

### MRTH

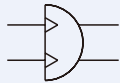
Male pivot gear  
(standard type)

### MRTH-D

Male pivot gear  
(double end rod type)

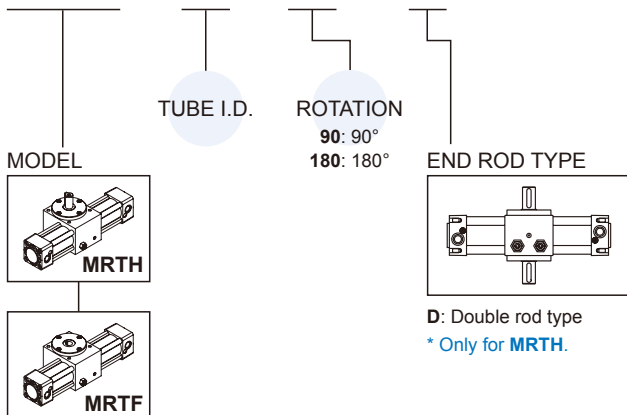
### MRTF

Female pivot gear



### Order example

MRTH — 40 — 90 — D



### Features

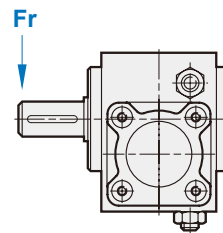
- The body is manufactured in anodized aluminium alloy, and has been designed looking at the harmonious aesthetic development.
- Pinion and rack produced from carbon steel reduces backlash within the mechanism.
- Rotation adjustment screw.
- Magnetic as standard.

### Specification

Model	MRTF, MRTH, MRTH-D		
Tube I.D. (mm)	40	63	
Standard rotation	90±5°, 180±5°		
Rotating shaft dia. (mm)	16	24	
Initial position of slot (mm)	See dimensional feature		
Medium	Filtered air with or without lubrication		
Operating pressure range	0.13~0.7 MPa		
Ambient temperature	-5~+60°C (No freezing)		
Max. allowable axial thrust (kg)	10	12	
Cushion angle	74°	75°	
Max. allowable kinetic energy	90°	0.266J	0.675J
	180°	0.58J	1.54J
Max. allowable radial trust (Fr)	514.5 N	725.2 N	
Sensor switch (*)	LN65		

\* LN65 specification, please refer to page 5-20.

### Max. allowable radial trust



### Cylinder weight

Unit: kg

Tube I.D.	MRTH		MRTH-D		MRTF		LN65 Sensor switch
	90°	180°	90°	180°	90°	180°	
40	3.30	3.40	3.35	3.45	3.14	3.24	0.03
63	5.80	6.20	5.95	6.35	5.47	5.87	

