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www.iptech1.com

Stealth® MultiDrive Series:
The Flexible Right Angle

Stealth® MultiDrive™ (MD) offers three different output options for true flexibility. MultiDrive models include Low Ratio, Dual Shaft and Hollow Shaft options in a compact, right angle package. With 5 frame sizes and multiple ratios to choose from, you are guaranteed to find a Stealth® MultiDrive to fit your servo motor application.

RT Model
Hollow Shaft

MultiDrive™ features Stealth® helical gearing for high torque, high accuracy and quiet operation in a compact, right angle package.

- **Low Backlash**
  Standard as low as 8 arc minutes and 4 arc minutes optional
- **Space Saving**
  compact, right angle design saves space in many applications
- **Smooth, Quiet Operation and Long Life**
  hardened, precision spiral bevel gears ensure quiet operation.
- **Quick, Error-Free Mounting**
  to any servo or stepper motor using Bayside's patented ServoMount® design.
- **Sealed Unit…**
  seals and o-rings provide IP65 protection to prevent leaks and to protect against harsh environments.

Hollow Shaft Model

5 Frame Sizes
RT90
RT115
RT142
RT180
RT220

Ratios
3:1
9:1
15:1
21:1
30:1

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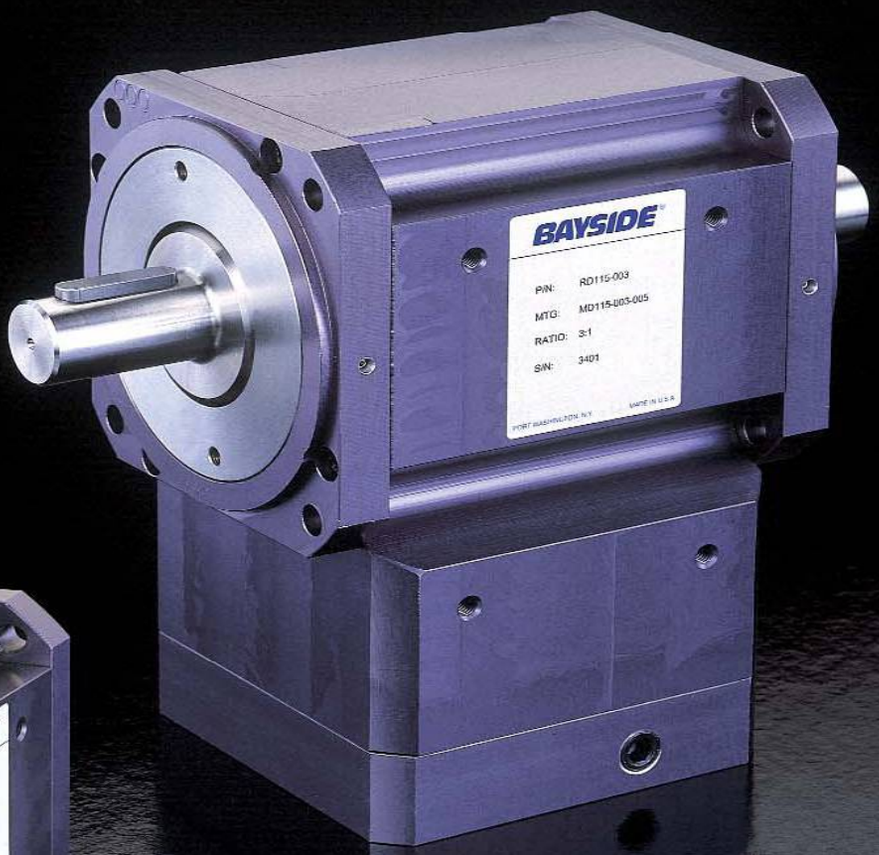
Dual Shaft Model
5 Frame Sizes
RD90
RD115
RD142
RD180
RD220

Ratios	
1:1	15:1
2:1	21:1
3:1	30:1
9:1	

RD Model
Dual Shaft



RB Model
Low Ratio

Low Ratio Model
5 Frame Sizes
RB90
RB115
RB142
RB180
RB220

Ratios
1:1
2:1
3:1

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Stealth® MultiDrive Series:

Performance Specifications

	Units	Ratio	Frame Size (RT, RD, RB) R_90	R_115	R_142	R_180	R_220
Nominal Output Torque, $T_{nom\ r}$	**Nm**	1	**23**	**45**	**113**	**192**	**508**
	in lb		200	400	1,000	1,700	4,500
	Nm	2-30	**34**	**90**	**136**	**260**	**565**
	in lb		300	800	1,200	2,300	5,000
Max. Acceleration Output Torque, $T_{acc\ r}$	**Nm**	1	**28**	**56**	**141**	**240**	**636**
	in lb		250	500	1,250	2,125	5,625
	Nm	2-30	**42**	**113**	**169**	**324**	**636**
	in lb		375	1,000	1,500	2,875	5,625
Emergency(1) Stop Output Torque, $T_{em\ r}$	**Nm**	1	**45**	**90**	**226**	**384**	**1,017**
	in lb		400	800	2,000	3,400	9,000
	Nm	2-30	**68**	**181**	**271**	**520**	**1,130**
	in lb		600	1,600	2,400	4,600	10,000
Nominal Input Speed, $N_{nom\ r}$	RPM	1,2,3	3,000	2,600	2,200	1,800	1,400
	RPM	9,15,21,30	3,800	3,400	3,000	2,400	1,800
Max. Input Speed, N_{maxr}	RPM	1,2,3	4,000	3,500	2,900	2,500	1,600
	RPM	9,15,21,30	5,300	4,500	3,800	3,000	2,300
Standard Backlash	arc min	1,2,3	10	9	9	8	8
	arc min	9,15,21,30	12	11	11	10	10
Low Backlash	arc min	1,2,3	6	5	5	4	4
	arc min	9,15,21,30	8	7	7	6	6
Efficiency at Nominal Torque	%	1,2,3	95	95	95	95	95
	%	9,15,21,30	92	92	92	92	92
Noise Level(2) at:							
2,500 RPM	dB	All	70	70	70	—	—
1,500 RPM	dB		—	—	—	72	72
Torsional Stiffness	**Nm / arc min**	All	**3**	**6**	**16**	**43**	**90**
	in lb / arc min		28	56	140	380	800
Maximum Weight	**kg**	All	**7**	**13**	**25**	**54**	**114**
	lb		16	28	56	120	250
Maximum Allowable Case Temperature	°C	All	← 100 →				

