

KCERM-R170 Module Series

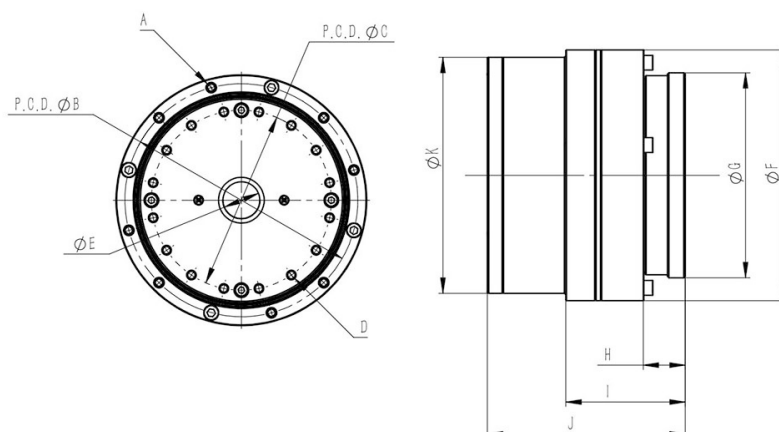


The product can effectively replace some direct-drive motors and hollow rotary platforms. Rotating actuators such as precision cam splitters and servo-integrated high-ratio planetary reducers. The harmonic reducer is combined with a standard servo motor or a stepper motor.

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	R170	100	25	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	J	K
R170	8-φ6.6 T33 EQS M6T15	158	122	16-φ6.6 T27 EQS M6T14	25	170	139	28.5	81	134.2	160
Deviation	—	—	—	—	—	0 -0.03	0 -0.03	—	—	—	—
Weight (kg)	No brakes: 11.34Kg					Equipped with brakes: 11.60Kg (friction damping brake)					

Parameter Table 1

Model	R110					
Speed ratio	—	50	80	100	120	160
Input the rated torque at 2000r/min	Nm	178	268	345	382	382
	kgfm	17.8	26.8	34.5	38.2	38.2
Allowable peak torque during start-stop	Nm	523	675	738	802	841
	kgfm	52.3	67.5	73.8	80.2	84.1
Allowable maximum torque of average load torque	Nm	255	369	484	586	586
	kgfm	25.5	36.9	48.4	58.6	58.6
Instantaneous allowable maximum input torque	Nm	892	1270	1400	1530	1530
	kgfm	89.2	127	140	153	153
Maximum allowable input speed (grease lubrication)	r/min	4000				
Allowable average input speed (grease lubrication)	r/min	3000				
Maximum allowable rotational speed at the output end	RPM	28	17	14	12	8
Backlash	Arc Sec	≤30			≤25	
Design life	Hour	15000			12000	

Parameter Table 2

Model	R170		
Brake parameters	Static torsion	Nm	≥5.0
	Braking response time	ms	100
	Disconnect response time	ms	80
Encoder parameters	position loop	bit	19
	speed loop	bit	20
Motor parameters	rated power	w	500
	rated speed	RPM	1200
	rated torque	Nm	3.0
	peak torque	Nm	11.0
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