

PH05 Series

Features



- 180° angular open & close type by Link Lever
- Excellent durability with anti-abrasive surface treatment at frictional surface
- Auto Switch for the detection of position can be attached
- As integrated cylinder with link, the finger can be opened and closed 180° by motion of link. It can prevent interference of finger in work piece handling.

Order form

PH05 - 30 - A1 S

①

②

③

④

③ Auto Switch type

Symbol	Type	Length	Applied cylinder
A1	DSC PRO-A1	1m	ø 20, ø 30
A1L	(2-wire)	3m	
B1	PLC PRO-B1	1m	ø 40, ø 50
B1L	(3-wire)	3m	
A2	DSC PRO-A2	1m	ø 16
A2L	(2-wire)	3m	
B2	PLC PRO-B2	1m	
B2L	(3-wire)	3m	

① Series

② Bore size & Stroke(mm)

Name	Bore size(mm)	Stroke(°)
16	16	-5 ~ 180
20	20	-5 ~ 180
30	30	-5 ~ 180
40	40	-5 ~ 180
50	50	-5 ~ 180
80	80	-5 ~ 180

④ Auto Switch quantity

Blank	2ea
S	1ea

Specification

Model	PH05-16	PH05-20	PH05-30	PH05-40	PH05-50	PH05-80
Bore size(mm)	16	20	30	40	50	80
Stroke(°)	-5 ~ 180	-5 ~ 180	-5 ~ 180	-5 ~ 180	-5 ~ 180	-5 ~ 180
Gripping force(kgf)	2.1	3.4	8.4	15	25.7	83
Air pressure(5kgf/cm ²) Note 2)						
Air port size	M5	M5	PT1/8	PT1/8	PT1/8	PT3/8
Main body weight(kgf)	0.15	0.3	0.65	1.16	2.1	4.5
Allowable length of attachment L(mm) Note 3)	50	80	95	120	140	170
Fluid	Clean air Note 1)					
Air pressure(kgf/cm ²)	3 ~ 7 (General resistance pressure: 10.5) Note 4)					
Lubrication	No need (if need, use one sort of turbine oil: SPEC ISOVG 32)					
Temperature(°C)	5 ~ 60					
Accuracy(mm)	±0.1					
Max. Cycle Per Minute(C.P.M)	60					
Motion type	Double-acting type (Structure: Angular open & close by Direct CAM) (Guide: Metal Guide)					
Tolerance of open and close angle(°)	Open: -2 ~ +5, Close: -5 ~ +2 (based on one side finger)					

Note 1) Clean air: Fresh air containing solid matters with 0.3% of supersaturated moisture and 99.9% of liquid oil that passed through the 3-10μm degree of filtering

Note 2) The position of gripping point for gripping force is the end point of the Finger.

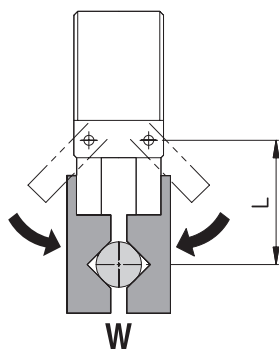
Note 3) For the base point of tolerable length and displacement in attachment, refer to page 48.(Tolerable value with 5kgf/cm² of Air pressure.)

Note 4) Guaranteed capacity of resist pressure: A pressure that does not cause an abnormality in parts when it is applied for 1 minute without any weight loaded.



► Refer to page 49 for how to read the graph.

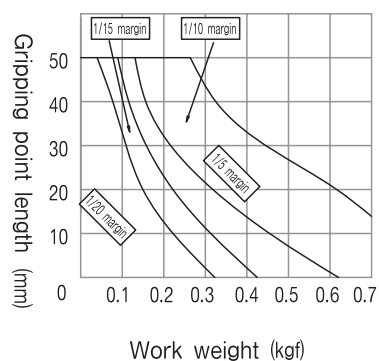
WORK outer diameter gripping force graph



