

Generation II Stealth® Series

RX Generation II Performance Specifications

Parameter	Units	Ratio	RX60 Gen II/23	RX90 Gen II/34	RX115 Gen II/42
Nominal Output Torque ¹⁾ $T_{nom r}$	Nm (in-lb)	5	10 (89)	44 (390)	68 (602)
		10	19 (168)	64 (566)	128 (1133)
		15,20,25,50	24 (212)	66 (585)	136 (1204)
		30,40,100	20 (177)	60 (530)	128 (1133)
Maximum Acceleration Output Torque ²⁾ $T_{acc r}$	Nm (in-lb)	5	15 (133)	66 (584)	102 (903)
		10	28 (248)	96 (850)	192 (1700)
		15,20,25,50	36 (319)	100 (885)	204 (1805)
		30,40,100	30 (266)	90 (797)	192 (1700)
Emergency Stop Output Torque ³⁾ $T_{em r}$	Nm (in-lb)	5	32 (283)	120 (1062)	216 (1912)
		10	58 (513)	192 (1700)	384 (3398)
		15,20,25,50	64 (566)	200 (1770)	408 (3611)
		30,40,100	48 (425)	160 (1416)	345 (3053)
Nominal Input Speed $N_{nom r}$	RPM	5,10	3200	2800	2400
		15,20,25,30,40	3700	3300	2900
		50,100	4200	3800	3400
Maximum Input Speed $N_{max r}$ ⁴⁾	RPM	5 – 100	6000	5300	4500
Maximum Radial Load Pr_{max} ^{5, 7)}	N (lbs)		1550 (348)	2800 (1079)	5500 (1236)
Maximum Axial Load Pa_{max} ⁶⁾	N (lbs)		2100 (475)	3600 (810)	6800 (1530)
Service Life	h		20,000		
Standard Backlash ⁸⁾	arc-min	5 – 10	<20	<18	<16
		15 – 100	<20	<18	<16
Low Backlash ⁸⁾	arc-min	5 – 10	<18	<16	<14
		15 – 100	<16	<14	<12
Efficiency at Nominal Torque	%	5 – 100	94	94	94
Noise Level at 3000 RPM ⁹⁾	db	5 – 100	<65	<68	<68
Torsional Stiffness	Nm/arc-min (in-lb/arc-min)	5 – 100	2.5 (22)	10 (90)	22 (195)
Maximum Allowable Case Temperature	°C	5 – 100	-20 to 90		
Lubrication		5 – 100	Per Maintenance Schedule		
Mounting Position		5 – 100	Any		
Degree of Protection			IP65		
Maximum Weight	kg (lbs)	5 – 100	2.0 (4.4)	6.0 (13.2)	11.0 (24.2)

1) At nominal speed $N_{nom r}$.

2) Parker MotionSizer sizing software available for free download at parkermotion.com.

3) Maximum of 1000 stops.

4) For intermittent operation.

5) Max radial load applied to the center of the shaft at 100 rpm.

6) Max axial load at 100 rpm.

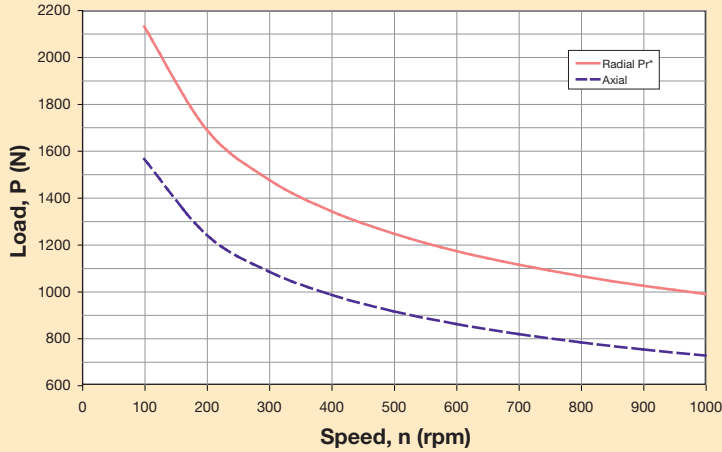
7) For combined radial and axial load consult factory.

8) Measured at 2% of rated torque.

9) Measure at 1m.

