

Parallel Type Air Gripper:Wide Type

FHL2 Series



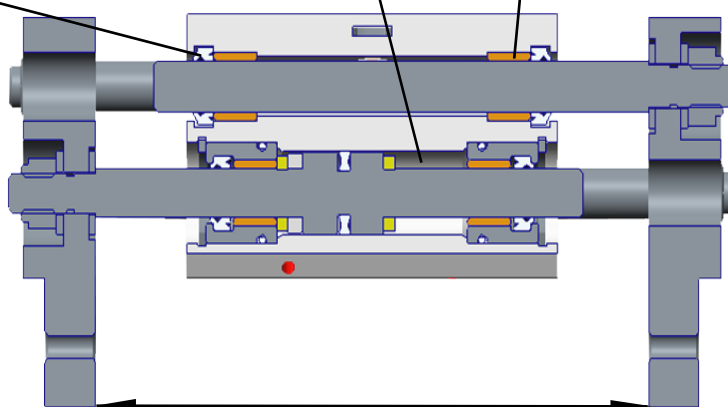
Advantages

- *Long stroke to adjust to the bulky workpieces.
- *A large amount of gripping force is provided through the use of a double piston mechanism.
- *Fingers synchronized by a rack and pinion mechanism.
- *A scraper with a dust lip is adopted for all rod rotating parts.
- *Many options are available for different working conditions.

Built-in dust-protection mechanism.

Double cylinders design with large clamping moment.

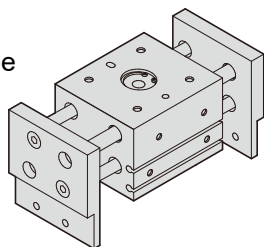
Sliding bearing ensures clamping accuracy and bears clamping moment.



Various claming strokes

Claming types

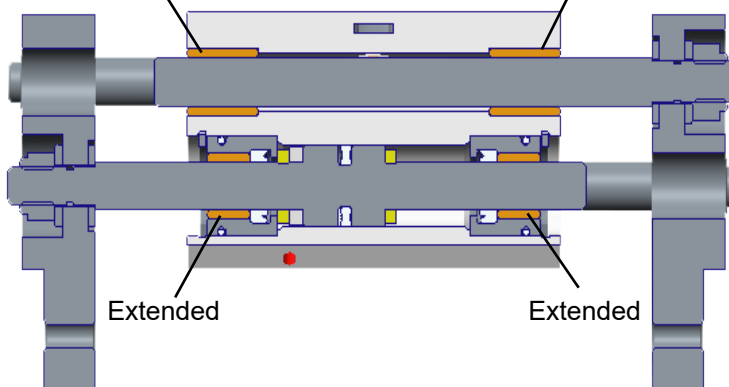
Standard type



Extended bearing to improve the clamping precision and the carrying capacity of clamping moment.

Extended

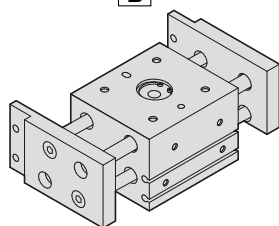
Extended



Extended

Extended

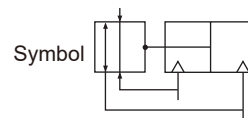
Side clamping type **B**



Parallel Type Air Gripper:Wide Type

FHL2 Series(ø10~ø40)

- *Long stroke.
- *Double piston rod design to increase the holding force.
- *Gear rod operation to make finger open and close synchronously.
- *A scraper with a dust lip is adopted for all rod rotating parts.
- *Many options for different operating conditions.

