

PH02 Series

Features



- Precision Parallel open & close type circular General Hand by Crank Lever
- Classified into 2-Finger, 3-Finger, or 4-Finger Type according to the intended use
- Center Pusher for handling work piece positioning can be attached (Option)
- Various type selections according to the size and weight of work piece
- Possible to select the unit (PH02Z, PH02Y Type) only for Auto Loader
- Auto Switch for the detection of position can be attached

Order form

PH02 - 30 - B - A1 S

① ② ③ ④ ⑤

④ Auto Switch type

Symbol	Type	Length
A1	DSC PRO-A1 (2-wire)	1m
A1L		3m
B1	PLC PRO-B1 (3-wire)	1m
B1L		3m

⑤ Auto Switch quantity

Blank	2ea
S	1ea

* For PH02-16C and 20C, only one Auto Switch can be attached.
(For A and B type, 2 switches can be attached)

① Series

② Bore size & Stroke(mm)

Name	Bore size(mm)	Stroke(mm)
16	16	6
20	20	8
25	25	10
30	30	12
40	40	16
50	50	20
60	63	25
80	80	30
100	100	40
125	125	45

③ JAW quantity

—	A : 2JAW
—	B : 3JAW
—	C : 4JAW

Specification

Model	PH02-16	PH02-20	PH02-25	PH02-30	PH02-40	PH02-50	PH02-60	PH02-80	PH02-100	PH02-125
Bore size(mm)	16	20	25	30	40	50	63	80	100	125
Stroke(mm)	6	8	10	12	16	20	25	30	40	45
Gripping force(kgf)	Close	8	12.3	18.7	29	54	83.5	142	231	363
		Open	9.3	14.6	22.3	34.2	65	99.5	158	256
Air pressure(5kgf/cm ²)	Note 2)									
Air port size	M5	M5	M5	PT1/8	PT1/8	PT1/8	PT1/8	PT3/8	PT3/8	PT3/8
Main body weight(kgf)	0.12	0.21	0.4	0.6	1.2	1.7	2.7	4.5	6.4	9.1
Allowable length of attachment L(mm)										
Displacement of attachment H(mm)	Note 3)	20	25	30	35	40	50	60	80	100
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)	±0.05			±0.08				±0.1		
Max. Cycle Per Minute(C.P.M)	100				70				40	
Motion type	Double-acting type (Structure: Parallel open & close by Crank Lever) (Guide: Metal Guide)									
Tolerance of open & close stroke(mm)	Open: -0.5 ~ +1, Close: -1 ~ +0.5									

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.

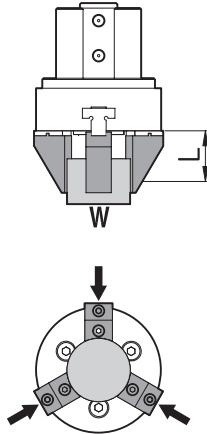
Note 3) For the base point of tolerable length and displacement in attachment, refer to page 48.(Tolerable value with 5kgf/cm² of Air pressure.)

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.

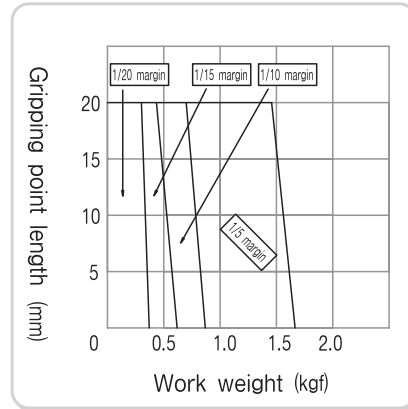
WORK outer diameter gripping force graph



