




Order example

MCRT – 20 – J66

MODEL

TUBE I.D.

GRIPPER MODULE

Code	Model	Size	Tube I.D.	Description
S50	MCHS 	50	20	2 finger
S66		66		
S80		80		
S100		100		
S125		125		
J50	MCHJ 	50	20	3 finger
J66		66		
J80		80		
J100		100		
G16	MCHG2 (*) 	16	20	3 finger
G20		20		
G25		25		
G32		32		
G40		40		
G50		50		
G63		63		

* The MCHG2 on MCRT series is modified.
Please contact us if you need to replace it.

Weight

Unit: kg

Rotary actuator + gripper module×2				
Size	MCHS	MCHJ	Size	MCHG2
50	3.5	3.8	16	3.4
66	3.8	4.2	20	3.5
80	4.2	7.0	25	3.6
100	7.1	8.8	32	3.7
125	8.8	—	40	4.1
			50	6.4
			63	7.4

Features

- Hollow shaft design for easy sensor wiring.
- Various grippers are available for exchange.
- Hose-free direct connection: Air supply tunnel can connect directly without piping to assure the flexible when rotating.
- Modular rotation and gripping system for automation applications.
- Water repellent design for environment with cutter fluid.
- Magnetic as standard. Can be used with embedded sensors.

Specification – Rotation gripper

Model	MCRT	
Tube I.D. (mm)	20	25
Port size	Rotary actuator piping: Rc1/8 Gripper piping: M5×0.8	
Rotary angle	180°	
Medium	Air	
Operating pressure range (MPa)	0.45~0.7	
Ambient temperature	+5~+60°C (No freezing)	
Lubrication	Not required	
Sensor switch *1	RDVE(V)	
Cushion	Shock absorber *2	
Max. allowable kinetic energy (J) *3	1.21	1.82
Rotary cylinder torque (N.m)	3	5.5

*1. RDVE(V) specification, please refer to page 5-11.

*2. The shock absorber is expendable. Replace when damping performance decrease.

*3. Excluding gripper module.

Specification – Gripper

Model	MCHS	MCHJ	MCHG2
Operating pressure range (MPa)	0.3~0.8	0.2~0.8	0.2~0.6 (0.1~0.6) *
Sensor switch	RDVEV (Please refer to page 5-11)		

* () for gripper module G32~G63.

MCHS size	S50	S66	S80	S100	S125
Effective gripping force at 0.6 MPa (N)	69	122	225	315	505
(mm)	40 (clamping length)				

* MCHS series specification, please refer to page 3-38.

