

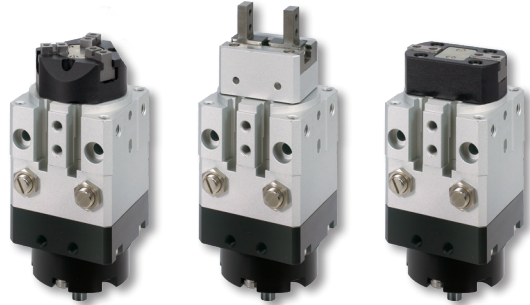
# RM series Rotary Gripper

## Product features

CHELIC

### Feature

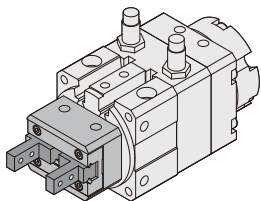
- 90°, 180° rotary and gripping
- Built-in magnet
- 3 type



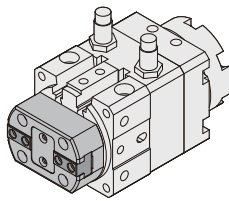
### Specification

Item	Bore size (mm)	Ø10	Ø16	Ø20	Ø25
Gripper type		RMZ, RMW, RMQ			
Torque force	N·m	0.27	0.52	1.4	2.8
Action		Double acting			
Fluid		Air			
Pressure range	Gripper unit	2 ~ 7 ( 200 ~ 700 )			
	Rotary unit	2.5 ~ 7 ( 250 ~ 700 )			
Ambient and fluid temperature	°C	5 ~ 60			
Rotation angle	°	90, 180			
Lubrication		Lubrication free type			

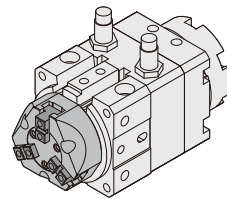
### Available grippers



● **RMZ** Rotary gripper



● **RMW** Rotary gripper



● **RMQ** Rotary gripper

HDQ

HDQT

HDQM

HMQ

HMT

HDL

HDT

HDF

RM

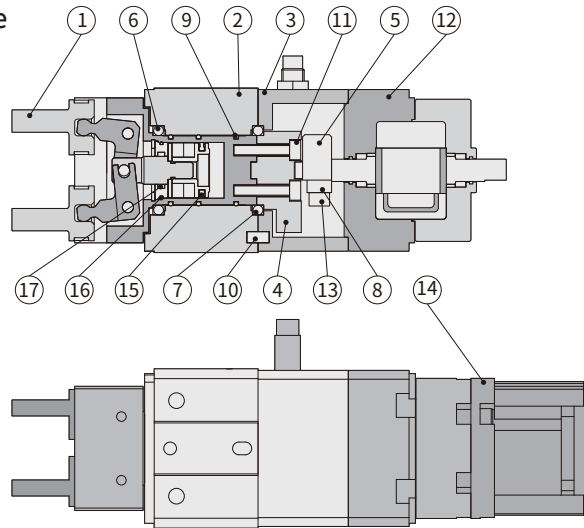
RB

# RM series Rotary Gripper

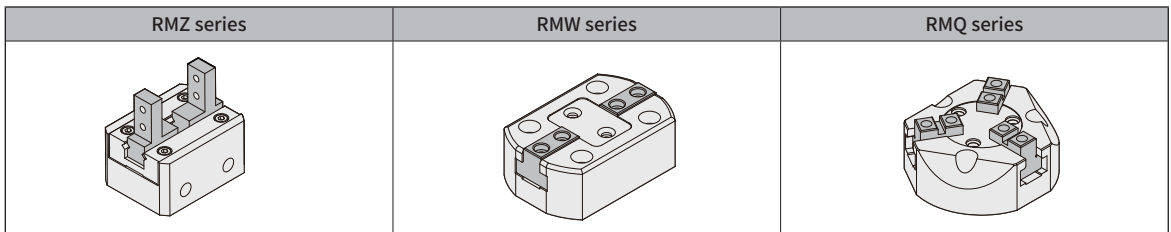
## Product features

**CHELIC**

### Internal structure



### Gripper assembly



### Components and material list

No.	Item	Material	No.	Item	Material	No.	Item	Material
01	Gripper assembly		07	Bearing	Bearing steel	13	Hexagon screw	Alloy steel
02	The Body	Aluminum alloy	08	Connecting block	Carbon steel	14	Sensor switch holder assembly	
03	Adjustment body	Aluminum alloy	09	O-ring	NBR	15	Piston packing	NBR
04	Block struck	Carbon steel	10	Pin	Bearing steel	16	O-ring	NBR
05	Connector	Carbon steel	11	Hexagon screw	Alloy steel	17	Shaft packing	NBR
06	Bearing	Bearing steel	12	Top cover	Aluminum alloy			

