

Remote Actuator Remote Controller

SGDC
SRC

SGDC

RoHS CE Catalog Code W8016

It is a low cost actuator equipped with a DC motor of a small size and high thrust force. It is compatible with micrometer head using the manual stage of Sigma Koki and can be easily automated.

- A customer can remove the micrometer head on its own and replace with the remote actuator.
- It is possible to select the movement amount of 13mm and 25mm depending on the application.
- Since USB interface is a standard feature, it can easily be operated from the PC.
- Since the remote control is possible, it can also be used in a hard place to work as well as a narrow place.
- The speed can be adjusted while driving. * Adjust by variable speed knob and I/O



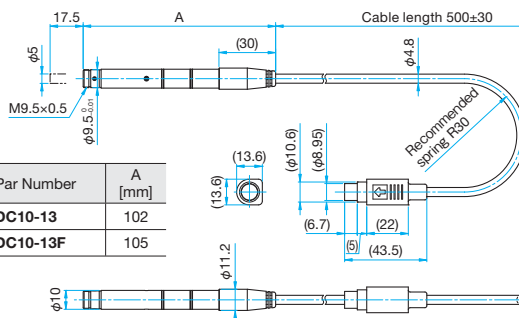
Attention

- ▶ When replacing the micrometer head with the remote actuator, micro nut is required in order to remove the micro. Please contact our international Sales Division, if the micro nut is required.
- ▶ Please be careful when handling cable. Shock, compression, bending, twisting, tensile bring to the disconnection of the cable.



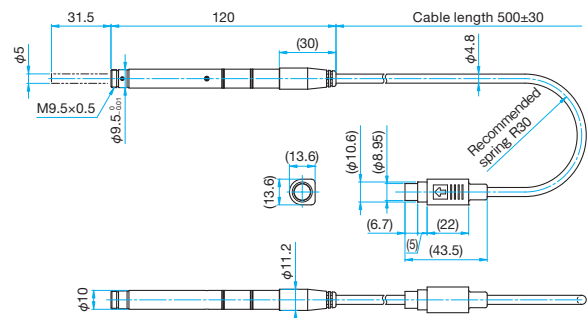
Outline Drawing

SGDC-10-13/13F



Par Number	A [mm]
SGDC10-13	102
SGDC10-13F	105

SGDC10-25



Specifications

Sensitivity (resolving power)	Under 0.1μm for reference
Lead of Screw	M3 P=0.5mm
Backlash	<0.03mm
Motor Type	DC motor (DC6V)
Temperature of Operation	5 – 40°C
Ambient Humidity	20 – 80%RH (no condensation)
Length of Cable	0.5m

Specifications

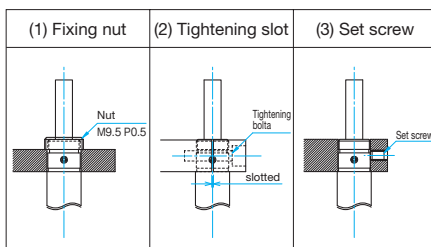
Par Number	Travel [mm]	Travel Speed*1 [mm/s]	Thrust Force*2 [N]	Weight [kg]
SGDC10-13	17.5	1	>29.5 (3kgf)	0.06
SGDC10-13F	17.5	0.2	>68.6 (7kgf)	0.06
SGDC10-25	31.5	1	>29.5 (3kgf)	0.08

*1 It is the guaranteed value for maximum speed. The speed can be adjusted.

*2 It is the guaranteed value at the maximum speed setting on the controller. Please be careful that the maximum thrust force can be over 20kgf.

Method of fixation

There are three methods of fixing for the actuator. When installing the unit, we recommend Fixing Nut method with the nut (M9.5×0.5).



Mounting methods (ex. TSD-601S)

