



KHQ series is the improvement of KB series.

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### Specification

Series	KHQ10	KHQ16	KHQ20	KHQ25
Action	Double acting, magnetic type			
Bore	Ø10	Ø16	Ø20	Ø25
Operating fluid	Compressed air			
Operating pressure	0.15 ~ 0.6MPa (1.5 ~ 6.1kgf/cm <sup>2</sup> )			
Temperature range	-10°C ~ 60°C			
Action tolerance	± 0.01mm			
Lubrication	Not required (If lubrication is required, use 1st sort of turbine oil equivalent of ISOVG32)			
Max. Operating frequency	180 c.p.m			

### Features

1. Less expensive than KB series.
2. More options of sensor grooves than those of KB series.
3. High action tolerance and long service life.
4. Compact body (10mm in width): suitable for high precision assembly of small workpieces.

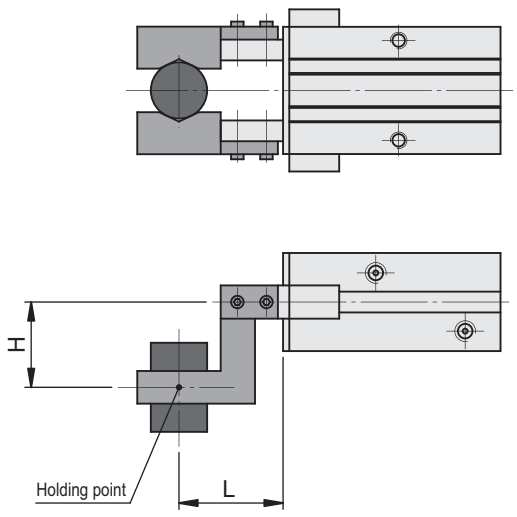
### How to order

<b>KHQ</b>	<b>16</b>	<b>TH-F9B</b>	<b>2</b>												
<b>Series</b>	<b>Bore</b>	<b>Reed switch</b>	<b>Switch quantity</b>												
	Ø10 Ø16 Ø20 Ø25	<table border="1"> <tr> <td>TH-F9B 2-wire solid state</td> <td>TH-F9BV 2-wire solid state</td> <td>TD11046 Adapter</td> </tr> <tr> <td>TH-F9N 3-wire NPN type solid state</td> <td>TH-F9NV 3-wire NPN type solid state</td> <td rowspan="2">Adapter for tetragonal groove (TH sensor)</td> </tr> <tr> <td>TH-F9P 3-wire PNP type solid state</td> <td>TH-F9PV 3-wire PNP type solid state</td> </tr> </table>	TH-F9B 2-wire solid state	TH-F9BV 2-wire solid state	TD11046 Adapter	TH-F9N 3-wire NPN type solid state	TH-F9NV 3-wire NPN type solid state	Adapter for tetragonal groove (TH sensor)	TH-F9P 3-wire PNP type solid state	TH-F9PV 3-wire PNP type solid state	<table border="1"> <tr> <td>1</td> <td>1PC</td> </tr> <tr> <td>2</td> <td>2PCS</td> </tr> </table>	1	1PC	2	2PCS
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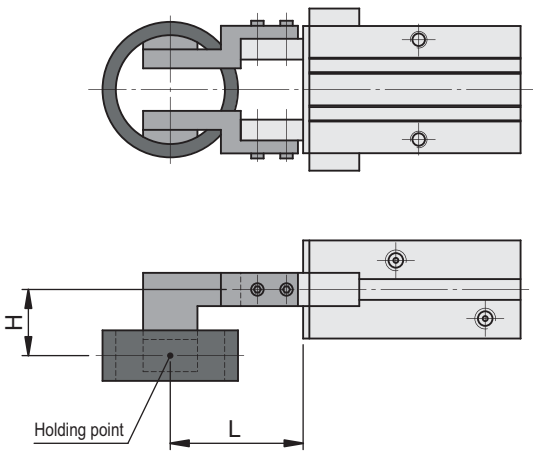
※ Please refer to 4.08.01 ~ 4.08.02

