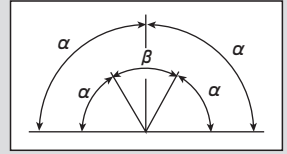


Rotor Table (With Swivel Joint)

RT01 Series

What is multiposition stop type?

It stops at 3 or 4 points as shown in the figure on the right. Angles α and β are designated.



Through-Hole

◆ Used for wiring, etc.

Air Pipe/Lead Wire Takeout Groove

Body Mountable from Up or Down

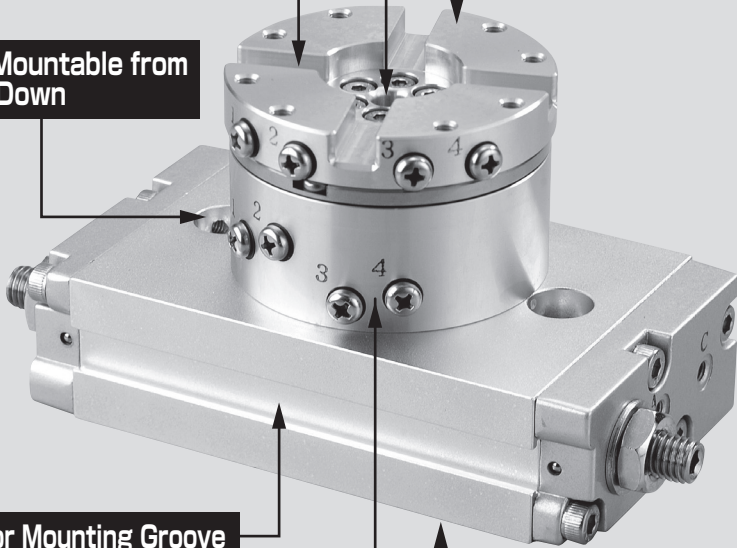
High Accuracy Table

- ◆ High accuracy/high rigidity bearing
- ◆ Load directly attachable

Sensor Mounting Groove

◆ 2 types of sensors mountable

Centering Reference Hole on the back face



Rotor

Rotor Table (With Swivel Joint)

RT01 Series

Multiposition Stop Type (Stop at 3 or 4 Positions) Built-in Air Cushion (Stop at 2 Positions)

RT01 Series (D)

Model Code No.

RT01 - 18 D - $\alpha + \beta$ * ZC253 A 2

Series Name

Nominal Diameter

18:18mm
22:22mm

Basic Structure

D: Multiposition Stop Type
(3-position or 4-position Stop Type)

Rocking Angle

α : 3-position Stop Type
 $2\alpha \leq 180^\circ$
 $\alpha + \beta$: 4-position Stop Type
 $2\alpha + \beta \leq 180^\circ$

Switch Type	Switch Lead Wire Length	Number of Switches
No Code: No Switch	—	—
ZC230: 2 Wire System Solid State	A: 1m	1:1 Switch
ZC253: 3 Wire System Solid State	B: 3m	2:2 Switches
EC22: 2 Wire System Solid State		3:3 Switches
EC23: 3 Wire System Solid State		4:4 Switches

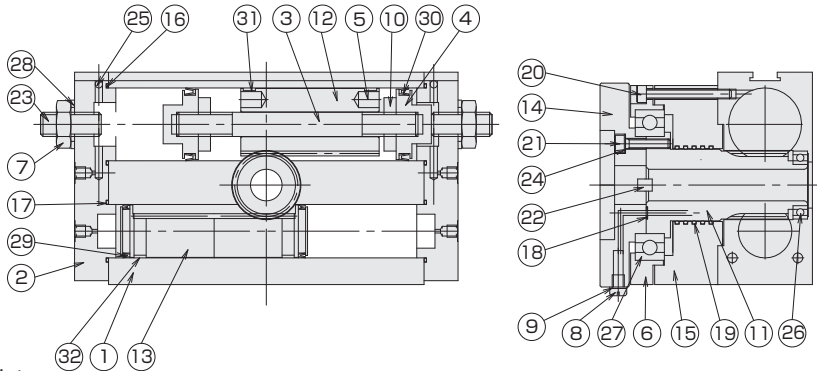
● Switch details → P.521~528

● Switch mounting → P.538~539

Type Indication Examples

3-position Stop Type		4-position Stop Type	
RT01-18D-90	RT01-18D-45	RT01-18D-45+90	RT01-18D-45+60