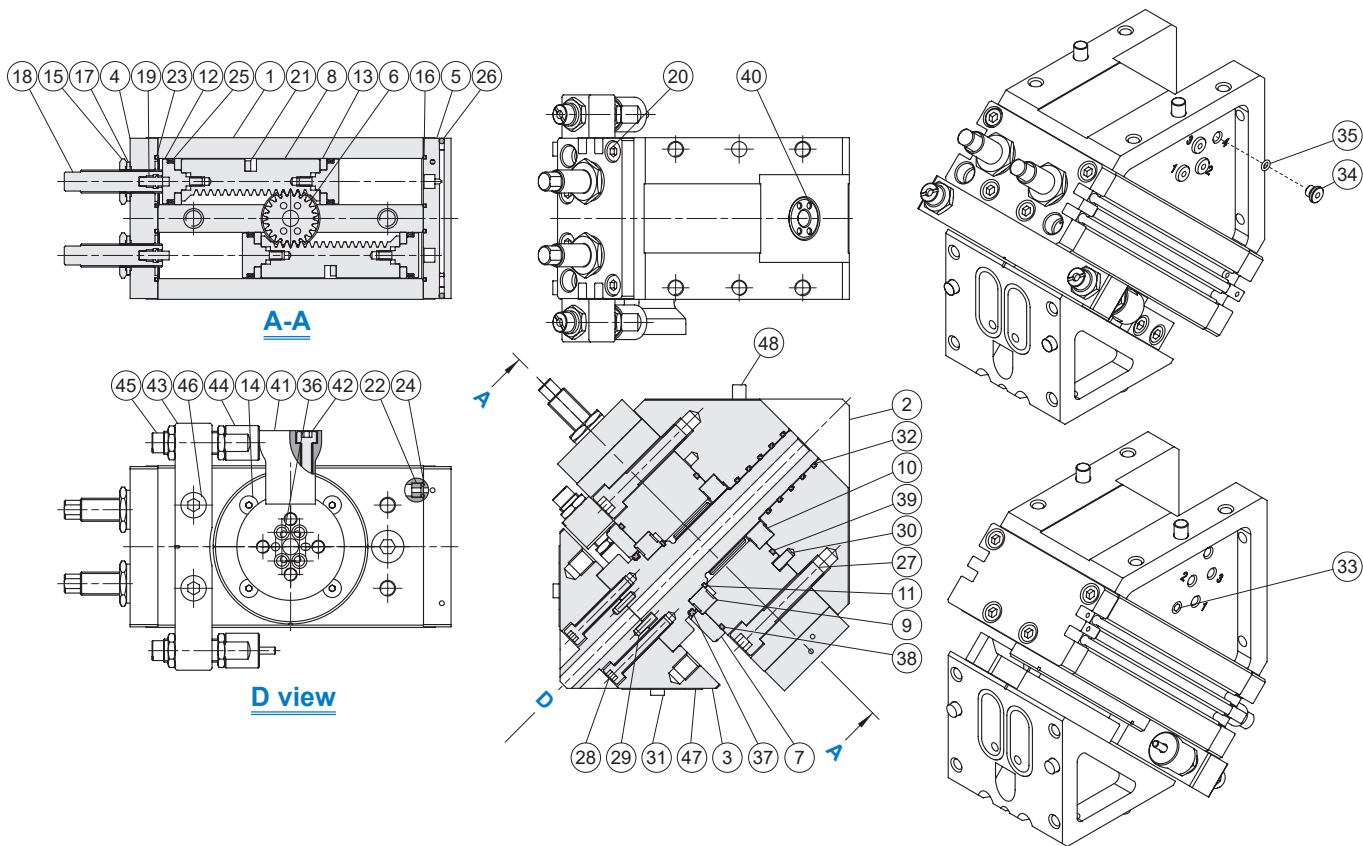
MCHJ size	J50	J66	J80	J100
Effective gripping force at 0.6 MPa (N)	95	177	297	527
(mm)	40 (clamping length)			

* MCHJ series specification, please refer to page 3-57.

