

KOGANEI

Catalog No.BKC0003-②

ISO 9001 ISO 14001



Change from traditional exclusive production line to innovative cell-manufacturing line !

A4 size desktop robot brings you a new ideal manufacturing station.

Improvements

1. The program functions are enhanced.
2. The repetitive positioning precision: ± 0.02 mm
3. The Z-axis-lead 2 mm specifications are added.

NEW
Products



Koganei Desktop Robot
Creceed

PAT. PEND.

**The superior performance featured
in the compact "Creceed"
open up a new area of manufacturing.**

**3 axes robot
within an A4 size
working space**

(smallest size for robot)



**A4
Desktop Robot**

The compact and high-performance desktop robot "Creceed" completely re-establishes the traditional image of an industrial robot.

Based on the operating technology gained through long experience in the pneumatics field, KOGANEI has been achieving high productivity, versatility and the ability to meet the different types of demands at the production site.

This all-round robot offers a full range of applications as an optimal solution to multi-needs, such as flexible cell manufacturing. With no need for skilled operators, shorter debugging time and minimal installation costs, it is suitable for a variety of process operations, from large production lines to small workshop uses, laboratories, or even for the hobbyist.

Creceed is now available !



Compact
Easy Operation
Flexible Use

Koganei Desktop Robot
Creceed

The ideal method for expanding your

World's smallest size

Simple Style Keypoint Desktop Robot **Creceed**

Easy to carry

Lightweight
5.5kg

Z axis

Achieves micro-operation speed

NEW The 2 mm lead specifications are added.

X axis

Select either
100mm stroke or
200mm stroke

NEW The program functions are enhanced.

Connector for external PC
RS232C connector

Lights up to show the operation status
LED indicator

Connector for teaching box

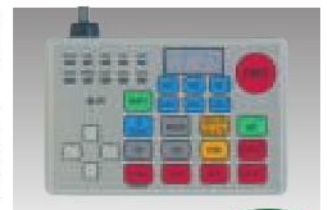
Compact

Required setting space for the unit is A4 size [210(W)×300(D)mm]. This is also suitable for one-man working cells in a small area where one person can operate multiple units as well as for the use in full-scale cell manufacturing. By adopting a precision sliding screw, ± 0.02 mm repeatability is achieved. Unit is portable, weighing only 5.5kg.



Easy Operation

Even a beginner can operate the robot easily, just by inputting "moving points" and "parameters" on a teaching box. A pre-programmed customized operation software is available. Easy program change and multi-tasking for several units are also available.

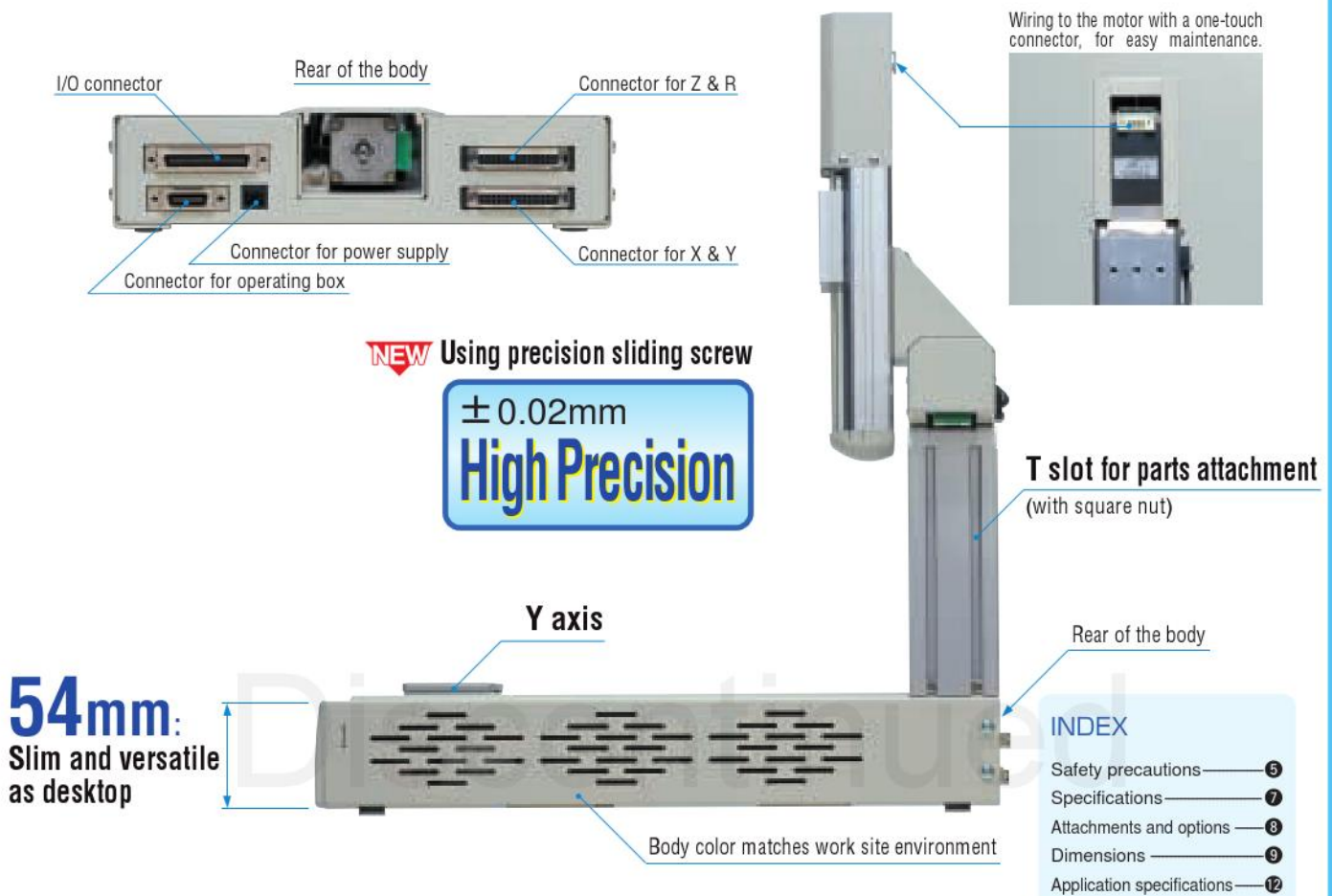


Easy-operation
teaching box
(sold separately)



One-touch
operating box

manufacturing system.



CAUTION

Note: Always read the operating manual provided with the body and applications before use. Also, be sure to read the "Safety Precautions" on p. 5.

Flexible Use

Four different application units are available such as, dispensing adhesive, grease or oil, fastening for small size screw up to M2^{Note}, soldering and cutting. On three axes unit, three dimensional linear and two dimensional circular interpolation can be utilized for more effective automation solutions.



Dispensing Unit



p. 14



Screw Fastening Unit



p. 14



Soldering Unit



p. 15



Cutting Unit



p. 16





Note: The special specifications can support up to M3.

