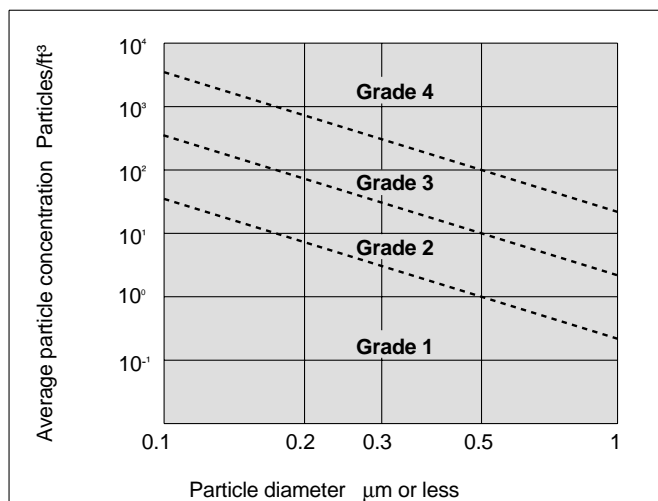
This falls outside of the grade because grease is applied to the internal seal materials.

Note 2) The maximum operating pressure is the value at 20°C. Refer to the operating pressure curve for other temperatures.

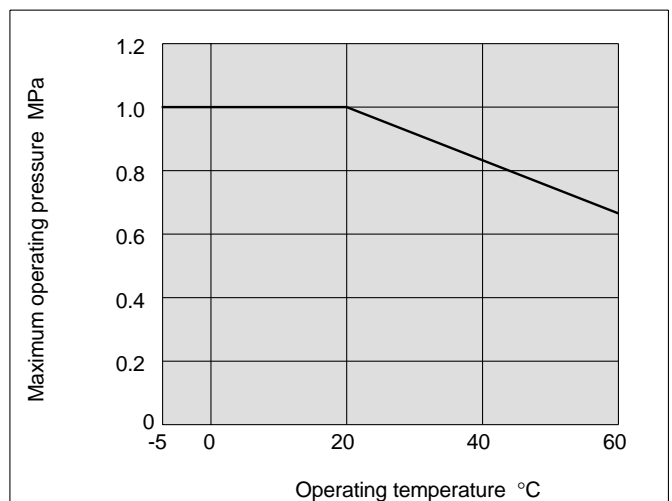
Principal Part Materials

| Model | Series KPQ | Series KPG |
|-------------------------------|-----------------------------------|------------------------|
| Body | Polypropylene resin | |
| Stud | Brass (electroless nickel plated) | SUS304 stainless steel |
| Chuck | SUS304 stainless steel | |
| Guide, Stopper | Brass (electroless nickel plated) | SUS304 stainless steel |
| Collet, Release button | Polypropylene resin | |
| Seal, O-ring, Bumper | NBR | |

Particulate Generation Grade Classifications



Relationship of Operating Temperature and Maximum Operating Pressure



How to Order

Clean One-touch fitting

Specifications

| Symbol | Specifications (metal part materials) |
|----------|---------------------------------------|
| Q | Brass (electroless nickel plated) |
| G | Stainless steel (SUS304) |

Model

| | |
|----------|--------------------------------|
| H | Male connector, Straight union |
| L | Union elbow, Male elbow |
| T | Male branch tee, Union tee |
| Y | Male run tee |
| U | Male branch, Union "Y" |
| R | Plug-in reducer |

Port size/Applicable tubing O.D.

| Thread connection | M5 | M5 x 0.8 |
|-------------------------|-------|---|
| 01 | R 1/8 | |
| 02 | R 1/4 | |
| 03 | R 3/8 | |
| 04 | R 1/2 | |
| Tubing (rod) connection | 00 | Same dia. tubing |
| 04 | ø4 | Different dia. tubing (plug-in reducer) |
| 06 | ø6 | |
| 08 | ø8 | |
| 10 | ø10 | |
| 12 | ø12 | |

Applicable tubing O.D.

| | |
|-----------|-----|
| 04 | ø4 |
| 06 | ø6 |
| 08 | ø8 |
| 10 | ø10 |
| 12 | ø12 |