MCHG2 size	G16	G20	G25	G32	G40	G50	G63
Effective gripping force at 0.5 MPa (N)	15	26	42	69	110	180	301
(mm) *1	20		30				

*1. Clamping length

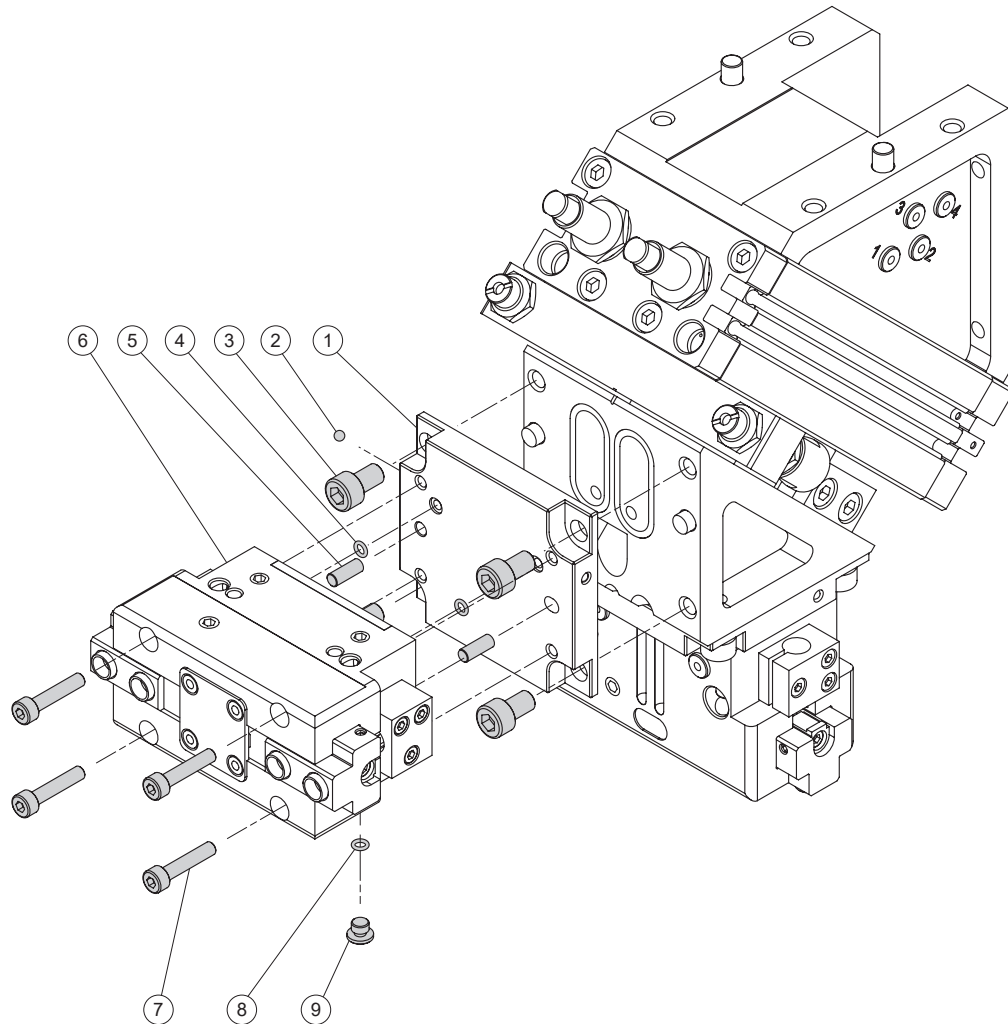
*2. MCHG2 series specification, please refer to page 3-51.