Internal Structure Diagram



Parts List

NO	Name	Material	NO	Name	Material	NO	Name	Material
1	Main Body	Aluminum Alloy	12	Rack	Stainless Steel	23	Hexagon Socket Head Setscrew	Carbon Tool Steel
2	Head Cover	Aluminum Alloy	13	Rack Piston	Carbon Steel	24	Conical Spring Washer	Carbon Steel
3	Piston Rod	Carbon Steel	14	Table	Aluminum Alloy	25	Steel Ball	Bearing Steel
4	Piston	Stainless Steel	15	Case	Aluminum Alloy	26	Bearing	Bearing Steel
5	Magnet	Magnetic Body	16	O Ring	NBR	27	Bearing	Bearing Steel
6	Pressure Cover	Soft Steel	17	O Ring	NBR	28	Fastener Seal	Soft Steel + NBR
7	Hexagon Nut	Soft Steel	18	O Ring	NBR	29	Packing	NBR
8	Plug	Brass	19	O Ring	NBR	30	Packing	NBR
9	Gasket	Soft Steel + NBR	20	Hexagon Socket Head Bolt	Carbon Tool Steel	31	Wearing	Teflon
10	Tightening Nut	Brass	21	Hexagon Socket Head Bolt	Carbon Tool Steel	32	Wearing	Teflon
11	Pinion Rod	Carbon Steel	22	Key	Carbon Steel			

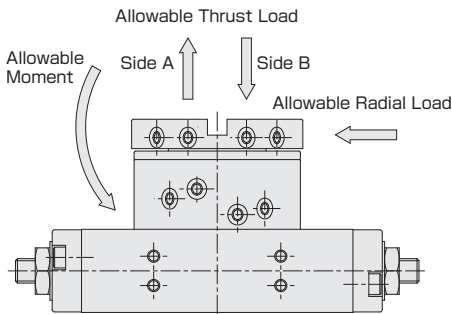
Specifications

Model	RT01-18D		RT01-22D	
Bore Size [mm]	$\phi 18+\phi 26$		$\phi 22+\phi 30$	
Fluid	Air			
Operating Pressure [MPa]	0.35~0.7			
Proof Pressure [MPa]	1.05			
Operating Temperature [°C]	0~60 (No Freezing)			
Rocking Angle [°]	MIN	$\alpha=10$	$\alpha=7$	
	MAX	3-Position Stop Type : $2\alpha\leq 180^\circ$ 4-Position Stop Type : $2\alpha+\beta\leq 180^\circ$		
Minimum Switch Detection Angle [°]	18		15	
Angle Adjustment 180° specification($2\alpha+\beta$) [°]	5~60 (Rocking is enabled between 120° and 185°.)			
Theoretical Torque [N·m]	2.8P		4.2P	
Allowable Energy [J]	7×10^{-2}		0.11	
Pipe Bore	M5×0.8			
Cushion Structure	None			
Fueling	Rotor	Not Required		
	Case	Required (Turbine oil (ISO VG32) shall be used. However, lithium grease may be used as a substitute.)		
Product Mass [g]	1630		2570	

Theoretical torque P: Indicates the working pressure.(MPa)

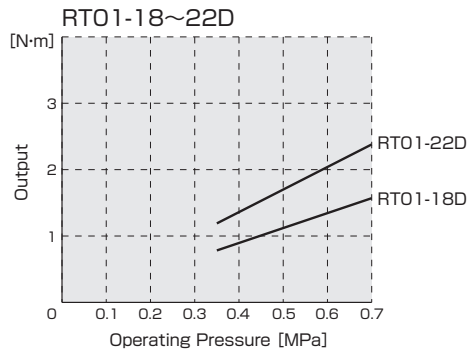
Minimum switch detection angle:The minimum angle (α and β) that enables the sensor to sense the intermediate stop part correctly.

