ADP series

Parallel Type Air Gripper

Feature

- Piston and lever all-in-one
- Grippe acting by bearing mechanism
- Mounting brackets in option

Specification

Item \ Bore size (mm)		Ø10	Ø16	Ø20	Ø25	Ø32
Action		Double acting				
Fluid		Air				
Pressure range kgf / cm² (kPa)		1.5 ~ 7 (150 ~ 700)				
Ambient and fluid temperature °C		0 ~ 60				
Max. operation frequency time/min		100				
Lubrication	Cylinder	Lubrication free type				
	Lever section	Lubrication required				
Theoretical gripping force(M) kgf-cm	Closed side	0.8	2.4	4.7	7.5	10
	Opened side	0.5	1.8	3.5	6.0	8.5
Max. gripper point length(L) mm		30	40	60	70	85
Gripperstroke mm		4	8	12	14	16
Port size mm		M3 X 0.5P	M5 X 0.8P			
Sensing device		With magnet				

Note 1: P: operating pressure kgf/cm2, L: the gripping point length is 30mm

Product weight

Model	Weight (kg)
ADP Ø10	0.12
ADP Ø16	0.16
ADP Ø20	0.55
ADP Ø25	0.75
ADP Ø32	1.23

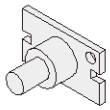
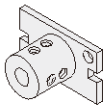
Code of order

ADP-20-AM-AMS-L
① ② ③

①

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

②

Mark	Mouting bracket	Mark	Mouting bracket	Mark	Mouting bracket
None	Without Mouting bracket	AM		AB	

※AM: Internal mounting AB: External mounting

③ AMS-□

L-straight cable

V-angle cable(90°)

Model :

M-2 wire Without contact

N-3 wire Without contact(NPN)

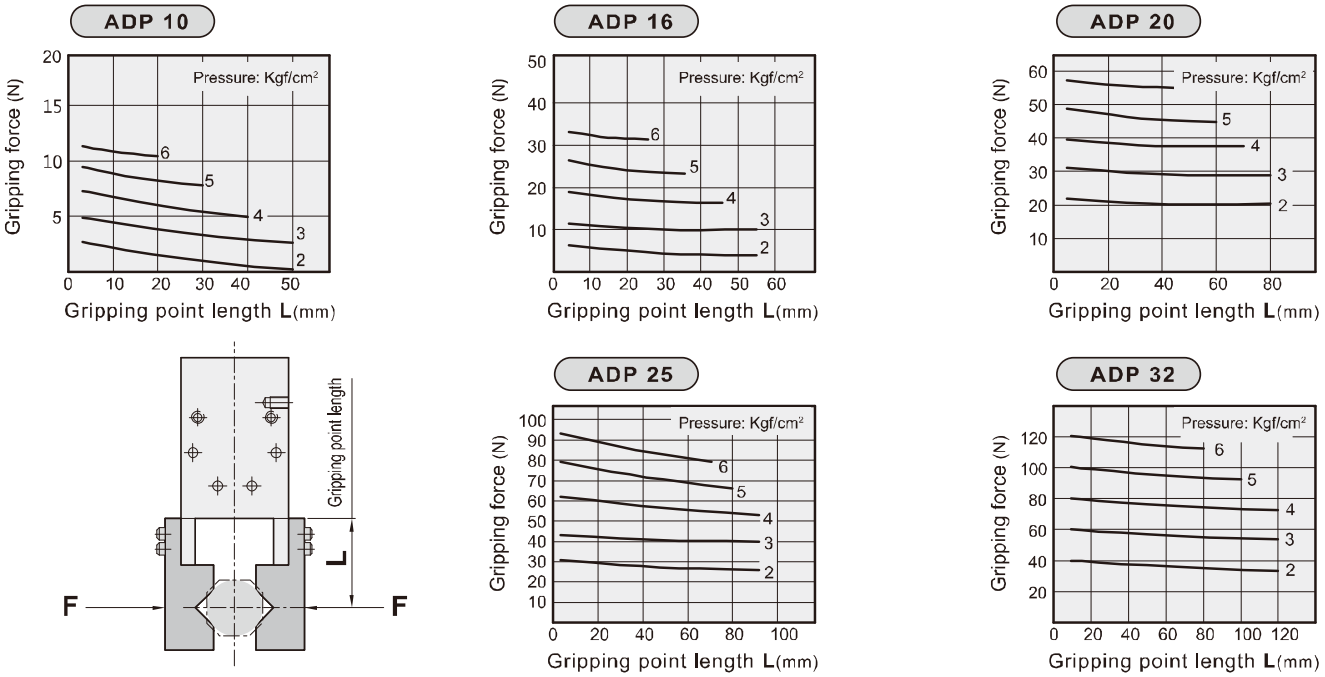
P-3 wire Without contact(PNP)

