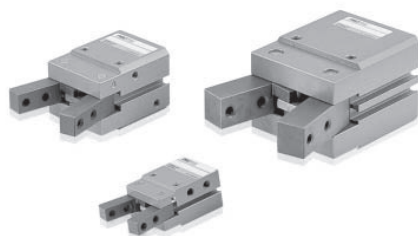


PH09 Series

Features



- Angular open & close type motion by Link Lever
- Smooth motion and excellent durability with general structure of cylinder integrated.
- Auto Switch for the detection of position can be attached (except PH09-12)

Order form

PH09 - 20 - A1 S

① ② ③ ④

③ Auto Switch 종류

Symbol	Type	Length	Applied cylinder
A1	DSC PRO-A1	1m	∅ 20, ∅ 25,
A1L	(2-wire)	3m	
B1	PLC PRO-B1	1m	∅ 30, ∅ 40
B1L	(3-wire)	3m	
A2	DSC PRO-A2	1m	∅ 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(°)
12	12	-14 ~ +30
16	16	-5 ~ +15
20	20	-5 ~ +20
25	25	-5 ~ +20
30	30	-5 ~ +20
40	40	-5 ~ +25

④ Auto Switch quantity

Blank	2ea
S	1ea

※ For PH09-12, Auto Switch can't be attached.

Specification

Model	PH09-12	PH09-16	PH09-20	PH09-25	PH09-30	PH09-40
Bore size(mm)	12	16	20	25	30	40
Stroke(°)	-14 ~ +30	-5 ~ +15	-5 ~ +20	-5 ~ +20	-5 ~ +20	-5 ~ +25
Gripping force(kgf)	0.5	2.8	4.4	7.8	13.2	22
Air pressure(5kgf/cm ²) Note 2)						
Air port size	M5	M5	M5	M5	M5	PT1/8
Main body weight(kgf)	0.03	0.10	0.25	0.30	0.4	0.74
Allowable length of attachment L(mm) Note 3)	25	50	80	90	100	120
Fluid	Clean air Note 1)					
Air pressure(kgf/cm ²)	5 ~ 7	2 ~ 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)	80			60		
Motion type	Single-acting (Normal Open)	Double-acting type (Structure: Angular open & close by Link Lever) (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 3-10 μ m degree of filtering

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

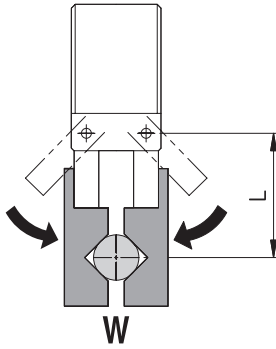
Note 3) For the base point of tolerable length and displacement in attachment, refer to page 48.(Tolerable value with 5kgf/cm² of Air pressure.)

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.

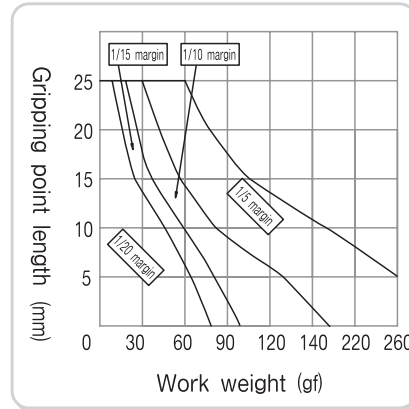
WORK outer diameter gripping force graph