Allowable Load and Allowable Moment



Model	Allowable Radial Load [N]	Allowable Thrust Load [N]		Allowable Moment [N·m]
		Side A	Side B	
RT01-18D	185	175	260	6.5
RT01-22D	430	400	600	10

Effective Torque



Stop Position Adjustment Method

👉 See P.540~541

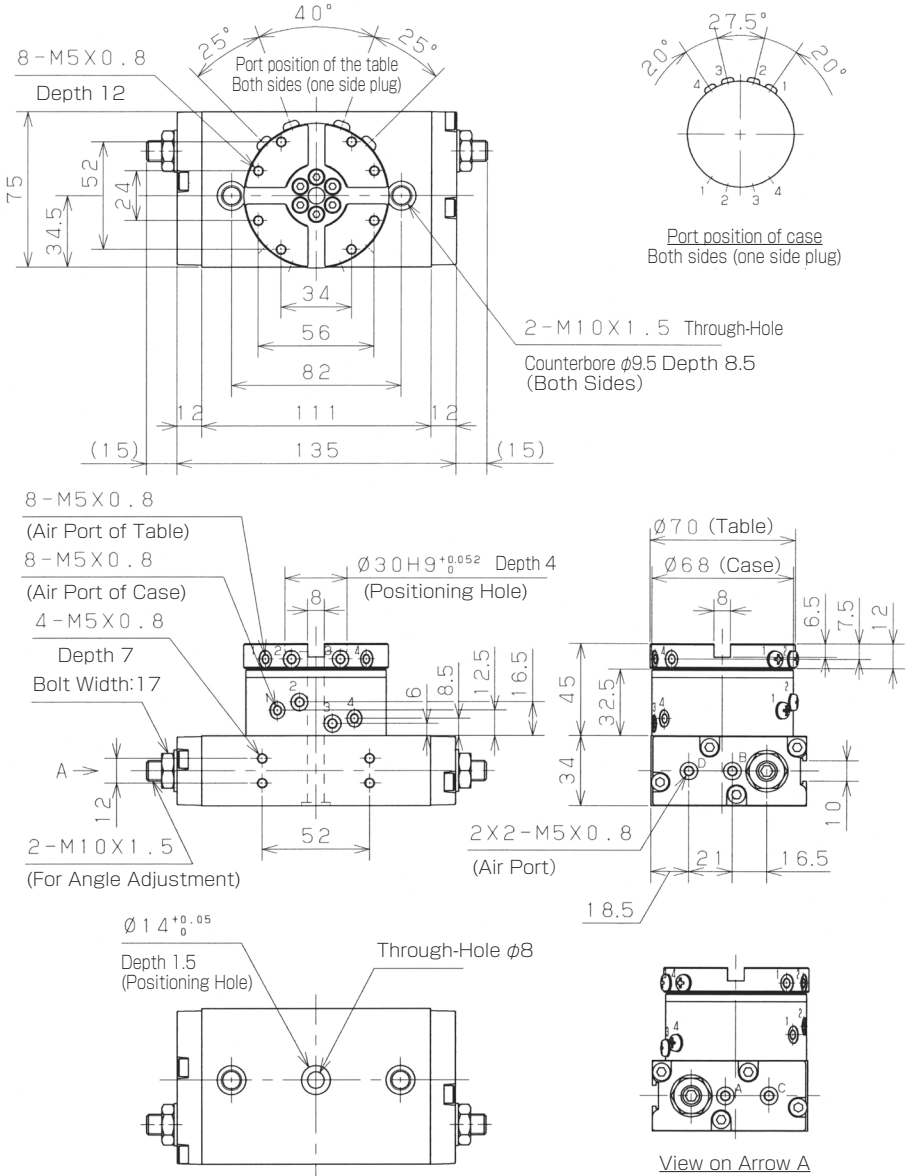
Stop Position Control Method

👉 See P.542~543

RT01 Series (D)