RX Generation II Output Shaft Load Rating

RX60 / RX23

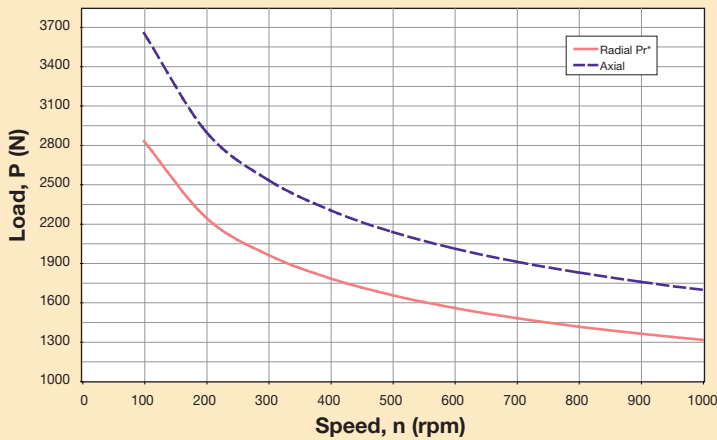


Formulas to calculate radial load (Prx) at any distance "X" from the gearhead mounting surface:

$$Prx = Pr * 78 \text{ mm} / (63 + X)$$

$$Prx = Pr * 3.07 \text{ in} / (2.48 \text{ in} + X)$$

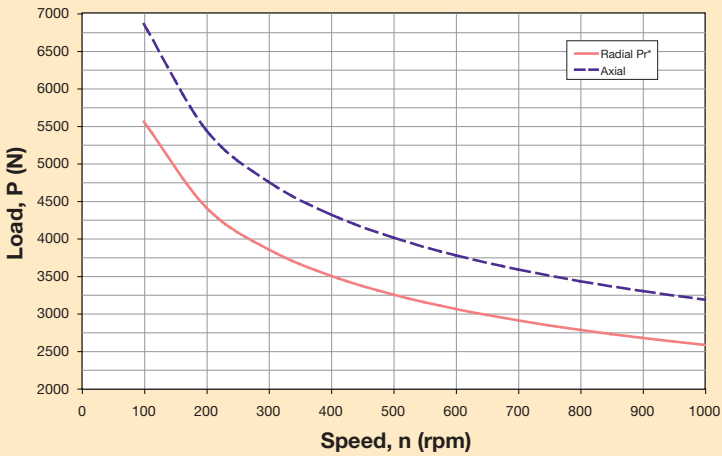
RX90 / RX34



$$Prx = Pr * 95 \text{ mm} / (73 + X)$$

$$Prx = Pr * 3.74 \text{ in} / (2.87 \text{ in} + X)$$

RX115 / RX42



$$Prx = Pr * 115 \text{ mm} / (73 + X)$$

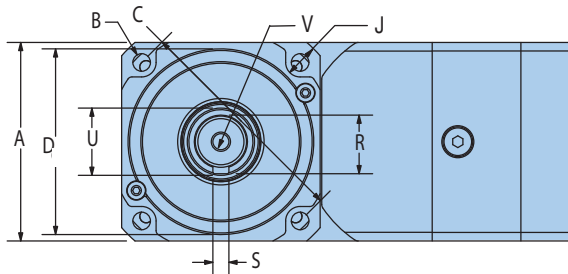
$$Prx = Pr * 4.53 \text{ in} / (3.43 \text{ in} + X)$$

* Radial load applied to center of the shaft.