### Packing and O-ring material list

Item	NO.09 O-ring	NO.15 Piston packing	NO.16 O-ring	NO.17 Shaft packing
Bore size \ Quantity	3	1	1	1
Ø 10	Ø12×Ø1.5	APA-10	Ø8×Ø1	MY-6A
Ø 16	Ø17.5×Ø1.5	APA-16	Ø14×Ø1	MY-8A
Ø 20	Ø22×Ø1.5	APA-20	Ø18×Ø1	MY-10A
Ø 25	Ø25.5×Ø1.5	APA-25	Ø20×Ø1.2	MY-12A

### Product weight

Bore size	Weight (kg)
Ø10	1.1
Ø16	1.6
Ø20	2.1
Ø25	2.7

Note: All of above are theoretical data.  
Weight tolerance about ±5%

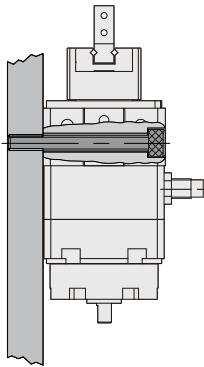
# RM series Rotary Gripper

## Mounting type and operation of sensor switch

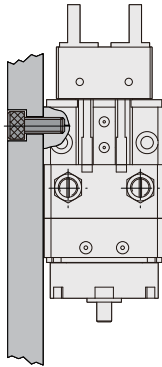
CHELIC

### Mounting type

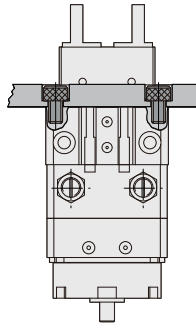
● Front mounting type



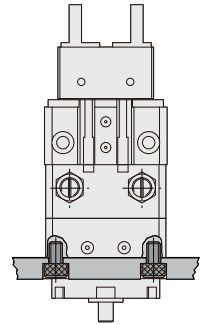
● Side installation (Three sides)



● Gripper unit installation



● Bottom installation



HDQ

HDQT

HDQM

HMQ

HMT

HDL

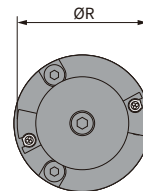
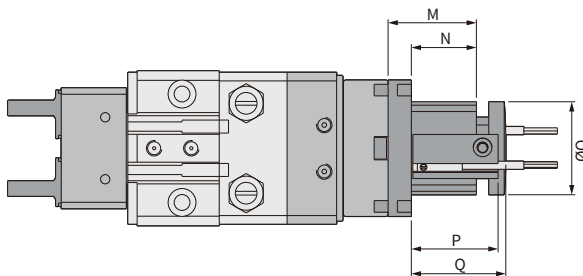
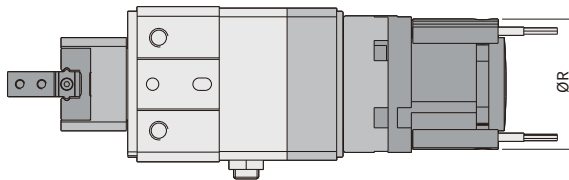
HDT

HDF

RM

RB

### Sensor switch holder



Model	Bore size	M	N	O	P	Q	R
RMZ	Ø10	28	22	24	27.3	29.5	34
	Ø16	28.5	21	30	28	30.5	42
RMW	Ø20	32.5	24	34	30.8	34	47
RMQ	Ø25	32.5	24	34	30.8	34	47

