

# HCW series Center Aligning Heavy-load Type Air Gripper

Product features/ Code of order

CHELIC

## Feature

- Compact size and strong gripping force
- Prevent dust and chip
- Positioning accuracy  $\pm 0.01\text{mm}$
- Center positioning and easy to mount onto the equipment



## Specification

Item	Bore size (mm)	Ø44	Ø60	
Action		Double acting		
Fluid		Air		
Pressure range	kgf / cm <sup>2</sup> (kPa)	2 ~ 8 (200 ~ 800)		
Ambient and fluid temperature	°C	5 ~ 80		
Lubrication	time/min	Lubrication free type		
Gripping force	Close	kgf	88	117
	Open	kgf	76	103
Stroke per jaw	mm	2.6		
Port size		PT1/8		
Recommend workpiece weight	kg	2.9	4.3	
Open/ Close time	s	0.09	0.13	
Positioning accuracy	mm	$\pm 0.01$		

## Code of order **HCW** **44**

1 2

1	Mark	Type
	None	Standard
	L	Long

2	Mark	Bore size (mm)
	44	Ø44
	60	Ø60

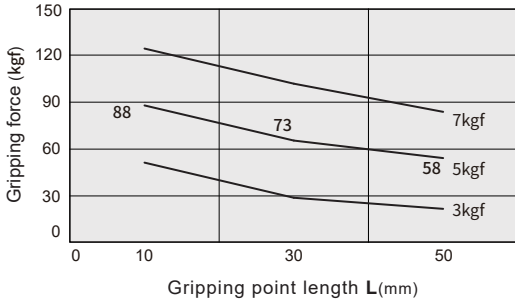
# HCW series Center Aligning Heavy-load Type Air Gripper

## Characteristics graph

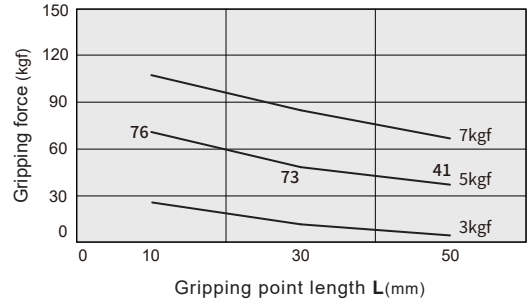
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### Gripping force characteristic

