# Series KK130 Variations

## Plug (P)

### Male thread type

| Port size | Model |
|---|---|
| R1/8 | **KK130P-01MS** |
| R1/4 | **-02MS** |
| R3/8 | **-03MS** |
| R1/2 | **-04MS** |
| NPT1/8 | **-N01MS** |
| NPT1/4 | **-N02MS** |
| NPT3/8 | **-N03MS** |
| NPT1/2 | **-N04MS** |

### Female thread type

| Port size | Model |
|---|---|
| Rc1/8 | **KK130P-01F** |
| Rc1/4 | **-02F** |
| Rc3/8 | **-03F** |
| Rc1/2 | **-04F** |
| NPT1/8 | **-N01F** |
| NPT1/4 | **-N02F** |
| NPT3/8 | **-N03F** |
| NPT1/2 | **-N04F** |

### Barb fitting type (for rubber hose)

| Hose nominal | Model |
|---|---|
| 6 (1/4") | **KK130P-07B** |
| 8 (1/4") | **-09B** |
| 9 (3/8") | **-11B** |
| 12 (1/2") | **-13B** |

∗ The figures in ( ) indicate the internal diameter of the applicable hose.

### Nut fitting type (for fiber reinforced urethane hose)

| Applicable hose I.D./O.D. | Model |
|---|---|
| 5/8 | **KK130P-50N** |
| 6/9 | **-60N** |
| 6.5/10 | **-65N** |
| 8/12 | **-80N** |
| 8.5/12.5 | **-85N** |
| 11/16 | **-110N** |

### One-touch fitting type

| Applicable tube O.D. | | Model |
|---|---|---|
| Metric size mm | 6 | **KK130P-06H** |
| | 8 | **-08H** |
| | 10 | **-10H** |
| | 12 | **-12H** |
| Inch size | 1/4" | **-07H** |
| | 5/16" | **-09H** |
| | 3/8" | **-11H** |
| | 1/2" | **-13H** |

## Socket (S)

### Male thread type

| Port size | Model∗ |
|---|---|
| R1/8 | **KK130S-01MS** |
| R1/4 | **-02MS** |
| R3/8 | **-03MS** |
| R1/2 | **-04MS** |
| NPT1/8 | **-N01MS** |
| NPT1/4 | **-N02MS** |
| NPT3/8 | **-N03MS** |
| NPT1/2 | **-N04MS** |

∗ Refer to the how to order on page 1 for the sleeve lock mechanism provided type.

### Female thread type

| Port size | Model∗ |
|---|---|
| Rc1/8 | **KK130S-01F** |
| Rc1/4 | **-02F** |
| Rc3/8 | **-03F** |
| Rc1/2 | **-04F** |
| NPT1/8 | **-N01F** |
| NPT1/4 | **-N02F** |
| NPT3/8 | **-N03F** |
| NPT1/2 | **-N04F** |

∗ Refer to the how to order on page 1 for the sleeve lock mechanism provided type.

### Barb fitting type (for rubber hose)

| Hose nominal | Model∗ |
|---|---|
| 6 (1/4") | **KK130S-07B** |
| 8 (1/4") | **-09B** |
| 9 (3/8") | **-11B** |
| 12 (1/2") | **-13B** |

∗ Refer to the how to order on page 1 for the sleeve lock mechanism provided type.
∗ The figures in ( ) indicate the internal diameter of the applicable hose.

### Nut fitting type (for fiber reinforced urethane hose)

| Applicable hose I.D./O.D. | Model∗ |
|---|---|
| 5/8 | **KK130S-50N** |
| 6/9 | **-60N** |
| 6.5/10 | **-65N** |
| 8/12 | **-80N** |
| 8.5/12.5 | **-85N** |
| 11/16 | **-110N** |

∗ Refer to the how to order on page 1 for the sleeve lock mechanism provided type.

### One-touch fitting type

| Applicable tube O.D. | | Model∗ |
|---|---|---|
| Metric size mm | 6 | **KK130S-06H** |
| | 8 | **-08H** |
| | 10 | **-10H** |
| | 12 | **-12H** |
| Inch size | 1/4" | **-07H** |
| | 5/16" | **-09H** |
| | 3/8" | **-11H** |
| | 1/2" | **-13H** |

∗ Refer to the how to order on page 1 for the sleeve lock mechanism provided type.

