Tool Changer One-push Type/Clamp Type



2 types of manual tool changers



Repeatability: ±0.01 (Position reproducibility)

Allows for the easy manual exchange of robot hand tools





Standards: ISO9409-1-50-4-M6 compliant

Compatible with the flanges of most major collaborative robots





Compact, Lightweight

Туре	Height	Weight	
One-push type	18.5 mm	137 g*1	Heigh
Clamp type	16 mm	137 g*1	

*1 The weight of the mounting bolts and positioning pins is not included.



RMTM Series

Tool Changer One-push Type/Clamp Type **RMTM Series**



RMH Mounting Compatible Option (Tool Plate)

Tool plate that can be mounted on RMH series air grippers for collaborative robots Select when changing between the clamp type and the one-push type.



Specifications

Model		RMTM1 (One-push type)	RMTM2 (Clamp type)
Work load		10 kg	20 kg
Repeatability (Position reproducibility)		±0.01	±0.02
	Main plate	84 g	99 g
Weight	Tool plate (T1)	53 g	38 g
	Tool plate (T2)	58 g	44 g
Moment resistance		20 N·m	60 N∙m
Torque resistance		20 N·m	60 N∙m
Standards		ISO9409-1-50-4-M6	ISO9409-1-50-4-M6
Recommended connection torque		_	2.7 to 3.3 N·m
Operating temperature range		0 to 60 °C (No freezing)	0 to 60 °C (No freezing)

Tool Changer **RMTM** Series



RMTM Series

Dimensions: Clamp Type/RMTM2





RMTM Series Specific Product Precautions

Be sure to read this before handling the products. For safety instructions as well as air gripper and auto switch precautions, refer to the "Handling Precautions for SMC Products" and the "Operation Manual" on the SMC website: https://www.smc.eu

Connection and Disconnection Procedures (One-push Type)

1. Connection/disconnection is possible by sliding the tool plate while pushing down on the push button.







Connection and Disconnection Procedures (Clamp Type)

1. Disconnection is possible by loosening the bolts that secure the clampers in place on both sides. When connecting, align the clampers with the grooves in the tool plate, and tighten the bolts on both sides.



Safety Instructions (One-push Type)

1. Depending on the robot's positioning, the tool may slide out under its own weight when the button is pushed.

Therefore, when exchanging tools, take note of the robot's positioning, and support the tool to be removed with your hands if needed.



2. Confirm that the push button has returned to its original height and that the tool plate is securely locked in place. If locking is insufficient, dropping of the tool or workpiece may result.

\wedge	Safety In	nstructions	These safety instructions damage. These instructi	s are intended to prevent hazardous situations and/or equipment ons indicate the level of potential hazard with the labels of	
			"Caution," "Warning" of followed in addition to In	or " Danger ." They are all important notes for safety and must be aternational Standards (ISO/IEC) ¹⁾ , and other safety regulations.	
Â	Danger:	Danger indicates a hazard wit which, if not avoided, will result injury.	 1) ISO 4414: Pneumatic fluid power – General rules and safety requirements for systems and their components. ISO 4413: Hydraulic fluid power – General rules and safety requirements for systems and their components. 		
Ŵ	Warning:	Warning indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.		IEC 60204-1: Safety of machinery – Electrical equipment of machines (Part 1: General requirements) ISO 10218-1: Robots and robotic devices - Safety requirements for industrial robots - Part 1: Robots.	
Ŵ	Caution:	Caution indicates a hazard wi which, if not avoided, could re injury.	th a low level of risk sult in minor or moderate	etc.	

▲ Warning

1. The compatibility of the product is the responsibility of the person who designs the equipment or decides its specifications. Since the product specified here is used under various operating conditions, its compatibility with specific equipment must be decided by the person who designs the equipment or decides its specifications based on necessary analysis and test results. The expected performance and safety assurance of the equipment will be the responsibility of the person who has determined its compatibility with the product. This person should also continuously review all specifications of the product referring to its latest catalogue information, with a view to giving due consideration to any possibility of equipment failure when configuring the equipment.

2. Only personnel with appropriate training should operate machinery and equipment.

The product specified here may become unsafe if handled incorrectly. The assembly, operation and maintenance of machines or equipment including our products must be performed by an operator who is appropriately trained and experienced.

- 3. Do not service or attempt to remove product and machinery/ equipment until safety is confirmed.
 - 1. The inspection and maintenance of machinery/equipment should only be performed after measures to prevent falling or runaway of the driven objects have been confirmed.
 - 2. When the product is to be removed, confirm that the safety measures as mentioned above are implemented and the power from any appropriate source is cut, and read and understand the specific product precautions of all relevant products carefully.
 - 3. Before machinery/equipment is restarted, take measures to prevent unexpected operation and malfunction.
- Our products cannot be used beyond their specifications. Our products are not developed, designed, and manufactured to be used under the following conditions or environments. Use under such conditions or environments is not covered.
 - 1. Conditions and environments outside of the given specifications, or use outdoors or in a place exposed to direct sunlight.
 - 2. Use for nuclear power, railways, aviation, space equipment, ships, vehicles, military application, equipment affecting human life, body, and property, fuel equipment, entertainment equipment, emergency shut-off circuits, press clutches, brake circuits, safety equipment, etc., and use for applications that do not conform to standard specifications such as catalogues and operation manuals.
 - Use for interlock circuits, except for use with double interlock such as installing a mechanical protection function in case of failure. Please periodically inspect the product to confirm that the product is operating properly.

Caution
We develop, design, and manufacture our products to be

We develop, design, and manufacture our products to be used for automatic control equipment, and provide them for peaceful use in manufacturing industries. Use in non-manufacturing industries is not covered.

Products we manufacture and sell cannot be used for the purpose of transactions or certification specified in the Measurement Act.

The new Measurement Act prohibits use of any unit other than SI units in Japan.

Limited warranty and Disclaimer/Compliance Requirements

The product used is subject to the following "Limited warranty and Disclaimer" and "Compliance Requirements".Read and accept them before using the product.

Limited warranty and Disclaimer

- 1. The warranty period of the product is 1 year in service or 1.5 years after the product is delivered, whichever is first. ²⁾ Also, the product may have specified durability, running distance or replacement parts. Please consult your nearest sales branch.
- 2. For any failure or damage reported within the warranty period which is clearly our responsibility, a replacement product or necessary parts will be provided. This limited warranty applies only to our product independently, and not to any other damage incurred due to the failure of the product.
- 3. Prior to using SMC products, please read and understand the warranty terms and disclaimers noted in the specified catalogue for the particular products.
- 2) Vacuum pads are excluded from this 1 year warranty. A vacuum pad is a consumable part, so it is warranted for a year after it is delivered. Also, even within the warranty period, the wear of a product due to the use of the vacuum pad or failure due to the deterioration of rubber material are not covered by the limited warranty.

Compliance Requirements

- 1. The use of SMC products with production equipment for the manufacture of weapons of mass destruction (WMD) or any other weapon is strictly prohibited.
- The exports of SMC products or technology from one country to another are governed by the relevant security laws and regulations of the countries involved in the transaction. Prior to the shipment of a SMC product to another country, assure that all local rules governing that export are known and followed.

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