

HG Series Long Stroke Parallel Hand

Long Stroke, Light Weight, and Compact Design

Key Features

■ Extra-long stroke gripper

Extra-long stroke via large lever ratio of cam

■ Light-weight and compact design

Light-weight and slim body

■ Easy mounting

The gripper can be mounted and operated in any orientation via 3 mounting surfaces

■ Switch slots available for sensing jaw position (open or closed)

All the sizes available for direct switch mount (up to 2 switches)



HG-3MS

Hand (2-law)

How To Order

Standard ----- **HG-3MS**

Option ----- **HG - 3MS - ET3S2 - H** ----- HG-3MS low hydraulic type with 2 of ET3 non-contact reed switches

Size	
Symbol	
3MS	

Sensor, Quantity			
Symbol	Name	Symbol	Name
ET3	Non-Contact 3-Lead		
ET2	Non-Contact 2-Lead		
S1	1 Sensor		* Bracket is required for mounting this switch
S2	2 Sensors		

Option			
Symbol	Name	Symbol	Name
NO	Normally Open		
NC	Normally Closed		
H	Low Pressure Hydraulic		
T	Heat-Proof		

For sensor detail ▶ 277P

For option detail ▶ 36P

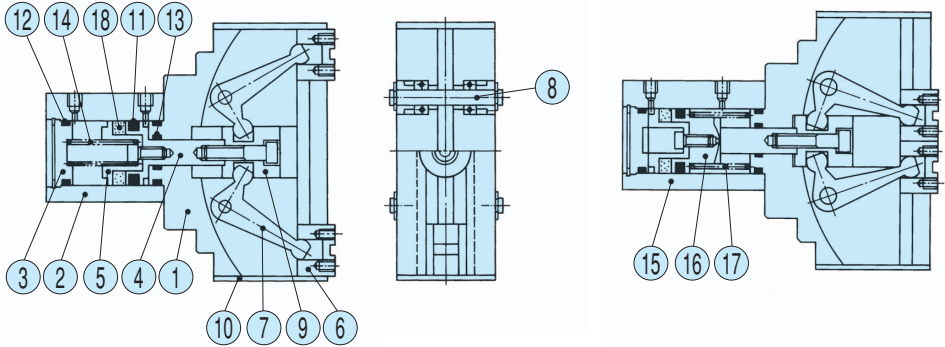
Specification

Model	HG-3MS	
	For Layout Drawing ▶ 115P	
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)	56	
Cylinder Diameter (mm)	dia.25	
Rod Diameter (mm)	dia.10	
Internal Volume [Reciprocation] (cm ³ /time)	11.8	
Repeatability (mm)	±0.03	
Weight (kg)	0.85	

Internal Structure / Parts & Seals

Standard (Double-Acting) & NO(Single Acting -Normally Open)

NC(Single Acting - Normally Closed)



Parts List

No.	Name	Material	No.	Name	Material	No.	Name	Material
1	Body	Aluminum	8	Fulcrum Shaft	Carbon Steel	15	NC Cylinder	Aluminum
2	Cylinder	Aluminum	9	Operating Ring	Stainless Steel	16	NC Piston	Stainless Steel
3	Cylinder Cover	Resin	10	Side Cover	Stainless Steel	17	NC Spring	Stainless Steel Wire
4	Piston A	Stainless Steel	11	Piston Seal		18	Magnet	
5	Piston B	Aluminum	12	Cylinder Seal				
6	Master(Base) Jaw	Carbon Steel	13	Rod Seal				
7	Arm	Carbon Steel	14	NO Spring	Stainless Steel Wire			

Seals List

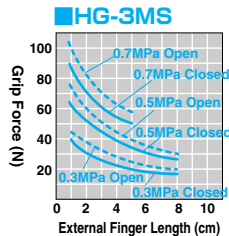
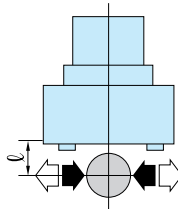
No.	HG-3MS
11	PSD-25
12	P-21, S-24
13	MYA-10

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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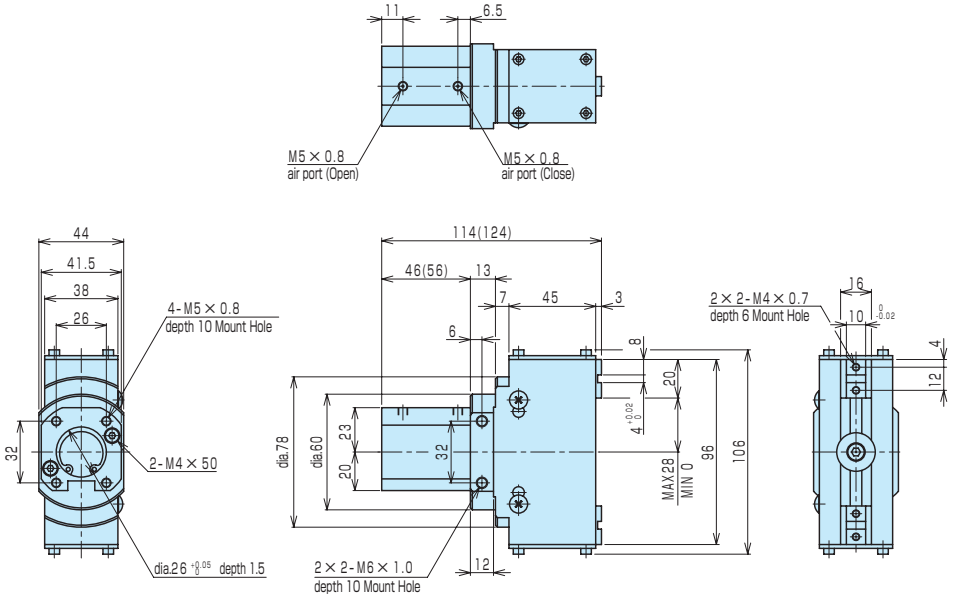
Layout Drawing

■HG-3MS (Optimal Grip Force 30N to 60N)

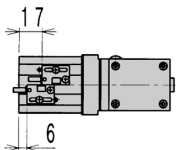
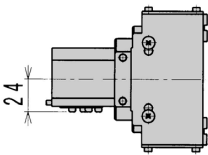
HG-3MS Standard • NO • NC


*Values inside () are for NC (Normally Closed) type

Hand
(2-law)



HG-3MS-E S



 For CAD data, please go to **▶518P**