

HDT series Wide Type Air Gripper

Product features/ Code of order

CHELIC

Feature

- Parallel shift clamp
- Built-in magnet
- Multiple ways to install



Specification

Item	Bore size (mm)	Ø10	Ø16	Ø20	Ø25	Ø32	Ø40
Action		Double acting					
Fluid		Air					
Pressure range	kgf / cm ² (kPa)	1.5 ~ 7(150 ~ 700)					
Ambient and fluid temperature	°C	0 ~ 60					
Max. operation frequency	time/min	40	40	40	40	20	20
Lubrication		Lubrication free type					
Theoretical holding force	N	14	44	73	128	228	396
Max. gripper point length (L)	mm	40	60	80	90	100	100
Opening/ closing stroke	mm	20, 40, 60	30, 60, 80	40, 80, 100	50, 100, 120	70, 120, 160	100, 160, 200
Port size	mm	M5X0.8P					PT1/8
Sensing device		With magnet					

Note: L: The gripping point length is 40mm applicable to Ø16, Ø20, Ø25, the gripping point length is 80mm applicable to Ø32, Ø40

P: Operating pressure=5 kgf/cm²

Code of order HDT 20 x 100 - B - 9D 2

1 2 3 4 5

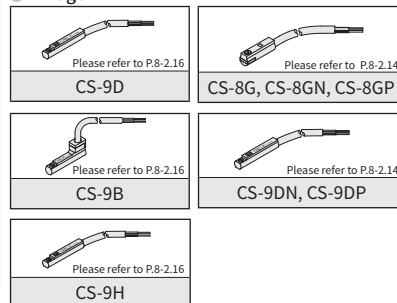
1	Mark	Bore size (mm)
	10	Ø10
	16	Ø16
	20	Ø20
	25	Ø25
	32	Ø32
	40	Ø40

2	Bore size (mm)	Stroke (mm)
	Ø10	20, 40, 60
	Ø16	30, 60, 80
	Ø20	40, 80, 100
	Ø25	50, 100, 120
	Ø32	70, 120, 160
	Ø40	100, 160, 200

3	Mark	Finger type	Mark	Finger type
	None: Standard		B: Finger side gripper	

4	Mark	Sensor switch
	None	Without sensor switch
	8G	CS-8G
	8GN	CS-8GN
	8GP	CS-8GP
	9D	CS-9D
	9B	CS-9B
	9H	CS-9H
	9DN	CS-9DN
	9DP	CS-9DP

Image



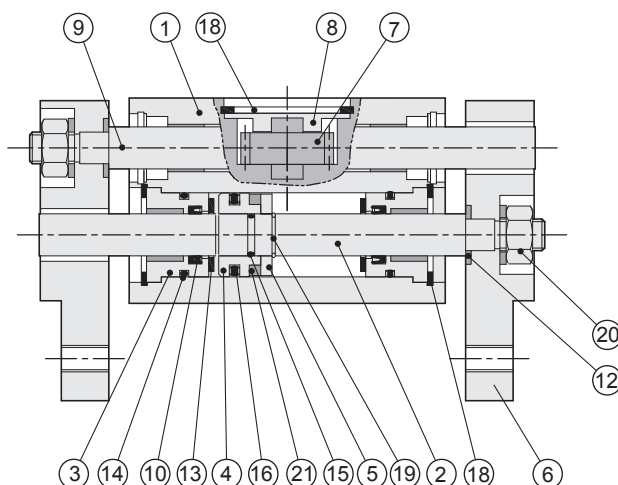
5	Mark	Sensor quantity
	1	With 1 sensor switch
	2	With 2 sensor switches

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Product features

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Internal structure



Components and material list

No.	Item	Material	No.	Item	Material	No.	Item	Material
01	Body	Aluminum alloy	08	Gear cover	Iron	15	Piston O-ring	NBR
02	Shaft	Stainless steel	09	Guide rod	Stainless steel	16	Piston packing	NBR
03	Front cover	Aluminum alloy	10	Shaft packing	NBR	17	Gear cover clip	Spring steel
04	Piston	Copper	11	Bearing	Teflon	18	Front cover clip	Spring steel
05	Magnetic cap	Copper	12	Gasket	Iron	19	Shaft clip	Spring steel
06	Finger	Aluminum alloy	13	Cushion gasket	Urethane	20	Nut	Bearing steel
07	Gear shaft	Carbon steel	14	Front cover O-Ring	NBR	21	Magnetic	Rare earth material