Safety Precautions (Creceed)

Before selecting and using products, please read all the Safety Precautions carefully to ensure proper product use. The Safety Precautions shown below are to help you use the product safely and correctly, and to prevent injury or damage to assets beforehand.

Observe these precautions along with the safety regulations of JIS B 8433 (Industrial Robot Safety Regulations).

The directions are ranked according to the degree of potential danger or damage: “**DANGER**,” “**WARNING**,” “**CAUTION**,” and “**ATTENTION**.”

| | |
|--|---|
|  DANGER | Expresses situations that can be clearly predicted as dangerous. If the noted dangers are not avoided, they could result in death or serious injury. They could also result in damage or destruction of assets. |
|  WARNING | Expresses situations that, while not immediately dangerous, could become dangerous. If the noted dangers are not avoided, they could result in death or serious injury. They could also result in damage or destruction of assets. |
|  CAUTION | Expresses situations that, while not immediately dangerous, could become dangerous. If the noted dangers are not avoided, they could result in light or semi-serious injury. They could also result in damage or destruction of assets. |
|  ATTENTION | While there is little chance of injury, the content here is of points that should be observed for appropriate use of the product. |

- This product was designed and manufactured as parts for use in General Industrial Machinery.
- For the selection and handling of the equipment, the system designer or other person with fully adequate knowledge and experience should always read the "Safety Precautions," "Catalog," "User's Manual," and other relevant material before commencing handling. Making mistakes in handling is dangerous.
- In using this product, it is the customer's responsibility to verify and determine the compatibility of this product to customer's systems.
- After reading the Catalog, Instruction Manual, etc., always place them where they can be easily available for reference to users of this product.
- If transferring or lending this product to another person, always attach the Catalog, Instruction Manual, etc., to the product where it is easily visible, to ensure that the new user can use the product safely and properly.

DANGER

- Do not use for the purposes listed below:
 1. Medical equipment related to the maintenance or management of human lives or bodies.
 2. Mechanical devices or equipment designed for the purpose of moving or transporting people.
 3. Critical safety components in mechanical devices.

This product has not been planned or designed for purposes that require advanced stages of safety. It could cause injury to human life.
- Do not use in locations with or near dangerous substances such as flammable or ignitable substances. It could ignite or burst into flames.
- Do not enter the operating range of the machinery when the product is in operation or in a state of operating readiness. The actuator can move suddenly, possibly resulting in injury.
- Always install the product in a horizontal, flat, and secure location, with plenty of margin for the operating space. Falling or toppling over of the product, or abnormal operation, etc., could result in injury.
- Never attempt to rebuild the product. It could result in abnormal operation leading to injury, electric shock, fire, etc.
- Never attempt inappropriate disassembly or assembly related to the product's basic configurations, performance, or functions. It could result in injury, electric shock, fire, etc.
- Do not splash water on the product. Splashing it with water, washing it or using it underwater could result in malfunction of the product leading to injury, electric shock, fire, etc.

WARNING

- Always use No.3 type grounding (grounding resistance of 100Ω or less). Current leakage could possibly result in electric shocks or malfunction.
- Before supplying electricity to the device, and before starting operation, always conduct a safety check of the area of machine operation. Careless supply of power could possibly result in electric shocks, or in injury caused by contact with moving parts.
- Do not touch the terminal and the miscellaneous switches, etc., while it is plugged in. There is the possibility of electric shock and abnormal operation.
- Do not scratch the robot cable, etc. If a cable has been damaged, bent excessively, pulled, wound on something, put a heavy object on it or has been pinched between objects, it can be the cause of abnormal operation, electric shock, or fire due to poor conductivity or a short circuit.

- Do not place hands unnecessarily on the Y-axis table during power failure or emergency stop. The 3-axis specification Creceed has no brake mechanism on the Z axis, and a 2-axis table or an attached device could descend under its own weight, resulting in injury.
- Do not allow the product to be thrown into fire. The product could explode and release toxic gases.
- If the device emits abnormal noise or excessive vibrations, stop operations at once. Continued operation could result in damaged products, or in abnormal operation or runaway that results in injury.
- Do not sit on the product, place your foot on it, or place other objects on it. Accidents such as falling and toppling over could result in injury. Dropping the product may damage or break the product resulting in abnormal, improper or erratic operation.
- When conducting any kind of operation of the product, such as inspection, repair or replacement, always shut off the power supply completely before starting.

CAUTION

- Use a lift or other support tool to firmly support the product during conveyance or mounting, or conduct the operation with a plural number of people, etc., and always be careful to ensure human safety.
- Do not use in atmospheres containing corrosive gases, flammable gases, or flammable liquids. Resulting rust could weaken body strength, while operating motor in such an environment risks an explosion.
- Take sufficient shielding measures if using in the locations listed below. Failure to take such measures could possibly result in abnormal operation.
 1. Locations subject to large electrical currents or magnetic fields
 2. Locations subject to electric noise generated by static electricity, etc.
 3. Locations that could be subject to radiation
- Mount the robot and controller in locations with low levels of dust and dirt. Mounting in locations with large amounts of dust and dirt could possibly result in abnormal operation.
- Do not mount in locations subject to large vibrations(0.5G or more). Large vibrations transmitted to the product could possibly result in abnormal operation.

ATTENTION

- When considering the possibility of using this product in situations or environments not specifically noted in the Catalog or Instruction Manual, or in applications where safety is a particularly important requirement, such as airplane facility, combustion devices, leisure equipment, and other places where human life or assets may be greatly affected, take adequate safety precautions such as application with enough margins or fail-safe measures for ratings and performances. Please consult KOGANEI with any questions.
- Use a protective cover, etc., to ensure that people's bodies do not come into direct contact with the operating sections of mechanical devices, etc.
- Do not make the controls in a way that would cause work to fall down during power outages. Make the controls so that the table, workpiece, etc. cannot fall, if the mechanical device is subject to a power outage or an emergency power shutdown.
- Do not use in locations under direct sunlight (ultraviolet), in locations subject to dust, salt, or iron powder, or in ambient atmospheres that contain organic solvents, phosphoric ester-based hydraulic fluids, sulfur dioxide gas, chlorine gas, or acids. These conditions could cause short-term functional shutdowns, sudden performance failure, or a shortened operating life.
- For the wiring, check the Instruction Manual.
- When handling the product, wear protective gloves, safety glasses, and safety boots, etc., to ensure safety.
- When the product has become unusable, or is no longer necessary, dispose of it appropriately as industrial waste.

OTHER

- Always observe the following items.
KOGANEI cannot be responsible if these items are not properly observed.
 1. When using this product in systems, always use genuine KOGANEI parts or compatible parts (recommended parts). When conducting maintenance and repairs, always use genuine KOGANEI parts or compatible parts (recommended parts). Always observe the required procedures.
 2. Do not attempt inappropriate disassembly or assembly related to the product's basic configurations, performance, or functions.

CAUTION

Read this before starting use.

Mounting

Observe the following precautions to keep the table moving accuracy, and to ensure smooth sliding screw movement.

1. Install the robot in a horizontal, flat, and secure location.
2. Reserve adequate installation mounting space to ensure robot rigidity.