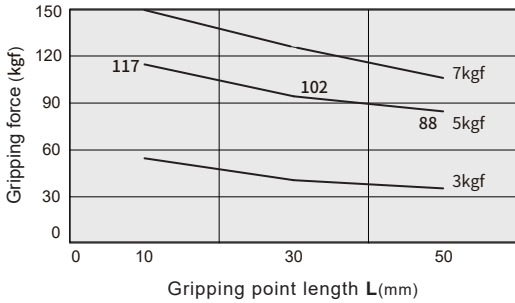
HCW\HCWL 44 - OPEN



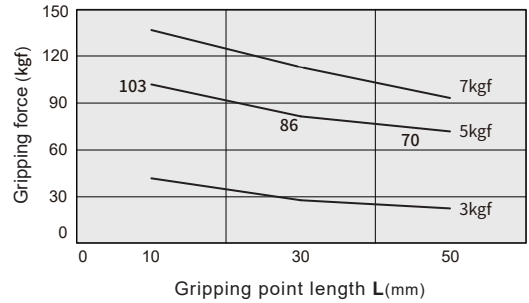
HCW \ HCWL 44 - CLOSE



HCW\HCWL 60 - OPEN



HCW \ HCWL 60 - CLOSE



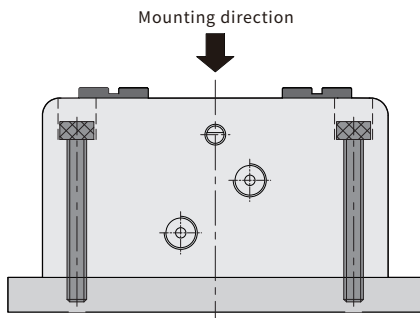
HCW

RMT

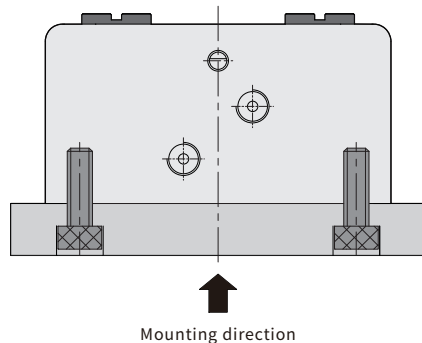
RTL

### Mounting type

1. Apply the screw to through-holes of body



2. Apply the screw from bottom thread hole

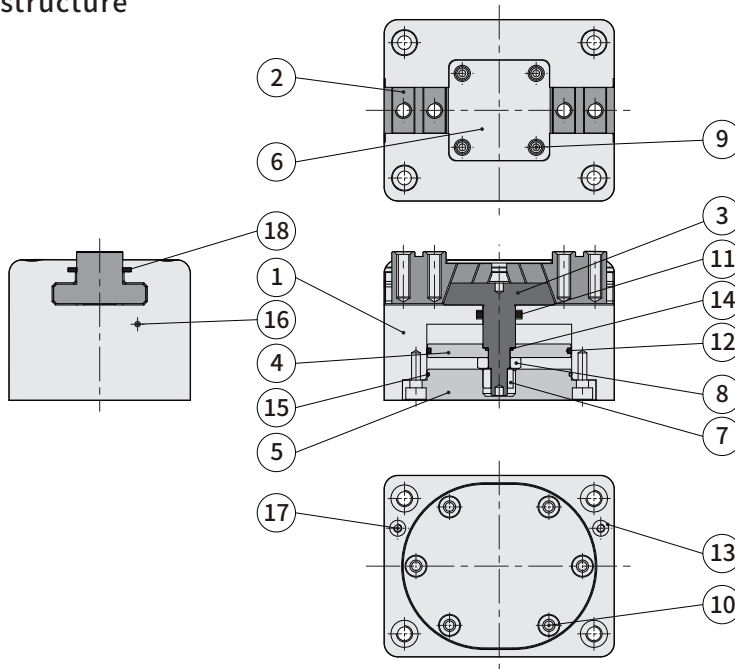


# HCW series Center Aligning Heavy-load Type Air Gripper

Product features

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## Internal structure



## Components and material list

No.	Item	Material	No.	Item	Material
01	Body	Aluminum alloy	10	Gripper cap screw	Alloy steel
02	Finger	Carbon steel	11	Shaft packing	NBR
03	Shaft	Alloy steel	12	X-ring	NBR
04	Oval piton	Aluminum alloy	13	O-ring	NBR
05	Base	Aluminum alloy	14	O-ring	NBR
06	Finger cap	Stainless steel	15	O-ring	NBR
07	Base	Aluminum alloy	16	Stainless steel bead	Stainless steel
08	Centering sleeve	Copper alloy	17	Air path plug	Alloy steel
09	Nut	Iron	18	Rubber lining	Plastic

## Packing and O-ring material list

Unit: mm

Item	X-ring	Shaft packing	13 O-ring	14 O-ring	15 O-ring
Model \ Quantity	1	1	1	1	2
HCW 44	41*44.56*1.78	MY-12A	Ø40*Ø1	Ø8*Ø1	Ø4*Ø1
HCW 60	48.9x54.14x2.62	MY-14A	Ø52*Ø1	Ø10*Ø1	Ø4*Ø1

## Product weight

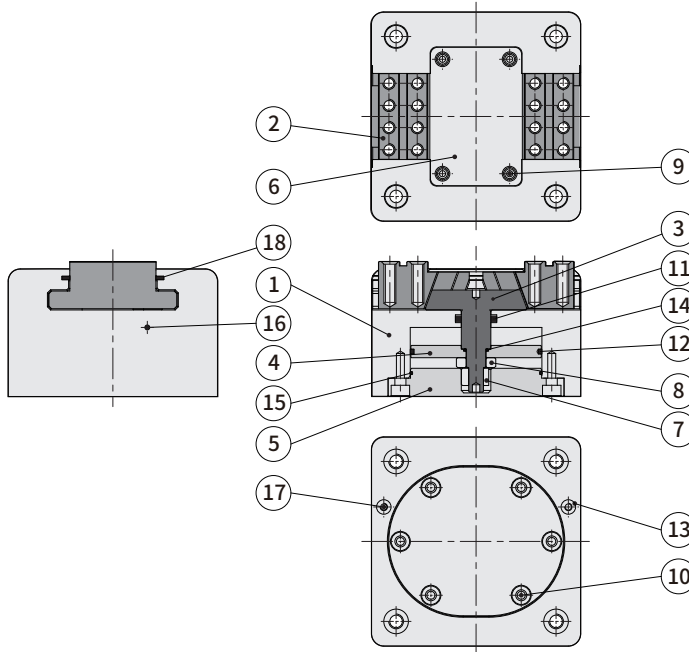
Model	Weight (kg)
HCW 44	1.14
HCW 60	1.65

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HCW

RMT

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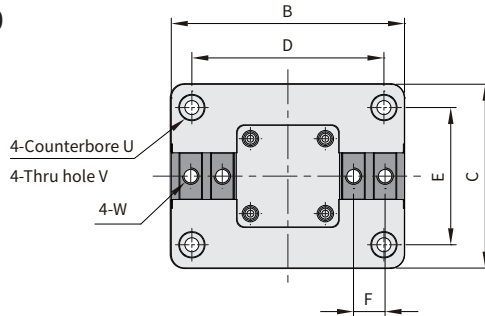
Model	Weight (kg)
HCW 44	1.14
HCW 60	1.65

