

# KAGS series



KAGS-20

### Features

- Angular type air gripper
- Auto switch is attachable
- Hard anodizing on the body to improve surface hardness and durability
- Dust cover can be attached

### How to order

KAGS - ① ② K ③ + A93 ④ x ⑤ 2

① Series

KAGS	Angular type air gripper
------	--------------------------

② Bore size

12	Ø12	25	Ø25
16	Ø16	30	Ø30
20	Ø20	40	Ø40

③ Cover type

Nil	Standard (Without dust cover)
K	With dust cover

⑤ Quantity of sensor parts

#	Quantity of sensor
---	--------------------

④ Auto switch

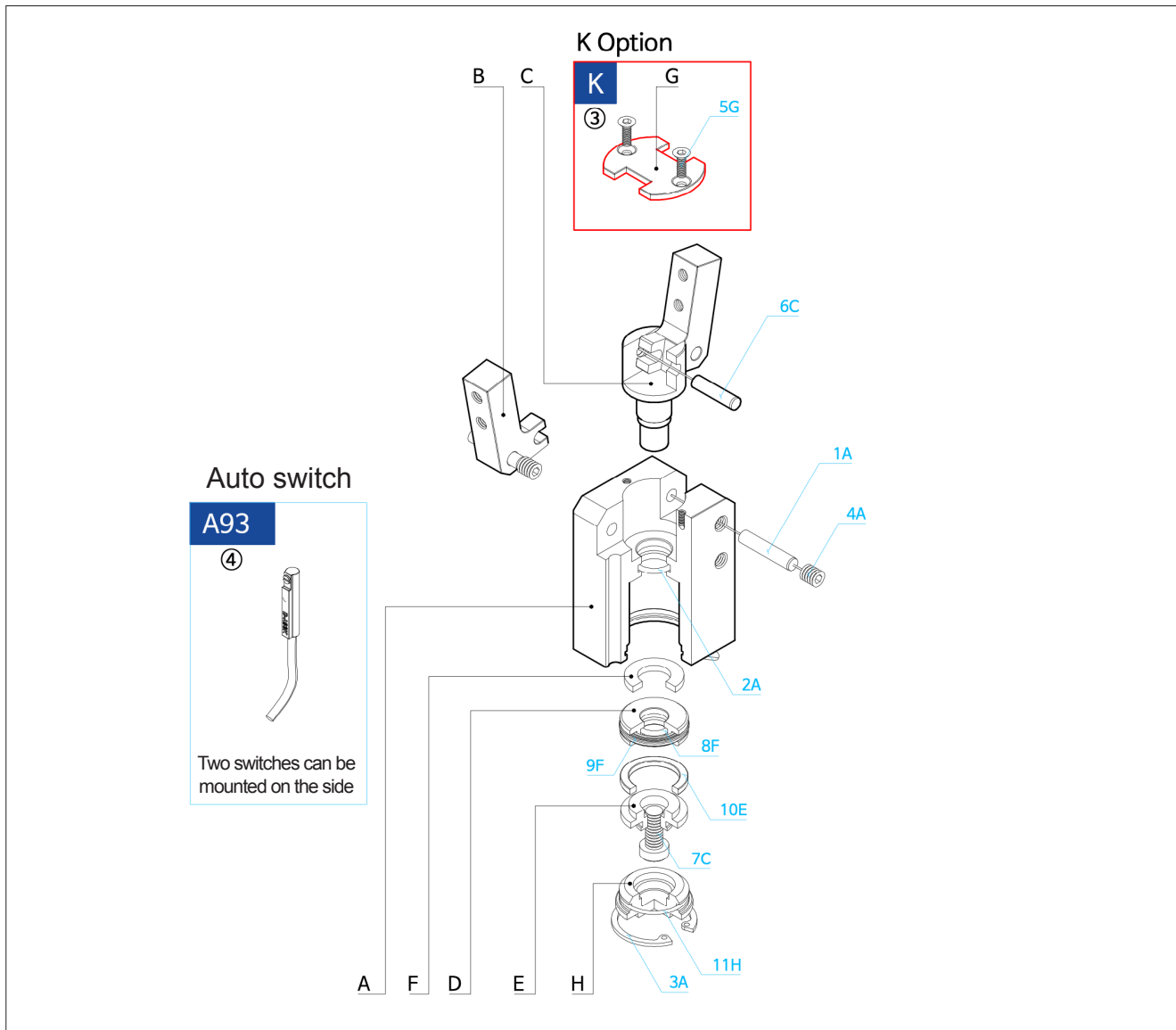
Reed A/S	Model	Solid state A/S	Model	Notes
A93(V)	D-A93(V)K	F-9□(V)	D-F9□(V)K	□ = N, P, B
A93N	D-A93KN	F-9□(V)	D-F9□(V)K	
A93(V)S	D-A93(V)K-S	F-9□(V)	D-F9□(V)K	