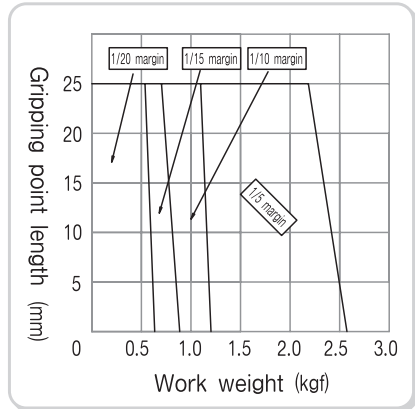
Outer diameter gripping state

W : Work weight
L : Gripping point length

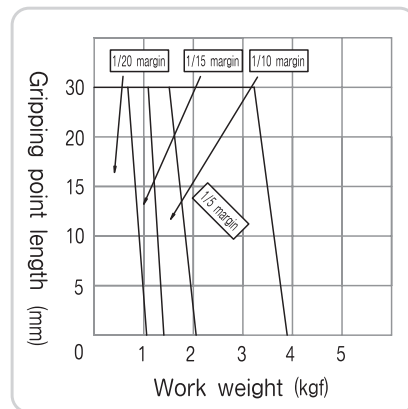
◆PH02-16



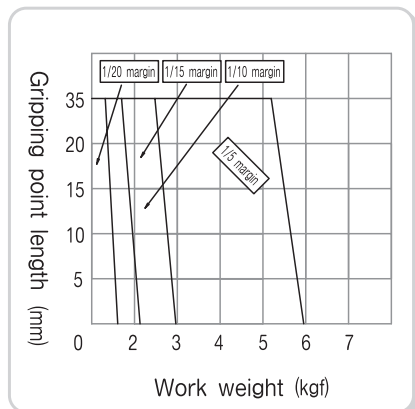
◆PH02-20



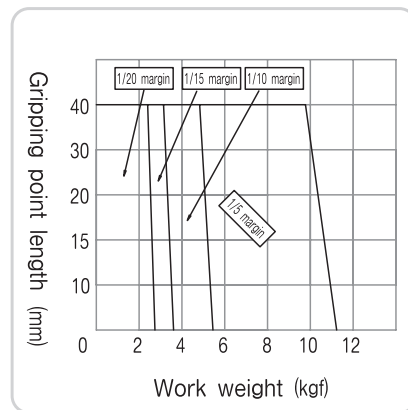
◆PH02-25



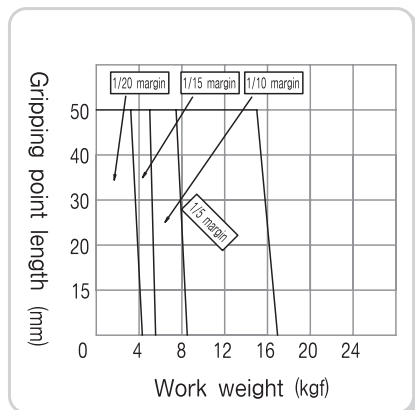
◆PH02-30



◆PH02-40



◆PH02-50



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.

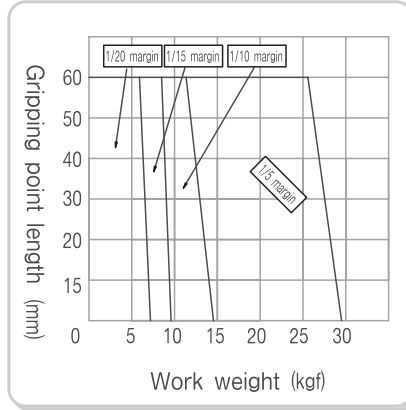


PH02 Series

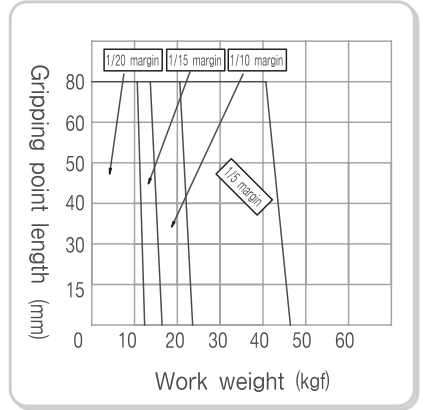
▶ Refer to page 49 for how to read the graph.

WORK outer diameter gripping force graph

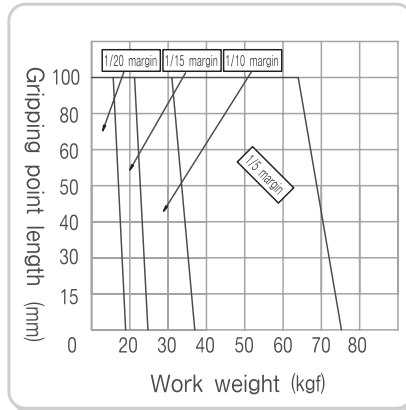
◆PH02-60



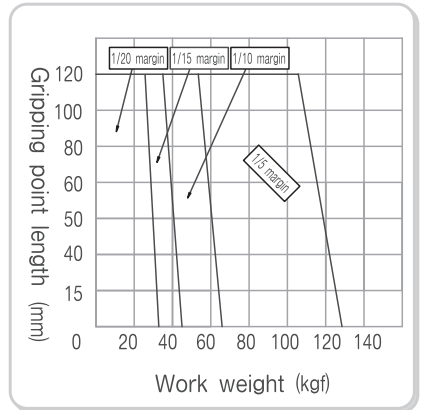
◆PH02-80



◆PH02-100

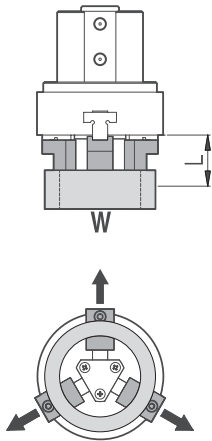


◆PH02-125



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

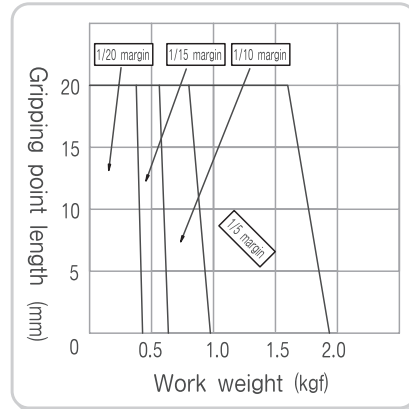
WORK inner diameter gripping force graph



