

HHC·HHD Series High Grip Force Hand

High Grip Force and Space-Saving Hand

Key Features

- Compact and light weight body via oval piston
- High grip force and long stroke via direct drive mechanism
- T-slot jaw slide guide for higher impact resistance and use of long external fingers
- Oil-resistant sensors available (option)



HHC-125AS

Hand
(2-Jaw)

How To Order

Standard ----- **HHC-160AS**

Option ----- **HHC - 160AS - ET3 L S2**

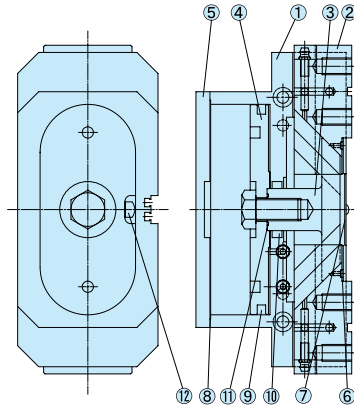
Model		Size		Sensor				Switch Shape		Quantity	
Symbol	Symbol	Symbol	Name	Symbol	Name	Symbol	Name	Symbol	Specification	Symbol	Name
HHC	100AS	ET2	Non-Contact 2-Lead	E24	Contact 2-Lead	L	L-Shape	S1	1 Sensor		
HHD	125AS	ER2	Non-Contact 2-Lead	E25	Contact 2-Lead			S2	2 Sensors		
	160AS	ET3	Non-Contact 3-Lead	E40	Non-Contact 3-Lead						
		ER3	Non-Contact 3-Lead	E41	Non-Contact 2-Lead						

For sensor detail ▶277P

Specification

Model	HHC-100AS	HHD-100AS	HHC-125AS	HHD-125AS	HHC-160AS	HHD-160AS
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)	Equivalent to dia.91		Equivalent to dia.125		Equivalent to dia.173	
Rod Diameter (mm)	dia.30		dia.36		dia.40	
Internal Volume [Reciprocation] (cm ³ /time)	307		705		1600	
Repeatability (mm)	±0.03					
Weight (kg)	4.5		7		11.5	

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 HHC(D)-160AS

Seals List

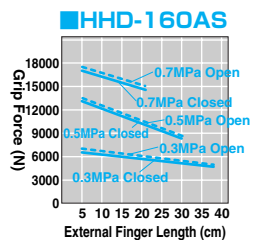
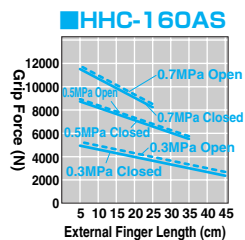
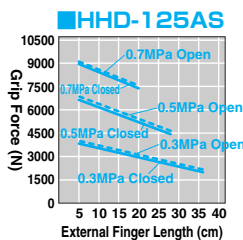
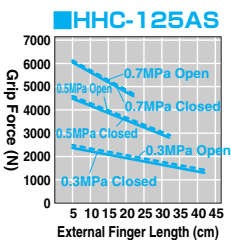
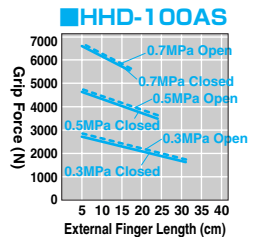
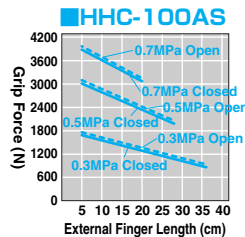
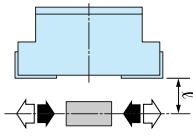
No.	HHC (D) -100AS	HHC (D) -125AS	HHC (D) -160AS
8	Grid-Surface Gasket	Grid-Surface Gasket	Grid-Surface Gasket
9	Oval Seal	Oval Seal	Oval Seal
10	GLY-30	GLY-36	GLY-40
11	S-20	S-24	S-29

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 (⇒) —



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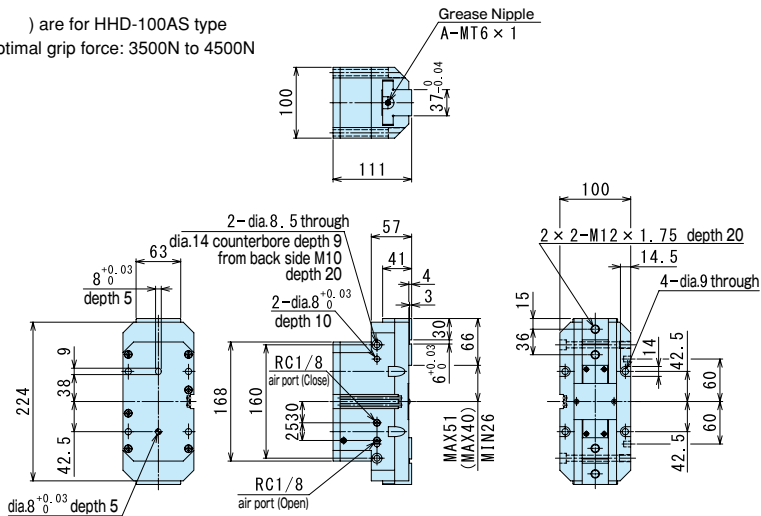
Layout Drawing

■HHC-100AS (Optimal Grip Force 1800N to 2800N)

HHC-100AS Standard

*Values inside () are for HHD-100AS type

*HHD-100AS optimal grip force: 3500N to 4500N



■HHC-125AS (Optimal Grip Force 3000N to 4500N)

HHC-125AS Standard

*Values inside () are for HHD-125AS type.

*HHD-125AS optimal grip force: 4500N to 6500N