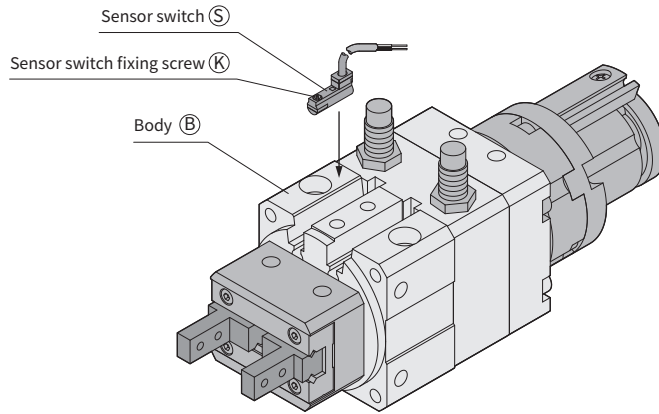
# RM series Rotary Gripper

## Mounting type and operation of sensor switch

CHELIC

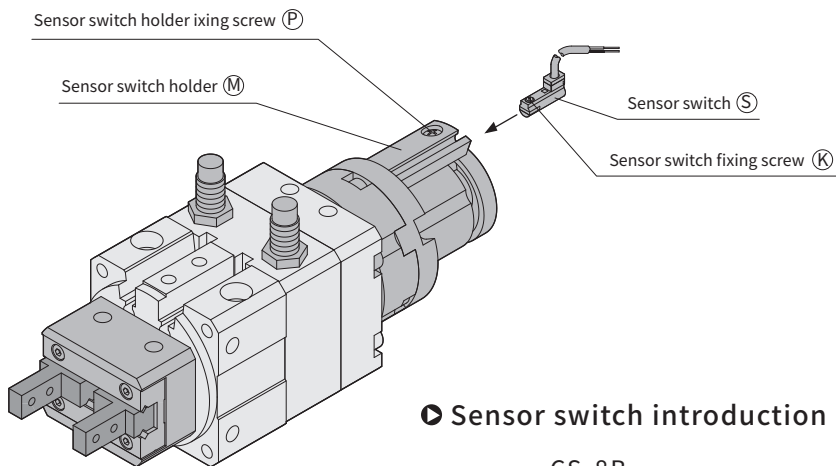
### ■ Sensor switch adjustment on gripper unit

- Adjustment: **1.** Put sensor switch (S) on the body (B) in front of slot and insert sensor switch to the slot.  
**2.** Insert sensor switch (S) to the slot at the appropriate position and screw (K) in.



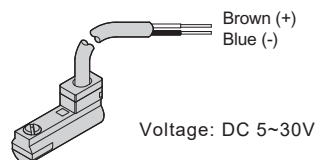
### ■ Sensor switch adjustment on rotary cylinder

- Adjustment: **1.** Loosen the screws (P) that allow sensor to move.  
**2.** Insert the sensor switch (S) to appropriate position of holder (M). Make sure the position is detectable before tighten the screw (K).  
**3.** Adjust sensor switch (M) to appropriate position with screw (P) and screwdriver.



### ▶ Sensor switch introduction

CS-8B



# RMQ series Rotary Gripper

Product features/ Code of order

**CHELIC**

## Feature

- 90°, 180° rotary and gripping
- Built-in magnet
- 3 finger centre gripping



## Specification

Item	Bore size (mm)	Ø10	Ø16	Ø20	Ø25
Action		Double acting			
Fluid		Air			
Pressure range kgf / cm <sup>2</sup> (kPa)	Gripper unit	2 ~ 7 ( 200 ~ 700 )			
	Rotary unit	2.5 ~ 7 ( 250 ~ 700 )			
Ambient and fluid temperature	°C	5 ~ 60			
Rotation angle	°	90, 180			
Torque force	N·m	0.27	0.52	1.4	2.8
Allowable kinetic energy	J	0.004	0.013	0.032	0.07

## Code of order **RMQ 10 A - 180 - C1 - 8B 2**

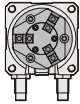
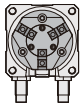
1 2 3 4 5 6

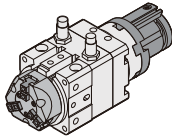
1	Mark	Bore size (mm)
	10	Ø10
	16	Ø16
	20	Ø20
	25	Ø25

3	Mark	Rotation angle
	90	90°
	180	180°

6	Mark	Sensor quantity
	1	With 1 sensor switch
	2	With 2 sensor switch
	3	With 3 sensor switch
	4	With 4 sensor switch

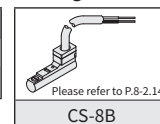
- Sensor q'ty to gripper unit: 2piece
- Sensor q'ty to rotary unit: 2piece

2	Mark	Starting Position	Description
	A		B port face to gripper in horizontal position
	B		B port face to gripper in vertical position

