



# Sine Rodless Cylinder Direct Mount Type **REBR Series**

## Specifications



### Symbol

Air cushion  
(Magnet type)



**Made to Order Specifications**  
[Click here for details](#)

Symbol	Specifications
-XC57	With Floating Joint

Bore size (mm)	15	25	32
Fluid	Air		
Proof pressure	1.05 MPa		
Maximum operating pressure	0.7 MPa		
Minimum operating pressure	0.18 MPa		
Ambient and fluid temperature	-10 to 60°C (No freezing)		
Piston speed (Max.) <sup>(Note)</sup>	50 to 600 mm/s		
Lubrication	Not required (Non-lube)		
Stroke length tolerance (mm)	0 to 250 st: $^{+1.0}_0$ , 251 to 1000 st: $^{+1.4}_0$ , 1001 st and up to: $^{+1.8}_0$		
Leading force (N)	137	363	588

Note) Piston speed above indicates the maximum speed. It takes approximately 0.5 seconds (for one side) after the body moves from the stroke end until it goes through the cushion stroke, while it takes approximately 1 second for both sides.

## Standard Stroke

Bore size (mm)	Standard stroke (mm)	Maximum manufacturable stroke (mm)	Maximum stroke with switch (mm)
15	150, 200, 250, 300, 350, 400, 450, 500	1000	750
25	200, 250, 300, 350, 400, 450	2000	1500
32	500, 600, 700, 800		

Note) Intermediate stroke is available in 1 mm increments.

## Weight

Item	Bore size (mm)	(kg)		
		15	25	32
Basic weight (for 0 st)	REBR□ (with switch rail)	0.277	0.660	1.27
	REBR□-□N (without switch rail)	0.230	0.580	1.15
Additional weight per each 50 mm of stroke (when equipped with switch rail)		0.045	0.083	0.113
Additional weight per each 50 mm of stroke (when not equipped with switch rail)		0.020	0.050	0.070

Calculation: (Example) REBR25-500 (with switch rail)

- Basic weight ..... 0.660 (kg)
- Additional weight ..... 0.083 (kg/50 st)
- Cylinder stroke ..... 500 (st)
- 0.660 + 0.083 x 500 + 50 = 1.49 kg

REA

REB

REC

Smooth

Low Speed

MQ

RHC

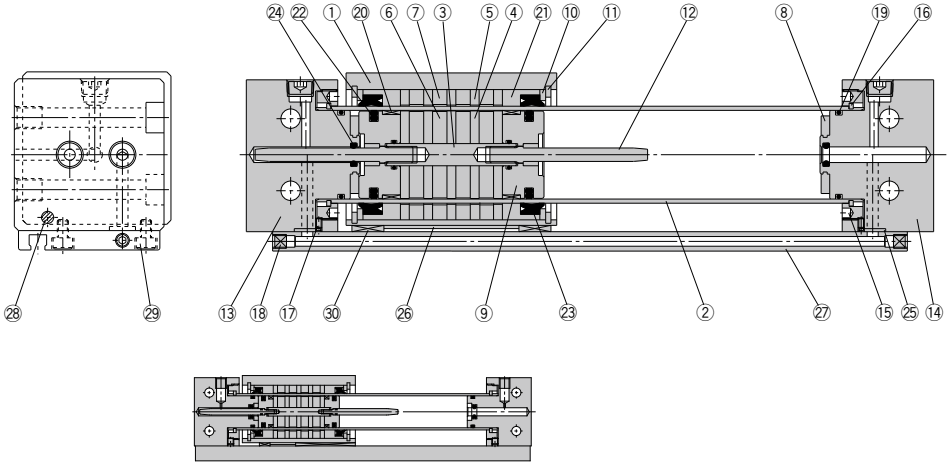
RZQ

D-□

-X□

# REBR Series

Construction:  $\varnothing 15$ ,  $\varnothing 25$ ,  $\varnothing 32$



REBR15

## Component Parts

No.	Description	Material	Note
1	Body	Aluminum alloy	Hard anodized
2	Cylinder tube	Stainless steel	
3	Shaft	Stainless steel	
4	Piston side yoke	Roller steel plate	Zinc chromated
5	External slider side yoke	Roller steel plate	Zinc chromated
6	Magnet A	—	
7	Magnet B	—	
8	Bumper	Urethane rubber	Except REBR15
9	Piston	Aluminum alloy	Chromated
10	Spacer	Roller steel plate	Nickel plated
11	Retaining ring	Carbon tool steel	Phosphate coated
12	Cushion ring	Stainless steel Brass	REBR15, 25 REBR32 Compound electroless nickel plated
13	End cover A	Aluminum alloy	Hard anodized
14	End cover B	Aluminum alloy	Hard anodized
15	Attachment ring	Aluminum alloy	Hard anodized
16	Type C retaining ring for axis	Hard steel wire material Stainless steel	Nickel plated (REBR15) REBR25, 32
17	Hexagon socket head set screw	Chromium steel	Nickel plated
18	Hexagon socket head plug	Chromium steel	Nickel plated
19	Cylinder tube gasket	NBR	