wire length-L : 2000mm

Operating type and data

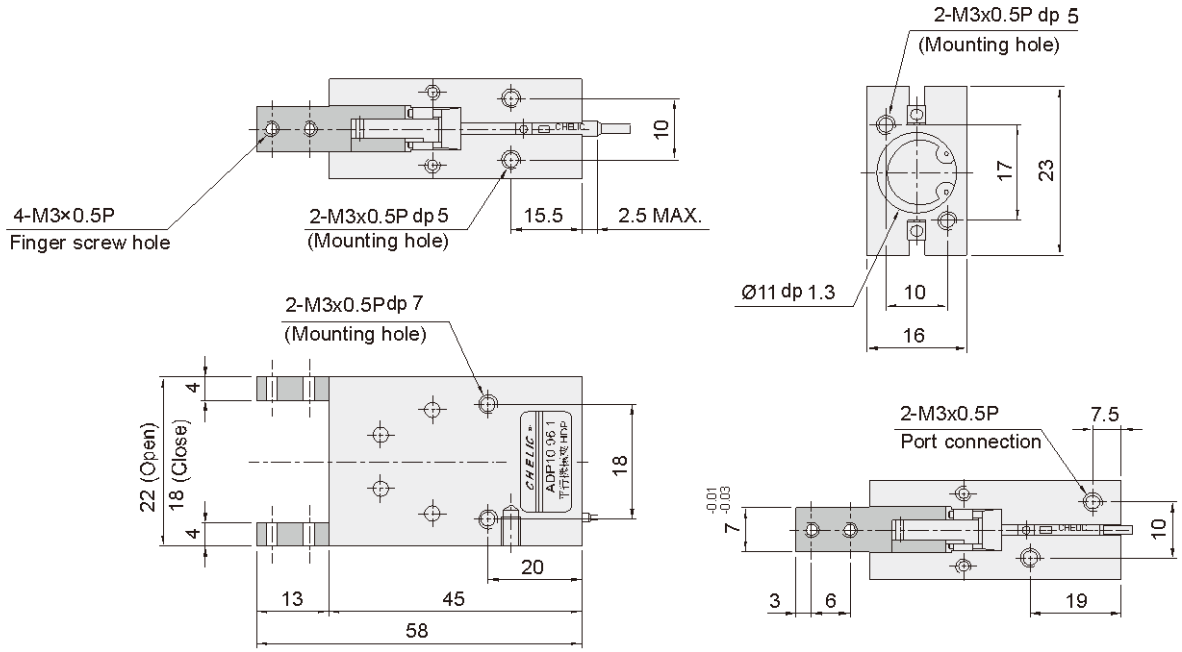
Model	The smallest operating pressure (kgf/cm²)	Thread port (mm)	Effective gripping force (N)	
ADP 10	2.2	4-M3x0.5P	Open	4.9
			Close	7.8
ADP 16	1	4-M3x0.5P	Open	17.6
			Close	23.5
ADP 20	1	4-M4x0.7P	Open	34.3
			Close	46
ADP 25	1	4-M5x0.8P	Open	58.8
			Close	73.5
ADP 32	1	4-M6x1.0P	Open	83.3
			Close	98