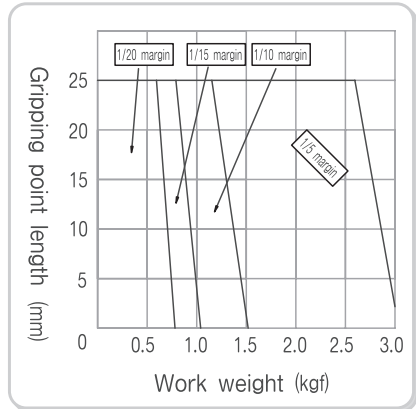
Inner diameter gripping state

W : Work weight
L : Gripping point length

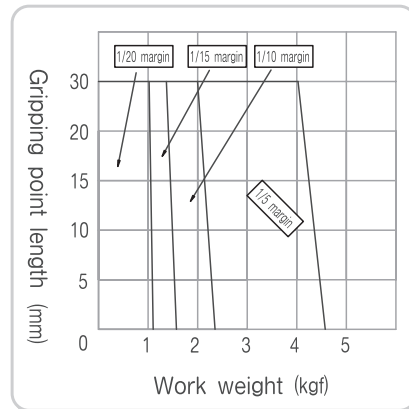
◆PH02-16



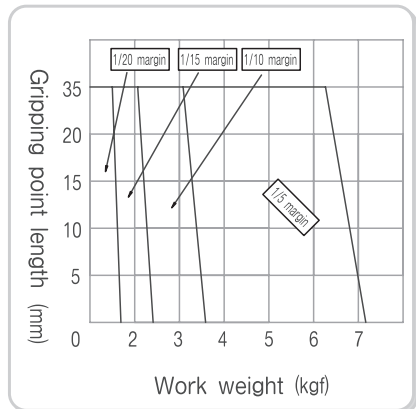
◆PH02-20



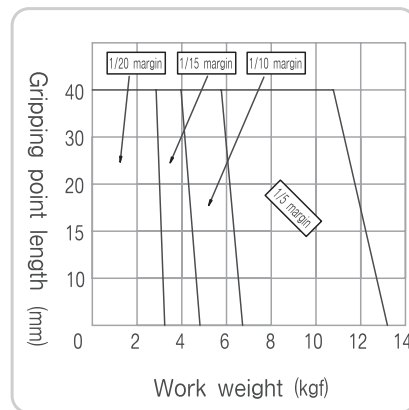
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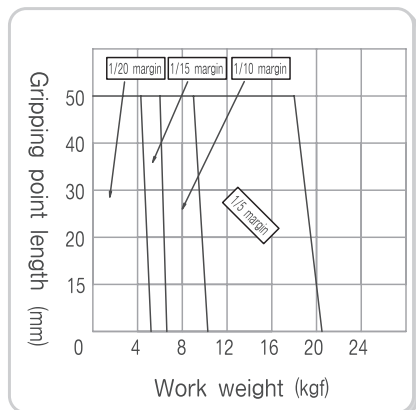
◆PH02-30



◆PH02-40



◆PH02-50



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

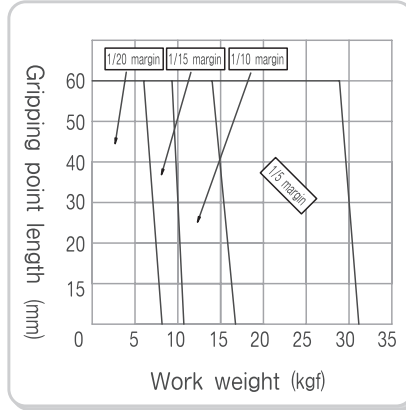


PH02 Series

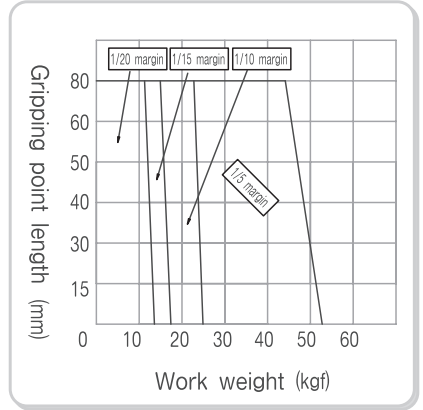
► Refer to page 49 for how to read the graph.