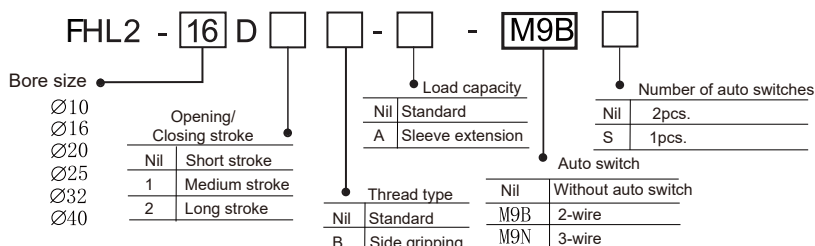


Specifications

Bore size (mm)	10	16	20	25	32	40
Action	Double acting					
Fluid	Air					
Max. operating pressure (MPa){kgf/cm ² }	0.6(6.1)					
Min. Operating pressure (MPa){kgf/cm ² }	0.15(1.5)	0.1(1.0)				
Ambient and fluid temperature	-10~60°C (with no condensation)					
Repeatability (mm)	±0.1					
Holding power (N){kgf}	14(1.4)	45(4.6)	74(7.5)	131(13.4)	228(23.4)	396(40.4)
Piping diameter	M5 x 0.8			Rc1/8		

Note) Under the pressure of 0.5MPa (5.1kgf/cm²) and the holding point 40mm (ø10 ~ ø25)
80mm (ø32/ø40)

How to Order



Note) Extended bearing type has same installation size with the standard type.
Extended shaft sleeve has stronger load capacity but no dustproof function.

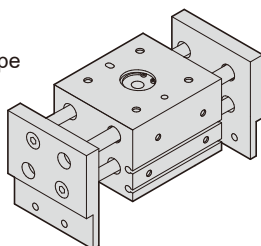
*Lead wire length symbols:
1m..... Nil(Example)M9B
3m..... L (Example)M9BL

How to order

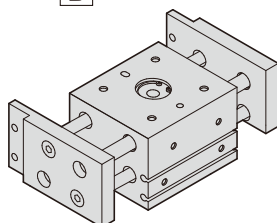
- 1) Need bore size 16mm and stroke 30mm.
Model No. FHL2-16D
 - 2) Need bore size 25mm and stroke 120mm.
Model No. FHL2-25D2 SW-M9B
- One cylinder with 2 auto switches.

Two clamping types of gripper

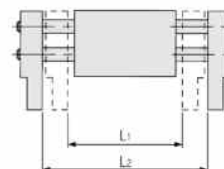
Standard type



Side clamping type **B**



Stroke/Weight table

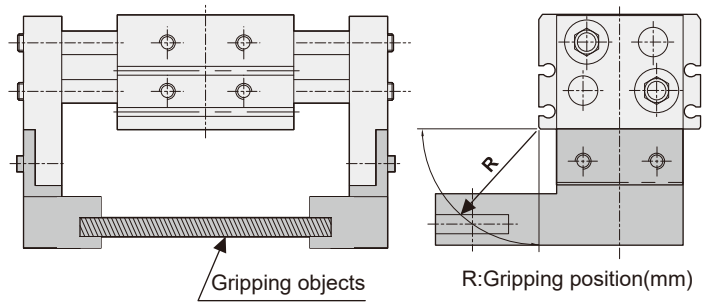


Model	Bore size (mm)	Max. operating frequency c. p. m	Opening/Closing stroke mm (L2-L1)	Closing width mm (L1)	Opening width mm (L2)	Weight g
FHL2-10D□-□	10	60	20	56	76	280
FHL2-10D1□-□		40	40	78	118	345
FHL2-10D2□-□			60	96	156	425
FHL2-16D□-□	16	60	30	68	98	585
FHL2-16D1□-□		40	60	110	170	795
FHL2-16D2□-□			80	130	210	935
FHL2-20D□-□	20	60	40	82	122	1025
FHL2-20D1□-□		40	80	142	222	1495
FHL2-20D2□-□			100	162	262	1690
FHL2-25D□-□	25	60	50	100	150	1690
FHL2-25D1□-□		40	100	182	282	2560
FHL2-25D2□-□			120	200	320	2775
FHL2-32D□-□	32	30	70	150	220	2905
FHL2-32D1□-□		20	120	198	318	3820
FHL2-32D2□-□			160	242	402	4655
FHL2-40D□-□	40	30	100	188	288	5270
FHL2-40D1□-□		20	160	246	406	6830
FHL2-40D2□-□			200	286	486	7905

