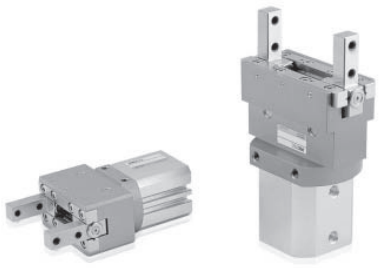
PH12 Series

Features



- Wide type parallel open & close type motion by Crank Lever
- Excellent durability and precision open & close operation with the application of Cross Roller Bearing Guide
- Auto Switch for the detection of position can be attached
- Expanded open & close stroke

Order form

PH12 - 20 - A1 S
① ② ③ ④

① Series

② Bore size & Stroke

Name	Bore size(mm)	Stroke(mm)
20	20	16
25	25	30
40	40	41

③ Auto Switch type

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

④ Auto Switch quantity

Blank	2ea
S	1ea

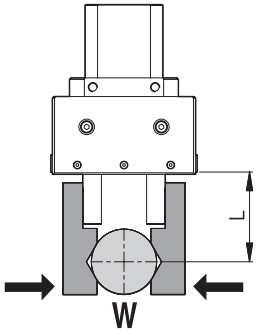
Specification

Model		PH12-20	PH12-25	PH12-40
Bore size(mm)		20	25	40
Stroke(mm)		16	30	41
Gripping force(kgf) Air pressure(5kgf/㎠) Note 2)	Close	9.5	13.1	34.2
	Open	11.3	15.6	40.7
Air port size		M5	M5	PT1/8
Main body weight(kgf)		0.35	0.7	1.5
Allowable length of attachment L(mm)		50	60	80
Displacement of attachment H(mm) Note 3)		25	30	40
Fluid		Clean air Note 1)		
Air pressure(kgf/㎠)		1.5 ~ 7 (General resistance pressure: 10.5) Note 4)		
Lubrication		No need (if need, use one sort of turbine oil: SPEC ISOVG 32)		
Temperature(℃)		5 ~ 60		
Accuracy(mm)		±0.01	±0.03	
Max. Cycle Per Minute(C.P.M)		100	80	
Motion type		Double-acting type (Structure: Parallel open & close by Crank Lever) (Guide: Cross Roller 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㎛ 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/㎠ 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.

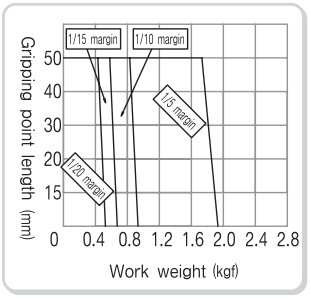
WORK outer diameter gripping force graph



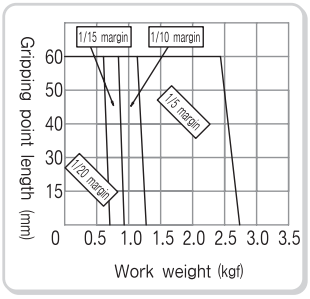
Outer diameter gripping state

W: Work weight
L : Gripping point length

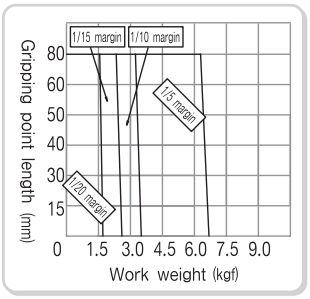
◆PH12-20



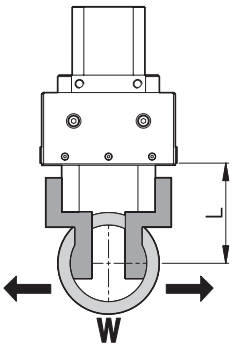
◆PH12-25



◆PH12-40



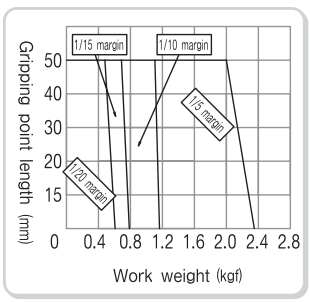
WORK inner diameter gripping force graph