Packing and O-ring material list

Unit: mm

Item		Piston packing	Cylinder shaft packing	Front cover O-ring	Piston O-ring
Model	Quantity	2	4	4	2
HDT Ø10		DYP - 10	DYR-6	Ø8.0 X Ø1.0	Ø4.0 x Ø1.0
HDT Ø16		DYP - 16	DYR-8K	Ø13.2 X Ø1.5	Ø6.3 x Ø0.8
HDT Ø20		DYP - 20	DYR-10SK	Ø17.5 X Ø1.5	Ø8.0 x Ø1.0
HDT Ø25		DYP - 25	DYR-12	Ø20.8 X Ø2.0	Ø10 x Ø1.0
HDT Ø32		DYP - 32	DYR-16	Ø28.5 X Ø2.0	Ø13.5 x Ø1.5
HDT Ø40		DYP - 40	EM-2025	Ø36 X Ø2.0	Ø12 x Ø1.5

Product weight

Model	HDT 1020	HDT 1040	HDT 1060	HDT 1630	HDT 1660	HDT 1680	HDT 2040	HDT 2080	HDT 20100
Weight (kg)	0.29	0.35	0.44	0.57	0.79	0.94	1.0	1.45	1.7
Model	HDT 2550	HDT 25100	HDT 25120	HDT 3270	HDT 32120	HDT 32160	HDT 40100	HDT 40160	HDT 40200
Weight (kg)	1.7	2.6	2.8	3	4.03	5.01	5.3	6.9	8

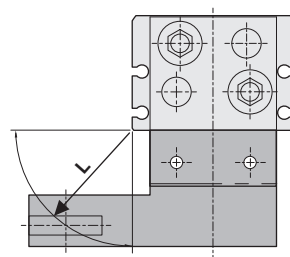
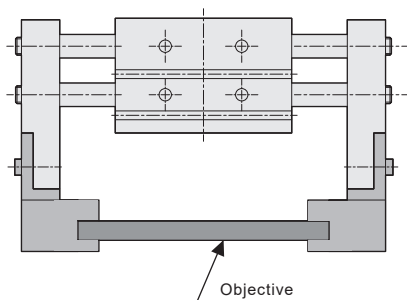
Note: All of above are theoretical data. Weight tolerance about ±5%

HDT series Wide Type Air Gripper

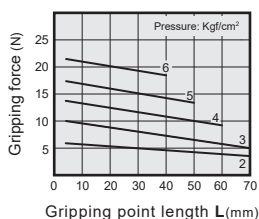
Characteristics graph

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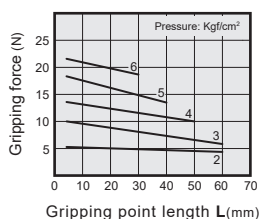
Characteristics graph