Material

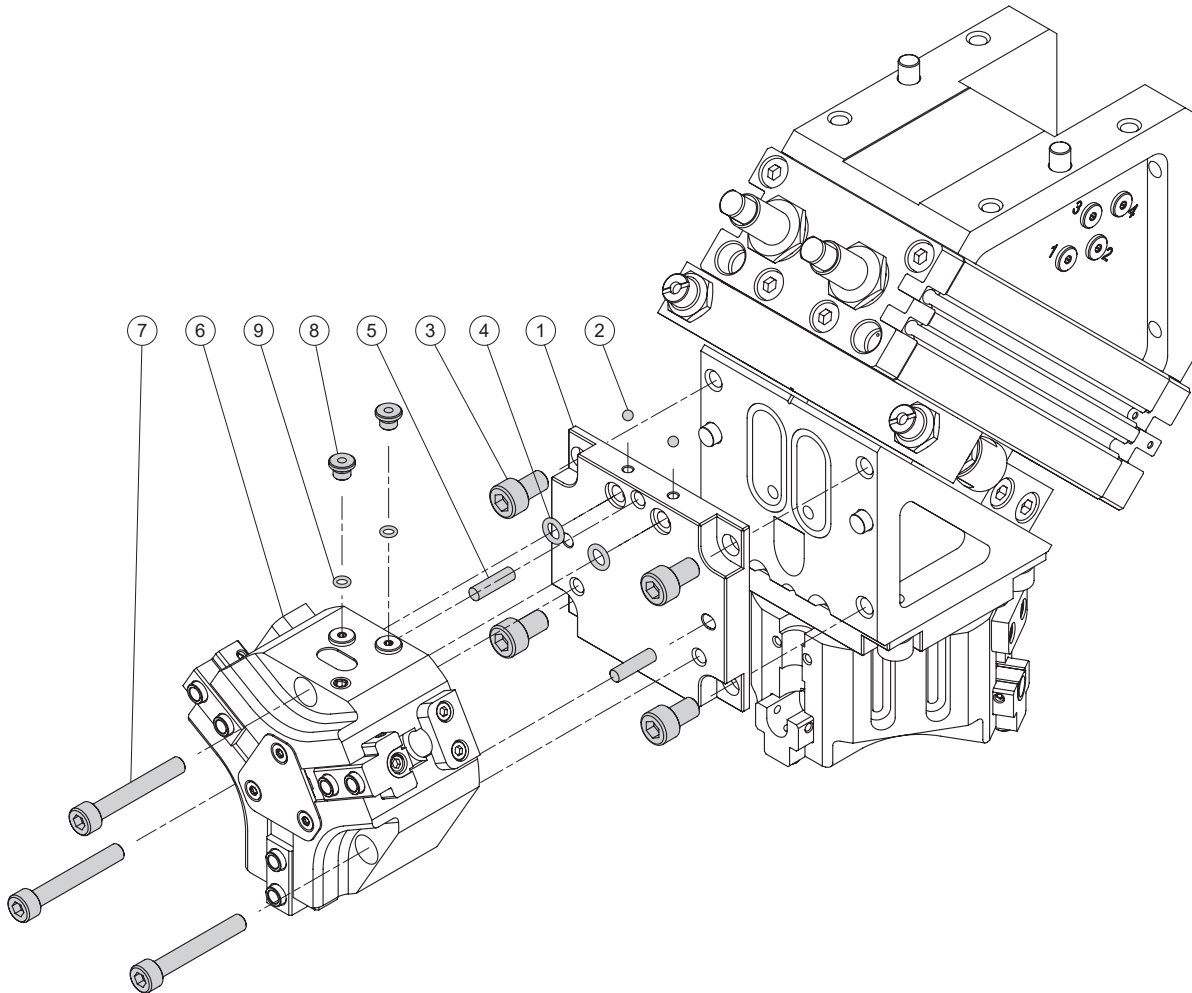
No.	Part name	Material	Q'y
1	Body	Aluminum alloy	1
2	Base	Aluminum alloy	1
3	Gripper fixed seat	Aluminum alloy	1
4	Cover	Aluminum alloy	1
5	End cover	Aluminum alloy	1
6	Pinion	Alloy steel	1
7	Bearing retainer	Aluminum alloy	1
8	Piston	Stainless steel	2
9	Ball bearing	Bearing steel	1
10	Ball bearing	Bearing steel	1
11	Snap ring	Spring steel	1
12	Piston	Aluminum alloy	4
13	Wear ring	Resin	4
14	Bolt	Carbon steel	4
15	Nut	Stainless steel	2
16	O-ring	NBR	2
17	Seal washer	NBR+Carbon steel	2
18	Adjust screw	Stainless steel	2
19	Cushion pad	NBR	2
20	Bolt	Stainless steel	8
21	Magnet	Magnet material	2
22	Fixed	Copper	2
23	Piston packing	NBR	2
24	O-ring	NBR	2