Gripping Point

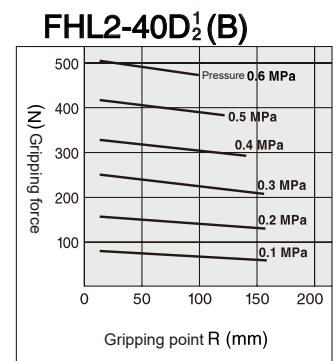
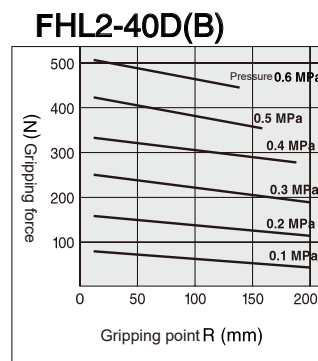
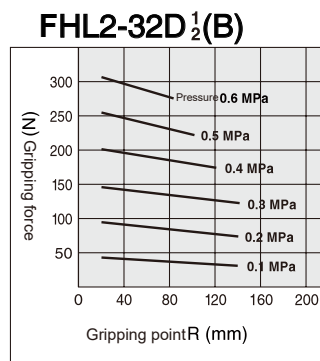
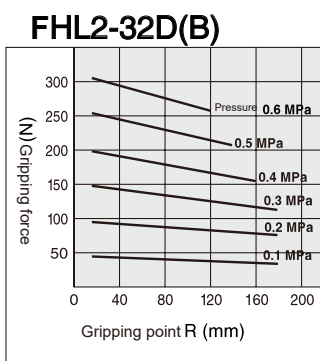
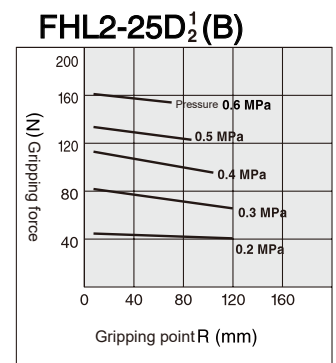
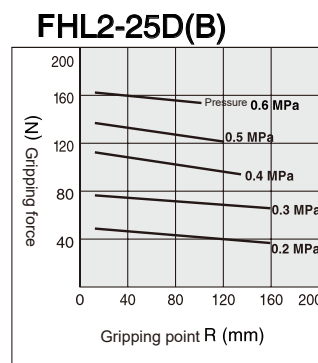
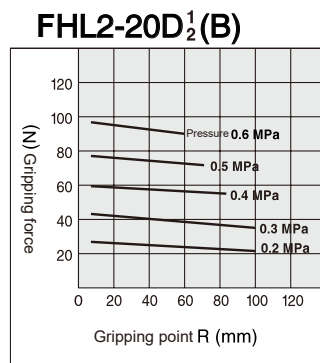
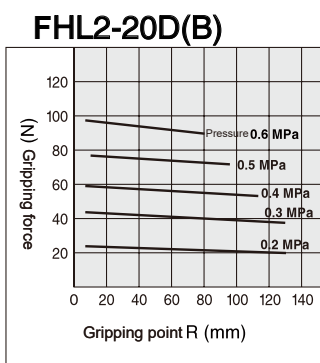
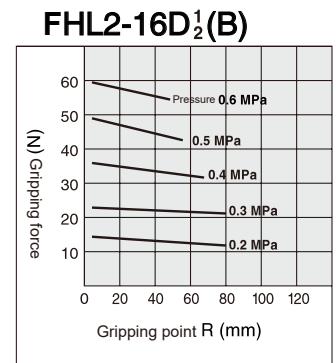
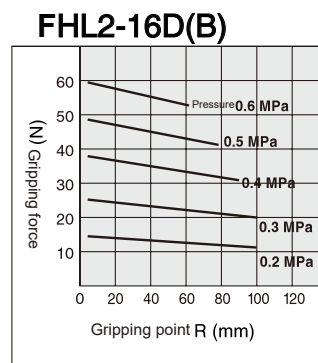
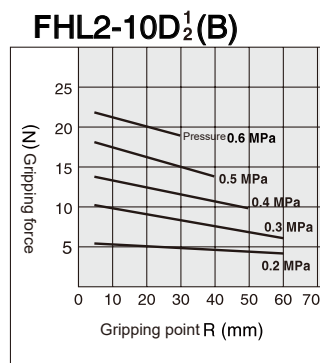
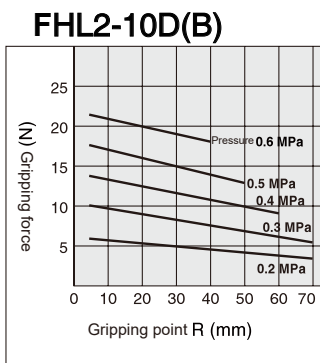
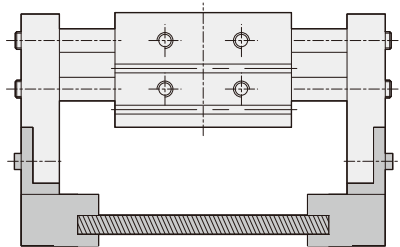
*The workpiece gripping point distance should be within the gripping force ranges given for each pressure in the effective gripping force graphs below.

