Overview
The square and space-saving cylinders have built-in rotary (swing) clamping mechanisms. Suitable for clamping small workpieces such as electron parts in limited spaces.

Features
- Space Swing / Square
- Design of All-Round (Contact / No Contact) are available in the cylinders.
- The sensor used for this rotary clamp cylinder is applicable only for rotary clamp cylinders.
- The performance of the speed controller affects the operation of the cylinder.
- For enhanced ease of use, the clamps are equipped with two guide grooves compatible with all diameters. In addition, each of the guide pins is sufficiently wide (Ø22~Ø28).

Basic Specifications of Clamp Cylinders
- Product Name
- Material
- Holder: Aluminum Alloy
- Cylinder Body: Aluminum Alloy
- Bushing: Coppers
- Rod Gasket: Nitrile Rubber
- Piston Rod: Steel
- Wear Contact: Acetal Resin
- Clamp Material: Urethane Rubber
- Cover: Stainless Steel
- L Type: Parts of the clamp cylinder are supplied as standard. psychosis.
- Non-rotational Accuracy: ±0.1° ±0.9° ±0.7°
- Cushion Mechanism: M5 Rc1/8 Rc1/4
- Piston Speed: [mm/s]
- 150 200
- Operating Temp. Range: [-10 °C + 60 °C (Non-Freezing)]
- Compressed Air: Double Acting
- Tube I.D.
- Ø25 80 4 125 6 196 3
- 377 603 1055 1649
- ±1° ±0.9° ±0.7°
- Guaranteed Withstand Pressure: [MPa]
- 50 200
- Piston Speed: [mm/s]
- 90° ±10°
- Rotating Direction
- 90° (Right / Left)
- Clamping Position
- Non-rotational Accuracy: ±0.1° ±0.9° ±0.7°
- Tighten the screw with a hex wrench.
- Never touch any moving part while the cylinder is in operation. It is extremely dangerous because fingers may be caught between moving parts.
- Design / Selection
- Overview
- Rotary Clamp Cylinders - Overview
- Rotary Clamp Cylinders - Specification
- Rotary Clamp Cylinder External Dimensions

Rotary Clamp Cylinders - Overview

### Rotary Clamp Cylinders

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### Compact Parallel Gripper - Overview

**Features**
- These are lightweight and compact, as well as achieving the high rigidity and high gripping forces.
- High gripping repeatability leads to less gripping errors.
- These can be used with the fingers, which are easy-to-select depending on column, cylindrical, or square shape parts.
- The fingers can be mounted to the main body directly, having more freedom for design.
- By installing attachments (optional), it can be mounted with the guide-integrated type Pneumatic Grippers.

### Selection Guide
- **Selection Procedure**
  1. Confirm Conditions: Confirm the necessary open/close stroke, workpiece weight, and shape.
  2. Calculate Required Gripping Force: The required gripping force should be 10 to 20 times of the workpiece weight. (When high acceleration, deceleration or impact load may occur, higher multiplier should be selected.)
  3. Selection of Types: The gripping forces are offered by gripping methods (External Grip / Internal Grip), gripping point distance and operating pressure depending on types. Select the appropriate model from the Gripping Force Chart.

### Precautions for Selection
- *Tapping holes to be added.*
- *Counterbored hole-change (ZA).*
- *Mounting hole addition through hole change.*
- *Note: Indicate applicable Rotary Clamp Cylinder Tube ID / Stroke.*

### Specifications
- **Part Number:** L₁ T ₃ (ZA, PC, TA, XA)
- **Material:** S/2
- **Surface Treatment:** Black Oxide
- **Type:** M
- **Mounting Hole Addition:** Through Hole Change
- **Counterbored Hole Change:** (RCLA, RCLAM, RCLA32)
- **Applicable to Arms:** If combined with TA, a
- **Through Hole Change Tapped Hole for Stopper:**

### Performance
- **Open/Close Operation**
  - **Single Acting Type**
    - The air enters Port A, it presses the piston, and the drive roller presses the finger mount to slide. When the air is released from Port A, a spring mechanism causes return to the original state.
    - **Double Acting Type**
      - The air enters Port A, it presses the piston, and the drive roller presses the finger mount to slide. When the air enters Port B, a return to the original state occurs.

### How to Grip
- **Single Acting Type**
  - Double Acting Type

### App. Example
- **Up and Down Floating Function**