

## 3-Jaw Bearing-Integrated Gripper

### Key Features

#### High accuracy and smooth motion via cross roller guide

Cross roller bearing used for sliding material provides precise and smooth operation  
High accuracy and smooth motion

#### Protective rubber cover (option) for use in dusty and harsh environments

Rubber cover prevents substances and particulates such as mists and dusts from penetrating into the interior of the unit

#### Clean room compliant types available

Clean Room Class 10 and Class 1000 types available



CKG-25AS



CKG-25AS-G

### How To Order

Standard ----- **CKG-16AS**

Option ----- **CKG-16AS - ET3S2 - GH** ----- CKG-16AS (CKG-16AS with oil-resistant (fluororubber) cover) with 2 of ET3 non-contact reed switches

Size	
Symbol	
16AS	
25AS	
32AS	
40AS	
50AS	

Sensor, Quantity			
Symbol	Name	Symbol	Name
ET3	*1 Non-Contact 3-Lead		
ET3L	*2 Non-Contact 3-Lead		
ET2	*1 Non-Contact 2-Lead	*1 Only 50AS requires bracket for mounting switch	
ET2L	*2 Non-Contact 2-Lead		
S1	1 Sensor	*2 Except 50AS	
S2	2 Sensors		

Option			
Symbol	Name	Symbol	Name
NO	Normally Open	GC2	*3 Clean Room Type
NC	Normally Closed	H	Low Pressure Hydraulic
T	Heat-Proof		
G	Rubber Cover		
GH	Oil (Fluororubber) Cover		
GT	Heat (Silicon Rubber) Cover		
GC1	*3 Clean Room Type		

For sensor detail ▶277P

\*3 Available only for 16AS

For option detail ▶36P

### Specification

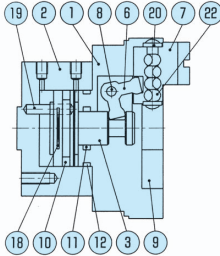
Model	CKG-16AS	CKG-25AS	CKG-32AS	CKG-40AS	CKG-50AS
	For Layout Drawing ▶240P	For Layout Drawing ▶241P	For Layout Drawing ▶242P	For Layout Drawing ▶243P	For Layout Drawing ▶244P
Working Pressure	Pneumatic: 0.1 to 0.7 MPa(0.3 to 0.7MPa for NO & NC types)				
Lubrication	Not Required or Turbine Oil Class 1 (ISOVG32)				
Ambient Temperature (°C)	5 to 60				
Total Jaw Stroke (mm)	6	6	8	11	16
Cylinder Diameter (mm)	dia.16	dia.25	dia.32	dia.40	dia.50
Rod Diameter (mm)	dia.9	dia.10	dia.14	dia.18	dia.20
Internal Volume [Reciprocation] (cm <sup>3</sup> /time)	1.0	2.2	5.1	10.1	36.1
Repeatability (mm)	±0.01				
Weight (kg)	0.24	0.47	0.80	1.4	2.3

# CKG-16AS/25AS/32AS/40AS/50AS

## Internal Structure / Parts & Seals

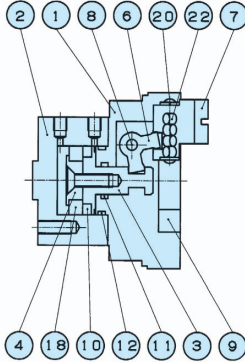
### CKG-16AS

■ Standard



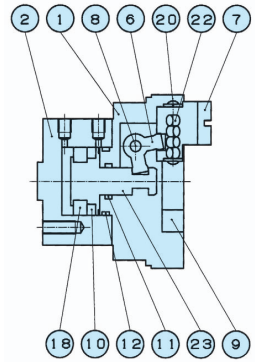
### CKG-25AS

■ Standard



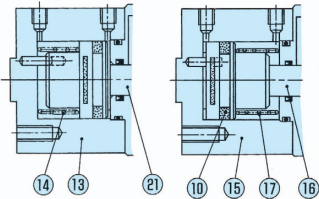
### CKG-32AS to 50AS

■ Standard



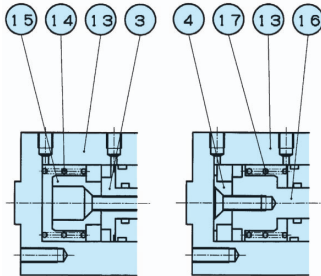
■ NO  
(Single Acting -  
Normally Open)