※ Refer to Auto Switch Catalogue for more information.

### Specifications

	KAGS-12	KAGS-16	KAGS-20	KAGS-25	KAGS-30	KAGS-40	
Fluid	Compressed air						
Operating Pressure	2~7kgf/cm <sup>2</sup> (0.2~0.7MPa)			1~7kgf/cm <sup>2</sup> (0.1~0.7MPa)			
Ambient Temperature	0~60℃						
Opening/Closing angle(°)(Both side)	-5°~15°			-5°~20°		-5°~25°	
Port size	M5				Rc(PT) 1/8		
Air consumption(CC/Cycle)	0.3	0.6	1.3	2.4	3.6	7.7	
Max. gripping point(mm)	36	48	60	75	90	120	
Frequency(Cycle/min)	30			20			
Repeat Accuracy(mm)	±0.1 (After initial 100 operation) / ±0.2 (After 1 million operation)						
Gripping force(N) ※ P = Mpa, L=mm	Open	$\frac{45.22xP}{1+0.056xL}$	$\frac{69.91xP}{1+0.043xL}$	$\frac{100.49xP}{1+0.033xL}$	$\frac{171.74xP}{1+0.031xL}$	$\frac{266xP}{1+0.029xL}$	$\frac{465.69xP}{1+0.024xL}$
	Close	$\frac{33.92xP}{1+0.056xL}$	$\frac{52.43xP}{1+0.043xL}$	$\frac{75.37xP}{1+0.033xL}$	$\frac{190.34xP}{1+0.031xL}$	$\frac{190.34xP}{1+0.029xL}$	$\frac{391.18xP}{1+0.024xL}$
Weight(kg)	0.06	0.1	0.2	0.26	0.40	0.73	

