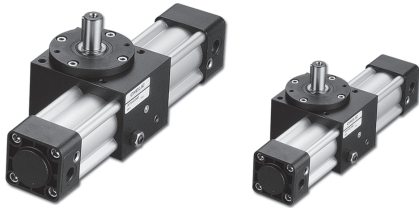


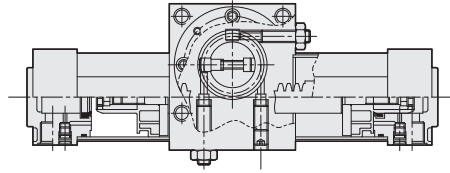
RTH series Rotary Cylinder

Product features

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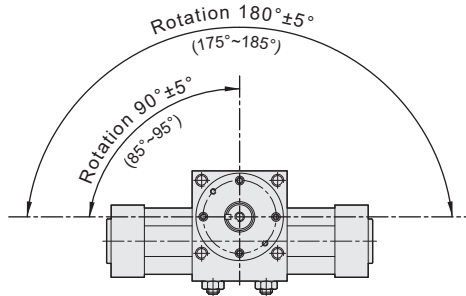
Internal structure



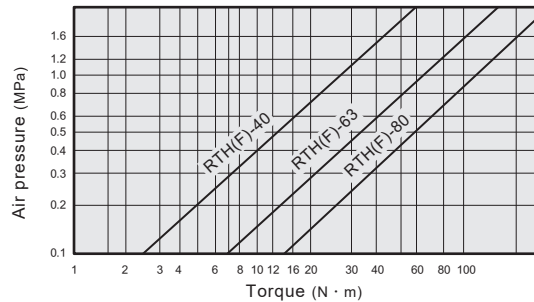
Specification

Item	Model	RTH40 - □	RTH63 - □	RTH80 - □
Action		Double acting		
Fluid		Air		
Torque force	N · m	10	40	60
Axis size	mm	Ø16	Ø24	Ø28
Rotation angle	°	90, 180		
Adjustment angle	°	±5		
Port size		G 1/4	G 3/8	
Pressure range	Kgf/cm ² (kPa)	1.5~7(150~700)		
Ambient and fluid temperature	°C	-10 ~ 60		
Max. allowable axial thrust	kg	10	12	20

The range of rotation angle



Output torque table



Code of order

RTH	63	180	F	9D	50F	2
Model	Torque force	Rotation angle	Rod type	Sensor switch	Sensor bracket	Sensor bracket qty

RTH series Rotary cylinder	40: Ø40mm 63: Ø63mm 80 : Ø80mm	90° - 90° 180° - 180°	None: Single rod (Rod/ Outer ditch) F: Inner hole type (Without rod/ Inner ditch) 2D: Double rod (Double rod/ Outer ditch)	CS-9D (Magnetic type) 9D CS-9B (Magnetic type) 9B CS-8G (Solid state sensor switch) 8G CS-8B (Solid state sensor switch) 8B	None: Without sensor bracket 32F: Applicable to Ø32, Ø40 50F: Applicable to Ø50, Ø63 80F: Applicable to Ø80, Ø100	1: 1 PC 2: 2 PCS
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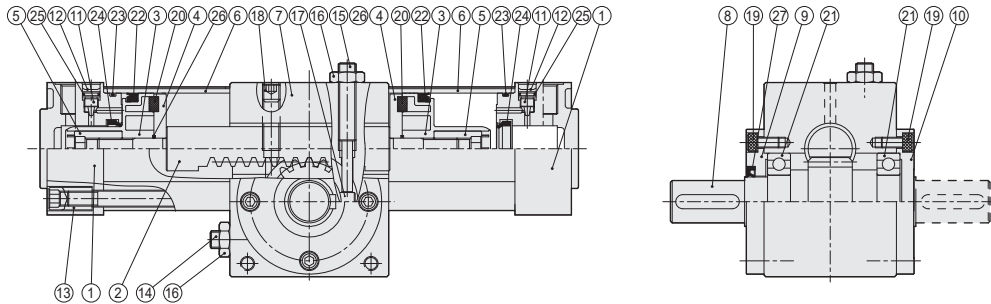
Sensor switch mark:
□ : None
(Without Sensor switch)