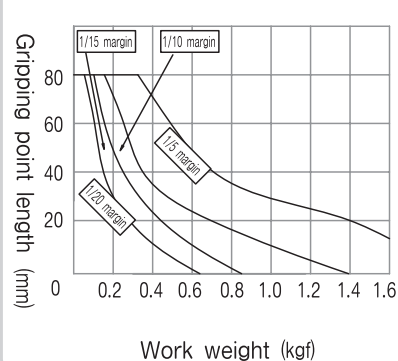
Outer diameter gripping state

W: Work weight
L: Gripping point length

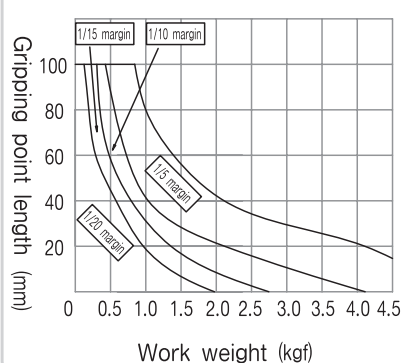
◆PH05-16



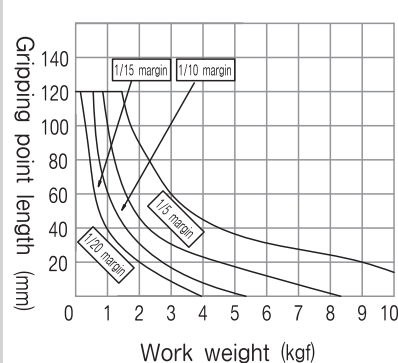
◆PH05-20



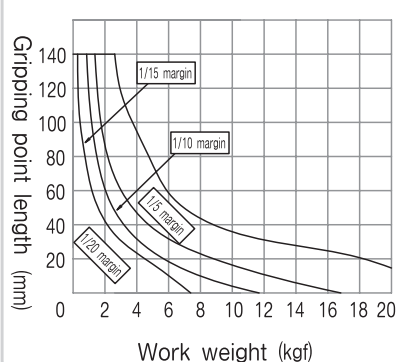
◆PH05-30



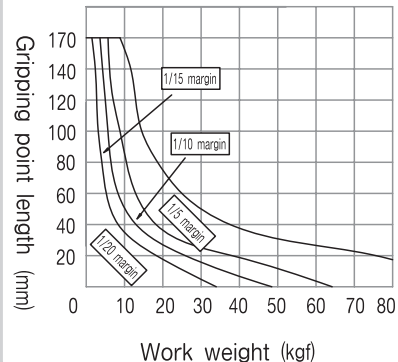
◆PH05-40



◆PH05-50



◆PH05-80



HAND

PH01-A
PH01-D
PH01-G
PH01K
PH01K-C
PH02
PH04
PH05
PH06
PH06-L
PH07
PH08
PH09
PH12
PH14-S
PH15-S
PH21
PH22
PH23

⚠ Caution

If using the attachment longer than allowable length as specified in the graph, it may have an adverse effect on the guide and cause problem to durability. Always use the gripping force within the specified length.