**Structure**

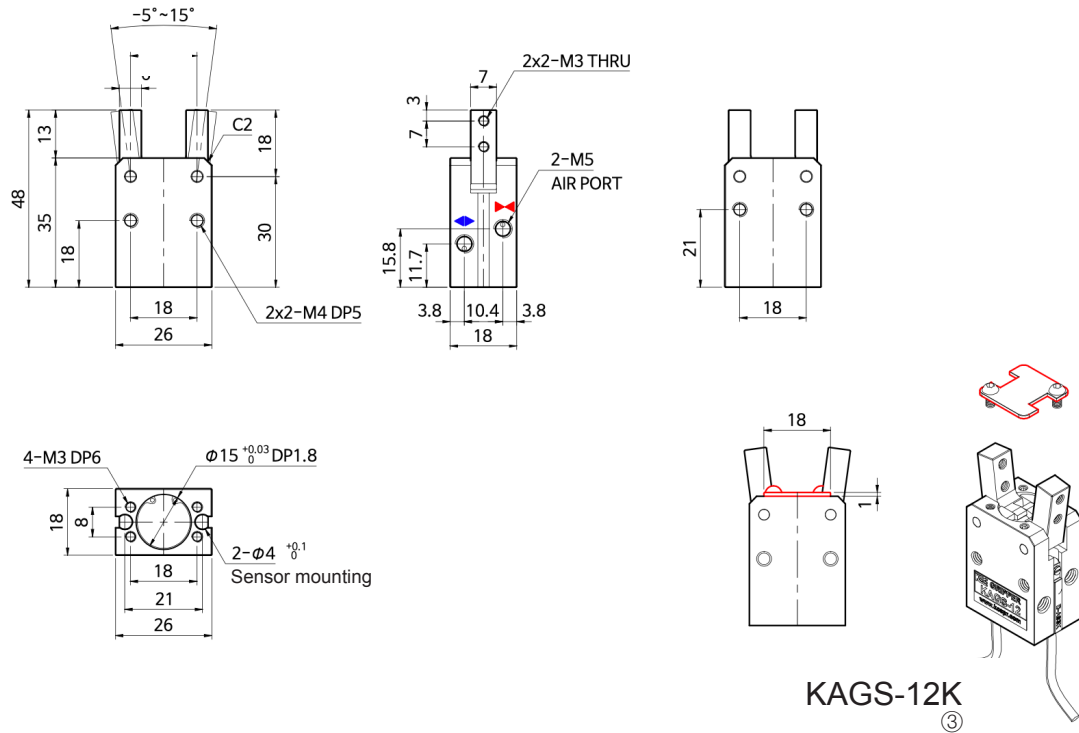


No	Parts	Material	Remark
A	Gripper Body	Aluminum alloy	Hard Anodizing
B	JAW	Steel alloy	
C	Plunger	Steel alloy	
D	Piston	Aluminum alloy	
E	Magetic cover	Aluminum alloy	
F	Damper	Urethane rubber	
G	Dust cover	Aluminum alloy	
H	End cover	Aluminum alloy	Cover type - K

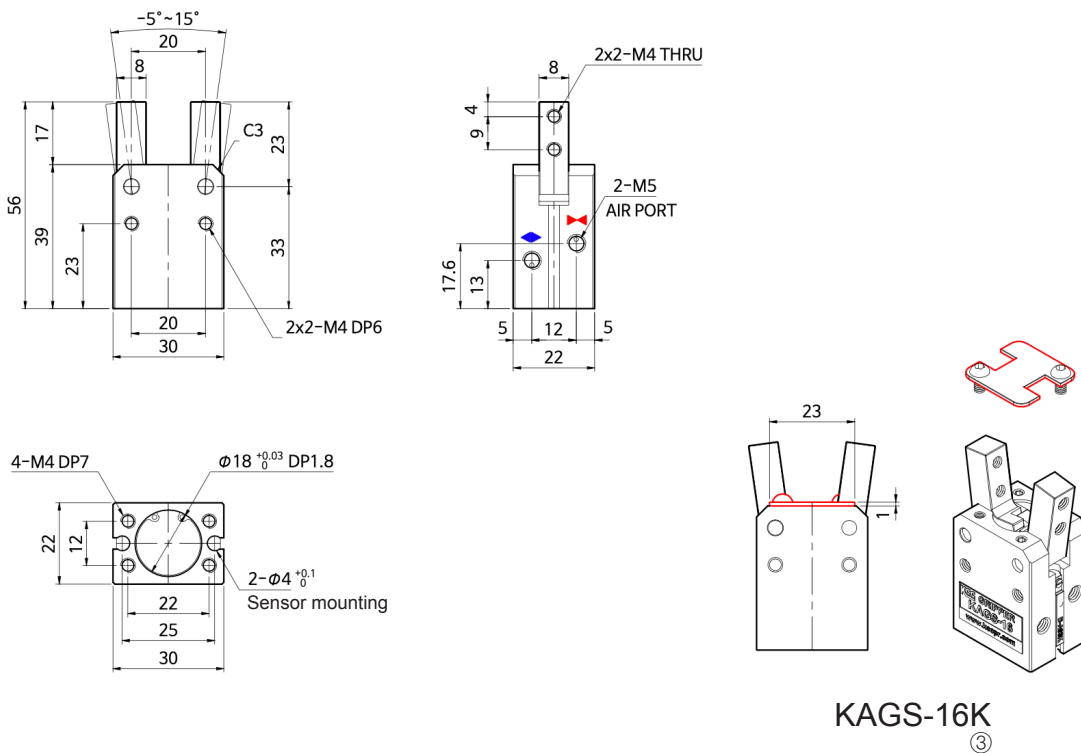
No	Parts	Remark
1A	Dowel pin	
2A	Rod packing	
3A	Snap ring	
4A	Headless bolt	
5G	Countersunk bolt	Cover type - K
6C	Dowel pin	
7C	Piston Fastening bolt	
8F	O-ring	
9F	Piston packing	
10E	Neodymium Magnet	
11H	O-ring	

