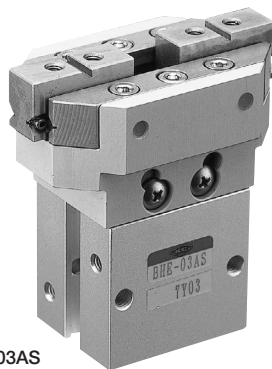


# BHE Series Self-Centering Hand

## Reliable High Accuracy Self-Centering Hand Suitable for Precise Handling

### Key Features

- Self-centering accuracy  $\pm 0.05$  mm
- High rigidity and durability via hard stainless steel
- Opening and closing stroke adjustable (option)



BHE-03AS

### How To Order

Standard ----- **BHE-01AS**

Option ----- **BHE - 01AS - ET3S2 - D** ----- BHE-01AS-D (opening stroke adjustable type) with 2 of ET3 non-contact reed switches

Size	
Symbol	
01AS	
03AS	
04AS	
05AS	
06AS	

Sensor, Quantity			
Symbol	Name	Symbol	Name
ET3	Non-Contact 3-Lead	S2	2 Sensors
ET3L	Non-Contact 3-Lead		
ET2	Non-Contact 2-Lead		
ET2L	Non-Contact 2-Lead		
S1	1 Sensor		

Option	
Symbol	Name
D	Adjustable Opening Stroke
E	Adjustable Closing Stroke
DE	Adjustable Opening & Closing Stroke

For sensor detail ▶ 277P

For option detail ▶ 36P

### Specification

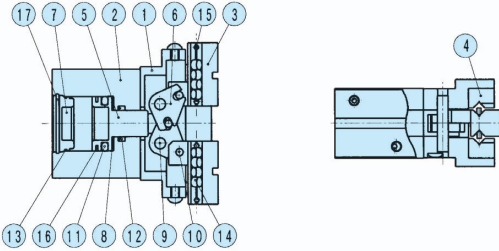
Model	BHE-01AS	BHE-03AS	BHE-04AS	BHE-05AS	BHE-06AS
	For Layout Drawing ▶ 63P	For Layout Drawing ▶ 64P	For Layout Drawing ▶ 65P	For Layout Drawing ▶ 66P	For Layout Drawing ▶ 67P
Working Pressure	Pneumatic: 0.2 to 0.7MPa				
Lubrication	Not Required or Turbine Oil Class 1 (ISOVG32)				
Ambient Temperature (°C)	5 to 60				
Total Jaw Stroke (mm)	7	10	14	16	22
Cylinder Diameter (mm)	dia.12	dia.16	dia.20	dia.25	dia.32
Rod Diameter (mm)	dia.6	dia.8	dia.10	dia.12	dia.16
Repeatability (mm)	$\pm 0.01$				
Centering Accuracy (mm)	$\pm 0.05$				
Weight (g)	108	154	260	438	1040

\* Centering accuracy and repeatability may be worsen if the jaw is overloaded. Please be cautious when using this model

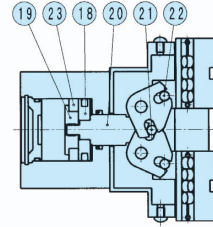
# BHE-01AS/03AS/04AS/05AS/06AS

## Internal Structure / Parts & Seals

### ■ BHE-01AS to 05AS



### ■ BHE-06AS



### ■ Parts List

No.	Name	Material	No.	Name	Material	No.	Name	Material
1	Body	Aluminum	9	Fulcrum Shaft	Bearing Steel	17	C-Type Snap Ring	Stainless Steel
2	Cylinder	Aluminum	10	Operating Shaft	Bearing Steel	18	Piston A	Aluminum
3	Master(Base) Jaw	Stainless Steel	11	Piston Seal		19	Piston B	Stainless Steel
4	Bearing Guide	Stainless Steel	12	Rod Seal		20	Piston Rod	Stainless Steel
5	Piston	Stainless Steel	13	Cylinder Seal		21	Operating Shaft A	Bearing Steel
6	Arm	Stainless Steel	14	Cross Roller		22	Operating Shaft B	Bearing Steel
7	Cylinder Cover	Resin	15	Spring Pin	Stainless Steel	23	Magnet	
8	Cushion		16	Half Moon shape Magnet		24		

### ■ Seals List

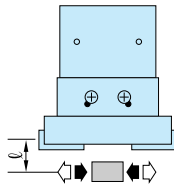
No.	BHE-01AS	BHE-03AS	BHE-04AS	BHE-05AS	BHE-06AS
11	PSD-12	PSD-16	PSD-20	PSD-25	PSD-32
12	MYA-6	MYA-8	MYA-10	MYA-12	MYA-16
13	dia.10×dia.1	dia.14×dia.1	dia.18×dia.1	dia.22.33×dia.1.02	S-29

