

PRECISION MOTION CONTROL

Compact Precision Ring Drive

Based on Nexen's innovative Roller Pinion technology, the Compact Ring Drive (CRD) system comes complete with a precision grade bearing and drive mechanism in a sealed housing.

Freely programmable, the three drive design configurations allow the CRD to be optimized for high speed, high torque or both depending on the application. With a 250 or 350 mm dial plate bolt circle diameter and a large open center, users can optimize performance in a small space.





High Indexing Precision

With an indexing precision up to \pm 30 ArcSec and repeatability up to \pm 5 ArcSec, Nexen's CRD offers unmatched mechanical system capabilities.

Zero Backlash

Unlike other mechanical drive systems, the CRD offers zero backlash options from the motor through the driven load.

High Output Load Capacity

With the precision grade, high load capacity cross-roller bearing, the CRD can handle loads up to 112 kN.

High Speed

The high speed bearing option allows for speeds up to 500 RPM.

Smooth in Motion

Combining Nexen's RPS technology with an integrated bearing and motor/gearhead gives a rigid, smooth system.

>>> A DRIVE STATION FOR EVERY APPLICATION

Direct Drive (DDP)

High Speed Mid Torque

High Precision Planetary (PL)



High Torque Mid Speed

Harmonic Gearhead (HG)



High Torque Low Speed

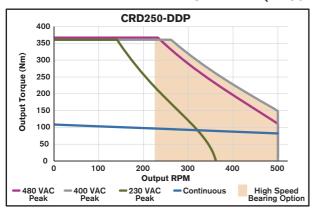


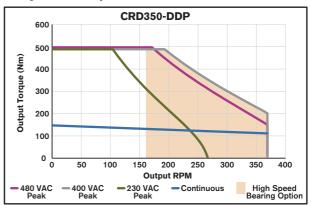
PRECISION MOTION CONTROL

		High Speed & Mid Torque				High Torque & Mid Speed				High Torque & Low Speed		
Performance Specifications		CRD250-DDP		CRD350-DDP		CRD250-PL		CRD350-PL		CRD250-HG	CRD350-HG	
Bearing Type: High Load / High Speed		HL	HS	HL	HS	HL	HS	HL	HS	HL	HL	
Maximum Velocity	RPM	See C	Charts	See Charts		225**	329**	161** 240**		25**	18**	
Max Continuous Velocity	RPM	See Charts		See Charts		151**		111**		18**	13**	
Positional Accuracy	±ArcSec	41		30		59*		43*		42	31	
One Way Repeatability	±ArcSec	6.8		5		7		5.2		7	5.2	
Max Backlash	ArcSec	0		0		20.3*		14.8*		0	0	
Max Acceleration Torque	Nm	360		487		494		676		532	728	
Continuous Stall Torque	Nm	110		150		N/A		N/A		N/A	N/A	
Nominal Torque	Nm	N/A		N/A		323		442		380	520	
Gear/Pinion Ratio		6.2:1		8.4:1		3.8:1		5.2:1		3.8:1	5.2:1	
Input to Output Ratio		6.2:1		8.4:1		15.2:1**		20.8:1**		190:1**	260:1**	
Max Axial Output Load	kN	60	20	112	23	60	20	112	23	60	112	
Max Radial Output Load	kN	40	17.5	75	20	40	17.5	75	20	40	75	
Max Moment Output Load	Nm	3575	1450	9350	2450	3575	1450	9350	2450	3575	9350	

^{*}Includes Gearbox Backlash **Assumes Planetary Gearbox Ratio of 4:1 and Harmonic Gearhead Ratio of 50:1 (other ratio options available)

CRD-DDP (Direct Drive) System Output





Direct Drive Motor Specification	CR	D250-D	DP	CRD350-DDP			
Voltage Req'd at Rated Output (Vac Input)	Vac	230	400	480	230	400	480
Peak Current (Ip)	Amps	49.5	49.5	39.2	49.5	49.5	39.2
Continuous Current (Ic)	Amps	10.9	10.9	8.7	10.9	10.9	8.7
Torque Sensitivity (Kt)*	Nm/Arms	10.2	10.2	12.7	13.7	13.7	17.2
Back EMF Constant (Kb)*	Vpk/kRPM	613	613	769	830	830	1040
Resistance (Line to Line) (Rm)	Ohms	1.14	1.14	1.80	1.14	1.14	1.80
Inductance (Lm)	mH	9.3	9.3	15	9.3	9.3	15

^{*}System Equivalent Values



Nexen Group, Inc. 560 Oak Grove Parkway Vadnais Heights, MN 55127 (800) 843-7445 Fax: (651) 286-1099 www.nexengroup.com

Nexen has sales offices throughout the United States, Europe, Japan, and Australia.

www.nexengroup.com

Preliminary product. Data subject to change without notice.

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