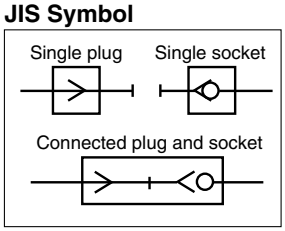
# S Couplers
# *Series KK130*

## Specifications

| | |
|---|---|
| **Fluid** | Air Note) |
| **Operating pressure range** | 0 to 1.5 MPa |
| | One-touch fitting type: 0 to 1.0 MPa |
| **Proof pressure** | 2.0 MPa |
| **Ambient and fluid temperature** | –20 to 80°C (No freezing) |
| | One-touch fitting type: –5 to 60°C (No freezing) |
| **Plating** | Sleeve: Electroless nickel plated<br>Other external metal parts: Zinc chromated |
| **Sealant** | Male thread with sealant |

Note) Cannot be used for water.

**JIS Symbol**




## Performance

| | |
|---|---|
| Plug and socket connection | Sleeve slide detachable type |
| Check valve | Socket: Built-in check valve |
| Flow direction | Dual directional |
| Sleeve lock mechanism | Manual locking type (with detent) Semi-standard |

## How to Order

**KK130 P – 02 MS**

**130 series**

**Socket/Plug**

| Symbol | Type |
|---|---|
| **P** | Plug |
| **S** | Socket |
| **L** | Semi-standard Socket (With sleeve lock mechanism) |

**Connection type**

| Symbol | Type |
|---|---|
| **MS** | Male thread (With sealant) |
| **F** | Female thread |
| **B** | With barb fitting |
| **N** | With nut fitting |
| **H** | With one-touch fitting |

**Port size variations**

**Male/Female thread type**

| Symbol | Thread size |
|---|---|
| **01** | R, Rc1/8 |
| **02** | R, Rc1/4 |
| **03** | R, Rc3/8 |
| **04** | R, Rc1/2 |
| **N01** | NPT1/8 |
| **N02** | NPT1/4 |
| **N03** | NPT3/8 |
| **N04** | NPT1/2 |

**Barb fitting type**

| Symbol | Hose nominal |
|---|---|
| **07** | 6 (1/4") |
| **09** | 8 (1/4") |
| **11** | 9 (3/8") |
| **13** | 12 (1/2") |

∗ The figures in ( ) indicate the internal diameter of the applicable hose.

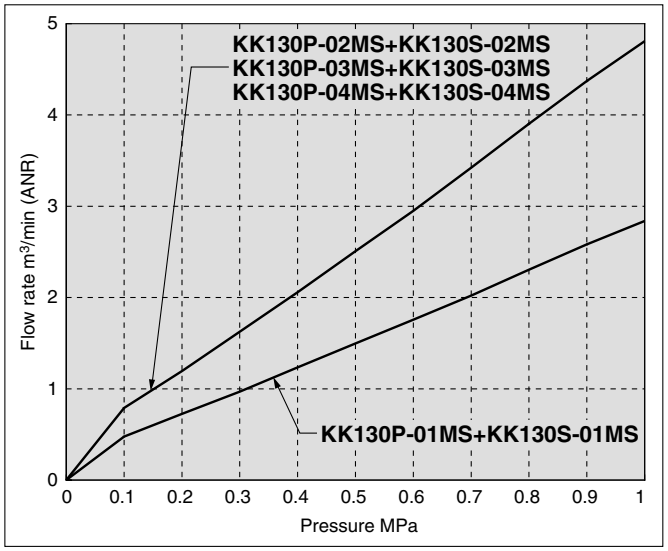
**Nut fitting type**

| Symbol | Applicable hose I.D./O.D. mm |
|---|---|
| **50** | 5/8 |
| **60** | 6/9 |
| **65** | 6.5/10 |
| **80** | 8/12 |
| **85** | 8.5/12.5 |
| **110** | 11/16 |

**One-touch fitting type**

| Symbol | Applicable tube O.D. mm | |
|---|---|---|
| **06** | ø6 | Metric size |
| **08** | ø8 | |
| **10** | ø10 | |
| **12** | ø12 | |
| **07** | ø1/4" | Inch size |
| **09** | ø5/16" | |
| **11** | ø3/8" | |
| **13** | ø1/2" | |