# HCW series Center Aligning Heavy-load Type Air Gripper

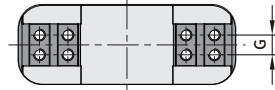
## Dimensions

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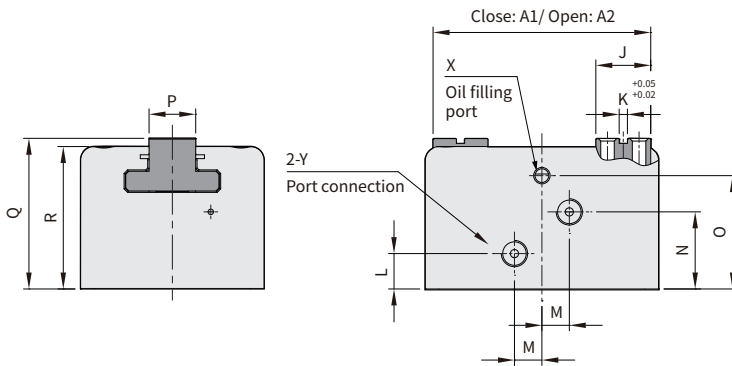
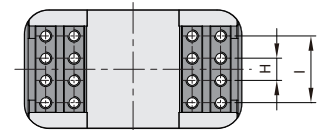
### HCW(L) 44~60



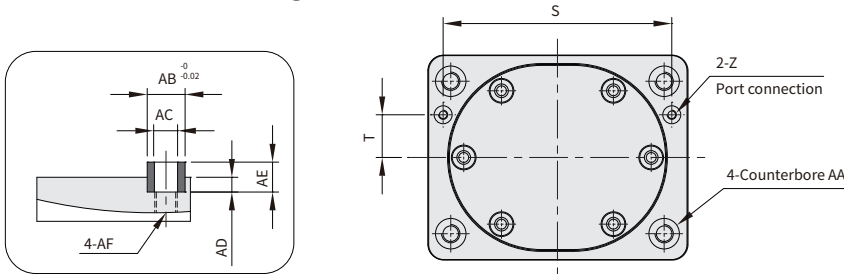
### HCW 60 Gripper hole dimensions



### HCWL 44~60 Gripper hole dimensions



### Close-up of centering sleeve



Unit: mm

Model \ Mark	A1	A2	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
HCW 44	79.3	84.6	85	67	70	50	11.5	-	-	-	20	3	12.9	10	28.1	41.3	17	54.9	51.9	75	14	Ø9x19dp
HCW 60	94	99.3	100	77	80	60	14	14	-	-	23	5	12.9	10	28.1	41.3	27	54.9	51.9	89	15	Ø11x12dp
HCWL 44	79.3	84.6	85	85	85	65	11.5	-	9	27	20	3	12.9	10	28.1	41.3	35	54.9	51.9	75	14	Ø9x19dp
HCWL 60	94	99.3	100	100	100	80	15	-	12	36	25	5	12.9	10	28.1	41.3	50	54.9	51.9	89	15	Ø11x12dp

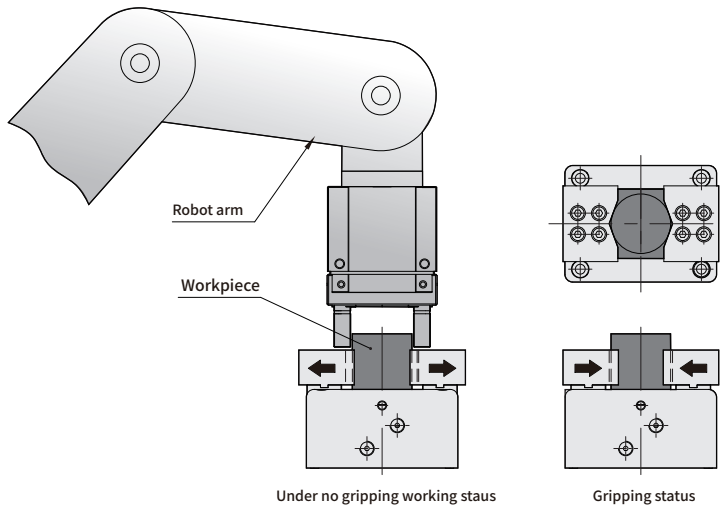
Model \ Mark	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
HCW 44	Ø5.1	M6x1.0X12dp	Ø5	PT1/8x10dp	M3	Ø10x4dp	Ø10	Ø5.3	2	5	M5x0.8PX10dp
HCW 60	Ø6.5	M6x1.0X12dp	Ø5	PT1/8x10dp	M3	Ø12x4dp	Ø12	Ø5.3	2	6	M6x1.0PX20dp
HCWL 44	Ø5.1	M5x0.8X10dp	Ø5	PT1/8x10dp	M3	Ø10x4dp	Ø10	Ø6.3	2	5	M5x0.8PX10dp
HCWL 60	Ø6.5	M5x0.8X12dp	Ø5	PT1/8x10dp	M3	Ø12x4dp	Ø12	Ø6.3	2	6	M6x1.0PX20dp

# HCW series Center Aligning Heavy-load Type Air Gripper

Operation

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## ■ Gripping workpiece



HCW

RMT

RTL

## ■ For tooling machine application - positioning and gripping