CAD data provided

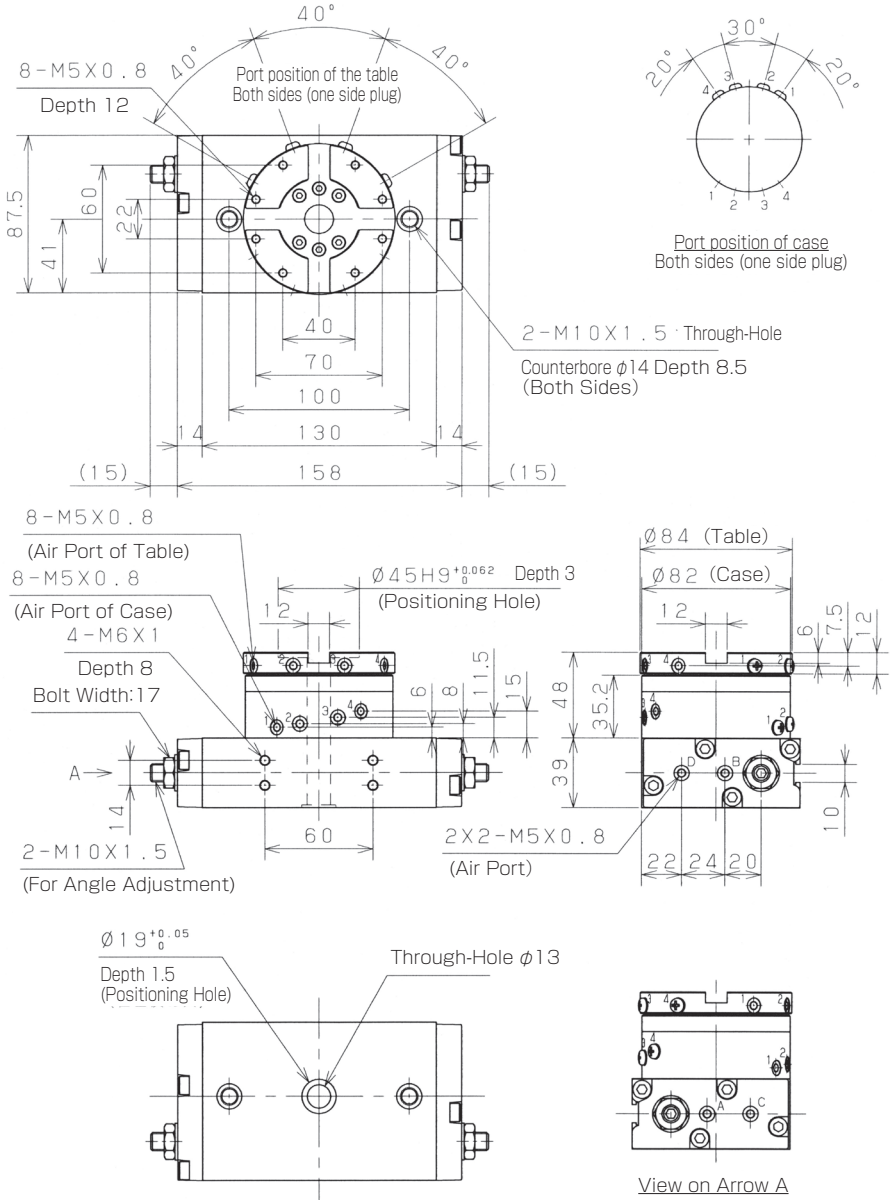
Dimensions RT01-18D-□



Rotor Table (With Swivel Joint)

RT01 Series

Dimensions RT01-22D-□



RT01 Series (B)

Model Code No.

RT01 - 18 B - 90 ※ ZC253 A 2

Series Name

Nominal Diameter

18:18mm
22:22mm

Basic Structure

B: 2-position Stop Type
(Built-in Air Cushion)