## Flow-rate Characteristics [Representative Value]

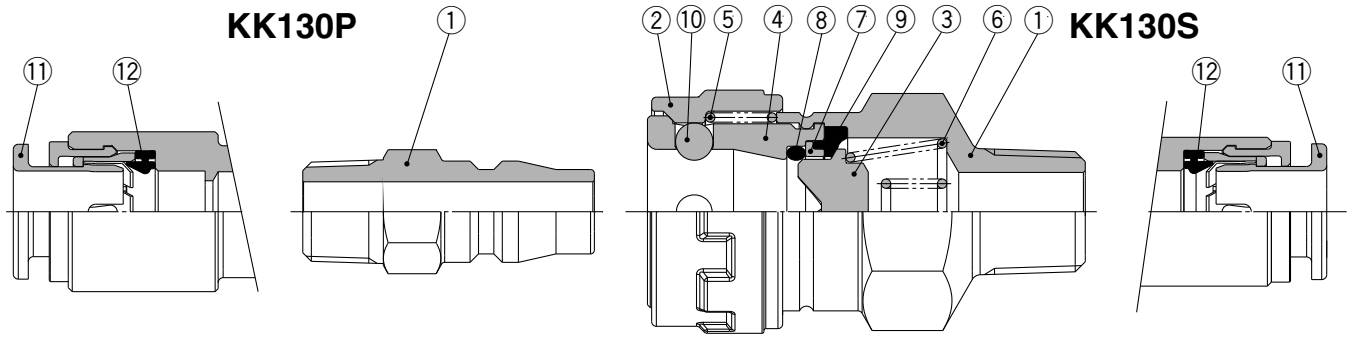



∗ This flow-rate characteristic test method complies with JIS B 8390 (Pneumatic fluid power – Components using compressible fluids – Determination of flow-rate characteristics)
∗ The figures are representative values when the same type of plug and socket are connected.

| Connection type | | | Sonic conductance C [dm³/(s·bar)] | Critical pressure ratio b | Flow coefficient Cv | Effective area S [mm²] |
|---|---|---|---|---|---|---|
| Type | Symbol | Connection | | | | |
| Male thread | **-01MS** | R1/8 | 4.2 | 0.4 | 1.2 | 21 |
| | **-02MS** | R1/4 | 7.0 | 0.4 | 1.9 | 35 |
| | **-03MS** | R3/8 | 7.0 | 0.5 | 2.1 | 35 |
| | **-04MS** | R1/2 | 7.0 | 0.5 | 2.1 | 35 |
| Female thread | **-01F** | Rc1/8 | 6.0 | 0.5 | 1.8 | 30 |
| | **-02F** | Rc1/4 | 7.0 | 0.5 | 2.1 | 35 |
| | **-03F** | Rc3/8 | 7.0 | 0.5 | 2.1 | 35 |
| | **-04F** | Rc1/2 | 7.0 | 0.5 | 2.1 | 35 |
| With barb fitting | **-07B** | 6 (1/4") | 2.0 | 0.4 | 0.5 | 10 |
| | **-09B** | 8 (1/4") | 3.0 | 0.4 | 0.8 | 15 |
| | **-11B** | 10 (3/8") | 6.0 | 0.5 | 1.8 | 30 |
| | **-13B** | 12 (1/2") | 7.0 | 0.5 | 2.1 | 35 |
| With nut fitting | **-50N** | 5/8 | 2.0 | 0.4 | 0.5 | 10 |
| | **-60N** | 6/9 | 3.5 | 0.4 | 1.0 | 18 |
| | **-65N** | 6.5/10 | 4.2 | 0.4 | 1.2 | 21 |
| | **-80N** | 8/12 | 7.0 | 0.4 | 1.9 | 35 |
| | **-85N** | 8.5/12.5 | 7.0 | 0.4 | 1.9 | 35 |
| | **-110N** | 11/16 | 7.0 | 0.5 | 2.1 | 35 |
| With one-touch fitting | **-06H** | ø6 | 2.0 | 0.4 | 0.5 | 10 |
| | **-08H** | ø8 | 4.4 | 0.5 | 1.3 | 22 |
| | **-10H** | ø10 | 7.0 | 0.5 | 1.8 | 35 |
| | **-12H** | ø12 | 7.0 | 0.5 | 2.1 | 35 |

## Construction

**<With one-touch fitting>** **<With one-touch fitting>**




**Plug** **Socket**

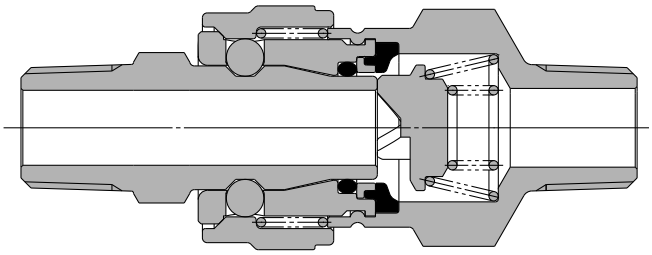


**Figure: Connected plug and socket**

### Plug

| No. | Description | Material | Note |
|---|---|---|---|
| **1** | **Plug** | Structural steel | Zinc chromated |
| **11** | **Cassette** | — | |
| **12** | **Seal** | NBR | |