PH05 Series

16

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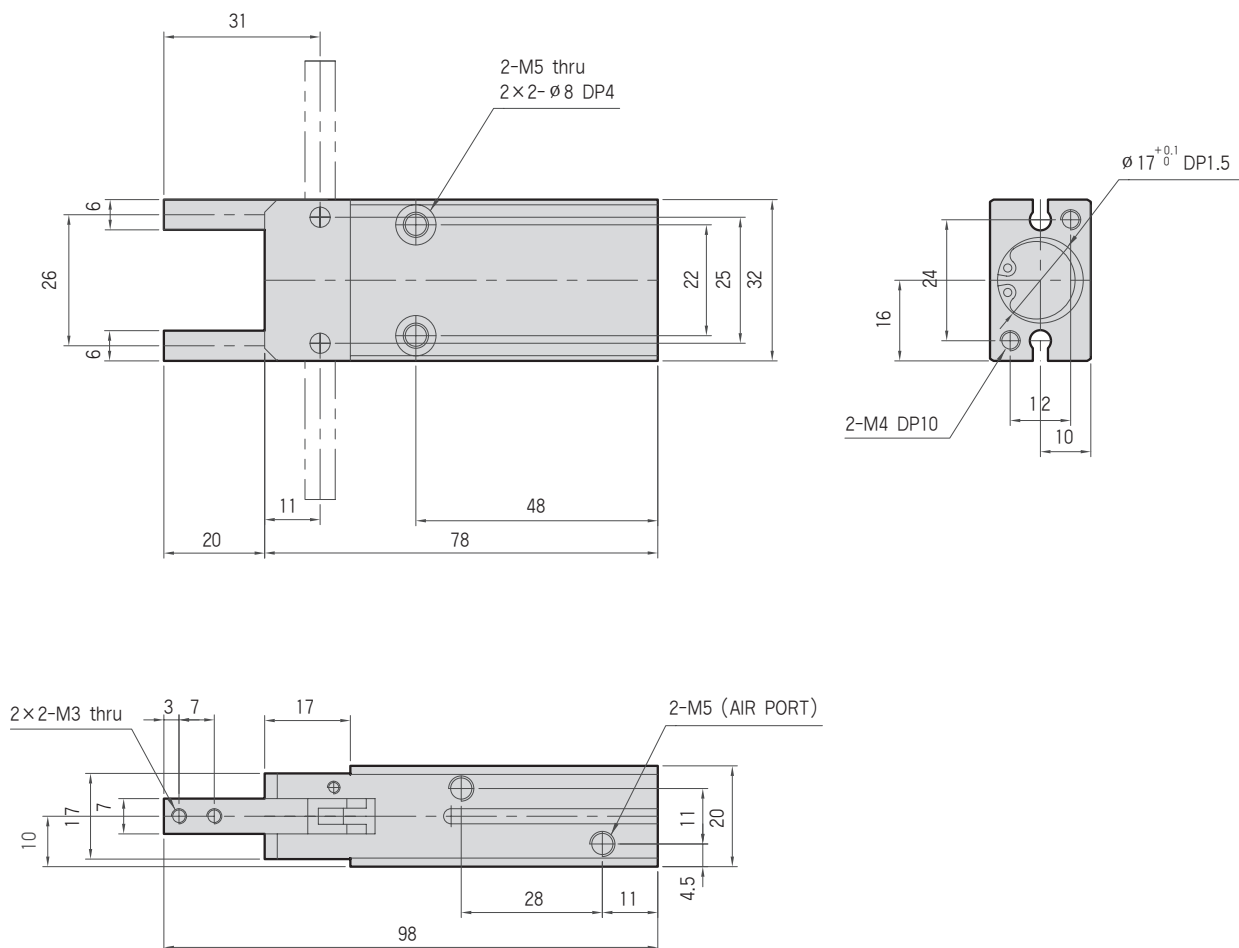
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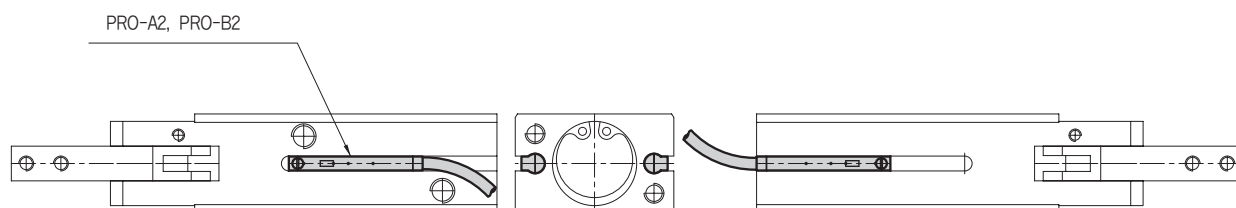
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PH05-16