Specifications:	Units	Ratio	Frame Size (RT, RD, RB) R_90	R_115	R_142	R_180	R_220
Moment of Inertia(3)	**gm cm sec²**	1	**3.28**	**11.0**	**38.7**	**101**	**444**
	oz in sec²		0.046	0.153	0.538	1.41	6.17
	gm cm sec²	2	**4.17**	**11.3**	**32.8**	**95.4**	**274**
	oz in sec²		0.058	0.157	0.455	1.32	3.81
	gm cm sec²	3	**2.68**	**7.75**	**22.3**	**65.6**	**191**
	oz in sec²		0.037	0.108	0.311	0.911	2.65
	gm cm sec²	9	**1.07**	**3.28**	**10.4**	**35.8**	**119**
	oz in sec²		0.015	0.046	0.145	0.497	1.66
	gm cm sec²	15 - 30	**0.566**	**2.09**	**5.36**	**17.9**	**62.6**
	oz in sec²		0.008	0.029	0.075	0.248	0.869

(1) Maximum of 1,000 stops
(2) Measured at 1 meter
(3) All Moment of Inertia values are as reflected at the input shaft of the gearhead.

Specification are subject to change without notice

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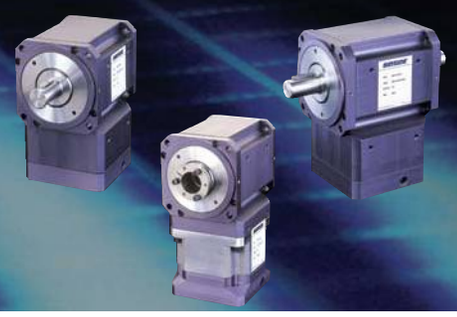
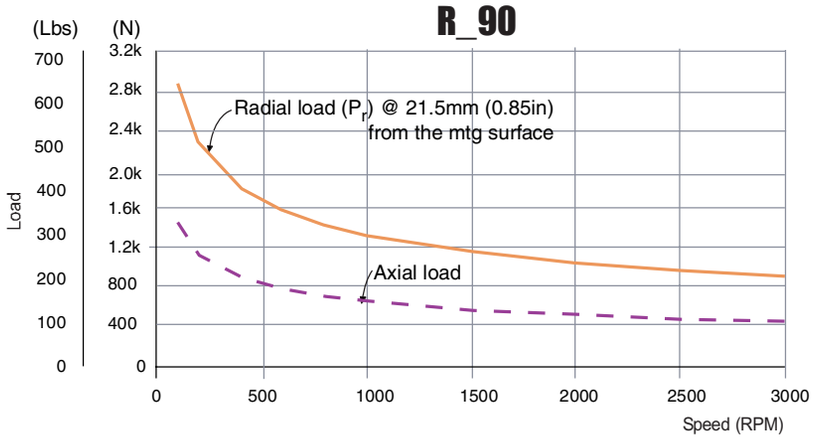
Stealth® MultiDrive Series:
Output Shaft Load Rating



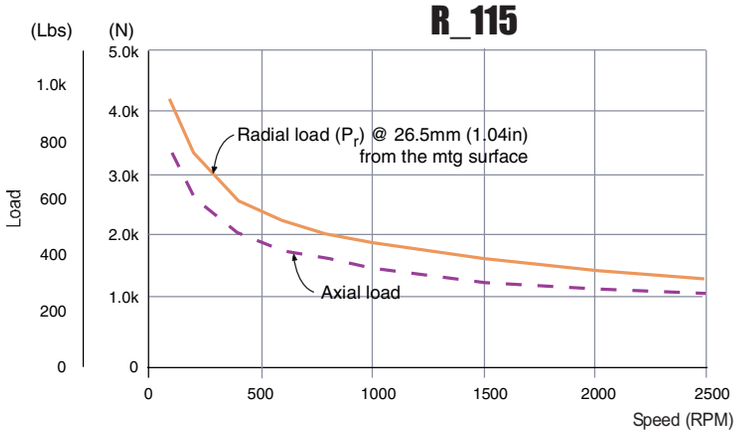
Formulas to calculate Radial Load (P_{rx}) at any distance "X" from the gearhead mounting surface.

R_90



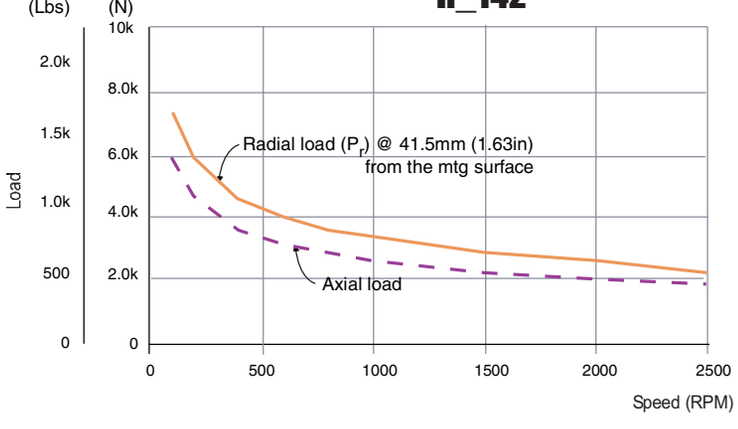
$P_{rx} = (P_r)(\mathbf{121mm}) / (\mathbf{100mm} + X)$
$P_{rx} = (P_r)(4.76in) / (3.94in + X)$

R_115



$P_{rx} = (P_r)(\mathbf{151mm}) / (\mathbf{125mm} + X)$
$P_{rx} = (P_r)(5.94in) / (4.92in + X)$

R_142



$P_{rx} = (P_r)(\mathbf{201mm}) / (\mathbf{160mm} + X)$
$P_{rx} = (P_r)(7.91in) / (6.30in + X)$