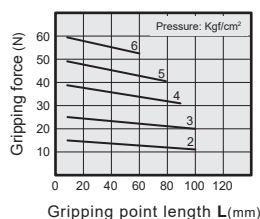
HDT 1020



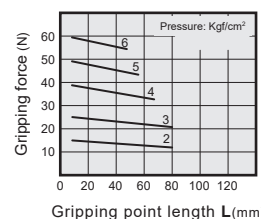
HDT 1040 HDT 1060



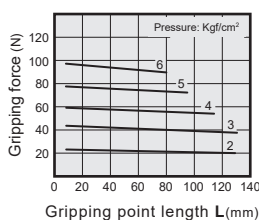
HDT 1630



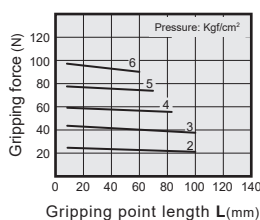
HDT 1660 HDT 1680



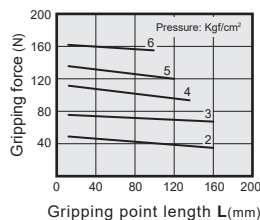
HDT 2040



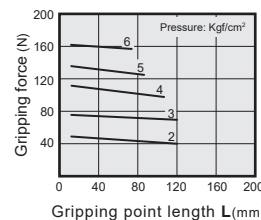
HDT 2080 HDT 20100



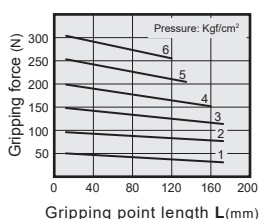
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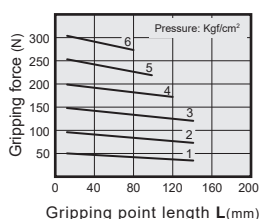
HDT 25100 HDT 25120



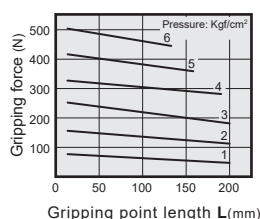
HDT 3270



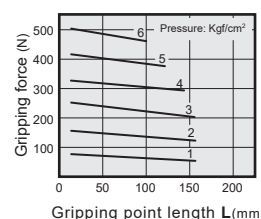
HDT 32120 HDT 32160



HDT 40100



HDT 40160 HDT 40200

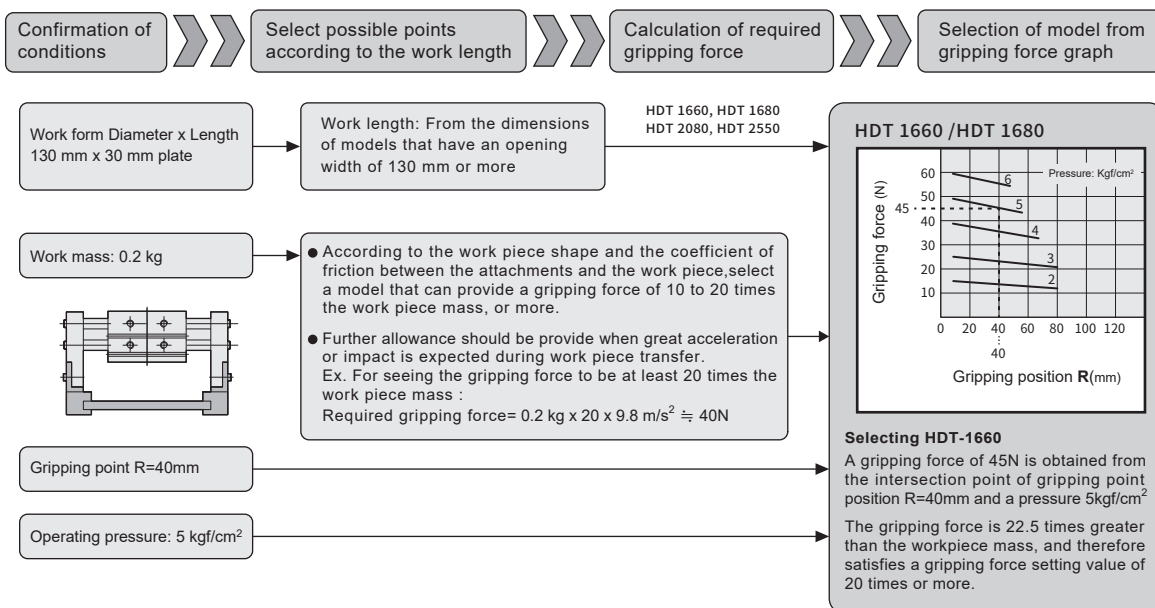


HDT series Wide Type Air Gripper

Model selection, Mounting type

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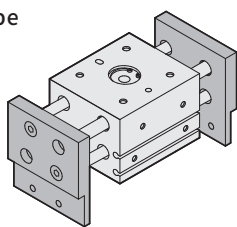
Selection procedure



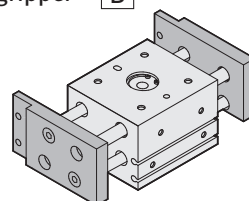
Mounting type

Finger type (2 types)