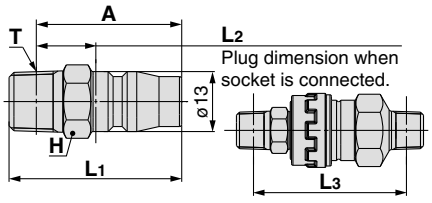
### Socket

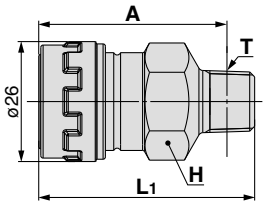
| No. | Description | Material | Note |
|---|---|---|---|
| **1** | **Socket body** | Structural steel | Zinc chromated |
| **2** | **Sleeve** | Steel wire | Electroless nickel plated |
| **3** | **Valve** | Steel wire | Zinc chromated |
| **4** | **Main body** | Steel wire | Zinc chromated |
| **5** | **Sleeve spring** | Stainless steel | |
| **6** | **Valve spring** | Stainless steel | |
| **7** | **Holder** | Steel band | Zinc chromated |
| **8** | **Plug O-ring** | NBR | |
| **9** | **Seal** | NBR | |
| **10** | **Steel ball** | SUJ | |
| **11** | **Cassette** | — | |
| **12** | **Seal** | NBR | |

## Dimensions

**Plug (KK130P)** | **Socket (KK130S, L)**

### Male thread type




(mm)

| Model | T Connection male thread | H Width across flats | L1 | L2 | A*1 | Min. hole size | Weight g | When connected Full length L3 |
|---|---|---|---|---|---|---|---|---|
| **KK130P-01MS** | R1/8 | 14 | 34.0 | 11.1 | 30.0 | 6.0 | 18 | 51.1 |
| **-02MS** | R1/4 | 14 | 38.0 | 13.1 | 32.0 | 8.0 | 22 | 53.9 |
| **-03MS** | R3/8 | 19 | 39.0 | 13.6 | 32.5 | 8.0 | 37 | 53.3 |
| **-04MS** | R1/2 | 22 | 43.0 | 16.1 | 35.0 | 8.0 | 52 | 55.9 |
| **KK130P-N01MS** | NPT1/8 | 14 | 34.0 | 10.1 | 29.0 | 6.0 | 18 | 49.4 |
| **-N02MS** | NPT1/4 | 14 | 38.0 | 11.6 | 30.5 | 8.0 | 22 | 51.5 |
| **-N03MS** | NPT3/8 | 19 | 39.0 | 12.6 | 31.5 | 8.0 | 37 | 51.7 |
| **-N04MS** | NPT1/2 | 22 | 43.0 | 14.1 | 33.0 | 8.0 | 52 | 52.3 |

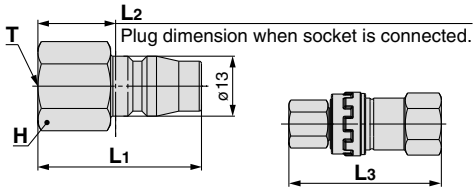
*1 Reference dimension after installation

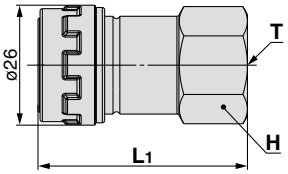
(mm)

| Model | T Connection male thread | H Width across flats | L1 | A*1 | Min. hole size | Weight g |
|---|---|---|---|---|---|---|
| **KK130S(L)-01MS** | R1/8 | 22 | 44.0 | 40.0 | 6.0 | 73 |
| **-02MS** | R1/4 | 22 | 46.8 | 40.8 | 8.5 | 74 |
| **-03MS** | R3/8 | 22 | 46.2 | 39.7 | 8.5 | 82 |
| **-04MS** | R1/2 | 22 | 47.8 | 39.8 | 14.0 | 83 |
| **KK130S(L)-N01MS** | NPT1/8 | 22 | 44.3 | 39.3 | 6.0 | 73 |
| **-N02MS** | NPT1/4 | 22 | 47.4 | 39.9 | 8.5 | 74 |
| **-N03MS** | NPT3/8 | 22 | 46.6 | 39.1 | 8.5 | 82 |
| **-N04MS** | NPT1/2 | 22 | 48.2 | 38.2 | 14.0 | 83 |