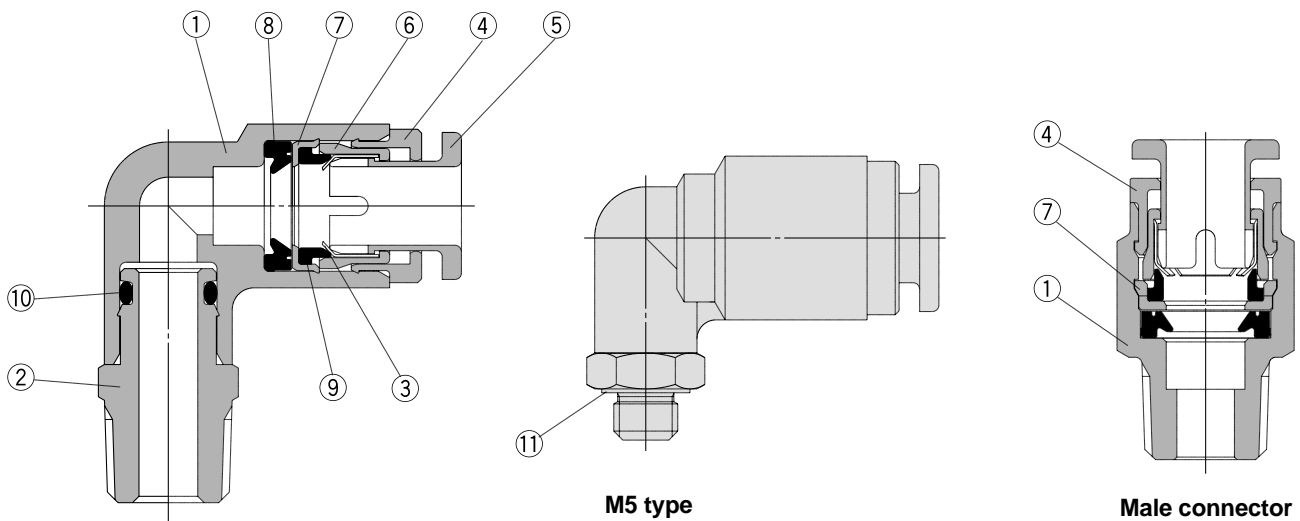
Applicable fitting size

| | |
|-----------|-----|
| 04 | ø4 |
| 06 | ø6 |
| 08 | ø8 |
| 10 | ø10 |
| 12 | ø12 |

Plug

Clean One-touch fitting

Construction



Parts list

| No. | Description | Material | |
|-----|----------------|---|---|
| | | Series KPQ | Series KPG |
| 1 | Body | Polypropylene resin | |
| | | With male connector | SUS304 stainless steel |
| 2 | Stud | Brass (electroless nickel plated) | SUS304 stainless steel |
| 3 | Chuck | SUS304 stainless steel | |
| 4 | Guide | Brass (electroless nickel plated) | |
| | | With male connector | SUS304 stainless steel |
| 5 | Release button | Polypropylene resin (color: light gray) | Polypropylene resin (color: light blue) |
| 6 | Collet | Polypropylene resin | |
| 7 | Stopper | SUS304 stainless steel | |
| | | With male connector | Polypropylene resin |
| 8 | Seal | NBR | |
| 9 | Bumper | NBR | |
| 10 | O-ring | NBR | |
| 11 | Gasket | SUS304 stainless steel + NBR | |

K

M

H

D

MS

T

LQ

Clean Room

Series KPQ/KPG

Dimensions

Male Connector: KPQH, KPGH

(M5)

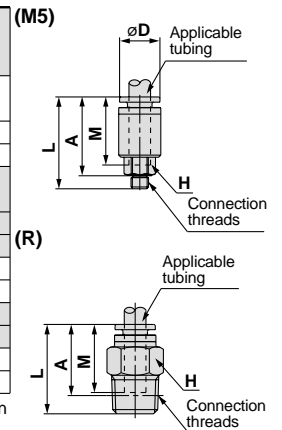


(R)



| Applicable tubing O.D. mm | Connection threads R | Model | | H (width across flats) | øD | L | A* | M | Effective area mm ² | | Weight g |
|---------------------------|----------------------|-----------|-----------|------------------------|------|------|------|------|--------------------------------|-----|----------|
| | | | | | | | | | TPH | TPS | |
| 4 | M5 | KPQH04-M5 | — | 8 | 10 | 25.4 | 22.5 | 18 | 4 | 4 | 4 |
| | | — | KPGH04-M5 | | | 25.9 | | | | | |
| | 1/8 | KPQH04-01 | KPGH04-01 | 10 | — | 25.4 | 19.5 | — | — | — | 7 |
| 1/4 | KPQH04-02 | KPGH04-02 | 14 | — | 22.9 | 17 | — | — | — | — | 12 |
| 6 | M5 | KPQH06-M5 | — | 8 | 12 | 26.3 | 23 | 19.5 | 10 | 10 | 5 |
| | | — | KPGH06-M5 | | | 26.8 | | | | | |
| | 1/8 | KPQH06-01 | KPGH06-01 | 12 | — | 25.6 | 19.5 | — | — | — | 7 |
| 1/4 | KPQH06-02 | KPGH06-02 | 14 | — | 26.1 | 20 | — | — | — | — | 14 |
| 8 | 1/8 | KPQH08-01 | KPGH08-01 | 14 | — | 32.6 | 26.5 | 21.5 | 26 | 18 | 14 |
| | | — | KPGH08-02 | | | 30.6 | | | | | |
| | 1/4 | KPQH08-02 | KPGH08-02 | — | — | 37.6 | 31.5 | — | — | — | — |
| 10 | 3/8 | KPQH10-03 | KPGH10-03 | 17 | — | 33 | 26.5 | 24 | 41 | 29 | 23 |
| | 1/2 | KPQH12-04 | KPGH12-04 | | | 19 | | | | | |
| 12 | 1/2 | KPQH12-04 | KPGH12-04 | 22 | — | 34.1 | 26 | 25 | 58 | 46 | 46 |

* Reference dimension for R threads after installation



Male Elbow: KPQL, KPGL

(M5)