WORK inner diameter gripping force graph

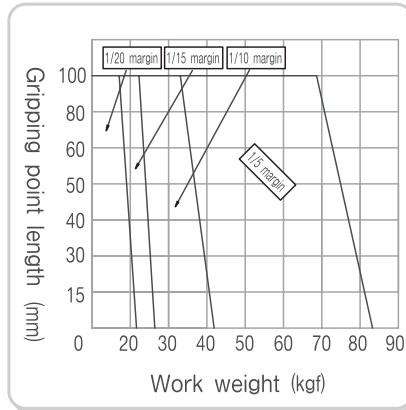
◆PH02-60



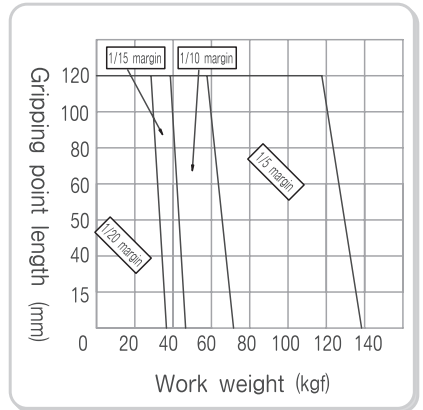
◆PH02-80



◆PH02-100



◆PH02-125

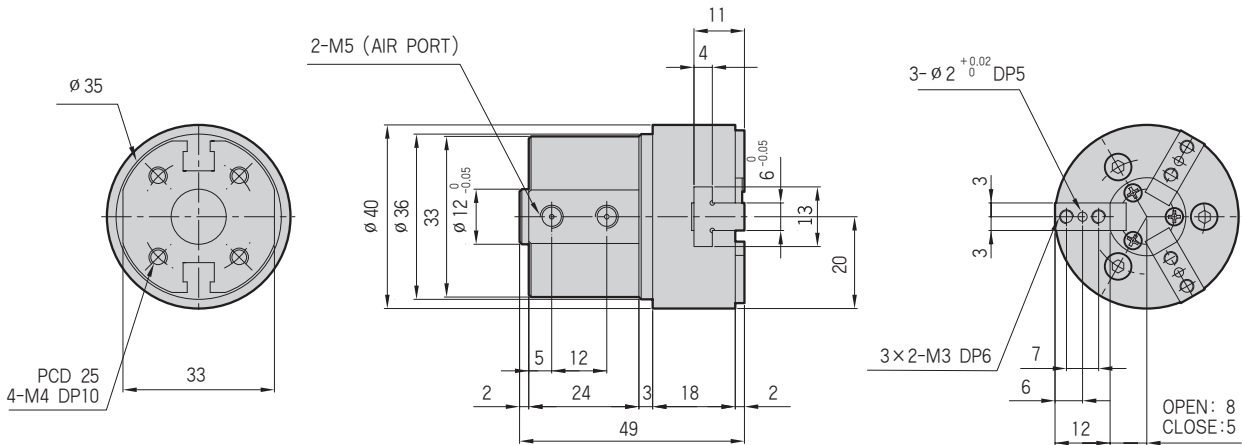


16 20 25 30 40 50 60 80 100 125

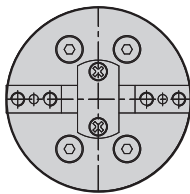
PH02-16

HAND

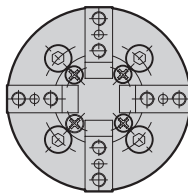
- PH01-A
- PH01-D
- PH01-G
- PH01K
- PH01K-C
- PH02**
- PH04
- PH05
- PH06
- PH06-L
- PH07
- PH08
- PH09
- PH12
- PH14-S
- PH15-S
- PH21
- PH22
- PH23