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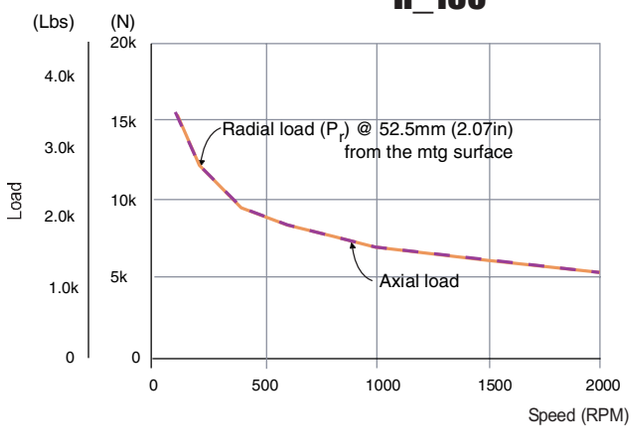
Stealth® MultiDrive Series:
Output Shaft Load Rating

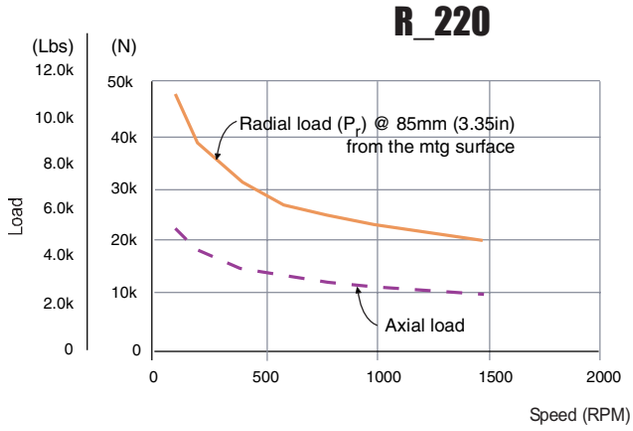
Formulas to calculate Radial Load (P_{rx}) at any distance "X" from the gearhead mounting surface.

R_180



$P_{rx} = (P_r)(\mathbf{260mm}) / (\mathbf{208mm} + X)$
$P_{rx} = (P_r)(10.24in) / (8.19in + X)$

R_220



$P_{rx} = (P_r)(\mathbf{352mm}) / (\mathbf{267mm} + X)$
$P_{rx} = (P)(13.86in) / (10.5in + X)$

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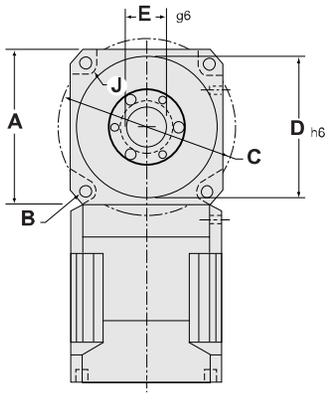
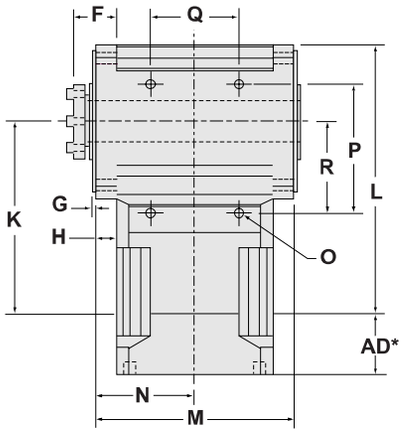
Stealth® MultiDrive Series:
RT Hollow Shaft

Dimensions

OUTPUT VIEW



SIDE VIEW



Frame Size	A Square Flange (mm)	A (in)	B Bolt Hole (mm)	B (in)	C Bolt Circle (mm)	C (in)	D Pilot Diameter (mm)	D (in)	E Thru Bore Diameter** (mm)	E (in)	F Taper Bushing Extension (mm)	F (in)	G Pilot Thickness (mm)	G (in)	H Flange Thickness (mm)	H (in)
RT90	90	3.543	6.5	0.256	100	3.937	80	3.150	22	0.866	26.5	1.043	3	0.118	12	0.472
RT115	115	4.528	8.5	0.335	130	5.118	110	4.331	30	1.181	31	1.220	3.5	0.138	14	0.551
RT142	142	5.591	11	0.433	165	6.496	130	5.118	38	1.496	43	1.693	3.5	0.138	20	0.787
RT180	182	7.165	13	0.512	215	8.465	160	6.299	48	1.890	54.2	2.134	10	0.394	25	0.984
RT220	220	8.661	17	0.669	250	9.843	180	7.087	60	2.362	74.1	2.917	15	0.591	35	1.378

Frame Size	J Housing Recess (mm)	J (in)	K Dist. to Output Centerline (For ratio = 3:1) (mm)	K (in)	K2 Dist. to Output Centerline (For ratio > 3:1) (mm)	K2 (in)	L1 Housing Length (For ratio = 3:1) (mm)	L1 (in)	L2 Housing Length (For ratio > 3:1) (mm)	L2 (in)	M Housing Width (mm)	M (in)	N Dist. to Input Centerline (mm)	N (in)
RT90	6.6	0.260	95	3.740	117	4.606	140	5.512	162	6.378	114	4.488	57	2.244
RT115	7.9	0.311	116	4.567	144.2	5.677	173.5	6.831	201.7	7.941	143	5.630	71.5	2.815
RT142	10.5	0.413	134	5.276	179	7.047	205	8.071	250	9.843	182	7.165	91	3.583
RT180	10	0.394	169	6.654	209.1	8.228	260	10.236	300.1	11.815	232	9.134	116	4.567
RT220	16	0.630	206	8.110	266	10.472	316	12.441	376	14.803	290	11.417	145	5.709

Both output flanges have identical dimensions.
*AD=Adapter Length. Adapter will vary, depending on motor. Consult Internet (www.baysidemotion.com) for details or call Bayside.
**Maximum bushing bore diameter. Actual through bore of output shaft is larger. For additional bore diameter, contact Bayside's Application Engineers for information.