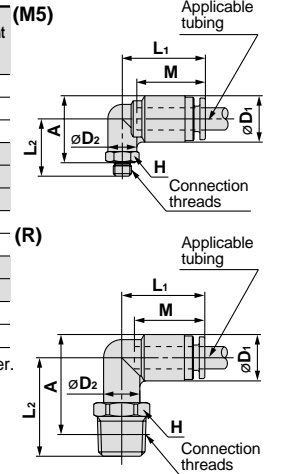


(R)



| Applicable tubing O.D. mm | Connection threads R | Model | | H (width across flats) | Note 1) øD ₁ | øD ₂ | L ₁ | L ₂ | A* | M | Effective area mm ² | | Weight g |
|---------------------------|----------------------|-----------|-----------|------------------------|-------------------------|-----------------|----------------|----------------|------|------|--------------------------------|-----|----------|
| | | | | | | | | | | | TPH | TPS | |
| 4 | M5 | KPQL04-M5 | KPGL04-M5 | 8 | 10.4 | 8 | 20.7 | 15.3 | 17 | 18 | 4 | 4 | 4 |
| | | — | KPGL04-01 | | | | | 10 | 22 | | | | |
| | 1/4 | KPQL04-02 | KPGL04-02 | 14 | — | 26 | 25 | — | — | — | — | — | 19 |
| 6 | M5 | KPQL06-M5 | KPGL06-M5 | 8 | 12.8 | 8 | 22.8 | 15.8 | 18.5 | 19.5 | 10 | 10 | 12 |
| | | — | KPGL06-01 | | | | | 10 | 23.2 | | | | |
| | 1/4 | KPQL06-02 | KPGL06-02 | 14 | — | 27.2 | 27.5 | — | — | — | — | — | 20 |
| 8 | 1/8 | KPQL08-01 | KPGL08-01 | 12 | 15.2 | 12 | 26.3 | 24.4 | 26 | 21.5 | 26 | 18 | 13 |
| | | — | KPGL08-02 | | | | | 14 | 28.4 | | | | |
| | 1/4 | KPQL10-02 | KPGL10-02 | — | — | 29.9 | 33 | — | — | — | — | — | 26 |
| 10 | 3/8 | KPQL10-03 | KPGL10-03 | 17 | 18.5 | 17 | 29.4 | 31.9 | 34.5 | 24 | 41 | 29 | 36 |
| | 1/2 | KPQL12-04 | KPGL12-04 | | | | | 22 | — | | | | |
| 12 | 1/2 | KPQL12-04 | KPGL12-04 | 22 | 20.9 | — | 31.4 | 37.1 | 39.5 | 25 | 58 | 46 | 65 |

* Reference dimension for R threads after installation Note 1) øD₁ indicates the maximum diameter.



Union Tee: KPQT, KPGT

(M5)

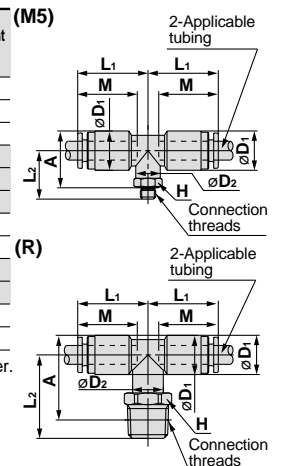


(R)



| Applicable tubing O.D. mm | Connection threads R | Model | | H (width across flats) | Note 1) øD ₁ | øD ₂ | L ₁ | L ₂ | A* | M | Effective area mm ² | | Weight g |
|---------------------------|----------------------|-----------|-----------|------------------------|-------------------------|-----------------|----------------|----------------|------|------|--------------------------------|-----|----------|
| | | | | | | | | | | | TPH | TPS | |
| 4 | M5 | KPQT04-M5 | KPGT04-M5 | 8 | 10.4 | 8 | 20.7 | 15.3 | 17 | 18 | 4 | 4 | 6 |
| | | — | KPGT04-01 | | | | | 10 | 22 | | | | |
| | 1/4 | KPQT04-02 | KPGT04-02 | 14 | — | 26 | 25 | — | — | — | — | — | 19 |
| 6 | M5 | KPQT06-M5 | KPGT06-M5 | 8 | 12.8 | 8 | 22.8 | 15.8 | 18.5 | 19.5 | 10 | 10 | 7 |
| | | — | KPGT06-01 | | | | | 10 | 23.2 | | | | |
| | 1/4 | KPQT06-02 | KPGT06-02 | 14 | — | 27.2 | 27.5 | — | — | — | — | — | 20 |
| 8 | 1/8 | KPQT08-01 | KPGT08-01 | 12 | 15.2 | 12 | 26.3 | 24.4 | 26 | 21.5 | 26 | 18 | 14 |
| | | — | KPGT08-02 | | | | | 14 | 28.4 | | | | |
| | 1/4 | KPQT10-02 | KPGT10-02 | — | — | 29.9 | 33 | — | — | — | — | — | 22 |
| 10 | 3/8 | KPQT10-03 | KPGT10-03 | 17 | 18.5 | 17 | 29.4 | 31.9 | 34.5 | 24 | 41 | 29 | 39 |
| | 1/2 | KPQT12-03 | KPGT12-03 | | | | | 22 | — | | | | |
| 12 | 1/2 | KPQT12-04 | KPGT12-04 | 22 | 20.9 | — | 31.4 | 37.1 | 39.5 | 25 | 58 | 46 | 38 |

* Reference dimension for R threads after installation Note 1) øD₁ indicates the maximum diameter.