No.	Part name	Material	Q'y
25	Piston Seal	NBR	4
26	Ball	Stainless steel	6
27	Bolt	Stainless steel	2
28	Bolt	Stainless steel	4
29	Pin	Steel	2
30	Pin	Steel	1
31	Pin	Steel	4
32	Piston Seal	NBR	5
33	Screw	Stainless steel	1
34	Plug	Copper	4
35	O-ring	NBR	4
36	O-ring	NBR	4
37	Piston Seal	NBR	1
38	O-ring	NBR	1
39	O-ring	NBR	1
40	Ball	Stainless steel	4
41	Fixing plate	Carbon steel	1
42	Bolt	Stainless steel	2
43	Cushion mount	Aluminum alloy	1
44	Fixing nut	Stainless steel	2
45	Shock absorber	-	2
46	Bolt	Stainless steel	2
47	O-ring	NBR	4
48	Pin	Steel	2



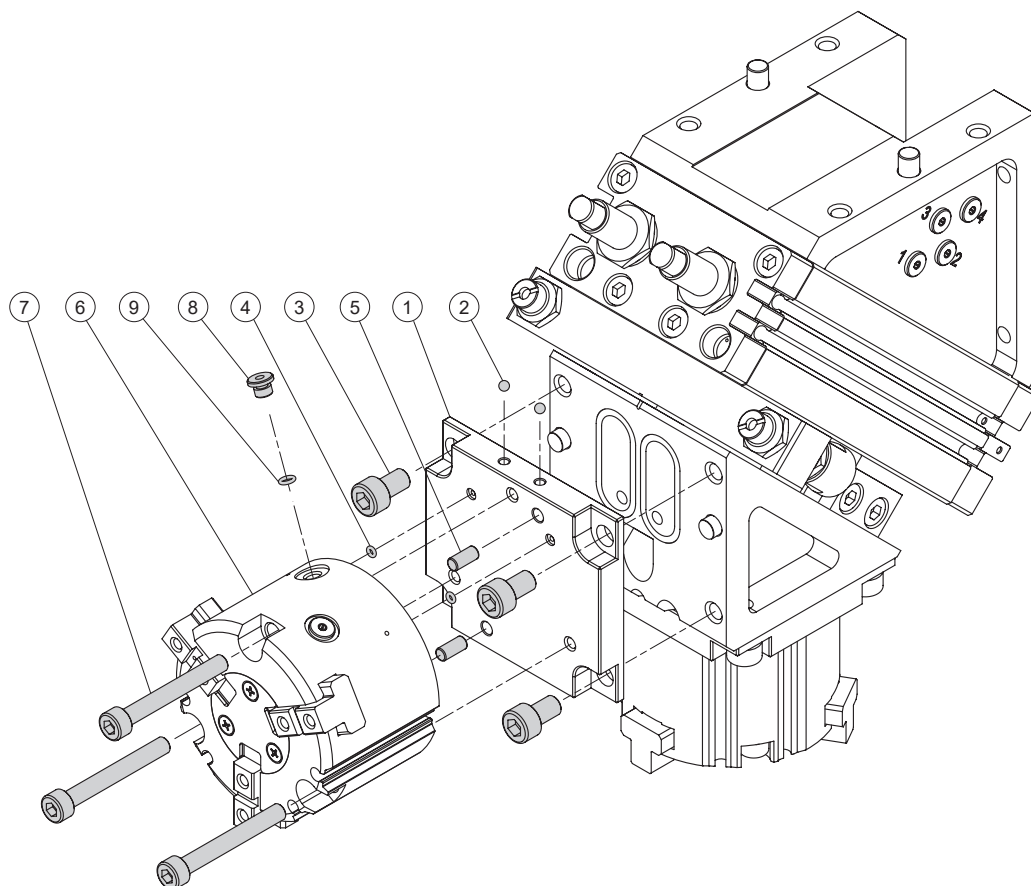
Material

No.	Part name	Material	with gripper MCHS series	
			Q'y	
			MCRT-20 S50~S80	MCRT-25 S100, S125
1	Connecting board	Aluminum alloy	2	2
2	Ball	Stainless steel	4	4
3	Bolt	Carbon steel	8	8
4	O-ring	NBR	4	4
5	Pin	Steel	4	4
6	MCHS Gripper	-	2	2
7	Bolt	Carbon steel	8	8
8	Plug	Copper	4	4
9	O-ring	NBR	4	4