Standard type

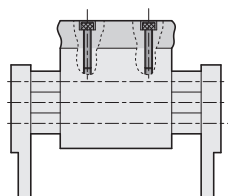


Finger side gripper – B

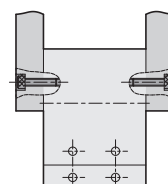


Mounting type (2 types)

Top side mounting type



Side mounting type

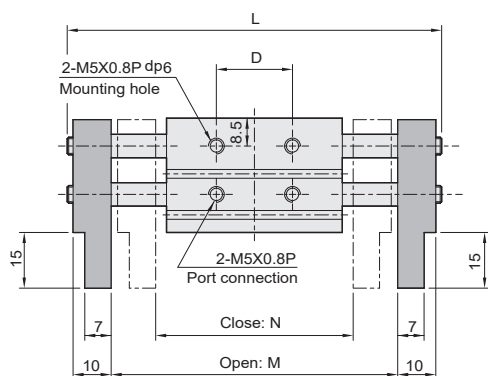
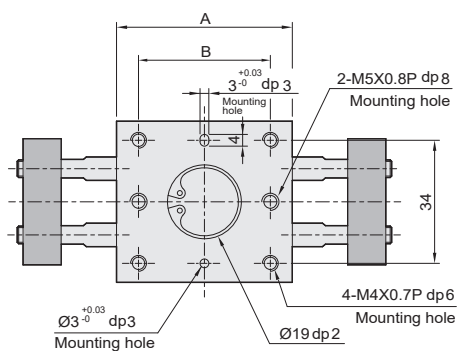
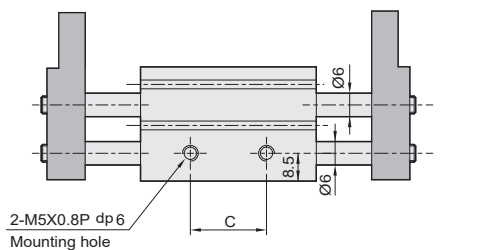


HDT series Wide Type Air Gripper

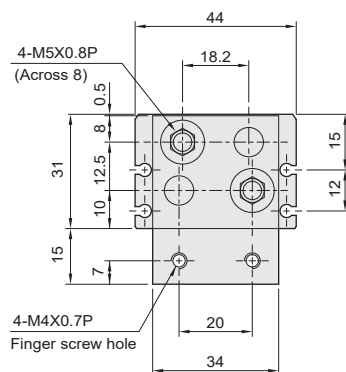
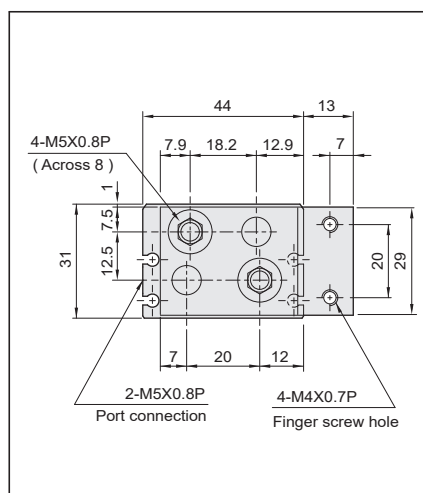
Dimensions

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HDT 10



HDT 10 □ B (Finger side gripper)



Unit: mm

Model	A	B	C	D	L	M	N
HDT 1020 □	52	36	30	30	100(80)	76	56
HDT 1040 □	68	52	46	46	136(96)	112	72
HDT 1060 □	86	70	64	64	174(114)	150	90