PH05-16-Auto Switch



16

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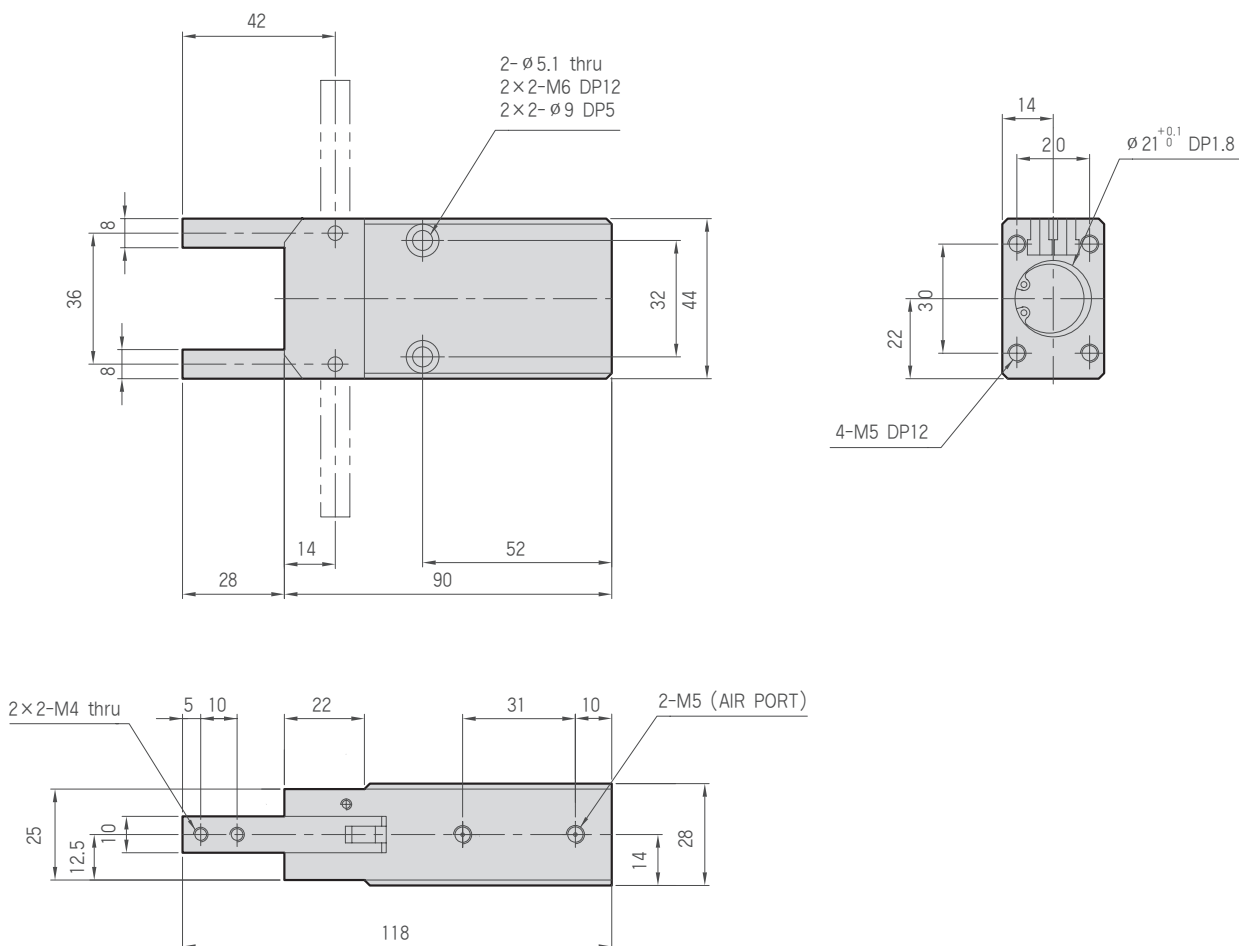
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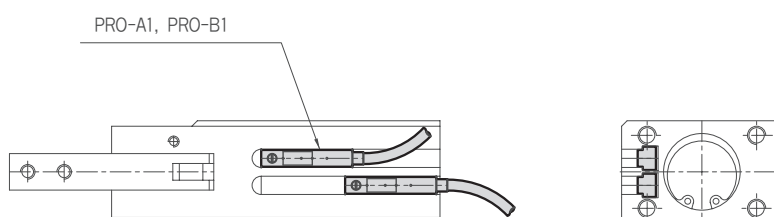
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PH05-20