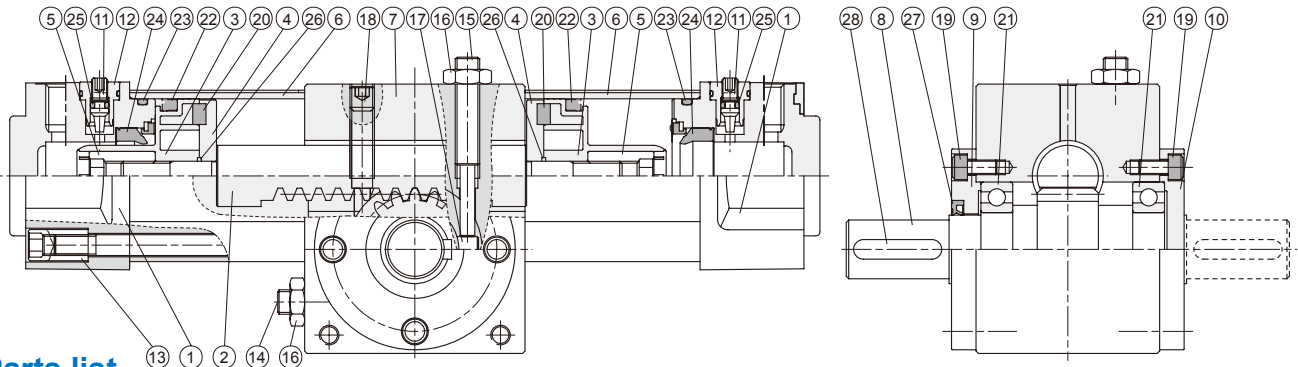
## ROTARY ACTUATOR

### How to order the seal kit

MRT	SK	Tube I.D.	Seal kit	Tube I.D.	Seal kit
	H	40	MRTHSK40 - Including No.22,23,24,25,26,27	40	MRTFSK40 - Including No.22,23,24,26,27
	F	63	MRTHSK63 - Including No.22,23,24,25,26,27	63	MRTFSK63 - Including No.22,23,24,26,27

### MRTH

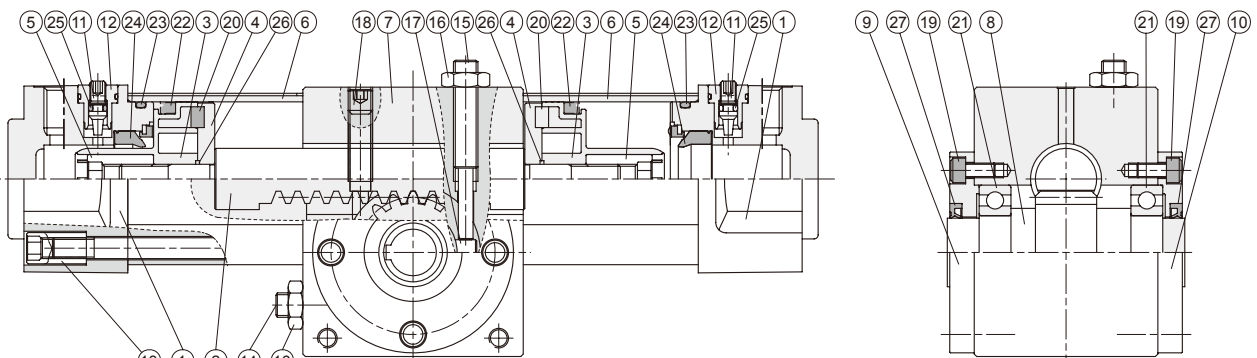
### MRTH-D



### Parts list

No.	Part name	Q'y	No.	Part name	Q'y	No.	Part name	Q'y
1	End cap	2	11	Cushion needle	2	21	Ball bearing	2
2	Rack	1	12	Washer	2	22	Piston packing	2
3	Piston	2	13	Tie bolt	8	23	Cylinder gasket	2
4	Magnet holder	2	14	Adjusting screw	1	24	Cushion packing	2
5	Piston nut	2	15	Adjusting screw	1	25	O-ring	2
6	Cylinder tube	2	16	Lock nut	2	26	Piston gasket	2
7	Housing	1	17	Stopper pin	1	27	Rod packing	1
8	Pinion shaft	1	18	Set screw	1	28	Key (MRTH-D=2)	1
9	End cover	1	19	Hexagon socket head screw	8			
10	End cover	1	20	Magnet	2			

### MRTF



### Parts list

No.	Part name	Q'y	No.	Part name	Q'y	No.	Part name	Q'y
1	End cap	2	10	End cover	1	19	Hexagon socket head screw	8
2	Rack	1	11	Cushion needle	2	20	Magnet	2
3	Piston	2	12	Cushion plug	2	21	Ball bearing	2
4	Magnet holder	2	13	Tie bolt	8	22	Piston packing	2
5	Piston nut	2	14	Adjusting screw	1	23	Cylinder gasket	2
6	Cylinder tube	2	15	Adjusting screw	1	24	Cushion packing	2
7	Housing	1	16	Lock nut	2	25	O-ring	2
8	Pinion shaft	1	17	Stopper pin	1	26	Piston gasket	2
9	End cover	1	18	Set screw	1	27	Rod packing	2

