

High-Precision Cycloidal Reducer (RV Reducer)



Reducer Applications

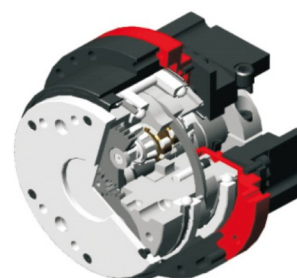
Liquid crystal panel production equipment, CNC tool changers, rotary tables, robot joints, palletizers, positioners, welding machines, radar, antennas, navigation equipment, riveting machines, aluminium machines, automated firing platforms, ammunition exchange systems, 3D printers, 5-axis water jets, multi-axis grinding equipment, cleanroom rotary table applications, wind tunnel testing, etc.

Reducer Features

- Ultra-low backlash, transmission hysteresis less than 1 arcmin
- Low noise, low vibration, high efficiency (efficiency greater than 88%)
- Fully sealed IP65 protection rating for input/output ends
- Wide range of reduction ratios: 19–5000 (some custom options)
- Complete input support structure and sealed output structure for easier assembly
- Broad torque range: 19Nm–40000Nm (some custom options)
- Pre-lubricated with specialised grease, maintenance-free for life

Solid Shaft Type

Model	Rated Output Torque	Rated Output Speed	Acceleration / Deceleration	Backlash	Torsional Stiffness
	Nm	rpm	Nm	arcmin	Nm/arcmin
CK004	40	30	84	< 1	6.6
CK009	92	30	230	< 1	17
CK014	141	20	353	< 1	28
CK026	259	15	648	< 1	56
CK053	532	15	1330	< 1	120
CK080	784	15	1960	< 1	203
CK110	1095	15	2738	< 1	306
CK180	1826	15	4100	< 1	461
CK320	3136	15	7840	< 1	1027
CK450	4450	15	11125	< 1	1611



Hollow Shaft Type

Model	Rated Output Torque	Rated Output Speed	Acceleration / Deceleration	Backlash	Torsional Stiffness
	Nm	rpm	Nm	arcmin	Nm/arcmin
CH005	47	30	104	< 1	10
CH009	85	20	212	< 1	27
CH014	141	15	352	< 1	45
CH020	260	15	643	< 1	81
CH040	372	15	930	< 1	93
CH065	656	15	1620	< 1	182
CH080	823	15	2057	< 1	271
CH115	1196	15	2957	< 1	326
CH200	1912	15	4725	< 1	770
CH800	8030	15	19850	< 1	2903



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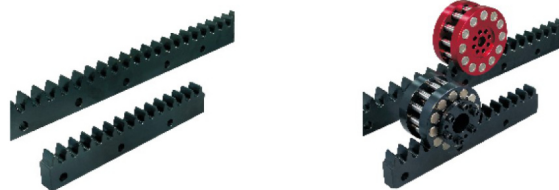
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Zero-Backlash Roller Rack & Gear Ring



Zero-Backlash Roller Rack

- High precision, high speed, high efficiency
- Low noise, low dust generation, low wear
- Infinite splicing for ultra-long-distance motion



Model	Pinion		CRP002-P	CRP004-P	CRP008-P	CRP015-P	CRP020-P	CRP040-P	CRP060-P	CRP080-P	CRP120-P	CRP180-P	Custom Specifications Available (Enquire with us)
	Rack		CRP002-R	CRP004-R	CRP008-R	CRP015-R	CRP020-R	CRP040-R	CRP060-R	CRP080-R	CRP120-R	CRP180-R	
Force 	Max.acc/dec.tangential	N	851	1403	2105	3158	3509	6015	7895	9357	12632	15789	
	Pack tangential force(E-	N	1702	2807	4210	6316	7018	12030	15789	18713	25263	31579	
Accuracy 	Positioning accuracy	μm	±30	±30	±25	±25	±25	±25	±20	±20	±20	±20	
	Repeatable positioning	μm	±7	±7	±5	±5	±5	±5	±5	±5	±5	±5	

Zero-Backlash Roller Gear Ring

- Large/medium size, high torque, large dimensions
- High torque, high rigidity, high precision

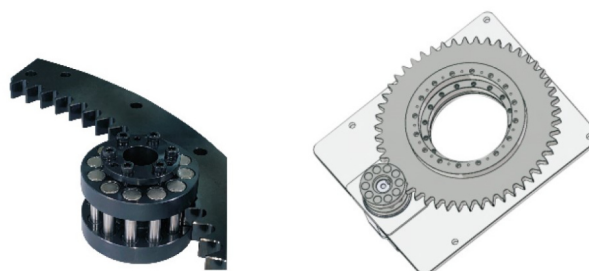


Pinion model	Circular rack model	Ratio	Rated output torque (Nm)	Max acc./dec. torque (Nm)	Center distance (mm)	Inner diameter (mm)	Outer diameter (mm)	Thickness (mm)	Style	Structure	Custom Specifications Available (Enquire with us)
RPE004	RPE004-i3-ixx	3_X	40	80	Customisable				Internal / External Gear Teeth	Full Circle / Segment	
RPE008	RPE008-i3-ixx	3_X	80	160							
RPE015	RPE015-i3-ixx	3_X	150	300							
RPE020	RPE020-i3-ixx	3_X	200	400							
RPE040	RPE040-i3-ixx	3_X	400	800							
RPE060	RPE060-i3-ixx	3_X	600	1200							
RPE080	RPE080-i3-ixx	3_X	800	1600							
RPE120	RPE120-i3-ixx	3_X	1200	2400							
RPE180	RPE180-i3-ixx	3_X	1800	3600							

*Gear ring torque = Roller torque × Reduction ratio

Zero-Backlash Roller Gear Ring

Available options:
External gear ring / Internal gear ring / Segmented angle
/ Integrated rotary platform; Customisation services provided.



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