*If operated with the workpiece gripping point beyond the indicated ranges, the load that will be applied to the fingers or the guide will become excessively unbalanced. As a result, the fingers could become loosened and adversely affect the service life of the unit.



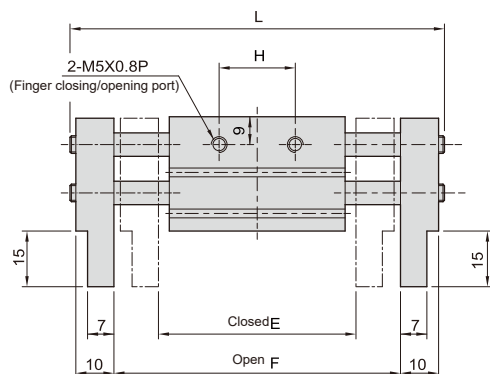
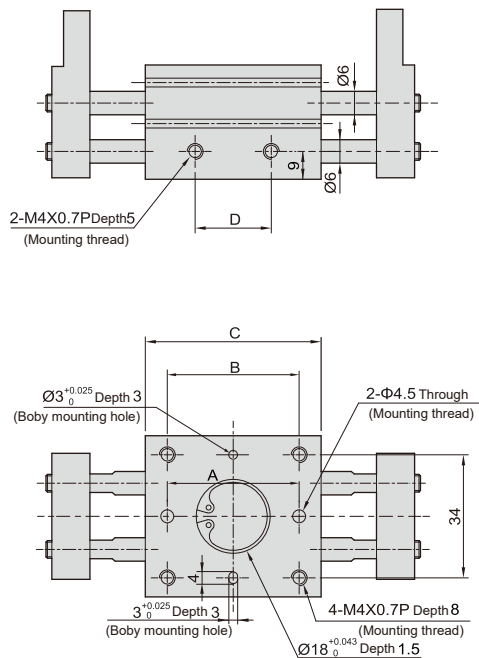
Effective Gripping Force

•The gripping force shown in the tables represents the gripping force of one finger when all finger and attachments are in contact with the work.
F=one finger thrust.

