

KCERM-R70 Module Series

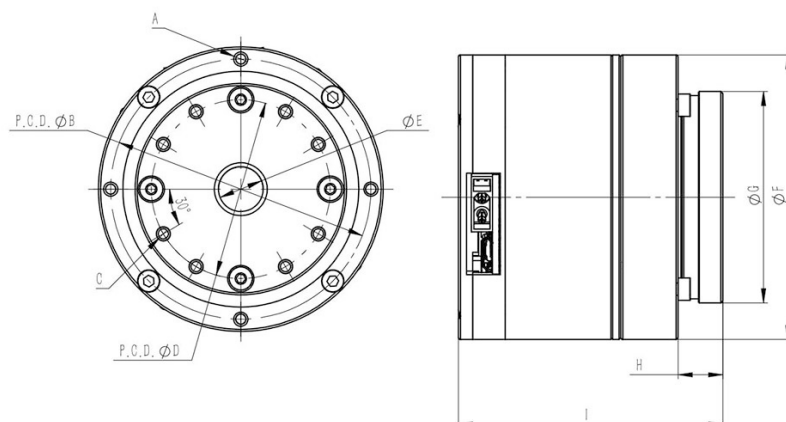


The product can effectively replace some direct-drive motors and hollow rotary platforms. Rotating actuators such as precision cam splitters and servo-integrated high-ratio planetary reducers. The harmonic reducer is combined with a standard servo motor or a stepper motor.

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	R70	100	11	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
R70	4- ϕ 3.5 T15 EQS M3T5	64	8- ϕ 3.5 T10 EQS M3T5	44	11	70	52	11	65
Deviation	—	—	—	—	—	0 -0.03	0 -0.03	—	—
Weight (kg)	No brakes: 0.76Kg			Equipped with brakes: 0.84Kg (friction damping brake)					

Parameter Table 1

Model	R70			
Speed ratio	—	50	80	100
Input the rated torque at 2000r/min	Nm	7	10	10
	kgfm	7	1.0	1.0
Allowable peak torque during start-stop	Nm	23	30	36
	kgfm	2.3	30	3.6
Allowable maximum torque of average load torque	Nm	9	14	14
	kgfm	0.9	1.4	1.4
Instantaneous allowable maximum input torque	Nm	46	61	70
	kgfm	4.6	6.1	7.0
Maximum allowable input speed (grease lubrication)	r/min	8000		
Allowable average input speed (grease lubrication)	r/min	3500		
Maximum allowable rotational speed at the output end	RPM	96	60	48
Backlash	Arc Sec	≤30		≤25
Design life	Hour	15000		12000

Parameter Table 2

Model	R70		
Brake parameters	Static torsion	Nm	≥0.5
	Braking response time	ms	100
	Disconnect response time	ms	50
Encoder parameters	position loop	bit	19
	speed loop	bit	20
Motor parameters	rated power	w	151
	rated speed	RPM	4800
	rated torque	Nm	0.3
	peak torque	Nm	0.96
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