■ NC  
(Single Acting -  
Normally Closed)



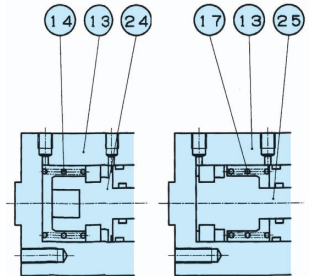
■ NO  
(Single Acting -  
Normally Open)

■ NC  
(Single Acting -  
Normally Closed)



■ NO  
(Single Acting -  
Normally Open)

■ NC  
(Single Acting -  
Normally Closed)



Chuck  
(3-Jaw)

### Parts List

No.	Name	Material	No.	Name	Material	No.	Name	Material
1	Body	Aluminum	10	Piston Seal		18	Magnet	
2	Cylinder	Aluminum	11	Rod Seal		19	Anti-Rotation	Stainless Steel
3	Piston A	Stainless Steel	12	Cylinder Seal		20	Bearing Holder	Steel Material
4	Piston B	Aluminum	13	NO & NC Cylinder	Aluminum	21	NO Piston A	Stainless Steel
6	Arm	Carbon Steel	14	NO Spring	Piano Wire	22	Roller	
7	Master(Base) Jaw	Carbon Steel	15	NO Piston B	Aluminum	23	Piston	Aluminum & Stainless Steel
8	Fulcrum Shaft	Carbon Steel	16	NC Piston A	Stainless Steel	24	NO Piston	Aluminum & Stainless Steel
9	Bearing Guide	Carbon Steel	17	NC Spring	Piano Wire	25	NC Piston	Aluminum & Stainless Steel

### Seals List

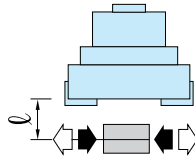
No.	CKG-16AS	CKG-25AS	CKG-32AS	CKG-40AS	CKG-50AS
10	PSD-16	PSD-25	PSD-32	PSD-40	PSD-50
11	MYA-9	MYA-10	MYA-14	MYA-18	MYA-20
12	S-14	S-22.4	S-29	S-36	S-46

## Performance Data

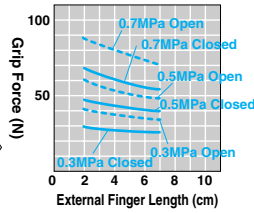
### ■ Grip Force

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

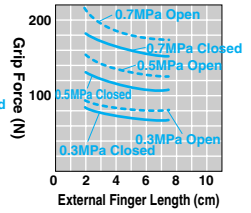
Open (⇐) ————  
 Closed (⇒) —————



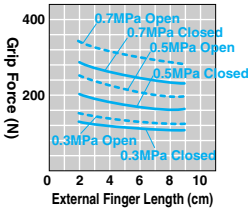
#### ■ CKG-16AS



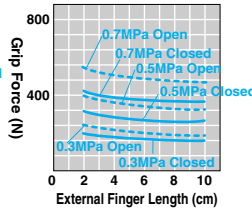
#### ■ CKG-25AS



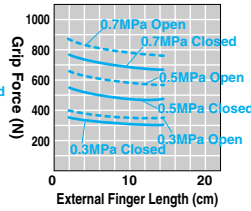
#### ■ CKG-32AS



#### ■ CKG-40AS



#### ■ CKG-50AS



# CKG-16AS/25AS/32AS/40AS/50AS

## Layout Drawing

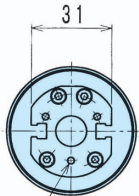
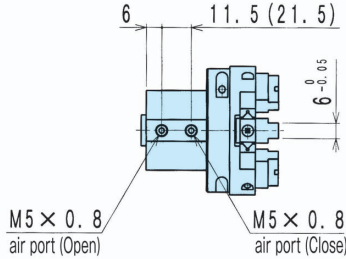
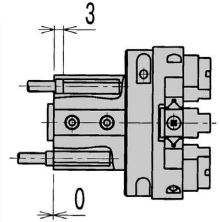
For CAD data, please go to **▶518P**