Gripping force characteristic

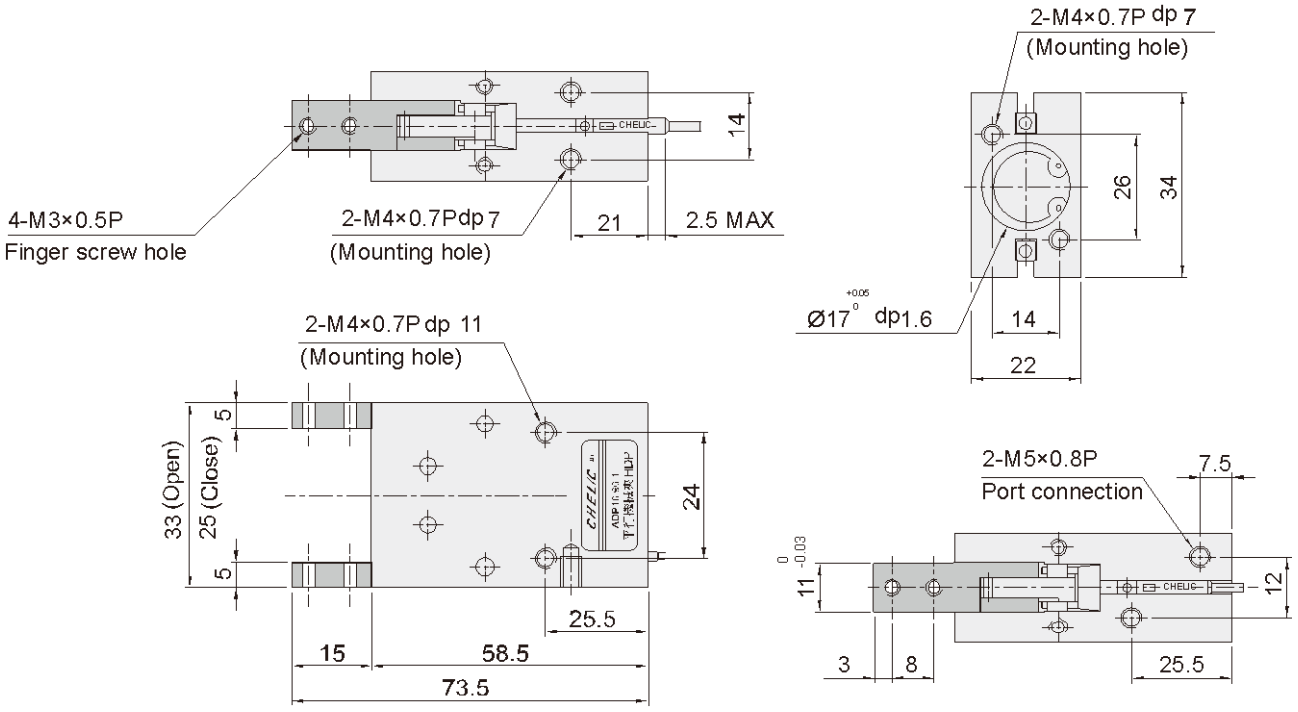


Dimensions

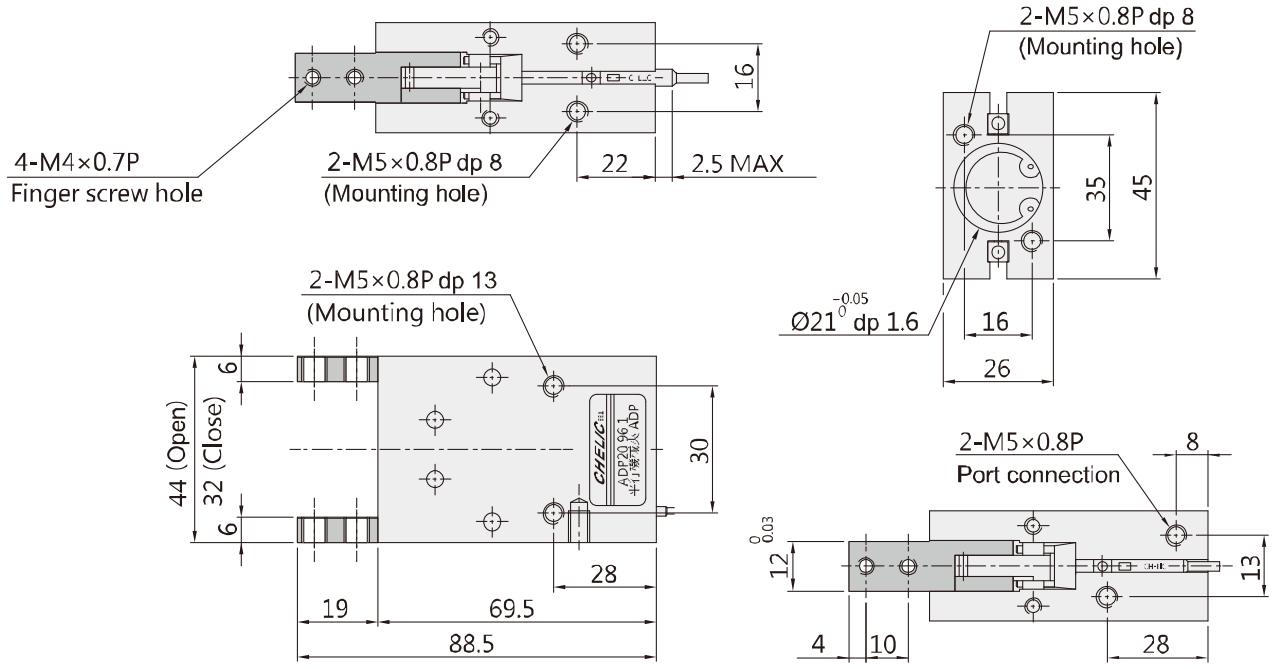
■ ADP-10



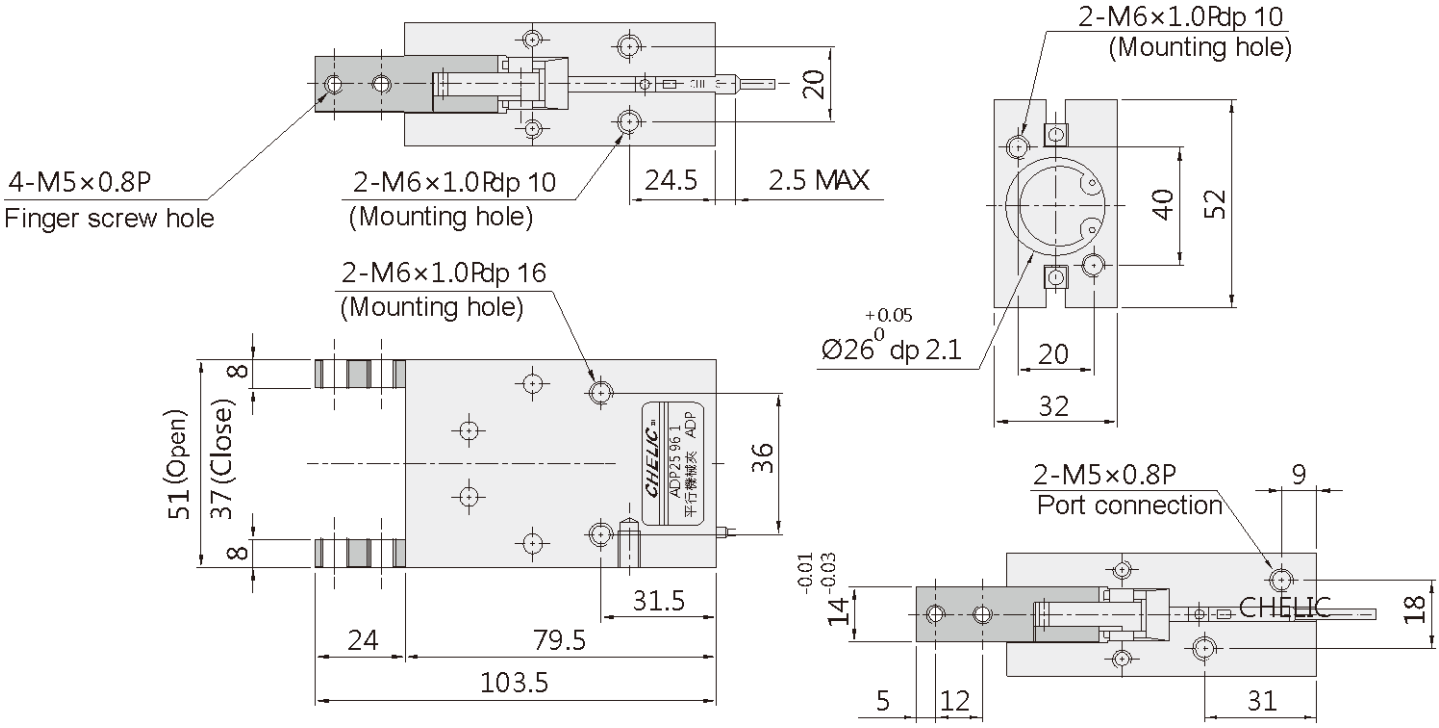
ADP-16


4-M3×0.5P
Finger screw hole
2-M4×0.7Pdp 7
(Mounting hole)
21
2.5 MAX