B-TYPE

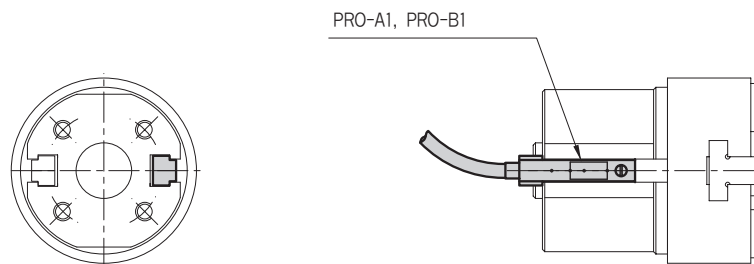


A-TYPE



C-TYPE

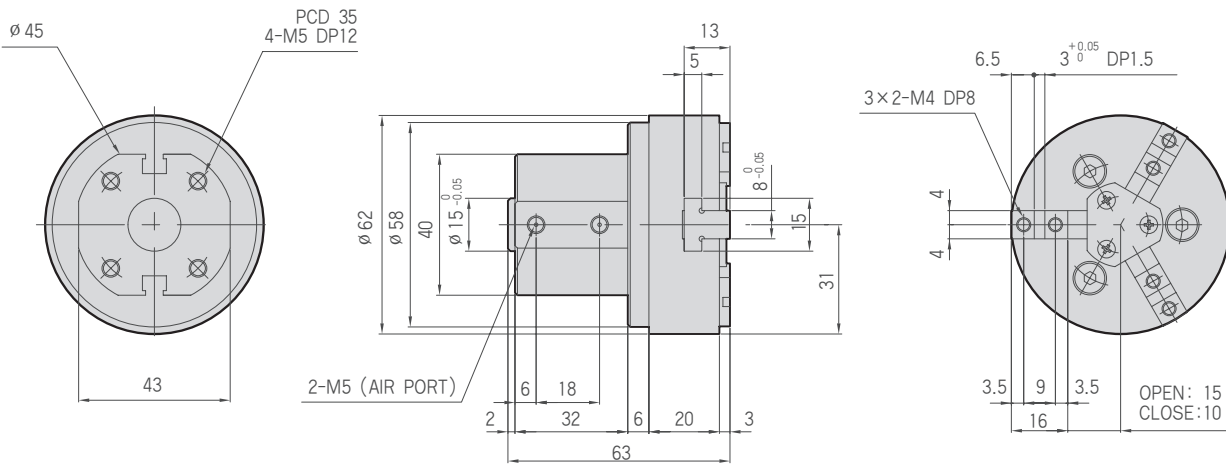
PH02-16-Auto Switch



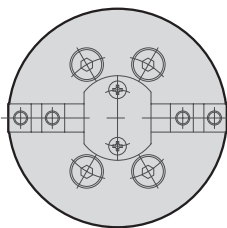
* For PH02-16C type, only one Auto Switch can be used (Close). (For A and B type, 2 switches can be used)

- 16
- 20
- 25
- 30
- 40
- 50
- 60
- 80
- 100
- 125

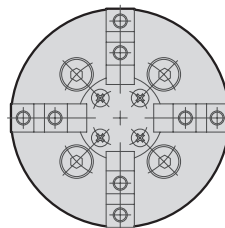
PH02-25



B-TYPE



A-TYPE

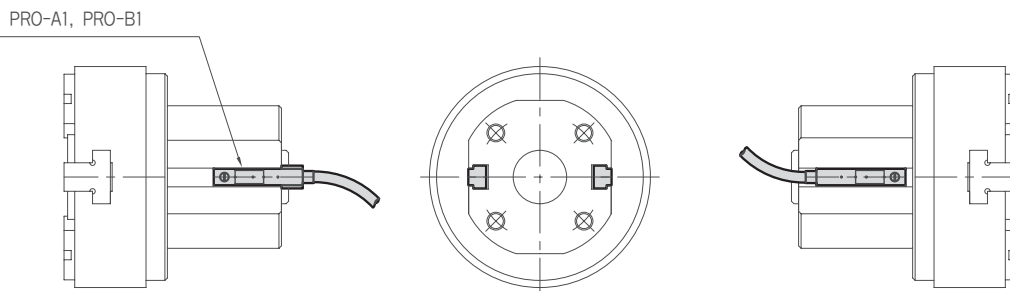


C-TYPE

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

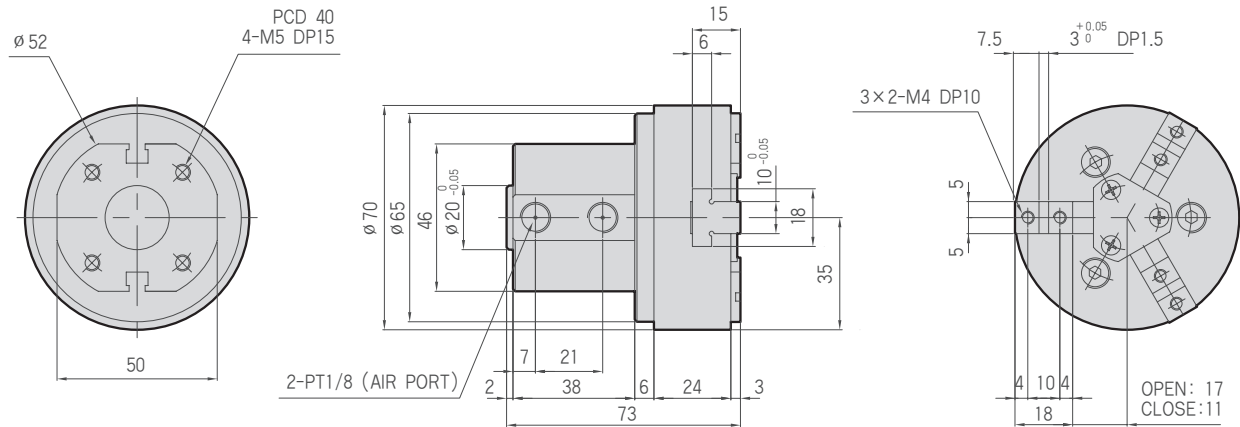
PH02-25-Auto Switch



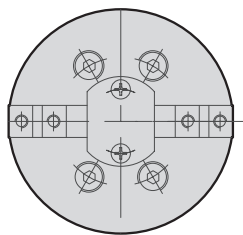
PH02 Series

- | | | | | | | | | | |
|----|----|----|-----------|----|----|----|----|-----|-----|
| 16 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 100 | 125 |
|----|----|----|-----------|----|----|----|----|-----|-----|