Dimensions

Male Run Tee: KPQY, KPGY

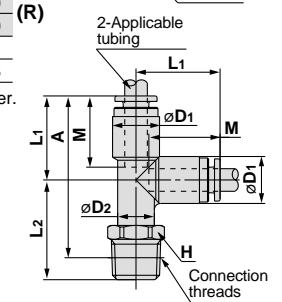
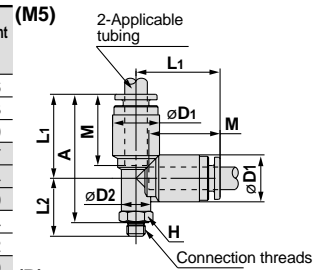
(M5)



(R)

| Applicable tubing O.D. mm | Connection threads R | Model | | H (width across flats) | Note 1) ϕD_1 | ϕD_2 | L ₁ | L ₂ | A* | M | Effective area mm ² | | Weight g |
|---------------------------|----------------------|-----------|-----------|------------------------|--------------------|------------|----------------|----------------|------|------|--------------------------------|----|----------|
| | | TPH | TPS | | | | | | | | | | |
| 4 | M5 | KPQY04-M5 | KPGY04-M5 | 8 | 10.4 | 8 | 20.7 | 15.3 | 32.5 | 18 | 4 | 4 | 6 |
| | 1/8 | KPQY04-01 | KPGY04-01 | 10 | | 10 | | 22 | 36.5 | | | | 13 |
| | 1/4 | KPQY04-02 | KPGY04-02 | 14 | | 14 | | 26 | 40.5 | | | | 19 |
| 6 | M5 | KPQY06-M5 | KPGY06-M5 | 8 | 12.8 | 8 | 22.8 | 15.8 | 35 | 19.5 | 10 | 10 | 7 |
| | 1/8 | KPQY06-01 | KPGY06-01 | 10 | | 10 | | 23.2 | 40 | | | | 14 |
| | 1/4 | KPQY06-02 | KPGY06-02 | 14 | | 14 | | 27.2 | 44 | | | | 20 |
| 8 | 1/8 | KPQY08-01 | KPGY08-01 | 12 | 15.2 | 12 | 26.3 | 24.4 | 44.5 | 21.5 | 26 | 18 | 14 |
| | 1/4 | KPQY08-02 | KPGY08-02 | 14 | | | | 14 | 28.4 | | | | 48.5 |
| 10 | 1/4 | KPQY10-02 | KPGY10-02 | 17 | 18.5 | 17 | 29.4 | 29.9 | 53.5 | 24 | 41 | 29 | 29 |
| | 3/8 | KPQY10-03 | KPGY10-03 | 17 | | | | 17 | 31.9 | | | | 55 |
| 12 | 3/8 | KPQY12-03 | KPGY12-03 | 22 | 20.9 | 17 | 31.4 | 33.1 | 58 | 25 | 58 | 46 | 41 |
| | 1/2 | KPQY12-04 | KPGY12-04 | 22 | | | | 22 | 37.1 | | | | 60.5 |

* Reference dimension for R threads after installation Note 1) ϕD_1 indicates the maximum diameter.



Male Branch: KPQU, KPGU

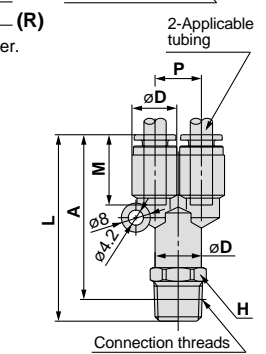
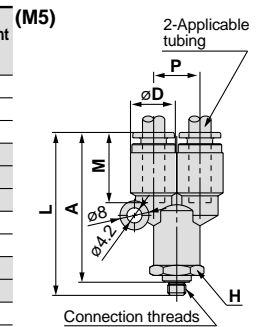
(M5)



(R)

| Applicable tubing O.D. mm | Connection threads R | Model | | H (width across flats) | Note 1) ϕD | L | P | A* | M | Effective area mm ² | | Weight g |
|---------------------------|----------------------|-----------|-----------|------------------------|------------------|------|------|------|------|--------------------------------|----|----------|
| | | TPH | TPS | | | | | | | | | |
| 4 | M5 | KPQU04-M5 | KPGU04-M5 | 11 | 10.4 | 41.7 | 10.4 | 38 | 18 | 4 | 4 | 10 |
| | 1/8 | KPQU04-01 | KPGU04-01 | | | 44.2 | | 38 | | | | 11 |
| | 1/4 | KPQU04-02 | KPGU04-02 | | | 48.2 | | 42 | | | | 20 |
| 6 | M5 | KPQU06-M5 | KPGU06-M5 | 13 | 12.8 | 44.9 | 12.8 | 41.5 | 19.5 | 10 | 10 | 12 |
| | 1/8 | KPQU06-01 | KPGU06-01 | | | 47.4 | | 41.5 | | | | 11 |
| | 1/4 | KPQU06-02 | KPGU06-02 | | | 51.4 | | 45.5 | | | | 21 |
| 8 | 1/8 | KPQU08-01 | KPGU08-01 | 17 | 15.2 | 55.5 | 15.2 | 49.5 | 21.5 | 26 | 18 | 15 |
| | 1/4 | KPQU08-02 | KPGU08-02 | | | 60.6 | | 54.5 | | | | 23 |
| 10 | 1/4 | KPQU10-02 | KPGU10-02 | 19 | 18.5 | 63.8 | 18.5 | 58 | 24 | 41 | 29 | 30 |
| | 3/8 | KPQU10-03 | KPGU10-03 | | | 61.3 | | 55 | | | | 40 |
| 12 | 3/8 | KPQU12-03 | KPGU12-03 | 22 | 20.9 | 67 | 20.9 | 60.5 | 25 | 58 | 46 | 40 |
| | 1/2 | KPQU12-04 | KPGU12-04 | | | 71.4 | | 63.5 | | | | 65 |

* Reference dimension for R threads after installation Note 1) ϕD indicates the maximum diameter.