**Holding point**

● External gripping

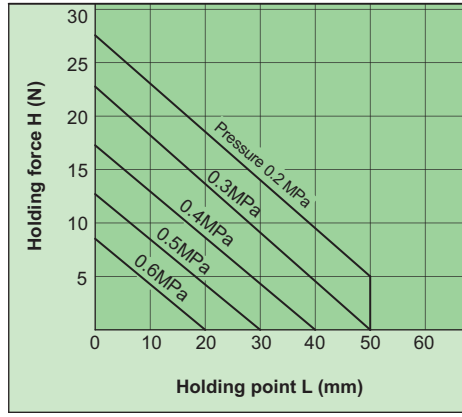


● Internal gripping

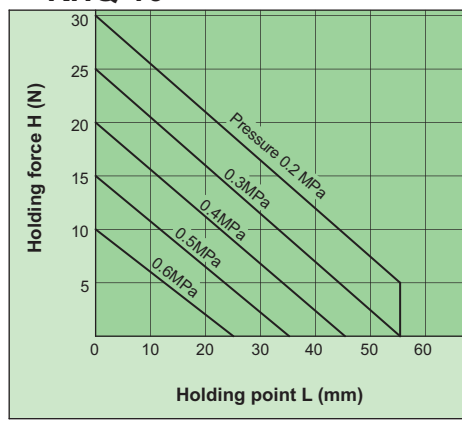


- The gripper should be operated when the workpiece holding point "L" and the amount of holding force "H" stay within the range for each operating pressure given in the graphs to the right.
- If the workpiece holding point goes beyond the range limits, this will have an adverse effect on the service life of the gripper.