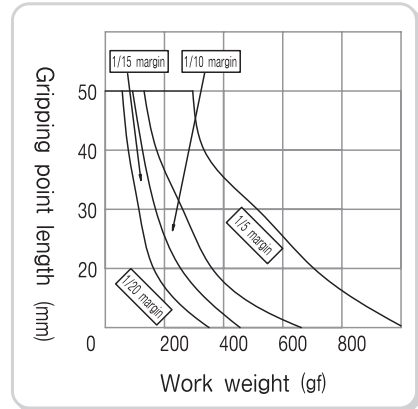
Outer diameter gripping state

W: Work weight
L: Gripping point length

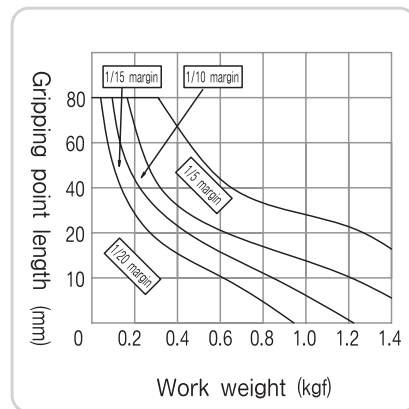
◆PH09-12



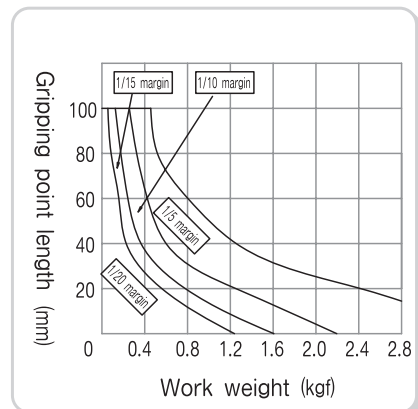
◆PH09-16



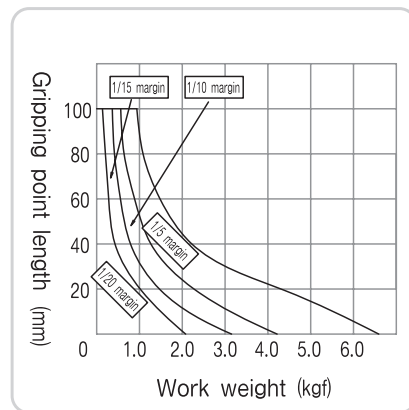
◆PH09-20



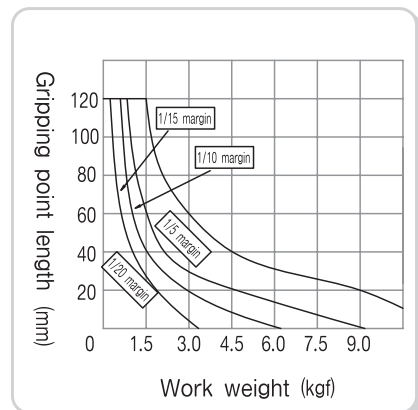
◆PH09-25



◆PH09-30



◆PH09-40



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.