Environment

1. Avoid using in locations where the robot and controller are subject to dripping water or dripping oil, etc., or to large amounts of dust.
2. Avoid using in locations subject to sulfuric acid, hydrochloric acid, or other corrosive gases.
3. Avoid using in locations subject to strong vibrations or shocks.

Other

Before starting use, always read the instruction manual attached to the robot and controller.

Robot

Gantry 3-axis type
DTR-AS3



Orthogonal 3-axis type
DTR-CS3



Gantry 2-axis type
DTR-AS2



Orthogonal 2-axis type
DTR-CS2



Specifications

| Robot | | DTR-AS2-3 | DTR-AS3-3 | DTR-ASL3-3 | DTR-AL2-3 | DTR-AL3-3 | DTR-ALL3-3 | DTR-CS2-3 | DTR-CS3-3 | DTR-CSL3-3 |
|----------------------|--|-----------|-----------|------------|-----------|-----------|------------|-----------|-----------|------------|
| | | DTR-AS2-4 | DTR-AS3-4 | DTR-ASL3-4 | DTR-AL2-4 | DTR-AL3-4 | DTR-ALL3-4 | DTR-CS2-4 | DTR-CS3-4 | DTR-CSL3-4 |
| Operating range (mm) | X ^{Note 1} | 150 | 150 | 150 | 200 | 200 | 200 | 100 | 100 | 100 |
| | Y | 180 | 180 | 180 | 180 | 180 | 180 | 200 | 200 | 200 |
| | Z | — | 50 | 50 | — | 50 | 50 | — | 50 | 50 |
| Maximum speed (mm/s) | X · Y | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| | Z | — | 200 | 70 | — | 200 | 70 | — | 200 | 70 |
| Repeatability | (mm) | ±0.02 | ±0.02 | ±0.02 | ±0.02 | ±0.02 | ±0.02 | ±0.02 | ±0.02 | ±0.02 |
| Maximum payload (kg) | X · Y | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | Z | — | 1 | 2 | — | 1 | 2 | — | 1 | 1 |
| Resolving power (mm) | X·Y(lead) | 0.015 (6) | 0.015 (6) | 0.015 (6) | 0.015 (6) | 0.015 (6) | 0.015 (6) | 0.015 (6) | 0.015 (6) | 0.015 (6) |
| | Z (lead) | — | 0.015 (6) | 0.005 (2) | — | 0.015 (6) | 0.005 (2) | — | 0.015 (6) | 0.005 (2) |
| Environment | Temperature | 0~40℃ | | | | | | | | |
| | Humidity | 35~90% | | | | | | | | |
| Driving method | 2-phase stepping motor, sliding screw | | | | | | | | | |
| Operating method | PTP, CP | | | | | | | | | |
| Axial control | Simultaneous 3-axis (4-axis : option) ^{Note 2} | | | | | | | | | |
| Interpolation | 3-dimensional linear interpolation(0.45~45mm/s), 2-dimensional circular interpolation (0.15~15mm/s) | | | | | | | | | |
| Teaching method | Teaching playback | | | | | | | | | |
| Input/Output | 16 points of I/O in each (General-purpose input:15, General-purpose output:13 Custom input:Start, Custom output:Ready, Busy and Pallet) | | | | | | | | | |
| Programming capacity | 1000 steps x 6 groups | | | | | | | | | |
| Point | 1 step, 1 point | | | | | | | | | |
| Programming method | Code input | | | | | | | | | |
| Serial Interface | RS232C 1ch | | | | | | | | | |
| Power source | External power supply box (INPUT AC85~264V OUTPUT DC24V 2A) | | | | | | | | | |

Note 1 : If using the Screw Fastening Unit or the Soldering Unit, the X axis should be a 200mm stroke.

2 : The controller for the Soldering Unit should be a 4-axis specification.

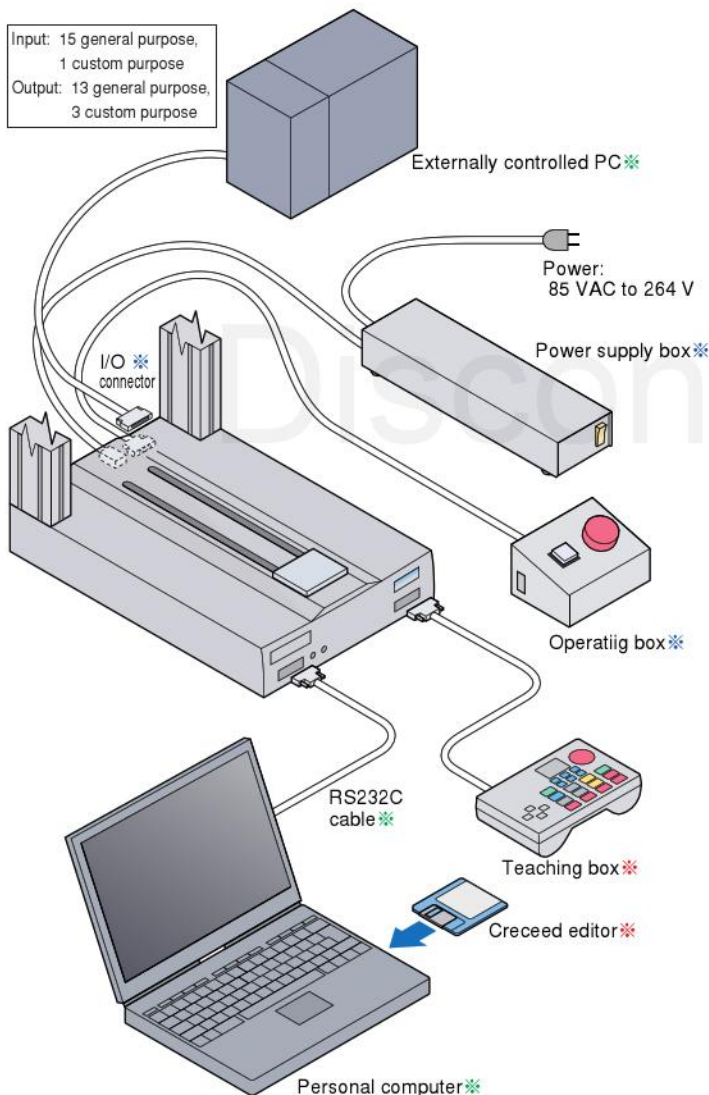
| Robot order code | | Gantry type | | | | | | | | | | Orthogonal type | | | | | | | |
|------------------|-------------------------------------|--------------|-----------|-----------|------------|-----------|--------------------------------|-----------|-----------|-----------|------------|-----------------|------------|-----------|-----------|-----------|------------|-----------|------------|
| | | DTR-AS2-3 | DTR-AS2-4 | DTR-AS3-3 | DTR-ASL3-3 | DTR-AS3-4 | DTR-ASL3-4 | DTR-AL2-3 | DTR-AL2-4 | DTR-AL3-3 | DTR-ALL3-3 | DTR-AL3-4 | DTR-ALL3-4 | DTR-CS2-3 | DTR-CS2-4 | DTR-CS3-3 | DTR-CSL3-3 | DTR-CS3-4 | DTR-CSL3-4 |
| X-axis stroke | | 150mm stroke | | | | | 200mm stroke ^{Note 1} | | | | | 100mm stroke | | | | | | | |
| Number of axes | 2-axis | ● | ● | | | | ● | ● | | | | | ● | ● | | | | | |
| | 3-axis | | | ● | ● | ● | ● | | | ● | ● | ● | ● | | | ● | ● | ● | ● |
| Controller | 3-axis controller | ● | | ● | ● | | | ● | | ● | ● | | | ● | | ● | ● | | |
| | 4-axis controller ^{Note 2} | | ● | | | ● | ● | | | ● | | | ● | ● | | | ● | ● | |

Note 1 : If using the Screw Fastening Unit with Z axis motor type or the Soldering Unit, always select the X-axis 200mm stroke product **DTR-AL3-3**, **DTR-ALL3-3**, **DTR-AL3-4** or **DTR-ALL3-4**.