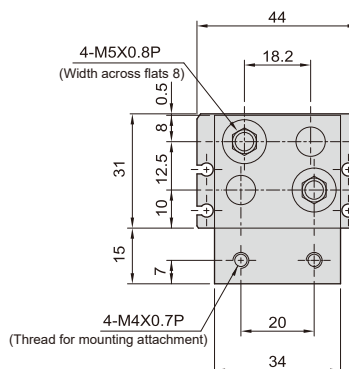
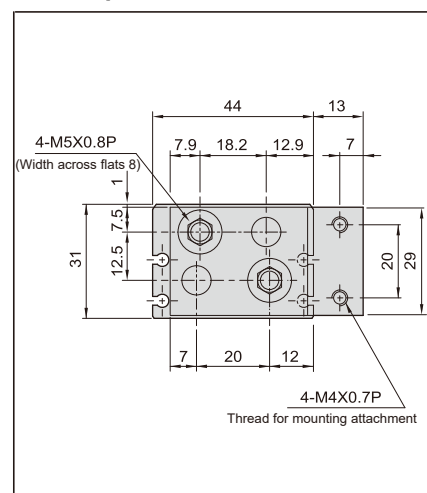


Outline Drawing

FHL2-10D□□-□

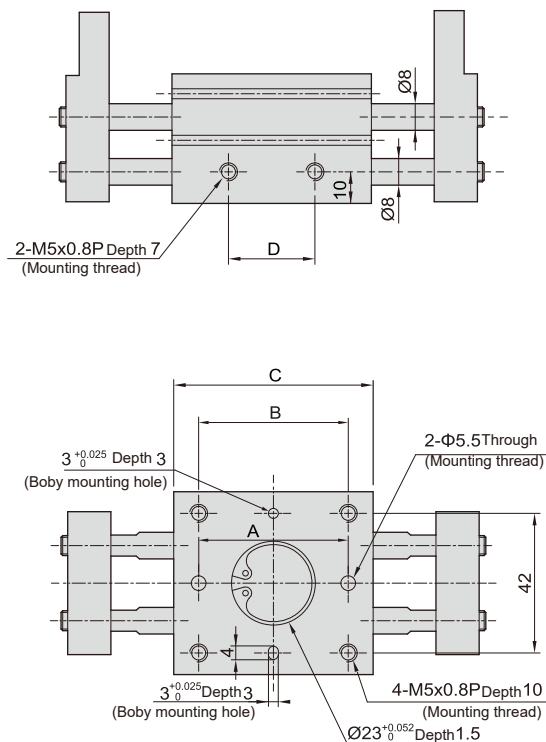


FHL2-10D□B-□ (Side clamping of gripper type)

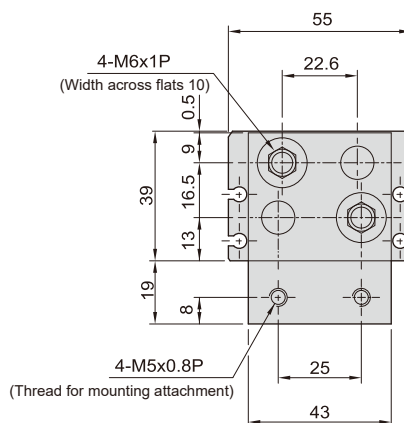
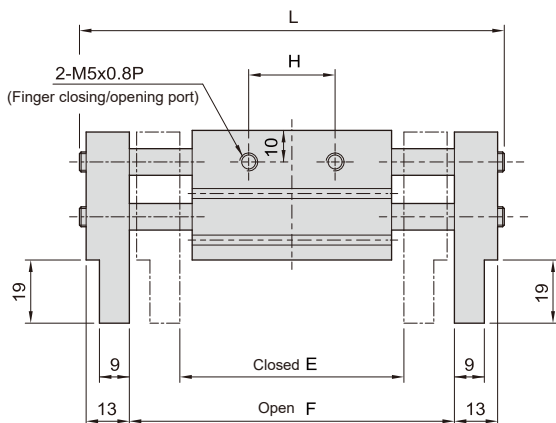
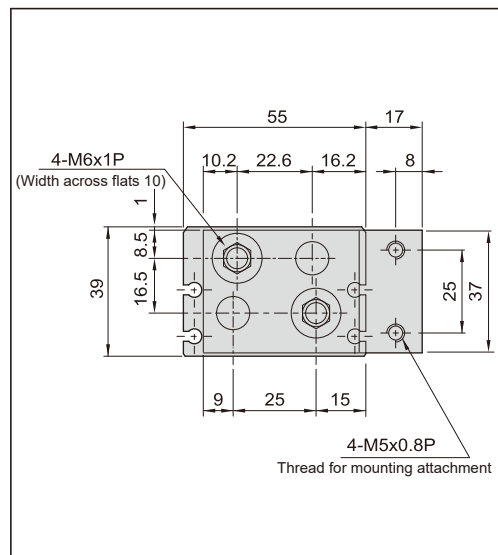