HDQ

HDQT

HDQM

HMQ

HMT

HDL

HDT

HDF

RM

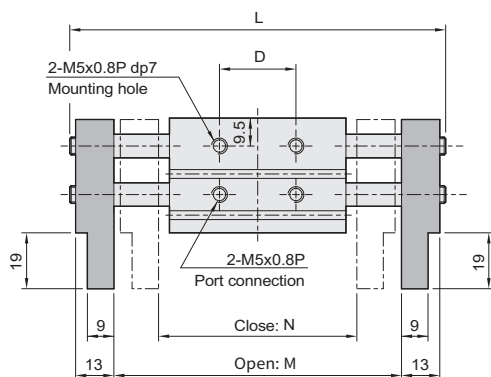
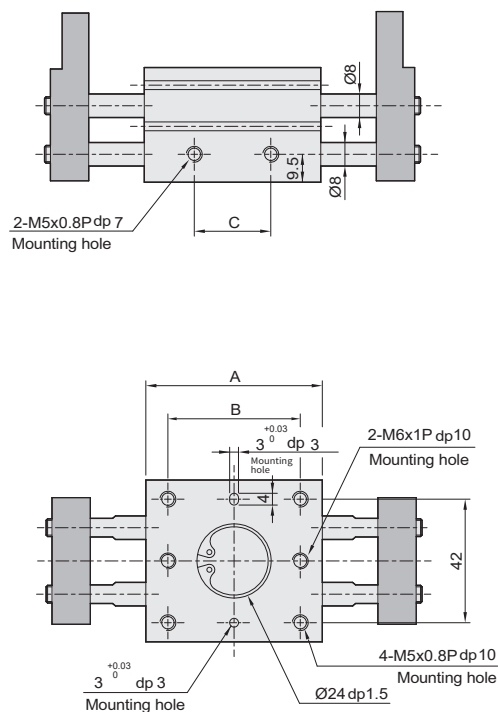
RB

HDT series Wide Type Air Gripper

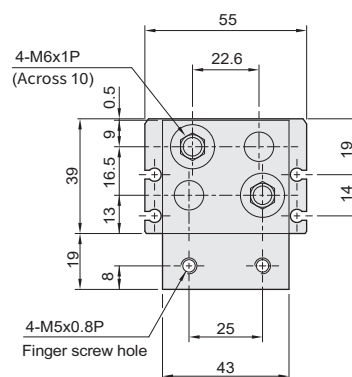
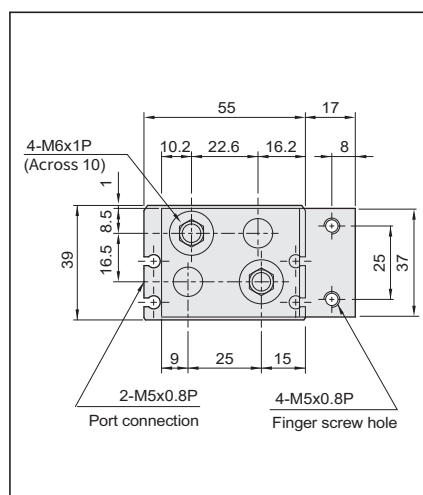
Dimensions

CHELIC

HDT 16



HDT 16 □ B (Finger side gripper)



Unit: mm

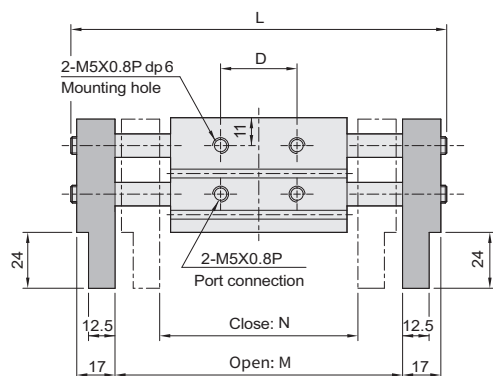
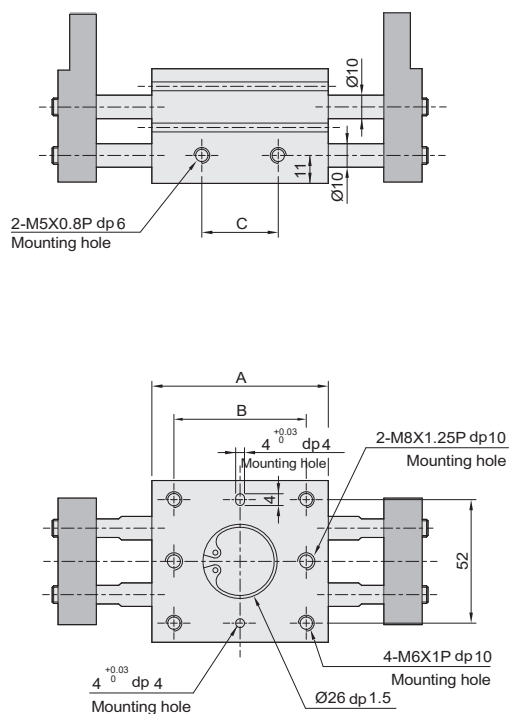
Model	A	B	C	D	L	M	N
HDT 1630 □	60	45	26	26	128(98)	98	68
HDT 1660 □	90	75	56	56	188(128)	158	98
HDT 1680 □	110	95	76	76	228(148)	198	118