Rocking Angle

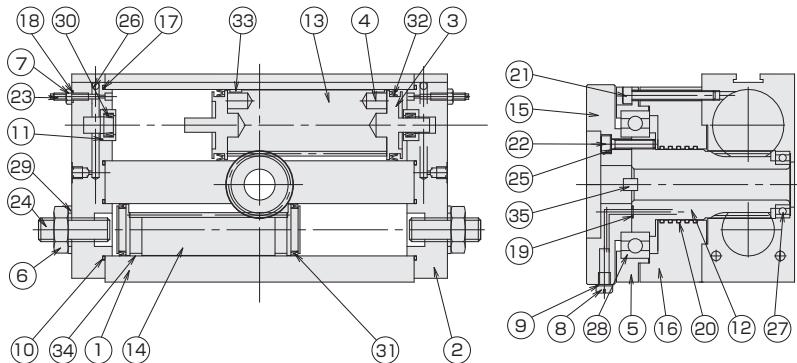
90:90°
180:180°

Switch Type	Switch Lead Wire Length	Number of Switches
ZC230: 2 Wire System Solid State	A: 1m	1:1 Switch
ZC253: 3 Wire System Solid State	B: 3m	2:2 Switches
EC22: 2 Wire System Solid State		
EC23: 3 Wire System Solid State		
Switch Type	Number of Switches	Switch Lead Wire Length
No Code: No Switch	—	—
RCA: 2 Wire System Contact	1:1 Switch	No Code: 1.5m
RCB: 2 Wire System Contact	2:2 Switches	LA: 5m
RCM: 2 Wire System Solid State		

● Switch details → P.521~528

● Switch mounting → P.538~539

Internal Structure Diagram



Parts List

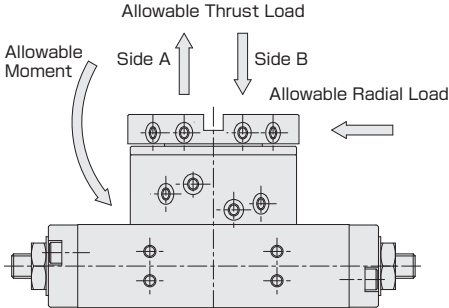
NO	Name	Material	NO	Name	Material	NO	Name	Material
1	Main Body	Aluminum Alloy	13	Rack	Stainless Steel	25	Conical Spring Washer	Carbon Steel
2	Head Cover	Aluminum Alloy	14	Rack Piston	Carbon Steel	26	Steel Ball	Bearing Steel
3	Piston	Brass	15	Table	Aluminum Alloy	27	Bearing	Bearing Steel
4	Magnet	Magnetic Body	16	Case	Aluminum Alloy	28	Bearing	Bearing Steel
5	Pressure Cover	Soft Steel	17	O Ring	NBR	29	Fastener Seal	Soft Steel + NBR
6	Hexagon Nut	Soft Steel	18	O Ring	NBR	30	Packing	NBR
7	Hexagon Nut	Brass	19	O Ring	NBR	31	Packing	NBR
8	Plug	Brass	20	O Ring	NBR	32	Packing	NBR
9	Gasket	Soft Steel + NBR	21	Hexagon Socket Head Bolt	Carbon Tool Steel	33	Wearing	Teflon
10	Gasket	NBR	22	Hexagon Socket Head Bolt	Carbon Tool Steel	34	Wearing	Teflon
11	Packing Housing	Brass	23	Needle	Stainless Steel	35	Key	Carbon Steel
12	Pinion Rod	Carbon Steel	24	Hexagon Socket Head Setscrew	Carbon Tool Steel			

仕様

Model	RT01-18B		RT01-22B	
Bore Size [mm]	φ18+φ26		φ22+φ30	
Fluid	Air			
Operating Pressure [MPa]	0.2~0.7			
Proof Pressure [MPa]	1.05			
Operating Temperature [°C]	0~60 (No Freezing)			
Rocking Angle [°]	90·180			
Angle Adjustment [°]	90° Specification	70~95		
	180° Specification	160~185		
Theoretical Torque [N·m]	8.6P		14P	
Allowable Energy [J]	0.28		0.42	
Pipe Bore	M5×0.8			
Cushion Structure	Air Cushion			
Fueling	Rotor	Not Required		
	Case	Required (Turbine oil (ISO VG32) shall be used. However, lithium grease may be used as a substitute.)		
Product Mass [g]	1650		2620	