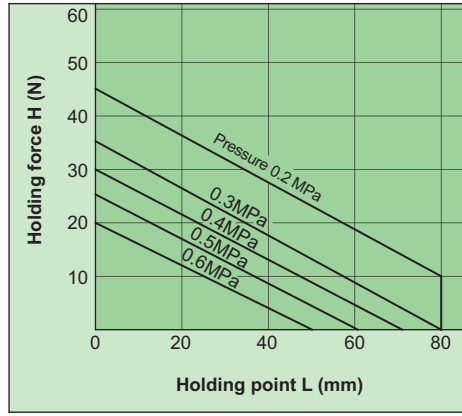
● KHQ-10



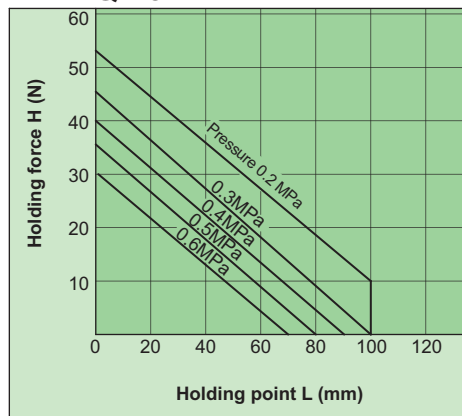
● KHQ-16



● KHQ-20

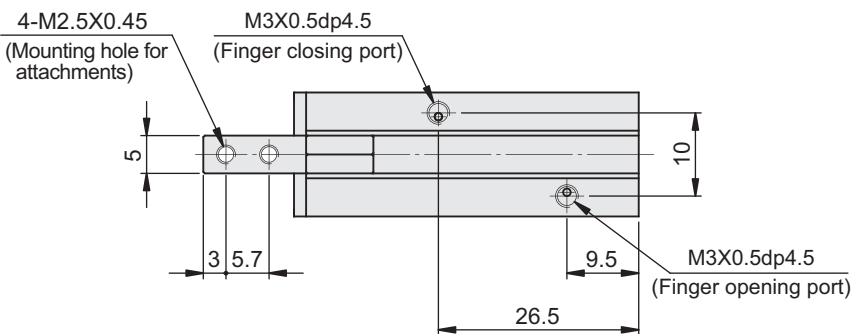
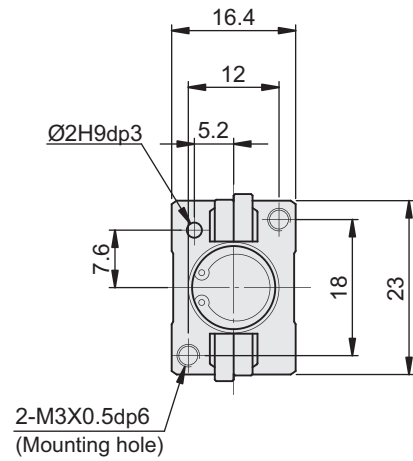
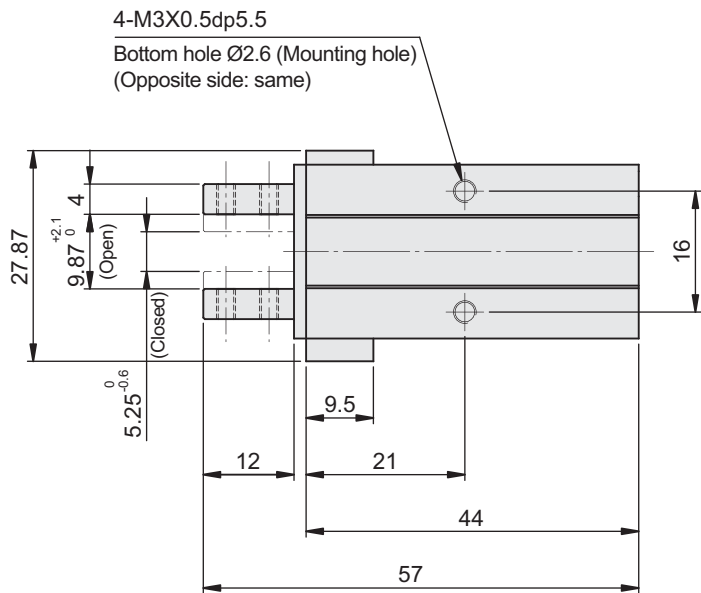
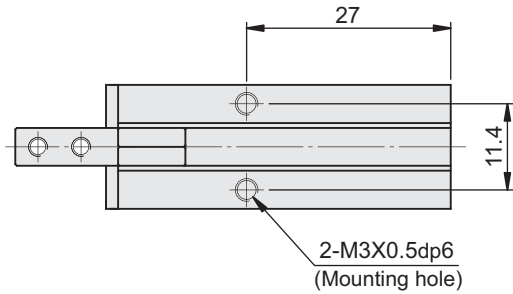