Foot Mounting Holes Location (RT, RD, RB)

Frame Size	O Thread Size x Depth	P (mm)	P (in)	Q (mm)	Q (in)	R (mm)	R (in)
R__90	M4x6	80	3.150	60	2.362	60	2.362
R__115	M6x9	100	3.937	70	2.756	75	2.953
R__142	M8x12	120	4.724	80	3.150	85	3.346
R__180	M10x15	160	6.299	100	3.937	110	4.331
R__220	M12x20	195	7.677	130	5.118	136	5.354

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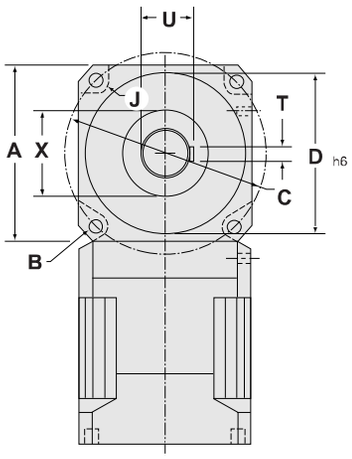
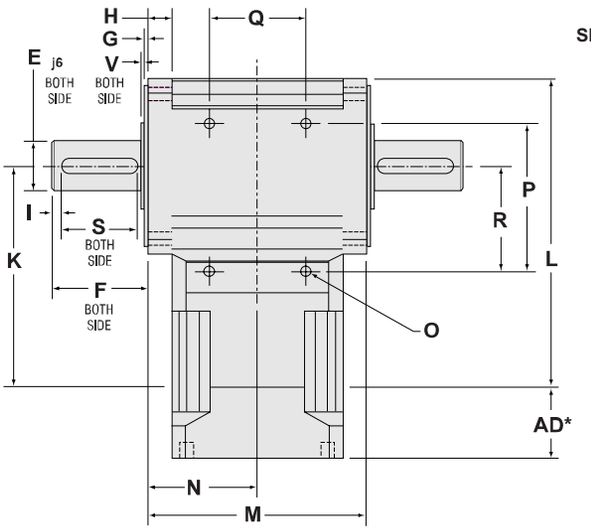
Stealth® MultiDrive Series:
RD Dual Shaft

Dimensions

OUTPUT VIEW



SIDE VIEW



Frame Size	A Square Flange (mm)	A (in)	B Bolt Hole (mm)	B (in)	C Bolt Circle (mm)	C (in)	D Pilot Diameter (mm)	D (in)	E Output Shaft Diameter (mm)	E (in)	F Output Shaft Length (mm)	F (in)	G Pilot Thickness (mm)	G (in)	H Flange Thickness (mm)	H (in)	I Dist. From Shaft End (mm)	I (in)	J Housing Recess (mm)	J (in)
RD90	90	3.543	6.5	0.256	100	3.937	80	3.150	20	0.787	40	1.575	3	0.118	12	0.472	5	0.197	6.6	0.260
RD115	115	4.528	8.5	0.335	130	5.118	110	4.331	24	0.945	50	1.969	3.5	0.138	14	0.551	7	0.276	7.9	0.311
RD142	142	5.591	11	0.433	165	6.496	130	5.118	40	1.575	80	3.150	3.5	0.138	20	0.787	8	0.315	10.5	0.413
RD180	182	7.165	13	0.512	215	8.465	160	6.299	50	1.969	95	3.740	10	0.394	25	0.984	6	0.236	10	0.394
RD220	220	8.661	17	0.669	250	9.843	180	7.087	75	2.953	155	6.102	15	0.591	35	1.378	8	0.315	16	0.630

Frame Size	K1 Dist. to Output Centerline (For ratio <= 3:1) (mm)	K1 (in)	K2 Dist. to Output Centerline (For ratio > 3:1) (mm)	K2 (in)	L1 Housing Length (For ratio <= 3:1) (mm)	L1 (in)	L2 Housing Length (For ratio > 3:1) (mm)	L2 (in)	M Housing Width (mm)	M (in)	N Dist. to Input Centerline (mm)	N (in)	S Keyway Length (mm)	S (in)	T Keyway Thickness (mm)	T (in)	U Keyway Height (mm)	U (in)	V Shoulder Height (mm)	V (in)	X Shoulder Diameter (mm)	X (in)
RD90	95	3.740	117	4.606	140	5.512	162	6.378	114	4.488	57	2.244	28	1.102	6	0.236	22.5	0.886	2.5	0.098	45	1.575
RD115	116	4.567	144.2	5.677	173.5	6.831	201.7	7.941	143	5.630	71.5	2.815	32	1.260	8	0.315	27	1.063	2.5	0.098	50	1.969
RD142	134	5.276	179	7.047	205	8.071	250	9.843	182	7.165	91	3.583	63	2.480	12	0.472	43	1.693	2.5	0.098	50	1.969
RD180	169	6.654	209.1	8.232	260	10.236	300.1	11.815	232	9.134	116	4.567	70	2.756	14	0.551	53.5	2.106	2.5	0.098	55	2.165
RD220	206	8.110	266	10.472	316	12.441	376	14.803	290	11.417	145	5.709	100	3.937	20	0.787	79.5	3.130	2.5	0.098	100	3.937

Both output flanges have identical dimensions. Contact Bayside's Application Engineers for information.
*AD=Adapter Length. Adapter will vary, depending on motor. Consult Internet (www.baysidemotion.com) for details or call Bayside.

Encoder Mounting Option	Dimensions For All Frame Sizes (mm)	(in)
Shaft Diameter	9.525	0.375
Shaft Length	19.050	0.750
Bolt Circle	74.981	2.952
Tapped Holes	M4x6 (Min. Depth)	
Encoder (Not Supplied)	DRC C25, BEI E25, RENCO C2520	

An additional flange is required on the gearhead for encoder mounting.
It will increase the thickness of one output flange by 10mm.

Foot Mounting Holes Location (RT, RD, RB)

Frame Size	O Thread Size x Depth	P (mm)	P (in)	Q (mm)	Q (in)	R (mm)	R (in)
R__90	M4x6	80	3.150	60	2.362	60	2.362
R__115	M6x9	100	3.937	70	2.756	75	2.953
R__142	M8x12	120	4.724	80	3.150	85	3.346
R__180	M10x15	160	6.299	100	3.937	110	4.331
R__220	M12x20	195	7.677	130	5.118	136	5.354