If using the Screw Fastening Unit with air driven Z axis type always select the X-axis 200mm stroke products **DTR-AL2-3** or **DTR-AL2-4**.

2 : If using the Application of Soldering Unit, select the 4-axis controller (**DTR-AL3-4** or **DTR-ALL3-4**). (Made-to-order product. Ask Koganei distributor for delivery.)

System configuration diagram



Command list

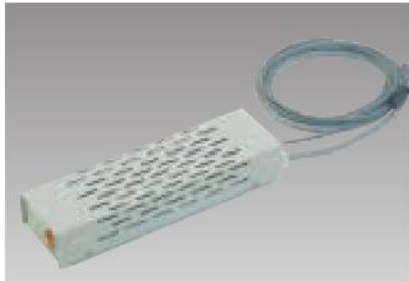
| Command | Second | Data | Explanation |
|---------|-----------------------|-----------------|--|
| POINT | 0 ** | Point | XY→Z movement |
| POINT | 1 ** | Point | ZI(virtual position)→XY→Z movement |
| POINT | 2 ** | Point | ZO(virtual origin)→XY→Z movement |
| POINT | 3 ** | — | ZI(virtual position) movement |
| POINT | 4 ** | — | ZO(origin point height) movement |
| POINT | 5 ** | — | Return-to-origin movement |
| POINT | 6 ** | Point | R-axis movement |
| POINT | 7 ** | Point | XYZ(absolute) movement |
| POINT | 8 ** | Point | XYZ(incremental) movement |
| LINE | 0 ** | Point | Linear interpolation movement |
| LINE | 1 ** | Reference point | Continuous interpolation storing start |
| LINE | 2 0 0 | — | Continuous interpolation storing end |
| LINE | 3 0 0 | — | Continuous interpolation operation |
| LINE | 4 0 0 | — | XYR simultaneous operation |
| LINE | 5 0 0 | Shift point | Continuous interpolation shift operation |
| CIRCLE | 0 0 0 | Point | Circle movement |
| PALET | 0 0 * | — | Pallet (number*) movement |
| PALET | 1 0 * | — | Pallet (number*) count-up output |
| SEQ | 0 ** | — | IN** is in the ON wait status |
| SEQ | 1 ** | — | IN** is in the OFF wait status |
| SEQ | 2 ** | — | OUT** is ON |
| SEQ | 3 ** | — | OUT** is OFF |
| SEQ | 4 # # | — | Timer setting |
| SEQ | 5 ** | — | Interpolation ON delay |
| SEQ | 6 ** ^{Note} | J=# # | IN** is ON; an unconditional jump to the step No. # # |
| SEQ | 7 ** ^{Note} | J=# # | IN** is OFF; an unconditional jump to the step No. # # |
| SEQ | 8 0 0 ^{Note} | J=# # | An unconditional jump to the step No. # # |
| SEQ | 9 ** ^{Note} | J=# # | IN** is ON; a CALL jump to the step No. # # |
| SEQ | 9 1 6 ^{Note} | J=# # | An unconditional CALL jump to the step No. # # |
| SEQ | 9 1 7 ^{Note} | — | Return |
| END | 0 0 0 | — | The program ends unconditionally |
| END | 1 0 0 | — | After 1-cycle operation, the program stops in the END step |
| END | 2 0 0 | — | The program operates repeatedly |

Note: Setting can be made only by the Creceed Editor; that is, setting cannot be made by the Teaching Box.

- * Accessory
- * Option (sold separately)
- * Prepared by customers

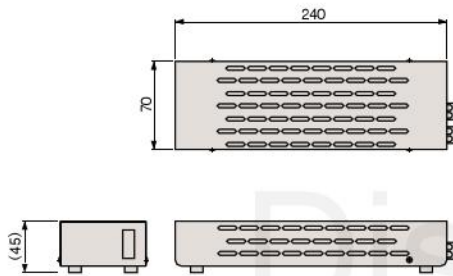
Attachments

**Power supply box
DTRM-BB**

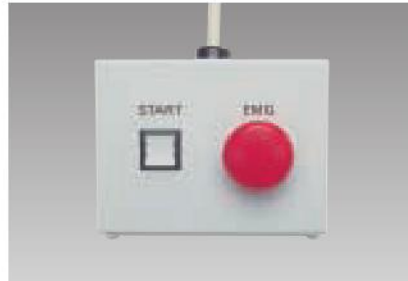


INPUT AC85~264V OUTPUT DC24V

■ Dimensions

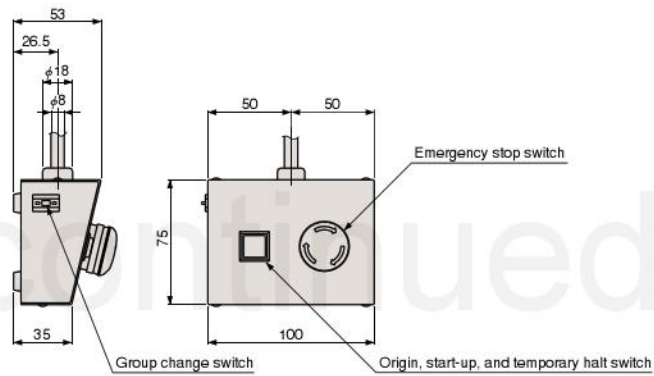


**Operating box
DTRM-OB**



For manual operation of operation start or emergency stop.

■ Dimensions



**I/O connector
DTRM-CT**



Connector for connecting to a personal computer, solenoid valve, relay, or other external equipment.



Registered Desktop Robot
Creceed

A4
Desktop Robot
Desktop Robot

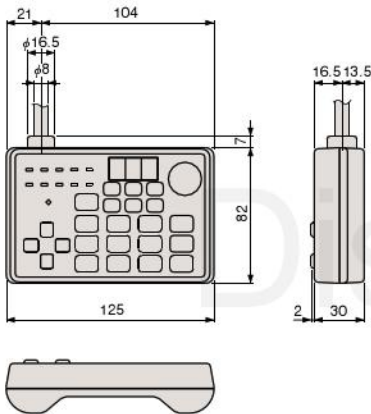
Options

Teaching box DTRP-TB



For easy operation of parameter settings and program input

■ Dimensions



Personal computer support software: Creceed Editor



Personal computer support tool for pre-programmed dedicated operations.