14
2-M4×0.7P dp 7
(Mounting hole)
26
34
Ø17 +0.05 0 dp1.6
14
22
2-M4×0.7P dp 11
(Mounting hole)
33 (Open)
25 (Close)
5
5
24
25.5
15
58.5
73.5
2-M5×0.8P
Port connection
7.5
11 0 -0.03
12
3
8
25.5

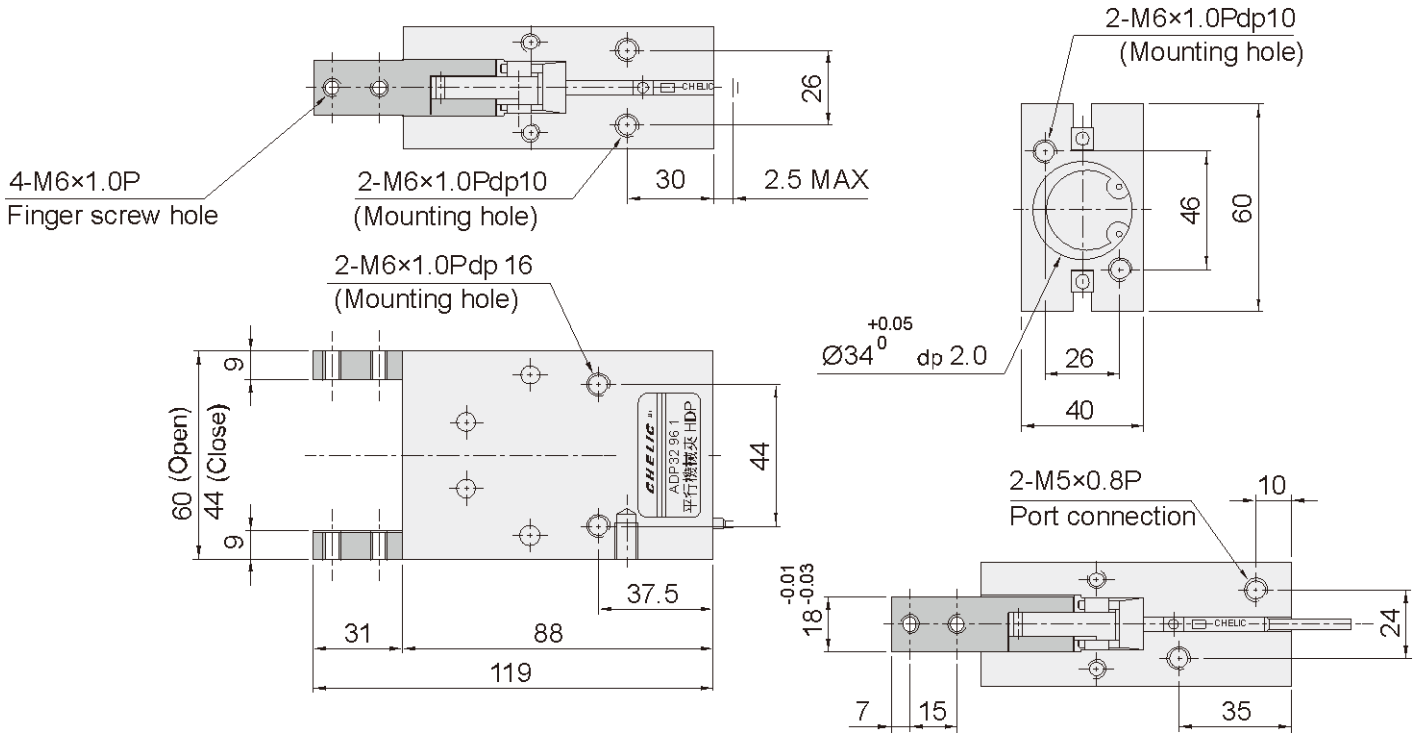
ADP-20


4-M4×0.7P
Finger screw hole
2-M5×0.8P dp 8
(Mounting hole)
22
2.5 MAX
16
2-M5×0.8P dp 8
(Mounting hole)
35
45
Ø21 -0.05 0 dp 1.6
16
26
2-M5×0.8P dp 13
(Mounting hole)
44 (Open)
32 (Close)
6
6
30
28
19
69.5
88.5
2-M5×0.8P
Port connection
8
12 0 -0.03
13
4
10
28