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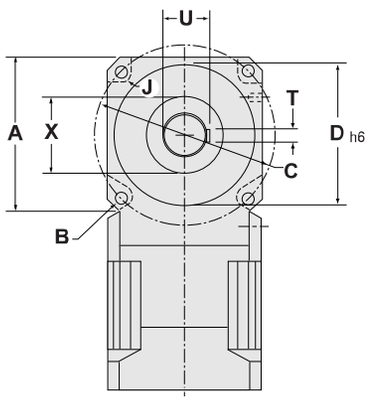
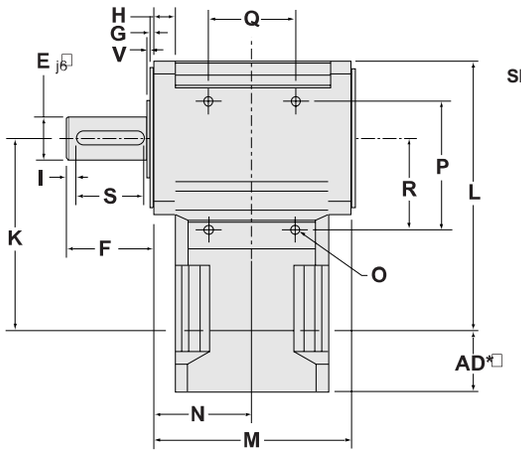
Stealth® MultiDrive Series:
RB Low Ratio

Dimensions

OUTPUT VIEW



SIDE VIEW



Frame Size	A Square Flange (mm)	A (in)	B Bolt Hole (mm)	B (in)	C Bolt Circle (mm)	C (in)	D Pilot Diameter (mm)	D (in)	E Output Shaft Diameter (mm)	E (in)	F Output Shaft Length (mm)	F (in)	G Pilot Thickness (mm)	G (in)	H Flange Thickness (mm)	H (in)	I Dist. From Shaft End (mm)	I (in)	J Housing Recess (mm)	J (in)
RB90	90	3.543	6.5	0.256	100	3.937	80	3.150	20	0.787	40	1.575	3	0.118	12	0.472	5	0.197	6.6	0.260
RB115	115	4.528	8.5	0.335	130	5.118	110	4.331	24	0.945	50	1.969	3.5	0.138	14	0.551	7	0.276	7.9	0.311
RB142	142	5.591	11	0.433	165	6.496	130	5.118	40	1.575	80	3.150	3.5	0.138	20	0.787	8	0.315	10.5	0.413
RB180	182	7.165	13	0.512	215	8.465	160	6.299	50	1.969	95	3.740	10	0.394	25	0.984	6	0.236	10.0	0.394
RB220	220	8.661	17	0.669	250	9.843	180	7.087	75	2.953	155	6.102	15	0.591	35	1.378	8	0.315	16.0	0.630

Frame Size	K Dist. to Output Centerline (mm)	K (in)	L Housing Length (mm)	L (in)	M Housing Width (mm)	M (in)	N Dist. to Input Centerline (mm)	N (in)	S Keyway Length (mm)	S (in)	T Keyway Thickness (mm)	T (in)	U Keyway Height (mm)	U (in)	V Shoulder Height (mm)	V (in)	X Shoulder Diameter (mm)	X (in)
RB90	95	3.740	140.6	5.512	114	4.488	57	2.244	28	1.102	6	0.236	22.5	0.886	2.5	0.098	45	1.575
RB115	116	4.567	173.5	6.831	143	5.630	71.5	2.815	32	1.260	8	0.315	27	1.063	2.5	0.098	50	1.969
RB142	134	5.276	205	8.071	182	7.165	91	3.583	63	2.480	12	0.472	43	1.693	2.5	0.098	50	1.969
RB180	169	6.654	260	10.236	232	9.134	116	4.567	70	2.756	14	0.551	53.5	2.106	2.5	0.098	55	2.165
RB220	206	8.110	316	12.441	290	11.417	145	5.709	100	3.937	20	0.787	79.5	3.130	2.5	0.098	100	3.937

Both output flanges have identical dimensions.
*AD=Adapter Length. Adapter will vary, depending on motor. Consult Internet (www.baysidemotion.com) for details or call Bayside.
*Additional hollow shaft bore diameters are available. Contact Bayside's Application Engineers for information.

Specifications are subject to change without notice.

How to Order

Order Numbering Example: **RD142E0102-XXXLB**

1. Pick frame size and ratio.
2. Pick options.
3. Specify motor make and model for mounting kit.

MODEL
- RB= Low Ratio
- RD= Dual-Shaft
- RT= Hollow Shaft

FRAME SIZE
- 090
- 115
- 142
- 180
- 220

OPTIONAL ENCODER MOUNT
- RD Only

RATIOS

RB	RD	RT
001	001	-
002	002	-
003	003	003
-	009	009
-	015	015
-	021	021
-	030	030

SPECIAL (Factory Issued)

OPTIONAL LOW BACKLASH

MultiDrive Gearheads are supported by a worldwide network of offices and local distributors. Call **1-800-305-4555** for application engineering assistance or for the name of your local distributor. Information can also be obtained at **www.baysidemotion.com**.

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Stealth® RS Advanced Series

Performance Specifications

	Units	Ratio	Frame Size RS60	RS90	RS115	RS142	RS180	RS220	RS300
Nominal Output Torque, $T_{nom\ r}$	**Nm**	5	**11**	**28**	**75**	**141**	**316**	**678**	**2,203**
	in lb		95	250	660	1,250	2,800	6,000	19,500
	Nm	10	**21**	**55**	**147**	**271**	**621**	**1,299**	**2,712**
	in lb		190	490	1,300	2,400	5,500	11,500	24,000
	Nm	15-25	**33**	**85**	**215**	**395**	**938**	**1,808**	**4,181**
	in lb		290	750	1,900	3,500	8,300	16,000	37,000
	Nm	30-100	**28**	**85**	**192**	**316**	**836**	**1,469**	**4,181**
	in lb		250	750	1,700	2,800	7,400	13,000	37,000
Max. Acceleration Output Torque, $T_{acc\ r}$	**Nm**	5	**13**	**33**	**88**	**166**	**373**	**802**	**2,644**
	in lb		115	295	780	1,470	3,300	7,100	23,400
	Nm	10	**26**	**66**	**169**	**333**	**734**	**1,582**	**3,277**
	in lb		230	580	1,500	2,950	6,500	14,000	29,000
	Nm	15-100	**37**	**101**	**260**	**452**	**1,096**	**2,000**	**5,311**
	in lb		330	890	2,300	4,000	9,700	17,700	47,000
Emergency(1) Stop Output Torque, $T_{em\ r}$	**Nm**	5	**31**	**77**	**203**	**384**	**870**	**1,853**	**6,102**
	in lb		270	680	1,800	3,400	7,700	16,400	54,000
	Nm	10	**60**	**153**	**395**	**768**	**1,695**	**3,684**	**7,684**
	in lb		530	1,350	3,500	6,800	15,000	32,600	68,000
	Nm	15-100	**87**	**232**	**599**	**1,040**	**2,520**	**4,588**	**12,316**
	in-lb		770	2,050	5,300	9,200	22,300	40,600	109,000
Nominal Input Speed, $N_{nom\ r}$	RPM	5,10	3,200	2,800	2,400	2,000	1,600	1,200	1,000
	RPM	15-40	3,700	3,300	2,900	2,500	2,000	1,500	1,250
	RPM	50-100	4,200	3,800	3,400	3,000	2,400	1,800	1,500
Maximum Input Speed, $N_{max\ r}$	RPM	5-100	6,000	5,300	4,500	3,800	3,000	2,300	1,900
Standard Backlash (2)	arc min	5,10	14	12	12	10	10	10	10
	arc min	15-100	12	10	10	8	8	8	8
Low Backlash (2)	arc min	5,10	10	8	8	6	6	6	6
	arc min	15-100	8	6	6	4	4	4	4
Efficiency at Nominal Torque	%		94	94	94	94	94	94	94
Noise Level(3) at:									
3,000 RPM	dB	5-100	70	70	70	—	—	—	—
2,000 RPM	dB		—	—	—	72	72	—	—
1,500 RPM	dB		—	—	—	—	—	72	72
Torsional Stiffness	**Nm / arc min**	5-100	**3**	**10**	**19**	**35**	**90**	**170**	**290**
	in lb / arc min		22	84	164	310	800	1,500	2,560
Maximum Weight	**kg**	5-100	**2**	**6**	**11**	**24**	**43**	**80**	**120**
	lb		4	13	25	52	94	177	265
Max. Allowable Case Temp.	°C	5-100	← 100 →						