### CKG-16AS (Optimal Grip Force 20N to 40N)

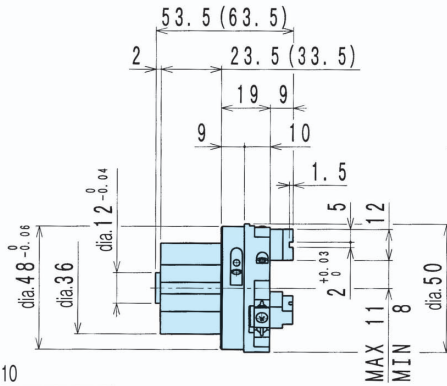
#### CKG-16AS Standard • NO • NC

\*Values inside ( ) are for NO (Normally Open) and NC (Normally Closed) type

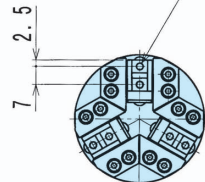
#### CKG-16AS-E□S□



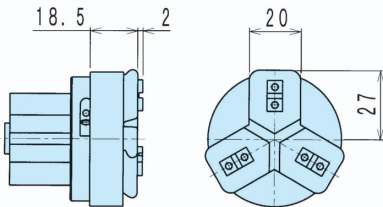
3-M3 × 0.5 depth 10  
P. C. D 23 (120° equally divided by 3)



3 × 2-M3 × 0.5 depth 6



#### CKG-16AS-G



# CKG Series Bearing Chuck

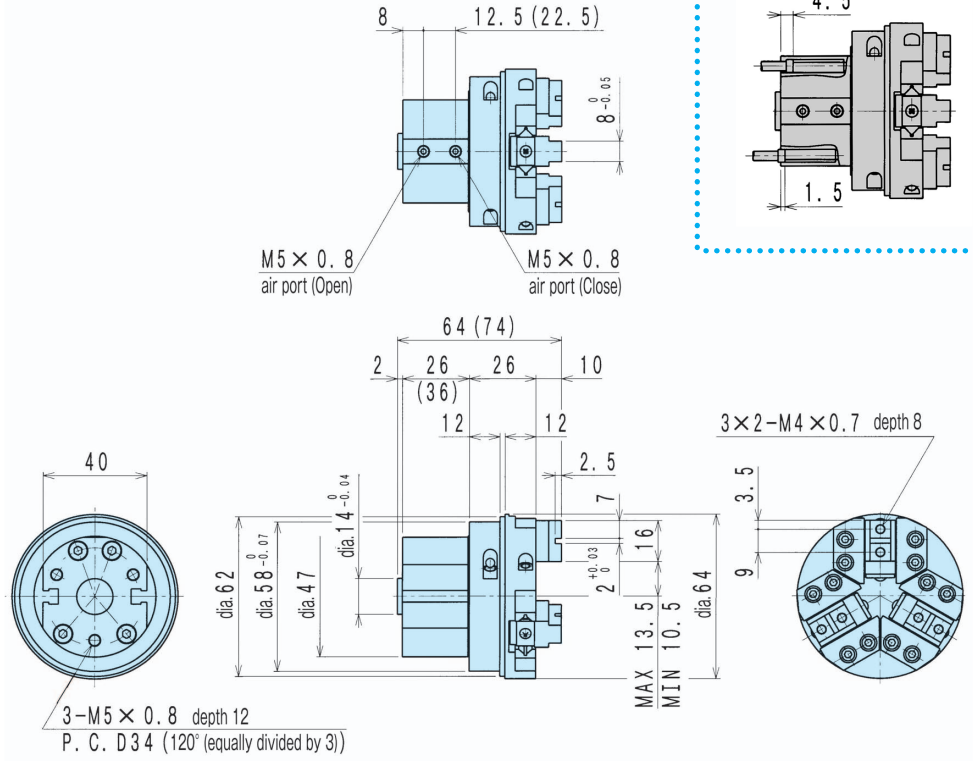
## Layout Drawing

### CKG-25AS (Optimal Grip Force 60N to 120N)

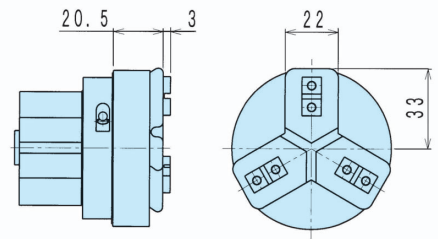
#### CKG-25AS Standard • NO • NC

#### CKG-25AS-E□S□

\*Values inside ( ) are for NO (Normally Open) and NC (Normally Closed) type



#### CKG-25AS-G



Chuck (3-Jaw)

