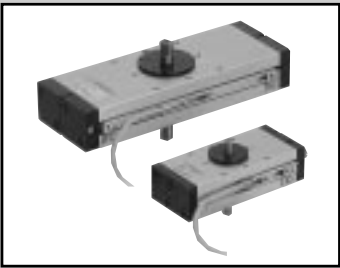


RRC
GRC
RV3*
NHS
HR
LN
FH100
HAP
BSA2
BHA/
BHG
LHA
LHAG
HKP
HLA/
HLB
HLAG/
HLBG
HEP
HCP
HMF
HMFb
HFP
HLC
HGP
FH500
HBL
HDL
HMD
HJL
BHE
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2
-*,HC
CKH2
CKLB2
NCK/
SCK/FC
FJ
FK
Ending



Rotary actuator Rack & pinion type

RRC Series

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

JIS symbol



Specifications

Descriptions	RRC		
Size	8	32	63
Effective torque ^{Note 1} 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 ^{Note 2} 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 ⁺³ ₋₁ , 180 ⁺³ ₋₁ , 270 ⁺³ ₋₁		
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 ³	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.

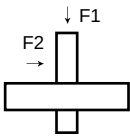
Note 3: Adjustable angle is available as an option. Refer to page 13.

Maximum load

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

Unit: N

Model no.	RRC-8	RRC-32	RRC-63
Load direction			
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
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
Current consumption	-	-		10mA or less with 24 VDC		20mA or less	5 to 50mA	7 to 20mA
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	90°	180°	270°	Switch weight (per switch)	Switch bracket		
Model no.					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

RRC - **8** - **90** - _____ - **A**

With switch

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

A Size

B Maximum oscillating angle

C Switch model no.

* indicates lead wire length.

<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

D Switch quantity

E Option

How to order switch

● Switch body + mounting bracket (including rail)

RRC - **T2H*** - **8** - **90**

Switch model no. (Item **C** above)

Size (Item **A** above)

Maximum oscillating angle (Item **B** above)

● Mounting bracket (including rail)

RRC - **T** - **8** - **90**

Bracket

Size (Item **A** above)

Maximum oscillating angle (Item **B** above)

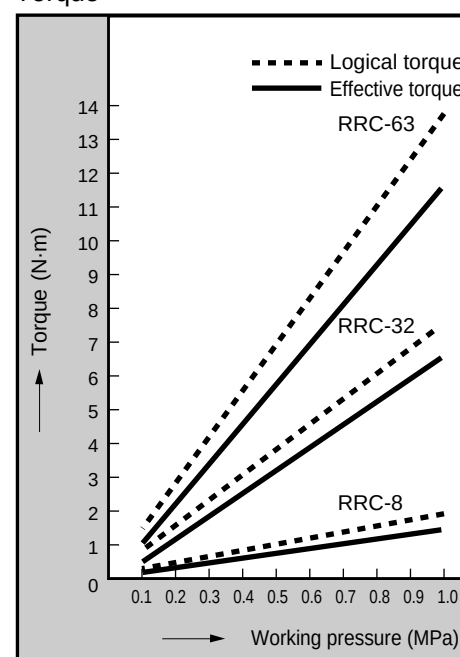
● Only switch body

SW - **T2H***

Switch model no. (Item **C** above)

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