

KHC Series Compact Auto Tool Changer

Key Features

0.5kg payload limit ultra-compact auto tool changer

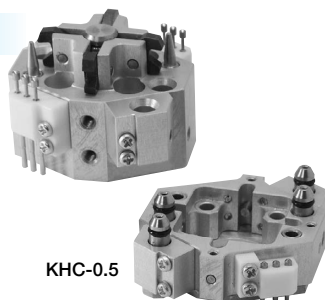
The ultra-compact light-weight unit (60g) for parallel-motion robots

Anti-drop mechanism for standard models

Built-in spring retention for a sudden air loss

Various options

In addition to 2 built-in air ports for tool, maximum 2 air ports and maximum 6-signal electrode can be added



KHC-0.5

How To Order

Robot Side

Standard ----- **KHC-0.5R**

Option ----- **KHC - 0.5 R - DP1 - AP1**

| Size | |
|--------|--|
| Symbol | |
| 0.5 | |
| | |
| | |

| Parts | |
|--------|-----------------|
| Symbol | Name |
| R | Robot Side Only |
| | |
| | |

| Option | |
|--------|-------------------------------|
| Symbol | Name |
| DP1 | 1 Electrode for Signal Wires |
| DP2 | 2 Electrodes for Signal Wires |
| AP1 | 1 Additional Air Port |
| AP2 | 2 Additional Air Ports |
| Z | Special Type (Custom) |

For option detail ▶ 36P

Tool Side

Standard ----- **KHC-0.5H**

Option ----- **KHC - 0.5 H - DP1 - AP1**

| Size | |
|--------|--|
| Symbol | |
| 0.5 | |
| | |
| | |

| Parts | |
|--------|----------------|
| Symbol | Name |
| H | Tool Side Only |
| | |
| | |

| Option | |
|--------|-------------------------------|
| Symbol | Name |
| DP1 | 1 Electrode for Signal Wires |
| DP2 | 2 Electrodes for Signal Wires |
| AP1 | 1 Additional Air Port |
| AP2 | 2 Additional Air Ports |
| Z | Special Type (Custom) |

For option detail ▶ 36P

■ Option only

KHC - **0.5** **RS** - **DP**

| Size | |
|--------|--|
| Symbol | |
| 0.5 | |
| | |
| | |

| Parts | |
|--------|-----------------|
| Symbol | Name |
| RS | Robot Side Only |
| HS | Tool Side Only |
| | |

| Option | |
|--------|----------------------------|
| Symbol | Name |
| DP | Electrode for Signal Wires |
| AP | Additional Air Port |
| | |

For option detail ▶ 36P

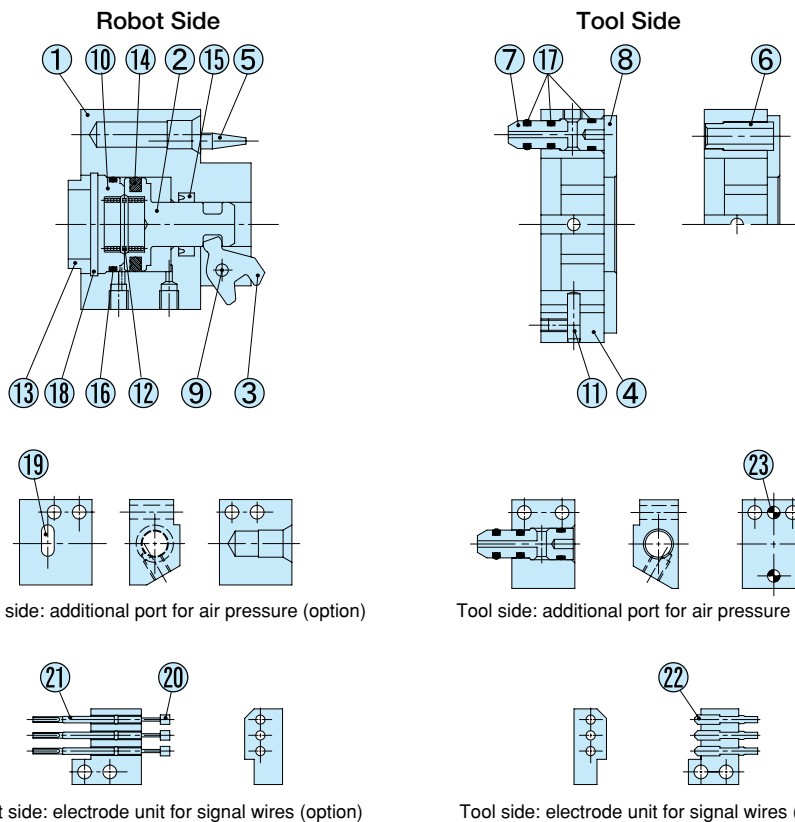
Specification

| Model | | KHC-0.5 For Layout Drawing ▶ 406P |
|--|---|--|
| Payload Limit | (kg) | 0.5 |
| Total Length When Coupled | (mm) | 31 |
| Working Pressure | | 0.3 to 0.7MPa |
| Ambient Temperature | (°C) | 5 to 60 |
| Repeatability | (mm) | ±0.01 |
| Coupling Axial Force | (N) | 60 (at 0.5MPa) |
| Moment When Coupled | (N·m) | 1.5 (at 0.5MPa) |
| Torque When Coupled | (N·m) | 5.3 |
| Air Port | Number of Ports | 2 Pieces |
| | Minimum Cross-Sectional Area (mm ²) | 0.78 |
| Weight | (g) | 67 |
| Air Port (Additional) (Option) | | Max. 2 Air Ports (1 Air Port x 2) |
| Electric Interface (Additional) (Option) | | Max. 6 Signals (3 Signals x 2) Current Capacity MAX2A |

*Air Pressure Range for Use: -100Pa to 0.7MPa

*Vacuum state can not be retained

Internal Structure / Parts & Seals



Robot side: additional port for air pressure (option)

Tool side: additional port for air pressure (option)

Robot side: electrode unit for signal wires (option)

Tool side: electrode unit for signal wires (option)

Parts List

| No. | Name | Material | No. | Name | Material | No. | Name | Material |
|-----|-----------------|-----------------|-----|-----------------|-----------------|-----|---------------------------|-----------------|
| 1 | Robot Side Body | Aluminum | 9 | Fulcrum Shaft | Bearing Steel | 17 | Air Pin Seal | |
| 2 | Piston | Stainless Steel | 10 | Cylinder Cover | Resin | 18 | For C-Type Snap Ring Hole | Stainless Steel |
| 3 | Arm | Stainless Steel | 11 | Operating Shaft | Bearing Steel | 19 | Parallel Key | Steel Material |
| 4 | Tool Side Body | Aluminum | 12 | Spring | Stainless Steel | 20 | Spring Probe | |
| 5 | Locating Pin | Stainless Steel | 13 | Locating Ring | Aluminum | 21 | Receptacle | |
| 6 | Locating Hole | Stainless Steel | 14 | Piston Seal | | 22 | Electrode Pin | Copper |
| 7 | Air Pin | Stainless Steel | 15 | Rod Seal | | 23 | Knock Pin | Steel Material |
| 8 | Tool Plate | Aluminum | 16 | Cylinder Seal | | | | |

Seals List

| No. | KHC-0.5 |
|-----|--------------|
| 14 | PSD-15 |
| 15 | MYA-7 |
| 16 | dia.13×dia.1 |
| 17 | SS-3 |

Layout Drawing

For CAD data, please go to **▶518P**

■KHC-0.5

KHC-0.5 Standard