# CKG-16AS/25AS/32AS/40AS/50AS

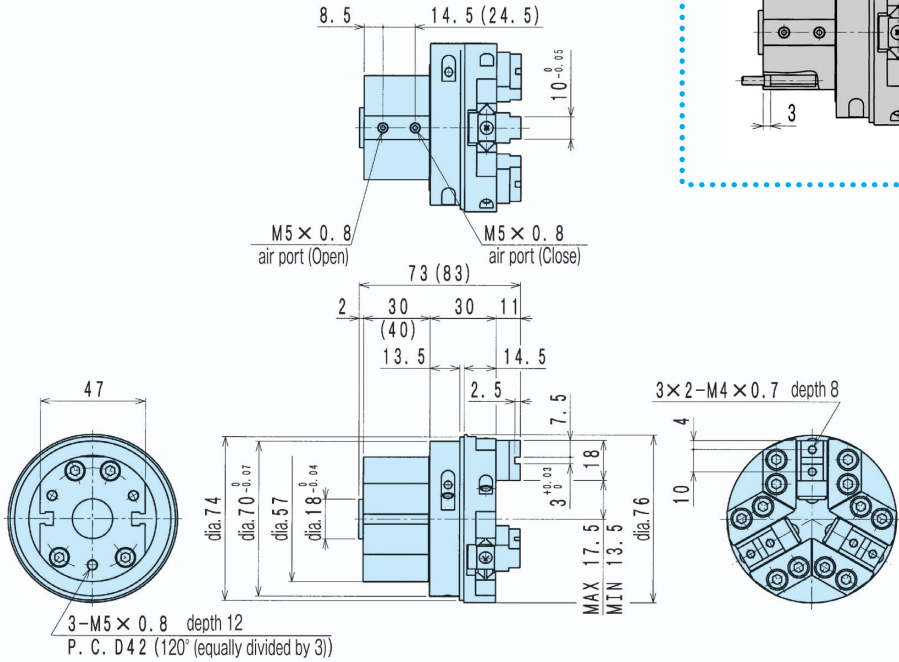
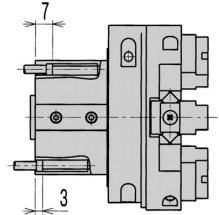
For CAD data, please go to **▶518P**

## CKG-32AS (Optimal Grip Force 100N to 200N)

### CKG-32AS Standard • NO • NC

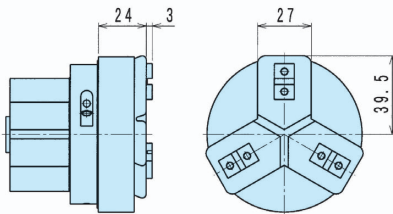
\*Values inside ( ) are for NO (Normally Open) and NC (Normally Closed) type

### CKG-32AS-E□S□



Chuck  
(3-Jaw)

