

Rotary Actuator with Angle Adjuster Vane Style

Series *CRB2BWU*

Size: 10, 15, 20, 30, 40



How to Order

Without auto switch

CRB2 **B** WU **10** - **180** **S**

With auto switch
Size: 10, 15

CDRB2 **F** WU **10** - **180** **S** - **T99** **L**

With auto switch
Size: 20, 30, 40

CDRB2 **B** WU **20** - **180** **S** - **T79** **L**

With auto switch
(With auto switch unit and built-in magnet)
* Refer to page 141 when the auto switch unit is needed separately.



Mounting style

B	Basic style
F	Flange style

* F: Except size 40

With angle adjuster

Pattern

Nil	Standard
P	Simple Specials/Made to Order

* For details, refer to pages 69 to 80.

Size
10
15

Size
20
30
40

Vane type
S Single vane
D Double vane

Rotating angle

	Single vane		Double vane	
	90	180	90	180
90°				
180°				
270°				
100°				

Auto switch

Nil	Without auto switch (built-in magnet)
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* For the applicable auto switch model, refer to the table below.

Size
10
15
20
30
40

Made to Order
Refer to the table below for details.

Number of auto switches

S	1 pc. *
Nil	2 pcs. **

* S (1 auto switch) is shipped with a right-hand auto switch.

** Nil (2 auto switches) is shipped with a right-hand and a left-hand switch.

Electrical entry/Lead wire length

Nil	Grommet/Lead wire	0.5 m
L	Grommet/Lead wire	3 m
C	Connector/Lead wire	0.5 m
CL	Connector/Lead wire	3 m
CN	Connector/without lead wire	

* Connectors are available only for auto switch types R73, R80 and T79.

** Lead wire with connector part nos.

D-LC05: Lead wire 0.5 m

D-LC30: Lead wire 3 m

D-LC50: Lead wire 5 m

Applicable Auto Switches/Refer to pages 761 to 809 for further information on auto switches.

Applicable size	Type	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model	Lead wire type	Lead wire length (m) *				Applicable load
					DC	AC			0.5 (Nil)	3 (L)	5 (Z)	None (N)	
For 10 and 15	Solid state switch	Grommet	Yes	2-wire	12V		T99	Heavy-duty cord	●	●	—	—	IC circuit Relay, PLC
				3-wire (NPN)	5V, 12V		T99V		●	●	—	—	
				3-wire (PNP)	24V		S99		●	●	—	—	
				3-wire (PNP)	5V, 12V		S99V		●	●	—	—	
				3-wire (PNP)	24V		S9P		●	●	—	—	
	Reed switch	Grommet	No	2-wire	5V, 12V	24 V or less 100 V or less	90	Parallel cord	●	●	●	—	IC circuit Relay, PLC
				2-wire	5V, 12V	24 V or less 100 V or less	90A	Heavy-duty cord	●	●	●	—	
				2-wire	—	—	97	Parallel cord	●	●	●	—	
				2-wire	—	100V	93A	Heavy-duty cord	●	●	●	—	
				2-wire	—	100V	93A	Heavy-duty cord	●	●	●	—	
For 20, 30 and 40	Solid state switch	Grommet	Yes	2-wire	12V		T79	Heavy-duty cord	●	●	—	—	IC circuit Relay, PLC
				3-wire (NPN)	5V, 12V		T79C		●	●	●	●	
				3-wire (PNP)	24V		S79		●	●	—	—	
				3-wire (PNP)	5V, 12V		S7P		●	●	—	—	
				3-wire (PNP)	24V		S7P		●	●	—	—	
	Reed switch	Grommet	Yes	2-wire	—	100V	R73	Heavy-duty cord	●	●	—	—	IC circuit
				2-wire	—	—	R73C		●	●	●	●	
				2-wire	—	—	R80		●	●	—	—	
				2-wire	—	—	R80C		●	●	—	—	
				2-wire	—	—	R80C		●	●	—	—	

* Lead wire length symbols: 0.5 m Nil (Example) R73C
3 m L (Example) R73CL
5 m Z (Example) R73CZ
None N (Example) R73CN



Made to Order

(Refer to pages 69 to 73, 79 and 80 for details.)

Symbol	Specifications/Description
XA1 to XA24	Shaft type pattern
XC 1	Add connection port
XC 2	Change threaded hole to through-hole
XC 3	Change the screw position
XC 4	Change rotation range
XC 5	Change rotation range between 0 and 200°
XC 6	Change rotation range between 0 and 110°
XC 7	Reversed shaft
XC30	Fluorine grease

The above may not be selected when the product comes with an auto switch or angle adjustment unit. Refer to pages 69, 70 and 79 for details.

