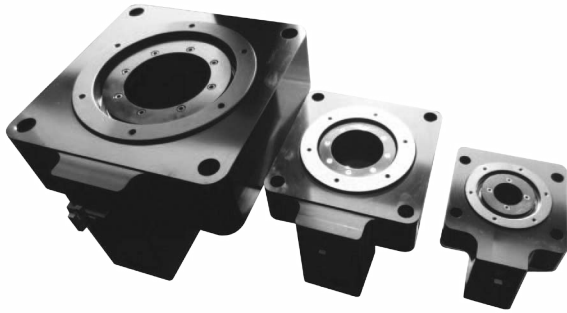


## KRA series– Electric rotary actuator(hollow type)



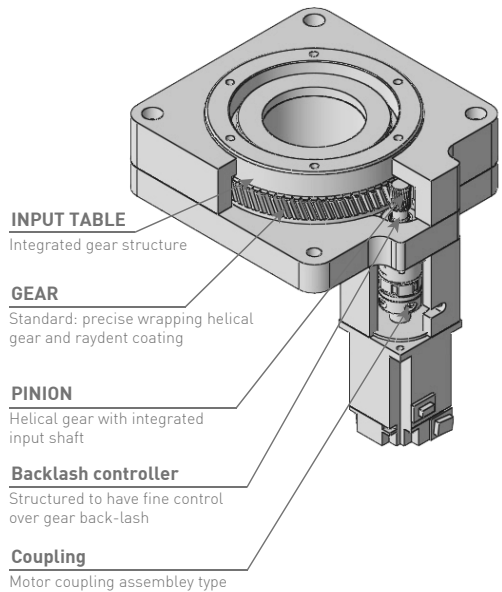
Series	KRA104-SV	KRA104-ST	KRA150-SV
Motor	100W-40, Servo Motor	EDCI-42V24/L, Step Motor	400W-60, Servo Motor
Input table support bearing	Crossed Roller Bearing(4010)	Crossed Roller Bearing(4010)	Crossed Roller Bearing(7013)
Table torque limit [N·m]	1.6	1.2	13
Table rotation speed limit [rpm]	200	100	200
Gear ratio	1:5	1:5	1:10
Backlash(lost Motion) [°]	0.16~0.33	0.16~0.33	0.16~0.33
Resolving power [ppr]	4,194,304 x 5	10,000 x 5	4,194,304 x 10
Repetition positioning precision [°]	±0.042	±0.042	±0.042
Thrust load limit [N]	compression: 833/ Tension: 166	compression: 833/ Tension: 166	compression: 1940/ Tension: 388
Input table wobble [mm]	±0.06	±0.06	±0.08
Weight (motor not included) [kg]	1.3	1.3	4

Series	KRA150-ST	KRA250-SV	KRA250-ST
Motor	EDCI-60V24/L, Step Motor	750W-80, Servo Motor	EDCI-86V48/L, Step Motor
Input table support bearing	Crossed Roller Bearing(7013)	Crossed Roller Bearing(12025)	Crossed Roller Bearing(12025)
Table torque limit [N·m]	5.6	28.8	12.6
Table rotation speed limit [rpm]	100	200	100
Gear ratio	1:10	1:12	1:12
Backlash(lost Motion) [°]	0.16~0.33	0.16~0.33	0.16~0.33
Resolving power [ppr]	10,000 x 10	4,194,304 x 12	10,000 x 12
Repetition positioning precision [°]	±0.042	±0.042	±0.042
Thrust load limit [N]	compression: 1940/ Tension: 388	compression: 4460/ Tension: 890	compression: 4460/ Tension: 890
Input table wobble [mm]	±0.08	±0.10	±0.10
Weight (motor not included) [kg]	4	16	16

- Servo/step motor can be easily attached to the rotary actuator with coupling
- Compact and simple design
- Precise helical gear and cross roller bearing offers maximum efficiency
- Motor capacity 50W(40)~750W(80) with planetary gear.

► Customization available

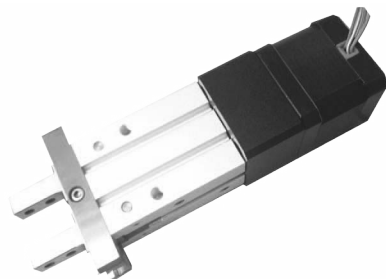
### Features



## TEF series–Electric gripper

- Step motor or servo motor option available  
Step motor for small capacity and low speed (TEF 10,16,20,25)  
Servo motor(40) for large capacity and high speed (TEF 20,25)
- Applies specially processed ball screw and nut  
Durability increased with special steel and special coating  
Improved gripping force
- Long stroke and various mountings  
Rear flange type

► Customization available



Series	Size	Open/closing stroke (mm)	Gripping force (N)	Opening/closing speed (mm/s)
TEF	10	4	10	3~60
	16	6	34	3~60
	20	10	42	3~80
	25	14	62	3~80