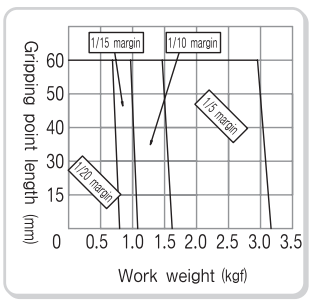
Inner diameter gripping state

W: Work weight
L : Gripping point length

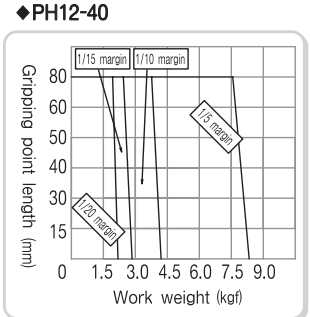
◆PH12-20



◆PH12-25



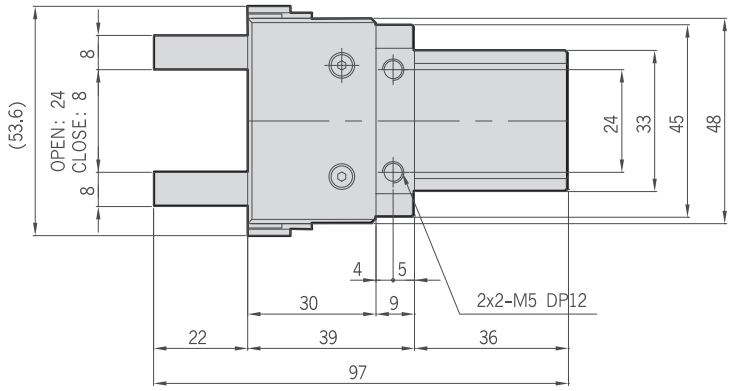
◆PH12-40

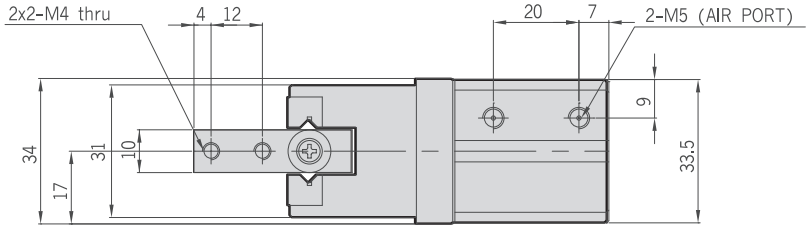


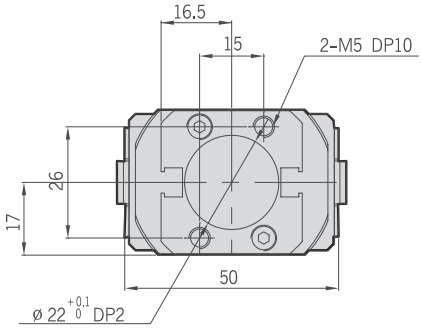
⚠ Caution

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.