Model	A	B	C	D	L	E	F	H
FHL2-10D□-□	38	36	51	26	100(80)	56	76	20
FHL2-10D1□-□	54	52	67	42	142(108)	78	118	32
FHL2-10D2□-□	72	70	85	60	180(146)	96	156	50

FHL2-16D□□-□

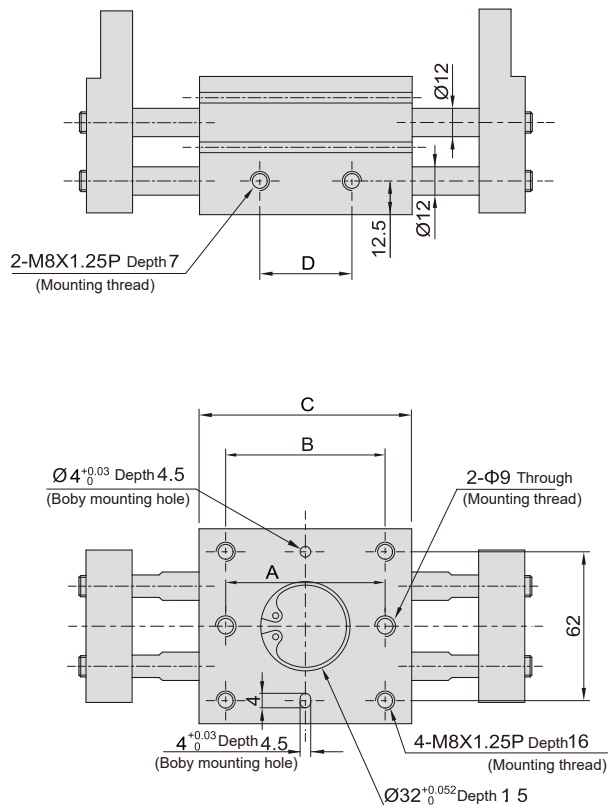


FHL2-16D□B-□ (Side clamping of gripper type)