Specifications:	Units	Ratio	Frame Size RS60	RS90	RS115	RS142	RS180	RS220	RS300
Moment of Inertia(4)	**g cm sec^2**	5	**0.197**	**0.745**	**2.68**	**8.94**	**26.5**	**82.2**	**378**
	oz-in-sec^2		0.003	0.010	0.037	0.124	0.368	1.14	5.26
	g cm sec^2	10	**0.095**	**0.489**	**1.67**	**5.87**	**16.7**	**50.4**	**238**
	oz-in-sec^2		0.001	0.007	0.023	0.082	0.232	0.700	3.31
	g cm sec^2	15,30	**0.092**	**0.453**	**1.58**	**5.60**	**15.2**	**47.4**	**158**
	oz-in-sec^2		0.001	0.006	0.022	0.078	0.211	0.658	2.19
	g cm sec^2	20,25,40	**0.083**	**0.358**	**1.13**	**4.17**	**10.7**	**34.3**	**116**
	oz-in-sec^2		0.001	0.005	0.016	0.058	0.149	0.476	1.61
	g cm sec^2	50,100	**0.072**	**0.238**	**0.685**	**2.26**	**6.70**	**21.2**	**95.4**
	oz-in-sec^2		0.001	0.003	0.010	0.031	0.093	0.294	1.32

(1) Maximum of 1,000 stops
(2) Measured at 2% of rated torque
(3) Measured at 1 meter
(4) All Moment of Inertia values are as reflected at the input shaft of the gearhead.
(5) RS300 is available in Ratios of: 4, 6, 10, 15, 20, 24, 30 & 50:1

Specification are subject to change without notice

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Fax: 877-IP-Tech2
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1

Stealth Planetary Output

Stealth RS is built into the gearhead to deliver *"The Helical Advantage"* at the load-carrying output section.

2

Spiral Bevel Gears

Deliver high efficiency and high torque in a compact, right angle package.