HDT series Wide Type Air Gripper

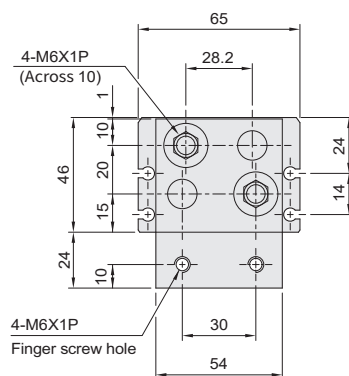
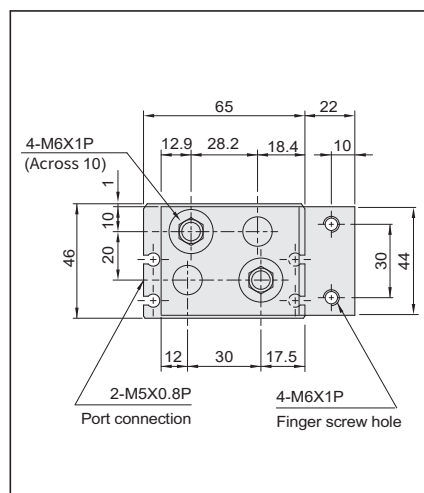
Dimensions

CHELIC

HDT 20



HDT 20 □ B (Finger side gripper)



Unit: mm

Model	A	B	C	D	L	M	N
HDT 2040 □	71	58	40	40	157(117)	119	79
HDT 2080 □	113	100	82	82	239(159)	201	121
HDT 20100 □	133	120	102	102	279(179)	241	141

HDQ

HDQT

HDQM

HMQ

HMT

HDL

HDT

HDF

RM

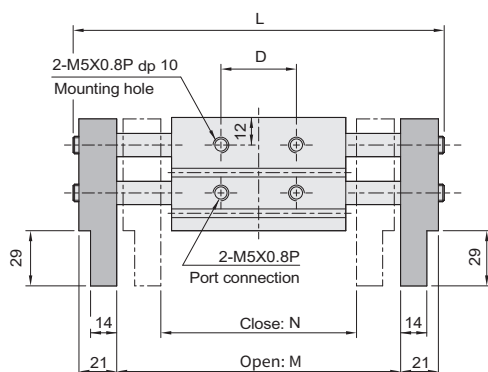
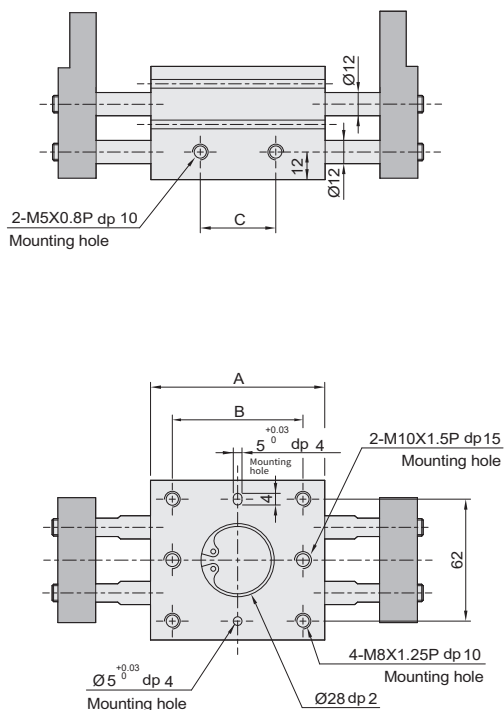
RB