**Dimensions**

**KAGS-12**

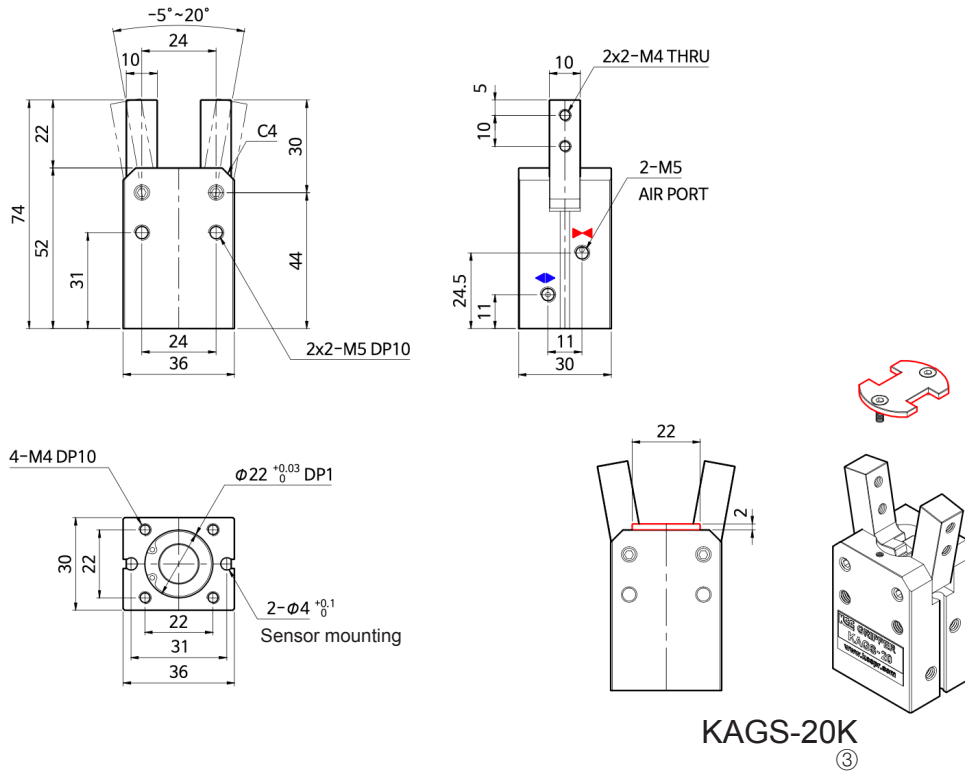


**KAGS-16**

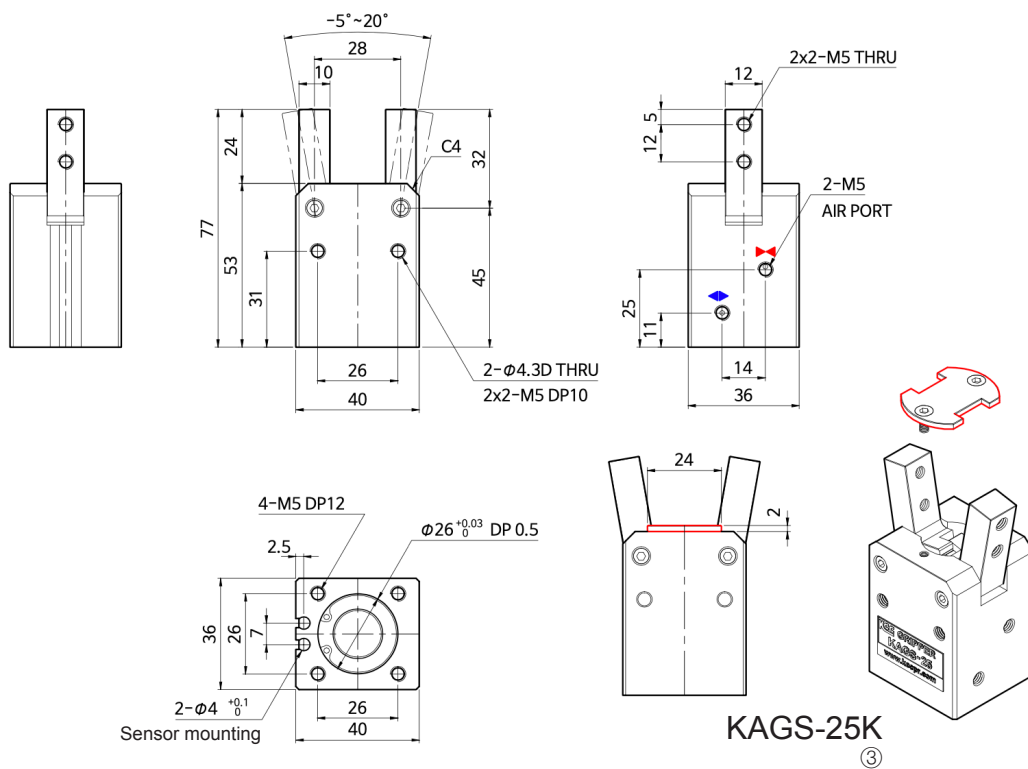