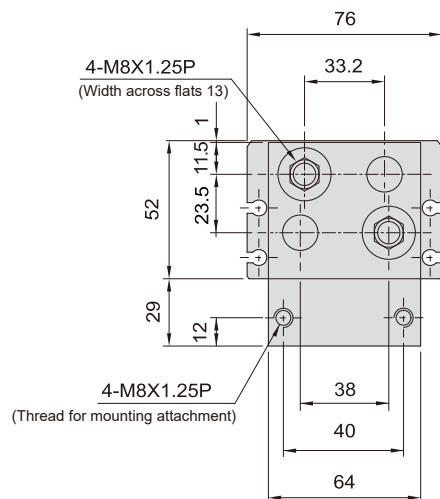
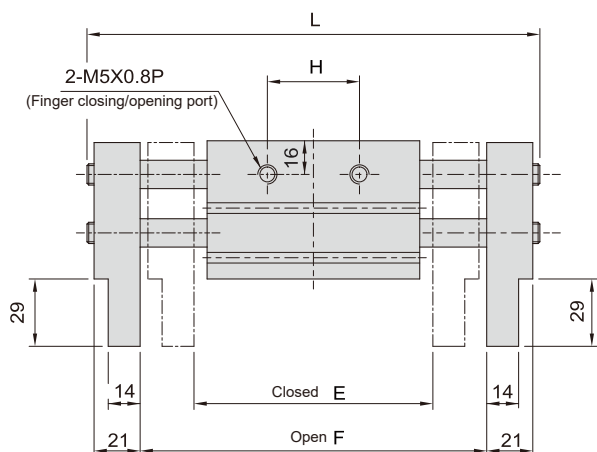
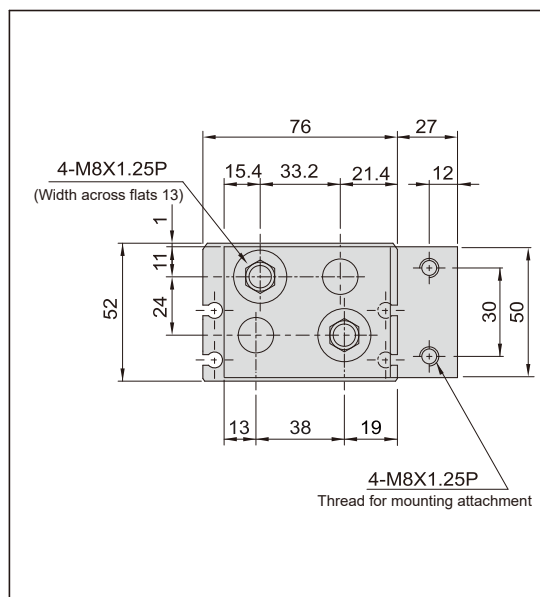


Model	A	B	C	D	L	E	F	H
FHL2-10D □-□	40	45	60	28	128(98)	68	98	23
FHL2-10D1□-□	70	75	90	58	200(152)	110	170	41
FHL2-10D2□-□	90	95	110	78	240(192)	130	210	61

FHL2-25D□□-□

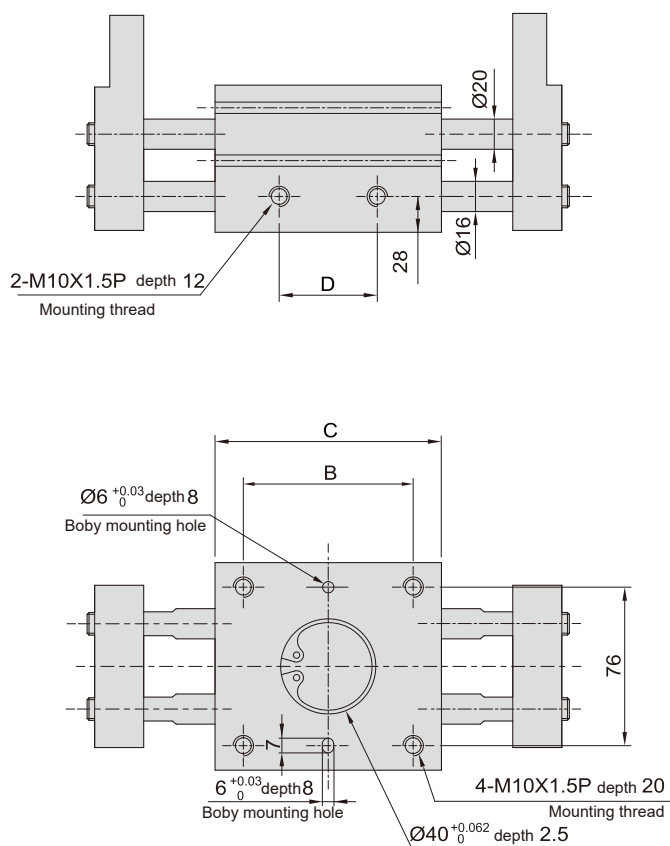


FHL2-25D□B-□ (Side clamping of gripper type)