DTRP-SW-HTA (Japanese version)
DTRP-SW-HTC (English version)

Sample program software for applications



A sample program is available for each application, and the sample program can be used together with the Creceed Editor.

- For dispensing: **DTRP-SW-DPA**
- For screw tightening (electrically powered): **DTRP-SW-SDA**
- For screw tightening (air): **DTRP-SW-SDB**
- For soldering: **DTRP-SW-SMA**
- For cutting: **DTRP-SW-CTA**

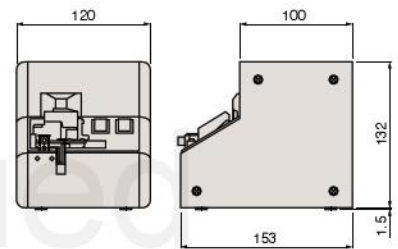
Screw supplying unit DTRM-SJ0001



Device for supplying screws to the "Screw Fastening Unit".

DTRM-SJ0001 (for M1.4)
DTRM-SJ0002 (for M1.7)
DTRM-SJ0003 (for M2)

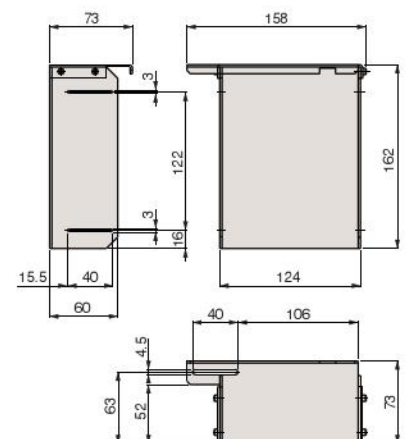
■ Dimensions



Bracket for the screw supplying unit DTRP-BKA



■ Dimensions

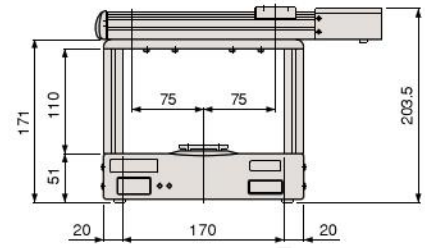
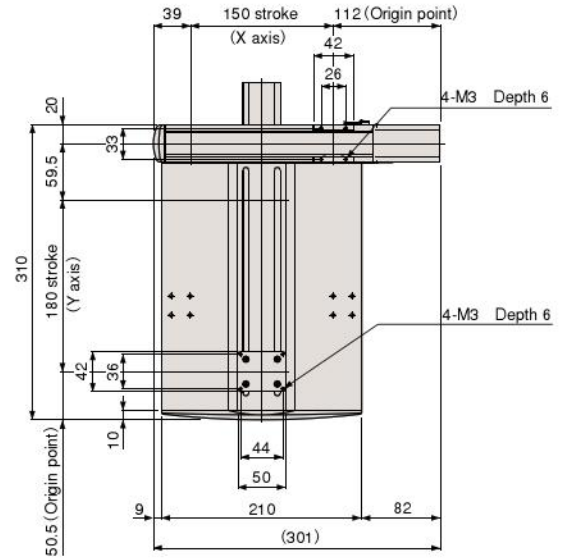
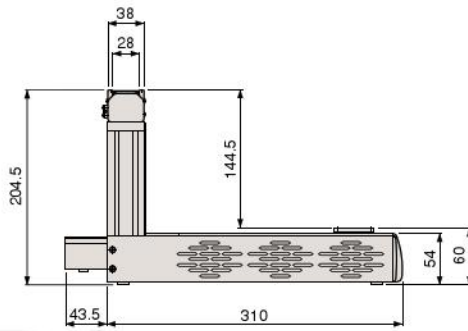


Gantry 2-axis

DTR-AS2-3 (3-axis controller)

DTR-AS2-4 (4-axis controller, made-to-order product)

X axis : 150mm



Discontinued

Gantry 3-axis

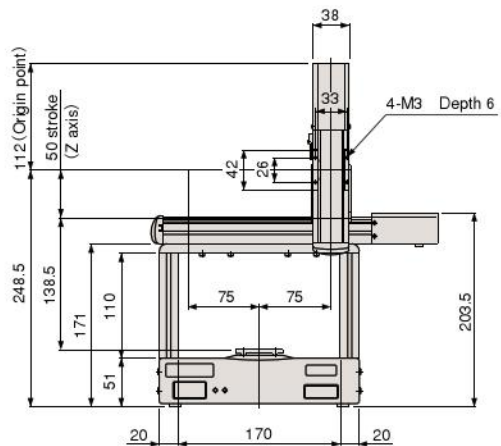
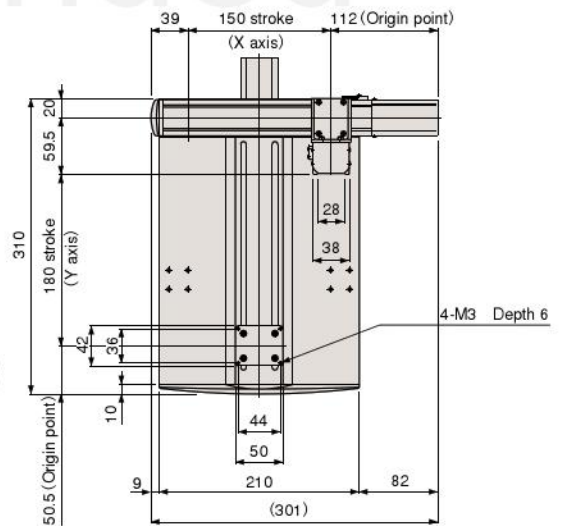
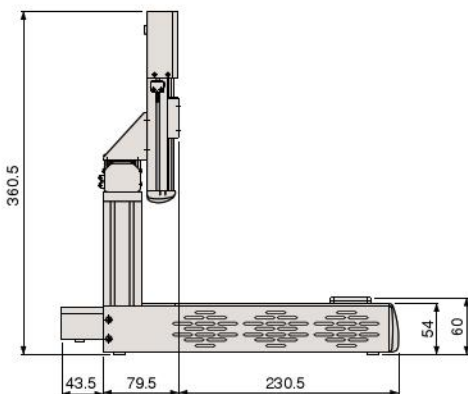
DTR-AS3-3 (3-axis controller)

DTR-ASL3-3 (3-axis controller, Z-axis-lead 2 mm specifications)

DTR-AS3-4 (4-axis controller; made-to-order product)

DTR-ASL3-4 (4-axis controller; Z-axis-lead 2 mm specifications; made-to-order product)