PH09 Series

12

16

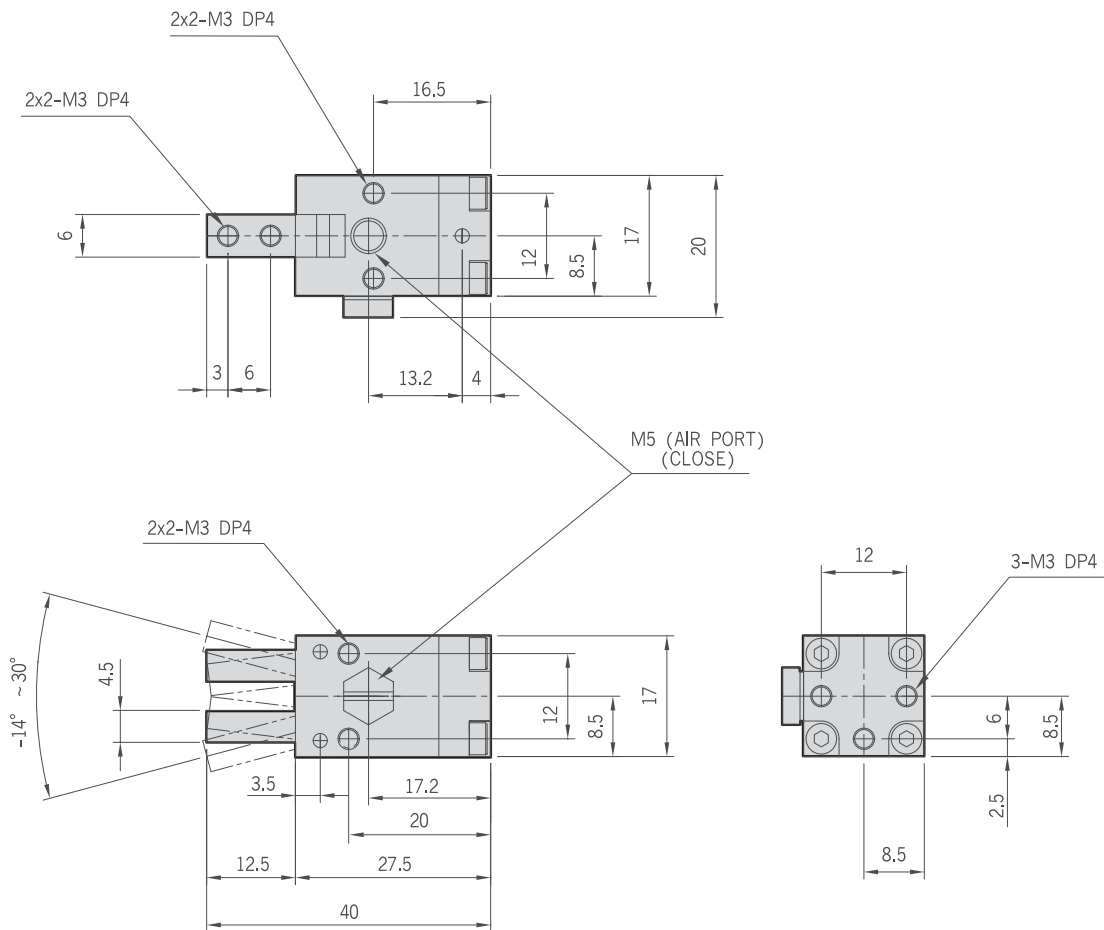
20

25

30

40

PH09-12

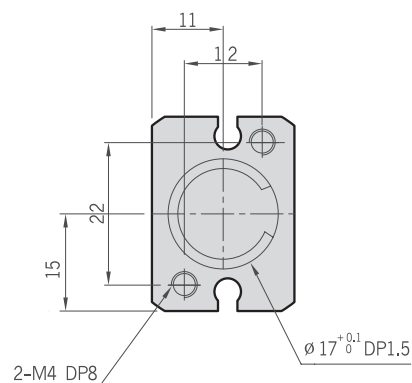
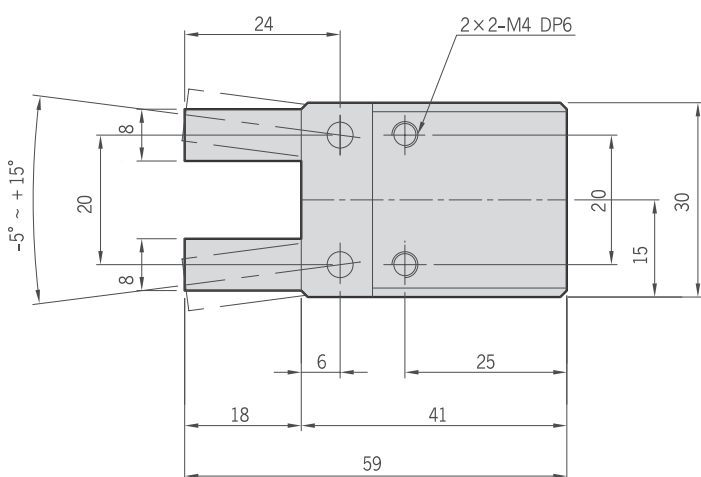
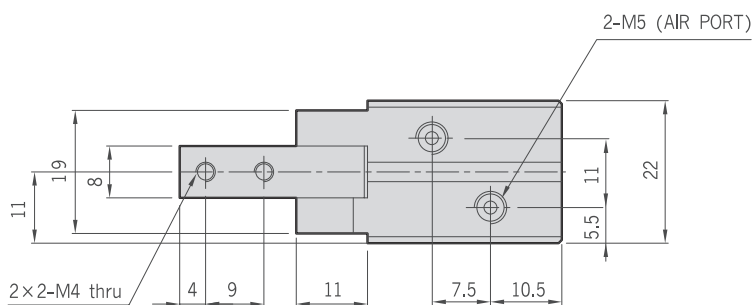