4	Mark	Sensor switch holder	Quantity
	None	Without sensor switch holder	—
	C		1 = 1 piece 2 = 2 piece

5	Mark	Sensor switch
	None	Without sensor switch
	8B	CS-8B

● Image



HDQ

HDQT

HDQM

HMQ

HMT

HDL

HDT

HDF

RM

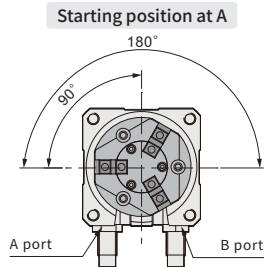
RB

# RMQ series Rotary Gripper

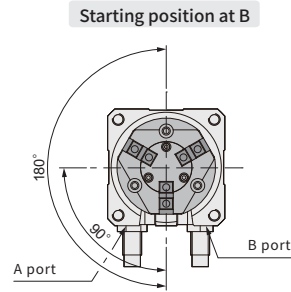
Rotation range, Characteristics graph

**CHELIC**

## Rotation range

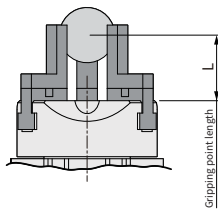
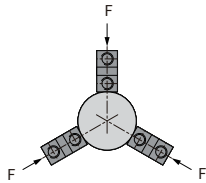


● From top view, B port is to activate gripper

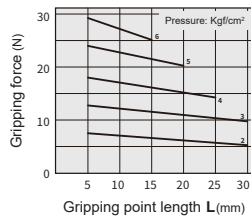


● From top view, B port is to activate gripper

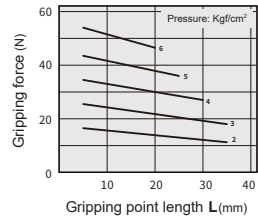
## External grip



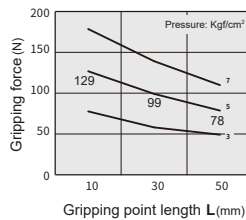
### ● RMQ 10



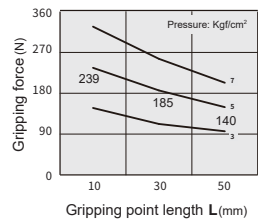
### ● RMQ 16



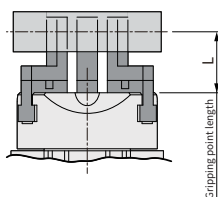
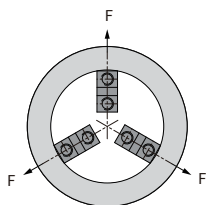
### ● RMQ 20



