#### Super slim units with refined precision



# **KUMINA Series**



#### **Features**

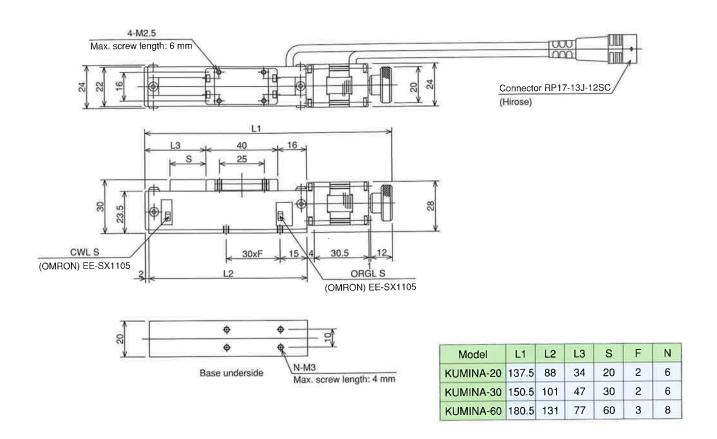
- Super-slim miniature actuators, up to 24 mm wide and 30 mm high (palm-sized).
- Precision ground miniature ball screws are used, resulting in ultra-precision, high durability, and high resolution.
- These units incorporate photo sensors (CW / CCW), despite their ultra-compact size.
- Ideal for high-precision positioning of small components, and dose control.

# **Specifications (Standard products)**

Model	Units	KUMINA-20-24	KUMINA-30-24	KUMINA-60-24
Stroke	(mm)	20	30	60
Repeated positioning accuracy	(mm)	± 0.005		
Maximum horizontal load capacity	N (kgf)	29.4 (3.0)		
Maximum vertical load capacity	N (kgf)	10.2 (1.0)		
Maximum load moment	N · m (kgf · cm)	Mp: 0.6 (6.2) My: 0.6 (6.2) Mr: 1.17 (11.4)		
Maximum speed	(mm/sec)	20		
Initial lost motion	(mm)	0.005 max.		
Lead	(mm)	1		
Resolution	(mm/step)	0.002 (For full step)		
Weight	(kg)	0.2	0.21	0.23
Motor		Five-phase stepping motor, 0.35 A/phase (24mm x 24mm)		
Sensor		Photo micro sensor (2 points, motor side and opposite side): 5V DC, 50mA		
Operating temperature range	(℃)	0 ~ 40		

<sup>\*</sup> Maximum load moments - Mp: Permissible moment in screw pitch direction; My: Permissible yaw moment; Mr: Permissible rolling moment

#### Specifications diagram

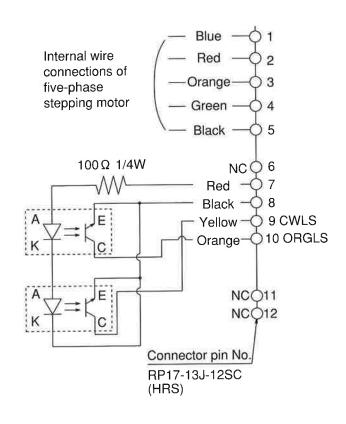




# **Applications**

Ideal for applications demanding high accuracy, such as precision positioning devices for small component installations, measuring equipment, desktop testing equipment, and precision dispensers.

# Wire connection diagram



★ Special custom orders and single-unit orders are welcome.