## Component Parts

No.	Description	Material	Note
20	Wear ring A	Special resin	
21	Wear ring B	Special resin	
22	Piston seal	NBR	
23	Scraper	NBR	
24	Cushion seal	NBR	
25	Switch rail gasket	NBR	
26	Magnetic shielding plate	Roller steel plate/Chromated	
27	Switch rail	Aluminum alloy/Clear anodized	
28	Magnet	—	
29	Hexagon socket head cap screw	Chromium steel/Nickel plated	
30	Wear ring C	Special resin	

## Replacement Parts: Seal Kit

Bore size (mm)	Kit no.	Contents
15	REBR15-PS	A set of 19, 20, 21, 22, 23, 24, 25, 29 listed above
25	REBR25-PS	
32	REBR32-PS	

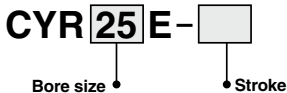
Note) Cushion seal 24 may be difficult to be replaced.

\* Seal kit includes a grease pack (10 g).

Order with the following part number when only the grease pack is needed.

Grease pack part no.: GR-S-010 (10 g)

## Switch Rail Accessory Kit



## Switch Rail Accessory Kit

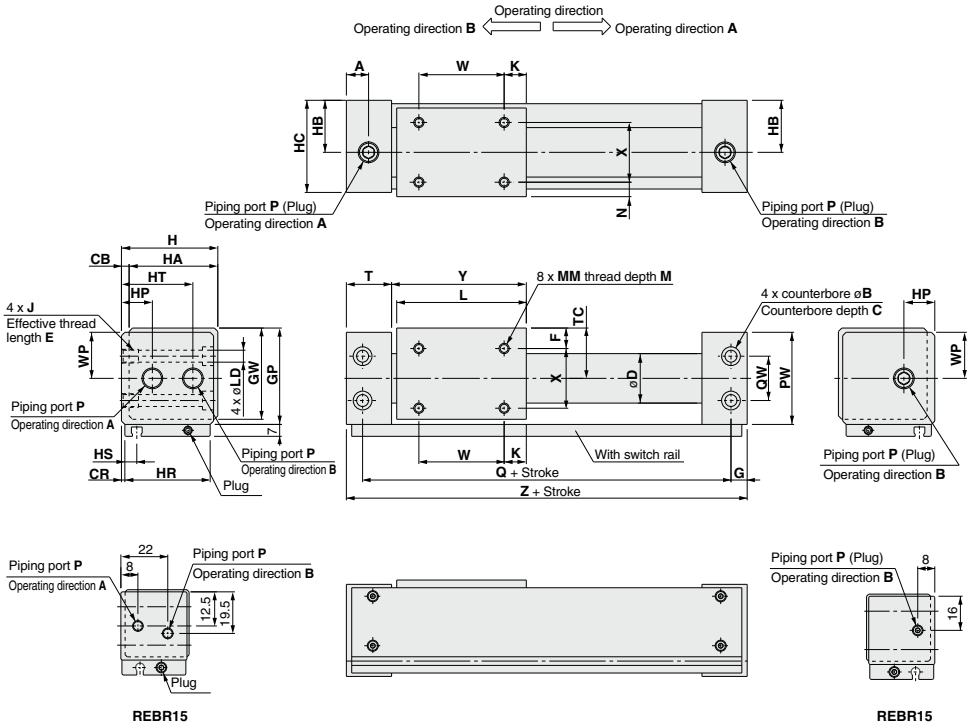
Bore size (mm)	Kit no.	Contents
15	CYR15E-□	Above nos. 26, 27, 28, 29, 30
25	CYR25E-□	
32	CYR32E-□	

Note 1) □ indicates the stroke.

Note 2)  $\varnothing 15$  has internal magnets in the body.

# Sine Rodless Cylinder Direct Mount Type **REBR Series**

Dimensions:  $\varnothing 15, \varnothing 25, \varnothing 32$



- REA
- REB**
- REC
- Smooth
- Low Speed
- MQ
- RHC
- RZQ

REBR15

REBR15

Model	A	B	C	CB	CR	D	F	G	GP	GW	H	HA	HB	HC	HP	HR	HS	HT
REBR15	12	8	4.2	2	0.5	17	8	7	33	31.5	32	30	17	31	—	30	8.5	—
REBR25	12.5	9.5	5.2	3	1	27.8	8.5	10	44	42.5	44	41	23.5	43	14.5	41	6.5	33.5
REBR32	19.5	11	6.5	3	1.5	35	10.5	16	55	53.5	55	52	29	54	20	51	7	39