# MRTF / MRTF Dimensions $\varnothing 40, \varnothing 63$



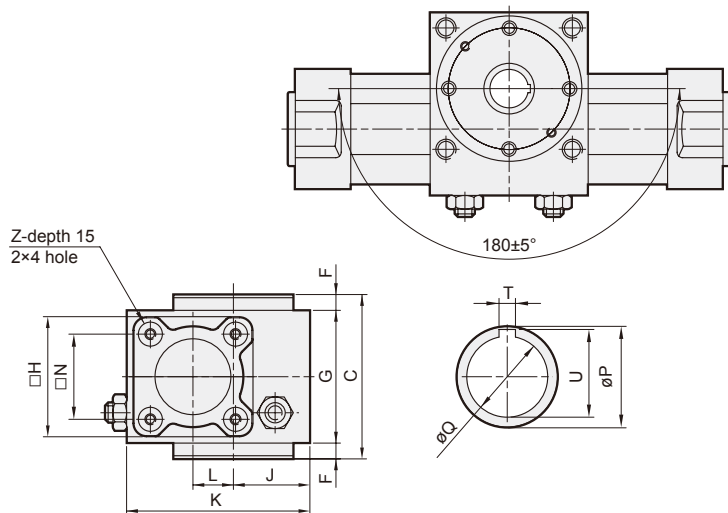
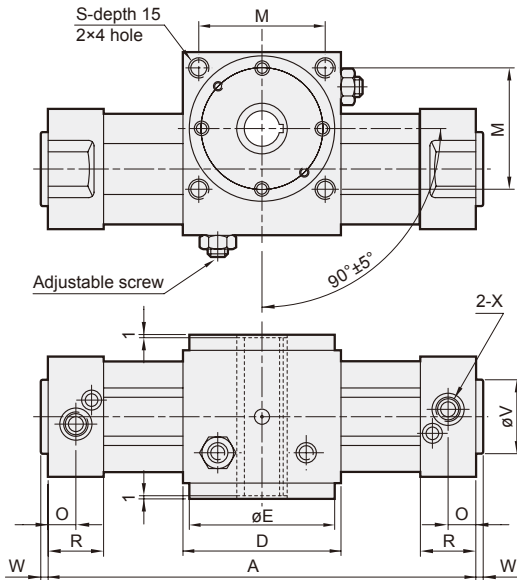
## ROTARY ACTUATOR

mindman

### MRTF

Angle of rotation  $90^\circ$

Angle of rotation  $180^\circ$

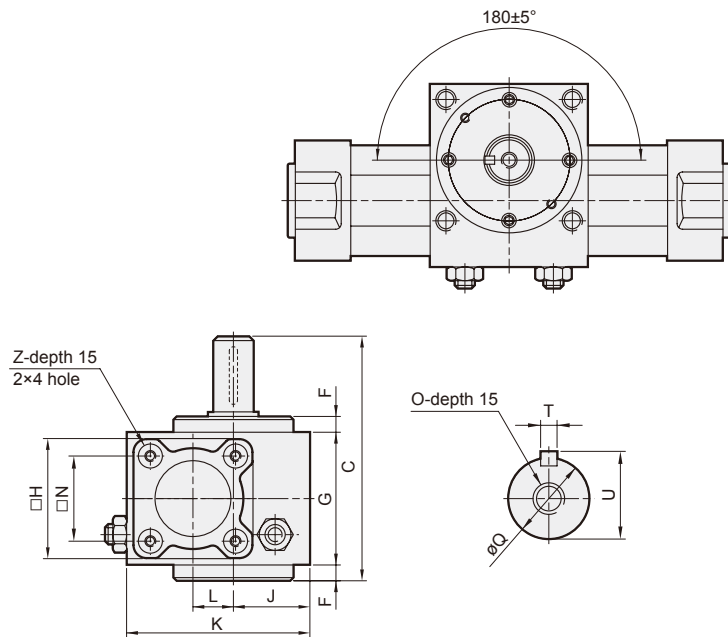
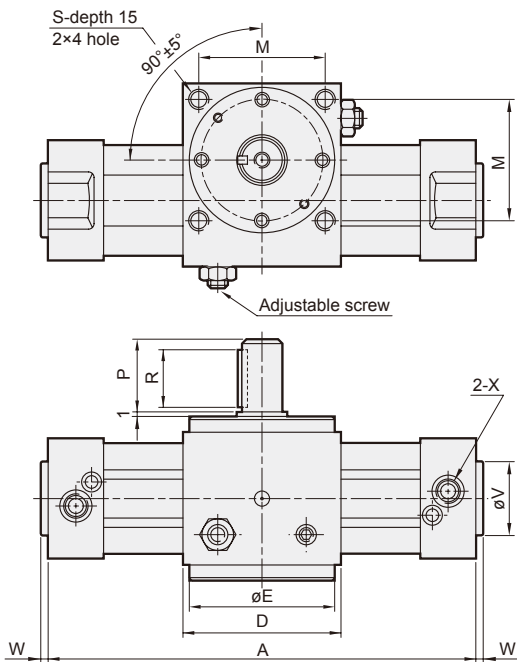