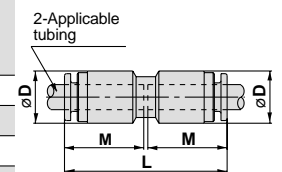


Straight Union: KPQH, KPGH



| Applicable tubing O.D. mm | Model | | Note 1) ϕD | L | M | Effective area mm ² | | Weight g |
|---------------------------|-----------|-----------|------------------|------|------|--------------------------------|----|----------|
| | TPH | TPS | | | | | | |
| 4 | KPQH04-00 | KPGH04-00 | 10.4 | 37.4 | 18 | 4 | 4 | 4 |
| 6 | KPQH06-00 | KPGH06-00 | 12.8 | 39.6 | 19.5 | 10 | 10 | 6 |
| 8 | KPQH08-00 | KPGH08-00 | 15.2 | 44.4 | 21.5 | 26 | 18 | 10 |
| 10 | KPQH10-00 | KPGH10-00 | 18.5 | 48.6 | 24 | 41 | 29 | 15 |
| 12 | KPQH12-00 | KPGH12-00 | 20.9 | 50.6 | 25 | 58 | 46 | 18 |

Note 1) ϕD indicates the maximum diameter.



K

M

H

D

MS

T

LQ

Clean Room

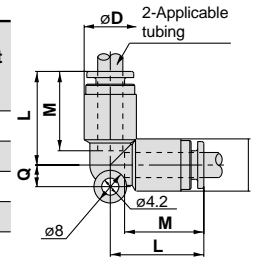
Series KPQ/KPG

Elbow: KPQL, KPGL



| Applicable tubing O.D. mm | Model | | Note 1) ϕD | L | Q | M | Effective area mm ² | | Weight g |
|---------------------------|-----------|-----------|------------------|------|-----|------|--------------------------------|-----|----------|
| | | | | | | | TPH | TPS | |
| 4 | KPQL04-00 | KPGL04-00 | 10.4 | 20.7 | 4.5 | 18 | 3.5 | 3.5 | 3 |
| 6 | KPQL06-00 | KPGL06-00 | 12.8 | 22.8 | 5.3 | 19.5 | 9 | 9 | 7 |
| 8 | KPQL08-00 | KPGL08-00 | 15.2 | 26.3 | 6 | 21.5 | 22 | 15 | 11 |
| 10 | KPQL10-00 | KPGL10-00 | 18.5 | 29.4 | 6.8 | 24 | 35 | 25 | 16 |
| 12 | KPQL12-00 | KPGL12-00 | 20.9 | 31.4 | 7.5 | 25 | 50 | 40 | 20 |

Note 1) ϕD indicates the maximum diameter.

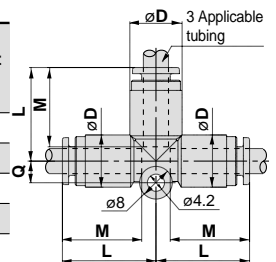


Union Tee: KPQT, KPGT



| Applicable tubing O.D. mm | Model | | Note 1) ϕD | L | Q | M | Effective area mm ² | | Weight g |
|---------------------------|-----------|-----------|------------------|------|-----|------|--------------------------------|-----|----------|
| | | | | | | | TPH | TPS | |
| 4 | KPQT04-00 | KPGT04-00 | 10.4 | 20.7 | 4.5 | 18 | 4 | 4 | 7 |
| 6 | KPQT06-00 | KPGT06-00 | 12.8 | 22.8 | 5.3 | 19.5 | 10 | 10 | 9 |
| 8 | KPQT08-00 | KPGT08-00 | 15.2 | 26.3 | 6 | 21.5 | 26 | 18 | 16 |
| 10 | KPQT10-00 | KPGT10-00 | 18.5 | 29.4 | 6.8 | 24 | 41 | 29 | 25 |
| 12 | KPQT12-00 | KPGT12-00 | 20.9 | 31.4 | 7.5 | 25 | 58 | 46 | 29 |

Note 1) ϕD indicates the maximum diameter.

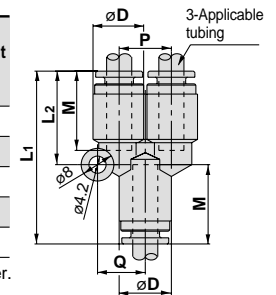


Union "Y": KPQU, KPGU



| Applicable tubing O.D. mm | Model | | Note 1) ϕD | L ₁ | L ₂ | P | Q | M | Effective area mm ² | | Weight g |
|---------------------------|-----------|-----------|------------------|----------------|----------------|------|------|------|--------------------------------|-----|----------|
| | | | | | | | | | TPH | TPS | |
| 4 | KPQU04-00 | KPGU04-00 | 10.4 | 38.8 | 20.6 | 10.4 | 9.7 | 18 | 4 | 4 | 7 |
| 6 | KPQU06-00 | KPGU06-00 | 12.8 | 42.1 | 22.8 | 12.8 | 11.7 | 19.5 | 10 | 10 | 10 |
| 8 | KPQU08-00 | KPGU08-00 | 15.2 | 48.7 | 27.5 | 15.2 | 13.7 | 21.5 | 26 | 18 | 17 |
| 10 | KPQU10-00 | KPGU10-00 | 18.5 | 54 | 30.7 | 18.5 | 16.1 | 24 | 41 | 29 | 26 |
| 12 | KPQU12-00 | KPGU12-00 | 20.9 | 57.2 | 32.9 | 20.9 | 18.1 | 25 | 58 | 46 | 32 |

Note 1) ϕD indicates the maximum diameter.

