

CKT·CKU Series High Grip Force Chuck

High Grip Force 3-Jaw Gripper for Large Workpieces

Key Features

- High grip force and long stroke via direct drive mechanism
- High impact-resistant T-slot jaw slide guide for use of long external finger
- Low profile for space-saving
- Oil-resistant sensors available (option)



CKT-160AS

How To Order

Standard ----- **CKT-160AS**

Option ----- **Model** **Size** **Sensor** **Quantity**
CKT - 160AS - ET3 S2

Model		Size		Sensor				Quantity	
Symbol	Symbol	Symbol	Name	Symbol	Name	Symbol	Name		
CKT	160AS	ET2	Non-Contact 2-Lead	E25	Contact 2-Lead	S1	1 Sensor		
CKU	200AS	ET2L	Non-Contact 2-Lead	E25L	Contact 2-Lead	S2	2 Sensors		
	250AS	ET3	Non-Contact 3-Lead	E40	Non-Contact 3-Lead				
		ET3L	Non-Contact 3-Lead	E40L	Non-Contact 3-Lead				
		E24	Contact 2-Lead	E41	Non-Contact 2-Lead				
		E24L	Contact 2-Lead	E41L	Non-Contact 2-Lead				

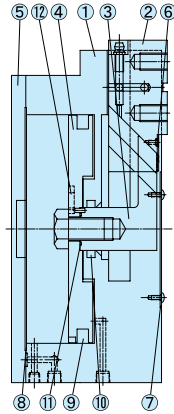
For sensor detail ▶277P

Specification

Model	CKT-160AS <small>For Layout Drawing ▶235P</small>	CKU-160AS <small>For Layout Drawing ▶235P</small>	CKT-200AS <small>For Layout Drawing ▶235P</small>	CKU-200AS <small>For Layout Drawing ▶235P</small>	CKT-250AS <small>For Layout Drawing ▶236P</small>	CKU-250AS <small>For Layout Drawing ▶236P</small>
Working Pressure	Pneumatic: 0.3 to 0.7MPa					
Lubrication	Not Required or Turbine Oil Class 1 (ISOVG32)					
Ambient Temperature (°C)	5 to 60					
Total Jaw Stroke (mm)	50	28	60	34	70	40
Cylinder Diameter (mm)	dia.160		dia.200		dia.250	
Rod Diameter (mm)	dia.30		dia.36		dia.40	
Internal Volume [Reciprocation] (cm ³ /time)	987		1854		3392	
Repeatability (mm)	±0.03					
Weight (kg)	10		17		27	

Chuck (3-Jaw)

Internal Structure / Parts & Seals



Parts List

No.	Name	Material	No.	Name	Material	No.	Name	Material
1	Body	Aluminum	5	Cylinder Cover	Aluminum	9	Piston Seal	
2	Master(Base) Jaw	Aluminum	6	Master(Base) Jaw Cover*	Stainless Steel	10	Rod Seal	
3	Piston A	Carbon Steel	7	Center Cover	Stainless Steel	11	Rod Seal	
4	Piston B	Aluminum	8	Gasket		12	Magnet	

*Not available for CKT(U)-250AS

Seals List

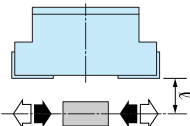
No.	CKT (U) -160AS	CKT (U) -200AS	CKT (U) -250AS
8	Grid-Surface Gasket	Grid-Surface Gasket	Grid-Surface Gasket
9	PSD-160	PSD-200	PSD-250
10	GLY-30	GLY-36	GLY-40
11	S-20	S-24	S-29