RTH series Rotary Cylinder

Product features

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Internal structure



Order code of seal kit

Bore size	Seal kit
40	RTH40 - NO. 22, 23, 24, 26, 27
63	RTH63 - NO. 22, 23, 24, 26, 27
80	RTH80 - NO. 22, 23, 24, 26, 27

Bore size	Seal kit
40	RTH-2D40 - NO. 22, 23, 24, 26, 27
63	RTH-2D63 - NO. 22, 23, 24, 26, 27
80	RTH-2D80 - NO. 22, 23, 24, 26, 27

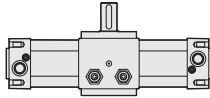
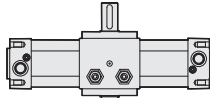
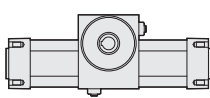
Bore size	Seal kit
40	RTH-F40 - NO. 22, 23, 24, 26, 27
63	RTH-F63 - NO. 22, 23, 24, 26, 27
80	RTH-F80 - NO. 22, 23, 24, 26, 27

Components and material list

No.	Item	Material	No.	Item	Material
01	End cover	Aluminum alloy	15	Adjustment bolt	Alloy steel
02	Gear	Alloy steel	16	Nut	Alloy steel
03	Piston body	Aluminum alloy	17	Stopper pin	Alloy steel
04	Magnet holder	Aluminum alloy	18	Plug	Alloy steel
05	Piston nut	Alloy steel	19	Screw	Alloy steel
06	Cylinder base	Aluminum alloy	20	Magnet	Resinous magnet
07	Body	Aluminum alloy	21	Bearing	Bearing steel
08	Pinion shaft	Alloy steel	22	Piston packing	NBR
09	End cover	Aluminum alloy	23	End cover O-ring	NBR
10	End cover	Aluminum alloy	24	Absorbing packing ring	NBR
11	Absorbing pin	Alloy steel	25	Cushion O-ring	NBR
12	Washer	Spring steel	26	Piston O-ring	NBR
13	Tie screw	Alloy steel	27	Rod packing	NBR
14	Adjustment bolt	Alloy steel			

Weight

Unit: Kg

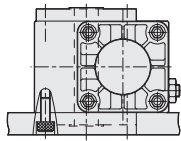
Bore size	RTH model		RTH-2D model		RTH-F model		Sensor bracket
							
	90°	180°	90°	180°	90°	180°	
Ø 40	3.00	3.10	3.05	3.15	2.84	2.94	0.065
Ø 63	5.40	5.80	5.55	5.95	5.07	5.47	0.066
Ø 80	9.75	10.30	9.999	10.54	9.19	9.74	0.086

RTH series Rotary Cylinder

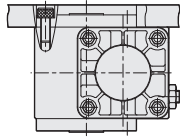
Mounting type, Dimensions

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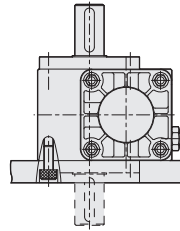
Mounting type



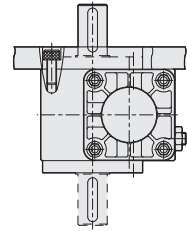
● Inner hole type
(Bottom mounting)



● Inner hole type
(Top mounting)