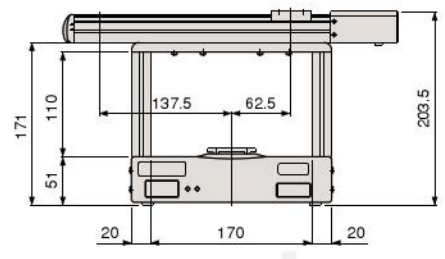
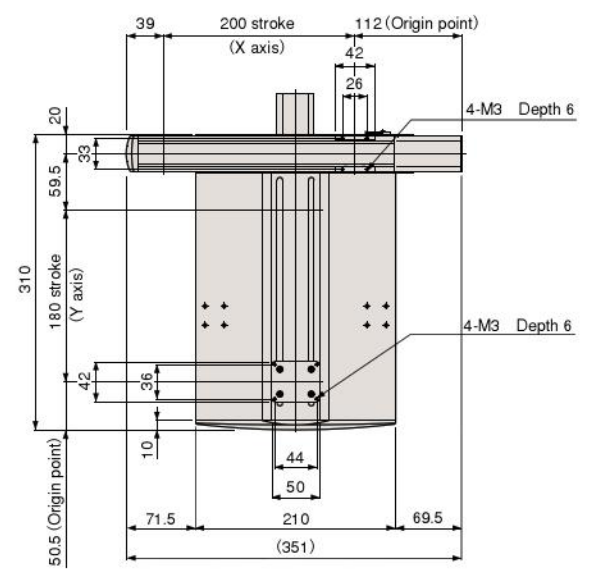
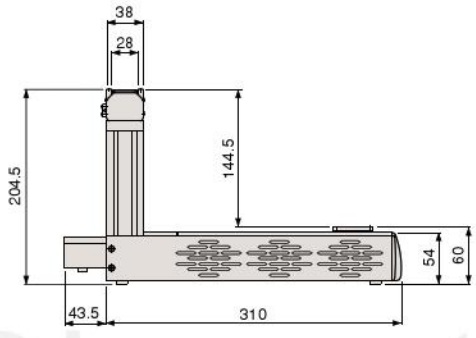
X axis : 100mm



**Gantry
2-axis**

- DTR-AL2-3** (3-axis controller)
- DTR-AL2-4** (4-axis controller, made-to-order product)

X axis : 200mm

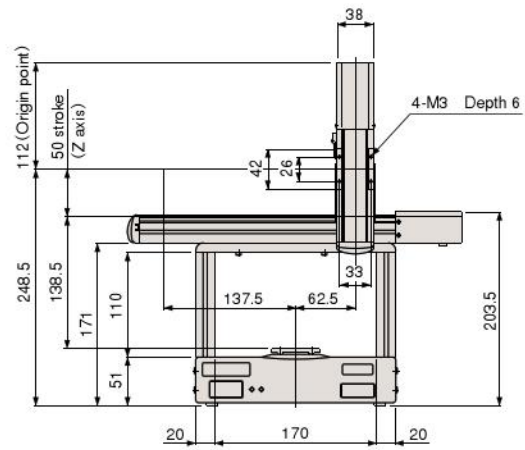
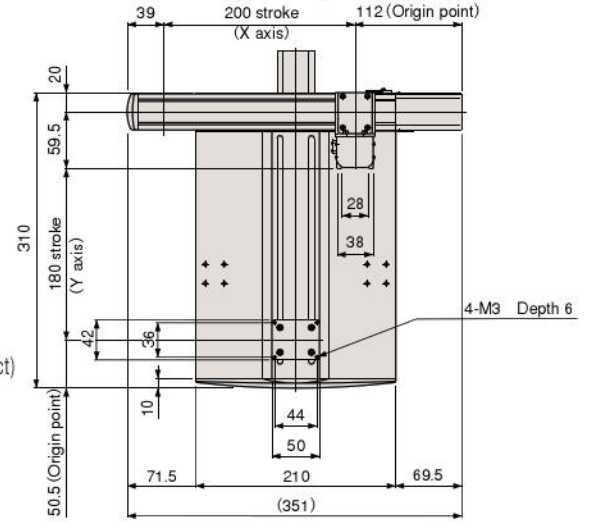
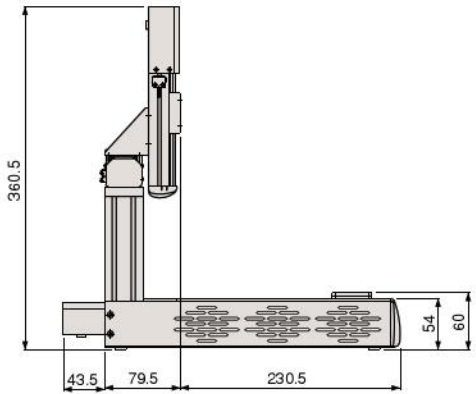


Discontinued

**Gantry
3-axis**

- DTR-AL3-3** (3-axis controller)
- DTR-ALL3-3** (3-axis controller, Z-axis-lead 2 mm specifications)
- DTR-AL3-4** (4-axis controller; made-to-order products)
- DTR-ALL3-4** (4-axis controller; Z-axis-lead 2 mm specifications; made-to-order product)

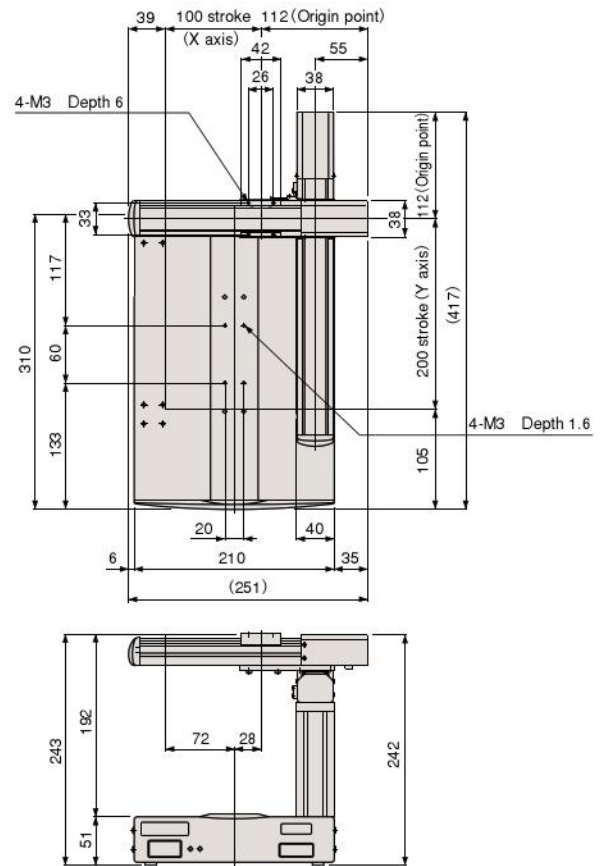
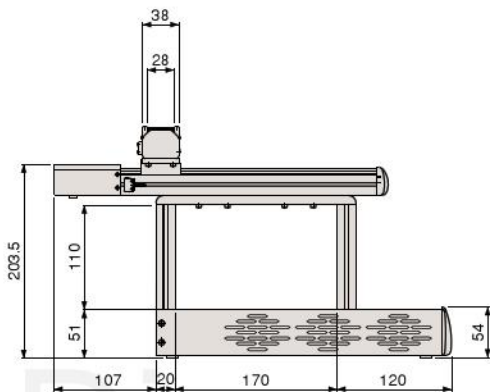
X axis : 200mm