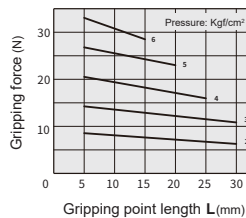
### ● RMQ 25



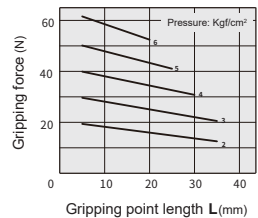
## Internal grip



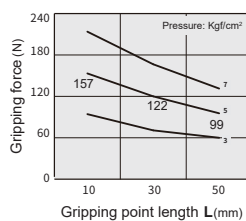
### ● RMQ 10



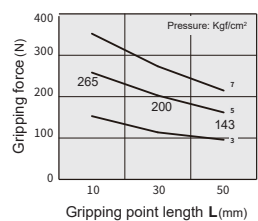
### ● RMQ 16



### ● RMQ 20



### ● RMQ 25

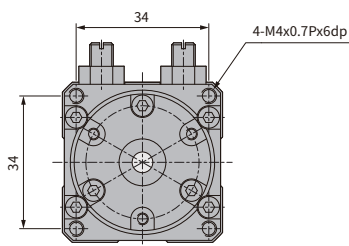
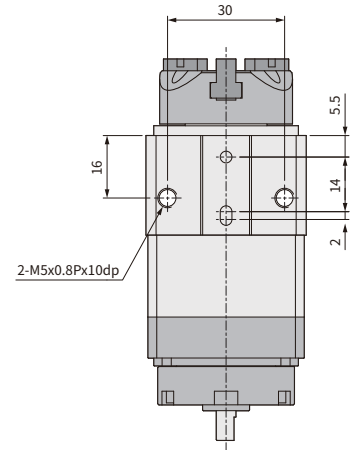
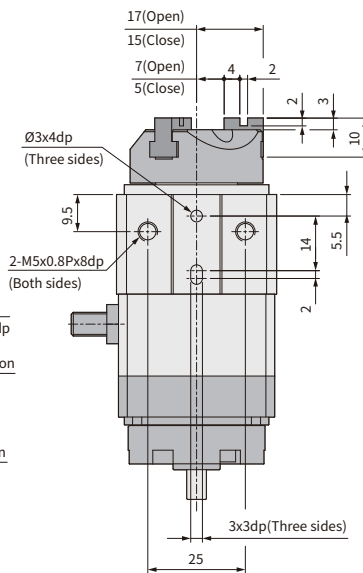
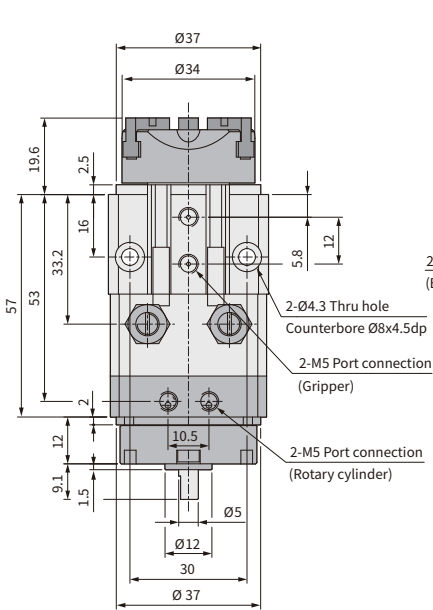
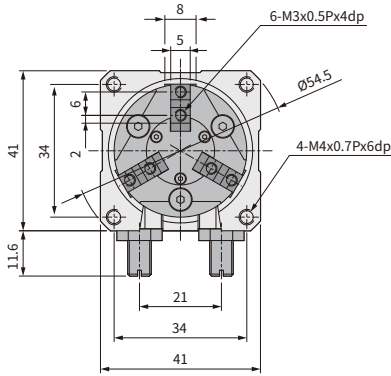


# RMQ series Rotary Gripper

## Dimensions

CHELIC

### RMQ 10



HDQ

HDQT

HDQM

HMQ

HMT

HDL

HDT

HDF

RM

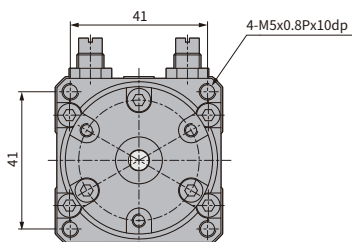
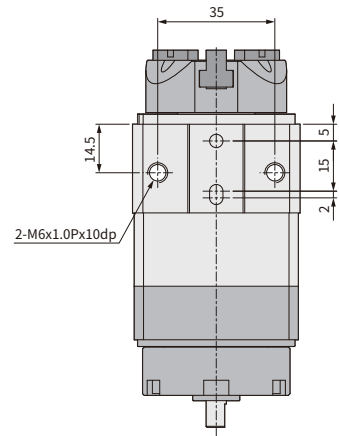
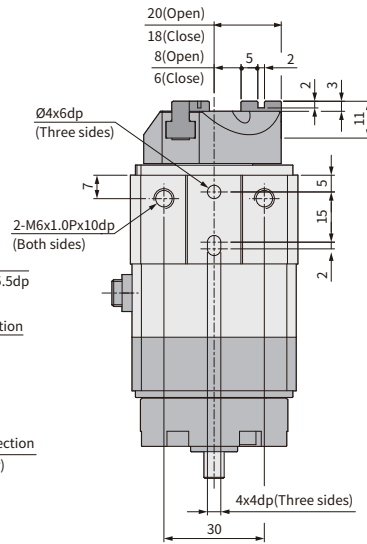
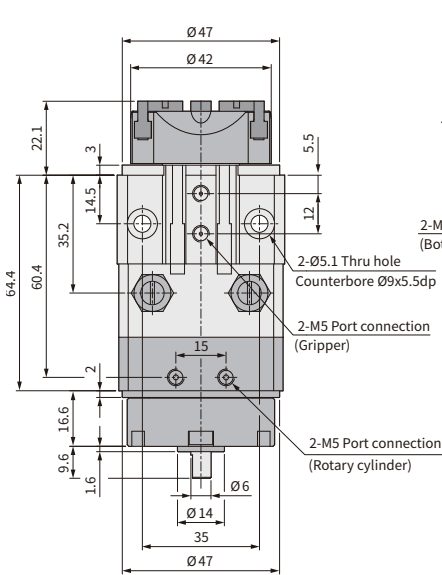
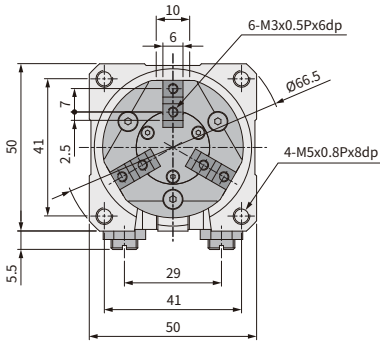
RB