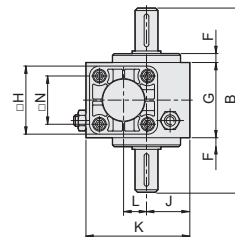
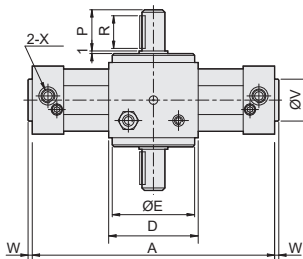
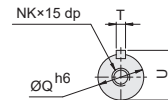
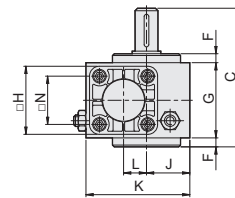
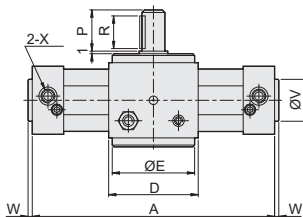
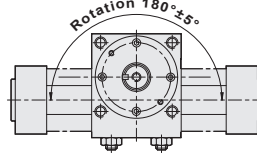
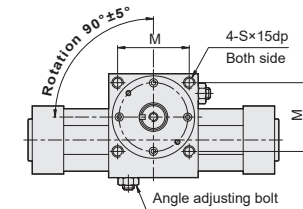


● Standard/Double rod
(Bottom mounting)

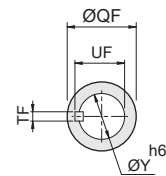
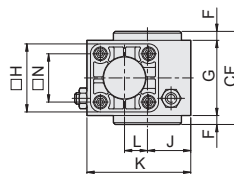
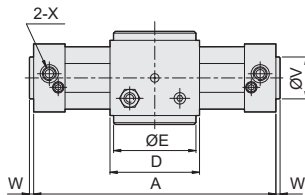


● Standard/Double rod
(Top mounting)

RTH series



Female axis (F)



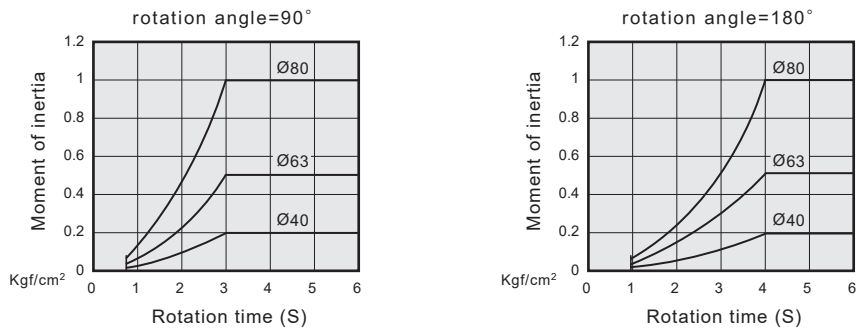
Model	A		B	C	CF	D	E	F	G	H	J	K	L	M	N	NK	P	Q	QF	R	S	T	TF	U	UF	V	W	X	Y	Z
	90°	180°																												
RTH40	263	326	143	112	81	75	72	8	65	53	37.5	93	27.5	60	38	M5	30	16	25	25	M6	5	5	18	16.5	35	4	G1/4	14	M6
RTH63	306	377	181	138	95	90	82	10	75	75	42.5	110	30	70	56.5	M8	42	24	30	36	M8	8	6	27	22	45	5	G3/8	19	M8
RTH80	343	428	221	170	119	105	96	12	95	95	51.5	135	36	82	72	M8	50	28	35	45	M10	8	6	31	27.5	45	6	G3/8	24	M10