Model	A		C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Z
	$90^\circ$	$180^\circ$																						
MRTF-40	263	326	81	75	72	8	65	53	37.5	93	27.5	60	38	15	25	14H7 <sup>+0.018</sup> <sub>0</sub>	30	M6	5	16.5	35	5	G1/4	M6
MRTF-63	306	377	95	90	82	10	75	75	42.5	110	30	70	56.5	16	30	19H7 <sup>+0.021</sup> <sub>0</sub>	32	M8	6	22	45	4	G3/8	M8

### MRTH

Angle of rotation  $90^\circ$

Angle of rotation  $180^\circ$



Model	A		C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Z
	$90^\circ$	$180^\circ$																						
MRTH-40	263	326	112	75	72	8	65	53	37.5	93	27.5	60	38	M5	30	16h6 <sup>0</sup> <sub>-0.011</sub>	25	M6	5	18	35	5	G1/4	M6
MRTH-63	306	377	138	90	82	10	75	75	42.5	110	30	70	56.5	M8	42	24h6 <sup>0</sup> <sub>-0.013</sub>	36	M8	8	27	45	4	G3/8	M8

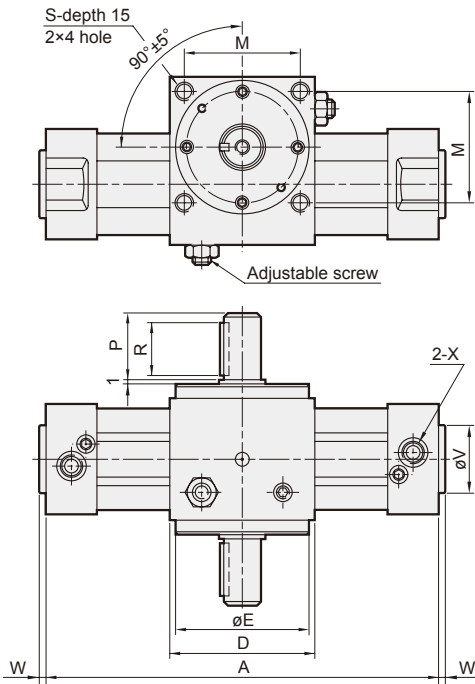
# MRTH / MRTF Dimensions $\varnothing 40, \varnothing 63$