PH05-20-Auto Switch



HAND

PH01-A

PH01-D

PH01-G

PH01K

PH01K-C

PH02

PH04

PH05

PH06

PH06-L

PH07

PH08

PH09

PH12

PH14-S

PH15-S

PH21

PH22

PH23



PH05 Series

16

20

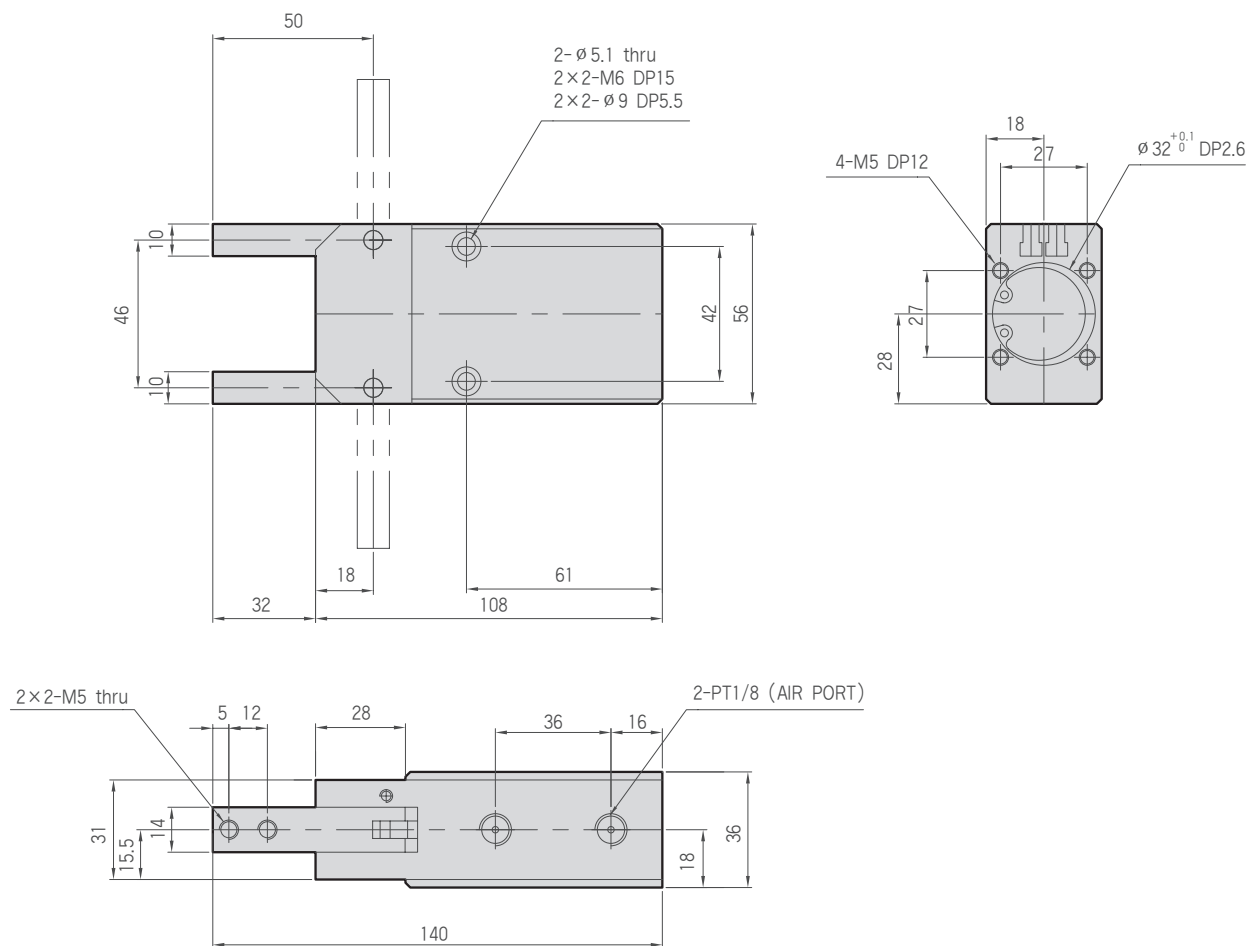
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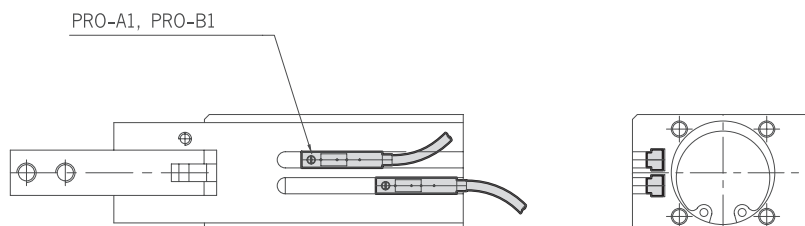
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PH05-30