Orthogonal 2-axis

DTR-CS2-3 (3-axis controller)

DTR-CS2-4 (4-axis controller, made-to-order product)



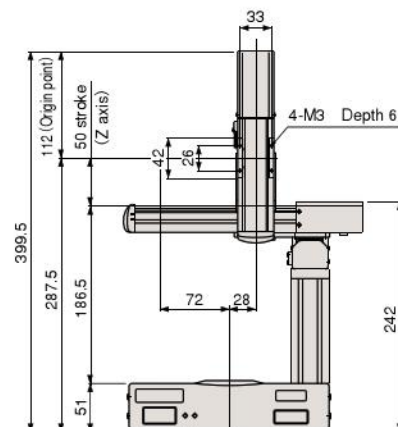
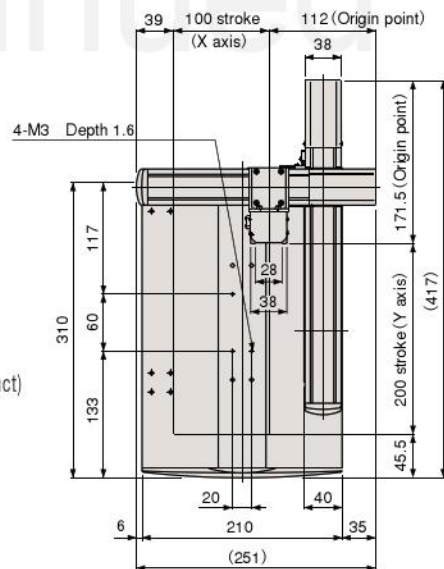
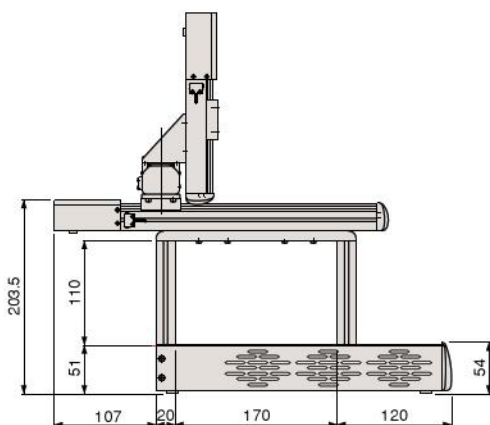
Orthogonal 3-axis

DTR-CS3-3 (3-axis controller)

DTR-CSL3-3 (3-axis controller, Z-axis-lead 2 mm specifications)

DTR-CS3-4 (4-axis controller; made-to-order product)

DTR-CSL3-4 (4-axis controller; Z-axis-lead 2 mm specifications; made-to-order product)



Applications

Dispensing Unit **DTRU-DPA**



Creceed body sold separately.

Attention For the detailed specifications, external dimensions, handling requirements, and safety precautions for each unit, see the operating manuals provided with each unit.

- Optimum for dispensing or applying such as grease or adhesives.
- Uses a no-taper syringe and double wiper piston construction for stable liquid dispensing.

Specifications

| | | |
|---|---------------------------|--|
| Operating range | X axis | 150mm |
| | Y axis | 180mm |
| | Z axis | 50mm |
| Valve box | Dispensing pressure range | 0.02 ~ 0.3MPa |
| | Dispensing time range | 0.1 ~ 9.9Sec |
| | Power supply | 24VDC |
| Syringe/Piston | Size (cc) | 3 pcs. each of 10 and 30 (applicable to UV) |
| Syringe adaptor | Size (cc) | 1 pce. each of 10 and 30 (connecting tube, 0.9m) |
| Syringe cap | Size (cc) | 3 pcs. each of 10 and 30 |
| Syringe end caps | | 6 pcs. |
| Needle nozzle (needle length 12.7mm) | Gauge size | 2 pcs. each of 18, 20, 21, 22, 23 and 25 |

Optional item

- Sample program software: **DTRP-SW-DPA**

Maintenance parts

- Valve box ● Syringe ● Syringe adaptor ● Needle nozzle ● Piston
- Syringe cap ● Syringe end cap ● O ring

Attention Dispenser conditions can be changed depending on the environment, materials used, etc. We cannot, therefore, guarantee dispensing quality. For dispensing quality, the user should always ensure the quality by his application.

Screw Fastening Unit (Z-axis : motor) **DTRU-SDA**



Creceed body sold separately.

- Work in combination with a screw supplying unit realizes automatic screw fastening.

Specifications

| | | |
|-----------------|---------------------------------|---|
| Operating range | X axis | 200mm |
| | Y axis | 180mm |
| | Z axis | 50mm |
| Driver | Applicable screw size | M1 ~ M2 (up to M3 with special) |
| | Applicable screw types | Depends on type of screw supplying unit |
| | Controller power supply voltage | 100VAC ±5% 50/60Hz |
| | Controller power consumption | 180W |
| | Bit | 2 pcs, H4-#0, 20 X 60 |
| | Mouthpiece | 1 each of 01 (M1.4), 02 (M1.7), 03 (M2.0), Pan head type 1 cross-slotted screw |
| | Valve box | Air pressure |
| | Power supply voltage | 24VDC |

Attention If using the Screw Fastening Unit, select 200mm stroke robot (**DTR-ALL3-3**, **DTR-ALL3-4**) as the X-axis

Optional item

- Sample program software: **DTRP-SW-SDA**
- Screw supplying unit: **DTRM-SJ0001**, **DTRM-SJ0002**, **DTRM-SJ0003**

Maintenance parts

- Driver ● Controller ● Bracket ● Valve box (for driver) ● Bit
- Mouthpiece

Attention Screw fastening conditions can be changed depending on the environment, materials used, etc. Koganei cannot, therefore, guarantee screw fastening quality. For screw fastening quality, the user should always ensure the quality by his application.



Screw Fastening Unit (Z-axis : pneumatics)

DTRU-SDB

- Screw fastening unit of this type uses an air cylinder for the Z axis.



Creceed body sold separately.

Specifications

| | | |
|----------------------|---------------------------------|---|
| Operating range | X axis | 200mm |
| | Y axis | 180mm |
| Driver | Applicable screw size | M1 ~ M2 |
| | Applicable screw type | Depends on type of screw supplying unit |
| | Controller power supply voltage | 100VAC ±5% 50/60Hz |
| | Controller power consumption | 180W |
| | Bit | 2 pcs, H4-#0, 20 X 60 |
| Valve box | Air pressure | 0.4 ~ 0.7MPa |
| | Power supply voltage | 24VDC |
| Z-axis cylinder unit | Cylinder model | ARS16 X 30 |

Attention When using the Screw Fastening Unit, select 200mm 2-axis robot (DTR-AL2-3, DTR-AL2-4) as the X-axis

Optional item

- Sample program software: DTRP-SW-SDB
- Screw supplying unit: DTRM-SJ0001, DTRM-SJ0002, DTRM-SJ0003

Maintenance parts

- Driver ● Controller ● Bracket (for driver) ● Valve box

Attention Screw fastening conditions can be changed depending on the environment, materials used, etc. Koganei cannot, therefore, guarantee screw fastening quality. For screw fastening quality, the user should always ensure the quality by his application.



