Thin, Light-Weight, Compact Practical Type

Key Features

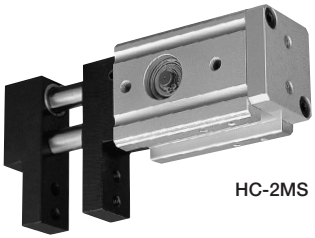
■No adjustment for multi-purpose application
Long jaw stroke and parallel clamping (centripetal motion) eliminates hassle and time-consuming adjustment

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

■Thin, light-weight, and compact design
Thin, and light-weight, and compact body

■Bearing integrated

■Switch slots available for sensing jaw position (open or closed)
All the sizes available for direct switch mount (up to 2 switches)



HC-2MS

How To Order

Standard ------- **HC-2MS**

Option ------- **HC - 2MS - ET3S2 - SU**

(Size - Sensor, Quantity - Option)

---- HC-2MS, of which iron material changed to stainless steel, with 2 of ET3 non-contact reed switches

Size	
Symbol	
2MS	
3MS	
4MS	

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

* Bracket is required for mounting this switch

For sensor detail ▶277P

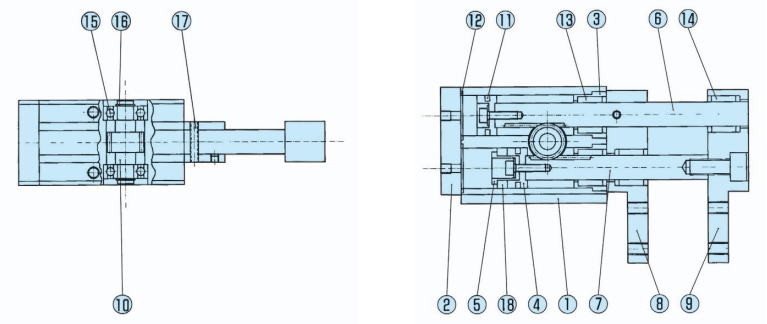
Option			
Symbol	Name	Symbol	Name
SU	Stainless Steel for Iron Material		
SUA	All Stainless Steel		
T	Heat-Proof		

For option detail ▶ 36P

Specification

Model	HC-2MS For Layout Drawing ▶ 85P	HC-3MS For Layout Drawing ▶ 85P	HC-4MS For Layout Drawing ▶ 86P
Working Pressure	Pneumatic: 0.3 to 0.7MPa		
Lubrication	Not Required or Turbine Oil Class 1 (ISOVG32)		
Ambient Temperature (℃)	5 to 60		
Total Jaw Stroke (mm)	20	30	40
Cylinder Diameter (mm)	dia.12	dia.20	dia.32
Rod Diameter (mm)	dia.10	dia.12	dia.16
Internal Volume [Reciprocation] (cm^3/time)	2.3	9.4	32.1
Repeatability (mm)	±0.05		
Weight (kg)	0.52	0.98	1.90

Internal Structure / Parts & Seals



■Parts List

No.	Name	Material	No.	Name	Material	No.	Name	Material
1	Body	Aluminum	7	Piston Rod B	Stainless Steel	13	Needle Bearing A	
2	Head Cover	Aluminum	8	Master(Base) Jaw A	Carbon Steel	14	Needle Bearing B	
3	Rod Cover *	Aluminum	9	Master(Base) Jaw B	Carbon Steel	15	Bearing	
4	Piston A	Aluminum	10	Pinion Gear	Carbon Steel	16	Grip Snap Ring	
5	Piston B	Resin	11	Piston Seal		17	Spring Pin	
6	Piston Rod A	Stainless Steel	12	Cylinder Seal		18	Magnet	