**Dimensions**

**KAGS-20**

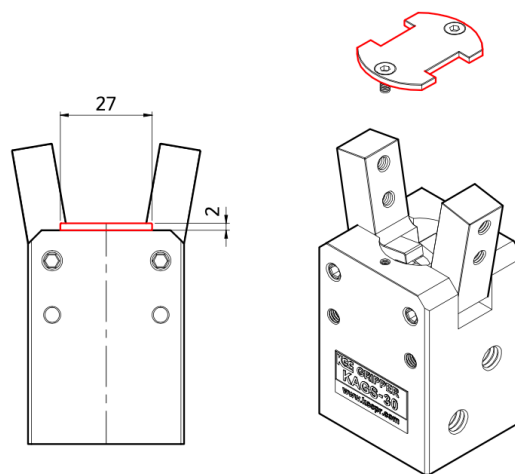
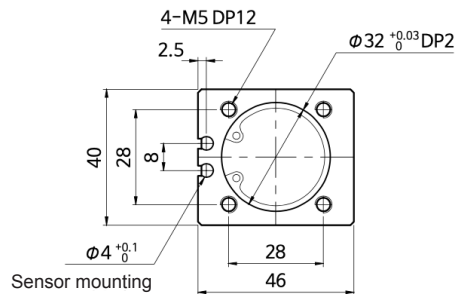
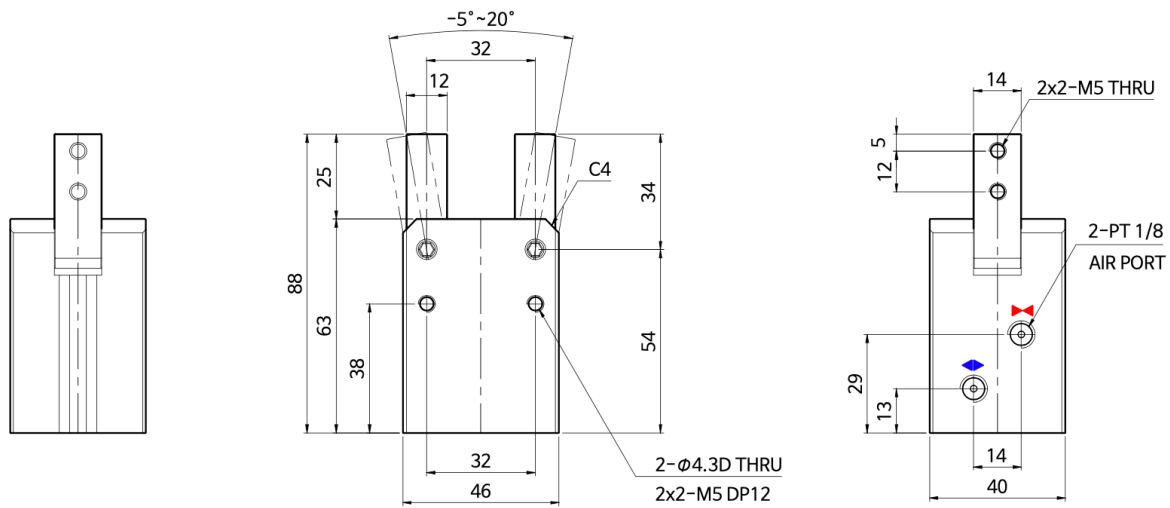