※ Normal open type.

PH09-16

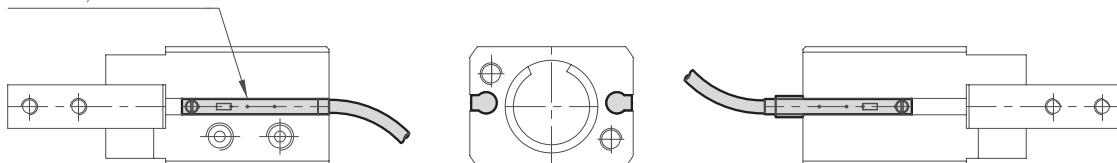
HAND

- 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



PH09-16-Auto Switch

PRO-A1, PRO-B1





PH09 Series

12

16

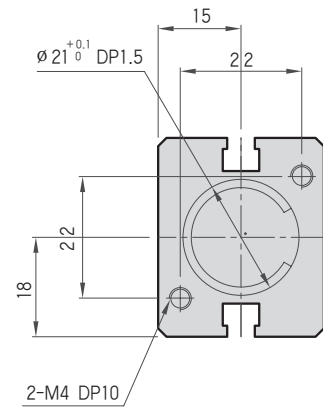
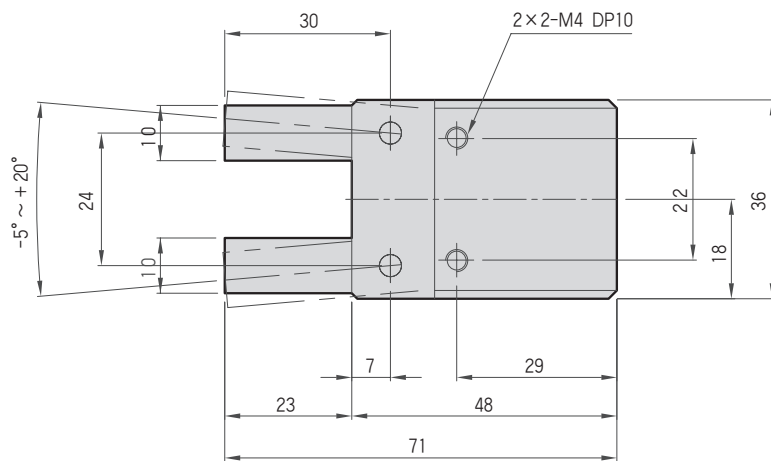
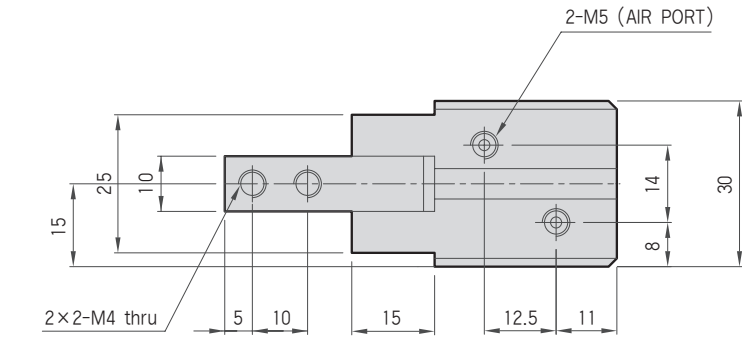
20

