

## Features:

Parallel motion can be used for either internal or external holding.

Compact design, gripper body is made of hardcoated aluminum, ensures better abrasion and corrosion resistance.

Use non-lubricated seals and bush for durable performance, maintenance with ease.

Reed switches are available for indication of operating positions.

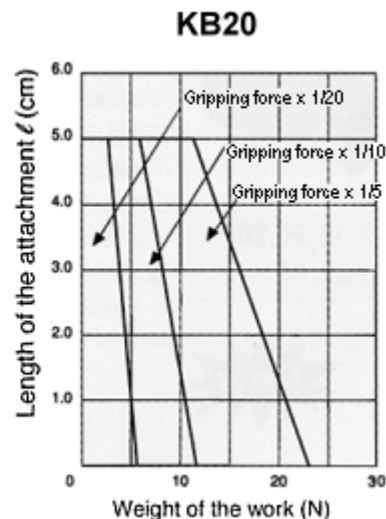
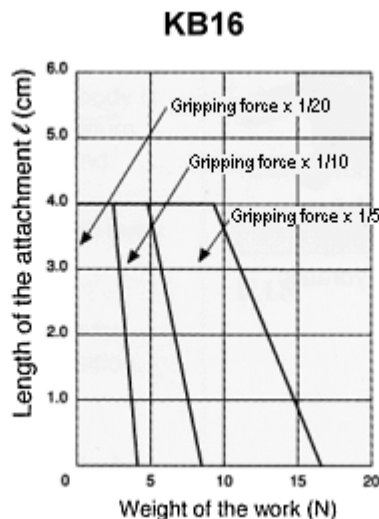
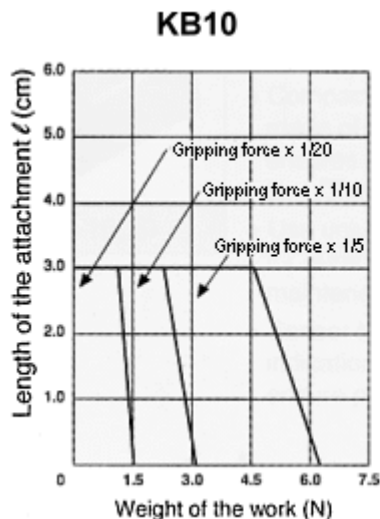


## Specifications:

Item \ Type		KB10	KB16	KB20
Cylinder bore size	mm	10	16	20
Stroke	mm	6	8	10
Action		Double acting type		
Operating fluid		Air		
Operating pressure	Mpa (Kgf/cm <sup>2</sup> )	0.3~0.7 (3~7.1)		
Temperature range	°C	5~60		
Lubrication		Non-lube or lube (ISO VG32)		
Repeatability accuracy	mm	Initial value: ±0.1, At 10 million cycles: ±0.2		
Life		10 million cycles on condition that the load is evenly applied to each finger.		
Exhaust volume	(cc)	0.5	1.0	2.5
Gripping force	Closed side	(P-0.04) (90-8L)	(P-0.03) (180-20L)	(P-0.02) (285-30L)
	Opened side	(P-0.04) (60-8L)	(P-0.03) (135-20L)	(P-0.02) (225-30L)
	L: Length of attachments from the end of fingers to the center of the work (cm)			
Weight	(g)	75	130	240
Max. length of attachment from finger end	(cm)	3.0	4.0	5.0
Max. weight of one attachment	(g)	30	50	80

Note: 1N = 0.102Kgf

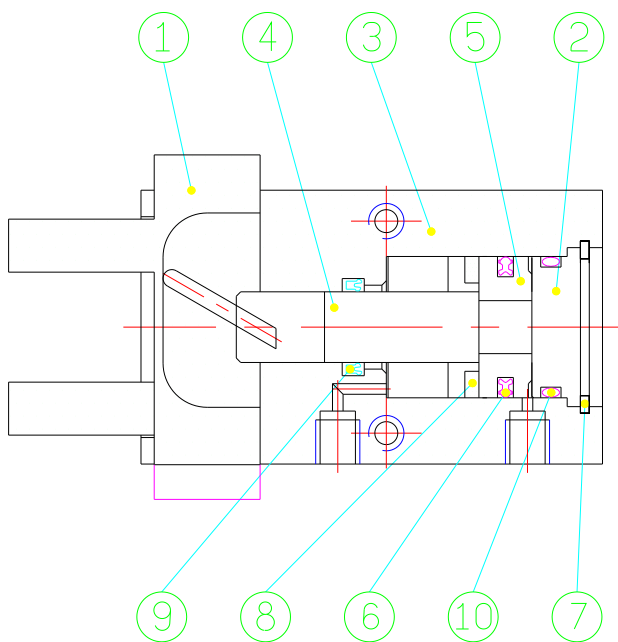
## Gripping Force Diagrams:



## How to Order:

KB	16	x	TC TD	2
①	②		③	④
① Series				
② Bore (mm)				
③ Reed switch type: TC-11 (only for KB-16/20) TD-11 (only for KB-10)				
④ Reed switch quantity				

## Internal Dimensions:

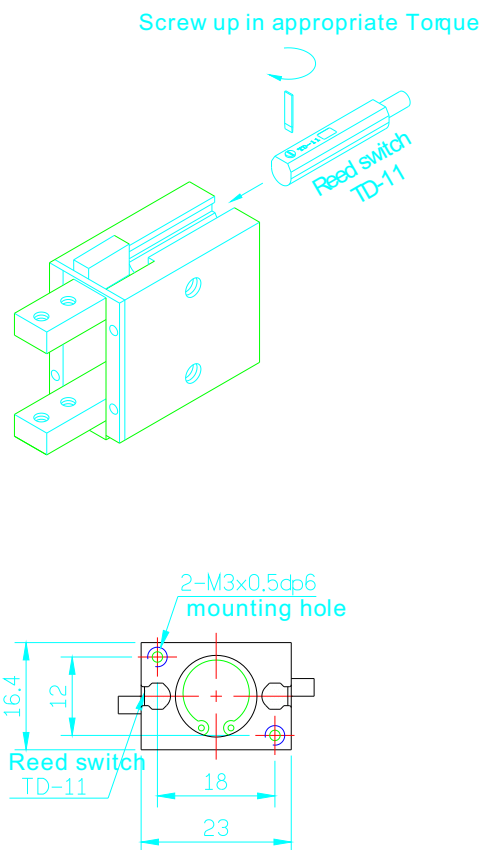
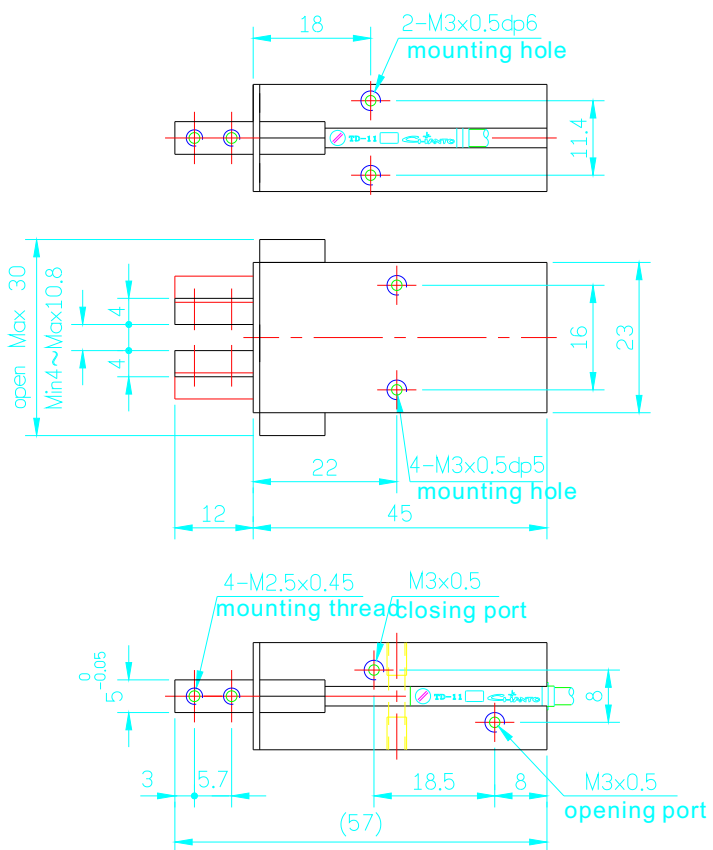


## Parts List:

NO.	Description	Material	Qty
①	Finger	Nitrided steel alloy	2
②	Rear end cover	Anodized aluminium alloy	1
③	Barrel	Hard anodized aluminium alloy	1
④	Piston rod	Hardened chrome steel	1
⑤	Piston	Aluminium alloy	1
⑥	Magnet	Resinous magnet	1
⑦	Snap ring	Steel alloy	1
⑧	Piston seal	NBR	1
⑨	Piston rod seal	NBR	1
⑩	End cover seal	NBR	1