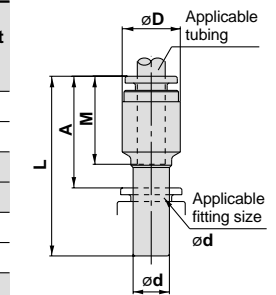


Plug-in Reducer: KPQR, KPGR



| Applicable tubing O.D. mm | Applicable fitting size ϕd | Model | | Note 1) ϕD | L | A | M | Effective area mm ² | | Weight g |
|---------------------------|----------------------------------|-----------|-----------|------------------|------|------|------|--------------------------------|-----|----------|
| | | | | | | | | TPH | TPS | |
| 4 | 6 | KPQR04-06 | KPGR04-06 | 10.4 | 39.4 | 20.1 | 18 | 4 | 4 | 3 |
| | 8 | KPQR04-08 | KPGR04-08 | | 41.9 | 20.2 | | | | |
| 6 | 8 | KPQR06-08 | KPGR06-08 | 12.8 | 42.5 | 20.8 | 19.5 | 10 | 10 | 4 |
| | 10 | KPQR06-10 | KPGR06-10 | | 45 | 21.2 | | | | |
| 8 | 10 | KPQR08-10 | KPGR08-10 | 15.2 | 47 | 23.2 | 21.5 | 26 | 18 | 5 |
| | 12 | KPQR08-12 | KPGR08-12 | | 48 | 23.2 | | | | |
| 10 | 12 | KPQR10-12 | KPGR10-12 | 18.5 | 50.5 | 25.7 | 24 | 41 | 29 | 9 |

Note 1) ϕD indicates the maximum diameter.

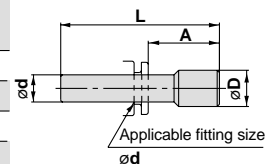


Plug: KPP



| Applicable fitting size ϕd | Model | ϕD | L | A | Weight g |
|----------------------------------|--------|----------|------|------|----------|
| 4 | KPP-04 | 6 | 32 | 13.8 | 0.4 |
| 6 | KPP-06 | 8 | 35 | 15.7 | 0.7 |
| 8 | KPP-08 | 10 | 39 | 17.3 | 1.1 |
| 10 | KPP-10 | 12 | 43 | 19.2 | 1.7 |
| 12 | KPP-12 | 14 | 45.5 | 20.7 | 2.5 |

* The plug is common for series KPQ, KPG and KPP.



Clean
Tubing

Polyolefin Tubing Series *TPH*



Series

● – 20m bundle □ – 100m bundle

| Designation | TPH0425 | TPH0604 | TPH0806 | TPH1075 | TPH1209 |
|-------------|---------|---------|---------|---------|---------|
| O.D. mm | 4 | 6 | 8 | 10 | 12 |
| I.D. mm | 2.5 | 4 | 6 | 7.5 | 9 |

| | | | | | |
|------------|---|---|---|---|---|
| White (W) | ● | ● | ● | ● | ● |
| Black (B) | ● | ● | ● | ● | ● |
| Red (R) | ● | ● | ● | ● | ● |
| Blue (BU) | ● | ● | ● | ● | ● |
| Yellow (Y) | ● | ● | ● | ● | ● |
| Green (G) | ● | ● | ● | ● | ● |

Specifications

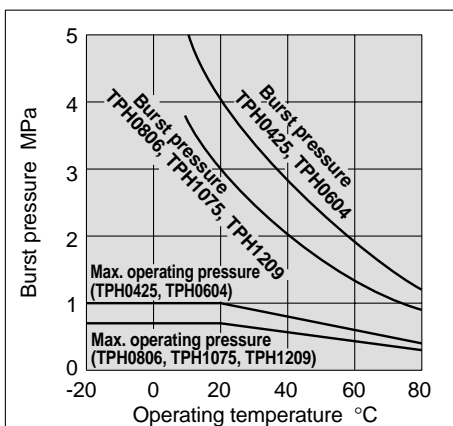
| | | | | | |
|--------------------------------------|--|----|-------------------------------|----|----|
| Fluid | Air, Nitrogen gas, Water (pure water) <small>Note 1)</small> | | | | |
| Maximum operating pressure (at 20°C) | 1.0MPa <small>Note 2)</small> | | 0.7MPa <small>Note 2)</small> | | |
| Min. bending radius mm | 15 | 25 | 35 | 45 | 55 |
| Burst pressure | Refer to the burst pressure characteristics curve. | | | | |
| Operating temperature | – 20 to 80°C, For water 5 to 80°C | | | | |
| Material | Polyolefin resin | | | | |

Note 1) Consult SMC regarding other fluids.

Note 2) The maximum operating pressure is the value at 20°C. Refer to the burst pressure characteristics curve for other temperatures. Furthermore, an abnormal temperature rise due to adiabatic compression can cause tubing to burst.

Note 3) The minimum bending radius indicates the value at a temperature of 20°C with an outside diameter rate of change of 10% or less. At higher temperatures the outside diameter rate of change may exceed 10% within the minimum bending radius.