25

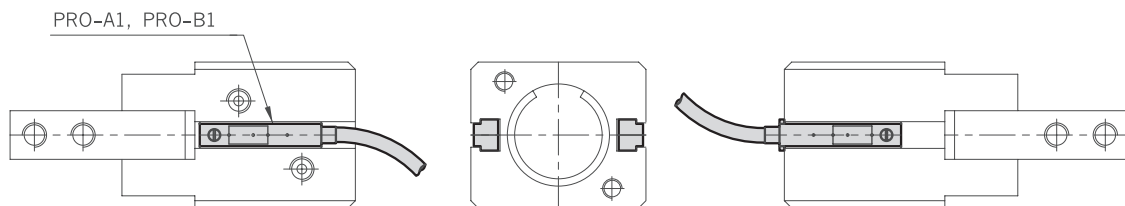
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PH09-20



PH09-20-Auto Switch

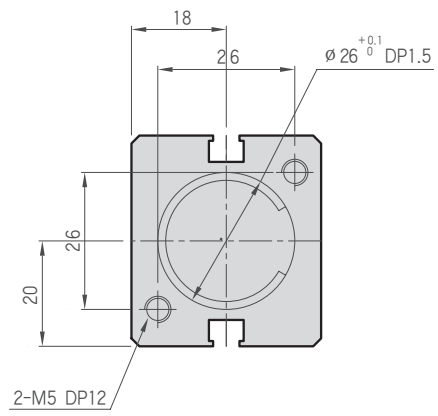
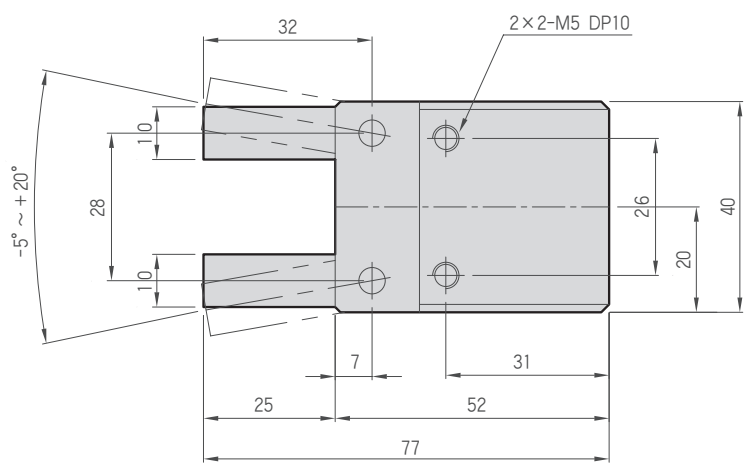
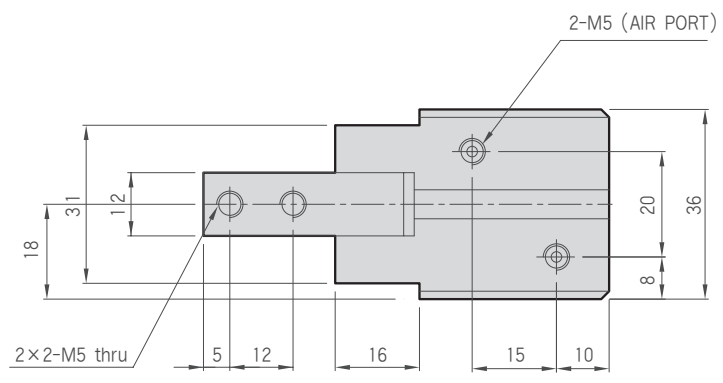