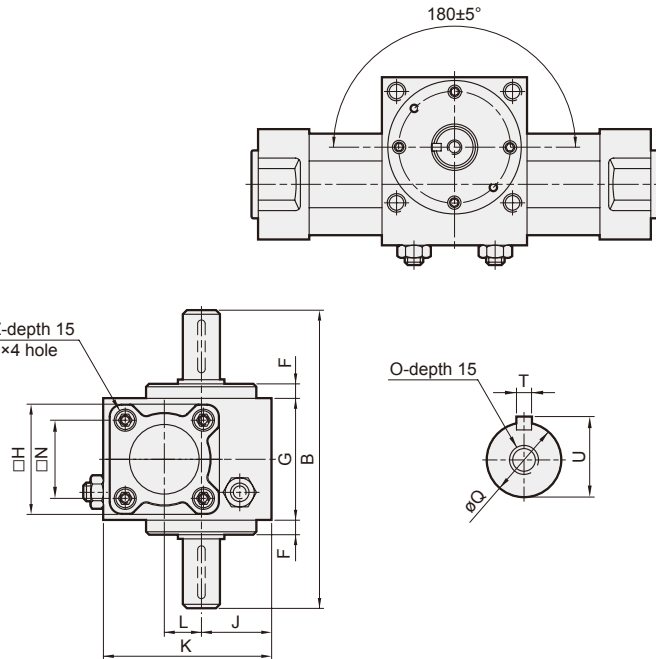
## ROTARY ACTUATOR

mindman

### MRTH-D Angle of rotation 90°

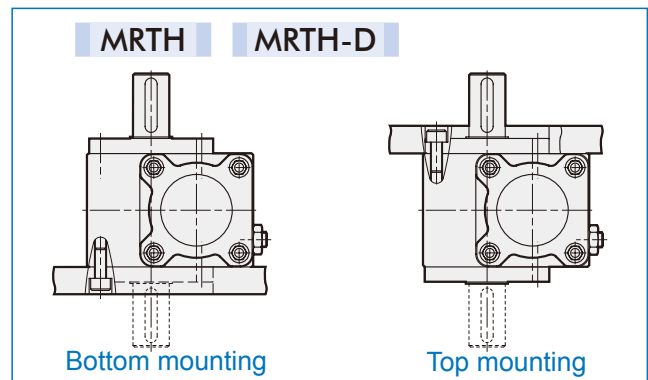
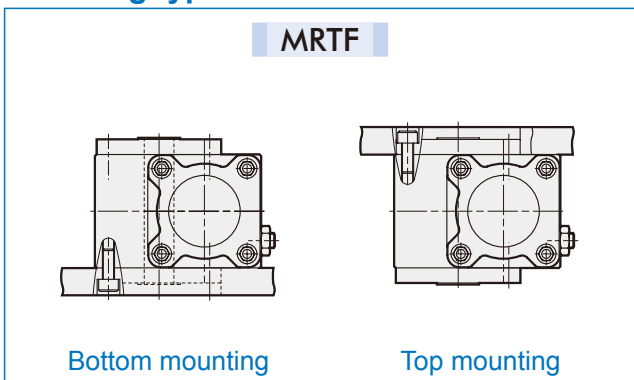


### Angle of rotation 180°

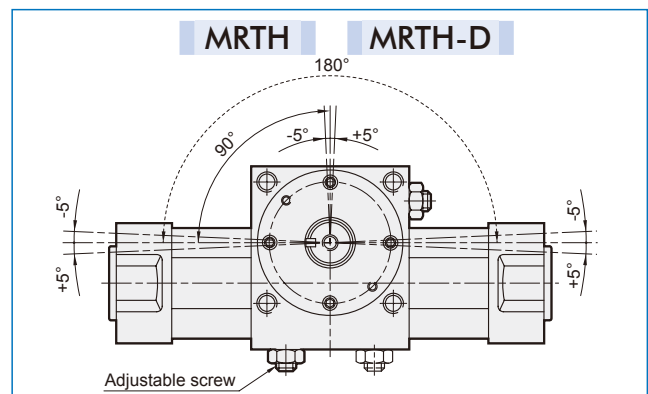
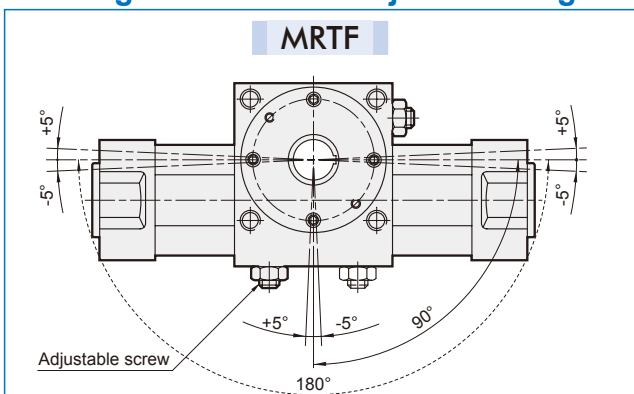