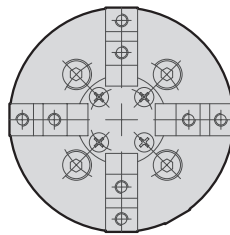
PH02-30



B-TYPE

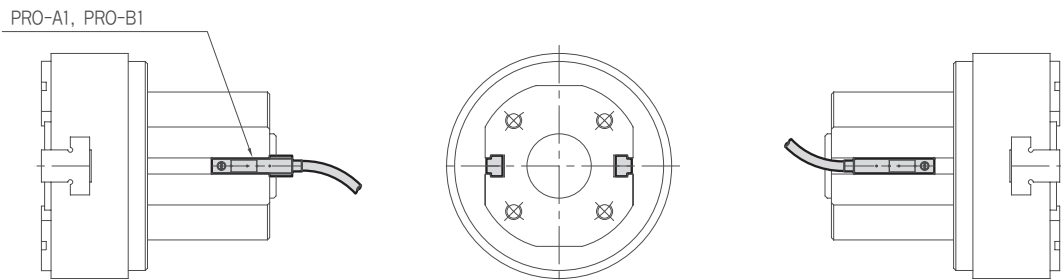


A-TYPE



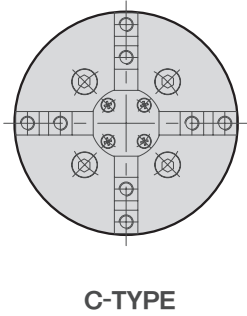
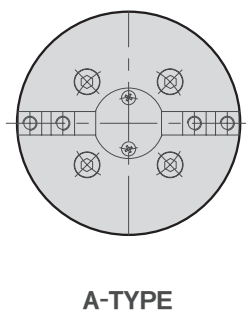
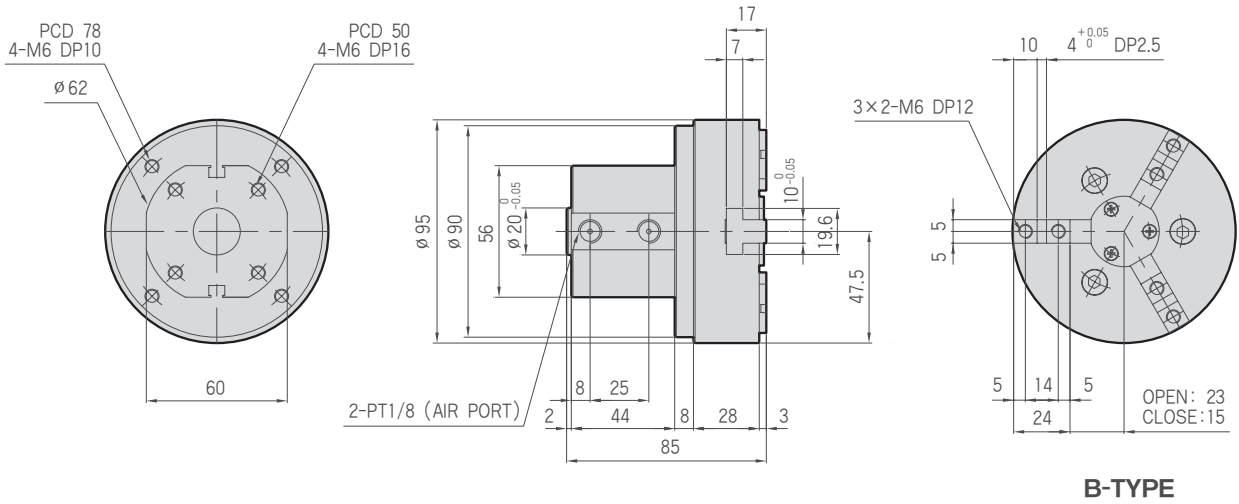
C-TYPE