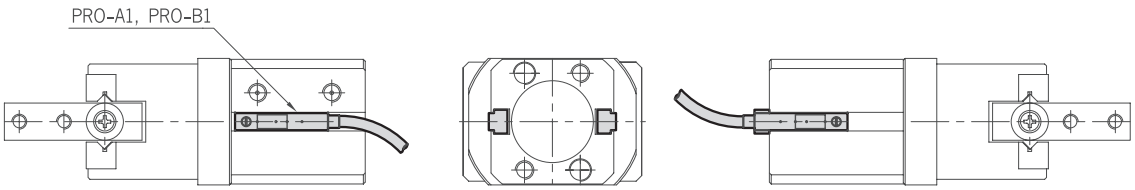
PH12-20



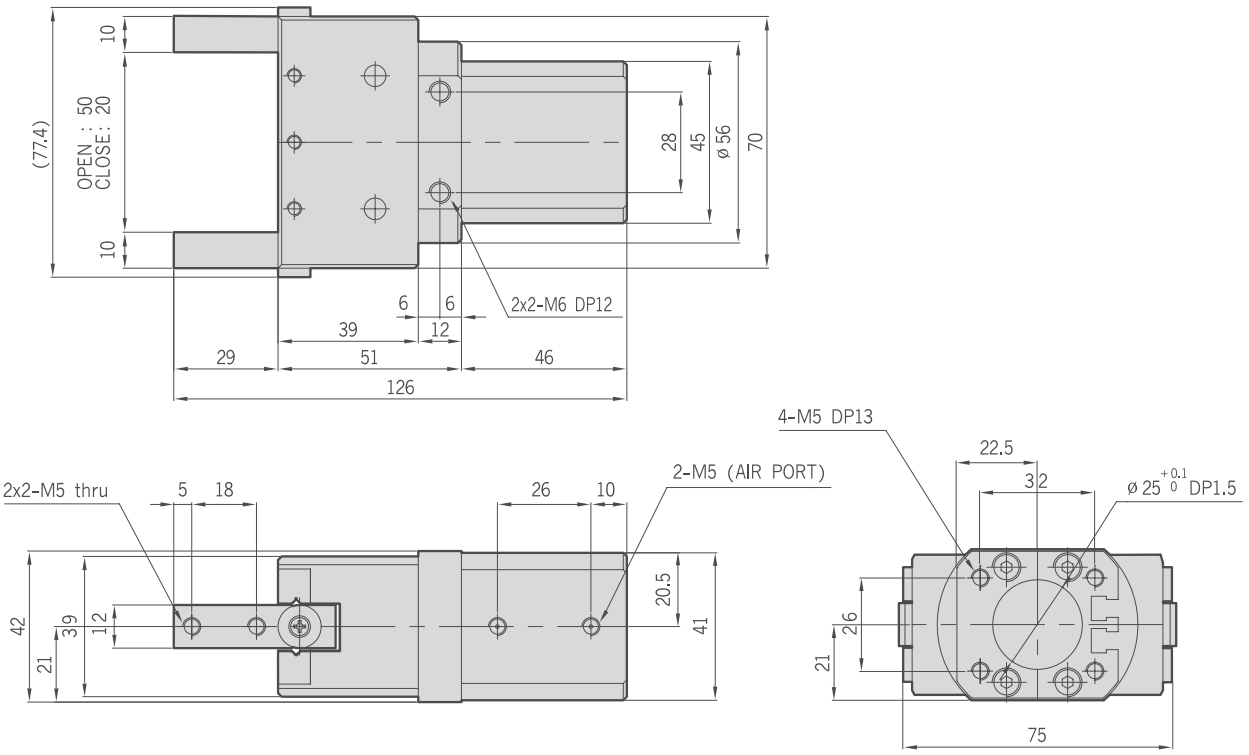




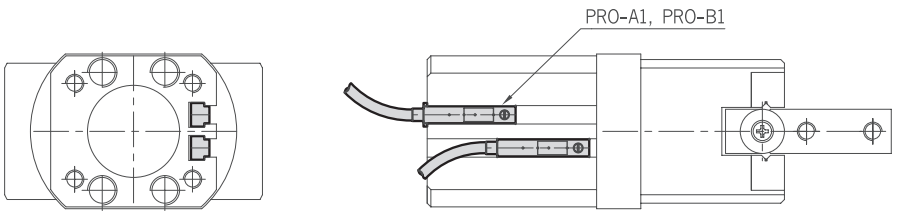
PH12-20-Auto Switch



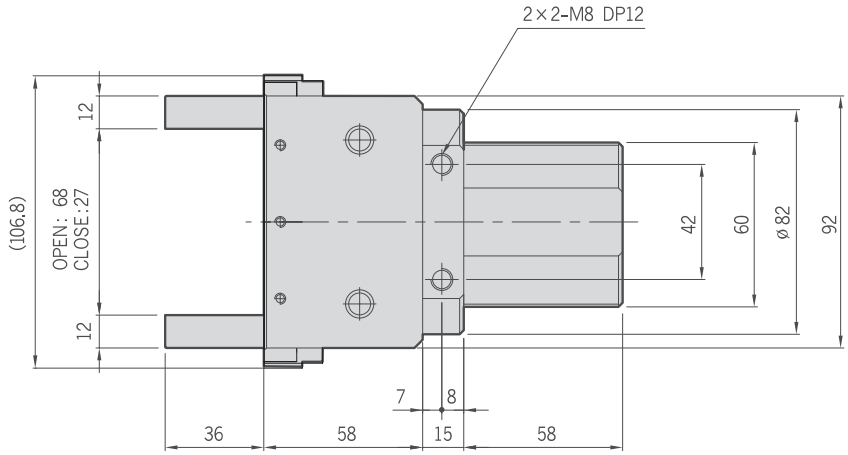
PH12-25

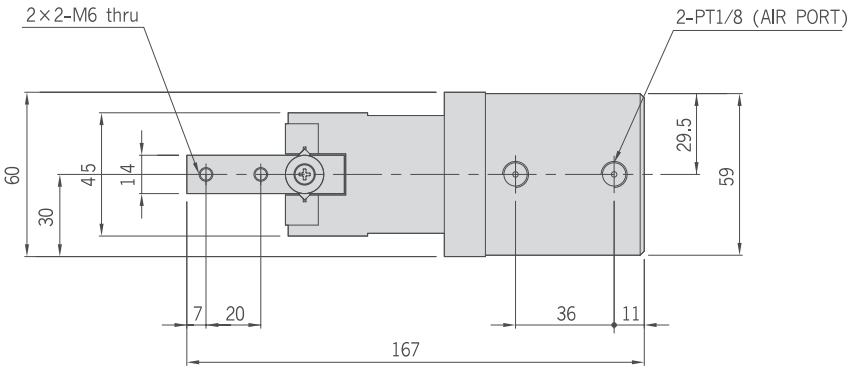


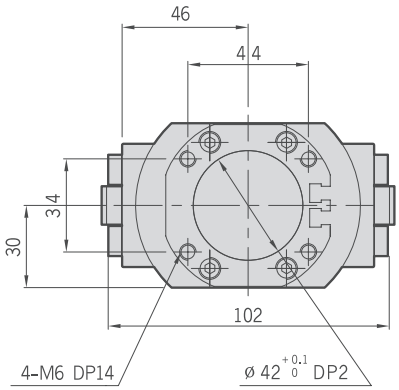
PH12-25-Auto Switch



PH12-40







PH12-40-Auto Switch