HDT series Wide Type Air Gripper

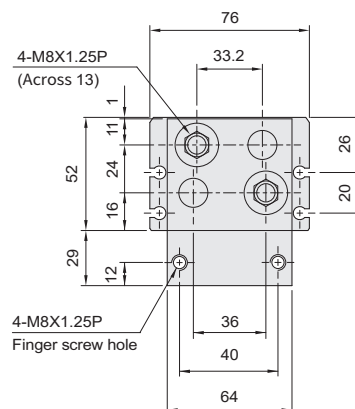
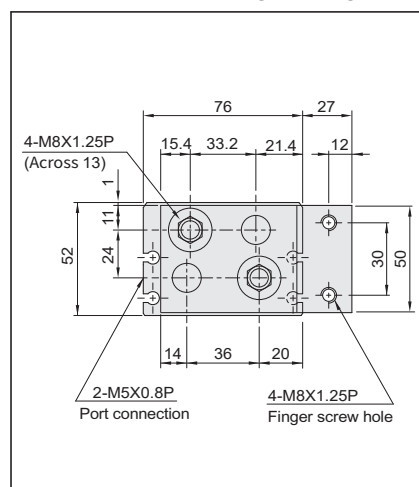
Dimensions

CHELIC

HDT 25



HDT 25 □ B (Finger side gripper)



Unit: mm

Model	A	B	C	D	L	M	N
HDT 2550 □	88	70	50	50	192(142)	146	96
HDT 25100 □	142	124	104	104	296(196)	250	150
HDT 25120 □	160	142	122	122	334(214)	288	168

Dimensions

 HDT ☐

2-M6X1P dp 8
Mounting hole

C

15.5

Ø14

Ø16

A

B

6^{+0.03}₀ dp 6

Mounting hole

2-M10X1.5P dp 15
Mounting hole

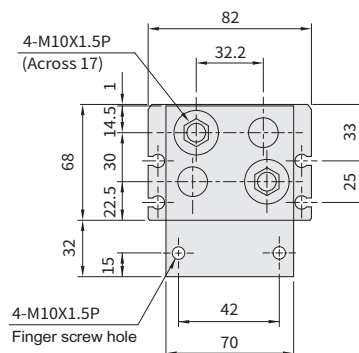
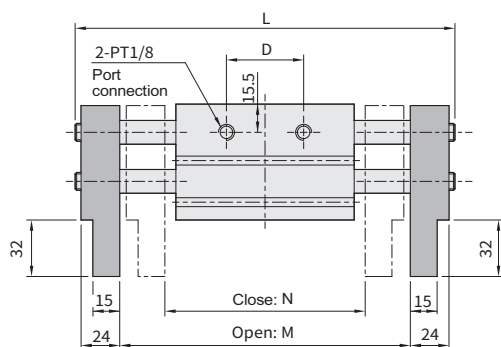
64

4-M8X1.25P dp 12
Mounting hole

Ø26 dp 1.5

Ø6^{+0.03}₀ dp 6
Mounting hole

Technical drawing of the rear view of the 1000 Series 1U Rack Mountable Power Supply. The drawing shows a rectangular unit with dimensions: overall width 82, overall height 66, and mounting flange width 30. The mounting flange has four 4-M10X1.5P holes (2 on each side) and two 2-RC1/8" port connections. The main body has four 4-M10X1.5P finger screw holes. Dimensions for hole positions are provided: 18.9, 32.2, 24.9, 15, 1, 14.5, 30, 14, 42, 20, and 42.



Model	A	B	C	D	L	M	N
HDT 3270 ☐	110	86	69	69	240(170)	188	118
HDT 32120 ☐	158	134	117	117	338(218)	286	166
HDT 32160 ☐	202	178	161	161	422(262)	370	210