**KAGS-25**



**Dimensions**

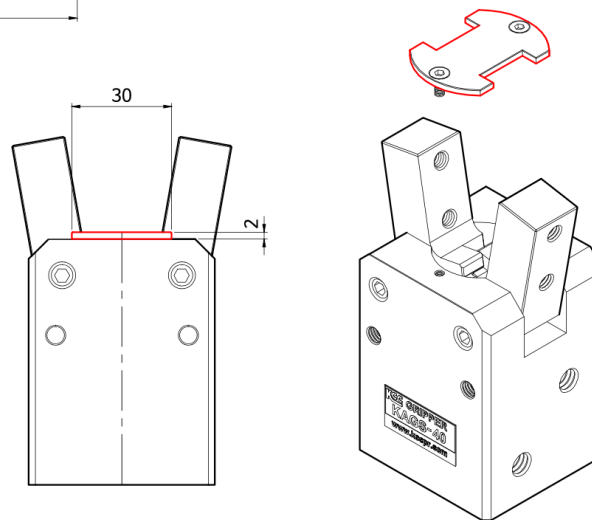
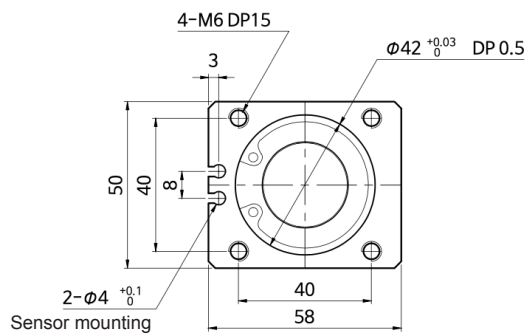
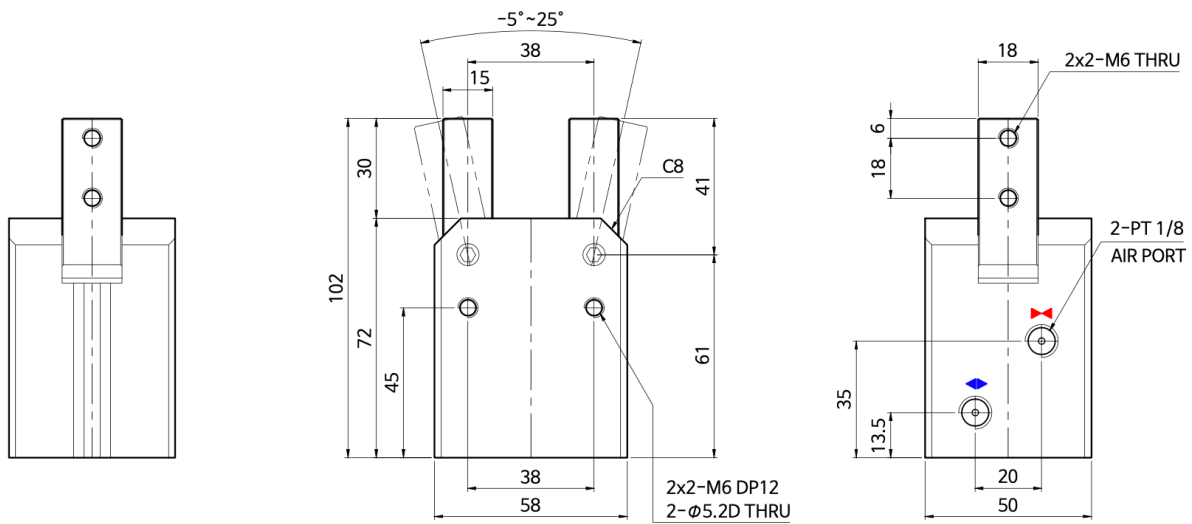
**KAGS-30**