## Performance Data

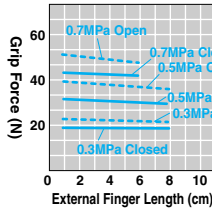
### ■ Grip Force

The graph shows grip force in opening and closing with effective external finger lengths  $\ell$  from gripper cover surface under different air pressure (MPa)

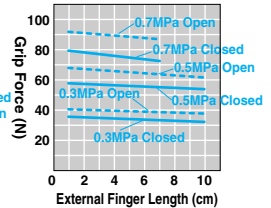
Open (⇐) ---  
 Closed (⇒) ———



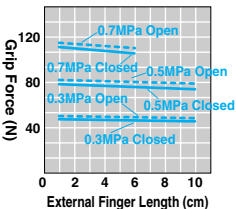
### ■ BHE-01AS



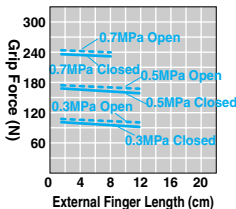
### ■ BHE-03AS



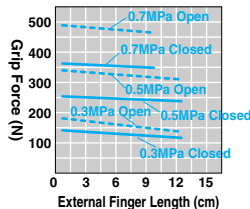
### ■ BHE-04AS



### ■ BHE-05AS



### ■ BHE-06AS



# BHE Series Self-Centering Hand

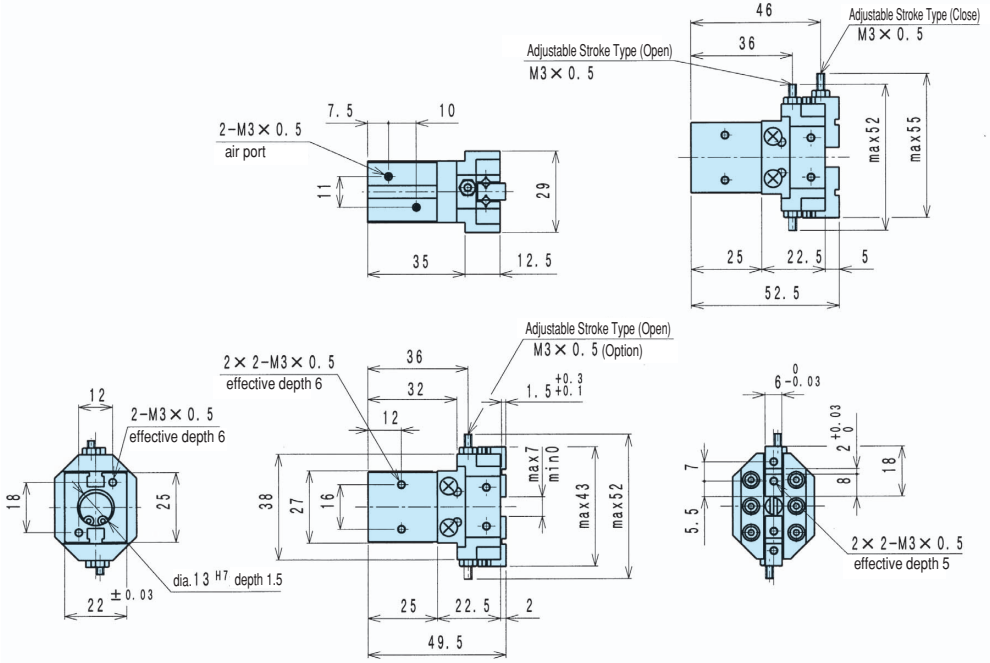
## Layout Drawing

### ■ BHE-01AS (Optimal Grip Force 15N to 30N)

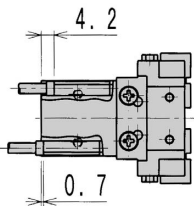
#### BHE-01AS Standard

Hand  
(2-law)

Adjustable Opening & Closing Stroke Layout (Option)