## External Dimensions:

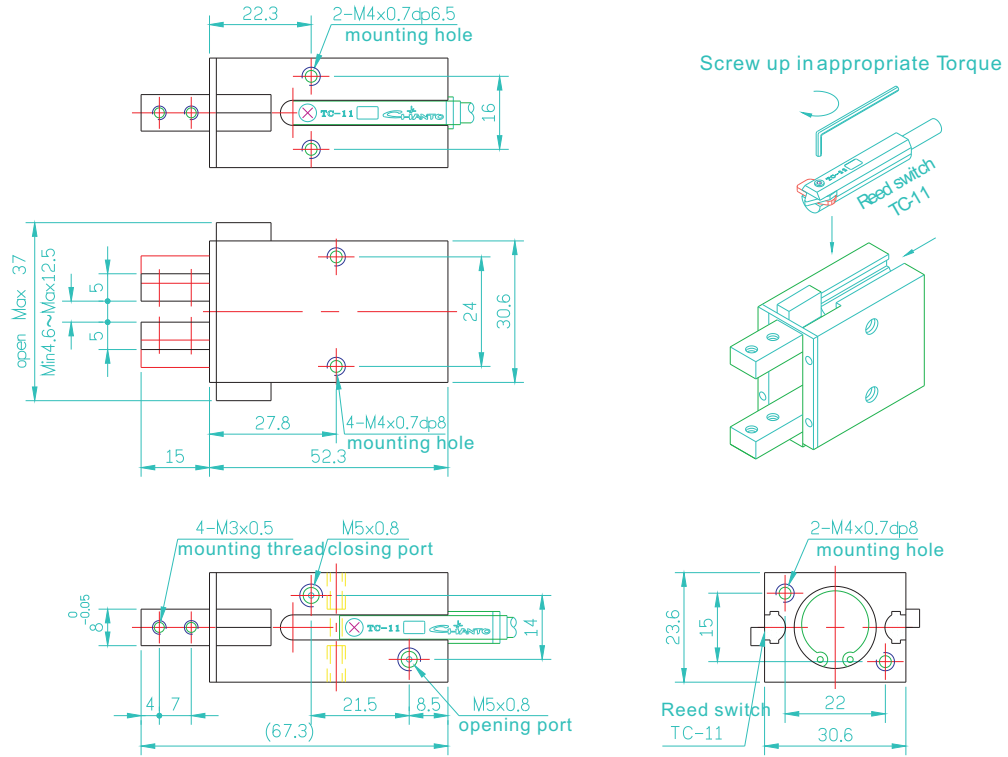
• KB10



\* If using reed switch, through hole can't be used for mounting.

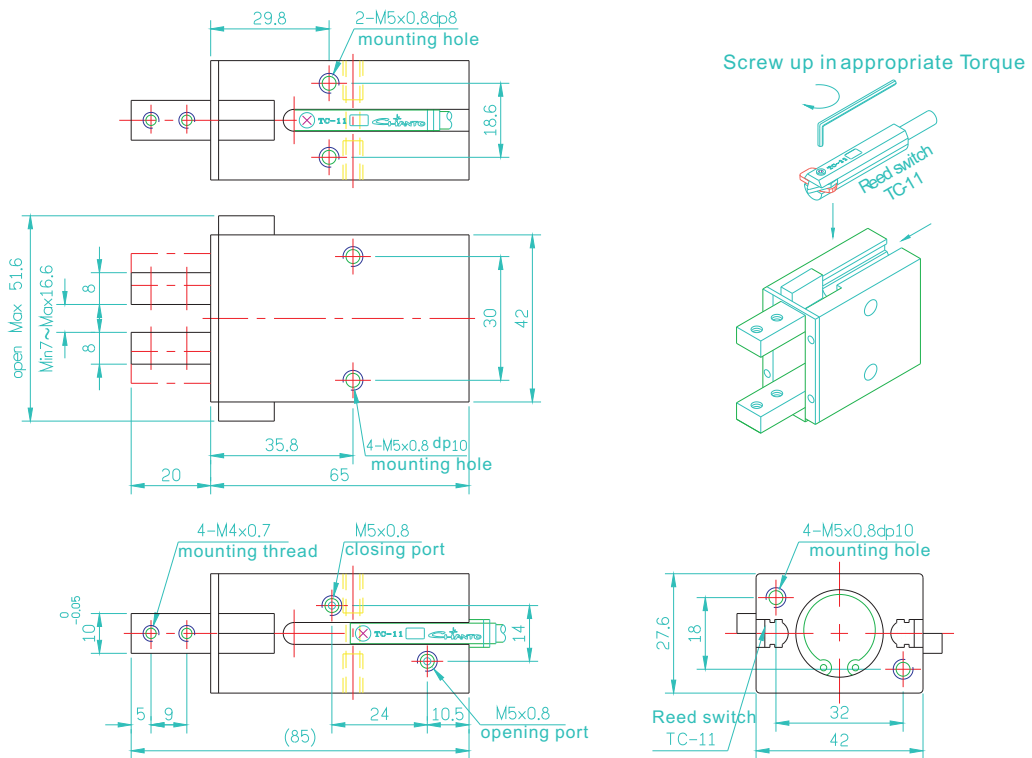
# External Dimensions:

## • KB16



\* If using reed switch, through hole can't be used for mounting.

## • KB20



\* If using reed switch, through hole can't be used for mounting.