Performance Data

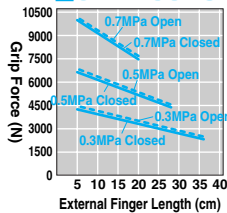
Grip Force

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

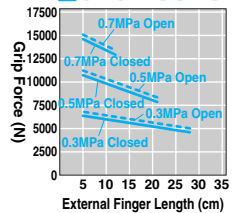
Open (⇐) ---
Closed (⇒) —



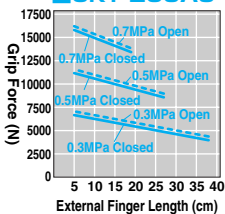
CKT-160AS



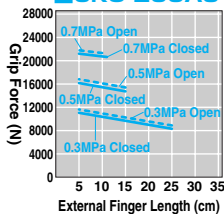
CKU-160AS



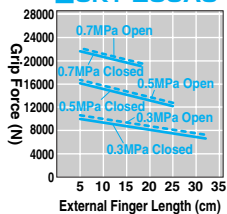
CKT-200AS



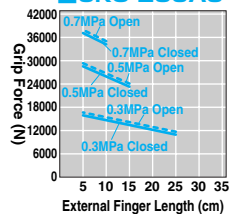
CKU-200AS



CKT-250AS



CKU-250AS



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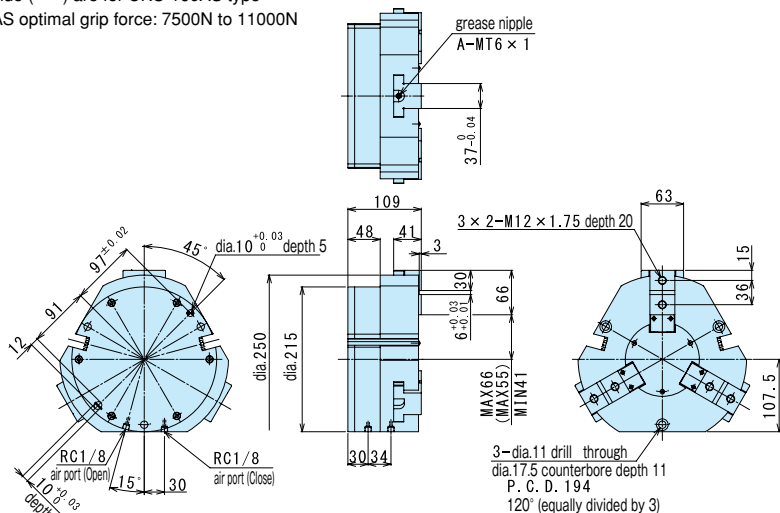
Layout Drawing

■CKT-160AS (Optimal Grip Force 4500N to 7000N)

CKT-160AS Standard

*Values inside () are for CKU-160AS type

*CKU-160AS optimal grip force: 7500N to 11000N

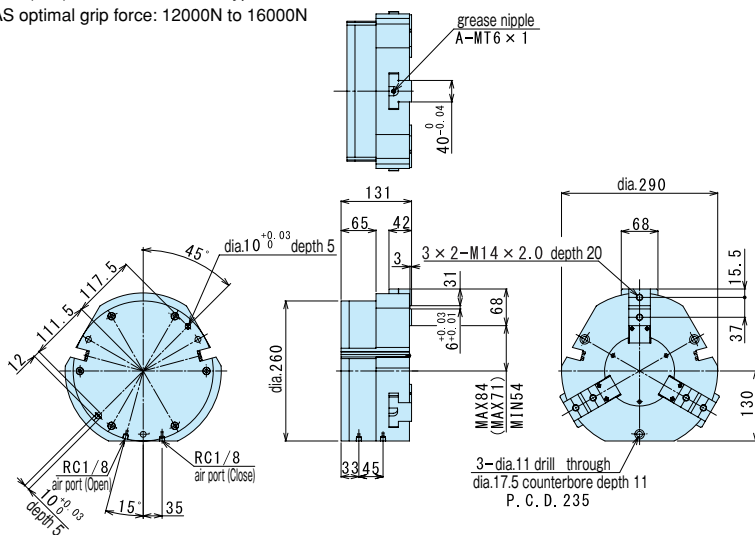


■CKT-200AS (Optimal Grip Force 7500N to 12000N)

CKT-200AS Standard

*Values inside () are for CKU-200AS type

*CKU-200AS optimal grip force: 12000N to 16000N



Chuck
(3-Jaw)