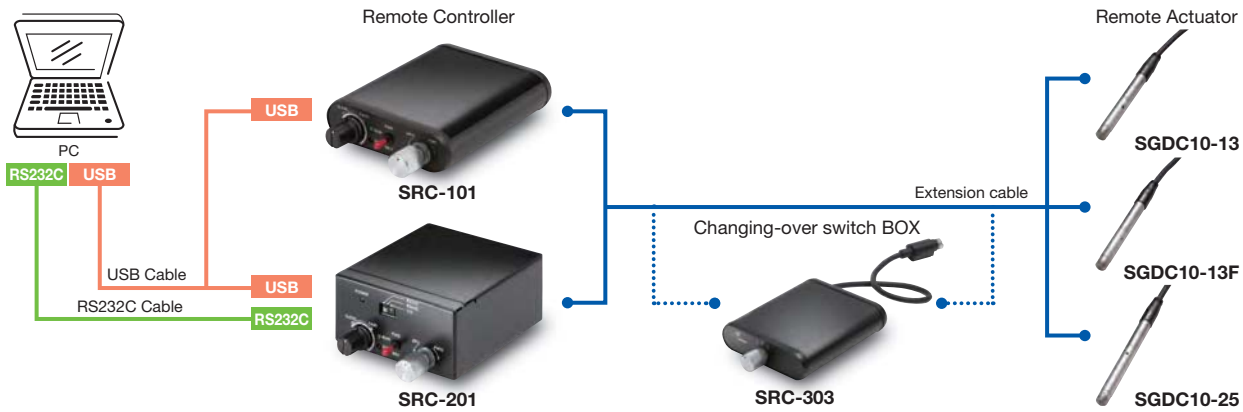
Compatible with most manual translation stages



1. Fixing a stage to tighten the Clamp screw of the stage.
2. Use the Allen wrench and remove the bracket from the stage.
3. Set screw is removed with Allen wrench and nut is removed with Nut driver. Micrometer can be removed.
4. Remote actuator is inserted and it fixes with Set screw and Nut. Please attach to direction of motor cable or twist of cable carefully.
5. A remote actuator is attached to a stage.

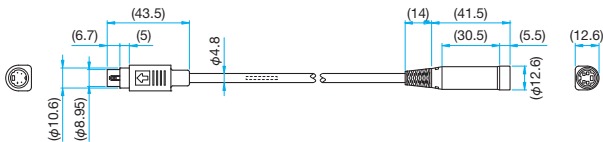
* Please attach a stage and an actuator in parallel.

System Chart



Option Extension cable

MDC-4-2/3/5



Specifications

Par Number	Product Name	Length of Cable [m]
MDC-4-2	Extension cable	2
MDC-4-3	Extension cable	3
MDC-4-5	Extension cable	5
USB/MINI-B-2	USB cable	2

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SRC-101



SRC-201

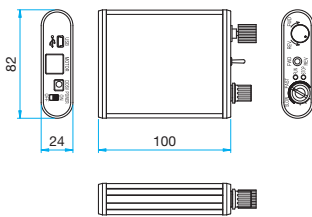


SRC-303 (changing-over switch BOX)

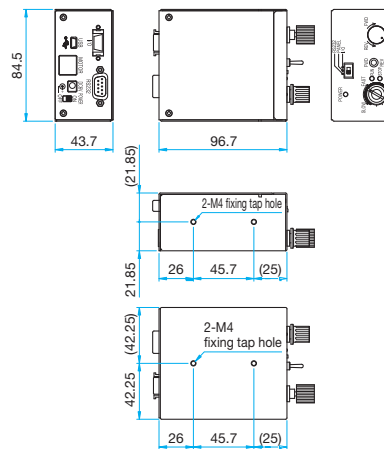
Outline Drawing

* excluding protrusions

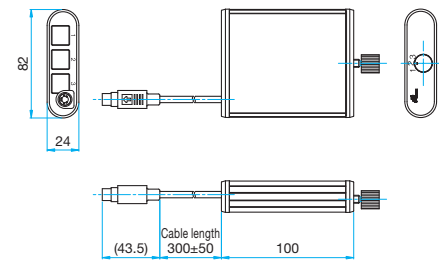
SRC-101



SRC-201



SRC-303



Specifications for SRC-101/201

Number of Controlling Axis	1 axis
Source Voltage	DC6V
Apparent Power	30VA
AC adaptor	AC100 - 240V ±10%
Drive System	PWM Control
Limit Sensor	Overload Detection Style
Motor type	DC motor (DC6V)
Temperature of Operation	5 - 40°C
Storage Temperature	20 - 80%RH (no condensation)
Control Switch	-20°C - 60°C
Control Switch	Shift Transmission, Micromotion, JOG

Specifications

Par Number	Interfaces	Control Signals	Weight [kg]
SRC-101	USB	-	0.15
SRC-201	USB, RS232C	Input Signals 6, Output Signals 4	0.38
SRC-303	-	-	0.15

Application Systems

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Remote

PKA

ACT