PH02-30-Auto Switch



- 16
- 20
- 25
- 30
- 40
- 50
- 60
- 80
- 100
- 125

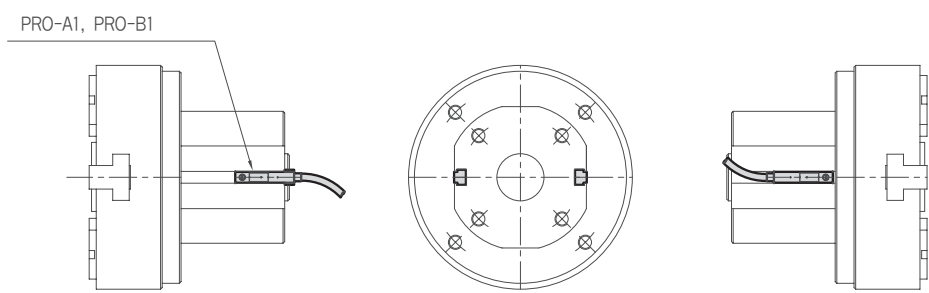
PH02-40



HAND

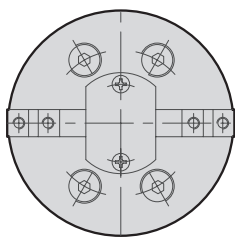
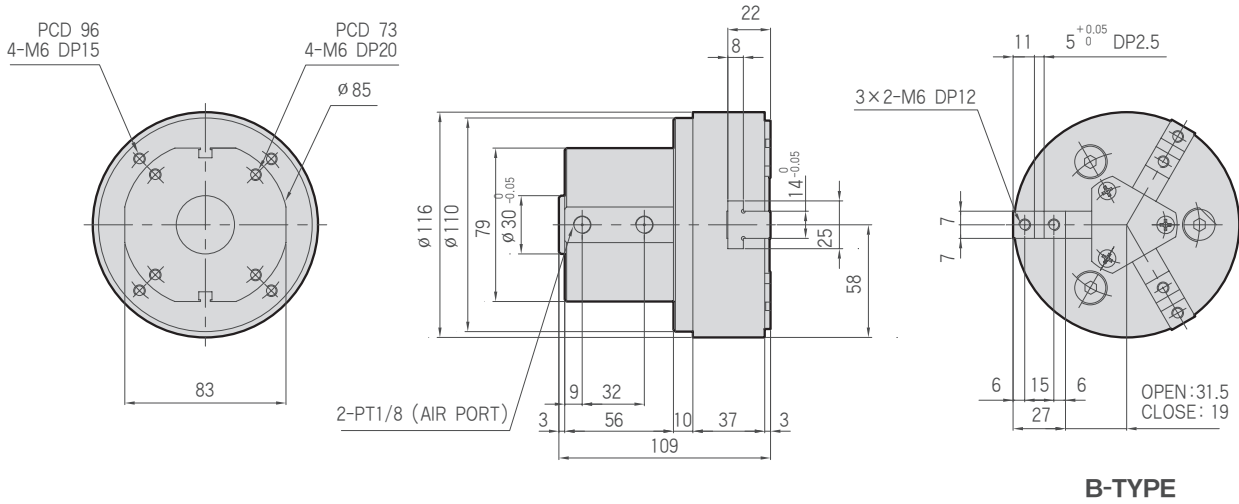
- PH01-A
- PH01-D
- PH01-G
- PH01K
- PH01K-C
- PH02**
- PH04
- PH05
- PH06
- PH06-L
- PH07
- PH08
- PH09
- PH12
- PH14-S
- PH15-S
- PH21
- PH22
- PH23

PH02-40-Auto Switch

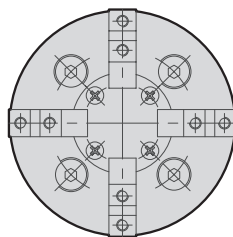


- 16
- 20
- 25
- 30
- 40
- 50
- 60
- 80
- 100
- 125

PH02-60

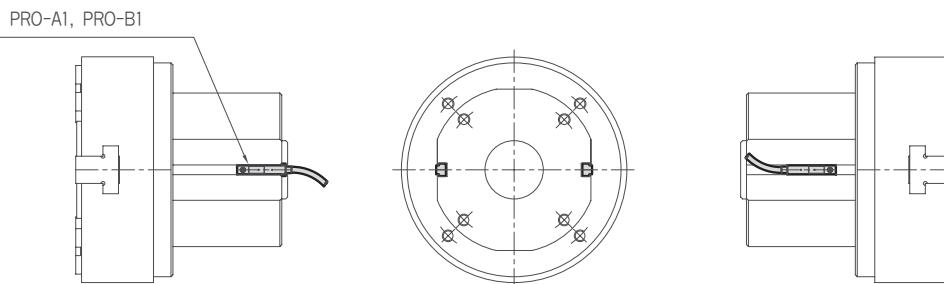


A-TYPE



C-TYPE

PH02-60-Auto Switch



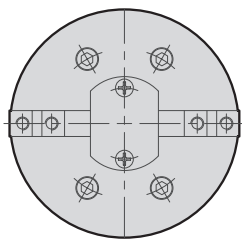
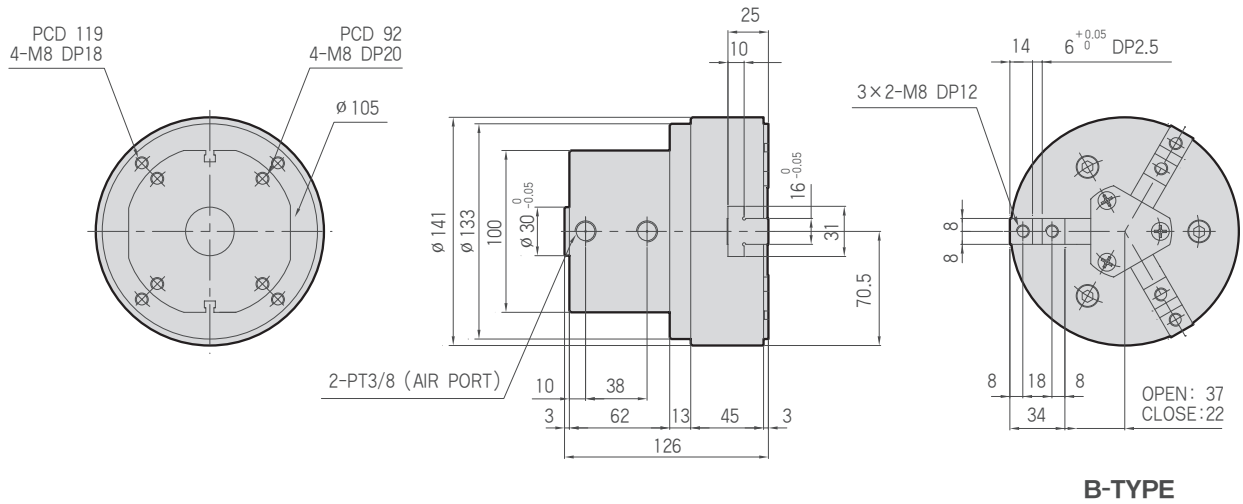
HAND