Burst Pressure Characteristics Curve and Operating Pressure



How to Order

TPH0604 B 20

Tubing designation ●

Colour ●

| Symbol | Colour |
|--------|--------|
| W | White |
| B | Black |
| R | Red |
| BU | Blue |
| Y | Yellow |
| G | Green |

Roll length ●

| Symbol | Length |
|--------|-------------|
| 20 | 20m bundle |
| 100 | 100m bundle |

K

M

H

D

MS

T

LQ

Clean
Room

Clean
Tubing

Soft Polyolefin Tubing Series *TPS*



Series

● -20m bundle □ -100m bundle

| Designation | TPS0425 | TPS0604 | TPS0805 | TPS1065 | TPS1208 |
|-------------|---------|---------|---------|---------|---------|
| O.D. mm | 4 | 6 | 8 | 10 | 12 |
| I.D. mm | 2.5 | 4 | 5 | 6.5 | 8 |

| | | | | | |
|------------|---|---|---|---|---|
| White (W) | ● | ● | ● | ● | ● |
| Black (B) | ● | ● | ● | ● | ● |
| Red (R) | ● | ● | ● | ● | ● |
| Blue (BU) | ● | ● | ● | ● | ● |
| Yellow (Y) | ● | ● | ● | ● | ● |
| Green (G) | ● | ● | ● | ● | ● |

Specifications

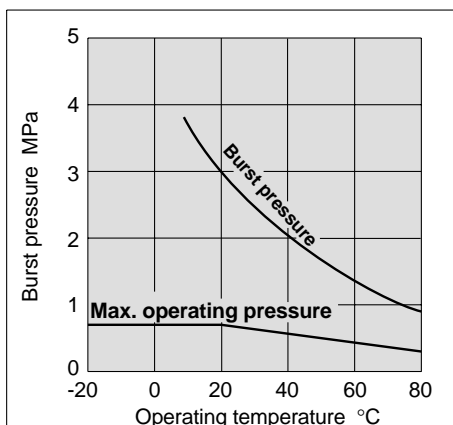
| | | | | | |
|--------------------------------------|--|----|----|----|----|
| Fluid | Air, Nitrogen gas, Water (pure water) ^{Note 1)} | | | | |
| Maximum operating pressure (at 20°C) | 0.7MPa ^{Note 2)} | | | | |
| Min. bending radius mm | 10 | 20 | 25 | 30 | 40 |
| Burst pressure | Refer to the burst pressure characteristics curve. | | | | |
| Operating temperature | - 20 to 80°C, For water 5 to 80°C | | | | |
| Material | Polyolefin resin | | | | |

Note 1) Consult SMC regarding other fluids.

Note 2) The maximum operating pressure is the value at 20°C. Refer to the burst pressure characteristics curve for other temperatures. Furthermore, an abnormal temperature rise due to adiabatic compression can cause tubing to burst.

Note 3) The minimum bending radius indicates the value at a temperature of 20°C with an outside diameter rate of change of 10% or less. At higher temperatures the outside diameter rate of change may exceed 10% with in the minimum bending radius.

Burst Pressure Characteristics Curve and Operating Pressure



How to Order

TPS0604 B - 20

Tubing designation ●

Colour ●

● Roll length

| Symbol | Colour |
|--------|--------|
| W | White |
| B | Black |
| R | Red |
| BU | Blue |
| Y | Yellow |
| G | Green |

| Symbol | Length |
|--------|-------------|
| 20 | 20m bundle |
| 100 | 100m bundle |

Related Equipment Clean Series Tubing

Polyurethane Tubing *Series 10-TU*

10 – TU0425 BU – 20

● Clean series

Tubing designation ●

● Roll length ●

| Colour | |
|--------|--------|
| B | Black |
| W | White |
| R | Red |
| BU | Blue |
| Y | Yellow |
| G | Green |
| C | Clear |
| YR | Orange |

| | |
|----|------------|
| 20 | 20m bundle |
|----|------------|

Series

● – 20m bundle

| Designation | Tubing size | | | | |
|-------------|-------------------------|-----------|-----------|-----------|-----------|
| | Metric size (series TU) | | | | |
| | 10-TU0425 | 10-TU0604 | 10-TU0805 | 10-TU1065 | 10-TU1208 |
| O.D. mm | 4 | 6 | 8 | 10 | 12 |
| I.D. mm | 2.5 | 4 | 5 | 6.5 | 8 |
| Black | ● | ● | ● | ● | ● |
| White (W) | ● | ● | ● | ● | ● |
| Red (R) | ● | ● | ● | ● | ● |
| Blue (BU) | ● | ● | ● | ● | ● |
| Yellow (Y) | ● | ● | ● | ● | ● |
| Green (G) | ● | ● | ● | ● | ● |
| Clear (C) | ● | ● | ● | ● | ● |
| Orange (YR) | ● | ● | ● | ● | ● |

Specifications

| | | | | | |
|---|---|----|----|----|----|
| Fluid | Air, Water | | | | |
| Maximum operating pressure (at 20°C) | 0.8MPa | | | | |
| Burst pressure | Refer to the burst pressure characteristics curve. | | | | |
| Min. bending radius mm ^{Note)} | 10 | 15 | 20 | 27 | 35 |
| Operating temperature | Air: -20 to 60°C, Water: 0 to 40°C (with no freezing) | | | | |
| Material | Polyurethane | | | | |

Note) The minimum bending radius indicates the value at a temperature of 20°C with an outside diameter rate of change of 10% or less. At higher temperatures the outside diameter rate of change may exceed 10% within the minimum bending radius.