# RMQ series Rotary Gripper

## Dimensions

CHELIC

### RMQ 16



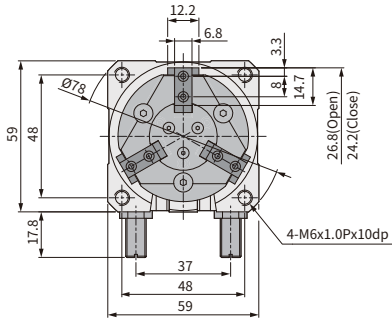


# RMQ series Rotary Gripper

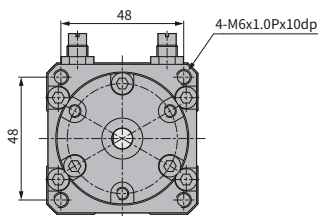
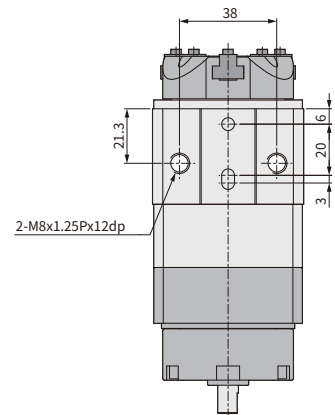
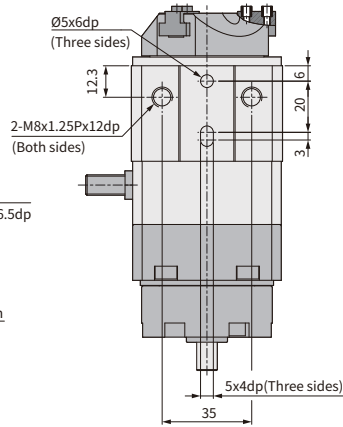
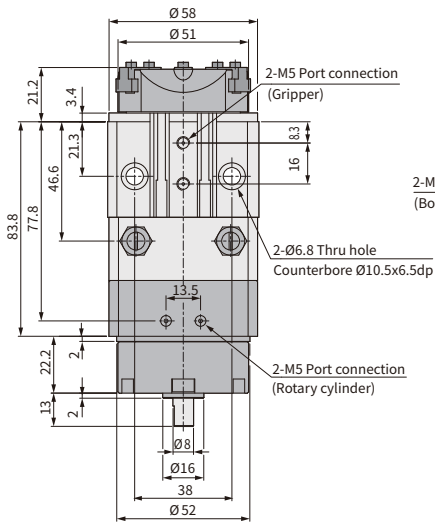
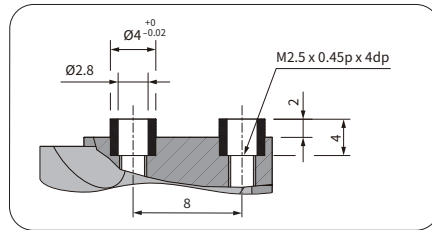
## Dimensions

CHELIC

### RMQ 20



### Close-up of centering sleeve



HDQ

HDQT

HDQM

HMQ

HMT

HDL

HDT

HDF

RM

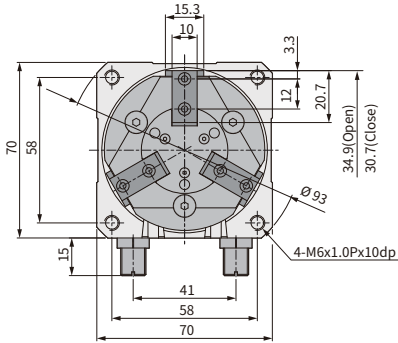
RB

# RMQ series Rotary Gripper

## Dimensions

CHELIC

### RMQ 25



### Close-up of centering sleeve