PH05-30-Auto Switch



16

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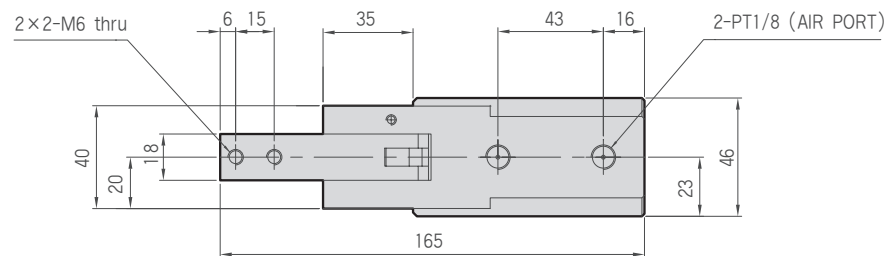
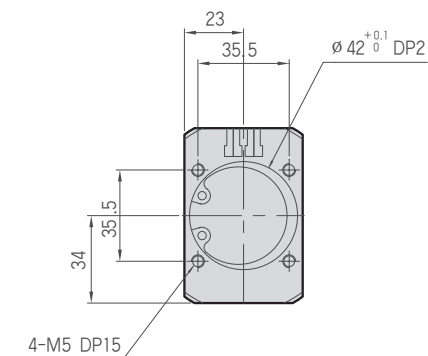
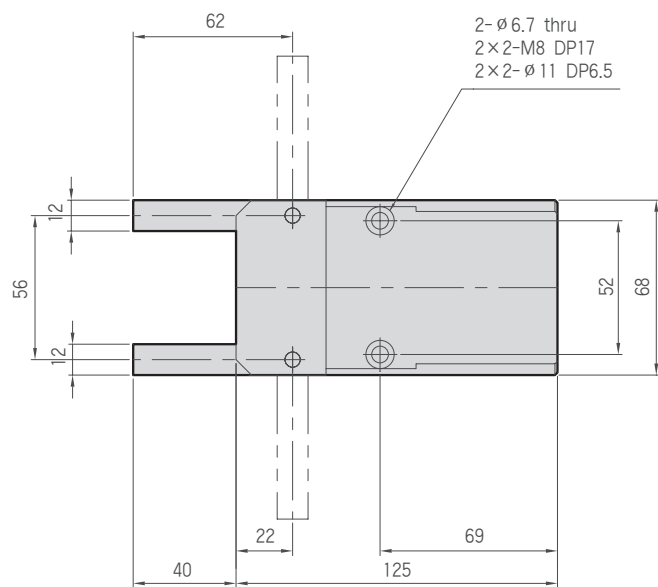
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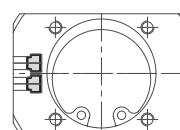
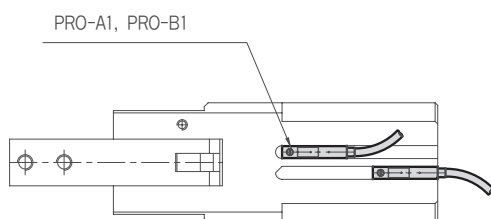
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80