Polyurethane Coiled Tubing *Series 10-TCU*



Specifications

| Model | 10-TCU 0425B-1 | 10-TCU 0425B-2 | 10-TCU 0425B-3 | 10-TCU 0604B-1 | 10-TCU 0604B-2 | 10-TCU 0604B-3 | 10-TCU 0805B-1 |
|--------------------------------------|--|----------------|----------------|----------------|----------------|----------------|----------------|
| Number of cores | 1 core | 2 cores | 3 cores | 1 core | 2 cores | 3 cores | 1 core |
| Tubing O.D. mm | 4 | | 6 | | 8 | | |
| Tubing I.D. mm | 2.5 | | 4 | | 5 | | |
| Fluid | Air | | | | | | |
| Maximum operating pressure (at 20°C) | 0.8MPa | | | | | | |
| Burst pressure | Refer to the burst pressure characteristics curve. | | | | | | |
| Operating temperature | -20 to 60°C | | | | | | |
| Material | Polyurethane | | | | | | |
| Colour | Black | | | | | | |

Polyurethane Flat Tubing *Series 10-TFU*



Specifications

| Model | 10-TFU 0425B-2 | 10-TFU 0425B-3 | 10-TFU 0604B-2 | 10-TFU 0604B-3 | 10-TFU 0805B-2 | 10-TFU 0805B-3 |
|--------------------------------------|--|----------------|----------------|----------------|----------------|----------------|
| Number of cores | 2 cores | 3 cores | 2 cores | 3 cores | 2 cores | 3 cores |
| Tubing O.D. mm | 4 | | 6 | | 8 | |
| Tubing I.D. mm | 2.5 | | 4 | | 5 | |
| Fluid | Air | | | | | |
| Maximum operating pressure (at 20°C) | 0.8MPa | | | | | |
| Burst pressure | Refer to the burst pressure characteristics curve. | | | | | |
| Operating temperature | -20 to 60°C | | | | | |
| Material | Polyurethane | | | | | |
| Colour | Black | | | | | |
| Min. bending radius mm | 10 | | 15 | | 20 | |
| Tubing roll length m | 10 | | | | | |

K□

M□

H□

D□

MS

T□

LQ

Clean Room

Clean Blowing System Related Equipment

Air Operated Valve Series LV

Low particulate generating valve with excellent corrosion resistance

Series LVA



Series LVC



Threaded type/Series LVA (basic type)

Note 1) PFA body not available for LVA10

| Series | Orifice size (mm) | Body material | Port size Rc | | | | |
|--------|-------------------|---------------|--------------|-----|-----|-----|-----|
| | | | 1/8 | 1/4 | 3/8 | 1/2 | 3/4 |
| LVA10 | ø2 | Note 1) | ● | ● | | | |
| LVA20 | ø4 | PFA | ○ | ● | | | |
| LVA30 | ø8 | PPS | | ○ | ● | | |
| LVA40 | ø12 | SUS316 | | | ○ | ● | |
| LVA50 | ø20 | SUS316 | | | | ○ | ● |

○: Body material SUS316 only

Integral fitting type/Series LVC (basic type)

| Series | Orifice size (mm) | Body material | Tubing size | | | | | | | | | | | | | |
|--------|-------------------|---------------|--------------|---|---|----|----|------------|-----|------|-----|-----|-----|-----|---|--|
| | | | Metric sizes | | | | | Inch sizes | | | | | | | | |
| | | | 4 | 6 | 8 | 10 | 12 | 19 | 1/8 | 3/16 | 1/4 | 3/8 | 1/2 | 3/4 | | |
| LVC20 | ø4 | PFA | ● | ● | | | | | | | ● | ● | ● | | | |
| LVC30 | ø8 | | | ● | ● | ● | | | | | | ● | ● | | | |
| LVC40 | ø10 | | | | | ● | ● | | | | | | ● | ● | | |
| LVC50 | ø16 | | | | | | ● | ● | | | | | | ● | ● | |

Clean Regulator Series SR

Contamination controlled stainless steel regulator

Series SRH



Series SR



Series SRH

| Series | Port size Rc | | | | | | Liquid-contact part materials | |
|---------|--------------|-----|-----|-----|------------|-----------|--------------------------------------|---|
| | 1/8 | 1/4 | 3/8 | 1/2 | 9/16-18UNF | 7/8-14UNF | Body | Diaphragm |
| SRH3000 | ● | ● | | | ● | | SUS316L (fluid-contact parts SUS316) | Liquid-contact surfaces PTFE + Fluoro rubber (grade A) Fluoro rubber (grade B) |
| SRH4000 | | ● | ● | ● | | ● | | |

Series SR

| Series | Port size Rc | | | | | Liquid-contact part materials | |
|--------|--------------|-----|-----|-----|-----|-------------------------------|--|
| | M5 | 1/8 | 1/4 | 3/8 | 1/2 | Body | Diaphragm |
| SR1000 | ● | | | | | SUS316 | Fluoro rubber Fluoro rubber host with PTFE on liquid-contact surfaces |
| SR3000 | | ● | ● | | | | |
| SR4000 | | | ● | ● | ● | | |

Clean Gas Filter Series SF

0.01mm particles 100% eliminated

Series SFA



Series SFB



Series SFC



Cartridge type

| Series | Type | Principal materials | | | Thread type | Port size | |
|-----------------------|----------|---------------------|--------------------------|---------------------|-------------|-----------|-----|
| | | Element | Housing | Seal | | M5 | 1/4 |
| 100 SFA 200 300 | Disk | PTFE + Polyethylene | SUS316 (electropolished) | Fluoro rubber (FPM) | Rc NPT | | ● |
| SFB100 | Straight | PTFE membrane | | | TSJ UOJ | ● | ● |

Disposable type

| Series | Type | Principal materials | | | Thread type | Port size | |
|--------|-----------------|------------------------------|--------------------------|----------------|-------------|-----------|-----|
| | | Element | Housing | Seal | | 1/4 | 3/8 |
| SFB300 | Straight | PTFE membrane | SUS316 (electropolished) | - | Rc | ● | |
| SFC100 | Multistage Disk | PTFE membrane PVDF holder | | O-ring PTFE | TSJ URJ | ● | ● |