*1 Reference dimension after installation

### Female thread type



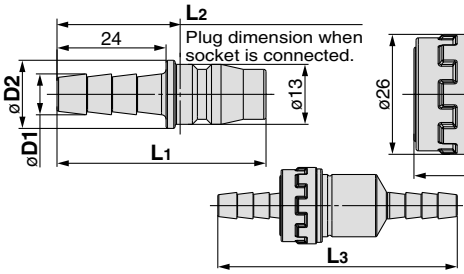

(mm)

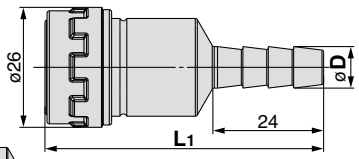
| Model | T Connection male thread | H Width across flats | L1 | L2 | Min. hole size | Weight g | When connected Full length L3 |
|---|---|---|---|---|---|---|---|
| **KK130P-01F** | Rc1/8 | 14 | 30.0 | 11.1 | 8.0 | 18 | 53.0 |
| **-02F** | Rc1/4 | 17 | 36.0 | 17.1 | 8.0 | 28 | 62.5 |
| **-03F** | Rc3/8 | 21 | 37.0 | 18.1 | 8.0 | 38 | 66.5 |
| **-04F** | Rc1/2 | 27 | 42.0 | 23.1 | 8.0 | 73 | 76.0 |
| **KK130P-N01F** | NPT1/8 | 14 | 30.0 | 11.1 | 8.0 | 18 | 53.0 |
| **-N02F** | NPT1/4 | 17 | 36.0 | 17.1 | 8.0 | 28 | 62.5 |
| **-N03F** | NPT3/8 | 21 | 37.0 | 18.1 | 8.0 | 38 | 66.5 |
| **-N04F** | NPT1/2 | 27 | 42.0 | 23.1 | 8.0 | 73 | 76.0 |

(mm)

| Model | T Connection male thread | H Width across flats | L1 | Min. hole size | Weight g |
|---|---|---|---|---|---|
| **KK130S(L)-01F** | Rc1/8 | 22 | 41.9 | 8.0 | 90 |
| **-02F** | Rc1/4 | 22 | 45.4 | 11.0 | 92 |
| **-03F** | Rc3/8 | 22 | 48.4 | 11.0 | 91 |
| **-04F** | Rc1/2 | 27 | 52.9 | 14.0 | 117 |
| **KK130S(L)-N01F** | NPT1/8 | 22 | 41.9 | 8.0 | 90 |
| **-N02F** | NPT1/4 | 22 | 45.4 | 11.0 | 92 |
| **-N03F** | NPT3/8 | 22 | 48.4 | 11.0 | 91 |
| **-N04F** | NPT1/2 | 27 | 52.9 | 14.0 | 117 |

### Barb fitting type (for rubber hose)




(mm)

| Model | Hose nominal | øD1 | øD2 | L1 | L2 | Min. hole size | Weight g | When connected Full length L3 |
|---|---|---|---|---|---|---|---|---|
| **KK130P-07B** | 6 (1/4") | 7.2 | 14.0 | 46.0 | 27.1 | 4.5 | 16 | 88.0 |
| **-09B** | 8 (1/4") | 9.0 | 15.0 | 46.0 | 27.1 | 5.0 | 19 | 87.5 |
| **-11B** | 9 (3/8") | 11.3 | 16.0 | 46.0 | 27.1 | 8.0 | 19 | 87.0 |
| **-13B** | 12 (1/2") | 15.0 | 18.0 | 46.0 | 27.1 | 8.0 | 33 | 86.0 |

∗ The figures in ( ) indicate the internal diameter of the applicable hose.

(mm)

| Model | Hose nominal | øD1 | L1 | Min. hole size | Weight g |
|---|---|---|---|---|---|
| **KK130S(L)-07B** | 6 (1/4") | 7.2 | 60.9 | 4.5 | 70 |
| **-09B** | 8 (1/4") | 9.0 | 60.4 | 5.0 | 72 |
| **-11B** | 9 (3/8") | 11.3 | 59.9 | 7.7 | 73 |
| **-13B** | 12 (1/2") | 15.0 | 58.9 | 9.0 | 81 |

∗ The figures in ( ) indicate the internal diameter of the applicable hose.