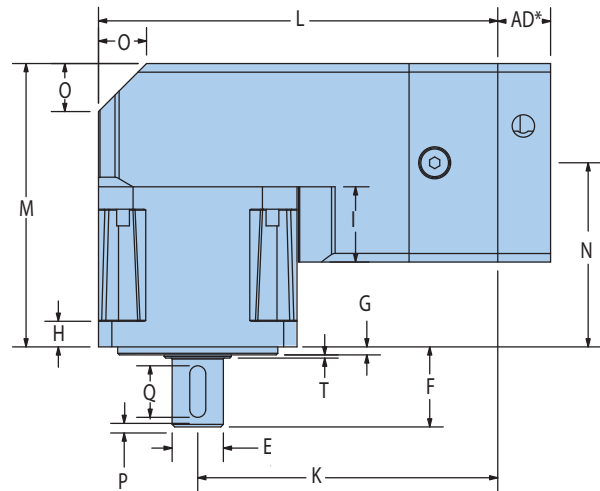
Generation II Stealth® Series

RX Generation II Dimensions

Free 3D Solid Models and drawings available at parkermotion.com



RX Gearheads also available with Flange Mount Option – Contact Factory



Metric Frame Sizes

Frame Size	A		B		C		D		E		F		G		H		I		J		K	
	Square Flange		Bolt Hole		Bolt Circle		Pilot Diameter		Output Shaft Diameter		Output Shaft Length		Pilot Thickness		Flange Thickness		Recess Length		Housing Recess		Distance to Output Centerline	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
RX60	62	2.441	5.5	0.217	70	2.756	50	1.969	16	0.630	25	0.984	2.5	0.098	8	0.315	23.5	0.925	5	0.197	93.7	3.689
RX90	90	3.543	6.5	0.256	100	3.937	80	3.150	20	0.787	40	1.575	3	0.118	10	0.394	36.5	1.437	6.5	0.256	132	5.197
RX115	115	4.528	8.5	0.335	130	5.118	110	4.331	24	0.945	50	1.969	3.5	0.138	12	0.472	47.5	1.870	7.5	0.295	153.5	6.043

Frame Size	L		M		N		O		P		Q		R		S		T		U		V	
	Housing Length		Housing Width		Distance to Input Centerline		Taper Distance		Distance from Shaft End		Keyway Length		Key Height		Keyway Width		Shoulder Height		Shoulder Diameter		Tap & Depth (end of shaft)	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
RX60	124.5	4.902	88.5	3.484	57.5	2.264	14	0.551	3	0.118	16	0.630	18	0.709	5	0.197	0.5	0.020	21	0.827	M5x8	
RX90	177	6.969	114	4.469	68.5	2.697	25	0.984	5	0.197	28	1.102	24.5	0.965	6	0.236	0.5	0.020	29	1.142	M8x16	
RX115	211	8.307	138	5.445	81	3.189	32	1.260	7	0.276	32	1.260	27	1.063	8	0.315	1	0.039	36	1.417	M8x16	

NEMA Frame Sizes

Frame Size	B		C		D		E		F		Q		R		S	
	Bolt Hole		Bolt Circle		Pilot Diameter		Output Shaft Diameter		Output Shaft Length		Keyway Length		Keyway Depth		Keyway Width	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
RX23	0.2	4.953	2.625	66.675	1.5	38.100	0.38	9.525	1	25.400	—	—	—	—	—	—
RX34	0.22	5.512	3.88	98.425	2.88	73.025	0.5	12.700	1.25	31.750	1.06	27.000	0.07	1.829	0.13	3.251
RX42	0.28	7.137	4.95	125.730	2.19	55.550	0.63	15.875	1.5	38.100	1.14	29.007	0.09	2.388	0.19	4.775

RX23 has a flat on output shaft, not a keyway

NOTE: NEMA Sizes have 20% lower torque/stiffness ratings due to smaller output shaft diameter.

RX Generation II Universal Mounting Kits*

Adapter Length “AD” Dimension

Frame Size	Motor Shaft Length		Gearhead Adapter Length	
	mm	in	mm	in
60	16 – 35	0.630 – 1.378	16.5	0.65
	35.1 – 41	1.382 – 1.614	22.5	0.886
90	20 – 40	0.787 – 1.575	20	0.787
	40.1 – 48	1.579 – 1.890	28.5	1.122
115	22 – 50	0.866 – 1.969	24	0.945
	50.1 – 61	1.972 – 2.402	35	1.378

* Know your motor and need our mounting kit part number? See page 29 or use our Motor Mounting Search Tool on our website at: www.parkermotion.com

RX Generation II Inertia

All moment of inertia values are as reflected at the input of the gearhead

Ratio	Units*	RX60 / RX23	RS90 / RX34	RS115 / RX42
5	kg-cm ²	0.2200	0.8100	2.5000
	in-lb-sec ²	0.000195	0.000717	0.002213
10	kg-cm ²	0.1900	0.6100	1.9000
	in-lb-sec ²	0.000168	0.000540	0.001682
15	kg-cm ²	0.1800	0.6000	1.7000
	in-lb-sec ²	0.150000	0.000531	0.001505
20	kg-cm ²	0.1700	0.5100	1.4000
	in-lb-sec ²	0.000150	0.000451	0.001239
25	kg-cm ²	0.1600	0.4200	1.3000
	in-lb-sec ²	0.000142	0.000372	0.001151
30	kg-cm ²	0.1800	0.6000	1.7000
	in-lb-sec ²	0.000159	0.000531	0.001505
40	kg-cm ²	0.1700	0.5100	1.4000
	in-lb-sec ²	0.000150	0.000451	0.001239
50	kg-cm ²	0.1500	0.4000	1.1000
	in-lb-sec ²	0.000133	0.000354	0.000974
100	kg-cm ²	0.1500	0.4000	1.1000
	in-lb-sec ²	0.000133	0.000354	0.000974

* Note: 1 kg-cm² = 0.000885 in-lb-sec²