

KCERM-R110 Module Series

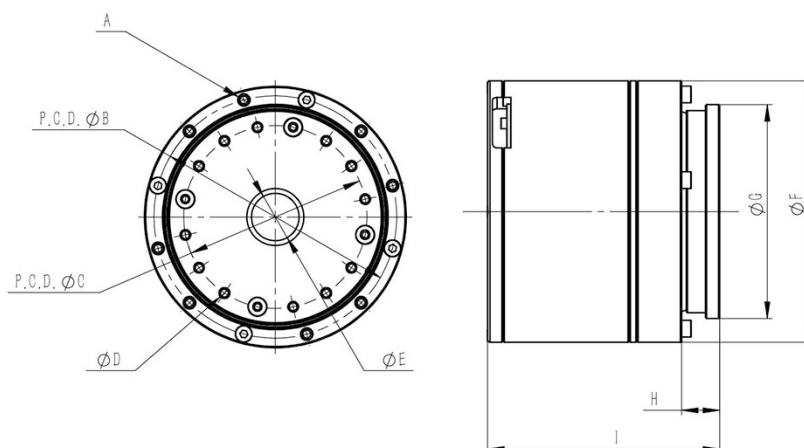


The product can effectively replace some direct-drive motors and hollow rotary platforms. Rotating actuators such as precision cam splitters and servo-integrated high-ratio planetary reducers. The harmonic reducer is combined with a standard servo motor or a stepper motor.

Feature

In the field of collaborative robots, further reduce the volume and weight of the robot joint module, implement a highly integrated transmission joint module solution.

Drawing



Naming resolution

K	CE	RM	R110	100	18	B	S	C	N
Product coding	Integration	Joint Module	Specifications	reduction ratio	Inner diameter	Is there a brake	Encoder type	contact method	torque sensor

Product size specification table(mm)

	A	B	C	D	E	F	G	H	I
R110	8-φ4.5 T22 EQS M4T10	102	77	12-φ4.5 T14 EQS M4T10	18	110	90	16	97.5
Deviation	—	—	—	—	—	0 -0.03	0 -0.03	—	—
Weight (kg)	No brakes: 3.52Kg			Equipped with brakes: 3.85Kg (friction damping brake)					

Parameter Table 1

Model	R110					
Speed ratio	—	50	80	100	120	160
Input the rated torque at 2000r/min	Nm	51	82	87	87	587
	kgfm	5.1	8.2	8.7	8.7	8.7
Allowable peak torque during start-stop	Nm	127	178	217	217	229
	kgfm	12.7	17.8	21.7	21.7	22.9
Allowable maximum torque of average load torque	Nm	72	113	140	140	140
	kgfm	7.2	11.3	14.0	14.0	14.0
Instantaneous allowable maximum input torque	Nm	242	332	369	395	408
	kgfm	24.2	33.2	36.9	39.5	40.8
Maximum allowable input speed (grease lubrication)	r/min	5000				
Allowable average input speed (grease lubrication)	r/min	3500				
Maximum allowable rotational speed at the output end	RPM	59	36	29	24	18
Backlash	Arc Sec	≤30			≤25	
Design life	Hour	15000			12000	

Parameter Table 2

Model	R110		
Brake parameters	Static torsion	Nm	≥3.0
	Braking response time	ms	120
	Disconnect response time	ms	50
Encoder parameters	position loop	bit	19
	speed loop	bit	20
Motor parameters	rated power	w	370
	rated speed	RPM	2950
	rated torque	Nm	1.2
	peak torque	Nm	3.6
Driver parameters	communication interface	—	EtherCAT/CANOpen
	Control bandwidth	—	Current loop: 50KHz Speed loop: 10KHz
	protection function	—	Reverse connection, overheating, short circuit Overvoltage, undervoltage, self check