

# Compact Rotary Actuator Rack & Pinion Type **CRQ2 Series**

## How to Order

Without auto switch

CRQ2B S 20 90

With auto switch

CDRQ2B S 20 90 M9BW

Built-in magnet

Shaft type

S	Single shaft
W	Double shaft

\* Refer to pages 243 and 244 for the shaft type variations.

Pattern

Nil	Standard
P	Combination of simple specials and Made to Order

\* Refer to pages 246 to 260 for details.

Size

10
15
20
30
40

Port type

Size	Port type	
10, 15	Nil	M5
20, 30, 40	Nil	Rc 1/8
	TF	G 1/8
	TN	NPT 1/8
	TT	NPTF 1/8

Number of auto switches

Nil	2 pcs.
S	1 pc.
n	n pcs.

Auto switch

Nil Without auto switch (Built-in magnet)

\* For the applicable auto switch model, refer to the table below.

Suffix symbol

Symbol	Cushion	Size			
		10	15	20	30 40
Nil	Without cushion	—	—	●	●
	Rubber bumper	●	●	—	—
C	Air cushion	—	—	●	●

Made to Order

Refer to page 236 for details.

Rotating angle

90	80° to 100°
180	170° to 190°
360	350° to 370°

## Applicable Auto Switches

Refer to pages 797 to 850 for further information on auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model		Lead wire length (m)			Pre-wired connector	Applicable load		
					DC	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)		5 (Z)	IC circuit	Relay, PLC
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NV	M9N	●	●	○	—	—	
				3-wire (PNP)				M9PV	M9P	●	●	○			IC circuit
				2-wire	M9BV	M9B	●	●	○	○	—				
	Diagnostic indication (2-color)			3-wire (NPN)	M9NWW	M9NW	●	●	○	○	—	IC circuit	Relay, PLC		
				3-wire (PNP)	M9PWW	M9PW	●	●	○	○					
				2-wire	M9BWW	M9BW	●	●	○	○	—				
Water resistant (2-color)	3-wire (NPN)	M9NAV <sup>*1</sup>	M9NA <sup>*1</sup>	○	○	○	○	—	IC circuit	—					
	3-wire (PNP)	M9PAV <sup>*1</sup>	M9PA <sup>*1</sup>	○	○	○	○								
	2-wire	M9BAV <sup>*1</sup>	M9BA <sup>*1</sup>	○	○	○	○	—							
Reed auto switch	—	Grommet	Yes	3-wire (NPN equiv.)	24 V	12 V	—	A96V	A96	●	—	—	—	IC circuit	
				2-wire				A93V <sup>*2</sup>	A93	●	●	●			—
				No	—	A90V	A90	●	—	—	—	IC circuit			

\*1 Although it is possible to mount water resistant type auto switches, note that the rotary actuator itself is not of water resistant construction.

\*2 1 m type lead wire is only applicable to D-A93.

\* Lead wire length symbols: 0.5 m ..... Nil (Example) M9NW  
1 m ..... M (Example) M9NWM  
3 m ..... L (Example) M9NWL  
5 m ..... Z (Example) M9NWX

\* Auto switches marked with "○" are made to order specification.

\* Refer to pages 837 and 838 for the details of solid state auto switch with pre-wired connector.

\* Auto switches are shipped together, (but not assembled).