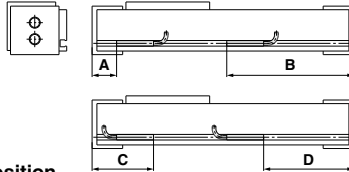
Model	J x E	K	L	LD	M	MM	N	P	PW	Q	QW	T	TC	W	WP
REBR15	M5 x 0.8 x 7	14	53	4.3	5	M4 x 0.7	6	M5 x 0.8	32	84	18	21	17	25	—
REBR25	M6 x 1 x 8	15	70	5.6	6	M5 x 0.8	6.5	1/8	43	105	20	25.5	22.5	40	21.5
REBR32	M8 x 1.25 x 10	13	76	7	7	M6 x 1	8.5	1/8	54	116	26	33	28	50	27

Model	X	Y	Z
REBR15	18	54.5	98
REBR25	28	72	125
REBR32	35	79	148

- D
- X

# Auto Switch Mounting

## Auto Switch Proper Mounting Position (Detection at Stroke End)



### Auto Switch Proper Mounting Position ø15, ø25, ø32

Auto switch model Bore size	A		B		C		D	
	D-A9□	D-M9□ D-M9□W D-M9□A	D-A9□	D-M9□ D-M9□W D-M9□A	D-A9□	D-M9□ D-M9□W D-M9□A	D-A9□	D-M9□ D-M9□W D-M9□A
15	19.5	23.5	78.5	74.5	—	—	58.5	62.5
25	23	27	102	98	46	42	79	83
32	31.5	35.5	116.5	112.5	54.5	50.5	93.5	87.5

Note 1) Auto switches cannot be installed in Area C in the case of ø15.  
Note 2) Adjust the auto switch after confirming the operating conditions in the actual setting.

### ø25, ø32

Auto switch model Bore size	A				B				C				D			
	D-Z7□ D-Z80 D-Y59□ D-Y7P D-Y7□W D-Y7BA	D-Z7□ D-Z80 D-Y59□ D-Y7P D-Y7□W D-Y7BA	D-Z7□ D-Z80 D-Y59□ D-Y7P D-Y7□W D-Y7BA	D-Z7□ D-Z80 D-Y59□ D-Y7P D-Y7□W D-Y7BA	D-Z7□ D-Z80 D-Y59□ D-Y7P D-Y7□W D-Y7BA	D-Z7□ D-Z80 D-Y59□ D-Y7P D-Y7□W D-Y7BA	D-Z7□ D-Z80 D-Y59□ D-Y7P D-Y7□W D-Y7BA	D-Z7□ D-Z80 D-Y59□ D-Y7P D-Y7□W D-Y7BA	D-Z7□ D-Z80 D-Y59□ D-Y7P D-Y7□W D-Y7BA	D-Z7□ D-Z80 D-Y59□ D-Y7P D-Y7□W D-Y7BA	D-Z7□ D-Z80 D-Y59□ D-Y7P D-Y7□W D-Y7BA	D-Z7□ D-Z80 D-Y59□ D-Y7P D-Y7□W D-Y7BA	D-Z7□ D-Z80 D-Y59□ D-Y7P D-Y7□W D-Y7BA	D-Z7□ D-Z80 D-Y59□ D-Y7P D-Y7□W D-Y7BA	D-Z7□ D-Z80 D-Y59□ D-Y7P D-Y7□W D-Y7BA	
25	22	103	47	78												
32	30.5	117.5	55.5	92.5												

Note ) Adjust the auto switch after confirming the operating conditions in the actual setting.

## Operating Range

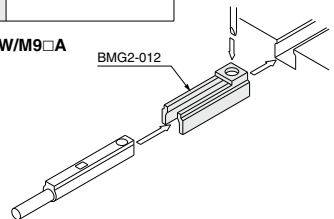
Auto switch model	Bore size (mm)		
	15	25	32
D-A9□	8	7.5	8
D-M9□W D-M9□ D-M9□A	4.5	5.5	4.5
D-Z7□/Z80	—	9	9
D-Y5□/Y7P/Y7□W/Y7BA	—	7	6

\* Since this is a guideline including hysteresis, not meant to be guaranteed.  
(assuming approximately ±30% dispersion)  
There may be the case it will vary substantially depending on an ambient environment.

## Auto Switch Specifications

Auto switch model	Bore size (mm)	
	ø25, ø32	
D-A9□ D-M9□ D-M9□W D-M9□A	BMG2-012	

D-A9□/M9□/M9□W/M9□A



Other than the models listed in “How to Order”, the following auto switches are applicable.  
For detailed specifications, refer to pages 941 to 1067.

Auto switch type	Model	Electrical entry (Fetching direction)	Features	Applicable bore size
Reed	D-Z73, Z76	Grommet (In-line)	—	ø25, ø32
	D-Z80		Without indicator light	
Solid state	D-Y59A, Y59B, Y7P	Grommet (In-line)	—	
	D-Y7NW, Y7PW, Y7BW		Diagnostic indication (2-color indicator)	
	D-Y7BA		Water resistant (2-color indicator)	

\* For solid state auto switches, auto switches with a pre-wired connector are also available. Refer to pages 1014 and 1015 for details.  
\* Normally closed (NC = b contact) solid state auto switches (D-M9□E(V)/Y7G(Y7H)) are also available. Refer to pages 1592-1 and 961 for details.