- 12
- 16
- 20
- 25
- 30
- 40

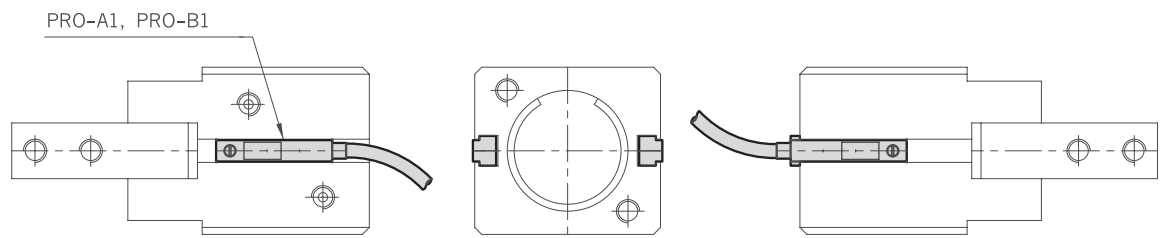
PH09-25

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



PH09-25-Auto Switch





PH09 Series

12

16

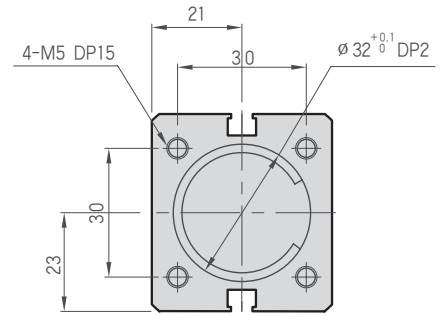
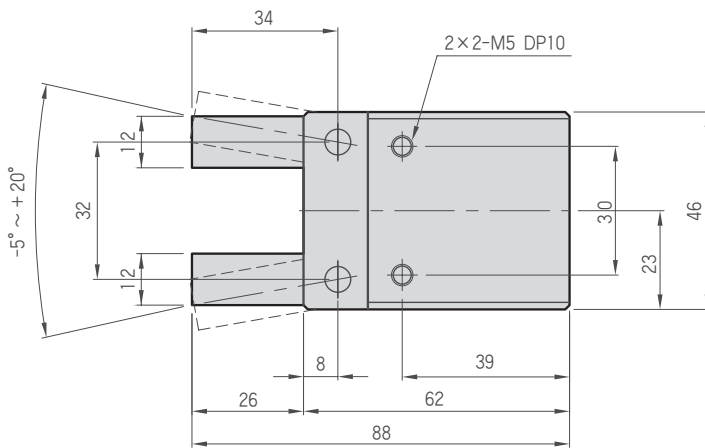
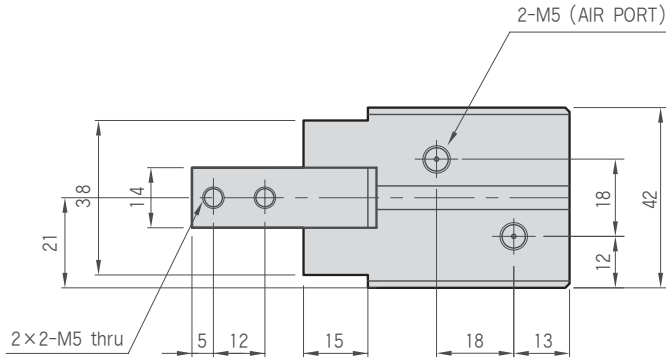
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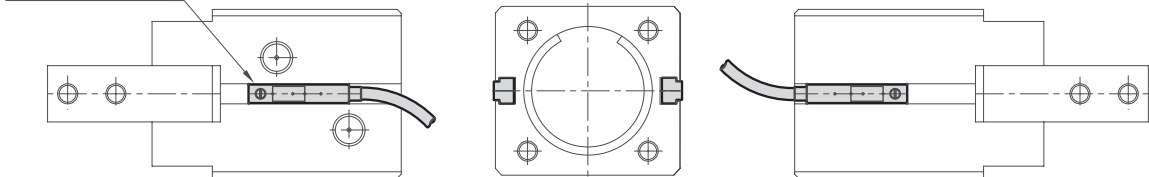
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PH09-30