● KHQ-25

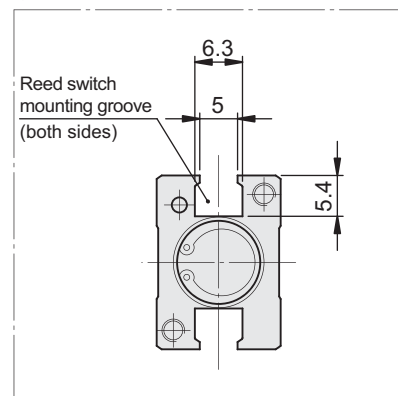


## External dimensions

### KHQ10



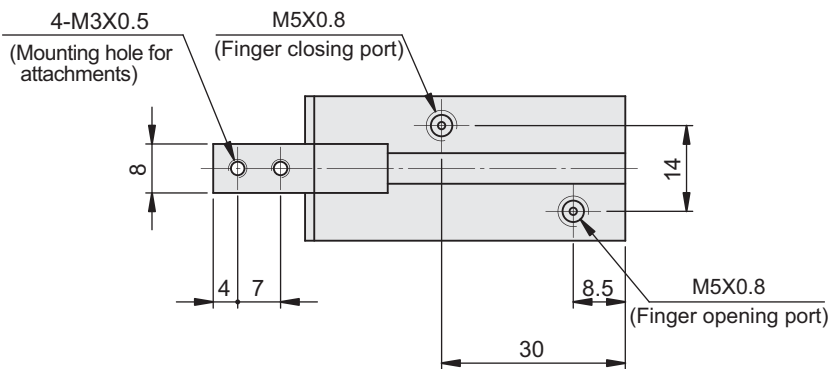
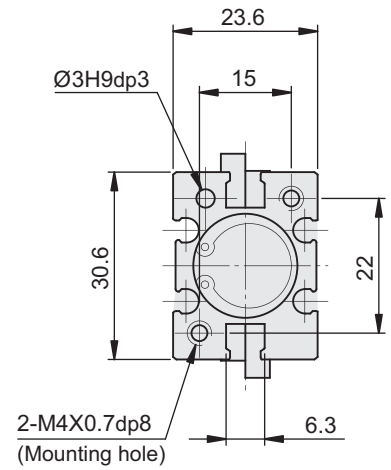
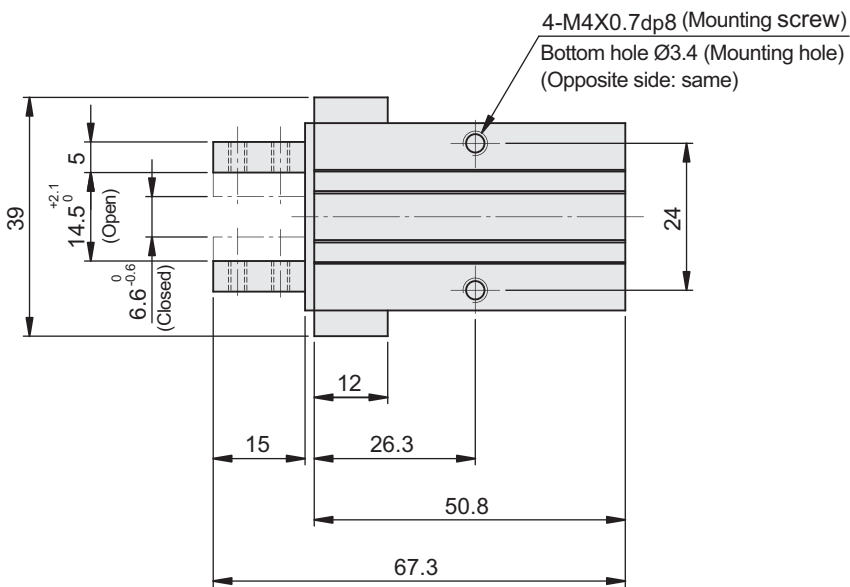
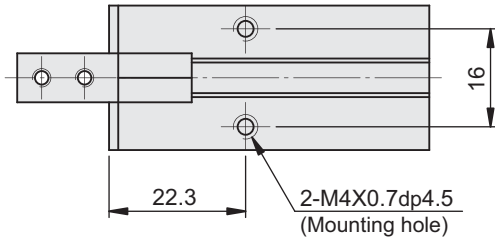
### Reed switch mounting groove dimensions



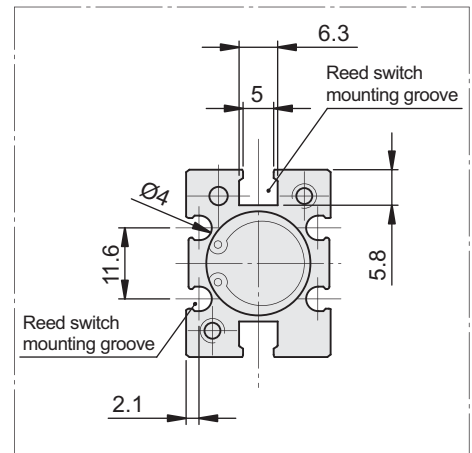
※ only TH sensor with bracket can be mounted.