3

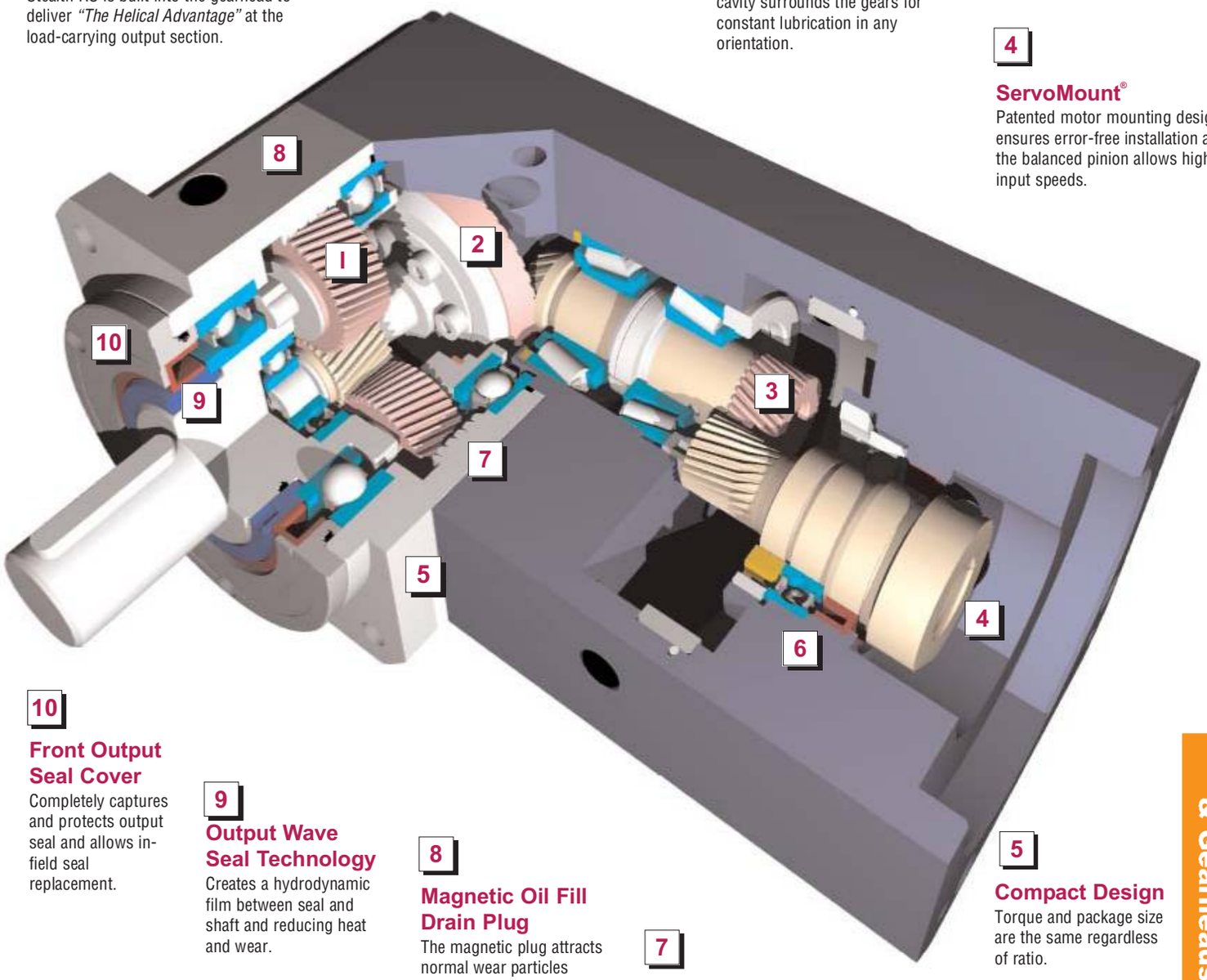
High Speed Input

Helical Stealth gearing provides high input speeds with quiet operation. Input cavity surrounds the gears for constant lubrication in any orientation.

4

ServoMount®

Patented motor mounting design ensures error-free installation and the balanced pinion allows higher input speeds.



10

Front Output Seal Cover

Completely captures and protects output seal and allows in-field seal replacement.

9

Output Wave Seal Technology

Creates a hydrodynamic film between seal and shaft and reducing heat and wear.

8

Magnetic Oil Fill Drain Plug

The magnetic plug attracts normal wear particles keeping them away from the gear mesh.

7

Oil Lubrication

Oil provides better lubrication, reduces friction and operating temperatures.

6

Sealed Unit

Viton seals and O-Rings provide IP65 protection to prevent leaks and protect against harsh environments.

5

Compact Design

Torque and package size are the same regardless of ratio.

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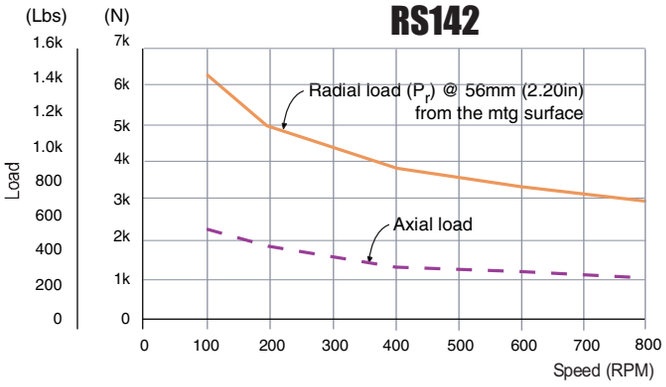
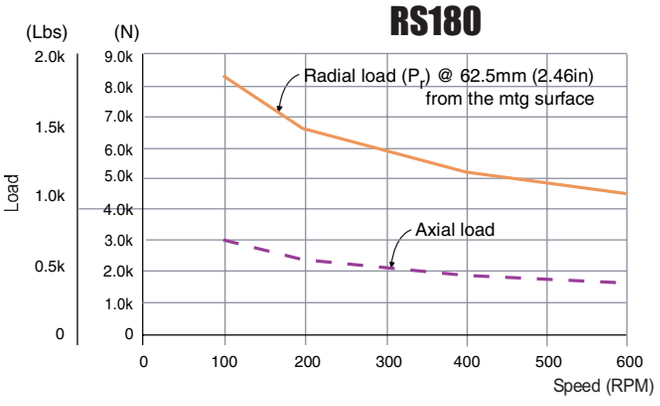
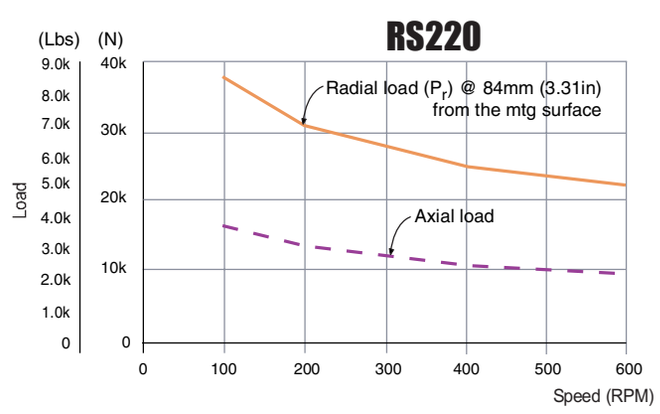
RS142



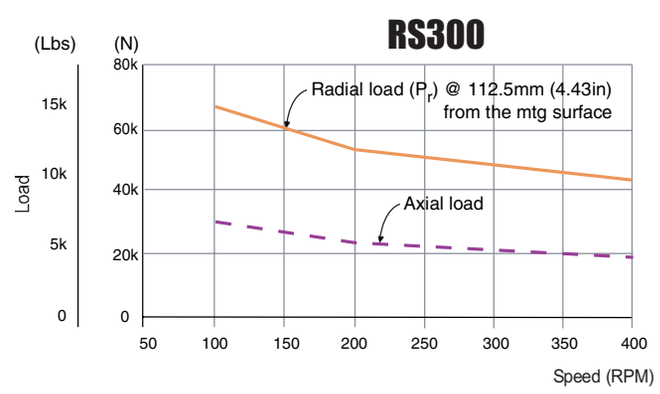
RS180



RS220



RS300



Formulas to calculate Radial Load (P_{rx}) at any distance "X" from the gearhead mounting surface.