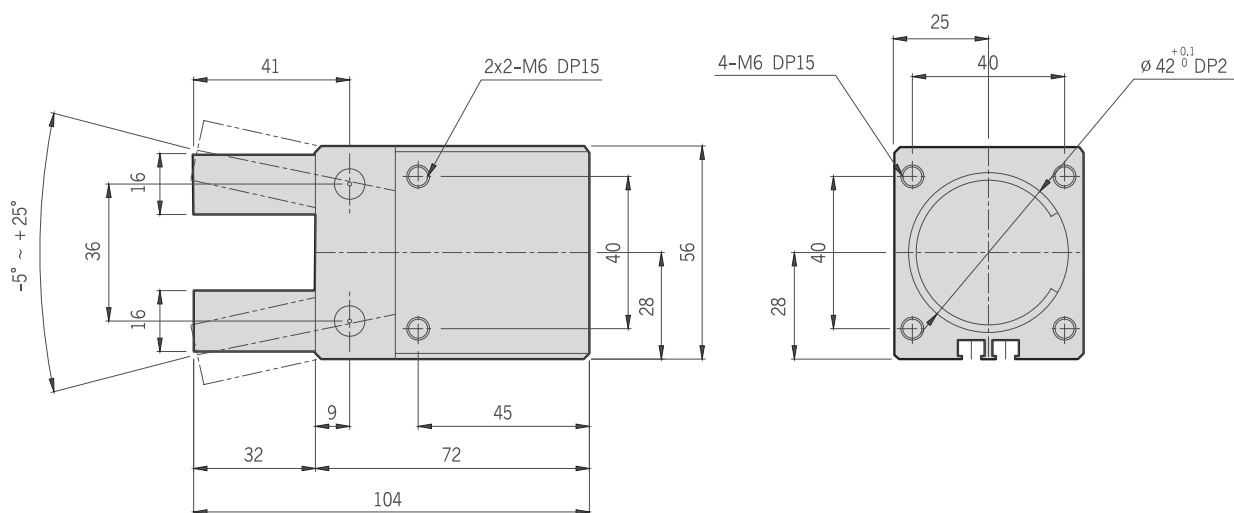
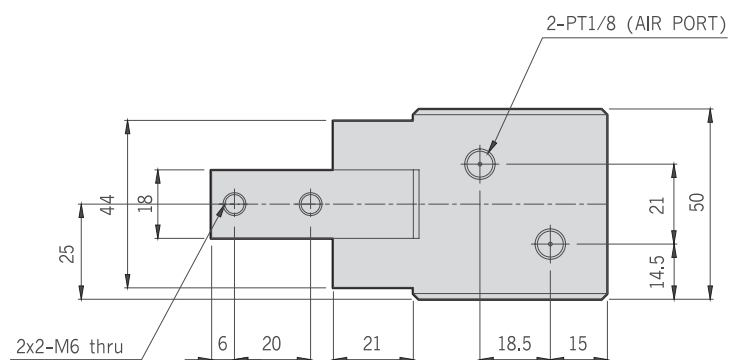


PH09-30-Auto Switch

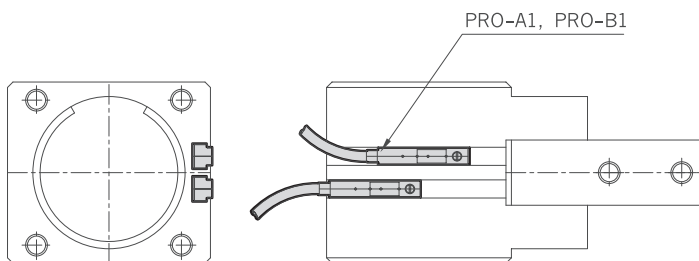
PRO-A1, PRO-B1



PH09-40



PH09-40-Auto Switch



HAND

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