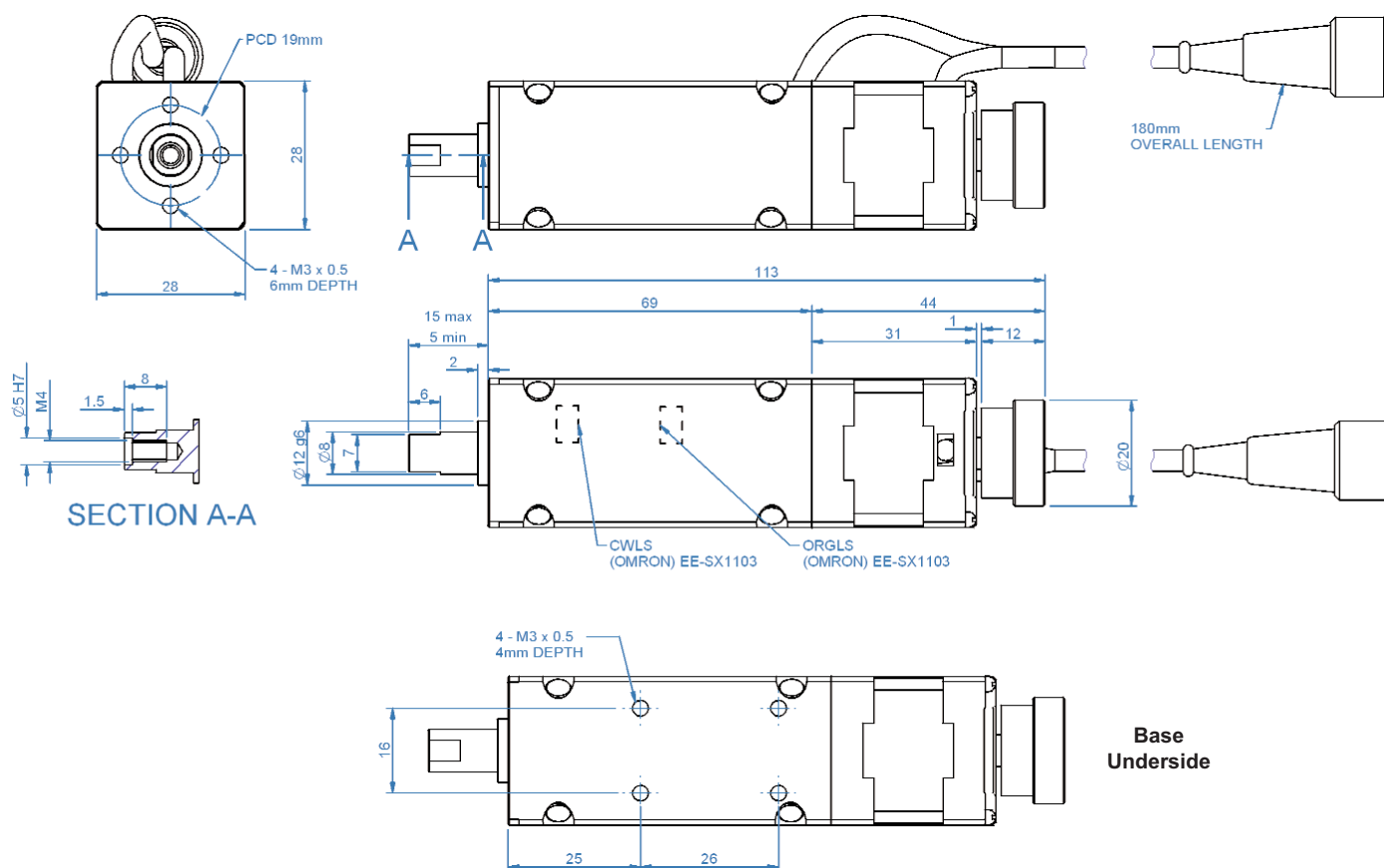




# Reliance Precision Mechatronics LLP



## RMRA 5SP - Miniature Rod Type Actuator Miniature Electrically Powered Cylinder



### Specifications:

All dimensions in millimetres

Model	Stroke mm	Position Repeatability mm	Axial Thrust N	Drive System	Max. Speed mm/sec	Backlash mm	Resolution mm/step	Weight kg	Motor	Operating Temperature Range °C	Sensor
RMRA-5SP	10	±0.002	29.4	Precision ground ball screw Lead : 0.5mm	10	0.005 max	0.001 (Full step)	0.27	5-phase stepper motor	0 to 40	Photo micro Sensor (2 points) 5V DC, 50 mA