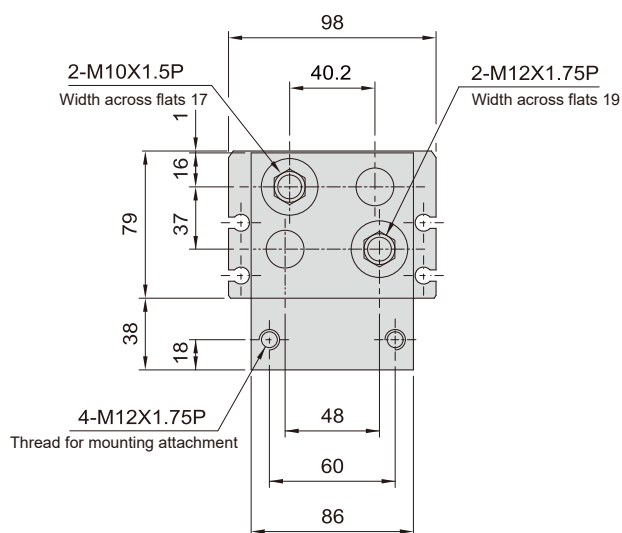
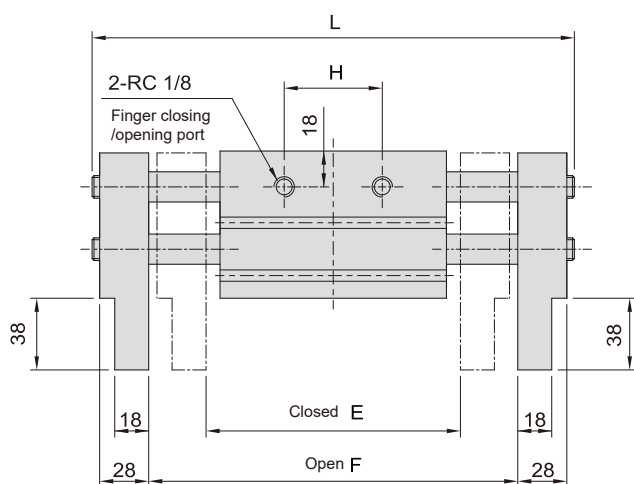
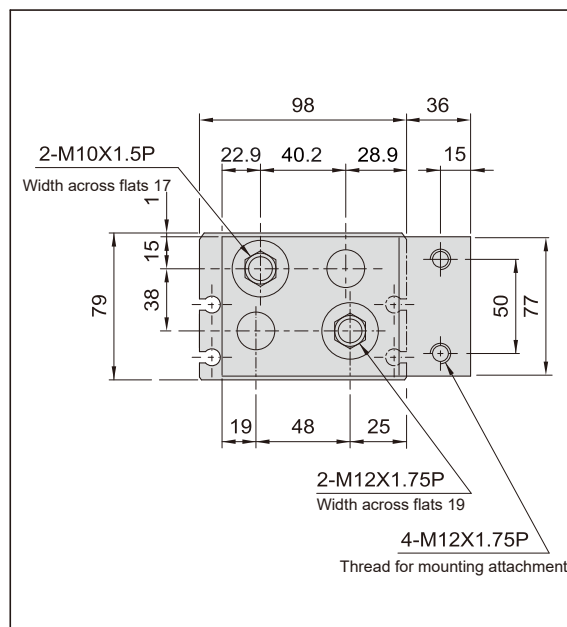


Model	A	B	C	D	L	E	F	H
FHL2-25D□-□	66	70	88	48	196(146)	100	150	38
FHL2-25D1□-□	120	124	142	102	328(244)	182	282	76
FHL2-25D2□-□	138	142	160	120	366(282)	200	320	94

FHL2-40D□□-□



FHL2-40D□B-□ (Side clamping of gripper type)



Model	B	C	D	H	L	E	F
FHL2-40D □-□	116	148	80	70	348(252)	188	288
FHL2-40D1 □-□	174	206	138	108	466(370)	246	406
FHL2-40D2 □-□	214	246	178	148	546(450)	286	486