**KAGS-30K**  
③

**Dimensions**

**KAGS-40**



**KAGS-40K**

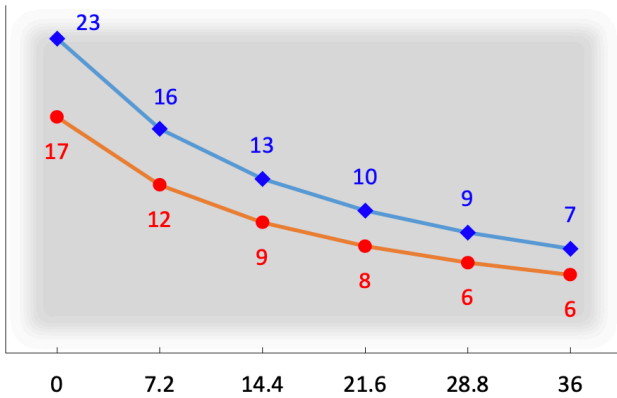
③

Effective gripping force

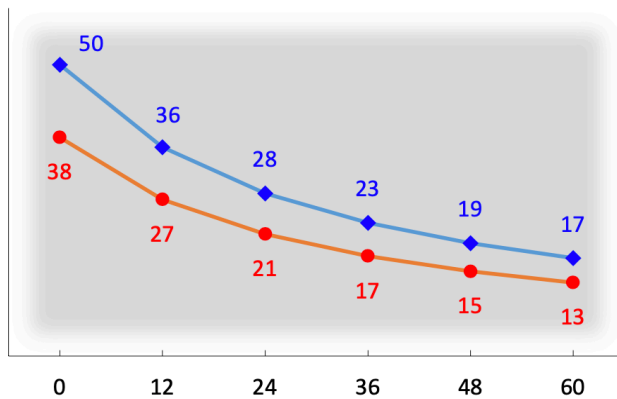
Gripping force [N] (Pressure = 0.5[MPa])

◆ : Open | ● : Close

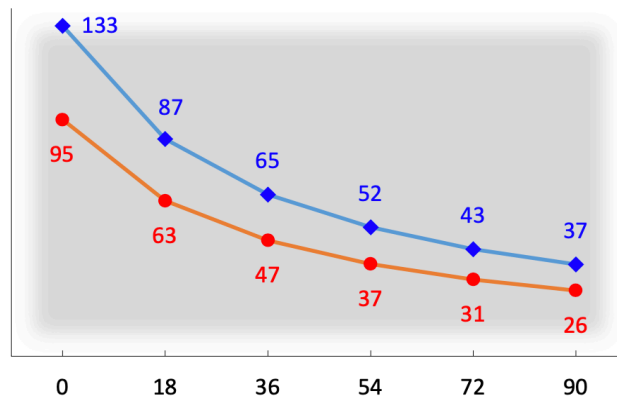
◆ KAGS-12



◆ KAGS-20



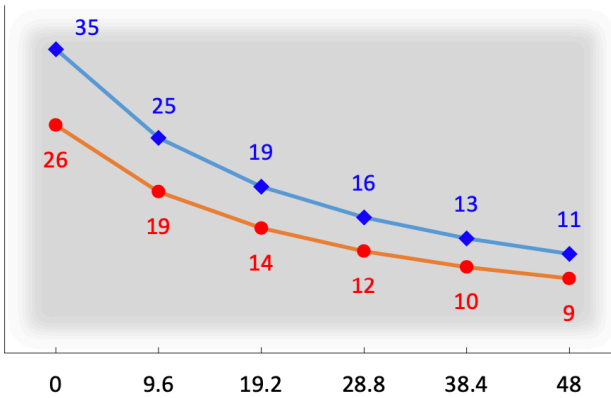
◆ KAGS-30



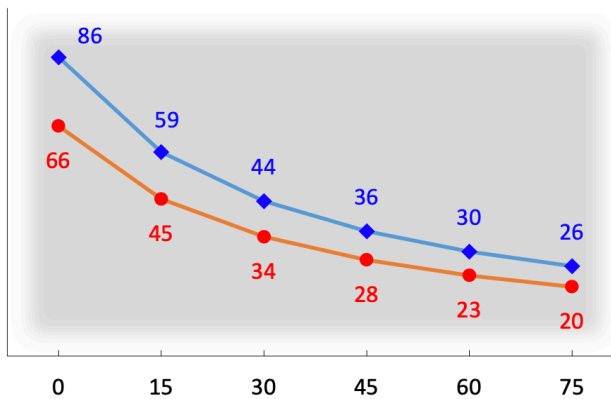
Work weight calculation method for each usage condition

- (Condition of use)
1. Fixed or slow moving: Graph x 1/5
  2. General deceleration and acceleration such as linear motion: Graph x 1/10
  3. Rapid deceleration and acceleration such as robot attachment or rotation: Graph x 1/20

◆ KAGS-16



◆ KAGS-25



◆ KAGS-40