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## Features:

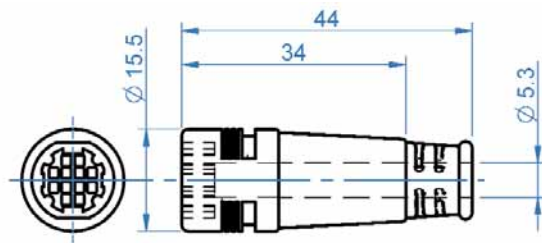
- Ultra-compact, small-stroke rod type actuator
- Ideal for applications such as electrically powered micrometer heads
- Metal parts and 0.5mm lead ballscrew are used, resulting in high rigidity and ultra precision
- 5-phase stepper motors are used for smooth movement and minimal heat generation

## Applications:

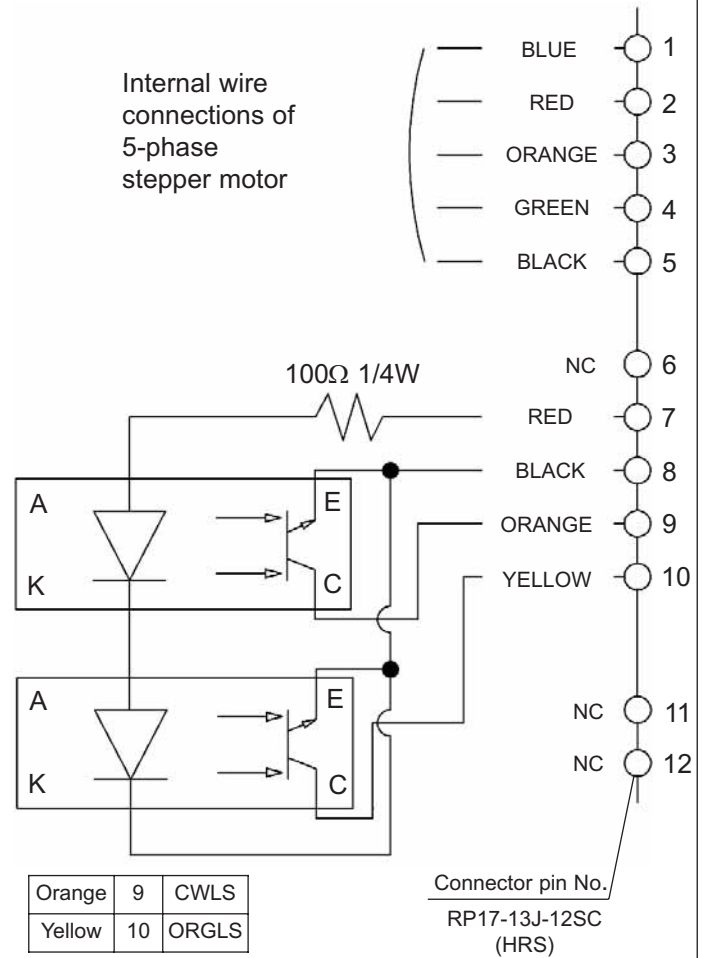
Ideal for applications demanding a smaller space envelope and microscopic feeding, fine angular adjustment, rotation control, precision dispensing and mirror movement.

## Connector Details:

RP17-13J-12SC



## Wire Connection Diagram:



## Available Accessory:

### KR-55ME-SS, 5-Phase Micro-Step Driver

- Micro-step driver for 5-phase stepper motors with a 24V DC power supply input
- 16 step angle types can be set with up to 250 divisions/125,000 pulses per revolution
- A low-vibration function ensures reduced vibration for full-step drive
- 2 types of micro-step angle can be selected as required using a selector signal
- Input/output signal optically isolated
- External dimensions 105 x 74 x 38mm



## Specifications:

Input Power Supply	DC24V ±10% (3A max.)
Drive Current	0.23 to 0.75 A/phase
Drive System	Micro-step drive system
Operating Temperature Range	0 to 40°C
Weight	Approx. 0.2g

## Input Pulse Characteristics:

Pulse Width	0.5µs min.
Pulse Interval	0.5µs min.
Rise/Fall Time	1µs max.
Max Pulse Frequency	500K pps
Pulse Voltage	[1]4v to 8v [0]0.5v to -8v
Internal Resistance	300Ω (F.R) 390Ω (H.O.D.S.)

Full technical information available on request



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