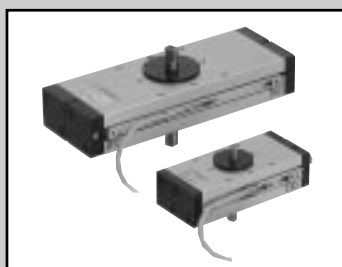
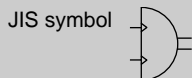


Rotary actuator Rack & pinion type

# RRC Series

- Size: 8, 32, 63
- Oscillating angle: 90°, 180°, 270°



## Specifications

Descriptions	RRC		
Size	8	32	63
Effective torque <sup>Note 1</sup> N·m	0.7	3.1	5.6
Actuation	Rack & pinion type		
Working fluid	Compressed air		
Max. working pressure MPa	1.0		
Min. working pressure <sup>Note 2</sup> MPa	0.1		
Withstanding pressure MPa	1.6		
Ambient temperature °C	-10 to 60 (no freezing)		
Port size	Rc1/8		
Oscillating angle tolerance Degree	90 <sup>±3</sup> , 180 <sup>±3</sup> , 270 <sup>±3</sup>		
Cushion	Rubber cushion	Air cushion	
Effective cushion length mm	-	4.8	5.8
Allowable energy absorption J	0.05	0.21	0.41
Volumetric capacity cm <sup>3</sup>	90°	3	12
	180°	6	24
	270°	9	36
Lubrication	Not required (when lubricating, use turbine oil ISOVG32.)		

Note 1: An effective torque value is a product at working pressure 0.5MPa.

Note 2: When using RRC-8 with maximum oscillating angle, working pressure to be 0.3MPa and over.

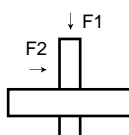
Note 3: Adjustable angle is available as an option. Refer to page 13.

## Maximum load

Load which applies to shaft to be following number or less.

Unit: N

Model no.	RRC-8	RRC-32	RRC-63
Thrust load F1	9.8	39.2	58.8
Radial load F2	19.6	78.4	117.6



## Switch specifications

- 1 color/2 color indicator

Descriptions	Proximity 2 wire			Proximity 3 wire		Reed 2 wire						
	T1H/T1V	T2H/T2V	T2YH/T2YV	T3H/T3V	T3YH/T3YV	T0H/T0V	T5H/T5V	T8H/T8V				
Applications	Programmable controller, relay, small solenoid valve	Programmable controller		Programmable controller, relay		Programmable controller, relay	Programmable controller, relay, IC circuit (without indicator light), serial connection	Programmable controller, relay				
Output method	-	-		NPN output		-						
Power voltage	-	-		10 to 28 VDC		-						
Load voltage	85 to 265 VAC	10 to 30 VDC		30 VDC or less		12/24 VDC	110 VAC	5/12/24 VDC	110 VAC	12/24 VDC	110 VAC	220 VAC
Load current	5 to 100mA	5 to 20mA (Note 1)		100mA or less	50mA or less	5 to 50mA	7 to 20mA	50mA or less	20mA or less	5 to 50mA	7 to 20mA	7 to 10mA
Current consumption	-	-		10mA or less with 24 VDC		-						
Internal voltage drop	7V or less	4V or less		0.5V or less		2.4V or less	0V	3V or less				
Light	LED (ON lighting)	LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	Without indicator light	LED (ON lighting)				
Leakage current	1mA or less with 100 VAC 2mA or less with 200 VAC	1mA or less		10μA or less		0mA						

Note 1: The maximum load current 20mA above is applied at 25°C. The current will be lower than 20mA if ambient temperature around switch is higher than 25°C. (5 to 10mA when 60°C)

Note 2: Refer to Ending 1 for other switch specifications.