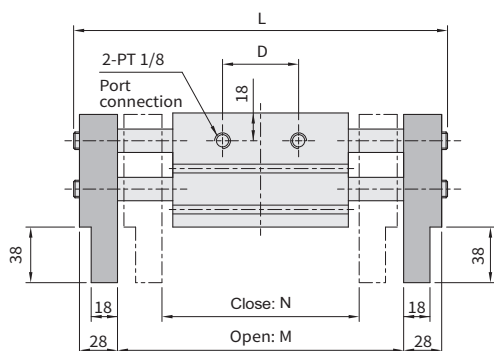
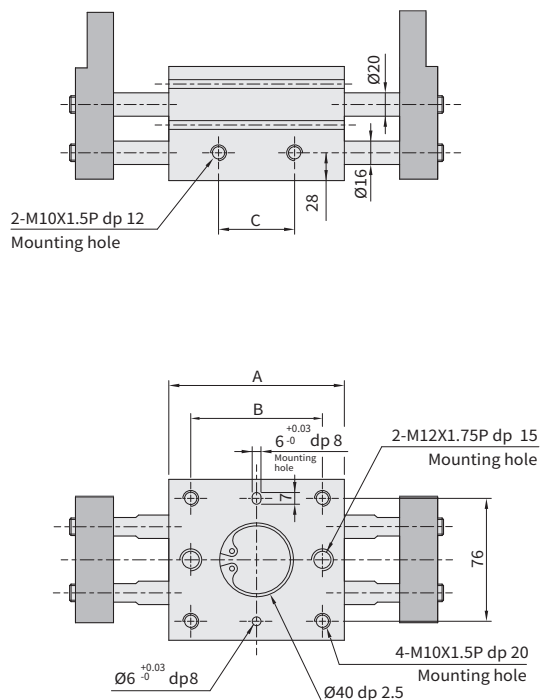
RB

HDT series Wide Type Air Gripper

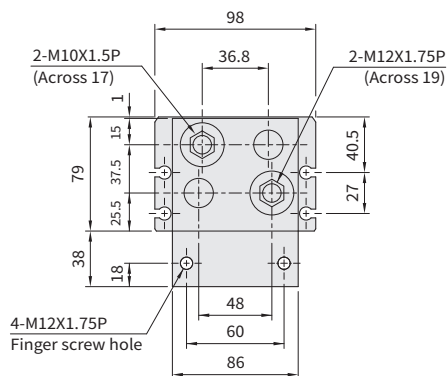
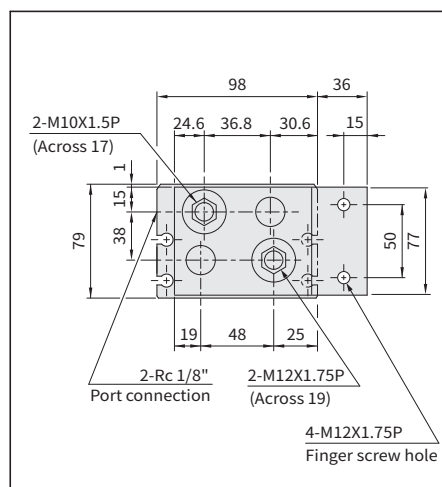
Dimensions

CHELIC

HDT 40



HDT 40 B (Finger side gripper)



Unit: mm

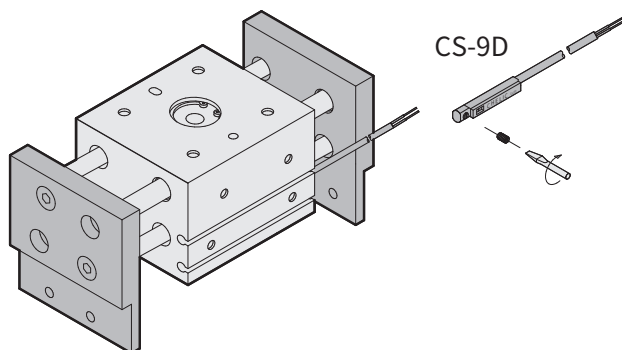
Model	A	B	C	D	L	M	N
HDT 40100 □	148	116	80	80	324(224)	264	164
HDT 40160 □	206	174	138	138	442(282)	382	222
HDT 40200 □	246	214	178	178	522(322)	462	262

HDT series Wide Type Air Gripper

Mounting type and operation of sensor switch

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■ Sensor switch mounting type



■ Hysteresis and operating range

Unit: mm

Model	CS-9D(B)	
Bore size	Operating range (F)	Hysteresis(R)
10	5	1.1
16	5	1.1
20	8.5	1
25	10	1.8
32	10	2
40	10	1.8

HDQ

HDQT

HDQM

HMQ

HMT

HDL

HDT

HDF

RM

RB