- 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

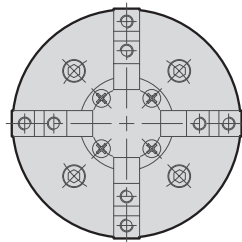
PH02 Series

16	20	25	30	40	50	60	80	100	125
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PH02-80

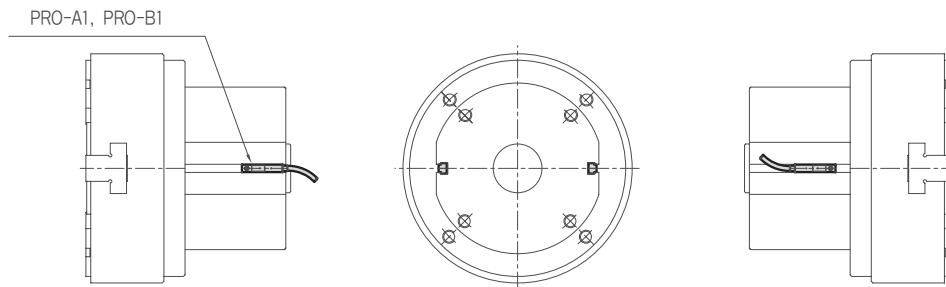


A-TYPE



C-TYPE

PH02-80-Auto Switch





PH02 Series

16

20

25

30

40

50

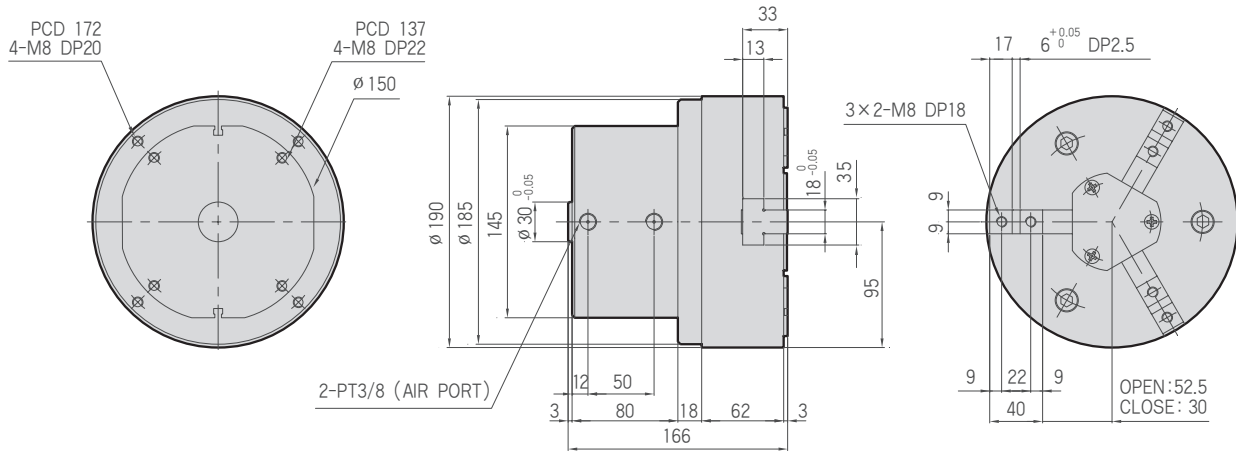
60

80

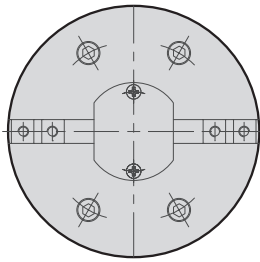
100

125

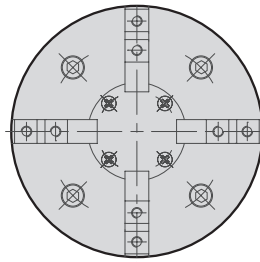
PH02-125



B-TYPE



A-TYPE



C-TYPE

PH02-125-Auto Switch

PRO-A1, PRO-B1