RTH series Rotary Cylinder

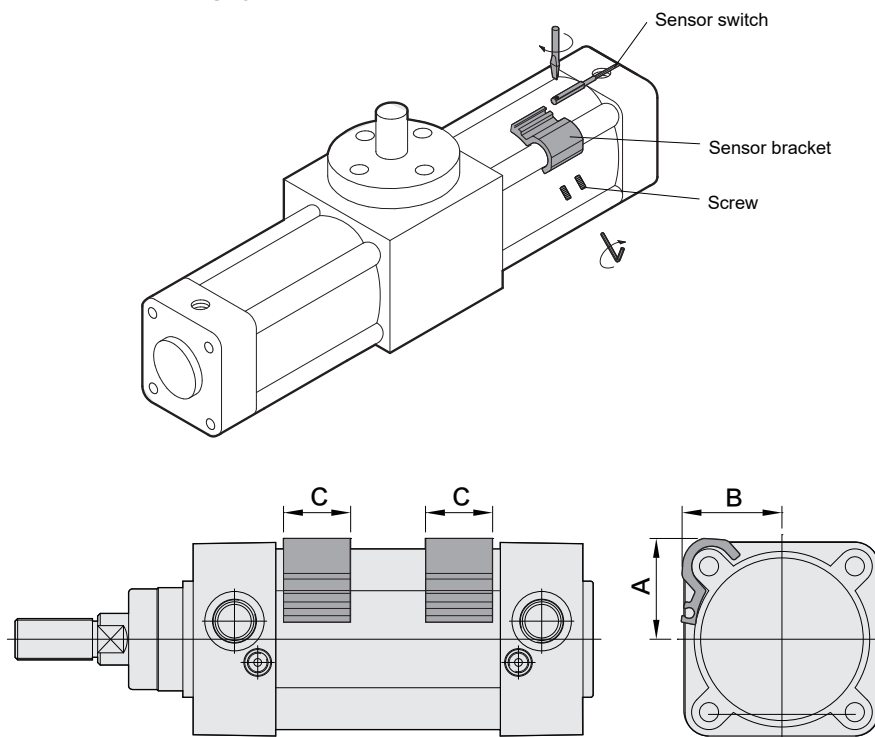
Sensor switch the setting

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Moment of inertia table



Sensor switch mounting type



Sensor switch bracket dimension

Unit: mm

Bore size	40	63	80
A	27.3	39	49.4
B	28	38.7	48
C	26	26	26

RTM

RMF

RTB

RTBM

RTZB

RTP

RTH

RTU

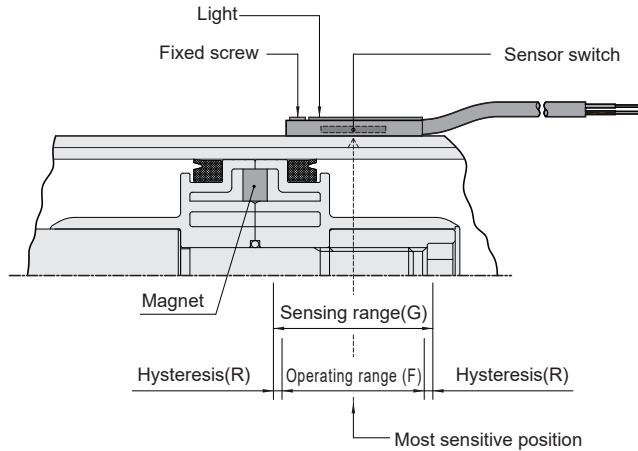
RTH series Rotary Cylinder

Sensor switch operating range

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Sensor switch setting and operating range

- CS-9D(B)



Sensing range

Sensor switch is fixed on the cylinder body. The magnetic piston head will activate the sensor switch when it enters the operating range. It has 0.5mm differential.

Operating range

When piston head moves the switch setting and adjustment will be based on the responding range generated by the magnetic field and the switch. (Please refer to the below table)

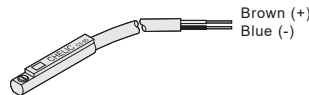
Model

Unit: mm

Bore size	CS-9D(B)	
	Operating range(F)	Hysteresis(R)
40	12	2~3
63	15	2~3
80	20	2~3

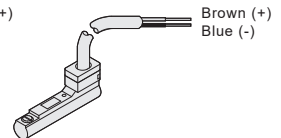
Sensor switch introduction

CS-9D



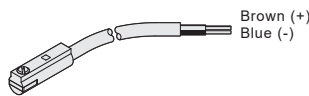
Voltage: DC 5 ~ 120V
AC 5 ~ 120V

CS-9B



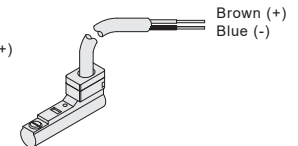
Voltage: DC 5 ~ 120V
AC 5 ~ 120V

CS-8G



Voltage: DC 5 ~ 30V

CS-8B



Voltage: DC 5 ~ 30V