External dimensions

KHQ16



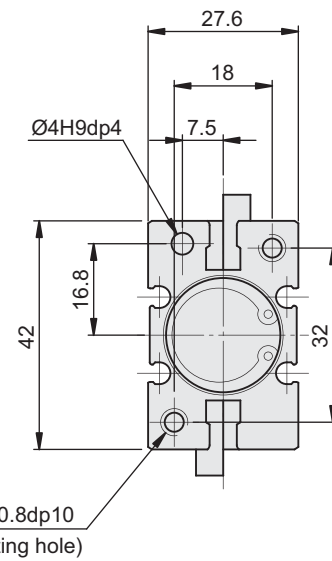
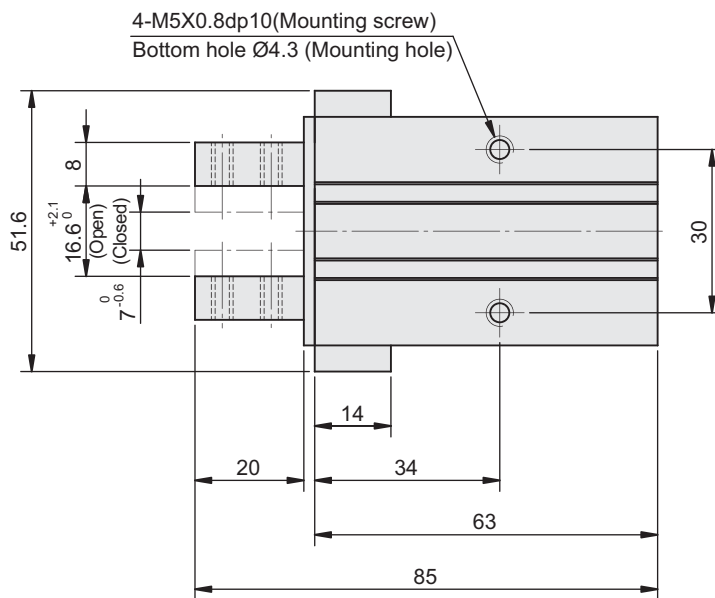
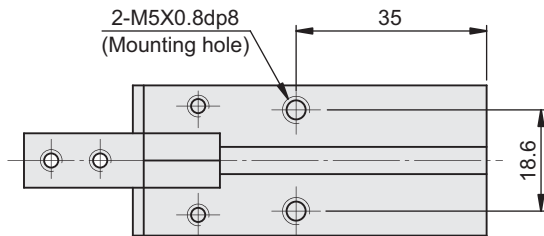
Reed switch mounting groove dimensions



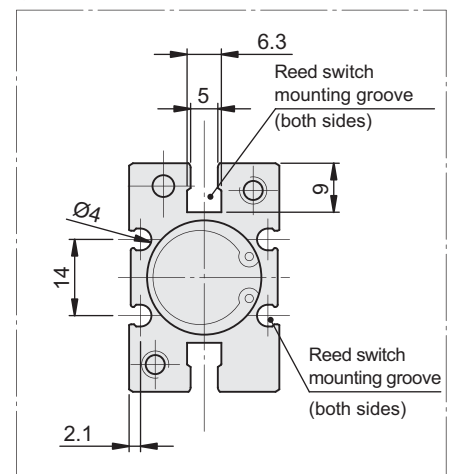
※ When using square type reed switch, through hole mounting is not possible.