CRB2

CRBU2

CRB1

MSU

CRJ

CRA1

CRQ2

MSQ

MSZ

CRQ2X

MSQX

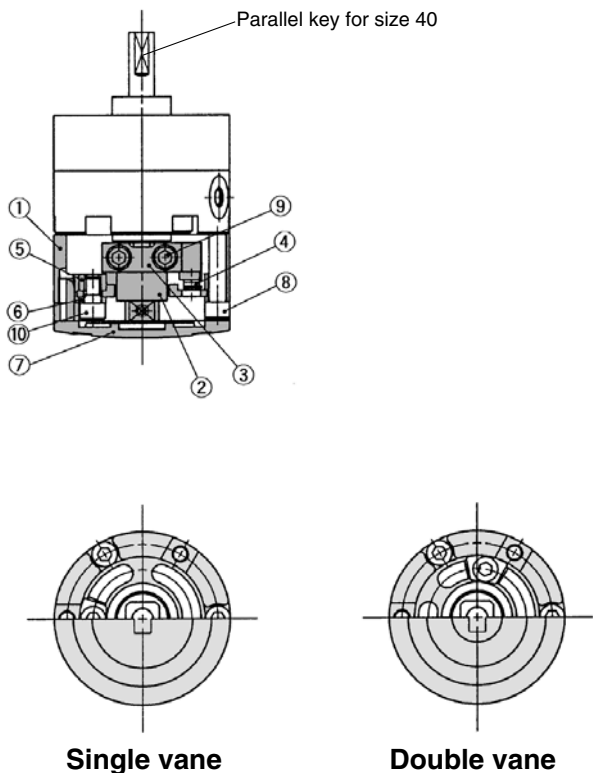
MRQ

D-□

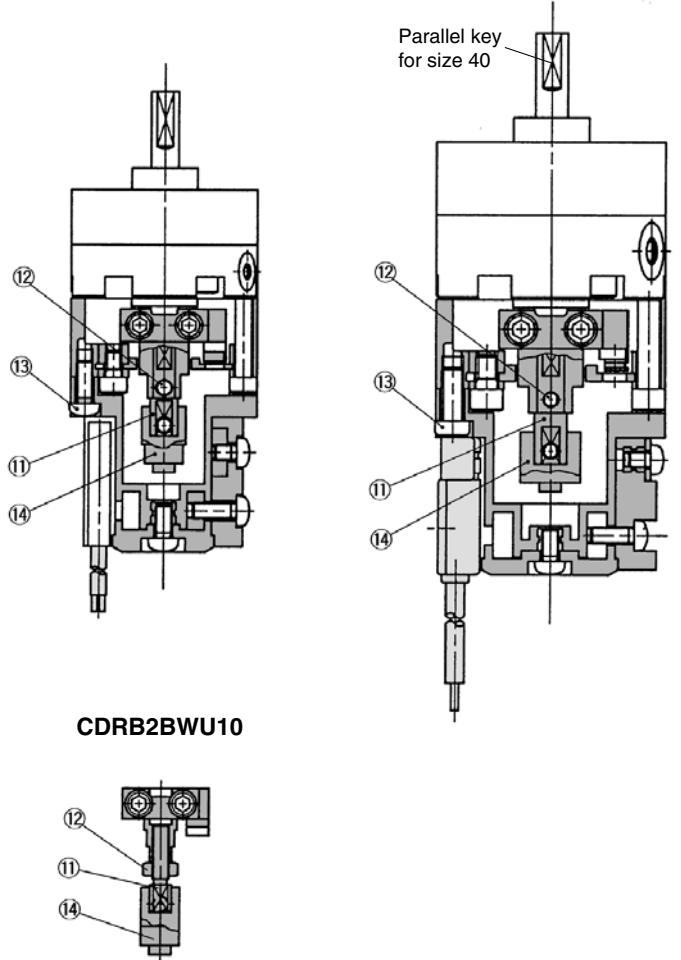
Series CRB2BWU

Construction (Same switch units are used for both single and double vane type.)

With angle adjuster
CRB2BWU10/15/20/30/40-□^S_D



With angle adjuster + Auto switch unit
CDRB2BWU10/15-□^S_D CDRB2BWU20/30/40-□^S_D



Component Parts

No.	Description	Material	Note
1	Stopper ring	Aluminum die-casted	Electroless nickel plated
2	Stopper lever	Carbon steel	Electroless nickel plated
3	Lever retainer	Carbon steel	Zinc chromated
4	Rubber bumper	NBR	
5	Stopper block	Carbon steel	Zinc chromated
6	Block retainer	Carbon steel	Zinc chromated
7	Cap	Resin	
8	Hexagon socket head cap screw	Stainless steel	Special screw
9	Hexagon socket head cap screw	Stainless steel	Special screw
10	Hexagon socket head cap screw	Stainless steel	Special screw
11	Joint	Aluminum alloy	Note) Zinc chromated
12	Hexagon socket head cap screw	Stainless steel	Hexagon nut will be used
13	Hexagon nut	Stainless steel	for size 10 only.
14	Round head Phillips screw	Stainless steel	Note)
15	Magnet lever	—	Note)

Note) These items (No. 11, 13, and 14) consist of auto switch unit and angle adjuster. Refer to pages 140 and 141 for detailed specifications. Stainless steel is used for size 10 only.

⚠ Precautions

Be sure to read before handling. Refer to front matters 38 and 39 for Safety Instructions and pages 4 to 13 for Rotary Actuator and Auto Switch Precautions.

Angle Adjuster

⚠ Caution

1. Since the maximum angle of the rotation adjustment range will be limited by the rotation of the rotary actuator itself, make sure to take this into consideration when ordering.

Rotating angle of the rotary actuator	Rotating angle adjustment range
270° ⁺⁴ ₀	0° to 230° (Size: 10, 40) *1
180° ⁺⁴ ₀	0° to 240° (Size: 15, 20, 30)
90° ⁺⁴ ₀	0° to 175°
	0° to 85°

*1 The maximum adjustment angle of the angle adjuster for size 10 and 40 is 230°.

- Connection ports are side ports only.
- The allowable kinetic energy is the same as the specifications of the rotary actuator by itself (i.e., without angle adjuster).
- Use a 100° rotary actuator if you desire to adjust the angle to 90° using a double vane type.