Soldering Unit

DTRU-SMA-□

- For space-saving soldering.



Creceed body sold separately.

Specifications

| | | | |
|------------------|--|----------------|----------|
| Operating range | X axis | 200mm | |
| | Y axis | 180mm | |
| | Z axis | 50mm | |
| Solder | Power supply for heat controlling unit | AC100V 50/60Hz | |
| | Heat controlling range | 200 ~ 450°C | |
| | Solder diameter (mm) | DTRU-SMA-01 | 0.5, 0.6 |
| | | DTRU-SMA-02 | 0.8 |
| | | DTRU-SMA-03 | 1.0, 1.2 |
| DTRU-SMA-04 | | 1.6 | |
| Soldering method | Point soldering Line soldering | | |
| Valve box | Supplying air pressure | 0 ~ 0.7MPa | |
| | Discharging pressure range | 0.02 ~ 0.5MPa | |
| | Power supply voltage | DC24V | |

Attention When using the Soldering Unit, select X-axis as 200mm DTR-ALL3-4(4-axis controller).
(Made-to-order product. Ask Koganei distributor for delivery.)

Optional item

- Sample program software: DTRP-SW-SMA

Maintenance parts

- Soldering iron head & feeding unit ● Heat controlling unit
- Bobbin bracket ● Cleaning unit ● Valve box

Attention Soldering conditions can be changed depending on the environment, materials used, etc. Koganei cannot, therefore, guarantee soldering quality. For soldering quality, the user should always ensure the quality by his application.

Cutting Unit **DTRU-CTA**



Creceed body sold separately.

Specifications

| | | |
|----------------------------|---------------------------------|----------------|
| Operating range | X axis | 100mm |
| | Y axis | 150mm |
| | Z axis | 50mm |
| DC brushless spindle motor | Revolutions | 20,000rpm |
| | Collet diameter | φ2mm |
| | Controller power supply voltage | 100VAC 50/60Hz |
| | Controller power consumption | 75W |
| | Motor output | 30W |

Optional item

- Sample program software: **DTRP-SW-CTA**
For dust collection methods, static electricity removal, and other items, consult us.

Maintenance parts

- Spindle motor ● Controller ● Bracket (for spindle motor)

Attention Cutting conditions can be changed depending on the environment, materials used, etc. Koganei cannot, therefore, guarantee cutting quality. For cutting quality, the user should always ensure the quality by his application.

Discontinued

Special specifications of the robot and applicaion unit

Creceed of special specifications often ordered is handled as semi-standard products and is prepared in advance. When ordering Creceed of special specifications from us, contact the nearest sales office.

| | Order code | Special specifications |
|----------------------|--------------------------|---|
| Robot | DTR-CS3-3-9W | Rigidness-enhanced orthogonal type |
| | DTR-AL3-160-3-12W | Stand height is 160 mm |
| | DTR-AL3-210-3-12W | Stand height is 210 mm |
| | DTR-AL3-260-3-12W | Stand height is 260 mm |
| | DTR-AL3-160-4-12W | Stand height is 160 mm; 4 axes controller type |
| | DTR-AL3-210-4-12W | Stand height is 210 mm; 4 axes controller type |
| | DTR-AL3-260-4-12W | Stand height is 260 mm; 4 axes controller type |
| | DTR-AS3-160-3-13W | Stand height is 160 mm |
| | DTR-AS3-210-3-13W | Stand height is 210 mm |
| | DTR-AS3-260-3-13W | Stand height is 260 mm |
| | DTR-AS3-160-4-13W | Stand height is 160 mm; 4 axes controller type |
| | DTR-AS3-210-4-13W | Stand height is 210 mm; 4 axes controller type |
| | DTR-AS3-260-4-13W | Stand height is 260 mm; 4 axes controller type |
| Screw-fastening unit | DTRM-S0001-5W | Driver for M2.6 |
| | DTRM-S0001-6W | Driver for M3.0 |
| | DTRU-SDA-1W | Z-axis electrically powered for M2.6 screw tightening |
| | DTRU-SDB-2W | Z-axis pneumatic type for M2.6 screw tightening |
| | DTRU-SDA-3W | Z-axis electrically powered for M3.0 screw tightening |
| | DTRU-SDB-4W | Z-axis pneumatic type for M3.0 screw tightening |

Remarks: The cutting unit having the specifications of 40,000 rpm can be manufactured. When you need such a cutting unit, contact our sales office.

Note: Products of these special specifications might be different from the standard ones in delivery, price, dimensions and life cycles, consequently before ordering these products, be sure to contact our sales office for confirmation of such differences.

Discontinued

Revised points

First edition

- P8 The code of the screw supply unit is added.
- P12 In the dispense unit specifications table, the valve box discharging pressure setting range is changed to 0.02~0.3 MPa.
- P12, 13 In the screw tightening unit specifications table, the driver bit is changed to H4-# 0 (2.0×60) (2 pieces).
- P13 In the soldering unit specifications table, the diameter of the solder in the solder specifications is written for each model.
- P14 In the specifications table, the motor output is added.
- P7 In the specifications of the robot, power 24 VDC is changed to 85 VAC~264 VAC.
- P8 INPUT 100V AC of the power supply box (accessory) is changed to 85 VAC~264 VAC.
- P3, 4, 12, 13 The photos of the following are changed: teaching box, dispensing unit, screw fastening unit (2-axis electrically powered), soldering unit, and cutting unit.
- P8 The photos of the following are changed: power supply box, personal computer support software.
The dimensions of the screw supply unit is added.
The bracket for the screw supply unit are added.
- P9, 10 The dimensions, extension lines, and figures are added.
- P7 In the specifications table for the robot, the interpolation speed of the interpolation function is changed.
- P3 The repeatability is changed from ± 0.05 mm to ± 0.02 mm.
The X-axis stroke is changed from 100 mm to 150 mm.
- P7 The following models are added: DTR-ASL3-3, DTR-ASL3-4, DTR-ALL3-3, DTR-ALL3-4, DTR-CSL3-3, and DTR-CSL3-4.
- P9, 10, 11 The dimensions and the notation are changed.
- P10 Personal computer support software is provided in Japanese or English versions.

Your inquiry to "Creceed"

FAX. 81-3-5286-2763

If you have inquiry, please fax us.

| | | | |
|----------------------------------|--------------|-----|--|
| Company name | | | |
| Office or plant name | | | |
| Section | | | |
| Your products | | | |
| Your title | | | |
| Your name | | | |
| Your responsibility | | | |
| Zip code | | | |
| Address | | | |
| Phone | | FAX | |
| E mail | | | |
| How did you know the "Creceed" ? | | | |
| Heading of inquiry | | | |
| Your inquiry | Discontinued | | |
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