### CKG-32AS-G



# CKG Series Bearing Chuck

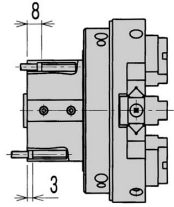
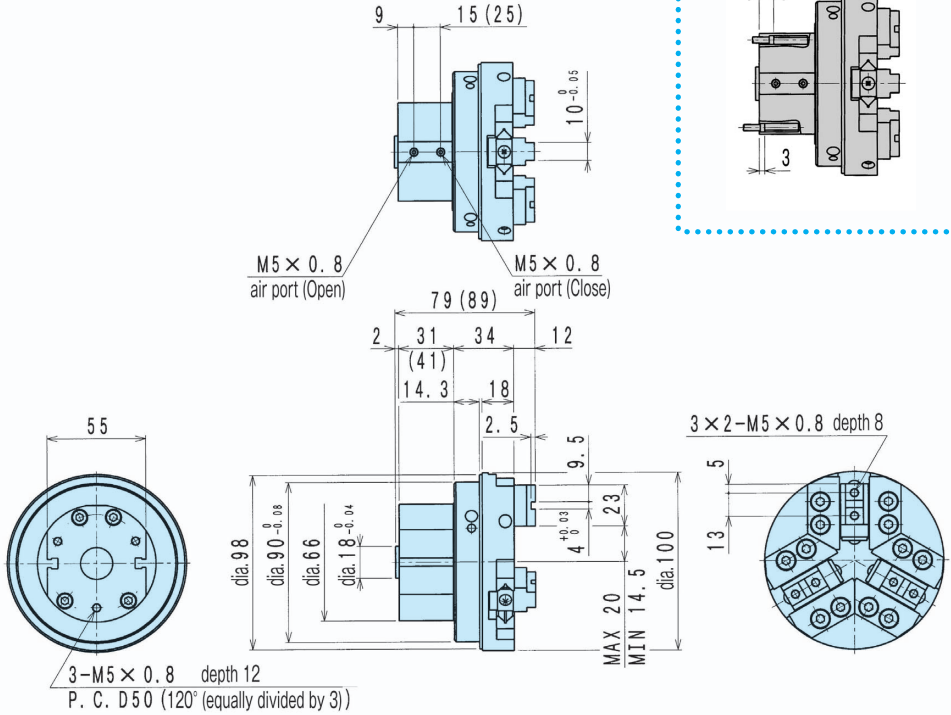
## Layout Drawing

### CKG-40AS (Optimal Grip Force 200N to 350N)

#### CKG-40AS Standard • NO • NC

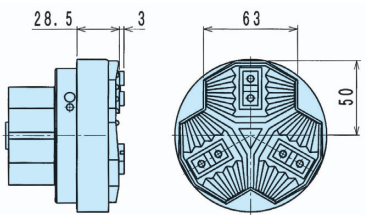
#### CKG-40AS-E□S□

\*Values inside ( ) are for NO (Normally Open) and NC (Normally Closed) type



Chuck (3-Jaw)

#### CKG-40AS-G



# CKG-16AS/25AS/32AS/40AS/50AS

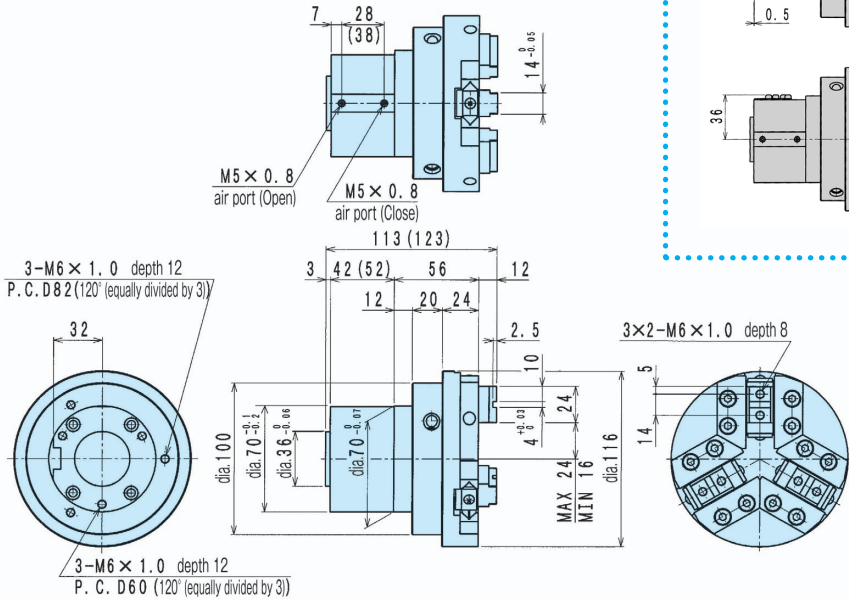
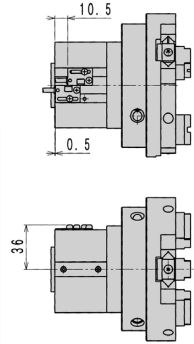
For CAD data, please go to **▶518P**

## ■CKG-50AS (Optimal Grip Force 300N to 500N)

### CKG-50AS Standard • NO • NC

\*Values inside ( ) are for NO (Normally Open) and NC (Normally Closed) type

### CKG-50AS-E□□□



Chuck  
(3-Jaw)

### CKG-50AS-G