## Cylinder weight

Unit: kg

Oscillating angle Model no.	90°	180°	270°	Switch weight (per switch)	Switch bracket		
					90°	180°	270°
RRC-8	0.39	0.43	0.49	0.018	0.005		
RRC-32	1.02	1.23	1.45		0.011	0.013	0.015
RRC-63	1.68	2.03	2.37		0.012	0.014	0.016

(E.g.) Product weight of RRC-8-90-T2H-D

Product weight: 0.39kg

Switch weight: 0.018×2 pcs. = 0.036 kg

Switch bracket weight: 0.005×2 pcs. = 0.010 kg

Product weight: 0.39 kg + 0.036 kg + 0.010 kg = 0.436 kg

## How to order

Without switch



With switch



A Size

B Maximum oscillating angle

C Switch model no.

\* indicates lead wire length.

D Switch quantity

E Option

<Example of model number>

**RRC-8-90-T2H-R-A**

Model: Rotary actuator rack & pinion type

A Size: 8

B Maximum oscillating angle: 90°

C Switch model no.: proximity T2H switch, lead wire 1m

D Switch quantity: clockwise rotation detection

E Option: adjustable angle

## How to order switch

● Switch body + mounting bracket (including rail)

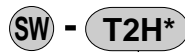


Switch model no. (Item C above)

Size (Item A above)

Maximum oscillating angle (Item B above)

● Only switch body



Switch model no. (Item C above)

● Mounting bracket (including rail)



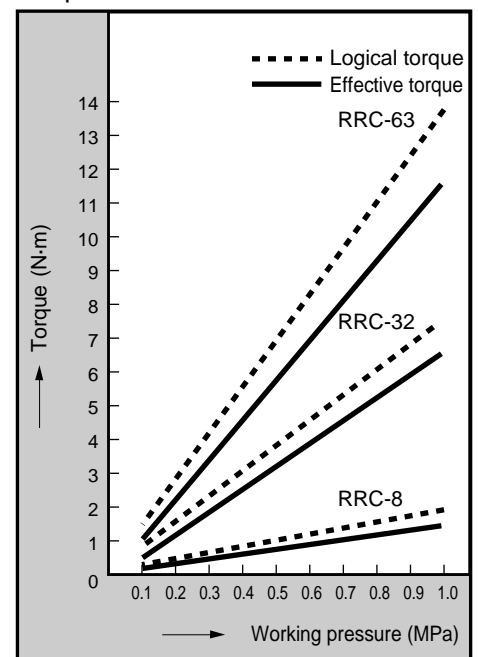
Bracket

Size (Item A above)

Maximum oscillating angle (Item B above)

Symbol	Descriptions				
<b>A</b>	<b>Size</b>				
<b>Model no.</b>	<b>Effective torque</b>				
8	0.7 (N·m)				
32	3.1 (N·m)				
63	5.6 (N·m)				
<b>B</b>	<b>Maximum oscillating angle</b>				
90	90°				
180	180°				
270	270°				
<b>C</b>	<b>Switch model no.</b>				
<b>Axial lead wire</b>	<b>Radial lead wire</b>	<b>Contact</b>	<b>Indicator</b>	<b>Lead wire</b>	
T0H*	T0V*	Reed	1 color indicator type	2-wire	
T5H*	T5V*		w/o light		
T8H*	T8V*		1 color indicator type		
T1H*	T1V*	Proximity	1 color indicator type	2-wire	
T2H*	T2V*			3-wire	
T3H*	T3V*		2-wire		
T2YH*	T2YV*		3-wire		
T3YH*	T3YV*		2 color indicator type		
T3PH*	T3PV*		1 color indicator type (custom order)		
<b>*Lead wire length</b>					
Blank	1m (standard)				
3	3m (option)				
5	5m (option)				
<b>D</b>	<b>Switch quantity</b>				
R	Clockwise rotation detection				
L	Counterclockwise rotation detection				
D	Two				
<b>E</b>	<b>Option</b>				
A	Adjustable angle				
P6	Copper and PTFE free				

## Torque



RRC
GRC
RV3*
NHS
HR
LN
FH100
HAP
BSA2
BHA/BHG
LHA
LHAG
HKP
HLA/HLB
HLAG/HLBG
HEP
HCP
HMF
HMFB
HFP
HLC
HGP
FH500
HLB
HDL
HMD
HJL
BHE
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2 *-HC
CKH2
CKLB2
NCK/SCK/FCK
FJ
FK
Ending
Rotary actuator
Oscillation, rotation drive type