PH05-40



PH05-40-Auto Switch



HAND

PH01-A

PH01-D

PH01-G

PH01K

PH01K-C

PH02

PH04

PH05

PH06

PH06-L

PH07

PH08

PH09

PH12

PH14-S

PH15-S

PH21

PH22

PH23



PH05 Series

16

20

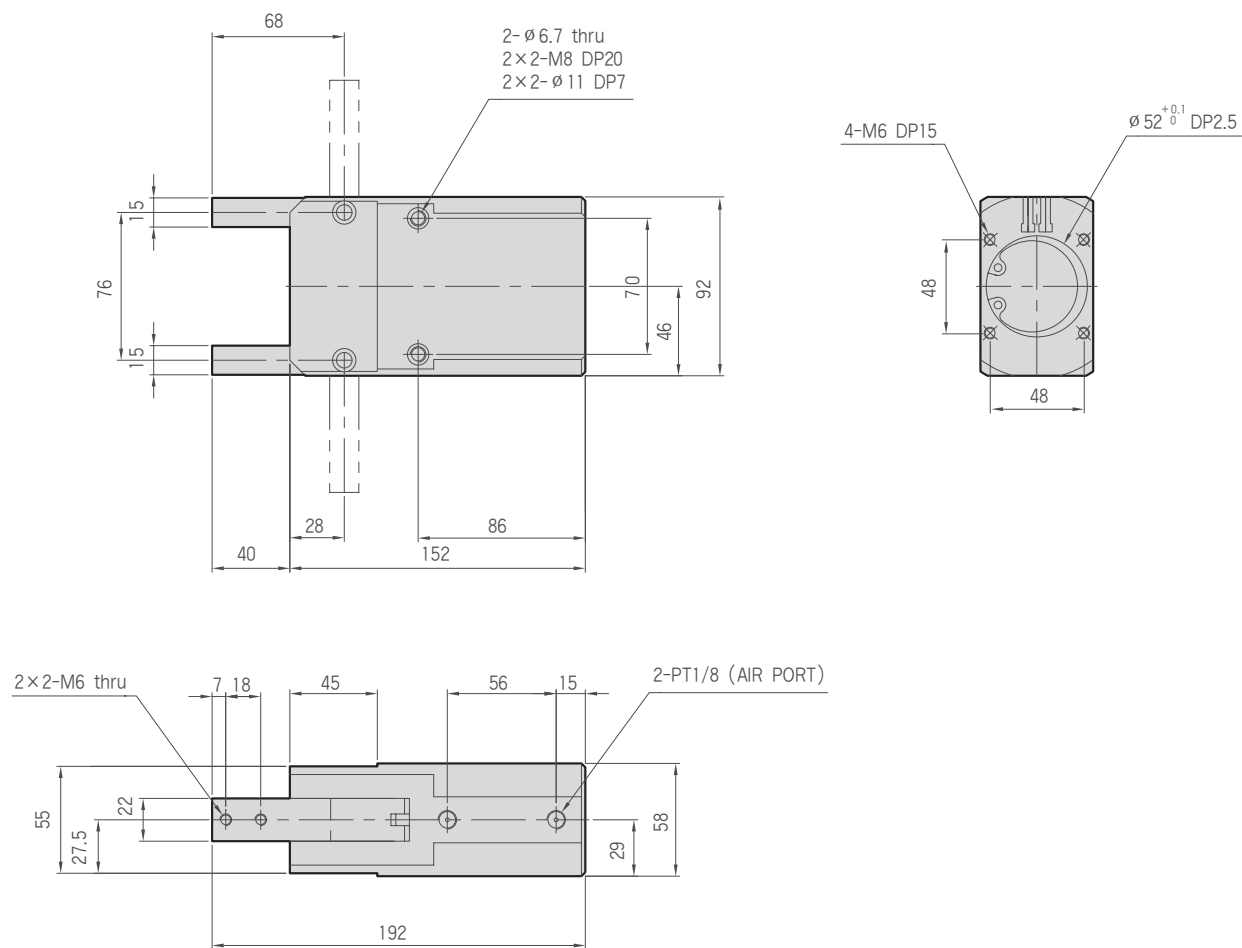
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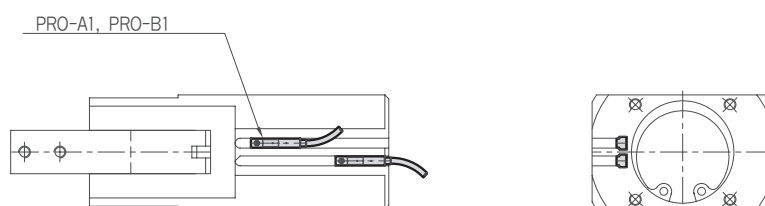
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PH05-50