## External dimensions

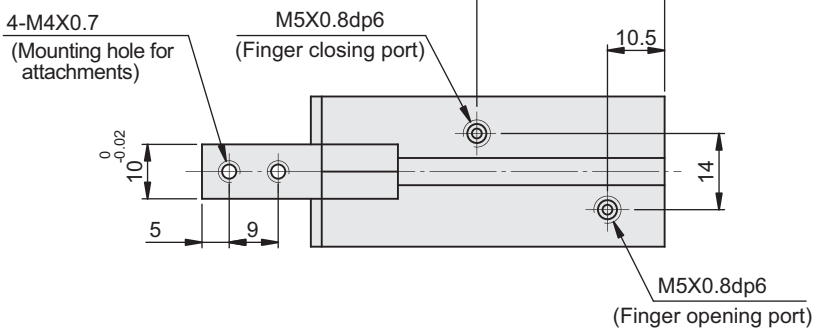
### KHQ20



### Reed switch mounting groove dimensions

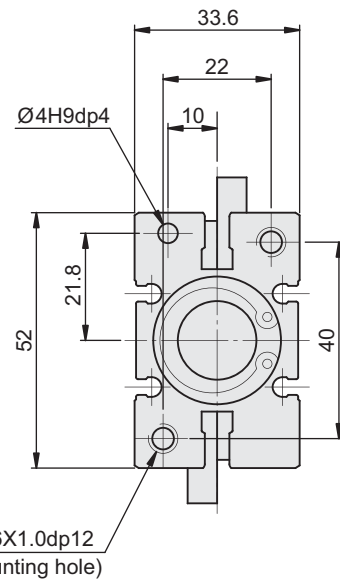
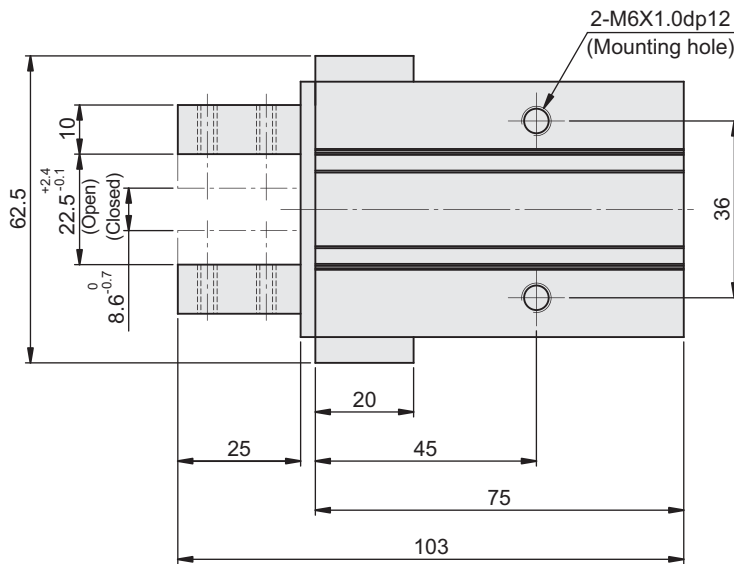
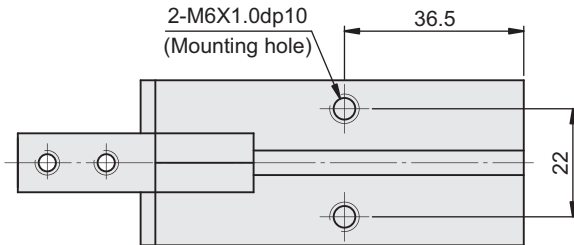


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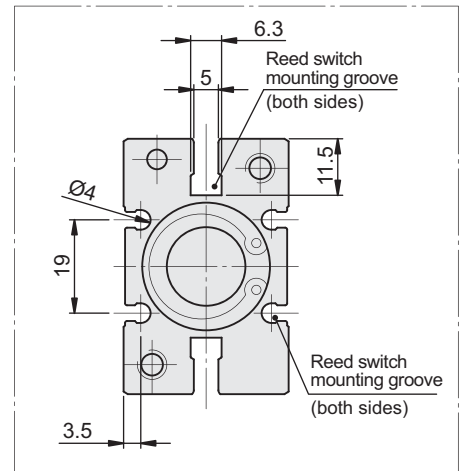


External dimensions

KHQ25



Reed switch mounting groove dimensions



※ When using square type reed switch, through hole mounting is not possible.