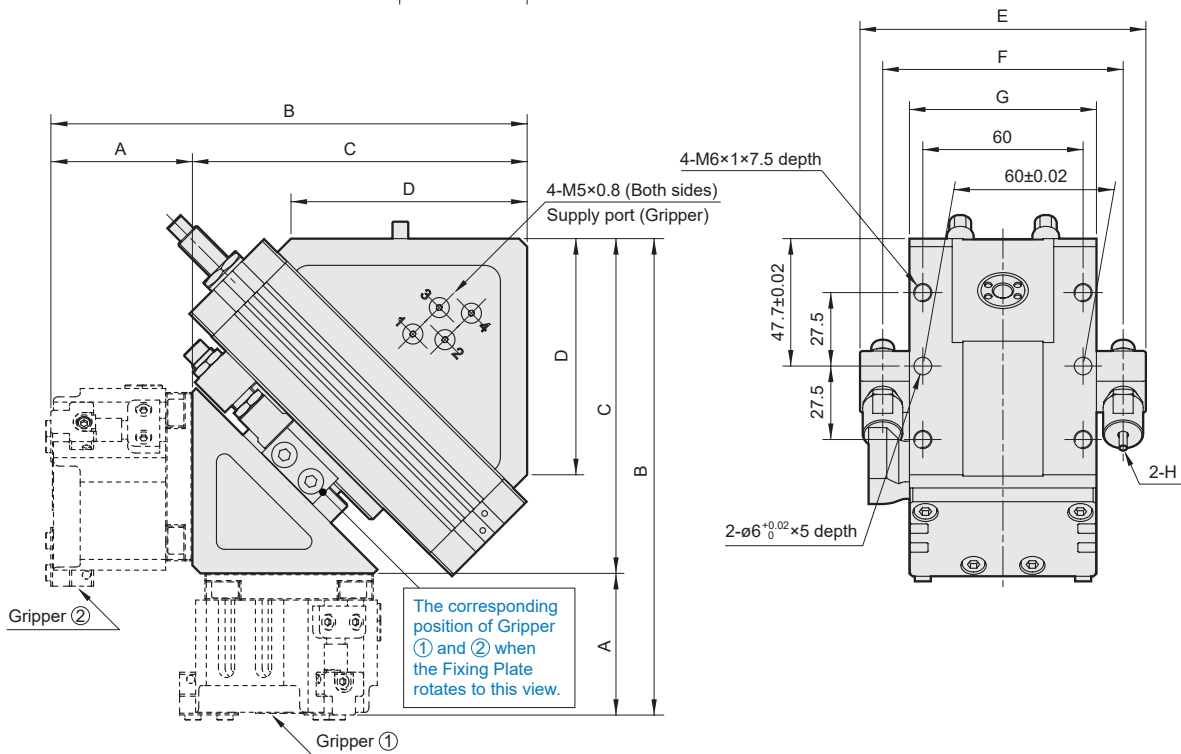
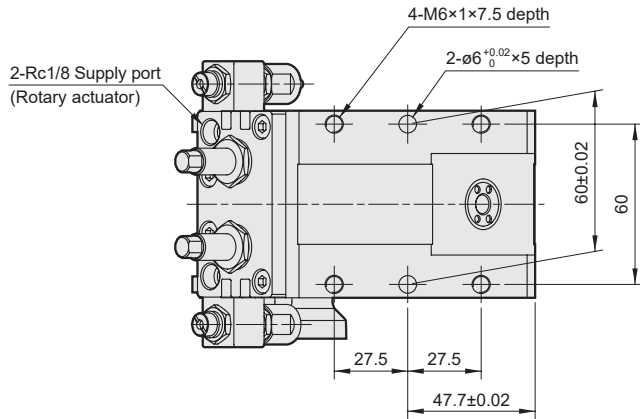
Material

with gripper MCHJ series			Q'y			
No.	Part name	Material	MCRT-20		MCRT-25	
			J50	J66	J80	J100
1	Connecting board	Aluminum alloy	2	2	2	2
2	Ball	Stainless steel	-	4	-	4
3	Bolt	Carbon steel	8	8	8	8
4	O-ring	NBR	4	4	4	4
5	Pin	Steel	4	4	4	4
6	MCHJ Gripper	-	2	2	2	2
7	Bolt	Carbon steel	6	6	6	6
8	Plug	Copper	4	4	4	4
9	O-ring	NBR	4	4	4	4



Material

No.	Part name	Material	with gripper MCHG2 series			
			Q'y			
			MCRT-20		MCRT-25	
			G16	G20~G40	G50	G63
1	Connecting board	Aluminum alloy	2	2	2	2
2	Ball	Stainless steel	4	4	-	4
3	Bolt	Carbon steel	8	8	8	8
4	O-ring	NBR	4	4	4	4
5	Pin	Steel	4	4	4	4
6	MCHG2 Gripper	-	2	2	2	2
7	Bolt	Carbon steel	6	6	6	6
8	Screw	Stainless steel	4	-	-	-
	Plug	Copper	-	4	4	4
9	O-ring	NBR	-	4	4	4



Gripper										
MCHS			MCHJ			MCHG2				
Code Tube I.D. / Size	A	B	Code Tube I.D. / Size	A	B	Code Tube I.D. / Size	A	B		
S50	41	166.3	20	J50	45	170.3	G16	45	170.3	
S66	49	174.3		J66	53	178.3	G20	48	173.3	
S80	59	184.3	25	J80	60	211	20	G25	50	175.3
S100	65	216		J100	70	221	G32	54	179.3	
25	S125	74					G40	57	182.3	
							G50	65	216	
						25	G63	76	227	

Supply port (Gripper)

Gripper	Gripper open	Gripper close
①	2	1
②	4	3

Code Tube I.D.	C	D	E	F	G	H
20	125.3	88.4	107	90	70	MDSC-1008-3-N
25	151	94	135	110	80	MDSC-1412-3-N