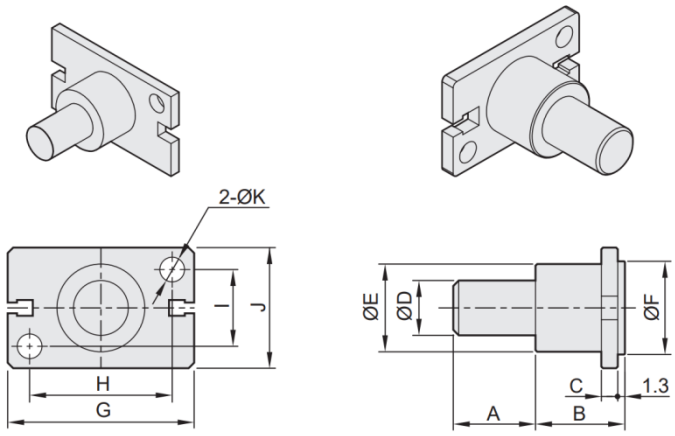
ADP-25


4-M5×0.8P
Finger screw hole
2-M6×1.0Pdp 10
(Mounting hole)
20
24.5
2.5 MAX
2-M6×1.0Pdp 10
(Mounting hole)
40
52
Ø26 +0.05 0 dp 2.1
20
32
2-M6×1.0Pdp 16
(Mounting hole)
51 (Open)
37 (Close)
8
8
36
31.5
24
79.5
103.5
2-M5×0.8P
Port connection
9
14 -0.01 -0.03
18
5
12
31
CHELIC

ADP-32


4-M6×1.0P
Finger screw hole
2-M6×1.0Pdp10
(Mounting hole)
26
30
2.5 MAX
2-M6×1.0Pdp10
(Mounting hole)
46
60
Ø34 +0.05 0 dp 2.0
26
40
2-M6×1.0Pdp 16
(Mounting hole)
60 (Open)
44 (Close)
9
9
44
37.5
31
88
119
2-M5×0.8P
Port connection
10
18 -0.01 -0.03
24
7
15
35
CHELIC

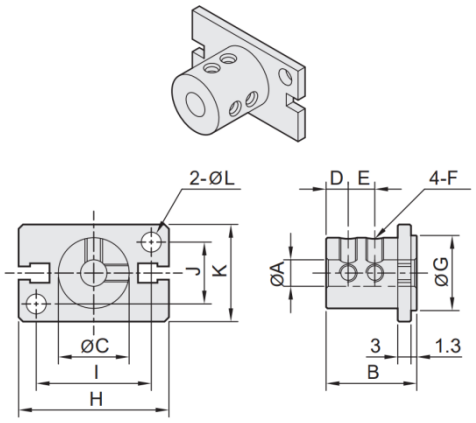
AM type mounting bracket (Available to internal mounting)



Unit mm

Model \ Mark	A	B	C	D	E	F	G	H	I	J	K
AM 10	10	10	2	8	12	13	27	17	10	16	3.5
AM 16	15	15	3	10	16	17	34	26	14	22	4.5
AM 20	15	15	3	10	18	21	45	35	16	26	5.5
AM 25	25	17	5	14	26	26	52	40	20	32	6.6
AM 32	25	20	6	16	30	34	60	46	26	40	6.6

AB type mounting bracket (Available to external mounting)



Unit: mm

Model \ Mark	A	B	C	D	E	F	G	H	I	J	K	L
AB 16	6	20.5	16	5	6	M4 x 0.7p	17	34	26	14	22	4.5
AB 20	8	20.5	20	7	7	M4 x 0.7p	21	45	35	16	26	5.5
AB 25	10	30.5	25	8	10	M4 x 0.7p	26	52	40	20	32	6.5
AB 32	12	40.5	32	10	15	M4 x 0.7p	34	60	46	26	40	6.5