* Except 2MS

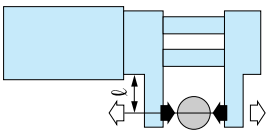
■Seals List

No.	HC-2MS	HC-3MS	HC-4MS
11	PSD-12	PSD-20	PSD-32
12	S-14	S-22	S-34

Performance Data

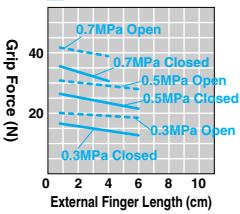
■Grip Force

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

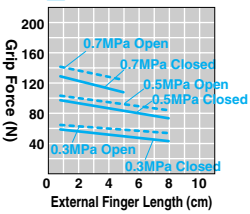


Open (⇦) - - - - - - - - -
Closed (➡) ———

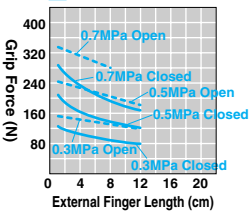
■HC-2MS



■HC-3MS



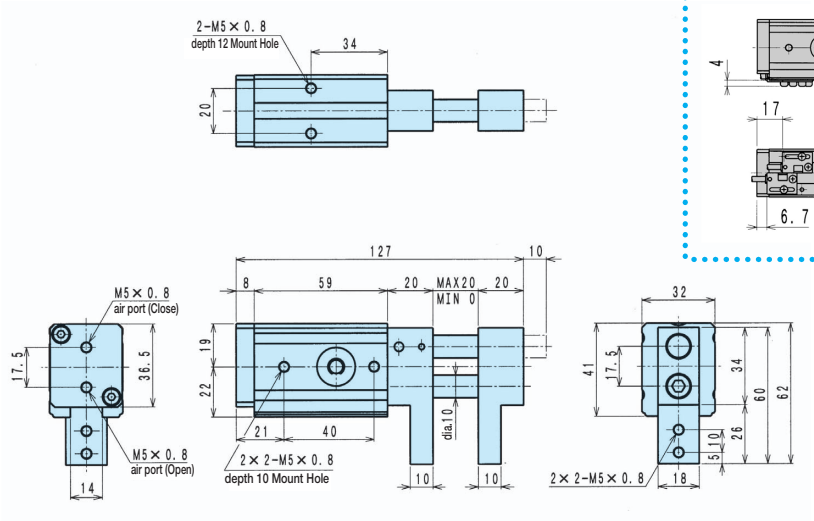
■HC-4MS



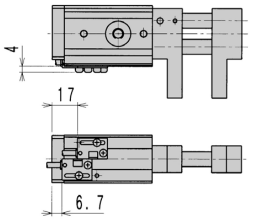
Layout Drawing

■HC-2MS (Optimal Grip Force 20N to 35N)

HC-2MS Standard

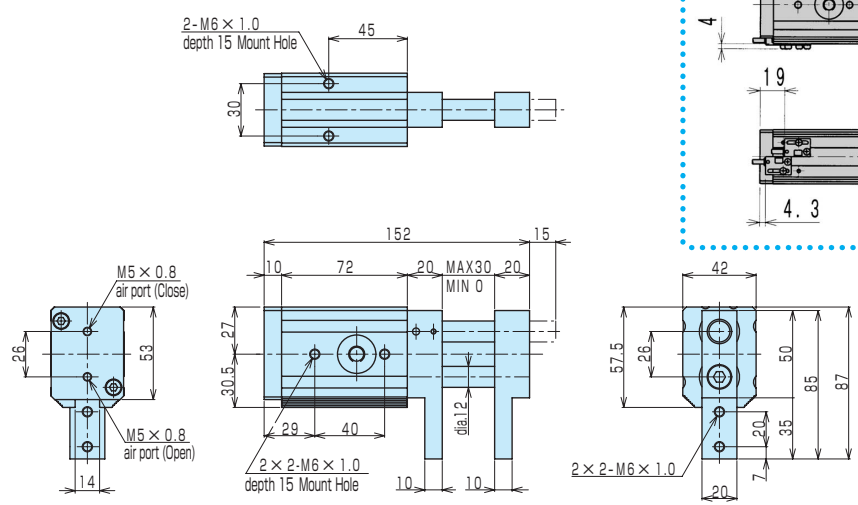


HC-2MS-E□S□

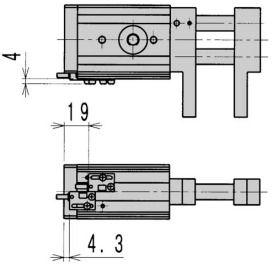


■HC-3MS (Optimal Grip Force 80N to 140N)

HC-3MS Standard



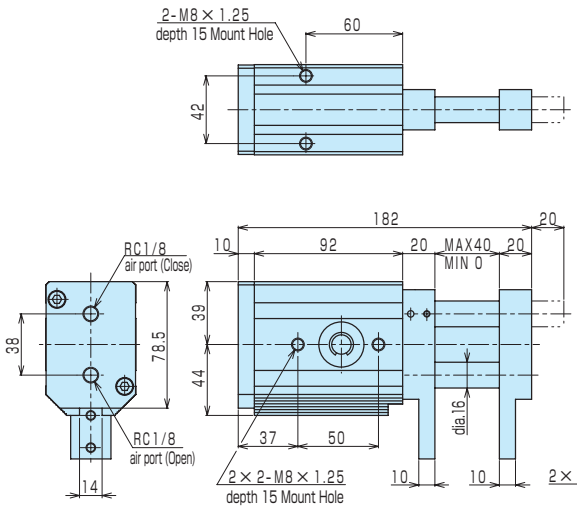
HC-3MS-E□S□



For CAD data, please go to ▶518P

■HC-4MS （Optimal Grip Force 150N to 300N）

HC-4MS Standard



HC-4MS-E□S□