#### BHE-01AS-E□S□



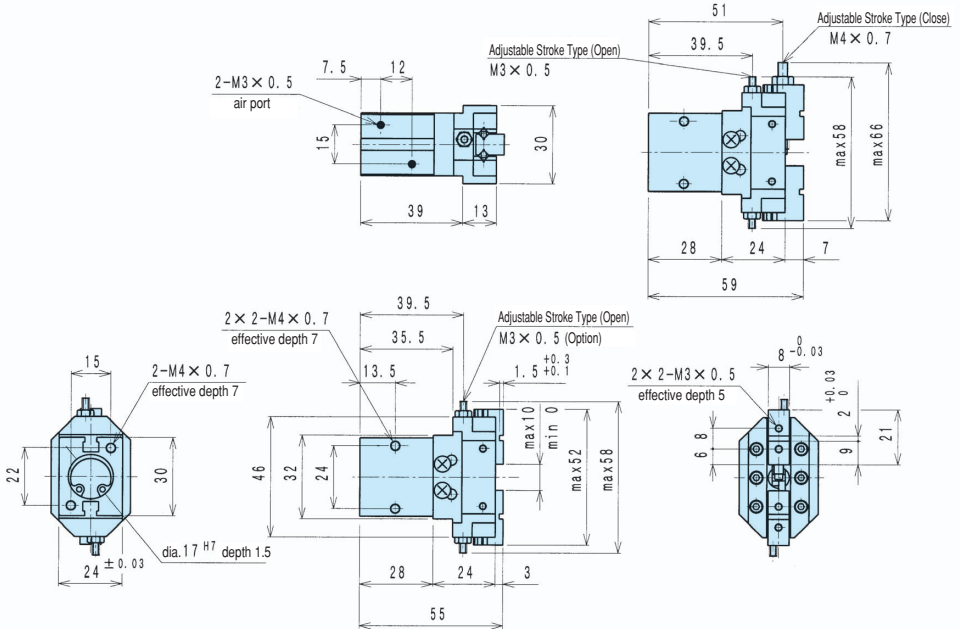
# BHE-01AS/03AS/04AS/05AS/06AS

For CAD data, please go to **▶518P**

## ■ BHE-03AS (Optimal Grip Force 30N to 50N)

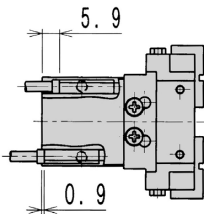
### BHE-03AS Standard

Adjustable Opening & Closing Stroke Layout (Option)



Hand  
(2-Jaw)

### BHE-03AS-E □ S □



# BHE Series Self-Centering Hand

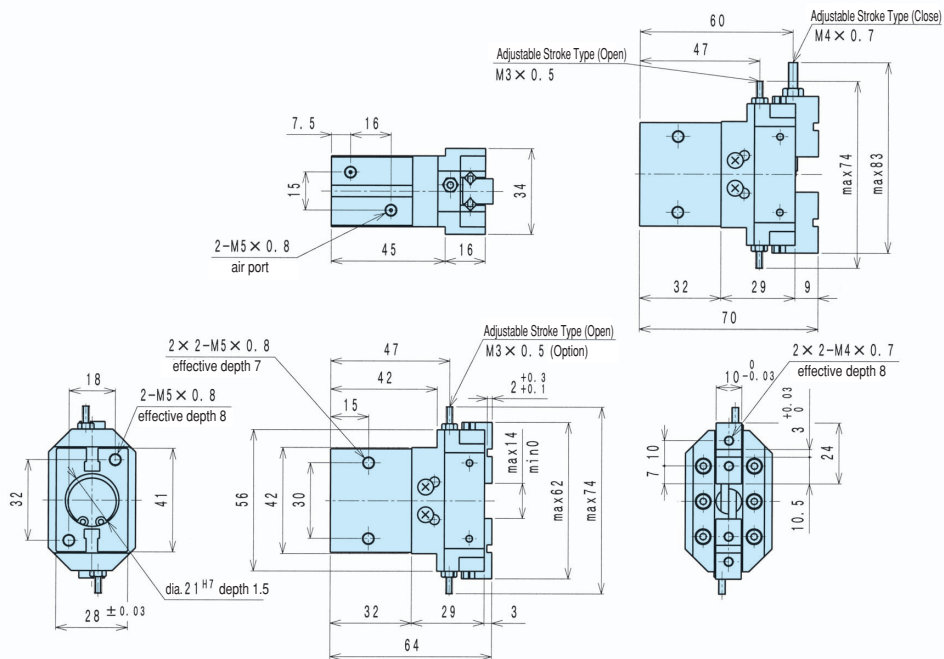
## Layout Drawing

### ■ BHE-04AS (Optimal Grip Force 40N to 80N)

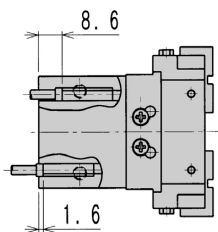
#### BHE-04AS Standard

Adjustable Opening & Closing Stroke Layout (Option)