$P_{rx} = (P_r)(\mathbf{127mm}) / (\mathbf{71mm} + X)$
$P_{rx} = (P_r)(5in) / (2.79in + X)$

$P_{rx} = (P_r)(\mathbf{138mm}) / (\mathbf{76mm} + X)$
$P_{rx} = (P_r)(5.43in) / (2.99in + X)$

$P_{rx} = (P_r)(\mathbf{190mm}) / (\mathbf{106mm} + X)$
$P_{rx} = (P_r)(7.48in) / (4.17in + X)$

$Prx = (Pr)(\mathbf{268mm}) / (\mathbf{156mm} + X)$
$Prx = (Pr)(10.55in) / (6.14in + X)$

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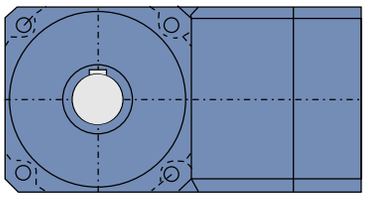
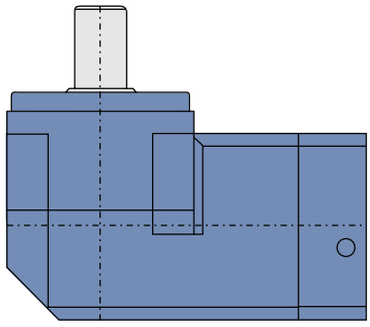
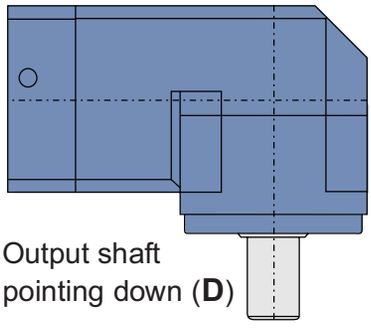
Stealth® RS Advanced Series:
How to Order



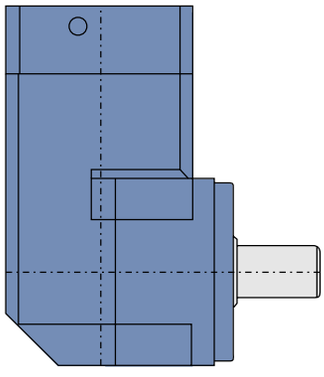
Horizontal orientation (**H**)



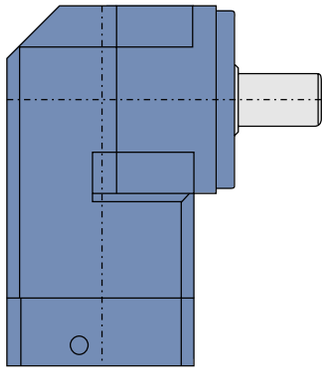
Output shaft pointing up (**U**)



Output shaft pointing down (**D**)



RS input facing up (**E**)



RS input facing down (**F**)

How to Order

Order Numbering Example: R S 1 8 0 - 0 1 0 - X X X L H

1. Pick frame size and ratio.
2. Pick backlash and orientation.
3. Specify motor make and model for mounting

FRAME SIZE	RATIO	SPECIAL	BACKLASH	ORIENTATION
60	005 030	(Factory	L = Low backlash	H = Horizontal orientation
90	010 040	Issued)	S = Standard backlash	U = Output shaft pointing up
115	015 050			D = Output shaft pointing down
142	020 100			E = RS input facing up
180	025			F = RS input facing down
220				(For other orientations consult the factory)
300				

RS Gearheads are supported by a worldwide network of offices and local distributors. Call **1-800-305-4555** for application engineering assistance or for the name of your local distributor. Information can also be obtained at **www.baysidemotion.com**.

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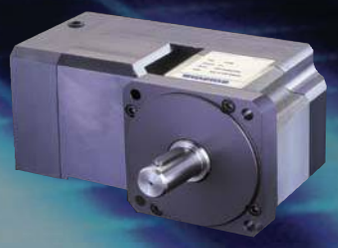
Stealth® RX Series



Performance Specifications

	Units	Ratio	Frame Size RX60	RX90	RX115
Nominal Output Torque, $T_{nom\ r}$	**Nm**	5	**7**	**17**	**45**
	in lb		58	149	484
	Nm	10	**13**	**33**	**88**
	in lb		112	292	484
	Nm	15-25	**20**	**51**	**129**
	in lb		175	451	1,238
	Nm	30-100	**17**	**51**	**115**
	in lb		149	451	1,323
Max. Acceleration Output Torque, $T_{acc\ r}$	**Nm**	5	**8**	**20**	**53**
	in lb		69	175	587
	Nm	10	**16**	**40**	**101**
	in lb		138	350	1,140
	Nm	15-100	**22**	**61**	**156**
	in lb		196	536	1,748
Emergency(1) Stop Output Torque, $T_{em\ r}$	**Nm**	5	**19**	**46**	**122**
	in lb		165	409	1,362
	Nm	10	**46**	**92**	**237**
	in lb		409	812	2,653
	Nm	15-100	**67**	**139**	**359**
	in lb		594	1,232	4,022
Nominal Input Speed, $N_{nom\ r}$	RPM	5, 10	3,200	2,800	2,400
	RPM	15-40	3,700	3,300	2,900
	RPM	50-100	4,200	3,800	3,400
Maximum Input Speed, N_{maxr}	RPM	5-100	6,000	5,300	4,500
Standard Backlash (2)	arc min	5, 10	20	18	18
	arc min	15-100	20	18	16
Low Backlash (2)	arc min	5, 10	18	16	16
	arc min	15-100	16	14	12
Efficiency at Nominal Torque	%	5-100	94	94	94
Noise Level(3) at: 3,000 RPM	dB	5-100	70	70	70
Torsional Stiffness	**Nm / arc min**	5-100	**2.5**	**9.5**	**18.5**
	in lb / arc min		22	84	164
Maximum Weight	**kg**	5-100	**2.01**	**5.74**	**11.35**
	lb		4.42	12.65	25
Max. Allowable Case Temperature	°C	5-100	← 100 →		

Specifications:	Units	Ratio	Frame Size RX60	RX90	RX115
Moment of Inertia(4)	**gm cm sec²**	5	**0.1970**	**0.7450**	**2.6820**
	oz in sec²		0.0030	0.0100	0.0373
	gm cm sec²	10	**0.0950**	**0.4890**	**1.6688**
	oz in sec²		0.0013	0.0068	0.0232
	gm cm sec²	15, 30	**0.0920**	**0.4530**	**1.5794**
	oz in sec²		0.0013	0.0063	0.0219
	gm cm sec²	20-40	**0.0830**	**0.3576**	**1.1324**
	oz in sec²		0.0012	0.0050	0.0157
	gm cm sec²	50-100	**0.0720**	**0.2384**	**0.6854**
	oz in sec²		0.0010	0.0033	0.0095

(1) Maximum of 1,000 stops
(2) Measured at 2% of rated torque
(3)Measured at 1 meter
Specification are subject to change without notice
(4) All Moment of Inertia values are as reflected at the input