PH05-50-Auto Switch



16

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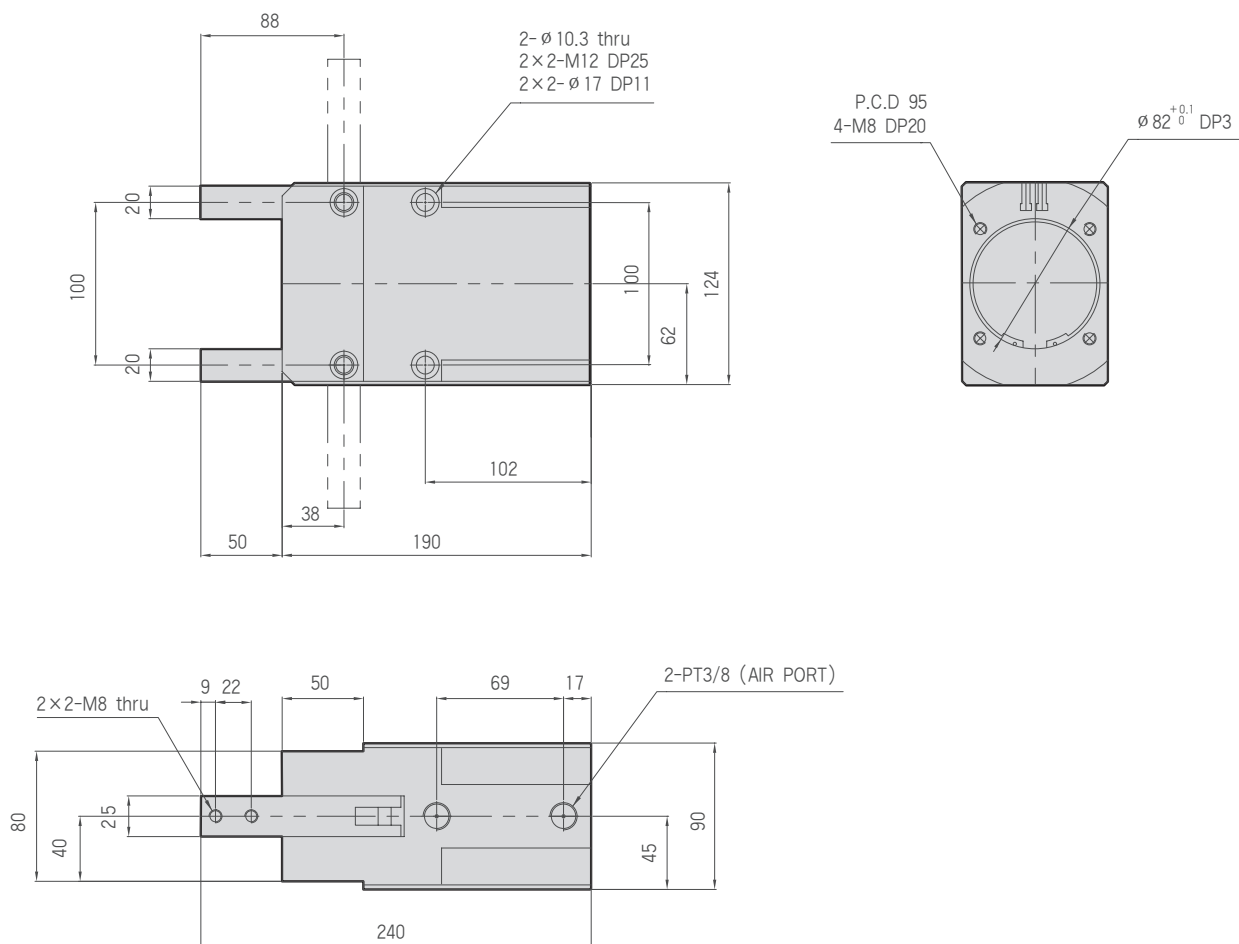
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PH05-80



HAND

PH01-A

PH01-D

PH01-G

PH01K

PH01K-C

PH02

PH04

PH05

PH06

PH06-L

PH07

PH08

PH09

PH12

PH14-S

PH15-S

PH21

PH22

PH23

PH05-80-Auto Switch