Hand  
(2-law)



#### BHE-04AS-E□S□



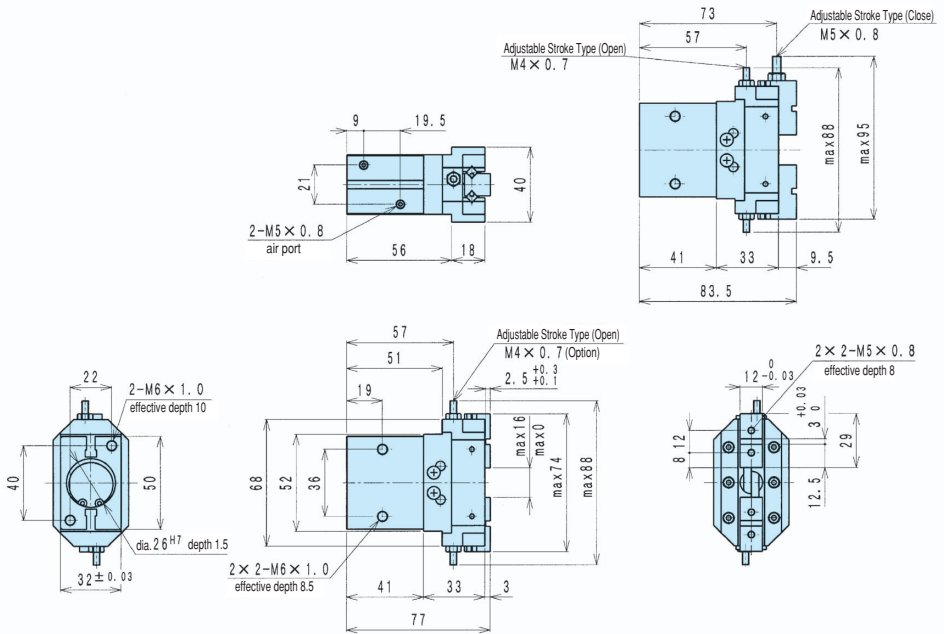
# BHE-01AS/03AS/04AS/05AS/06AS

For CAD data, please go to **▶518P**

## ■ BHE-05AS (Optimal Grip Force 80N to 150N)

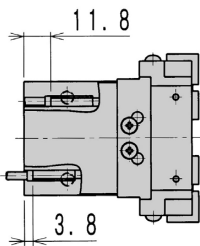
### BHE-05AS Standard

Adjustable Opening & Closing Stroke Layout (Option)



Hand  
(2-Jaw)

### BHE-05AS-E □ S □



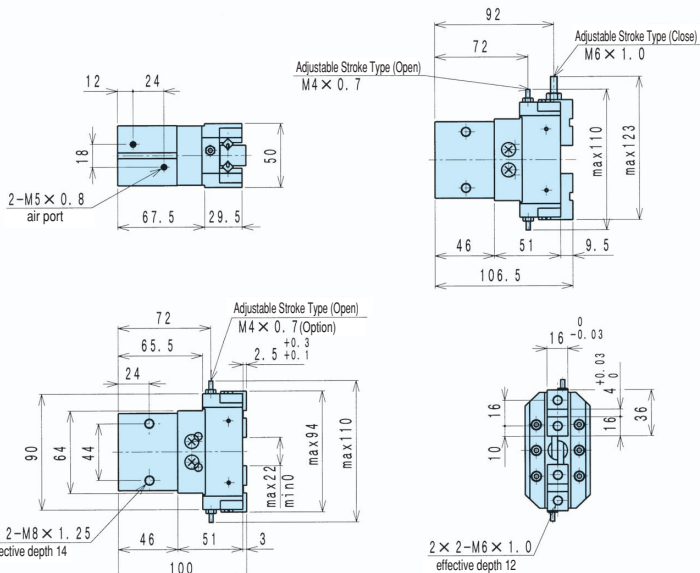
# BHE Series Self-Centering Hand

## Layout Drawing

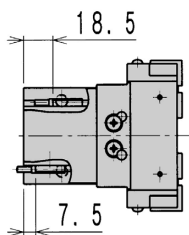
### ■ BHE-06AS (Optimal Grip Force 100N to 250N)

#### BHE-06AS Standard


Adjustable Opening & Closing Stroke Layout (Option)



#### BHE-06AS-E □ S □



# BHE-01AS/03AS/04AS/05AS/06AS

 For CAD data, please go to **▶518P**