Model	A		B	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Z
	90°	180°																						
MRTH-40-D	263	326	143	75	72	8	65	53	37.5	93	27.5	60	38	M5	30	16h6 <sub>-0.011</sub>	25	M6	5	18	35	5	G1/4	M6
MRTH-63-D	306	377	181	90	82	10	75	75	42.5	110	30	70	56.5	M8	42	24h6 <sub>-0.013</sub>	36	M8	8	27	45	4	G3/8	M8

### Mounting type

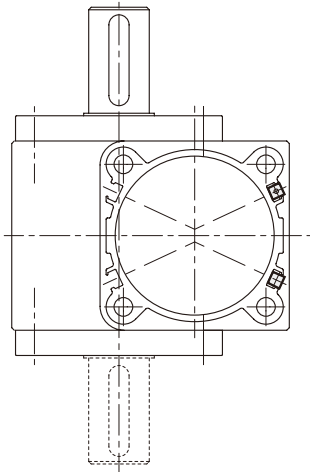


### Rotating direction and adjustable angle

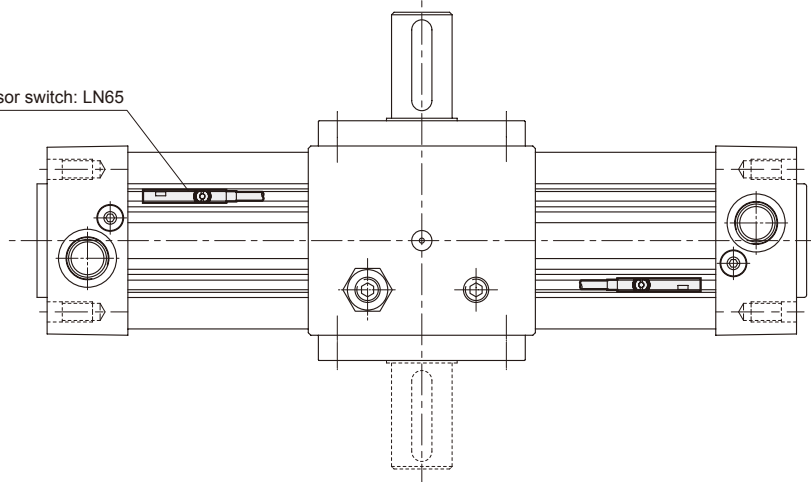


### MRTH

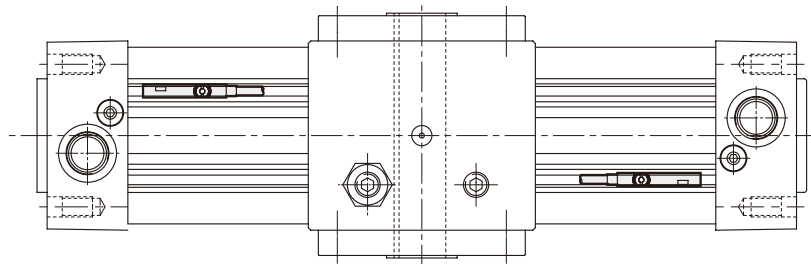
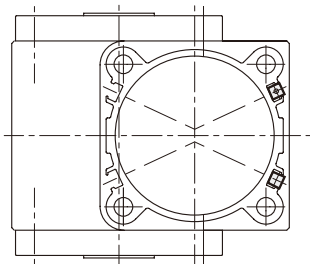
### MRTH-D



Sensor switch: LN65

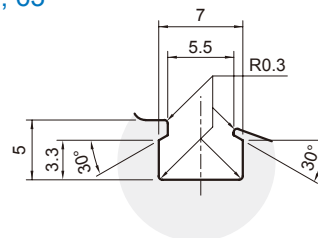


### MRTF



### Sensor switch mounting groove

$\varnothing 40, 63$



Tube I.D.	Sensor switch
40, 63	LN65