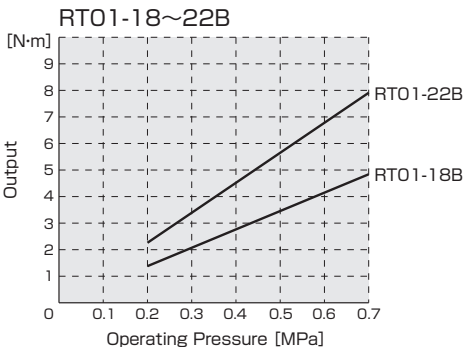
Theoretical torque P: Indicates the working pressure.(MPa)

Allowable Load and Allowable Moment



Model	Allowable Radial Load [N]	Allowable Thrust Load [N]		Allowable Moment [N·m]
		Side A	Side B	
RT01-18B	185	175	260	6.5
RT01-22B	430	400	600	10

Effective Torque



Stop Position Adjustment Method

☞ See P.540~541

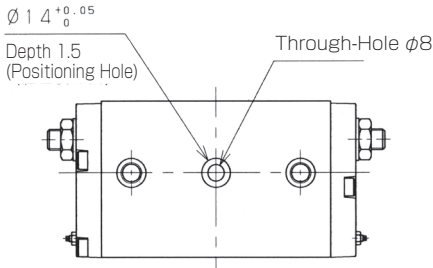
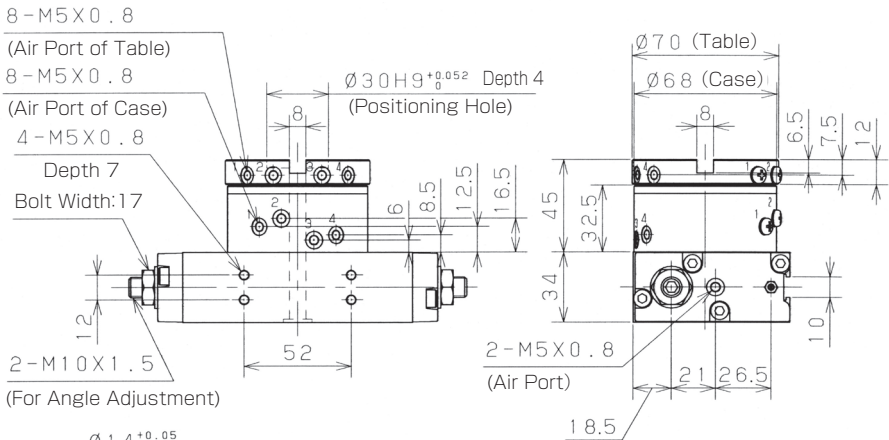
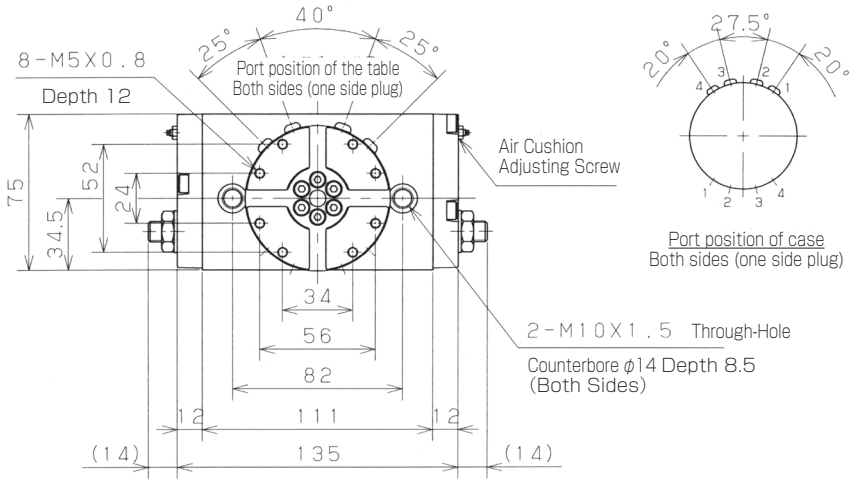
Stop Position Control Method

☞ See P.542~543

RT01 Series (B)

CAD data provided

Dimensions RT01-18B-□



Dimensions **RT01-22B-□**

